

HPC

Mechanical components by mail order

3/5
2016



Linear guidance parts



Tel: +33 (0)4 37 496 496

www.hpceurope.com

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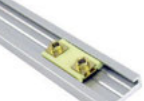
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Discounts: maximum discount on price list 2015

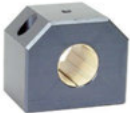
Stock: depending on availability

New: new product

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 NEW Feeler strip on rolls p.114	 Spherical bushing p.118		 Heavy duty male rod end p.126
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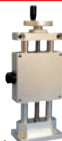
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Discounts: maximum discount on price list 2015

Stock: depending on availability

New: new product

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 Screwjack with travelling screw p.349	 Drylin® linear table p.354	 Mini profile mounted adjusting unit p.359	
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MORE THAN 31000 PART NUMBER
on **HPCEUROPE.COM**



INDEX ICONS

Internal bore



Modifiable



Non-modifiable

Angles



45°



90°



17°45'

Load



Axial load



Radial load



Heavy duty



Max load
1 tonne

Delivery time



48h



In hours or weeks

Method of fabrication



Moulded



Machined

Material



Steel



Stainless steel



Aluminium



Brass



Bronze



Nylon



Copper



Plastic



Delrin



Peek



Cast iron

Resistant to



Low
temperatures



High
temperatures



Corrosion



Shock

Special HPC



Custom-made



In stock



In imperial

Compatibility



Robotic
industry



Food industry

Maintenance



Maintenance
free



No lubrication

Applicable



Industrial



Manual

Standards



DIN



ISO

Origin



Japan



Switzerland

Quality



from 1 to 8

Others



Bi-directional



Precision



Duo



Bearings



Light



No fixing



Miniature size



Low cost
range



Modulable



High
speed of
rotation



Easy assembly

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SERVICES AVAILABLE FROM **HPC**



EASY ORDERING

- Personalised advice from our technical and sales teams is available by telephone from Monday to Friday from 08.00 to 12.20 and 13.40 to 18.00, just call +33 (0) 4 37 496 496
- We can also be contacted by fax, email or post.



PERSONALISED SOLUTIONS

- 190 000 standard parts available from stock
- **Custom parts** can be machined to order from samples or drawings
- Items not listed in catalogue can also be supplied
- Medium and large production runs available on request



ONLINE ORDERING AVAILABLE 24/24

- **www.hpceurope.com** references 31,000 parts
- Instant online quote generation
- Datasheets in PDF format and 3D models can be **downloaded free of charge** from the site
- Package tracking





SAFE PAYMENT



**Credit
card**



**Bank
Transfer**



Cheque



**Bank
draft**

Our bank details:
BNP PARIBAS
18 Chemin de Gargantua
69570 Dardilly
N° de compte: 00010041122



FAST DELIVERY

- Any order for articles in stock received before
- **14.00 will** be delivered before 18.00 the following day*
- Free delivery for all orders over 50€*



GENERAL INFORMATION

Engrenages HPC SARL, share capital 76 224€
N°382 911 907 RCS Lyon
French SIC code : APE 4669B
TVA FR 41 382 911 907

**58, Chemin de la Bruyère
69570 Dardilly – Lyon – France
Email: cial2@hpceurope.com
Website: www.hpceurope.com
Tel: +33(0)4 37 496 496
Fax: +33(0)4 37 490 055**

*Some restrictions apply. For deliveries to French mainland only.

Buyers guide

Rotary motion

Self-aligning flanges and housings



Part number	UCP	UCF	UCFL	UCP/PBT
Description	pillow block	4 hole flange unit	2 hole flange unit	pillow block
Body material	cast iron	cast iron	cast iron	polymer
Bearing material	steel	steel	steel	stainless steel
Bore-size (mm)	Ø20 → Ø75	Ø20 → Ø80	Ø20 → Ø60	Ø12 → Ø40
Maintenance				
Self aligning	✓	✓	✓	✓
Spherical	✗	✗	✗	✗
Uses	everyday	everyday	everyday	everyday
Quality	☆☆	☆☆	☆☆	☆☆☆☆
Price	€	€	€	€€
Pages	351	352	353	354



: with



: without

**UCF/PBT****UCFL/PBT****UCP/SS****UCF/SS****UCFL/SS****KSTM****EFSM**4 hole
flange unit2 hole
flange unit

à chapeau

4 hole
flange unit2 hole
flange unitpillow block
Igubal®4 hole flange
units Igubal®

polymer

polymer

stainless
steelstainless
steelstainless
steel

polymer

polymer

stainless
steelstainless
steelstainless
steelstainless
steelstainless
steel

polymer

polymer

Ø12 → Ø40

Ø12 → Ø40

Ø20 → Ø40

Ø20 → Ø40

Ø20 → Ø40

Ø5 → Ø30

Ø5 → Ø30

food
industryfood
industrydifficult
environmentdifficult
environmentdifficult
environment

everyday

everyday

☆☆☆

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3 55**3 56****3 57****3 58****3 59****3 62****3 60**

Buyers guide

Ball socket joints and bearings

Spherical plain bearings



Part number	GE-ES	GE-ES-2RS	GE-C	GE-ET-2RS	CSS
DIN 648	DIN 648	DIN 648	DIN 648	DIN 648	DIN ISO12240-1
Description	-	with sealed joint	-	with sealed joint	-
Ring / sphere materials	steel / steel	steel / steel	hard chrome / PTFE	hard chrome / PTFE	steel / self lubrication steel
Bore-size (mm)	Ø6 → Ø110	Ø15 → Ø110	Ø6 → Ø30	Ø17 → Ø110	Ø6 → Ø30
Maintenance					
Load indication	☆☆☆	☆☆☆	☆☆☆ one-directional	☆☆☆ one-directional	☆☆☆
Withstands shocks	✓	✓	✗	✗	✓
Oscillation speed	☆☆☆	☆☆☆	☆	☆	☆☆☆
Quality	☆☆	☆☆	☆☆	☆☆	☆☆
Price	€	€	€€	€€	€€€
Pages	3 118	3 119	3 120	3 121	3 122



: with



: without

Rod end bearings

						
	SSE	DGSA	DGSI	CMM	CFF	SME, SFE
	Unibal®	DIN 648	DIN 648	DIN 12240-4	DIN 12240-4	Unibal®
	-	male	female	male	female	male / female
	stainless steel / PTFE	steel / steel	steel / steel	steel or s/steel / bronze self-lubricating	steel or s/steel / bronze self-lubricating	stainless steel / PTFE
	Ø3 → Ø18	Ø6 → Ø80	Ø6 → Ø80	Ø4 → Ø20	Ø5 → Ø35	Ø2 → Ø18
						
	☆☆☆	☆☆☆	☆☆☆	☆☆☆	☆☆☆	☆☆☆
	✗	✓	✓	✗	✗	✗
	☆	☆☆☆	☆☆☆	☆☆☆	☆☆☆	☆
	☆☆☆	☆☆	☆☆	☆☆	☆☆	☆☆☆
	€€€€	€€	€€	€€€	€€€	€€€€
	③ 124	③ 126	③ 128	③ 130	③ 131	③ 134

Buyers guide

Linear motion

Linear slides



Part number	BSP	BWU	LWL	LWH	LRX	LSAG
Description	extendable slide	extendable slide	slide with ball-bearings	slide with ball-bearings	slide with rollers	ball-bearing splined shaft
Advantages	short stroke	high rigidity reduced stroke	everyday use	applications without vibrations or shocks	applications without vibrations or shocks	lateral movement with no rotation
Material	stainless steel	stainless steel	stainless steel	steel	steel	steel
Contact elements	ball-bearings	ball-bearings	recirculation balls	recirculation balls	recirculation cylinders	recirculation balls
Max. stroke length (mm)	63	66	1440	2960	2960	1200
Précision	☆☆☆	☆☆☆	☆☆☆	☆☆☆	☆☆☆	☆☆☆
Load	☆	☆☆	☆☆	☆☆☆	☆☆☆	☆
Load direction						
Uses	measuring devices, hard disks, scanners	clean rooms, medicine	machine tools, conveyors, robotics	machine tools, conveyors, robotics	machine tools, conveyors, robotics	measuring, robotics
Brand	IKO®	IKO®	IKO®	IKO®	IKO®	IKO®
Price	€€	€€	€€€	€€	€€€	€€
Pages	3 158 - 163	3 164 - 169	3 170 - 183	3 184 - 193	3 194 - 201	3 150 - 157

					
TS / TW	NK / NW	WJUM / WS	HW / HTS	HCV / HRV	UTK
linear slide rule	miniature guidance	compact and modular guidance	V-rail guidance	V-rail guidance	V-rail guidance
no maintenance silent	simple and efficient	silent, easy assembly	precise, easy to use	for high speed and reduced stroke length	silent, easy assembly
aluminium	aluminium	aluminium	steel	steel	steel, aluminium
DryLin® T polymer slides	DryLin® T polymer slides	DryLin® T polymer slides	ball-bearings (roller)	ball-bearings (roller)	roller
3959	3000	4000	6096 linkable	1976 linkable	3600
☆☆	☆	☆☆	☆☆	☆☆	☆☆
☆☆	☆	☆☆	☆☆☆	☆☆☆	☆☆
					
machine tools, dirty and damp environments	easily adaptable to many applications	easily adaptable to many applications	all types of usage, quick and economical	machine tools, special machines, high modularity	all types of usage, quick and economical
IGUS®	IGUS®	IGUS®	HEPCO®	HEPCO®	HEPCO®
€€	€	€	€€	€€	€€
③ 202 - 203	③ 208 - 213	③ 214 - 225	③ 266 - 269	③ 274 - 277	③ 256 - 265

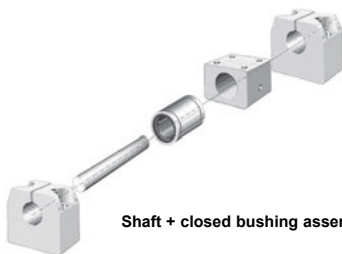
Buyers guide

Linear motion

Closed bushings



Part number	LBE	KB-WW	KB-UU	KBS	KBS-WW
Description	miniature	massive	massive	massive stainless steel	massive stainless steel
Brand	IKO®	-	NB	NB	-
For shaft size (mm)	Ø3 → Ø5	Ø8 → Ø40	Ø5 → Ø80	Ø8 → Ø60	Ø12 → Ø40
Shaft par number	-	Z-A	Z-A	Z-B	Z-B
Housing unit	-	NSB, S2B	NSB, S2B	NSB, S2B	NSB, S2B
Shaft end	-	SFWR, FGWA	SFWR, FGWA	SFWR, FGWA	SFWR, FGWA
Advantages	small diameters	economy range	high load capacity	high load capacity	economy range
Quality	☆☆☆	☆☆	☆☆☆	☆☆☆	☆☆
Price	€€	€	€€	€€€€	€
Pages	③ 238	③ 239	③ 240	③ 241	③ 239



Shaft + closed bushing assembly

Open bushings

				
TK	KH	RJUM / RJZM	TK-OP	KB-OP
self aligning Topball®	light	polymer without ball-bearings	self aligning Topball®	massive
NB	-	DryLin®	NB	NB
Ø12 → Ø40	Ø12 → Ø50	Ø5 → Ø50	Ø12 → Ø40	Ø10 → 80
Z-A	Z-A	AWN	FTSN	FTSN
NSB, S2B	SAKH	RJUM05, RJUM06	NSO, S2O	NSO, S2O
SFWR, FGWA	SFWR, FGWA	SFWR, FGWA	-	-
compensates for misalignments	for light loads	not sensitive to dirt	heavy loads, long lengths	heavy loads, long lengths
☆☆☆	☆☆	☆☆☆	☆☆☆	☆☆☆
€€	€	€€	€€€	€€€
③ 242	③ 236	③ 243	③ 246	③ 245



Shaft + open bushing assembly

Buyers guide

Actuator guides

Complete



In kit form



Part number	UGH	UGPC	UGPL	UGCG
Description	<i>H style guide</i>	<i>Short bearing</i>	<i>Long bearing</i>	<i>Guide shaft</i>
Advantages	<i>Complete pack</i>	<i>Modular system, assemble as required</i>	<i>Modular system, assemble as required</i>	<i>Modular system, assemble as required</i>
For actuators	Ø25 to Ø50	-	-	-
Stroke	25 → 60mm	-	-	700mm
Price	€€	€€	€€	€€€
Pages	3 404 - 410	3 396	3 397	3 398

Guidage tige filetée



Part number	LFM	LSM	LRH	LPR
Description	<i>Trapezoidal</i>	<i>Trapezoidal</i>	<i>Trapezoidal double inclinaison</i>	<i>à pas rapide</i>
For actuator	Ø10x2 → Ø120x16	Ø10x2 → Ø50x8	Ø16x4 → Ø36x6	Ø10x12 → Ø18x100
Material	Steel	Stainless steel	Steel	Stainless steel
Quality	☆☆☆	☆☆☆	☆☆	☆☆☆
Price	€	€€	€€	€€
Pages	3 294	3 296	3 298	3 292

Linear guidance



Part number	SHTP	SHTC	DOMI	TBL	TBD	TBV	CRG
Description	<i>Drylin® linear table</i>	<i>Drylin® linear table</i>	<i>Domiline adjustable slide</i>	<i>miniature table</i>	<i>With opposing threads</i>	<i>Lifting table</i>	<i>Linear positioner</i>
Stroke (mm)	100 → 500	100 → 1250	5 → 100	50 → 100	100 → 400	50 → 300	500
Advantage	<i>economy version</i>	<i>maintenance free</i>	<i>precision 5/100^e</i>	<i>precision 10/100^e</i>	<i>Quickly adjusted</i>	<i>For vertical stroke</i>	<i>For conveyor system</i>
Quality	☆☆	☆☆	☆☆☆	☆☆	☆☆	☆☆	☆☆
Price	€	€€	€€	€	€	€€	€€
Pages	3 354	3 356	3 374 → 391	3 364 → 365	3 366 → 367	3 362	3 370



KGS	BSPM
<i>Ballscrew</i>	<i>Miniature leadscrew</i>
Ø16x5 → Ø63x10	Ø6x1 → Ø14x2
<i>Steel</i>	<i>Steel</i>
☆☆	☆☆☆
€€	€€€
3 318	3 314

**GROUND
ROUND SHAFT**

NEW



**stainless
steel**

p.22

**METAFRAM®
CYLINDRICAL BUSH**



p.34

FLANGED BEARING
**stainless
steel**



p.58

**SINGLE HOUSED
BEARING ASSEMBLY**



p.64

**SELF-ALIGNING
RADIAL BALL BEARING**



p.78

COMBINED BEARINGS



p.90

ROLLER FREEWHEEL

NEW



p.98

ROTARY MOTION

p.20 - 115

BEARING LOCKNUT

NEW



p.105

PRECISION LOCKNUT



p.108

PRECISION SHIMS

**stainless
steel**



p.112

WIDE FEELER STRIP ON ROLLS

NEW



p.114

- Alloy tool steel for cold working, resists wear and fatigue but sensitive to shocks
- High toughness/ductility, low deformation after heat treatment (in the mass or surface by induction)
- Not recommended for welding
- Tolerance on diameter h7
- Materials:

100C6 steel (1.2067)

In normalised, softened state

Rm: 700/800 N/mm²

Hardness: ≤ 217HB

Density: 7.85

Composition:

Carbon: 0.95 to 1.1%

Manganese: 0.25 to 0.45%

Silicon: 0.15 to 0.35%

Chrome: 1.35 to 1.6%

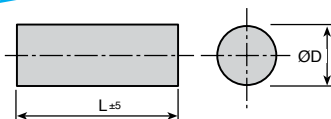
Sulphur (max): 0.015%

Phosphorous (max): 0.025%

Heat treatment:

Oil quenched between 825 and 875 °C

NEW!



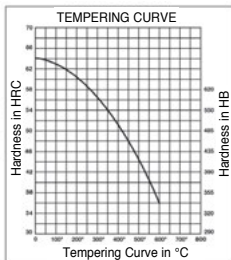
**Excellent price/
quality ratio**

Applications

- Dowel pins, punches, ejector pins, guide rods, bearings, files, drills, reamers

Info

- Not sold individually, contact us for details



Part number	ØD (h7)	L	Weight (kg/m)	Price each 1 to 5
MAT2-1000	2	1000	0,05	1,34 €
MAT2,5-1000	2,5	1000	0,08	7,34 €
MAT3-1000	3	1000	0,11	2,31 €
MAT4-1000	4	1000	0,2	2,54 €
MAT5-1000	5	1000	0,31	2,95 €
MAT6-1000	6	1000	0,45	3,46 €
MAT8-1000	8	1000	0,8	3,91 €
MAT10-1000	10	1000	1,25	5,74 €
MAT12-1000	12	1000	1,8	8,28 €
MAT15-1000	15	1000	2,82	12,22 €
MAT20-1000	20	1000	5,01	21,71 €
MAT25-1000	25	1000	7,82	33,94 €
MAT30-1000	30	1000	11,26	48,87 €
MAT40-1000	40	1000	20,03	86,86 €
MAT50-1000	50	1000	31,29	135,71 €

Dimensions in mm

DISCOUNTS

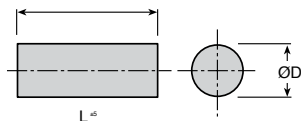
Qty	1+	6+	20+	40+
Disc.	List	-10%	-15%	On request

Part number	ØD (h7)	L	Weight (kg/m)	Price each 1 to 5
MAT3,175-1000	3,175	1000	0,13	14,65 €
MAT4,76-1000	4,76	1000	0,28	11,86 €
MAT6,35-1000	6,35	1000	0,5	13,96 €
MAT9,52-1000	9,52	1000	1,13	15,01 €
MAT12,7-1000	12,70	1000	2,02	23,02 €
MAT15,88-1000	15,88	1000	3,15	50,24 €
MAT19,05-1000	19,05	1000	4,54	46,19 €
MAT25,4-1000	25,40	1000	8,07	77,45 €

- **Material:**
precision drawn steel
- External diameter tolerance:
≤25mm +0/-0.015mm
>25mm +0/-0.025mm
- Std length A = 333mm +/-5mm
- Hardness: 9 HRC
- Tensile strength: 700-850 N/mm²
- Surface finish: 0,6µm

Chemical composition Standard % Typical analysis

C	0.95/1.25	1,130
Si	0.40 max.	0,220
Mn	0.25/0.45	0,370
P	0.045 max.	0,014
S	0.045 max.	0,018
Cr	0.35/0.45	0,430



Options

- Alternative lengths of 1 metre (B) or 3 metres (C) are available. To specify the length, add the letter to the part number
E.g. **RSH020A**

DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-10%	-15%	On request

Part number	ØD	Stock*		Price	
		333mm	1 metre	each A:	each B:
RSH020	2,00	✓	✓	1,56 €	3,84 €
RSH025	2,50	-	-	1,64 €	5,31 €
RSH030	3,00	✓	✓	1,99 €	6,22 €
RSH035	3,50	-	-	2,44 €	7,73 €
RSH040	4,00	✓	✓	2,67 €	8,37 €
RSH045	4,50	-	-	3,95 €	12,25 €
RSH050	5,00	✓	✓	5,56 €	11,48 €
RSH055	5,50	-	-	5,08 €	15,62 €
RSH060	6,00	✓	✓	5,31 €	16,25 €
RSH065	6,50	-	-	5,74 €	17,61 €
RSH070	7,00	-	-	6,21 €	19,05 €
RSH075	7,50	-	-	7,69 €	23,34 €
RSH080	8,00	✓	✓	7,19 €	23,41 €
RSH085	8,50	-	-	9,48 €	28,85 €
RSH090	9,00	-	-	9,38 €	28,45 €
RSH095	9,50	-	-	11,84 €	35,82 €
RSH100	10,00	✓	✓	15,63 €	33,81 €
RSH105	10,50	-	-	14,62 €	44,18 €
RSH110	11,00	-	-	13,74 €	41,69 €
RSH115	11,50	-	-	18,41 €	55,44 €

Part number	ØD	Stock*		Price	
		333mm	1 metre	each A:	each B:
RSH120	12,00	✓	✓	16,37 €	49,29 €
RSH125	12,50	-	-	21,80 €	65,75 €
RSH130	13,00	-	-	17,19 €	51,95 €
RSH140	14,00	-	-	20,17 €	60,90 €
RSH150	15,00	-	✓	22,61 €	68,25 €
RSH160	16,00	-	✓	23,34 €	70,40 €
RSH170	17,00	-	-	26,66 €	80,31 €
RSH180	18,00	-	-	29,87 €	89,89 €
RSH190	19,00	-	-	34,02 €	102,34 €
RSH200	20,00	✓	✓	34,66 €	104,38 €
RSH210	21,00	-	-	41,06 €	123,61 €
RSH220	22,00	-	-	42,89 €	128,93 €
RSH230	23,00	-	-	51,02 €	153,42 €
RSH240	24,00	-	-	51,68 €	155,28 €
RSH250	25,00	-	✓	54,01 €	162,48 €
RSH260	26,00	-	-	66,53 €	199,90 €
RSH270	27,00	-	-	67,81 €	203,82 €
RSH280	28,00	-	-	77,38 €	232,40 €
RSH290	29,00	-	-	82,66 €	248,28 €
RSH300	30,00	✓	-	72,26 €	217,19 €

*Depending on availability - Dimensions in mm

Ground round shaft, sawn end

Sta New

MATss

304L stainless steel shaft

- Austenitic stainless steel with great resistance to corrosion (Nitric acid)
Very suitable for cold forming
Highly polishable
- Tolerance on diameter h9
- Surface finish: Ra1.6 (except sawn ends Ra25)
- Materials:
Stainless steel 304L (1.4307)
Hyper tempered: ≤ 215 HB
Density: 7.9

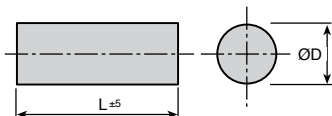
Composition:

- Carbon: $\leq 0.03\%$
- Silicon: $\leq 1.0\%$
- Manganese: $\leq 2.0\%$
- Phosphorus: 0.045%
- Sulphur: 0.015%
- Chrome: 17.5 to 19.5%
- Nickel: 8 to 10%

Properties:

- Thermal coefficient in $W.m/m^2 \text{ } ^\circ C$
at $100 \text{ } ^\circ C$: 16
at $400 \text{ } ^\circ C$: 20
at $800 \text{ } ^\circ C$: 26
- Module of elasticity at $20 \text{ } ^\circ C$: 201,000 N/mm²
- Average expansion coefficient in $m/m \text{ } ^\circ C$:
between 20 and $200 \text{ } ^\circ C$: 17.3×10^{-6}
between 20 and $400 \text{ } ^\circ C$: 18.3×10^{-6}
between 20 and $600 \text{ } ^\circ C$: 19.1×10^{-6}
- Non magnetic

NEW!



**Excellent price/
quality ratio**

Applications

- Chemical, food and mechanical industries

Info

- Not sold individually, contact us for details

DISCOUNTS

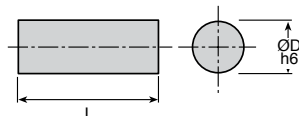
Qty	1+	6+	20+	40+
Disc.	List	-10%	-15%	On request

Part number	ØD (h9)	L	Weight (kg/m)	Price each 1 to 5
MAT2-1000/SS	2	1000	0.02	1,95 €
MAT2.5-1000/SS	2,5	1000	0.04	1,95 €
MAT3-1000/SS	3	1000	0.06	1,95 €
MAT4-1000/SS	4	1000	0.10	2,34 €
MAT5-1000/SS	5	1000	0.15	3,32 €
MAT6-1000/SS	6	1000	0.22	4,29 €
MAT8-1000/SS	8	1000	0.39	7,03 €

Dimensions in mm

Références	ØD (h9)	L	Weight (kg/m)	Price each 1 to 5
MAT10-1000/SS	10	1000	0.61	10,94 €
MAT12-1000/SS	12	1000	0.88	15,63 €
MAT15-1000/SS	15	1000	1,38	23,83 €
MAT20-1000/SS	20	1000	2,45	30,28 €
MAT25-1000/SS	25	1000	3,83	47,87 €
MAT30-1000/SS	30	1000	5,51	68,38 €

- **Material:**
stainless steel 303
- Standard length from 300mm to 1000mm cf. column L
- External diameter tolerance: h6
- Straightness: 0.01/300mm
- Surface finish: Ra 0.4



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-10%	-15%	On request

Part number	ØD	L	Stock*	Price each 1 to 5
GR2.992-6	2,992	600	✓	25,55 €
GR3.000-6	3,000	600	✓	16,06 €
GR3.992-6	3,992	600	✓	21,34 €
GR3.999-6	3,999	600	✓	31,86 €
GR4.991-9	4,991	900	✓	36,71 €
GR5.000-6	5,000	600	✓	20,15 €
GR5.993-6	5,993	600	✓	42,03 €
GR5.992-9	5,992	900	-	39,79 €
GR6.000-6	6,000	600	✓	39,79 €
GR6.000-9	6,000	900	✓	39,79 €
GR7.000-6	7,000	600	✓	30,30 €
GR7.000-9	7,000	900	-	45,30 €
GR7.993-6	7,993	600	✓	37,34 €
GR7.993-9	7,993	900	-	55,94 €
GR8.000-6	8,000	600	✓	35,45 €
GR8.992-9	8,992	900	-	99,85 €
GR9.992-9	9,992	900	✓	104,76 €

Part number	ØD	L	Stock*	Price each 1 to 5
GR9.993-10	9,993	1000	-	123,93 €
GR10.000-4	10,000	400	✓	40,56 €
GR10.000-9	10,000	900	-	104,03 €
GR10.000-10	10,000	1000	-	123,93 €
GR11.991-4	11,991	400	-	54,91 €
GR11.993-1	11,993	1000	-	161,39 €
GR12.000-4	12,000	400	✓	54,91 €
GR12.000-9	12,000	900	-	142,69 €
GR12.000-10	12,000	1000	✓	164,29 €
GR12.993-4	12,993	400	-	57,36 €
GR12.993-9	12,993	900	-	On request
GR13.993-9	13,993	900	-	167,86 €
GR14.991-9	14,991	900	-	223,20 €
GR16.000-9	16,000	900	-	230,61 €
GR19.992-9	19,992	900	✓	295,35 €
GR25.000-9	25,000	900	-	411,82 €
GR29.992-9	29,992	900	-	560,33 €

*Depending on availability - Dimensions in mm

Ground round bar, sawn end



MATCD Pre-hardened steel (42CD4T) bar

- Ready to use pre-hardened steel
- Tolerance on diameter h7
- Surface finish: Ra1.6 (except sawn ends Ra25)
- Materials:

Pre-hardened steel 42CD4T (1.7225)

Hardness 95-110 kg/mm²

Composition:

Carbon: 0.38 to 0.45%

Chrome: 0.9 to 1.2%

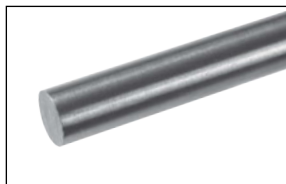
Silicon: 0.4%

Molybdenum: 0.15 to 0.3%

Manganese: 0.6 to 0.9%

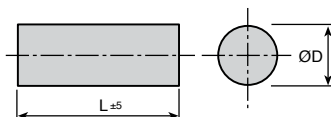
Phosphorus: 0.035%

Sulphur: 0.035%



Applications

- Transmission parts, shafts, cylinders, gears, crowns



Hard wearing



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-10%	-15%	On request

Part number	ØD (h7)	L	Weight (kg/m)	Price each 1 to 5
MAT5-1000/42CD4T	5	1000	0,16	9,57 €
MAT6-1000/42CD4T	6	1000	0,22	12,50 €
MAT8-1000/42CD4T	8	1000	0,39	14,82 €
MAT10-1000/42CD4T	10	1000	0,61	6,83 €
MAT12-1000/42CD4T	12	1000	0,88	11,13 €
MAT14-1000/42CD4T	14	1000	1,20	13,29 €

Dimensions in mm

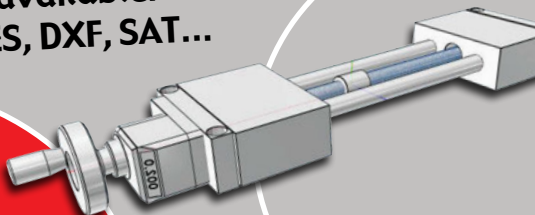
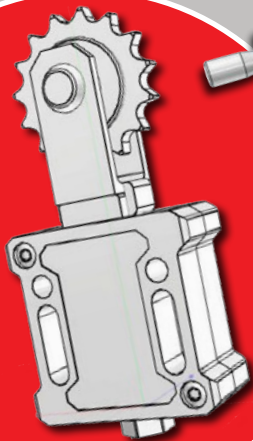
Part number	ØD (h7)	L	Weight (kg/m)	Price each 1 to 5
MAT15-1000/42CD4T	15	1000	1,38	14,85 €
MAT20-1000/42CD4T	20	1000	2,45	22,86 €
MAT25-1000/42CD4T	25	1000	3,83	35,75 €
MAT30-1000/42CD4T	30	1000	5,51	51,78 €
MAT40-1000/42CD4T	40	1000	9,80	89,88 €
MAT50-1000/42CD4T	50	1000	15,31	138,72 €

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Cylindrical polymer bush



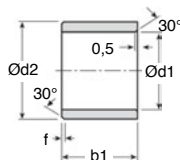
JSM

The speed specialist

- Material: iglidur® J, see JFM bush
- Not sold individually, please contact us for details

Assembly

- Recommended assembly tolerances
shaft h9, housing bore-size H7
- Shaft tr. 50 HRC, surface roughness 0.8-2 µm



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-10%	-25%	-40%	-50%	-60%	On request

Options

- Bore diameter up to 50mm

Part number	Ød1	Ød2	b1 (h13)	f	Stock*	Price each 1 to 9
JSM0104-02	1,5 +0,014 +0,054	4,0	2,0	0,5	✓	2,54 €
JSM0205-02	2,0 +0,014 +0,054	5,0	2,0	0,5	✓	2,65 €
JSM0206-02	2,5 +0,020 +0,080	6,0	2,5	0,5	-	On request
JSM0304-05	3,0 +0,014 +0,054	4,5	5,0	0,5	✓	3,31 €
JSM0308-04	3,0 +0,020 +0,080	8,0	4,0	0,5	-	4,89 €
JSM0308-05	3,0 +0,020 +0,080	8,0	5,0	0,5	-	4,16 €
JSM0405-04	4,0 +0,020 +0,068	5,5	4,0	0,5	✓	2,69 €
JSM0507-05	5,0 +0,020 +0,068	7,0	5,0	0,5	✓	2,76 €
JSM0608-06	6,0 +0,020 +0,068	8,0	6,0	0,5	✓	3,36 €
JSM0608-10	6,0 +0,020 +0,068	8,0	10,0	0,5	✓	3,59 €
JSM0810-08	8,0 +0,025 +0,083	10,0	8,0	0,5	✓	2,76 €
JSM0810-10	8,0 +0,025 +0,083	10,0	10,0	0,5	✓	3,41 €
JSM0810-12	8,0 +0,025 +0,083	10,0	12,0	0,5	✓	2,54 €
JSM0810-16	8,0 +0,025 +0,083	10,0	16,0	0,5	✓	3,66 €
JSM1012-05	10,0 +0,025 +0,083	12,0	5,0	0,5	✓	2,76 €
JSM1012-08	10,0 +0,025 +0,083	12,0	8,0	0,5	✓	2,82 €
JSM1012-15	10,0 +0,025 +0,083	12,0	15,0	0,5	✓	3,77 €
JSM1012-20	10,0 +0,025 +0,083	12,0	20,0	0,5	✓	3,95 €
JSM1014-16	10,0 +0,025 +0,083	14,0	16,0	0,5	-	3,52 €
JSM1016-10	10,0 +0,025 +0,083	16,0	10,0	0,5	-	3,59 €
JSM1016-16	10,0 +0,025 +0,083	16,0	16,0	0,5	-	4,01 €
JSM1214-08	12,0 +0,032 +0,102	14,0	8,0	0,8	✓	3,06 €
JSM1214-09	12,0 +0,032 +0,102	14,0	9,0	0,8	-	3,06 €
JSM1214-10	12,0 +0,032 +0,102	14,0	10,0	0,8	✓	3,06 €
JSM1214-15	12,0 +0,032 +0,102	14,0	15,0	0,8	✓	3,87 €
JSM1416-10	14,0 +0,032 +0,102	16,0	10,0	0,8	-	3,36 €
JSM1416-15	14,0 +0,032 +0,102	16,0	15,0	0,8	-	3,41 €
JSM1416-25	14,0 +0,032 +0,102	16,0	25,0	0,8	-	4,01 €
JSM1418-18	14,0 +0,032 +0,102	18,0	18,0	0,8	-	4,01 €
JSM1517-12	15,0 +0,032 +0,102	17,0	12,0	0,8	✓	3,95 €
JSM1517-20	15,0 +0,032 +0,102	17,0	20,0	0,8	-	3,77 €
JSM1618-12	16,0 +0,032 +0,102	18,0	12,0	0,8	✓	4,42 €
JSM1618-20	16,0 +0,032 +0,102	18,0	20,0	0,8	✓	4,42 €
JSM1820-20	18,0 +0,032 +0,102	20,0	20,0	0,8	-	5,30 €
JSM2023-20	20,0 +0,040 +0,124	23,0	20,0	0,8	-	5,35 €
JSM2023-25	20,0 +0,040 +0,124	23,0	25,0	0,8	✓	5,24 €
JSM2026-30	20,0 +0,040 +0,124	26,0	30,0	0,8	✓	6,76 €
JSM2427-25	24,0 +0,032 +0,102	27,0	25,0	0,8	-	6,67 €
JSM2528-30	25,0 +0,040 +0,124	28,0	30,0	0,8	✓	9,14 €
JSM2630-20	26,0 +0,040 +0,124	30,0	25,0	0,8	-	5,93 €

*Depending on availability - Dimensions in mm



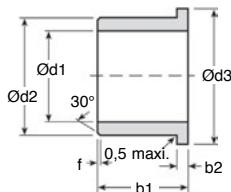
Flanged polymer bush

The speed specialist

JFM

- **Material:** iglidur® J
- Yellow
- Working temperature: -50°C to +90°C
(+60°C ideal, +120°C for short periods)
- Max. continuous speed:
Rotating 1.5 m/s
Oscillating 1.5 m/s
Linear 8 m/s
- Pressure resistance:
at +20°C 35 N/mm² (ideally 2 N/mm²)
- Friction coefficient
dry 0.06-0.18
greased 0.09
water/oil 0.04
- **Not sold individually, please contact us for details**

Maintenance free



Assembly

- Recommended assembly tolerances shaft h9, housing bore-size H7
- Shaft treated 50 HRC, surface finish 0.8-2 µm

Options

- Bore diameter up to 70mm

DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-10%	-25%	-40%	-50%	-60%	On request

Part number	Ød1	Ød2	Ød3 (d13)	b1 (h13)	b2 (-0,14)	f	Stock*	Price each 1 to 9
JFM0304-05	3 +0,014 +0,054	4,5	7,5	5	0,75	0,5	✓	2,60 €
JFM0405-06	4 +0,020 +0,068	5,5	9,5	6	0,75	0,5	✓	2,60 €
JFM0507-05	5 +0,020 +0,068	7,0	11,0	5	1,00	0,5	✓	2,60 €
JFM0608-06	6 +0,020 +0,068	8,0	12,0	6	1,00	0,5	✓	2,76 €
JFM0608-10	6 +0,020 +0,068	8,0	12,0	10	1,00	0,5	✓	2,89 €
JFM0810-06	8 +0,025 +0,083	10,0	15,0	6	1,00	0,5	✓	3,12 €
JFM0810-08	8 +0,025 +0,083	10,0	15,0	8	1,00	0,5	✓	3,24 €
JFM0812-06	8 +0,025 +0,083	12,0	16,0	6	1,00	0,5	✓	4,23 €
JFM1012-05	10 +0,025 +0,083	12,0	18,0	5	1,00	0,5	✓	3,18 €
JFM1012-09	10 +0,025 +0,083	12,0	18,0	9	1,00	0,5	✓	3,95 €
JFM1012-12	10 +0,025 +0,083	12,0	18,0	12	1,00	0,5	✓	4,01 €
JFM1012-15	10 +0,025 +0,083	12,0	18,0	15	1,00	0,5	✓	3,41 €
JFM1214-09	12 +0,032 +0,102	14,0	20,0	9	1,00	0,8	✓	3,81 €
JFM1214-12	12 +0,032 +0,102	14,0	20,0	12	1,00	0,8	✓	4,46 €
JFM1214-15	12 +0,032 +0,102	14,0	20,0	15	1,00	0,8	✓	4,71 €
JFM1416-12	14 +0,032 +0,102	16,0	22,0	12	1,00	0,8	-	4,39 €
JFM1416-17	14 +0,032 +0,102	16,0	22,0	17	1,00	0,8	✓	5,06 €
JFM1521-20	15 +0,032 +0,102	21,0	27,0	20	3,00	0,8	✓	7,63 €
JFM1618-17	16 +0,032 +0,102	18,0	24,0	17	1,00	0,8	✓	5,48 €
JFM1820-22	18 +0,032 +0,102	20,0	26,0	22	1,00	0,8	✓	5,84 €
JFM2023-21	20 +0,040 +0,124	23,0	30,0	21	1,00	0,8	✓	6,67 €
JFM2528-21	25 +0,040 +0,124	28,0	35,0	21	1,50	0,8	✓	7,30 €

*Depending on availability - Dimensions in mm

Flanged polymer bush



AFM For food and pharmaceutical industries

- **Material:** iglidur® A200
- Approved by the Food and Drug Administration (FDA)
- High resistance
- High abrasion resistance
- Suitable for slow oscillating, rotary or linear movements
- Working temp. -40°C to +80°C (short periods +170°C)
- For mechanical performance characteristics, please see ASM bush
- **Not sold individually, please contact us for details**

Maintenance free



DISCOUNTS

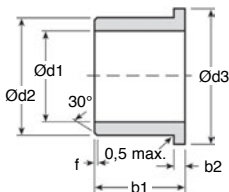
Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-10%	-25%	-45%	-60%	-65%	On request

Part number	Ød1	Ød2	Ød3 ¹¹³	b1 ¹¹³	b2 ¹¹⁴	f	Stock*	Price each 1 to 9
AFM0103-02	1,0 +0,020 +0,080	3	5	2	1,0	0,5	✓	3,06 €
AFM0104-02	1,5 +0,020 +0,080	4	6	2	1,0	0,5	-	3,06 €
AFM0205-03	2,0 +0,020 +0,080	5	8	3	1,5	0,5	✓	4,31 €
AFM0206-03	2,5 +0,020 +0,080	6	9	3	1,5	0,5	-	3,12 €
AFM0306-04	3,0 +0,020 +0,080	6	9	4	1,5	0,5	✓	4,31 €
AFM0408-04	4,0 +0,030 +0,105	8	12	4	2,0	0,5	✓	4,42 €
AFM0408-06	4,0 +0,030 +0,105	8	12	6	2,0	0,5	✓	4,42 €
AFM0509-05	5,0 +0,030 +0,105	9	13	5	2,0	0,5	-	3,36 €
AFM0509-06	5,0 +0,030 +0,105	9	13	6	2,0	0,5	-	3,36 €
AFM0509-08	5,0 +0,030 +0,105	9	13	8	2,0	0,5	✓	4,55 €
AFM0610-04	6,0 +0,030 +0,105	10	14	4	2,0	0,5	✓	4,42 €
AFM0610-06	6,0 +0,030 +0,105	10	14	6	2,0	0,5	-	4,55 €
AFM0610-10	6,0 +0,030 +0,105	10	14	10	2,0	0,5	✓	3,41 €
AFM0612-06	6,0 +0,030 +0,105	12	14	6	3,0	0,5	-	3,41 €
AFM0612-10	6,0 +0,030 +0,105	12	14	10	3,0	0,5	✓	3,52 €
AFM0711-08	7,0 +0,040 +0,130	11	15	8	2,0	0,5	-	3,59 €
AFM0811-08	8,0 +0,040 +0,130	11	13	8	2,0	0,5	✓	4,76 €
AFM0812-06	8,0 +0,040 +0,130	12	16	6	2,0	0,5	✓	4,67 €
AFM0812-08	8,0 +0,040 +0,130	12	16	8	2,0	0,5	✓	2,82 €
AFM0812-12	8,0 +0,040 +0,130	12	16	12	2,0	0,5	✓	3,81 €
AFM0814-06	8,0 +0,040 +0,130	14	18	6	3,0	0,5	-	3,66 €
AFM0814-10	8,0 +0,040 +0,130	14	18	10	3,0	0,5	-	3,66 €
AFM0914-06	9,0 +0,040 +0,130	14	19	6	3,0	0,5	-	3,59 €
AFM0914-10	9,0 +0,040 +0,130	14	19	10	3,0	0,5	-	3,66 €
AFM0914-14	9,0 +0,040 +0,130	14	19	14	3,0	0,5	-	3,77 €
AFM10162010	10,0 +0,040 +0,130	16	20	10	3,0	0,5	✓	3,87 €
AFM1016-08	10,0 +0,040 +0,130	16	22	8	3,0	0,5	✓	4,95 €
AFM1016-10	10,0 +0,040 +0,130	16	22	10	3,0	0,5	-	3,87 €
AFM1016-16	10,0 +0,040 +0,130	16	22	16	3,0	0,5	✓	5,13 €
AFM1218-08	12,0 +0,050 +0,160	18	24	8	3,0	0,8	✓	3,87 €
AFM1218-10	12,0 +0,050 +0,160	18	22	10	3,0	0,8	-	3,87 €
AFM1218-12	12,0 +0,050 +0,160	18	24	12	3,0	0,8	✓	3,24 €
AFM1218-15	12,0 +0,050 +0,160	18	22	15	3,0	0,8	✓	5,17 €

*Depending on availability - Dimensions in mm

Assembly

- Recommended assembly tolerances:
shaft h9
housing bore-size H7
- Treated shaft 50 Hrc
- Surface finish 1.5-3 μm

**DISCOUNTS**

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-10%	-25%	-45%	-60%	-65%	On request

Part number	Ød1	Ød2	Ød3 ^{h13}	b1 ^{h13}	b2 ^{h14}	f	Stock*	Price each 1 to 9
AFM1218-20	12 ^{+0,050 +0,160}	18	22	20	3,0	0,8	✓	5,30 €
AFM1420-10	14 ^{+0,050 +0,160}	20	25	10	3,0	0,8	-	4,07 €
AFM1420-15	14 ^{+0,050 +0,160}	20	25	15	3,0	0,8	✓	5,35 €
AFM1420-20	14 ^{+0,050 +0,160}	20	25	20	3,0	0,8	✓	5,48 €
AFM1521-10	15 ^{+0,050 +0,160}	21	27	10	3,0	0,8	-	4,11 €
AFM1521-15	15 ^{+0,050 +0,160}	21	27	15	3,0	0,8	✓	5,42 €
AFM1521-20	15 ^{+0,050 +0,160}	21	27	20	3,0	0,8	✓	5,48 €
AFM1521-25	15 ^{+0,050 +0,160}	21	27	25	3,0	0,8	-	4,42 €
AFM1622-12	16 ^{+0,050 +0,160}	22	28	12	3,0	0,8	✓	4,11 €
AFM1622-15	16 ^{+0,050 +0,160}	22	28	15	3,0	0,8	✓	5,35 €
AFM1622-20	16 ^{+0,050 +0,160}	22	28	20	3,0	0,8	-	4,36 €
AFM1622-25	16 ^{+0,050 +0,160}	22	28	25	3,0	0,8	✓	5,64 €
AFM1824-12	18 ^{+0,050 +0,160}	24	30	12	3,0	0,8	✓	5,35 €
AFM1824-18	18 ^{+0,050 +0,160}	24	30	18	3,0	0,8	-	4,36 €
AFM1824-20	18 ^{+0,050 +0,160}	24	30	20	3,0	0,8	-	4,36 €
AFM1824-30	18 ^{+0,050 +0,160}	24	30	30	3,0	0,8	✓	6,01 €
AFM2026-15	20 ^{+0,065 +0,195}	26	32	15	3,0	0,8	✓	5,48 €
AFM2026-20	20 ^{+0,065 +0,195}	26	32	20	3,0	0,8	✓	5,84 €
AFM2026-30	20 ^{+0,065 +0,195}	26	32	30	3,0	0,8	✓	6,06 €
AFM2228-15	22 ^{+0,065 +0,195}	28	34	15	3,0	0,8	-	5,77 €
AFM2228-20	22 ^{+0,065 +0,195}	28	34	20	3,0	0,8	-	4,82 €
AFM2228-30	22 ^{+0,065 +0,195}	28	34	30	3,0	0,8	-	6,40 €
AFM2430-15	24 ^{+0,065 +0,195}	30	36	15	3,0	0,8	-	4,59 €
AFM2430-20	24 ^{+0,065 +0,195}	30	36	20	3,0	0,8	-	4,82 €
AFM2430-30	24 ^{+0,065 +0,195}	30	36	30	3,0	0,8	-	5,48 €
AFM2532-20	25 ^{+0,065 +0,195}	32	38	20	4,0	0,8	✓	6,40 €
AFM2532-30	25 ^{+0,065 +0,195}	32	38	30	4,0	0,8	-	6,01 €
AFM2532-40	25 ^{+0,065 +0,195}	32	38	40	4,0	0,8	✓	7,63 €
AFM2734-20	27 ^{+0,065 +0,195}	34	40	20	4,0	0,8	-	5,48 €
AFM2734-30	27 ^{+0,065 +0,195}	34	40	30	4,0	0,8	-	6,13 €
AFM2734-40	27 ^{+0,065 +0,195}	34	40	40	4,0	0,8	-	6,67 €
AFM2836-20	28 ^{+0,065 +0,195}	36	42	20	4,0	0,8	-	5,71 €
AFM2836-30	28 ^{+0,065 +0,195}	36	42	30	4,0	0,8	-	6,46 €
AFM2836-40	28 ^{+0,065 +0,195}	36	42	40	4,0	0,8	-	7,24 €
AFM3038-20	30 ^{+0,065 +0,195}	38	44	20	4,0	0,8	✓	6,88 €
AFM3038-30	30 ^{+0,065 +0,195}	38	44	30	4,0	0,8	✓	7,80 €
AFM3038-40	30 ^{+0,065 +0,195}	38	44	40	4,0	0,8	✓	8,59 €
AFM3240-20	32 ^{+0,080 +0,240}	40	46	20	4,0	1,2	-	5,77 €
AFM3240-30	32 ^{+0,080 +0,240}	40	46	30	4,0	1,2	-	6,83 €
AFM3240-40	32 ^{+0,080 +0,240}	40	46	40	4,0	1,2	-	7,80 €

*Depending on availability - Dimensions in mm

Cylindrical polymer bush



ASM For food and pharmaceutical industries

- **Material:** iglidur® A200
- Approved by the Food and Drug Administration (FDA)
- High resistance
- High abrasion resistance
- Suitable for slow oscillating, rotary or linear movements
- Working temp. -40°C to +80°C (short periods +170°C)
- **Not sold individually, please contact us for details**

Assembly

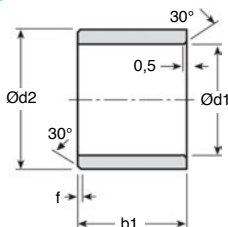
- Recommended assembly tolerances
shaft h9 housing bore-size H7
- Treated shaft 50 HRC
- Surface finish 1.5-3 µm

Maintenance free



Performance

- Max. continuous speed during dry operation:
Rotary 0.8 m/s
Oscillating 0.8 m/s
Linear 3 m/s
- Pressure resistance:
at 115°C 12 N/mm²
at 20°C 18 N/mm²
- Friction coefficient
dry 0.1-0.4
greased 0.09
water/oil 0.04
- Electrical resistance 10¹² Ω/cm



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-10%	-25%	-45%	-60%	-65%	On request

Part number	Ød ¹	Ød ²	b1 ^{h13}	f	Stock*	Price each 1 to 9
ASM0103-02	1,0 +0,020 +0,080	3	2	0,5	-	2,94 €
ASM0104-02	1,5 +0,020 +0,080	4	2	0,5	-	3,06 €
ASM0205-02	2,0 +0,020 +0,080	5	2	0,5	-	3,12 €
ASM0205-03	2,0 +0,020 +0,080	5	3	0,5	-	3,12 €
ASM0206-03	2,5 +0,020 +0,080	6	3	0,5	-	3,18 €
ASM0305-03	3,0 +0,020 +0,080	5	3	0,5	-	3,18 €
ASM0305-04	3,0 +0,020 +0,080	5	4	0,5	✓	4,31 €
ASM0306-03	3,0 +0,020 +0,080	6	3	0,5	-	3,18 €
ASM0306-04	3,0 +0,020 +0,080	6	4	0,5	✓	3,31 €
ASM0407-03	4,0 +0,030 +0,105	7	3	0,5	✓	4,42 €
ASM0407-04	4,0 +0,030 +0,105	7	4	0,5	-	3,31 €
ASM0407-06	4,0 +0,030 +0,105	7	6	0,5	✓	4,42 €
ASM0408-06	4,0 +0,030 +0,105	8	6	0,5	-	3,31 €
ASM0508-04	5,0 +0,030 +0,105	8	4	0,5	-	3,41 €

*Depending of availability - Dimensions in mm

Part number	Ød ¹	Ød ²	b ^{1h13}	f	Stock*	Price each 1 to 9
ASM0508-05	5 +0,030 +0,105	8	5	0,5	-	3,41 €
ASM0508-08	5 +0,030 +0,105	8	8	0,5	✓	4,59 €
ASM0509-05	5 +0,030 +0,105	9	5	0,5	-	4,55 €
ASM0509-08	5 +0,030 +0,105	9	8	0,5	-	3,41 €
ASM0608-10	6 +0,030 +0,105	8	10	0,5	✓	3,59 €
ASM0609-06	6 +0,030 +0,105	9	6	0,5	✓	4,59 €
ASM0610-04	6 +0,030 +0,105	10	4	0,5	✓	4,59 €
ASM0610-06	6 +0,030 +0,105	10	6	0,5	-	3,41 €
ASM0610-10	6 +0,030 +0,105	10	10	0,5	✓	4,76 €
ASM0612-06	6 +0,030 +0,105	12	6	0,5	-	4,76 €
ASM0612-10	6 +0,030 +0,105	12	10	0,5	✓	3,66 €
ASM0710-05	7 +0,040 +0,130	10	5	0,5	-	3,59 €
ASM0710-08	7 +0,040 +0,130	10	8	0,5	-	3,59 €
ASM0810-06	8 +0,040 +0,130	10	6	0,5	-	3,52 €
ASM0810-08	8 +0,040 +0,130	10	8	0,5	✓	4,67 €
ASM0810-10	8 +0,040 +0,130	10	10	0,5	✓	3,59 €
ASM0811-08	8 +0,040 +0,130	11	8	0,5	-	3,59 €
ASM0811-12	8 +0,040 +0,130	11	12	0,5	-	3,66 €
ASM0812-06	8 +0,040 +0,130	12	6	0,5	-	3,59 €
ASM0812-08	8 +0,040 +0,130	12	8	0,5	-	3,59 €
ASM0812-10	8 +0,040 +0,130	12	10	0,5	✓	4,76 €
ASM0812-12	8 +0,040 +0,130	12	12	0,5	✓	4,76 €
ASM0814-06	8 +0,040 +0,130	14	6	0,5	-	3,66 €
ASM0814-10	8 +0,040 +0,130	14	10	0,5	✓	3,77 €
ASM0912-14	9 +0,040 +0,130	12	14	0,5	-	3,66 €
ASM1014-06	10 +0,040 +0,130	14	6	0,5	-	3,52 €
ASM1014-08	10 +0,040 +0,130	14	8	0,5	-	3,52 €
ASM1014-10	10 +0,040 +0,130	14	10	0,5	✓	4,76 €
ASM1014-16	10 +0,040 +0,130	14	16	0,5	-	3,66 €
ASM1016-06	10 +0,040 +0,130	16	6	0,5	-	3,59 €
ASM1016-10	10 +0,040 +0,130	16	10	0,5	-	3,66 €
ASM1016-16	10 +0,040 +0,130	16	16	0,5	-	3,77 €
ASM1214-20	12 +0,050 +0,160	14	20	0,8	✓	4,67 €
ASM1216-15	12 +0,050 +0,160	16	15	0,8	✓	3,66 €
ASM1216-20	12 +0,050 +0,160	16	20	0,8	✓	4,89 €
ASM1218-08	12 +0,050 +0,160	18	8	0,8	-	4,76 €
ASM1218-10	12 +0,050 +0,160	18	10	0,8	-	3,59 €
ASM1218-15	12 +0,050 +0,160	18	15	0,8	✓	3,81 €
ASM1218-20	12 +0,050 +0,160	18	20	0,8	-	3,87 €
ASM1416-10	14 +0,050 +0,160	16	10	0,8	-	3,41 €
ASM1416-15	14 +0,050 +0,160	16	15	0,8	-	3,52 €
ASM1416-20	14 +0,050 +0,160	16	20	0,8	-	4,01 €
ASM1420-10	14 +0,050 +0,160	20	10	0,8	-	3,87 €
ASM1420-15	14 +0,050 +0,160	20	15	0,8	-	3,87 €
ASM1420-20	14 +0,050 +0,160	20	20	0,8	-	3,87 €
ASM1517-10	15 +0,050 +0,160	17	10	0,8	-	3,52 €
ASM1517-15	15 +0,050 +0,160	17	15	0,8	-	3,59 €
ASM1521-10	15 +0,050 +0,160	21	10	0,8	-	3,87 €
ASM1521-15	15 +0,050 +0,160	21	15	0,8	-	3,87 €
ASM1521-20	15 +0,050 +0,160	21	20	0,8	-	4,07 €
ASM1618-12	16 +0,050 +0,160	18	12	0,8	-	3,52 €

*Depending of availability - Dimensions in mm

Part number	Ød ¹	Ød ²	b ¹ ^{h13}	f	Stock*	Price each 1 to 9
ASM1618-20	16 +0,050 +0,160	18	20	0,8	-	3,77 €
ASM1620-20	16 +0,050 +0,160	20	20	0,8	✓	3,81 €
ASM1620-25	16 +0,050 +0,160	20	25	0,8	✓	5,48 €
ASM1622-12	16 +0,050 +0,160	22	12	0,8	-	4,01 €
ASM1622-15	16 +0,050 +0,160	22	15	0,8	-	4,07 €
ASM1622-16	16 +0,050 +0,160	22	16	0,8	-	4,11 €
ASM1622-20	16 +0,050 +0,160	22	20	0,8	✓	5,42 €
ASM1622-25	16 +0,050 +0,160	22	25	0,8	✓	5,59 €
ASM1824-12	18 +0,050 +0,160	24	12	0,8	-	4,01 €
ASM1824-20	18 +0,050 +0,160	24	20	0,8	-	4,36 €
ASM1824-30	18 +0,050 +0,160	24	30	0,8	-	4,67 €
ASM2023-15	20 +0,065 +0,195	23	15	0,8	-	3,87 €
ASM2023-20	20 +0,065 +0,195	23	20	0,8	-	3,87 €
ASM2025-20	20 +0,065 +0,195	25	20	0,8	✓	5,42 €
ASM2025-30	20 +0,065 +0,195	25	30	0,8	✓	5,77 €
ASM2026-15	20 +0,065 +0,195	26	15	0,8	-	4,31 €
ASM2026-20	20 +0,065 +0,195	26	20	0,8	✓	5,59 €
ASM2026-30	20 +0,065 +0,195	26	30	0,8	✓	6,01 €
ASM2226-15	22 +0,065 +0,195	26	15	0,8	-	3,87 €
ASM2228-10	22 +0,065 +0,195	28	10	0,8	-	4,01 €
ASM2228-15	22 +0,065 +0,195	28	15	0,8	-	4,31 €
ASM2228-20	22 +0,065 +0,195	28	20	0,8	-	4,42 €
ASM2228-30	22 +0,065 +0,195	28	30	0,8	-	4,89 €
ASM2430-15	24 +0,065 +0,195	30	15	0,8	-	4,36 €
ASM2430-20	24 +0,065 +0,195	30	20	0,8	-	4,55 €
ASM2430-30	24 +0,065 +0,195	30	30	0,8	-	5,00 €
ASM2528-12	25 +0,065 +0,195	28	12	0,8	✓	3,52 €
ASM2528-20	25 +0,065 +0,195	28	20	0,8	-	4,01 €
ASM2530-20	25 +0,065 +0,195	30	20	0,8	-	4,36 €
ASM2530-30	25 +0,065 +0,195	30	30	0,8	-	4,82 €
ASM2530-40	25 +0,065 +0,195	30	40	0,8	-	5,13 €
ASM2532-20	25 +0,065 +0,195	32	20	1,2	✓	5,00 €
ASM2532-30	25 +0,065 +0,195	32	30	1,2	-	5,71 €
ASM2532-40	25 +0,065 +0,195	32	40	1,2	-	6,31 €
ASM2630-20	26 +0,065 +0,195	30	20	1,2	-	5,13 €
ASM2632-30	26 +0,065 +0,195	30	30	1,2	-	5,77 €
ASM2734-20	27 +0,065 +0,195	34	20	1,2	-	5,13 €
ASM2734-30	27 +0,065 +0,195	34	30	1,2	-	5,84 €
ASM2734-40	27 +0,065 +0,195	34	40	1,2	-	6,51 €
ASM2833-20	28 +0,065 +0,195	33	20	1,2	✓	4,67 €
ASM2836-20	28 +0,065 +0,195	36	20	1,2	-	5,35 €
ASM2836-30	28 +0,065 +0,195	36	30	1,2	-	6,01 €
ASM2836-40	28 +0,065 +0,195	36	40	1,2	-	6,83 €
ASM3038-20	30 +0,065 +0,195	38	20	1,2	-	5,48 €
ASM3038-30	30 +0,065 +0,195	38	30	1,2	-	6,31 €
ASM3038-40	30 +0,065 +0,195	38	40	1,2	-	7,11 €
ASM3240-20	32 +0,080 +0,240	40	20	1,2	-	5,54 €
ASM3240-30	32 +0,080 +0,240	40	30	1,2	-	6,46 €
ASM3240-40	32 +0,080 +0,240	40	40	1,2	✓	7,24 €

*Depending of availability - Dimensions in mm

Cylindrical polymer bushing

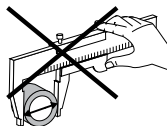
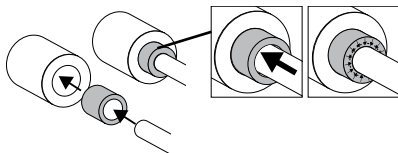
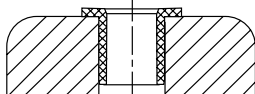
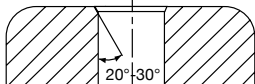
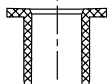
Assembly instructions

Assembly

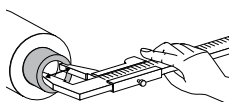
These plain Iglidur® bearings are designed to be force fitted. It is only once fitted into a steel bore (H7 tolerance recommended) that the internal diameter will reach its design tolerance. Before fitting the external diameter of the bearing may exceed the internal diameter by 2%. This is so that the bearing will remain in place and all radial or axial movement restricted. The bore should be machined to the standard recommended for bearings (typically H7). It should also be smooth, level and chamfered where possible. Mounting is normally achieved using a punch. The use of centring or calibrating mandrels can cause damage to bearings and increase play.

Use of adhesives

It is not normally necessary to glue the bearings in their housings. If the fixing becomes loose due to high temperatures, the bearing should be changed for one suitable for use at those temperatures. If the use of adhesive cannot be avoided then preliminary tests should be made, remembering that a positive test in one case may not necessarily work elsewhere.



Do not measure
before assembly

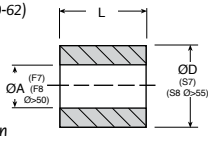


Take the measurement once
the bearing has been fitted

Diameter d1 (mm)	Bore H7 (mm)
to 3	0-0,010
> 3 to 6	0-0,012
> 6 to 10	0-0,015
> 10 to 18	0-0,018
> 18 to 30	0-0,021
> 30 to 50	0-0,025
> 50 to 80	0-0,030
> 80 to 120	0-0,035
> 120	0-0,040

- Bronze bush

- Material: Bronze BP 25 (FU-E10-62)
- Max. static load: 20N/mm²
- Max. dynamic load: 10N/mm²
- Max. linear speed: 6m/s
- Working temp. from -5°C to +90°C
- Saturating oil: T100
- Concentricity tolerance between A and D:
 $\varnothing A \leq 20\text{mm}$: tolerance 50µm -
 $20 < \varnothing A \leq 35\text{mm}$: tolerance 70µm
 $\varnothing A > 35\text{mm}$: tolerance 100µm
- Length tolerance:
 $L \leq 10\text{mm}$: tolerance $\pm 0.1\text{mm}$ -
 $L > 10\text{mm}$: tolerance $\pm 1\%$



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA (F7/F8)	ØD (s7/s8)	L	Stock*	Price each 1 to 9	Part number	ØA (F7/F8)	ØD (s7/s8)	L	Stock*	Price each 1 to 9
MET2-5-2	2	5	2	-	0,72 €	MET6-12-6	6	12	6	✓	1,40 €
MET2-5-3	2	5	3	✓	0,65 €	MET6-12-10	6	12	10	✓	1,27 €
MET3-6-4	3	6	4	✓	0,72 €	MET6-12-12	6	12	12	✓	1,34 €
MET3-6-10	3	6	10	✓	0,79 €	MET6-12-16	6	12	16	✓	1,40 €
MET4-7-4	4	7	4	✓	0,72 €	MET7-10-5	7	10	5	✓	0,79 €
MET4-7-8	4	7	8	✓	0,79 €	MET7-10-8	7	10	8	✓	0,96 €
MET4-7-12	4	7	12	✓	0,89 €	MET7-10-10	7	10	10	✓	1,02 €
MET4-8-4	4	8	4	✓	0,79 €	MET8-11-8	8	11	8	✓	0,89 €
MET4-8-8	4	8	8	✓	0,84 €	MET8-11-12	8	11	12	✓	1,10 €
MET4-8-12	4	8	12	✓	1,02 €	MET8-11-16	8	11	16	✓	1,17 €
MET5-8-5	5	8	5	✓	0,79 €	MET8-11-20	8	11	20	✓	1,22 €
MET5-8-8	5	8	8	✓	0,79 €	MET8-12-8	8	12	8	✓	1,10 €
MET5-8-10	5	8	10	✓	0,79 €	MET8-12-12	8	12	12	✓	1,17 €
MET5-8-12	5	8	12	✓	0,89 €	MET8-12-16	8	12	16	✓	1,27 €
MET5-8-16	5	8	16	✓	1,10 €	MET8-12-20	8	12	20	✓	1,34 €
MET5-9-4	5	9	4	-	0,79 €	MET8-14-8	8	14	8	✓	1,27 €
MET5-9-5	5	9	5	✓	0,79 €	MET8-14-12	8	14	12	✓	1,40 €
MET5-9-8	5	9	8	✓	0,96 €	MET8-14-16	8	14	16	✓	1,65 €
MET6-9-6	6	9	6	✓	0,79 €	MET8-14-20	8	14	20	-	On request
MET6-9-10	6	9	10	✓	0,89 €	MET9-12-6	9	12	6	-	On request
MET6-9-12	6	9	12	✓	1,02 €	MET9-12-10	9	12	10	-	On request
MET6-9-16	6	9	16	✓	1,10 €	MET9-12-14	9	12	14	✓	1,17 €
MET6-10-6	6	10	6	✓	0,84 €	MET10-13-10	10	13	10	✓	1,10 €
MET6-10-10	6	10	10	✓	1,10 €	MET10-13-16	10	13	16	✓	1,27 €
MET6-10-12	6	10	12	✓	1,10 €	MET10-13-20	10	13	20	✓	1,34 €
MET6-10-16	6	10	16	✓	1,22 €	MET10-13-25	10	13	25	✓	1,52 €

*Depending on availability - Dimensions in mm

DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA (F7/F8)	ØD (s7/s8)	L	Stock*	Price each 1 to 9
MET10-14-10	10	14	10	✓	1,22 €
MET10-14-16	10	14	16	✓	1,46 €
MET10-14-20	10	14	20	✓	1,58 €
MET10-14-25	10	14	25	✓	1,78 €
MET10-15-10	10	15	10	✓	1,34 €
MET10-15-16	10	15	16	✓	1,52 €
MET10-15-20	10	15	20	✓	1,84 €
MET10-15-25	10	15	25	✓	2,21 €
MET10-16-10	10	16	10	✓	1,40 €
MET10-16-16	10	16	16	✓	1,84 €
MET10-16-20	10	16	20	✓	2,15 €
MET10-16-25	10	16	25	✓	2,64 €
MET12-15-12	12	15	12	✓	1,27 €
MET12-15-16	12	15	16	✓	1,40 €
MET12-15-20	12	15	20	✓	1,40 €
MET12-15-25	12	15	25	✓	1,58 €
MET12-16-12	12	16	12	✓	1,40 €
MET12-16-16	12	16	16	✓	1,52 €
MET12-16-20	12	16	20	✓	1,78 €
MET12-16-25	12	16	25	✓	2,07 €
MET12-17-12	12	17	12	✓	1,52 €
MET12-17-16	12	17	16	✓	1,78 €
MET12-17-20	12	17	20	-	On request
MET12-17-25	12	17	25	-	On request
MET12-18-12	12	18	12	✓	1,65 €
MET12-18-16	12	18	16	✓	2,15 €
MET12-18-20	12	18	20	✓	2,59 €
MET12-18-25	12	18	25	✓	3,52 €
MET14-18-14	14	18	14	✓	1,52 €
MET14-18-18	14	18	18	✓	1,78 €
MET14-18-22	14	18	22	✓	2,07 €
MET14-18-28	14	18	28	-	On request
MET14-20-14	14	20	14	✓	2,07 €
MET14-20-18	14	20	18	✓	2,59 €
MET14-20-22	14	20	22	✓	3,08 €
MET14-20-28	14	20	28	✓	3,81 €
MET15-19-16	15	19	16	✓	1,71 €
MET15-19-20	15	19	20	✓	2,02 €
MET15-19-25	15	19	25	✓	2,40 €
MET15-19-32	15	19	32	-	On request
MET15-21-16	15	21	16	✓	2,53 €
MET15-21-20	15	21	20	✓	3,01 €
MET15-21-25	15	21	25	✓	3,70 €
MET15-21-32	15	21	32	✓	4,51 €
MET16-20-16	16	20	16	✓	1,78 €
MET16-20-20	16	20	20	✓	2,15 €
MET16-20-25	16	20	25	✓	2,59 €
MET16-20-32	16	20	32	✓	3,20 €
MET16-22-16	16	22	16	✓	2,59 €
MET16-22-20	16	22	20	✓	3,15 €
MET16-22-25	16	22	25	✓	3,81 €
MET16-22-32	16	22	32	✓	4,81 €
MET18-22-18	18	22	18	✓	2,40 €
MET18-22-22	18	22	22	✓	2,53 €
MET18-22-28	18	22	28	-	On request
MET18-22-36	18	22	36	-	On request
MET18-24-18	18	24	18	-	On request
MET18-24-22	18	24	22	✓	3,76 €
MET18-24-28	18	24	28	-	On request
MET18-24-36	18	24	36	-	On request
MET18-25-18	18	25	18	✓	3,64 €
MET18-25-22	18	25	22	-	On request
MET18-25-28	18	25	28	-	On request
MET18-25-36	18	25	36	-	On request
MET20-24-16	20	24	16	✓	2,07 €
MET20-24-20	20	24	20	✓	2,53 €
MET20-24-25	20	24	25	✓	3,08 €
MET20-24-32	20	24	32	✓	3,81 €
MET20-25-16	20	25	16	✓	2,59 €
MET20-25-20	20	25	20	✓	3,15 €
MET20-25-25	20	25	25	✓	3,81 €
MET20-25-32	20	25	32	-	On request
MET20-26-16	20	26	16	✓	3,08 €
MET20-26-20	20	26	20	✓	3,76 €
MET20-26-25	20	26	25	-	On request
MET20-26-32	20	26	32	✓	5,69 €
MET20-27-16	20	27	16	-	On request
MET20-27-20	20	27	20	-	On request
MET20-27-25	20	27	25	-	On request
MET20-27-32	20	27	32	-	On request
MET20-28-16	20	28	16	✓	4,13 €
MET20-28-20	20	28	20	✓	5,00 €
MET20-28-25	20	28	25	-	On request
MET20-28-32	20	28	32	-	On request
MET22-27-18	22	27	18	✓	9,17 €
MET22-27-22	22	27	22	-	On request
MET22-27-28	22	27	28	✓	4,51 €
MET22-27-36	22	27	36	-	On request

*Depending on availability - Dimensions in mm

- Bronze bushing

- Material: Bronze BP 25 (FU-E10-62)
- Max. static load: 20N/mm²
- Max. dynamic load: 10N/mm²
- Max. linear speed: 6m/s
- Working temp. from -5°C to +90°C
- Saturating oil: T100
- Concentricity tolerance between A and D:
 $\varnothing A \leq 20\text{mm}$: tolerance 50 μm - $20 < \varnothing A \leq 35\text{mm}$: tolerance 70 μm
 $\varnothing A > 35\text{mm}$: tolerance 100 μm
- Length tolerance:
 $L \leq 10\text{mm}$: tolerance $\pm 0.1\text{mm}$ - $L > 10\text{mm}$: tolerance $\pm 1\%$



DISCOUNTS

Qty	1+	10+	25+	50+
Disc.	List	-20%	-30%	On request

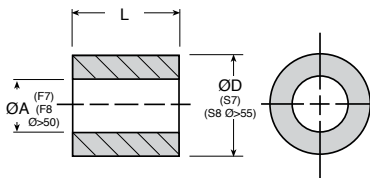
Part number (F7/F8)	$\varnothing A$	$\varnothing D$	L	Stock*	Price each 1 to 9
MET22-28-18	22	28	18	-	On request
MET22-28-22	22	28	22	✓	4,39 €
MET22-28-28	22	28	28	✓	5,38 €
MET22-28-36	22	28	36	-	On request
MET22-29-18	22	29	18	-	On request
MET22-29-22	22	29	22	-	On request
MET22-29-28	22	29	28	-	On request
MET22-29-36	22	29	36	-	On request
MET25-30-20	25	30	20	✓	3,70 €
MET25-30-25	25	30	25	✓	4,58 €
MET25-30-32	25	30	32	-	On request
MET25-30-40	25	30	40	✓	7,06 €
MET25-32-20	25	32	20	✓	5,20 €
MET25-32-25	25	32	25	✓	6,93 €
MET25-32-32	25	32	32	✓	8,00 €
MET25-32-40	25	32	40	✓	9,82 €
MET28-32-22	28	32	22	-	On request
MET28-32-28	28	32	28	-	On request
MET28-32-36	28	32	36	-	On request
MET28-32-45	28	32	45	-	On request
MET28-33-22	28	33	22	✓	4,46 €
MET28-33-28	28	33	28	✓	5,52 €
MET28-33-36	28	33	36	-	On request
MET28-33-45	28	33	45	-	On request
MET28-36-22	28	36	22	✓	7,38 €
MET28-36-28	28	36	28	-	On request
MET28-36-36	28	36	36	✓	11,24 €
MET28-36-45	28	36	45	-	On request

Part number (F7/F8)	$\varnothing A$	$\varnothing D$	L	Stock*	Price each 1 to 9
MET30-38-24	30	38	24	✓	4,61 €
MET30-38-30	30	38	30	✓	5,66 €
MET30-38-38	30	38	38	✓	7,03 €
MET32-38-20	32	38	20	✓	3,06 €
MET32-38-25	32	38	25	-	On request
MET32-38-32	32	38	32	✓	4,72 €
MET32-38-40	32	38	40	✓	5,80 €
MET32-38-50	32	38	50	✓	7,22 €
MET32-40-20	32	40	20	✓	4,08 €
MET32-40-25	32	40	25	-	On request
MET32-40-32	32	40	32	-	On request
MET32-40-40	32	40	40	✓	7,76 €
MET32-40-50	32	40	50	-	On request
MET35-44-22	35	44	22	✓	6,08 €
MET35-44-28	35	44	28	-	On request
MET35-44-35	35	44	35	✓	9,39 €
MET35-45-25	35	45	25	-	On request
MET35-45-35	35	45	35	-	On request
MET35-45-40	35	45	40	-	On request
MET35-45-50	35	45	50	✓	15,37 €
MET36-42-22	36	42	22	-	On request
MET36-42-28	36	42	28	-	On request
MET36-42-36	36	42	36	✓	6,42 €
MET36-42-45	36	42	45	-	On request
MET36-45-22	36	45	22	-	On request
MET36-45-28	36	45	28	-	On request
MET36-45-36	36	45	36	-	On request
MET36-45-45	36	45	45	-	On request

*Depending on availability - Dimensions in mm



MET



DISCOUNTS

Qty	1+	10+	25+	50+
Disc.	List	-20%	-30%	On request

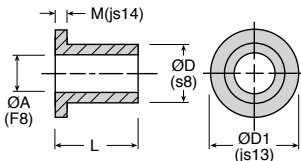
Part number	ØA (F7/F8)	ØD (s7/s8)	L	Stock*	Price each 1 to 9
MET38-44-25	38	44	25	-	On request
MET38-44-35	38	44	35	✓	7,06 €
MET38-44-45	38	44	45	-	On request
MET40-46-25	40	46	25	-	On request
MET40-46-32	40	46	32	✓	6,39 €
MET40-46-40	40	46	40	✓	7,92 €
MET40-46-50	40	46	50	✓	9,74 €
MET40-50-25	40	50	25	-	On request
MET40-50-32	40	50	32	✓	10,79 €
MET40-50-40	40	50	40	✓	13,65 €
MET40-50-50	40	50	50	-	On request
MET45-51-28	45	51	28	✓	6,92 €
MET45-51-36	45	51	36	-	On request
MET45-51-45	45	51	45	✓	10,20 €
MET45-51-56	45	51	56	-	On request
MET45-55-35	45	55	35	-	On request
MET45-55-55	45	55	55	-	On request
MET45-55-65	45	55	65	-	On request
MET45-56-28	45	56	28	-	On request
MET45-56-36	45	56	36	-	On request
MET45-56-45	45	56	45	-	On request
MET45-56-56	45	56	56	-	On request
MET50-56-32	50	56	32	-	On request
MET50-56-40	50	56	40	-	On request
MET50-56-50	50	56	50	-	On request

Part number	ØA (F7/F8)	ØD (s7/s8)	L	Stock*	Price each 1 to 9
MET50-56-63	50	56	63	✓	17,04 €
MET50-60-32	50	60	32	-	On request
MET50-60-40	50	60	40	-	On request
MET50-60-50	50	60	50	-	26,97 €
MET50-60-63	50	60	63	-	On request
MET55-65-40	55	65	40	✓	27,58 €
MET55-65-55	55	65	55	-	On request
MET55-65-70	55	65	70	-	On request
MET60-70-50	60	70	50	-	On request
MET60-70-60	60	70	60	-	On request
MET60-70-90	60	70	90	-	On request
MET60-70-120	60	70	120	-	On request
MET60-72-50	60	72	50	-	On request
MET60-72-60	60	72	60	-	On request
MET60-72-70	60	72	70	-	On request
MET60-80-90	60	80	90	-	104,50 €
MET60-80-120	60	80	120	-	138,73 €
MET63-70-40	63	70	40	-	On request
MET63-70-50	63	70	50	-	On request
MET70-80-90	70	80	90	-	77,60 €
MET70-80-120	70	80	120	-	92,46 €
MET80-100-120	80	100	120	-	180,77 €
MET100-120-120	100	120	120	-	221,03 €
MET110-125-120	110	125	120	-	173,98 €
MET125-150-120	125	150	120	-	341,55 €

*Depending on availability - Dimensions in mm

- Bronze bushing

- Material: Bronze BP 25 (FU-E10-62)
- Max. static load: 20N/mm²
- Max. dynamic load: 10N/mm²
- Max. linear speed: 6m/s
- Working temp. from -5°C to +90°C
- Saturating oil: T100
- Concentricity tolerance between A and D:
 $\varnothing A \leq 20\text{mm}$: tolerance 50µm
 $20 < \varnothing A \leq 35\text{mm}$: tolerance 70µm
 $\varnothing A > 35\text{mm}$: tolerance 100µm
- Length tolerance
 $L \leq 10\text{mm}$: tolerance $\pm 0.1\text{mm}$
 $L > 10\text{mm}$: tolerance $\pm 1\%$



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA (F8)	ØD (s8)	L	ØD1 (js13)	M (js14)	Stock	Price each 1 to 9
METC3-6-4	3	6	4	9	1,5	✓	0,89 €
METC3-6-6	3	6	6	9	1,5	✓	1,02 €
METC3-6-10	3	6	10	9	1,5	✓	1,10 €
METC4-8-4	4	8	4	12	2,0	✓	1,10 €
METC4-8-8	4	8	8	12	2,0	✓	1,17 €
METC4-8-12	4	8	12	12	2,0	✓	1,22 €
METC6-10-6	6	10	6	14	2,0	✓	1,17 €
METC6-10-10	6	10	10	14	2,0	✓	1,27 €
METC6-10-16	6	10	16	14	2,0	✓	1,34 €
METC8-12-8	8	12	8	16	2,0	✓	1,27 €
METC8-12-12	8	12	12	16	2,0	✓	1,34 €
METC8-12-16	8	12	16	16	2,0	✓	1,40 €
METC9-14-6	9	14	6	19	2,5	-	1,84 €
METC9-14-10	9	14	10	19	2,5	-	On request
METC9-14-14	9	14	14	19	2,5	✓	1,58 €
METC10-13-10	10	13	10	16	1,5	✓	1,10 €
METC10-13-16	10	13	16	16	1,5	✓	1,34 €
METC10-13-20	10	13	20	16	1,5	✓	1,34 €
METC10-15-10	10	15	10	20	2,5	✓	1,40 €
METC10-15-16	10	15	16	20	2,5	✓	1,78 €
METC10-15-20	10	15	20	20	2,5	✓	2,07 €
METC10-16-8	10	16	8	22	3,0	✓	1,52 €
METC10-16-10	10	16	10	22	3,0	✓	1,71 €
METC10-16-16	10	16	16	22	3,0	✓	2,27 €

DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA (F8)	ØD (s8)	L	ØD1 (js13)	M (js14)	Stock	Price each 1 to 9
METC12-15-12	12	15	12	18	1,5	✓	1,34 €
METC12-15-16	12	15	16	18	1,5	✓	1,46 €
METC12-15-20	12	15	20	18	1,5	✓	1,52 €
METC12-17-12	12	17	12	22	2,5	✓	1,71 €
METC12-17-16	12	17	16	22	2,5	✓	2,07 €
METC12-17-20	12	17	20	22	2,5	✓	2,46 €
METC12-17-25	12	17	25	22	2,5	✓	2,90 €
METC12-18-8	12	18	8	24	3,0	✓	1,65 €
METC12-18-12	12	18	12	24	3,0	✓	2,07 €
METC12-18-20	12	18	20	24	3,0	✓	2,96 €
METC14-18-14	14	18	14	22	2,0	✓	0,66 €
METC14-18-18	14	18	18	22	2,0	✓	1,97 €
METC14-18-22	14	18	22	22	2,0	✓	2,34 €
METC14-20-14	14	20	14	26	3,0	✓	2,59 €
METC14-20-18	14	20	18	26	3,0	✓	3,08 €
METC14-20-22	14	20	22	26	3,0	✓	3,59 €
METC14-20-28	14	20	28	26	3,0	✓	4,33 €
METC15-19-16	15	19	16	23	2,0	✓	1,84 €
METC15-19-20	15	19	20	23	2,0	✓	2,21 €
METC15-19-25	15	19	25	23	2,0	-	On request
METC15-21-16	15	21	16	27	3,0	✓	3,01 €
METC15-21-20	15	21	20	27	3,0	-	On request
METC15-21-25	15	21	25	27	3,0	✓	4,13 €
METC15-21-32	15	21	32	27	3,0	✓	5,00 €

*Depending on availability - Dimensions in mm

DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA (F8)	ØD (s8)	ØD1 (s13)	M (s14)	Price each
METC16-20-16	16	20	16	24	2,0 ✓ 1,97 €
METC16-20-20	16	20	20	24	2,0 ✓ 3,15 €
METC16-20-25	16	20	25	24	2,0 ✓ 2,77 €
METC16-22-16	16	22	16	28	3,0 ✓ 3,15 €
METC16-22-20	16	22	20	28	3,0 ✓ 3,70 €
METC16-22-25	16	22	25	28	3,0 ✓ 4,39 €
METC16-22-32	16	22	32	28	3,0 ✓ 4,81 €
METC18-22-18	18	22	18	26	2,0 ✓ 2,34 €
METC18-22-22	18	22	22	26	2,0 ✓ 2,90 €
METC18-22-28	18	22	28	26	2,0 ✓ 3,34 €
METC18-24-18	18	24	18	30	3,0 ✓ 3,76 €
METC18-24-22	18	24	22	30	3,0 ✓ 4,33 €
METC18-24-28	18	24	28	30	3,0 ✓ 5,20 €
METC20-24-16	20	24	16	28	2,0 ✓ 2,34 €
METC20-24-20	20	24	20	28	2,0 ✓ 2,77 €
METC20-24-25	20	24	25	28	2,0 ✓ 3,27 €
METC20-26-16	20	26	16	32	3,0 ✓ 4,33 €
METC20-26-20	20	26	20	32	3,0 ✓ 4,33 €
METC20-26-25	20	26	25	32	3,0 ✓ 5,20 €
METC20-26-32	20	26	32	32	3,0 ✓ 7,26 €
METC22-27-18	22	27	18	32	2,5 ✓ 3,44 €
METC22-27-22	22	27	22	32	2,5 - On request
METC22-27-28	22	27	28	32	2,5 - On request
METC22-28-15	22	28	15	34	3,0 ✓ 3,70 €
METC22-28-20	22	28	20	34	3,0 ✓ 4,64 €
METC22-28-25	22	28	25	34	3,0 - On request
METC22-28-30	22	28	30	34	3,0 - On request
METC22-29-18	22	29	18	36	3,5 - On request
METC22-29-22	22	29	22	36	3,5 ✓ 6,20 €
METC22-29-28	22	29	28	36	3,5 ✓ 7,50 €
METC22-29-32	22	29	32	36	3,5 ✓ 8,93 €
METC25-30-20	25	30	20	35	2,5 ✓ 4,19 €
METC25-30-25	25	30	25	35	2,5 ✓ 5,00 €
METC25-30-32	25	30	32	35	2,5 ✓ 6,51 €
METC25-32-20	25	32	20	39	3,5 ✓ 7,21 €
METC25-32-25	25	32	25	39	3,5 - On request
METC25-32-32	25	32	32	39	3,5 ✓ 9,00 €
METC28-33-22	28	33	22	38	2,5 ✓ 4,95 €
METC28-33-28	28	33	28	38	2,5 - On request
METC28-33-36	28	33	36	38	2,5 - On request
METC28-36-22	28	36	22	44	4,0 - On request
METC28-36-28	28	36	28	44	4,0 ✓ 10,35 €
METC28-36-36	28	36	36	44	4,0 ✓ 12,61 €

*Depending on availability - Dimensions in mm

DISCOUNTS

Qty	1+	10+	25+	50+
Disc.	List	-20%	-30%	On request

Part number	ØA (F8)	ØD (s8)	ØD1 (s13)	M (s14)	Price each
METC30-38-20	30	38	20	46	4,0 ✓ 5,34 €
METC30-38-25	30	38	25	46	4,0 ✓ 5,56 €
METC30-38-30	30	38	30	46	4,0 ✓ 6,42 €
METC32-38-20	32	38	20	44	3,0 ✓ 3,96 €
METC32-38-25	32	38	25	44	3,0 ✓ 4,64 €
METC32-38-32	32	38	32	44	3,0 ✓ 9,19 €
METC32-40-20	32	40	20	48	4,0 ✓ 4,99 €
METC32-40-25	32	40	25	48	4,0 - On request
METC32-40-30	32	40	30	48	4,0 ✓ 7,03 €
METC32-40-32	32	40	32	48	4,0 ✓ 7,19 €
METC36-42-22	36	42	22	48	3,0 ✓ 8,26 €
METC36-42-28	36	42	28	48	3,0 ✓ 5,63 €
METC36-42-36	36	42	36	48	3,0 - On request
METC36-45-22	36	45	22	54	4,5 - On request
METC36-45-28	36	45	28	54	4,5 - On request
METC36-45-36	36	45	36	54	4,5 - On request
METC40-46-25	40	46	25	52	3,0 ✓ 5,66 €
METC40-46-32	40	46	32	52	3,0 ✓ 7,00 €
METC40-46-40	40	46	40	52	3,0 ✓ 8,62 €
METC40-50-25	40	50	25	60	5,0 ✓ 10,56 €
METC40-50-32	40	50	32	60	5,0 ✓ 12,79 €
METC40-50-40	40	50	40	60	5,0 ✓ 14,62 €
METC45-51-28	45	51	28	57	3,0 ✓ 6,92 €
METC45-51-36	45	51	36	57	3,0 - On request
METC45-51-45	45	51	45	57	3,0 - On request
METC45-56-28	45	56	28	67	5,5 - On request
METC45-56-36	45	56	36	67	5,5 - On request
METC45-56-45	45	56	45	67	5,5 - On request
METC50-56-32	50	56	32	62	3,0 - On request
METC50-56-40	50	56	40	62	3,0 - On request
METC50-56-50	50	56	50	62	3,0 - On request
METC50-60-32	50	60	32	70	5,0 ✓ 16,33 €
METC50-60-40	50	60	40	70	5,0 ✓ 26,97 €
METC50-60-50	50	60	50	70	5,0 - On request
METC60-70-50	60	70	50	80	5,0 - 72,30 €
METC80-70-60	60	70	60	80	5,0 - sur demande

Using a mandrel

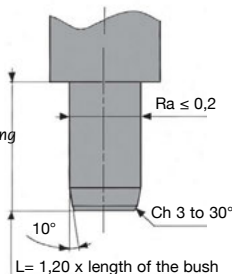
(Hardened carbon steel, polished finish, surface hardness 60RC)

tolerance Ø **m6**

- Fit the bush using a press ensuring that the correct diameter mandrel is used so that:
- the bushing is inserted correctly so as to ensure correct seating
 - the tolerances of the bore are still correct after fitting

Inserting force

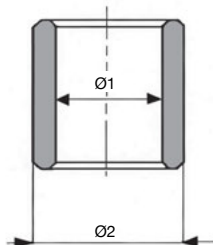
- Values are given assuming the tolerances are as follows ; mandrel **m6**, bore **H7** with $Ra \leq 3,2$ and considered to be rigid* : **100daN/cm** (equivalent surface area at 0cm from exterior of bushing)



*What do we mean by rigid? It is a bore or hole in steel (or possibly cast iron) where the wall thickness is at least 3 times the diameter of the bushing

Bush before assembly

- Ø interior -Ø1 cylindrical bush **F7**
(F8 pour Ø1 >50mm)
- Ø interior -Ø1 flanged bush **F8**
- Ø interior -Ø2 cylindrical bush **s7**
(S8 pour Ø2 >50mm)
- Ø interior -Ø2 flanged bush **s8**

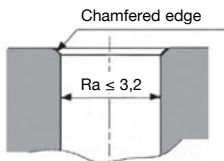


Steel housing

(in rigid material)

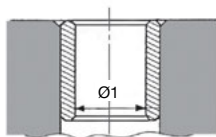
Tolerance $\varnothing$ H7

- The tightness between the bush and the hole and the final tolerances of the bore of the bush have been calculated for a rigid steel housing.
- For all other types of support (non rigid or other materials), the tightness may vary and practical tests should be carried out to confirm the bore tolerances.



Bush after press fitting

- $\varnothing$ interior – $\varnothing$ 1 cylindrical bush H7 (H8 for $\varnothing$ 1 > 50mm)
- $\varnothing$ interior – $\varnothing$ 1 flanged bush H8



Shaft to be used

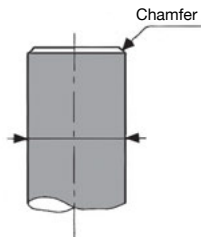
- Mechanical properties of steel depending on the type of bush
- For a BP25 bush
- Steel with a minimum hardness of 80 kg/mm²
- Ra ≤ 0.6

tolerance $\varnothing$ f7

- Where bushes are fitted without additional support (overmolding or gluing), use an h7 tolerated shaft rather than f7.

Operating clearances

- Running fit H7/f7 ou H8/f7
- Assembly instructions should be followed to ensure the correct operation of the self lubricating bush (lubricating, wear, rubbing).



Metric tolerances

Plain bushes

For length $L = 13$

Concentricity:

D compared to d

$D < = 50\text{mm}$, IT9

$D > = 50\text{mm}$, IT10

Flanged bushes

For length $L = 13$

Flange thickness $M = 13$

Flange diameter $F = 13$

Concentricity:

D concerning d

$D < = 50\text{mm}$, IT9

$D > = 50\text{mm}$, IT10

Flanged bushes

External diameter	r max
<12	0,30
$<12 <30$	0,60
<30	0,80

Chamfers: There are 45° chamfers on the internal and external edges at each end of the bush.



Please note: here are two different European standards that define the dimensions and tolerances of bearings.

Bearings conforming to two different standards may be incompatible and when used together may seize or may have their life expectancies reduced. It is therefore important to select bushes, housings, fitting pins and shafts with great care.

Specifications

Material	Code	Density (g/cm ³)	Porosity (%)	Chemical composition				Compression strength (N/mm)	Hard- ness (HB)
				C (%)	Cu (%)	Sn (%)	Other (%)		
Bronze	FU-E10-62	6,4 name	>22	$<0,3$	Balance	8,5/11,5	>2	>140	25

Tolerances of cylindrical and flanged bushings

Sizes (mm)		Standard tolerances (13)			
DE	A	IT9	IT10	+	-
-	3	0,025	-	0,070	0,070
3	6	0,030	-	0,090	0,090
6	10	0,036	-	0,110	0,110
10	18	0,043	-	0,135	0,135
18	30	0,052	-	0,165	0,165
30	50	0,062	-	0,195	0,195
50	80	-	0,120	0,230	0,230

Lubrication: Standard OILITE bearings are impregnated with highly refined mineral oil conforming to ISO VG (SAE 30) having a high viscosity and containing anti-oxidant, anti-rust and defoaming additives.

The oil should be replenished after 1000 hours of use or annually. These intervals can be extended for bearings with relatively thick walls and shortened for low porosity bearings. Bearings running submerged in oil or subject to oil-splash will not require refilling.

The standard operating temperature range is -9°C to 70°C.

Fitting: before fitting make sure that all sharp edges are removed from the housing and shaft. The bearing must be free from grit and dust. Wash in oil if storage conditions suspect, if they have been held in stock for more than a year or stored in contact with an absorbent material.

Always use a steady pressure to insert the bearing. Never use a hammer.

Shafts should ideally be hardened to approximately HRC 60 and ground to a surface roughness of Ra=0.25µm.

The standard metric range of OILITE bearings conforming to ISO 2795 are made to G7/s7 limits of tolerance. These bearings when fitted into a rigid H7 housing using an m5 fitting pin, will give an H7 toleranced bore, which is suitable for use with an f7 shaft.

Storage: OILITE bearings can be stored for considerable periods at room temperature without deterioration or loss of oil if kept in a metal or other non-absorbent container. Proximity to heat could cause oil loss by evaporation, in which case re-oiling will be necessary before fitting.

Re-oiling: after machining of the bearing, or following oil loss during storage, immerse in high quality mineral oil conforming to ISO VG 60 or ISO VG 150 (SAE30 or SAE40) at 80°C to 100°C for 10 to 15 minutes and then cool in cold oil.

Material equivalents

Material	Grade	ISO 5755/1 1987	UK BS5600 Part 5 Section 5.1 1988	France NF 150 5755/1 A95-771-1	Germany DIN 30 910 Part 3	USA		
						M.P.I.F Stand.35	S.A.E	A.S.T.M
Bronze Oilite®	MB01-1	P4011Z	P4011Z	FU-E10-60	Stin A50	CT-1000-K19	1140	B438 Grd 1 Type 1
	MB01-2	P4012Z	P4012Z	FU-E10-64		CT-1000-K26	1141	B438 Grd1 Type 2

- **Bronze bearing**
- Conforms to ISO 2795
- Tolerance G7/s7 G8/s8
- Materials: sintered bronze saturated with mineral oil
- Static load 50 N/mm²
- Dynamic load 15 N/mm²
- Working temp. -9°C to +70°C
- Fits bore-sizes H7



DISCOUNTS

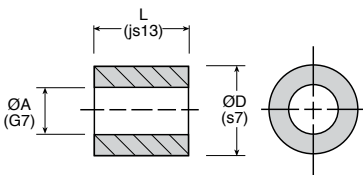
Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA	ØD	L	Stock*	Price each 1 to 9
QM3-2	Ø2	5	2	-	4,28 €
QM3-3	Ø2	5	3	-	4,28 €
QM5-3	Ø3	5	3	-	4,28 €
QM5-4	Ø3	5	4	-	4,28 €
QM6-3	Ø3	6	3	-	4,28 €
QM6-4	Ø3	6	4	-	4,28 €
QM7-4	Ø4	7	4	✓	4,64 €
QM7-6	Ø4	7	6	-	4,64 €
QM8-4	Ø4	8	4	-	4,94 €
QM8-6	Ø4	8	6	-	4,94 €
QM9-8	Ø5	8	8	-	5,06 €
QM10-5	Ø5	9	5	-	5,15 €
QM10-8	Ø5	9	8	-	5,15 €
QM11-4	Ø6	9	4	-	5,15 €
QM11-6	Ø6	9	6	-	5,15 €
QM11-10	Ø6	9	10	✓	5,15 €
QM12-4	Ø6	10	4	-	5,29 €
QM12-6	Ø6	10	6	-	5,29 €
QM12-10	Ø6	10	10	✓	5,29 €
QM13-5	Ø7	10	5	-	5,15 €
QM13-8	Ø7	10	8	-	5,15 €
QM13-10	Ø7	10	10	-	5,15 €
QM14-10	Ø7	11	10	-	5,53 €
QM15-6	Ø8	11	6	-	5,06 €
QM15-8	Ø8	11	8	✓	5,06 €
QM15-12	Ø8	11	12	✓	5,06 €
QM16-6	Ø8	12	6	✓	5,44 €
QM16-8	Ø8	12	8	-	5,44 €
QM16-12	Ø8	12	12	✓	5,44 €
QM16-16	Ø8	12	16	✓	5,44 €

Part number	ØA	ØD	L	Stock*	Price each 1 to 9
QM16-20	Ø8	12	20	✓	5,44 €
QM17-10	Ø9	12	10	-	5,15 €
QM17-14	Ø9	12	14	-	5,15 €
QM18-6	Ø9	14	6	-	5,74 €
QM18-10	Ø9	14	10	-	5,74 €
QM18-14	Ø9	14	14	-	5,74 €
QM19-8	Ø10	14	8	-	5,74 €
QM19-10	Ø10	14	10	✓	5,74 €
QM19-16	Ø10	14	16	✓	5,74 €
QM20-8	Ø10	16	8	-	6,72 €
QM20-10	Ø10	16	10	-	6,72 €
QM20-16	Ø10	16	16	-	6,72 €
QM21-8	Ø12	16	8	-	6,39 €
QM21-12	Ø12	16	12	✓	6,39 €
QM21-20	Ø12	16	20	✓	8,17 €
QM22-8	Ø12	18	8	✓	6,09 €
QM22-12	Ø12	18	12	-	6,09 €
QM22-20	Ø12	18	20	✓	9,04 €
QM23-10	Ø14	18	10	-	5,74 €
QM23-14	Ø14	18	14	-	5,74 €
QM23-20	Ø14	18	20	-	8,29 €
QM24-10	Ø14	20	10	-	6,09 €
QM24-14	Ø14	20	14	-	8,51 €
QM24-20	Ø14	20	20	-	10,48 €
QM25-10	Ø15	19	10	-	8,02 €
QM25-15	Ø15	19	15	-	8,02 €
QM25-25	Ø15	19	25	-	9,44 €
QM26-15	Ø15	21	15	-	8,83 €
QM26-25	Ø15	21	25	-	10,24 €

*Depending on availability - Dimensions in mm

European standard
versions also available -
see METC range



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	List	-20%	-30%	-40%	-50%	-60%	On request

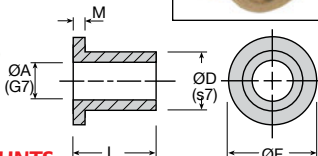
Part number	ØA	ØD	L	Stock*	Price each 1 to 9	Part number	ØA	ØD	L	Stock*	Price each 1 to 9
QM27-12	Ø16	20	12	-	7,48 €	QM37-20	Ø30	35	20	✓	16,93 €
QM27-16	Ø16	20	16	-	13,08 €	QM37-25	Ø30	35	25	-	19,11 €
QM27-25	Ø16	20	25	-	9,04 €	QM37-30	Ø30	35	30	-	21,13 €
QM28-12	Ø16	22	12	-	11,22 €	QM38-25	Ø30	40	25	-	25,19 €
QM28-16	Ø16	22	16	-	11,26 €	QM38-35	Ø30	40	35	-	35,78 €
QM28-25	Ø16	22	25	-	12,15 €	QM38-50	Ø30	40	50	-	45,82 €
QM29-12	Ø18	22	12	-	11,03 €	QM44-30	Ø40	46	30	-	35,26 €
QM29-18	Ø18	22	18	-	11,03 €	QM44-40	Ø40	46	40	-	41,27 €
QM29-30	Ø18	22	30	-	12,78 €	QM44-50	Ø40	46	50	-	47,22 €
QM30-18	Ø18	24	18	-	11,90 €	QM45-25	Ø40	50	25	-	35,38 €
QM30-30	Ø18	24	30	-	13,22 €	QM45-30	Ø40	50	30	-	40,23 €
QM31-15	Ø20	25	15	-	14,22 €	QM45-35	Ø40	50	35	-	44,31 €
QM31-20	Ø20	25	20	-	14,22 €	QM45-40	Ø40	50	40	-	49,26 €
QM31-25	Ø20	25	25	-	15,93 €	QM45-50	Ø40	50	50	-	60,72 €
QM32-15	Ø20	26	15	✓	14,46 €	QM45-60	Ø40	50	60	-	71,91 €
QM32-20	Ø20	26	20	-	14,46 €	QM46-35	Ø45	51	35	-	43,69 €
QM32-25	Ø20	26	25	-	18,01 €	QM46-45	Ø45	51	45	-	49,66 €
QM33-15	Ø22	28	15	-	15,06 €	QM46-55	Ø45	51	55	-	55,87 €
QM33-20	Ø22	28	20	-	17,25 €	QM47-35	Ø45	55	35	-	52,93 €
QM33-25	Ø22	28	25	-	20,29 €	QM47-45	Ø45	55	45	-	68,74 €
QM33-30	Ø22	28	30	-	21,21 €	QM47-55	Ø45	55	55	-	89,27 €
QM34-20	Ø22	32	20	-	25,76 €	QM48-30	Ø50	60	30	-	68,51 €
QM34-50	Ø22	32	50	-	56,83 €	QM48-35	Ø50	60	35	-	76,35 €
QM35-20	Ø25	30	20	-	16,75 €	QM48-40	Ø50	60	40	-	83,41 €
QM35-25	Ø25	30	25	-	19,90 €	QM48-50	Ø50	60	50	-	98,65 €
QM35-30	Ø25	30	30	-	22,90 €	QM49-50	Ø60	68	50	-	82,85 €
QM35-50	Ø25	30	50	-	36,93 €	QM49-60	Ø60	68	60	-	98,79 €
QM36-25	Ø25	35	25	-	24,43 €	QM50-50	Ø60	72	50	-	116,32 €
QM36-35	Ø25	35	35	-	30,28 €	QM50-60	Ø60	72	60	-	126,14 €
QM36-50	Ø25	35	50	-	39,60 €	QM50-70	Ø60	72	70	-	136,59 €

*Depending on availability - Dimensions in mm

- **Bronze bearing**
- Conforms to ISO 2795
- Tolerance G7/s7 G8/s8
- Materials: sintered bronze saturated with mineral oil
- Static load 50 N/mm²
- Dynamic load 15 N/mm²
- Working temp. -9°C to +70°C
- Fits bore-sizes H7



European standard versions also available - see METC range



DISCOUNTS

Qty	1+	10+	25+	50+	100+	200+	500+
Disc.	-	-20%	-30%	-40%	-50%	-60%	On request

Part number	ØA	L	ØD	ØF	M	Stock	Price each
QFM3	Ø2	3	5	8	1,5	-	4,78 €
QFM5	Ø3	4	6	9	1,5	✓	4,78 €
QFM6-4	Ø4	4	8	12	2,0	✓	4,94 €
QFM6-6	Ø4	6	8	12	2,0	✓	4,94 €
QFM7-4	Ø5	4	9	13	2,0	✓	5,74 €
QFM7-5	Ø5	5	9	13	2,0	✓	5,74 €
QFM7-8	Ø5	8	9	13	2,0	✓	5,74 €
QFM8-4	Ø6	4	10	14	2,0	✓	5,74 €
QFM8-6	Ø6	6	10	14	2,0	✓	5,74 €
QFM8-10	Ø6	10	10	14	2,0	✓	5,74 €
QFM9-8	Ø7	8	11	15	2,0	✓	5,74 €
QFM10-6	Ø8	6	12	16	2,0	✓	6,16 €
QFM10-8	Ø8	8	12	16	2,0	✓	6,16 €
QFM10-12	Ø8	12	12	16	2,0	✓	6,16 €
QFM12-8	Ø10	8	16	22	3,0	✓	6,99 €
QFM12-10	Ø10	10	16	22	3,0	✓	6,99 €
QFM12-16	Ø10	16	16	22	3,0	✓	8,69 €
QFM13-8	Ø12	8	18	24	3,0	✓	8,02 €
QFM13-12	Ø12	12	18	24	3,0	✓	8,02 €
QFM13-20	Ø12	20	18	24	3,0	✓	10,48 €
QFM14-10	Ø14	10	20	26	3,0	-	8,83 €
QFM14-14	Ø14	14	20	26	3,0	✓	8,83 €
QFM14-20	Ø14	20	20	26	3,0	✓	10,80 €
QFM15-10	Ø15	10	21	27	3,0	-	10,24 €
QFM15-15	Ø15	15	21	27	3,0	-	10,24 €
QFM15-20	Ø15	20	21	27	3,0	-	13,07 €
QFM15-25	Ø15	25	21	27	3,0	-	13,07 €

Part number	ØA	L	ØD	ØF	M	Stock	Price each
QFM16-12	Ø16	12	22	28	3,0	✓	10,80 €
QFM16-16	Ø16	16	22	28	3,0	✓	10,80 €
QFM16-25	Ø16	25	22	28	3,0	✓	14,59 €
QFM17-12	Ø18	12	24	30	3,0	-	11,49 €
QFM17-18	Ø18	18	24	30	3,0	-	14,90 €
QFM17-30	Ø18	30	24	30	3,0	-	20,19 €
QFM18-15	Ø20	15	26	32	3,0	✓	13,50 €
QFM18-20	Ø20	20	26	32	3,0	✓	16,14 €
QFM18-25	Ø20	25	26	32	3,0	✓	20,10 €
QFM18-30	Ø20	30	26	32	3,0	-	23,44 €
QFM20-20	Ø25	20	30	39	3,5	✓	17,03 €
QFM20-25	Ø25	25	30	39	3,5	-	31,19 €
QFM20-32	Ø25	32	30	39	3,5	-	23,91 €
QFM24-20	Ø30	20	38	46	4,0	-	23,27 €
QFM24-25	Ø30	25	38	46	4,0	-	26,37 €
QFM24-30	Ø30	30	38	46	4,0	-	31,73 €
QFM27-25	Ø35	25	45	55	5,0	-	34,90 €
QFM27-35	Ø35	35	45	55	5,0	-	44,96 €
QFM27-40	Ø35	40	45	55	5,0	-	50,55 €
QFM30-25	Ø40	25	50	60	5,0	-	59,46 €
QFM30-30	Ø40	30	50	60	5,0	-	62,49 €
QFM30-40	Ø40	40	50	60	5,0	-	68,51 €
QFM30-50	Ø40	50	50	60	5,0	-	73,72 €
QFM32-32	Ø50	32	60	70	5,0	-	66,60 €
QFM32-40	Ø50	40	60	70	5,0	-	71,55 €
QFM32-50	Ø50	50	60	70	5,0	-	82,50 €

*Depending on availability - Dimensions in mm

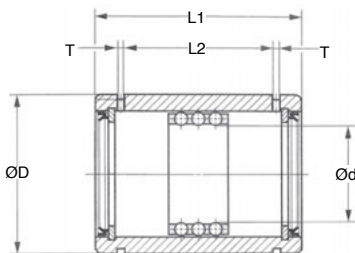
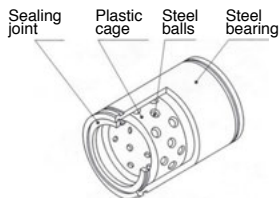
For combined rotary
and linear movements

IKO STU

- **Permits both linear and rotary movement**
- Sealed
- Material: steel
- Stroke: should not exceed 80% of the max. stroke length indicated in the table
- Max. temperature: +120°C

Assembly

- Use shafts with hardness 58-64 HRC, Ra 0.2
- When mounted vertically use:
shaft: k5, m5
housing: H6, H7
- Otherwise use
shaft: n5, p6
housing: J6, J7



DISCOUNTS

Qty	1+	5+	10+	25+
Disc. List	-6%	-12%	-12%	On request

Part number	Ød	ØD	L1	L2	T	Max. stroke (mm)	Static load Co (N)	Dynamic load C (N)	Weight (g)	Stock*	Price each 1 to 4
STU-8	8	15	24	12,3	1,5	14	211	315	16,5	✓	32,71 €
STU-10	10	19	30	15,5	1,5	16	466	659	30,7	✓	34,95 €
STU-12	12	23	32	17,1	1,5	17	822	1110	45,0	✓	37,22 €
STU-16	16	28	37	21,1	1,5	24	998	1230	74,0	✓	41,52 €
STU-20	20	32	45	26,8	2,0	32	1250	1390	107,0	✓	43,60 €
STU-25	25	37	45	26,8	2,0	32	1430	1450	121,0	✓	56,85 €
STU-30	30	45	65	45,1	2,5	65	3160	3110	215,0	✓	69,71 €
STU-35	35	52	70	50,1	2,5	75	3550	3290	342,0	-	82,47 €
STU-40	40	60	80	59,9	2,5	91	4810	4340	529,0	✓	104,30 €

*Depending on availability - Dimensions in mm



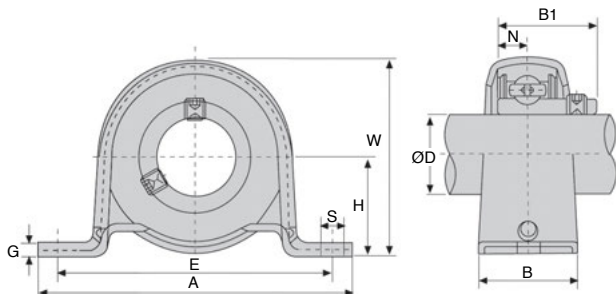
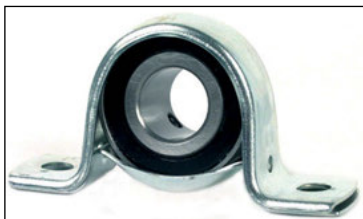
BPP

2 mounting points

- Pressed sheet flanged bearing
- Material : steel

Uses

- Simple mounted bearing for light loads



Part number	Load (kN)	
	Dynamic C	Static Co
BPP201	9,2	4,48
BPP202	9,2	4,48
BPP203	9,2	4,48
BPP204	12,2	6,30
BPP205	13,3	7,46
BPP206	18,5	10,80
BPP207	24,5	14,60

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØD	H	A	E	B	S	G	W	Bolt size	B1	N	Weight (kg)	Stock*	Price each 1 to 5
BPP201	12	22,2	86	68	25	9,5	3,2	43,8	M8	22	6,0	0,19	✓	9,39 €
BPP202	15	22,2	86	68	25	9,5	3,2	43,8	M8	22	6,0	0,19	✓	9,44 €
BPP203	17	22,2	86	68	25	9,5	3,2	43,8	M8	22	6,0	0,19	✓	9,79 €
BPP204	20	25,4	98	76	32	9,5	3,2	50,5	M8	25	7,0	0,23	✓	10,93 €
BPP205	25	28,6	108	86	32	11,5	4,0	56,6	M10	27	7,5	0,28	✓	11,55 €
BPP206	30	33,3	117	95	38	11,5	4,0	66,3	M10	30	8,0	0,47	✓	15,86 €
BPP207	35	39,7	129	106	42	11,5	4,6	78,0	M10	32	8,5	0,57	✓	18,59 €

*Depending on availability - Dimensions in mm



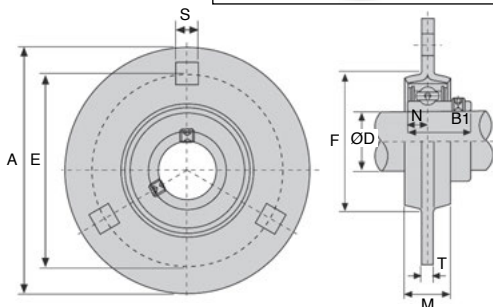
3 mounting points

BPF

- **Pressed sheet steel**
- Material : steel

Uses

- Simple mounted bearing for light loads



Part number	Load (kN)	
	Dynamic C	Static Co
BPFL201	9,2	4,48
BPFL202	9,2	4,48
BPFL203	9,2	4,48
BPFL204	12,2	6,30
BPFL205	13,3	7,46
BPFL206	18,5	10,80
BPFL207	24,5	14,60

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØD	A	E	M	S	T	F (min)	Bolt size	B1	N	Weight (kg)	Stock*	Price each 1 to 5
BPF201	12	81	63,5	14	7,1	4,0	49	M6	22	6,0	0,27	✓	9,47 €
BPF202	15	81	63,5	14	7,1	4,0	49	M6	22	6,0	0,27	✓	9,54 €
BPF203	17	81	63,5	14	7,1	4,0	49	M6	22	6,0	0,27	-	9,90 €
BPF204	20	90	71,5	16	9,0	4,0	56	M8	25	7,0	0,33	✓	11,69 €
BPF205	25	95	76,0	18	9,0	4,0	60	M8	27	7,5	0,38	✓	12,29 €
BPF206	30	113	90,5	18	11,0	5,2	71	M10	30	8,0	0,62	✓	18,06 €
BPF207	35	122	100,0	20	11,0	5,2	81	M10	32	8,5	0,82	✓	20,78 €

*Depending on availability - Dimensions in mm

Sheet steel flanged bearing for light loads



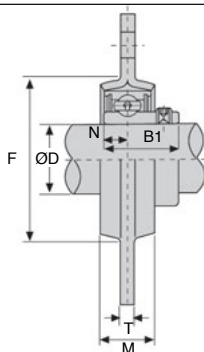
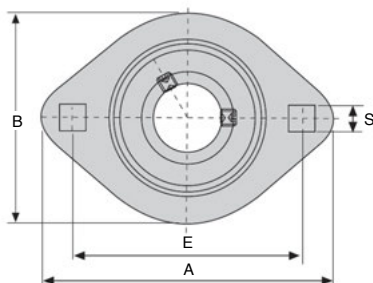
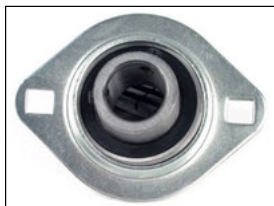
BPFL

2 mounting points

- Pressed sheet steel
- Material : steel

Uses

- Simple mounted bearing for light loads



Load (kN)

Part number	Dynamic C	Static Co
BPFL201	9,2	4,48
BPFL202	9,2	4,48
BPFL203	9,2	4,48
BPFL204	12,2	6,30
BPFL205	13,3	7,46
BPFL206	18,5	10,80
BPFL207	24,5	14,60

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØD	A	E	B	M	S	T	F (min)	Bolt size	B1	N	Weight (kg)	Stock*	Price each 1 to 5
BPFL201	12	81	63,5	59	14	7,1	4,0	49	M6	22	6,0	0,19	✓	9,11 €
BPFL202	15	81	63,5	59	14	7,1	4,0	49	M6	22	6,0	0,19	✓	9,15 €
BPFL203	17	81	63,5	59	14	7,1	4,0	49	M6	22	6,0	0,19	✓	9,50 €
BPFL204	20	90	71,5	67	16	9,0	4,0	56	M8	25	7,0	0,24	✓	9,99 €
BPFL205	25	95	76,0	71	18	9,0	4,0	60	M8	27	7,5	0,28	✓	11,19 €
BPFL206	30	113	90,5	84	18	11,0	5,2	71	M10	30	8,0	0,38	✓	14,76 €
BPFL207	35	122	100,0	94	20	11,0	5,2	81	M10	32	8,5	0,50	✓	17,38 €

*Depending on availability - Dimensions in mm



Cast iron pillow block bearing

2 mounting points

UCP

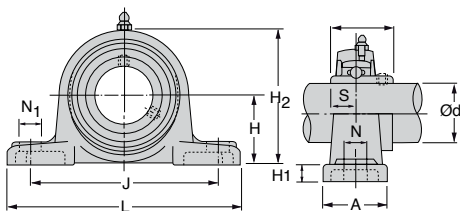
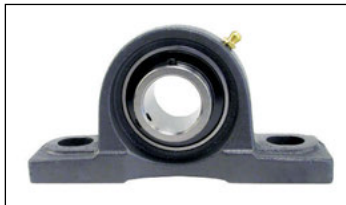
- **Self-aligning bearing**
- Spherical external ring
- Material:
 - Bearing: steel
 - Housing: cast iron
- Maximum speed depends on the shaft tolerance

Uses

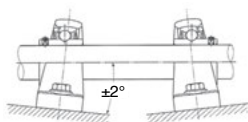
- Bearing easily installed

Options

- Version suitable for the food industry



Part number	Load (kN)		Speed/tolerance (rpm)			
	dynamic	static	i7	h7	h8	h9
UCP204	12,2	6,35	6700	4900	3500	1250
UCP205	13,3	7,50	5600	4100	2900	1050
UCP206	18,6	10,80	4700	3400	2400	880
UCP207	24,5	14,60	4000	3000	2100	760
UCP208	27,7	17,00	3600	2600	1900	660
UCP209	31,0	19,50	3300	2400	1700	620
UCP210	33,5	22,50	3000	2200	1600	570
UCP211	41,5	28,00	2700	2000	1400	510
UCP212	50,0	34,50	2400	1600	1250	460



DISCOUNTS

Qty	1+	6+	10+	100+
Disc.	List	-20%	-40%	On request

Part number	Bore		H	L	J	A	N	N1	H1	H2	S	B	Bolt size	Price each
	Ød	Ød												1 to 5
UCP204	20	33,3	127	95	38	13	13	19	14	65,0	12,7	31,0	M10	12,23 €
UCP205	25	36,5	140	105	38	13	13	19	15	71,0	14,3	34,1	M10	13,21 €
UCP206	30	42,9	165	121	48	17	20	17	17	84,0	15,9	38,1	M14	16,56 €
UCP207	35	47,6	167	127	48	17	20	18	18	93,0	17,5	42,9	M14	21,02 €
UCP208	40	49,2	184	137	54	17	20	18	18	100,0	19,0	49,2	M14	24,79 €
UCP209	45	54,0	190	146	54	17	20	20	18	106,0	19,0	49,2	M14	28,79 €
UCP210	50	57,2	206	159	60	20	23	21	113,0	19,0	51,6	M16	✓	37,24 €
UCP211	55	63,5	219	171	60	20	23	23	125,0	22,2	55,6	M16	-	45,28 €
UCP212	60	69,8	241	184	70	20	23	25	138,0	25,4	65,1	M16	✓	55,87 €

*Depending on availability - Dimensions in mm

Cast iron flange bearing unit

UCF

4 mounting points

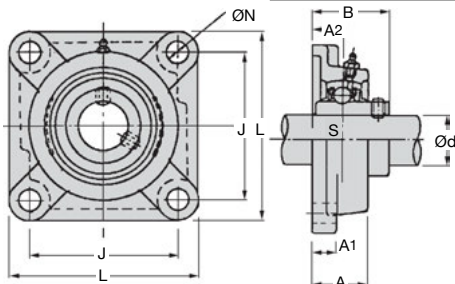
- **Self-aligning bearing**
- Spherical external ring
- Material:
 - Bearing: steel
 - Housing: cast iron
 - Maximum speed depends on the shaft tolerance

Uses

- Bearing easily installed

Options

- Version suitable for the food industry



Part number	Load (kN)		Speed/tolerance (rpm)			
	dynamic	static	j7	h7	h8	h9
UCF204	12,2	6,35	6700	4900	3500	1250
UCF205	13,3	7,50	5600	4100	2900	1050
UCF206	18,6	10,80	4700	3400	2400	880
UCF207	24,5	14,60	4000	3000	2100	760
UCF208	27,7	17,00	3600	2600	1900	660
UCF209	31,0	19,50	3300	2400	1700	620
UCF210	33,5	22,50	3000	2200	1600	570
UCF211	41,5	28,00	2700	2000	1400	510
UCF212	50,0	34,50	2400	1600	1250	460

DISCOUNTS

Qty	1+	6+	10+	100+
Disc.	List	-20%	-40%	On request

Part number	Bore									Bolt size	Stock*	Price each 1 to 5
	Ød	L	J	A2	A1	A	B	ØN	S			
UCF204	20	86	64	15	12	25,5	33,3	12	12,7	M10	✓	12,23 €
UCF205	25	95	70	16	14	27,0	35,8	12	14,3	M10	✓	13,21 €
UCF206	30	108	83	18	14	31,0	40,2	12	15,9	M10	✓	16,56 €
UCF207	35	117	92	19	16	34,0	44,4	14	17,5	M12	✓	21,02 €
UCF208	40	130	102	21	16	36,0	51,2	16	19,0	M14	✓	24,79 €
UCF209	45	137	105	22	18	38,0	52,2	16	19,0	M14	-	28,79 €
UCF210	50	143	111	22	18	40,0	54,6	16	19,0	M14	✓	37,24 €
UCF211	55	162	130	25	20	43,0	58,4	19	22,2	M16	-	45,28 €
UCF212	60	175	143	29	20	48,0	68,7	19	25,4	M16	✓	55,87 €

*Depending on availability - Dimensions in mm

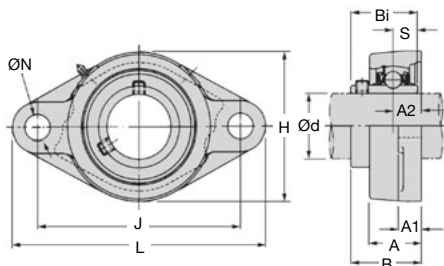
- **Self-aligning bearing**
- Spherical external ring
- Material:
 - Bearing: steel
 - Housing: cast iron
- Maximum speed depends on the shaft tolerance

Uses

- Bearing easily installed

Options

- Version suitable for the food industry



Part number	Load (kN)		Speed/tolerance (rpm)			
	dynamic	static	j7	h7	h8	h9
UCFL204	12,2	6,35	6700	4900	3500	1250
UCFL205	13,3	7,50	5600	4100	2900	1050
UCFL206	18,6	10,80	4700	3400	2400	880
UCFL208	27,7	17,00	3600	2600	1900	660
UCFL212	50,0	34,50	2400	1600	1250	460

DISCOUNTS

Qty	1+	6+	10+	100+
Disc.	List	-20%	-40%	On request

Part number	Bore			A2	A1	A	ØN	H	B	Bi	S	Bolt size	Price each
	Ød	L	J										1 to 5
UCFL204	20	113	90	5	11	25,5	12	60	33,3	31,0	12,7	M10	12,67 €
UCFL205	25	130	99	16	13	27,0	16	68	35,8	34,1	14,3	M14	13,62 €
UCFL206	30	148	117	18	13	31,0	16	80	40,2	38,1	15,9	M14	17,08 €
UCFL208	40	175	144	21	14	36,0	16	100	51,2	49,2	19,0	M14	25,57 €
UCFL212	60	250	202	29	18	48,0	23	140	68,7	65,1	25,4	M20	57,61 €

*Depending on availability - Dimensions in mm

- Self aligning bearing with 2 mounting points
- Interchangeable with cast iron units
- Grease applicator supplied
- Working temperature: -35°C to +102°C
- Materials:
 - Bearing: Stainless steel AISI 440C
 - Housing: PBT polymer
 - Grease: suitable for food industry



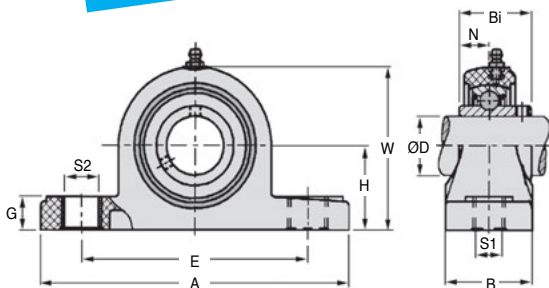
Colour

- UCP/PBT/G: green
- UCP/PBT/W: white

Accessories

- Protective hood

For the food industry



DISCOUNTS

Qty	1+	10+	26+	25+
Disc.	List	-10%	-20%	On request

Part number	ØD	H	A	E	B	S1	S2	G	W	Bi	N	Stock*	Price each 1 to 9
UCP201/PBT/G	12	33,3	127,0	95	38	11	14	14,2	65,5	31,0	12,7	✓	83,64 €
UCP202/PBT/G	15	33,3	127,0	95	38	11	14	14,2	65,5	31,0	12,7	✓	79,57 €
UCP203/PBT/G	17	33,3	127,0	95	38	11	14	14,2	65,5	31,0	12,7	✓	75,78 €
UCP204/PBT/W	20	33,3	127,0	95	38	11	14	14,2	65,5	31,0	12,7	✓	45,59 €
UCP205/PBT/W	25	36,5	140,5	105	38	11	14	14,2	71,0	34,0	14,3	✓	56,40 €
UCP206/PBT/W	30	42,9	163,0	119	46	14	18	17,8	83,0	38,1	15,9	✓	71,82 €
UCP207/PBT/W	35	47,6	168,0	128	48	14	18	18,0	94,5	42,9	17,5	✓	81,61 €
UCP208/PBT/W	40	49,2	184,0	137	54	14	18	19,5	98,0	49,2	19,0	✓	111,18 €

*Depending on availability - Dimensions in mm



Stainless steel/Polymer flanged bearing

4 mounting points

UCF_{PBT}

- Self aligning bearing with 4 mounting points
- Interchangeable with cast iron units
- Grease applicator supplied
- Working temperature: -35°C to +102°C
- Materials:
 - Bearing: Stainless steel AISI 440C
 - Housing: PBT polymer
 - Grease: suitable for food industry

Colour

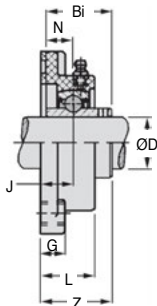
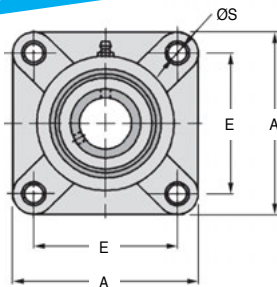
- UCF/PBT/G: green
- UCF/PBT/W: white

Accessories

- Protective hood



For the food industry



DISCOUNTS

Qty	1+	10+	26+	51+
Disc.	List	-10%	-20%	On request

Part number	ØD	A	E	G	L	ØS	Z	J	Bi	N	Stock*	Price each 1 to 9
UCF201/PBT/G	12	86	63,5	13,4	27,8	11	36,3	18,0	31,0	12,7	✓	85,18 €
UCF202/PBT/G	15	86	63,5	13,4	27,8	11	36,3	18,0	31,0	12,7	✓	81,07 €
UCF203/PBT/G	17	86	63,5	13,4	27,8	11	36,3	18,0	31,0	12,7	✓	75,78 €
UCF204/PBT/W	20	86	63,5	13,4	27,8	11	36,3	18,0	31,0	12,7	✓	46,37 €
UCF205/PBT/W	25	95	70,0	14,0	28,0	11	36,7	17,0	34,0	14,3	✓	57,26 €
UCF206/PBT/W	30	107	83,0	14,3	31,5	11	41,4	19,2	38,1	15,9	✓	72,44 €
UCF207/PBT/W	35	118	92,0	15,5	34,8	13	46,9	21,5	42,9	17,5	✓	80,75 €
UCF208/PBT/W	40	130	102,0	17,0	37,5	14	53,2	23,0	49,2	19,0	✓	111,14 €

*Depending on availability - Dimensions in mm

Stainless steel/Polymer flanged bearing

UCFLPBT

2 mounting points

- Self aligning bearing with 2 mounting points
- Interchangeable with cast iron units
- Grease applicator supplied
- Working temperature: -35°C to +102°C
- Materials:
 - Bearing: Stainless steel AISI 440C
 - Housing: PBT polymer
 - Grease: suitable for food industry



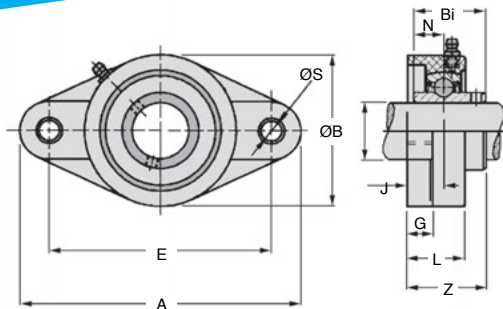
Colour

- UCFL/PBT/G: green
- UCFL/PBT/W: white

Accessories

- Protective hood

For the food industry



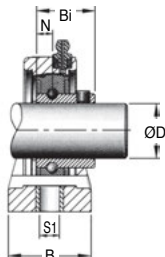
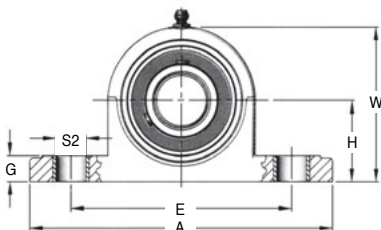
DISCOUNTS

Qty	1+	10+	26+	51+
Disc.	List	-10%	-20%	On request

Part number	ØD	A	E	ØB	G	L	ØS	Z	J	Bi	N	Stock*	Price each 1 to 9
UCFL201/PBT/G	12	113	90	65,0	11,4	26,5	11	33,7	15,4	31,0	12,7	✓	83,64 €
UCFL202/PBT/G	15	113	90	65,0	11,4	26,5	11	33,7	15,4	31,0	12,7	✓	79,60 €
UCFL203/PBT/G	17	113	90	65,0	11,4	26,5	11	33,7	15,4	31,0	12,7	-	75,78 €
UCFL204/PBT/W	20	113	90	64,0	11,4	26,5	11	33,7	15,4	31,0	12,7	✓	41,86 €
UCFL205/PBT/W	25	130	99	69,0	13,5	29,1	11	36,7	17,0	34,0	14,3	✓	52,87 €
UCFL206/PBT/W	30	148	117	80,0	13,3	30,5	11	41,2	19,0	38,1	15,9	-	67,09 €
UCFL207/PBT/W	35	164	130	90,0	16,1	32,8	13	43,4	18,0	42,9	17,5	-	76,82 €
UCFL208/PBT/W	40	176	144	100,0	20,0	37,5	14	51,7	21,5	49,2	19,0	-	107,34 €

*Depending on availability - Dimensions in mm

- Self aligning bearing with 2 mounting points
- Interchangeable with cast iron units
- Materials:
 Bearing: stainless steel
 Housing: stainless steel



For hostile environments

DISCOUNTS

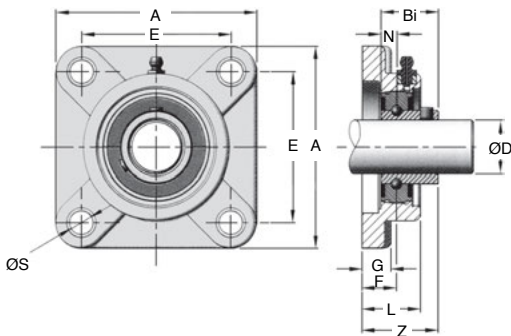
Qty	1+	10+	26+
Disc.	List -10%	On request	On request

Part number	ØD	H	A	E	B	S1	S2	G	W	Bi	N	Weight (kg)	Stock*	Price each 1 to 9
UCP204/SS	20	33,3	127	95,0	38	13,0	19,0	13,0	65,0	31,0	12,7	0,70	✓	64,29 €
UCP205/SS	25	36,5	140	105,0	38	13,0	19,0	15,0	71,0	34,1	14,3	0,85	✓	70,77 €
UCP206/SS	30	42,9	165	121,0	48	17,0	20,0	17,0	84,0	38,1	15,9	1,20	✓	110,14 €
UCP207/SS	35	47,6	167	127,0	48	17,0	19,0	19,0	93,0	42,9	17,5	1,70	✓	136,37 €
UCP208/SS	40	49,2	184	137,0	54	17,0	20,0	20,0	98,0	49,2	19,0	2,10	✓	163,94 €

*Depending on availability - Dimensions in mm

- Self aligning bearing with 4 mounting points
- Interchangeable with cast iron units
- Material:
 Bearing: stainless steel
 Housing: stainless steel

For hostile environments



DISCOUNTS

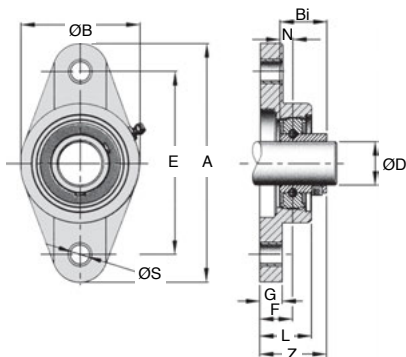
Qty	1+	10+	26+
Disc.	List	-10%	On request

Part number	ØD	A	E	G	L	ØS	Z	F	Bi	N	Weight (kg)	Stock*	Prix Uni. 1 à 9
UCF204/SS	20	86	64	11	25	12	33,3	15	31,0	12,7	0,60	✓	54,59 €
UCF205/SS	25	95	70	13	27	12	35,8	16	34,1	14,3	0,86	✓	66,13 €
UCF206/SS	30	108	83	13	31	12	40,1	18	38,1	15,9	1,10	✓	91,55 €
UCF207/SS	35	117	92	15	34	14	44,4	19	42,9	17,5	1,60	-	116,53 €
UCF208/SS	40	130	102	15	36	16	51,2	21	49,2	19,0	1,90	✓	147,27 €

*Depending on availability - Dimensions in mm

- Self aligning bearing with 2 mounting points
- Interchangeable with cast iron bearings
- Material:
Bearing: stainless steel
Housing: stainless steel

For hostile environments



DISCOUNTS

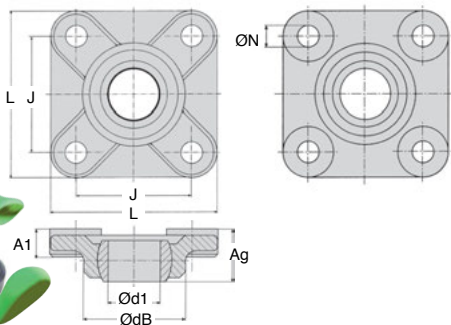
Qty	1+	10+	26+
Disc.	List	-10%	On request

Part number	ØD	A	E	G	L	ØS	Z	F	ØB	Bi	N	Weight (kg)	Price each	
													Stock*	1 to 9
UCFL204/SS	20	113	90	10	25,5	12	33,3	15	60	31,0	12,7	0,48	✓	61,74 €
UCFL205/SS	25	130	99	10	27,0	16	35,8	16	68	34,1	14,3	0,63	✓	68,26 €
UCFL206/SS	30	148	117	10	31,0	16	40,2	18	80	38,1	15,9	0,89	✓	101,23 €
UCFL207/SS	35	161	130	11	34,0	16	44,4	19	90	42,9	17,5	1,21	-	129,60 €
UCFL208/SS	40	175	144	11	36,0	16	51,2	21	100	49,2	19,0	1,60	-	175,20 €

*Depending on availability - Dimensions in mm

- Self-aligning polymer flange unit
- Housing in igumid®, a corrosion-resistant, non deforming material
- Ring in iglidur® W300, an extremely wear-resistant material
- Simple assembly
- Compensates for alignment errors
- 100% corrosion resistant
- Very light-weight
- Dry-working without maintenance

Maintenance free



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød1 E10	ØdB	L	J ±0,1	A1	Ag	Oblong hole N	Stock*	Price each 1 to 5
EFSM-05	5	14,0	25	17	4,5	8,5	3,2	✓	7,70 €
EFSM-06	6	14,0	25	17	4,5	8,5	3,2	✓	8,06 €
EFSM-08	8	18,0	33	22	5,5	10,5	4,3	✓	8,48 €
EFSM-10	10	22,0	38	26	6,5	12,0	5,3	✓	10,17 €
EFSM-12	12	25,0	40	28	7,0	13,0	5,3	✓	12,72 €
EFSM-15	15	30,0	49	34	8,5	15,5	6,4	-	22,78 €
EFSM-16	16	32,5	52	36	9,0	16,5	6,4	✓	15,93 €
EFSM-17	17	35,0	54	38	10,0	18,0	6,4	-	27,21 €
EFSM-20	20	40,0	65	45	11,0	20,0	8,4	✓	26,57 €
EFSM-25	25	48,5	74	52	14,0	25,0	8,4	✓	34,54 €
EFSM-30	30	55,0	85	60	15,0	26,0	10,5	✓	44,97 €

*Depending on availability - Dimensions in mm

Find our full range of **BEARING HOUSINGS** on **HPCEUROPE.COM**



- Pressed steel housings
- Food industry housings
- Cast housings
- Stainless steel housings

- Self-aligning polymer bearing
- Two part assembly
- Temperature -40°C to +80°C
(120°C for short periods)
- Slip speed: 0.5m/s
- Material:
Ring: Polymer iglidur® W300
Housing: Polymer igumid® G
- Pressure up to 20N/mm²



Advantages

- 20% of the weight of steel version
- Self-lubricating
- Large admissible load

Applications

- Compensates for alignment errors
- Oscillating parts

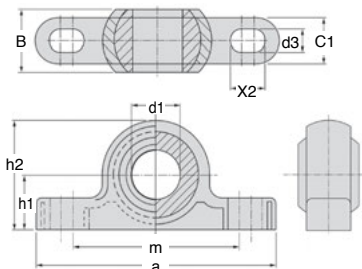
**Maintenance
free**

Part number	Max. static load for short life expectancy (N)	Max. static load for long life expectancy (N)	Max. static load in compression (N)
KSTM-05	700	350	500
KSTM-06	1100	550	700
KSTM-08	1300	650	1000
KSTM-10	1500	750	1100
KSTM-12	2200	1100	1150
KSTM-14	2400	1200	1200
KSTM-16	3000	1500	1800
KSTM-18	3500	1750	1900
KSTM-20	4700	2350	2500
KSTM-22	6100	3050	2700
KSTM-25	6600	3300	3200
KSTM-30	8100	4050	3750

Dimensions in mm

Advantages

- igubal® is self-lubricating
- Dry assembly
- No dirt collection
- Will not seize
- igubal® is suited to difficult environments
- Corrosion-resistant
- Resistant to chemicals
- High tolerance to vibration



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

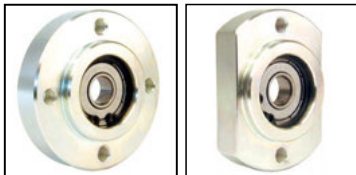
Part number	a	Ød1 (E10)	B	C1	h1	h2	m	Ød3	X2	Pivot angle	Stock*	Price each 1 to 5
KSTM-05	34	5	8	6,0	7	14	25	3,3	5	30°	✓	7,46 €
KSTM-06	43	6	9	7,0	10	20	33	4,5	6	29°	✓	7,55 €
KSTM-08	47	8	12	9,0	10	20	33	4,5	7	25°	✓	7,65 €
KSTM-10	62	10	14	10,5	14	28	46	5,5	8	25°	✓	8,50 €
KSTM-12	65	12	16	12,0	14	28	46	5,5	9	25°	✓	10,09 €
KSTM-14	82	14	19	13,5	18	36	60	6,6	11	23°	✓	13,83 €
KSTM-16	86	16	21	15,0	18	36	60	6,6	12	23°	✓	12,85 €
KSTM-18	93	18	23	16,5	22	44	68	9,0	13	23°	-	21,72 €
KSTM-20	98	20	25	18,0	22	44	68	9,0	14	23°	✓	16,57 €
KSTM-22	108	22	28	20,0	24	48	74	9,0	16	22°	-	29,44 €
KSTM-25	124	25	31	22,0	27	54	86	9,0	17	22°	✓	28,54 €
KSTM-30	139	30	37	25,0	32	64	96	11,0	20	22°	✓	38,58 €

*Depending on availability - Dimensions in mm

Single housed bearing assembly

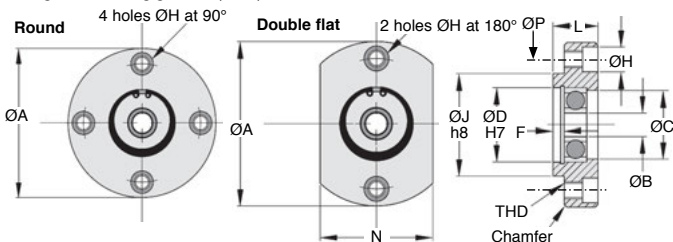
BH02 Bearing retained by with circlips

- **Bearing mounted in housing with circlips**
- Housing supplied with bearing
- ZZ bearing (with shielding)
- Materials:
Housing: zinc plated steel (60C40), natural finish
Bearing: steel
Circlips: steel



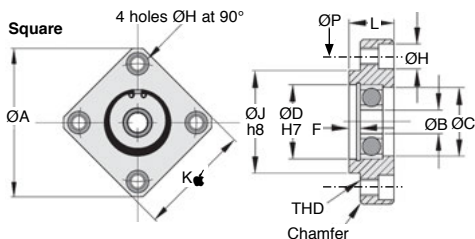
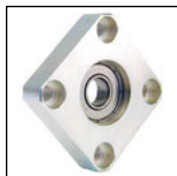
Options

- Flange with bearing glued in (BH01)



Part number			ØB	ØD	ØC	L	ØA	ØP
Round	Double flat	Square						
BH0200-40-623	BH0201-40-623	BH0202-40-623	3	Ø10x7Deep	Ø8,5	11	40	30
BH0200-40-634	BH0201-40-634	BH0202-40-634	4	Ø16x8Deep	Ø14,0	11	40	30
BH0200-40-625	BH0201-40-625	BH0202-40-625	5	Ø16x8Deep	Ø14,0	11	40	30
BH0200-40-606	BH0201-40-606	BH0202-40-606	6	Ø17x9Deep	Ø15,0	11	40	30
BH0200-58-608	BH0201-58-608	BH0202-58-608	8	Ø22x11Deep	Ø19,5	16	58	46
BH0200-58-6000	BH0201-58-6000	BH0202-58-6000	10	Ø26x12Deep	Ø24,0	16	58	46
BH0200-58-6201	BH0201-58-6201	BH0202-58-6201	12	Ø32x14Deep	Ø28,0	16	58	46
BH0200-94-6202	BH0201-94-6202	BH0202-94-6202	15	Ø35x18Deep	Ø33,0	25	94	78
BH0200-94-6003	BH0201-94-6003	BH0202-94-6003	17	Ø35x17Deep	Ø33,0	25	94	78
BH0200-94-6004	BH0201-94-6004	BH0202-94-6004	20	Ø42x19Deep	Ø38,0	25	94	78
BH0200-94-6005	BH0201-94-6005	BH0202-94-6005	25	Ø47x19Deep	Ø43,0	25	94	78
BH0200-94-6006	BH0201-94-6006	BH0202-94-6006	30	Ø55x20Deep	Ø50,0	25	94	78

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Price each 1 to 5									
ØH	THD	KØ	Bearing	N	ØJ	F	Round	Double flat	Square
Ø7,5x4,5Deep. (M4 Screw)	Ø4,20 (M5)	30	623ZZ	24	Ø22x3	3	51,57 €	58,31 €	61,09 €
Ø7,5x4,5Deep. (M4 Screw)	Ø4,20 (M5)	30	634ZZ	24	Ø22x3	3	51,57 €	58,31 €	61,09 €
Ø7,5x4,5Deep. (M4 Screw)	Ø4,20 (M5)	30	625ZZ	24	Ø22x3	3	51,57 €	58,31 €	61,09 €
Ø7,5x4,5Deep. (M4 Screw)	Ø4,20 (M5)	30	606ZZ	24	Ø22x3	3	51,57 €	58,31 €	61,09 €
Ø9,5x5,5Deep. (M5 Screw)	Ø5,20 (M6)	44	608ZZ	40	Ø36x4	4	70,16 €	72,36 €	101,82 €
Ø9,5x5,5Deep. (M5 Screw)	Ø5,20 (M6)	44	6000ZZ	40	Ø36x4	4	70,16 €	72,36 €	101,82 €
Ø15,0x8,5Deep. (M8 Screw)	Ø5,20 (M6)	44	6201ZZ	40	Ø36x4	4	70,16 €	72,36 €	101,82 €
Ø15,0x8,5Deep. (M8 Screw)	Ø8,50 (M10)	77	6202ZZ	67	Ø66x6	7	101,77 €	114,85 €	163,01 €
Ø15,0x8,5Deep. (M8 Screw)	Ø8,50 (M10)	77	6003ZZ	67	Ø66x6	7	101,77 €	114,85 €	163,01 €
Ø15,0x8,5Deep. (M8 Screw)	Ø8,50 (M10)	77	6004ZZ	67	Ø66x6	7	101,74 €	114,85 €	163,01 €
Ø15,0x8,5Deep. (M8 Screw)	Ø8,50 (M10)	77	6005ZZ	67	Ø66x6	7	101,77 €	114,85 €	163,01 €
Ø15,0x8,5Deep. (M8 Screw)	Ø8,50 (M10)	77	6006ZZ	67	Ø66x6	7	101,77 €	114,85 €	163,01 €

Dimensions in mm

Single housed bearing



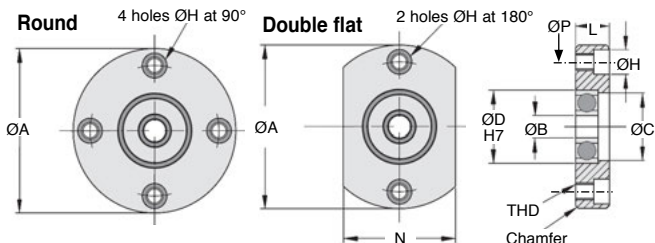
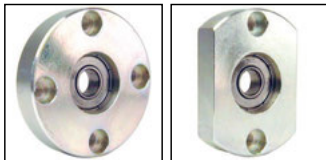
BH01

With tight fitting bearing

- **Housing with tight fitting bearing**
- ZZ bearing (with shielding)
- **Materials:**
Housing: zinc plated steel (60C40), natural finish
Bearing: steel

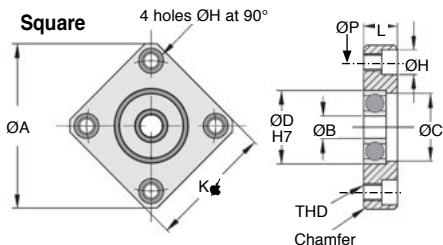
Options

- Flange with bearing retained by circlips (**BH02**)



Part number			ØB	ØD	ØC	L	ØA
Round	Double flat	Square					
BH0100-40-623	BH0101-40-623	BH0102-40-623	3	Ø10x4Deep	Ø8,5	8	40
BH0100-40-634	BH0101-40-634	BH0102-40-634	4	Ø16x5Deep	Ø14,0	8	40
BH0100-40-625	BH0101-40-625	BH0102-40-625	5	Ø16x5Deep	Ø14,0	8	40
BH0100-40-606	BH0101-40-606	BH0102-40-606	6	Ø17x6Deep	Ø15,0	8	40
BH0100-58-608	BH0101-58-608	BH0102-58-608	8	Ø22x7Deep	Ø19,5	12	58
BH0100-58-6000	BH0101-58-6000	BH0102-58-6000	10	Ø26x8Deep	Ø24,0	12	58
BH0100-58-6201	BH0101-58-6201	BH0102-58-6201	12	Ø32x10Deep	Ø28,0	12	58
BH0100-94-6202	BH0101-94-6202	BH0102-94-6202	15	Ø35x11Deep	Ø33,0	18	94
BH0100-94-6003	BH0101-94-6003	BH0102-94-6003	17	Ø35x10Deep	Ø33,0	18	94
BH0100-94-6004	BH0101-94-6004	BH0102-94-6004	20	Ø42x12Deep	Ø38,0	18	94
BH0100-94-6005	BH0101-94-6005	BH0102-94-6005	25	Ø47x12Deep	Ø43,0	18	94
BH0100-94-6006	BH0101-94-6006	BH0102-94-6006	30	Ø55x13Deep	Ø50,0	18	94

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

						Price each 1 to 5		
ØP	ØH	THD	K	Bearing	N	Round	Double flat	Square
30	Ø7,5x4,5Deep (M4 Screw)	Ø4,20 (M5)	30	623ZZ	24	47,26 €	53,47 €	47,26 €
30	Ø7,5x4,5Deep (M4 Screw)	Ø4,20 (M5)	30	634ZZ	24	47,26 €	53,47 €	55,94 €
30	Ø7,5x4,5Deep (M4 Screw)	Ø4,20 (M5)	30	625ZZ	24	47,26 €	53,47 €	55,94 €
30	Ø7,5x4,5Deep (M4 Screw)	Ø4,20 (M5)	30	606ZZ	24	47,26 €	53,47 €	55,94 €
46	Ø9,5x5,5Deep (M5 Screw)	Ø5,20 (M6)	44	608ZZ	40	78,40 €	66,34 €	70,01 €
46	Ø9,5x5,5Deep (M5 Screw)	Ø5,20 (M6)	44	6000ZZ	40	78,40 €	66,34 €	70,01 €
46	Ø9,5x5,5Deep (M5 Screw)	Ø5,20 (M6)	44	6201ZZ	40	78,40 €	66,34 €	70,01 €
78	Ø15,0x8,5Deep (M8 Screw)	Ø8,50 (M10)	77	6202ZZ	67	124,36 €	140,45 €	149,39 €
78	Ø15,0x8,5Deep (M8 Screw)	Ø8,50 (M10)	77	6003ZZ	67	124,36 €	140,45 €	149,39 €
78	Ø15,0x8,5Deep (M8 Screw)	Ø8,50 (M10)	77	6004ZZ	67	124,36 €	140,45 €	149,39 €
78	Ø15,0x8,5Deep (M8 Screw)	Ø8,50 (M10)	77	6005ZZ	67	124,36 €	140,45 €	149,39 €
78	Ø15,0x8,5Deep (M8 Screw)	Ø8,50 (M10)	77	6006ZZ	67	124,36 €	140,45 €	149,39 €

Dimensions in mm

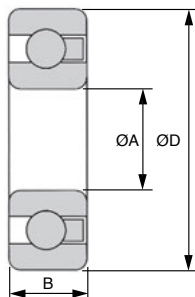
Plastic ball bearing



PBGL SING
PBss

Corrosion-resistant

- **Radial contact ball bearing**
- Conforms to DIN 625
- Resistant to chemicals
- Light-weight
- Working temp. up to +100°C
- No lubrication required
- Materials:
Rings: Polyoxymethylene
Ball bearings: Glass or stainless steel
Cage: Nylon



GL:
Glass balls



SS:
Stainless steel balls

Advantages

- No maintenance required

DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number					Max speed (rpm)	Static load (daN)	Dynamic load (daN)	Price each 1 to 5	
Glass balls	Stainless steel balls	ØA	ØD	B				Glass balls	Stainless steel balls
PB623/GL	PB623/SS	3	10	4	4500	3,0	4,5	12,93 €	12,64 €
PB624/GL	PB624/SS	4	13	5	3600	4,0	6,0	12,42 €	12,15 €
PB625/GL	PB625/SS	5	16	5	3050	4,5	6,5	10,55 €	10,31 €
PB626/GL	PB626/SS	6	19	6	2600	5,0	7,0	10,51 €	10,20 €
PB6000/GL	PB6000/SS	10	26	8	1900	9,0	13,0	12,57 €	12,25 €
PB6001/GL	PB6001/SS	12	28	8	1750	11,0	16,0	12,59 €	12,33 €
PB6002/GL	PB6002/SS	15	32	9	1550	13,0	19,0	13,06 €	12,75 €
PB6004/GL	PB6004/SS	20	42	12	1200	20,0	30,0	17,62 €	17,16 €
PB6005/GL	PB6005/SS	25	47	12	1050	24,0	36,0	19,11 €	18,62 €
PB6006/GL	PB6006/SS	30	55	13	900	28,0	42,0	25,89 €	25,26 €
PB6007/GL	PB6007/SS	35	62	14	800	32,0	48,0	40,97 €	39,99 €
PB607/GL	PB607/SS	7	19	6	2600	4,0	6,0	9,94 €	9,71 €
PB608/GL	PB608/SS	8	22	7	2200	5,5	8,0	10,83 €	10,55 €
PB6200/GL	PB6200/SS	10	30	9	1650	13,0	17,0	11,76 €	11,46 €
PB6201/GL	PB6201/SS	12	32	10	1550	15,0	22,0	13,50 €	On request

Dimensions in mm

**Without
lubrification,
lighter**

DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number					Max	Static	Dynamic	Price each 1 to 5	
Glass balls	Stainless steel balls	ØA	ØD	B	speed (rpm)	load (daN)	load (daN)	Glass balls	Stainless steel balls
PB607/GL	PB607/SS	7	19	6	2600	4,0	6,0	9,94 €	9,71 €
PB608/GL	PB608/SS	8	22	7	2200	5,5	8,0	10,83 €	10,55 €
PB609/GL	PB609/SS	9	24	7	2050	6,0	9,0	11,73 €	11,42 €
PB6200/GL	PB6200/SS	10	30	9	1850	13,0	17,0	11,76 €	11,46 €
PB6201/GL	PB6201/SS	12	32	10	1550	15,0	22,0	13,50 €	13,20 €
PB6202/GL	PB6202/SS	15	35	11	1400	17,0	25,0	15,79 €	15,41 €
PB6203/GL	PB6203/SS	17	40	12	1250	22,0	32,0	16,62 €	16,19 €
PB6204/GL	PB6204/SS	20	47	14	1050	27,0	42,0	20,75 €	20,31 €
PB6205/GL	PB6205/SS	25	52	15	950	32,0	48,0	24,43 €	23,84 €
PB6206/GL	PB6206/SS	30	62	16	800	36,0	55,0	39,17 €	38,15 €
PB6207/GL	PB6207/SS	35	72	17	700	41,0	62,0	On request	On request
PB6208/GL	PB6208/SS	40	80	18	625	44,0	66,0	On request	69,88 €
PB6209/GL	PB6209/SS	45	85	19	580	47,0	72,0	78,04 €	On request
PB6210/GL	PB6210/SS	50	90	20	550	54,0	77,0	98,00 €	On request
PB6211/GL	PB6211/SS	55	100	21	500	60,0	80,0	On request	On request
PB6212/GL	PB6212/SS	60	110	22	450	63,0	88,0	On request	On request
PB6300/GL	PB6300/SS	10	35	11	1400	19,0	28,0	16,39 €	16,01 €
PB6301/GL	PB6301/SS	12	37	12	1300	21,0	31,0	16,53 €	16,15 €
PB6302/GL	PB6302/SS	15	42	13	1200	26,0	37,0	20,45 €	19,93 €
PB6303/GL	PB6303/SS	17	47	14	1050	30,0	45,0	21,76 €	On request
PB6304/GL	PB6304/SS	20	52	15	950	35,0	53,0	25,29 €	24,66 €
PB6305/GL	PB6305/SS	25	62	17	725	40,0	60,0	39,80 €	38,77 €
PB6306/GL	PB6306/SS	30	72	19	675	46,0	70,0	64,26 €	62,63 €
PB6307/GL	PB6307/SS	35	80	21	600	49,0	75,0	On request	73,98 €
PB6309/GL	PB6309/SS	45	100	25	500	54,0	90,0	On request	On request
PB16002/GL	PB16002/SS	15	32	8	1500	13,0	19,0	12,50 €	12,21 €
PB16003/GL	PB16003/SS	17	35	8	1400	16,0	24,0	13,36 €	13,00 €
PB16004/GL	PB16004/SS	20	42	8	1150	19,0	29,0	16,99 €	16,59 €
PB16005/GL	PB16005/SS	25	47	8	1050	21,0	31,0	18,85 €	18,39 €
PB16006/GL	PB16006/SS	30	55	9	900	24,0	37,0	21,98 €	On request
PB16007/GL	PB16007/SS	35	62	9	800	29,0	43,0	On request	On request
PB16008/GL	PB16008/SS	40	68	9	750	30,0	45,0	On request	On request
PB16009/GL	PB16009/SS	45	75	10	650	33,0	50,0	On request	On request

Dimensions in mm

- **Radial contact ball bearing**
- Single line of balls
- Static and dynamic loads are both radial loads

Versions

- **Open**: no protection
- **ZZ**: bearing with 2 shields
- **2RS**: bearing with 2 seals

Info.

- ** Open
- 2 widths are displayed in the tables as bearings without seals are thinner

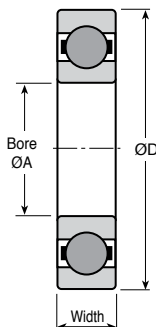


DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Bore ØA	ØD	Width	Max. speed (rpm)	Dynamic load (N)	Static load (N)	Stock*	Price each 1 to 5			
								2RS	Open	ZZ	2RS
Q693	3	8	3** / 4	60 000	560	179	-	-	14,70 €	8,22 €	On request
Q624	4	13	5	40 000	1 300	485	✓	✓	2,75 €	3,31 €	3,56 €
Q634	4	16	5	36 000	1 730	670	-	-	10,51 €	4,22 €	12,07 €
Q685	5	11	3** / 5	45 000	715	281	✓	✓	14,36 €	7,56 €	11,22 €
Q625	5	16	5	36 000	1 730	670	✓	✓	3,31 €	2,75 €	3,31 €
Q686	6	13	3,5** / 5	40 000	1 080	440	✓	✓	10,60 €	On request	6,06 €
Q626	6	19	6	32 000	2 340	885	✓	✓	3,16 €	2,89 €	2,49 €
Q608	8	22	7	34 000	3 300	1 370	✓	✓	2,36 €	3,98 €	2,36 €
Q61800	10	19	5	24 000	1 720	840	✓	✓	3,56 €	4,09 €	4,22 €
Q6000	10	26	8	22 000	4 550	1 970	✓	✓	3,42 €	3,56 €	3,70 €
Q6200	10	30	9	18 000	5 100	2 390	✓	✓	2,49 €	4,09 €	4,09 €
Q6300	10	35	11	17 000	8 100	3 450	✓	✓	7,44 €	4,90 €	5,03 €
Q61801	12	21	5	20 000	1 920	1 040	✓	✓	5,16 €	4,90 €	4,90 €
Q6001	12	28	8	18 000	5 100	2 370	✓	✓	3,56 €	3,70 €	3,81 €
Q6201	12	32	10	17 000	6 800	3 050	✓	✓	4,22 €	4,09 €	4,22 €
Q6301	12	37	12	16 000	9 700	4 200	✓	✓	6,66 €	6,10 €	5,16 €
Q61802	15	24	5	17 000	2 070	1 260	✓	✓	5,16 €	5,56 €	5,44 €
Q6002	15	32	9	15 000	5 600	2 830	✓	✓	4,22 €	4,09 €	4,22 €
Q6202	15	35	11	14 000	7 650	3 750	✓	✓	4,63 €	4,49 €	4,36 €
Q6302	15	42	13	13 000	11 400	5 450	-	-	6,89 €	5,84 €	6,10 €
Q61803	17	26	5	15 000	2 630	1 570	✓	✓	5,98 €	6,36 €	6,36 €
Q6003	17	35	10	13 000	6 000	3 250	✓	✓	4,76 €	4,49 €	4,49 €
Q6203	17	40	12	12 000	9 550	4 800	✓	✓	6,49 €	5,16 €	5,30 €
Q6303	17	47	14	11 000	13 600	6 650	-	-	10,91 €	7,19 €	7,30 €

*Depending on availability - Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Bore ØA	ØD	Width	Max. speed (rpm)	Dynamic load (N)	Static load (N)	Stock*		Price each 1 to 5		
							2RS	Open	ZZ	2RS	
Q61804	20	32	7	13 000	4 000	2 470	✓	7,19 €	7,98 €	6,76 €	
Q6004	20	42	12	11 000	9 400	5 000	✓	6,36 €	5,56 €	5,56 €	
Q6204	20	47	14	11 000	12 800	6 600	✓	7,98 €	6,10 €	6,23 €	
Q6304	20	52	15	10 000	15 900	7 900	✓	11,19 €	7,98 €	8,23 €	
Q61805	25	37	7	10 000	4 300	2 950	✓	10,78 €	9,70 €	9,70 €	
Q6005	25	47	12	9 500	10 100	5 850	✓	6,49 €	6,10 €	6,23 €	
Q6205	25	52	15	9 000	14 000	7 850	✓	8,89 €	7,30 €	7,44 €	
Q61806	30	42	7	9 000	4 500	3 450	✓	11,45 €	11,83 €	12,92 €	
Q6006	30	55	13	8 000	13 200	8 300	✓	10,91 €	7,19 €	7,30 €	
Q6206	30	62	16	7 500	19 500	11 300	✓	14,12 €	9,70 €	9,85 €	
Q61807	35	47	7	7 500	4 750	3 900	-	13,84 €	16,40 €	14,93 €	
Q6007	35	62	14	6 700	16 000	10 300	-	12,12 €	8,50 €	8,65 €	
Q6207	35	72	17	6 300	25 700	15 300	✓	18,39 €	12,50 €	12,78 €	
Q61808	40	52	7	6 700	4 900	4 350	-	19,05 €	20,40 €	20,14 €	
Q6008	40	68	15	6 000	16 800	11 500	✓	18,14 €	9,85 €	9,98 €	
Q6208	40	80	18	5 600	29 100	17 800	✓	23,88 €	15,32 €	15,73 €	
Q61809	45	58	7	6 000	5 350	5 250	-	26,30 €	34,30 €	26,02 €	
Q6009	45	75	16	5 300	20 900	15 200	-	17,85 €	11,99 €	12,38 €	
Q6209	45	85	19	5 300	31 500	20 400	-	27,09 €	18,14 €	18,39 €	
Q61810	50	65	7	5 300	6 400	6 200	-	31,10 €	90,85 €	34,57 €	
Q6010	50	80	16	4 800	21 800	16 600	-	23,88 €	14,66 €	14,01 €	
Q6210	50	90	20	4 800	35 000	23 200	-	On request	20,28 €	20,79 €	

*Depending on availability - Dimensions in mm

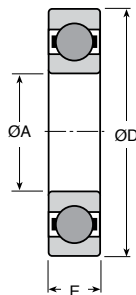
SZZ

With shield

- Radial contact ball bearings
- Single row of balls
- With 2 shielding plates (ZZ joints)
- Tolerance PO or equivalent
- Material: stainless steel AISI 440C
- Max. working temperature: +80°C



stainless steel



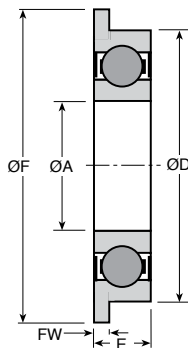
DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØA	ØD	E	Dynamic load (N)	Static load (N)	Stock*	Price each 1 to 5
S682ZZ	2	5	2,3	137,29	39,23	✓	20,01 €
S683ZZ	3	7	3,0	254,97	78,45	✓	14,97 €
S684ZZ	4	9	4,0	509,95	176,52	✓	14,97 €
S685ZZ	5	11	5,0	598,21	225,55	✓	14,16 €
S686ZZ	6	13	5,0	853,18	343,23	✓	14,16 €
S687ZZ	7	14	5,0	961,05	402,07	✓	15,03 €
S688ZZ	8	16	5,0	1029,70	460,91	✓	17,26 €
S680ZZ	8	22	7,0	2726,25	1068,92	✓	30,69 €
S689ZZ	9	17	6,0	1098,34	529,56	-	18,38 €
S6800ZZ	10	19	5,0	1441,58	657,05	✓	33,53 €
S6801ZZ	12	21	5,0	1569,06	853,18	✓	45,95 €
S6802ZZ	15	24	5,0	2029,98	1225,83	✓	58,25 €
S6803ZZ	17	26	5,0	1824,04	1196,41	-	63,76 €
S6804ZZ	20	32	7,0	3314,65	2029,98	✓	75,61 €

*Depending on availability - Dimensions in mm

- **Radial contact ball bearing**
- Single row of balls
- With 2 shielding plates (ZZ joints)
- Tolerance: P6/ABEC3
- With flange
- Material: stainless steel AISI 440C
- Static and dynamic loads : these bearings can handle approx 70% of the same loads that an equivalent steel bearing will accept
- Max. working temperature: +80°C



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØA	ØD	E	ØF	FW	Stock*	Price each 1 to 5
SF682ZZ	2,0	5	2,3	6,1	0,6	✓	22,01 €
SF683ZZ	3,0	7	3,0	8,1	0,8	✓	20,39 €
SF684ZZ	4,0	9	4,0	10,3	1,0	✓	20,77 €
SF685ZZ	5,0	11	5,0	12,5	1,0	✓	19,69 €
SF686ZZ	6,0	13	5,0	15,0	1,1	✓	18,89 €
SF687ZZ	7,0	14	5,0	16,0	1,1	✓	20,10 €
SF688ZZ	8,0	16	5,0	18,0	1,1	✓	22,01 €
SF689ZZ	9,0	17	6,0	19,0	1,1	-	20,95 €
SF980ZZ	10,0	19	7,0	21,0	1,5	✓	33,43 €

*Depending on availability - Dimensions in mm

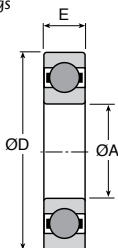
S2RS

With sealed joints

- **Radial contact ball bearing**
- Bearing with 2 sealed joints (2RS)
- Material:
Cage + balls: stainless steel AISI 440C
Joint: Neoprene
- Static and dynamic loads : these bearings can handle approx 70% of the same loads that an equivalent steel bearing will accept
- Max. working temperature: +80°C

Accessories

- Nut FU-SS



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØA	ØD	E	Stock*	Price each 1 to 5
S6000-2RS	10	26	8	✓	9,70 €
S6200-2RS	10	30	9	✓	11,32 €
S6001-2RS	12	28	8	✓	10,65 €
S6201-2RS	12	32	10	✓	12,78 €
S6301-2RS	12	37	12	-	19,46 €
S6002-2RS	15	32	9	✓	11,99 €
S6202-2RS	15	35	11	✓	14,01 €
S6302-2RS	15	42	13	-	23,49 €
S6003-2RS	17	35	10	-	13,34 €
S6203-2RS	17	40	12	-	19,46 €
S6303-2RS	17	47	14	-	29,61 €
S6004-2RS	20	42	12	✓	21,49 €
S6204-2RS	20	47	14	-	25,60 €
S6304-2RS	20	52	15	-	34,87 €
S6005-2RS	25	47	12	✓	25,50 €
S6205-2RS	25	52	15	-	32,69 €
S6305-2RS	25	62	17	-	51,01 €
S6006-2RS	30	55	13	✓	32,69 €
S6206-2RS	30	62	16	-	On request
S6306-2RS	30	72	19	-	81,49 €
S6007-2RS	35	62	14	-	46,98 €
S6207-2RS	35	72	17	-	65,33 €
S6208-2RS	40	80	18	-	96,34 €

*Depending on availability - Dimensions in mm

Angular contact ball bearings

Steel

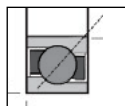
Q7

- Angular contact bearings are capable of handling axial and radial loads

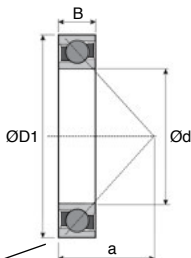
- Static and dynamic loads are radial loads

- Materials:

Steel rings and balls
Polyamide cage



Oblique contact



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	List -15%	List -20%	On request	On request

Part number	Ød	ØD1	B	a	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
					Dynamic (C)	Static (Co)	lubricant	Grease Oil		
Q7200-B	10	30	9	13,0	6,88	3,28	22950	27000	0,030	4,65 €
Q7201-B	12	32	10	14,4	7,46	3,72	19890	23400	0,036	4,95 €
Q7202-B	15	35	11	16,0	8,66	4,70	18360	21600	0,045	5,08 €
Q7203-B	17	40	12	18,0	10,88	5,98	15300	18000	0,064	6,59 €
Q7304-B	20	52	15	22,8	18,62	10,19	12240	14400	0,150	8,16 €
Q7305-B	25	62	17	26,8	25,48	15,29	10710	12600	0,240	11,98 €
Q7206-B	30	62	16	27,3	23,32	15,29	9945	11700	0,210	10,29 €
Q7306-B	30	72	19	31,0	33,81	20,78	9180	10800	0,370	12,36 €
Q7207-B	35	72	17	31,0	30,09	20,38	8415	9900	0,300	12,27 €
Q7208-B	40	80	18	34,0	35,67	25,48	7650	9000	0,380	17,52 €
Q7308-B	40	90	23	39,0	48,41	32,83	6885	8100	0,640	20,41 €
Q7209-B	45	85	19	37,0	36,95	27,44	6885	8100	0,430	18,05 €
Q7309-B	45	100	25	43,0	59,29	40,67	6120	7200	0,860	26,70 €
Q7210-B	50	90	20	39,0	38,22	29,89	6503	7650	0,470	20,02 €
Q7310-B	50	110	27	47,0	72,62	49,98	5738	6750	1,130	28,88 €
Q7211-B	55	100	21	43,0	47,82	37,24	5738	6750	0,620	24,38 €
Q7311-B	55	120	29	51,0	83,50	58,80	5126	6030	1,480	37,96 €
Q7212-B	60	110	22	47,0	56,06	44,59	5355	6300	0,830	25,36 €
Q7312-B	60	130	31	55,0	93,69	68,11	4590	5400	1,750	62,95 €
Q7213-B	65	120	23	50,0	64,97	52,92	4820	5670	1,000	33,61 €
Q7313-B	65	140	33	60,0	105,84	78,40	4284	5040	2,100	75,10 €
Q7214-B	70	125	24	53,0	70,07	58,80	4590	5400	1,100	45,10 €
Q7314-B	70	150	35	64,0	116,62	88,20	4055	4770	2,550	88,33 €
Q7215-B	75	130	25	56,0	71,34	62,72	4284	5040	1,180	53,27 €
Q7315-B	75	160	37	68,0	122,50	96,04	3825	4500	3,060	123,97 €
Q7316-B	80	170	39	72,0	140,14	115,64	3443	4050	3,700	149,29 €
Q7217-B	85	150	28	63,0	93,69	81,34	3825	4500	1,830	93,48 €
Q7218-B	90	160	30	67,0	105,84	94,57	3443	4050	2,120	106,03 €

Dimensions in mm

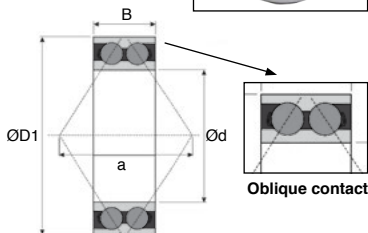
Double row **angular** contact ball bearings

Q3

Steel

- Double row angular contact bearings are capable of handling axial and radial loads
- Static and dynamic loads are radial loads
- Materials:
Steel rings and balls
Polyamide cage

Double row of bearings



Advantage

- The special feature of this type of bearing is that gives the equivalent performance of two single row bearings but with a reduced axial dimension.

DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD1	B	a	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
					Dynamic (C)	Static (Co)	Grease	lubricant Oil		
Q3200-ATN9	10	30	14,0	16	7,50	4,21	18360	21600	0,051	5,98 €
Q3201-ATN9	12	32	15,9	19	9,90	5,49	16830	19800	0,0580	6,85 €
Q3202-ATN9	15	35	15,9	21	11,00	6,66	13770	16200	0,0660	7,51 €
Q3203-ATN9	17	40	17,5	23	14,00	8,62	12240	14400	0,0950	7,62 €
Q3204-ATN9	20	47	20,6	28	19,60	11,76	10710	12600	0,1600	8,55 €
Q3304-ATN9	20	52	22,2	30	23,10	14,31	9945	11700	0,2200	15,53 €
Q3205-ATN9	25	52	20,6	30	21,20	14,01	9180	10800	0,1900	9,82 €
Q3305-ATN9	25	62	25,4	36	31,40	19,99	8415	9900	0,3500	17,18 €
Q3206-ATN9	30	62	23,8	36	29,40	19,99	7650	9000	0,2900	13,03 €
Q3306-ATN9	30	72	30,2	42	40,70	26,95	6885	8100	0,5300	22,09 €
Q3207-ATN9	35	72	27,0	42	39,20	27,44	6885	8100	0,4400	14,65 €
Q3307-ATN9	35	80	34,9	47	51,00	34,79	6505	7650	0,7100	28,35 €
Q3208-ATN9	40	80	30,2	46	46,60	33,32	6120	7200	0,5800	22,43 €
Q3308-ATN9	40	90	36,5	53	62,70	43,12	5740	6750	1,0500	36,85 €
Q3209-ATN9	45	85	30,2	49	50,00	38,22	5740	6750	0,6400	25,04 €
Q3309-ATN9	45	100	39,7	58	73,50	51,94	5130	6030	1,4000	52,29 €
Q3210-ATN9	50	90	30,2	52	50,00	38,22	5355	6300	0,6600	27,77 €
Q3211-ATN9	55	100	33,3	57	58,80	46,55	4820	5670	1,0500	36,85 €
Q3311-ATN9	55	120	49,2	72	109,80	79,87	4055	4770	2,5500	94,50 €
Q3212-ATN9	60	110	36,5	63	72,00	57,33	4284	5040	1,4000	43,01 €

Dimensions in mm

Double row **radial** contact ball bearings

Steel

Q4

- Double row bearings are capable of handling axial loads in both directions as well as radial loads as they have a deep gorge and can accept movement between the balls and raceway.

- Static and dynamic loads are radial loads

- Materials:

Steel rings and balls

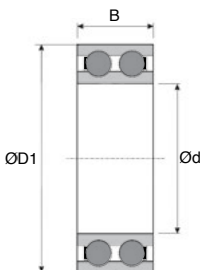
Polyamide cage

Double row
of bearings



Advantage

- For the same external diameter and bore, a bearing with two rows of balls is capable of handling higher loads than bearings with a single row of balls.



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD1	B	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
				Dynamic (C)	Static (Co)	Grease	lubricant Oil		
Q4200-ATN9	10	30	14	9,05	5,10	16830	19800	0,049	6,55 €
Q4201-ATN9	12	32	14	10,39	6,08	15300	18000	0,053	6,74 €
Q4202-ATN9	15	35	14	11,66	7,35	13005	15300	0,059	7,32 €
Q4203-ATN9	17	40	16	14,50	9,31	11475	13500	0,090	8,59 €
Q4204-ATN9	20	47	18	17,44	12,25	9945	11700	0,140	9,62 €
Q4205-ATN9	25	52	18	18,62	14,31	8415	9900	0,160	10,04 €
Q4206-ATN9	30	62	20	25,48	20,38	7268	8550	0,260	12,66 €
Q4207-ATN9	35	72	23	34,40	27,93	6120	7200	0,400	17,64 €
Q4208-ATN9	40	80	23	36,36	31,85	5355	6300	0,500	24,00 €
Q4210-ATN9	50	90	23	40,18	39,20	4590	5400	0,580	32,26 €
Q4211-ATN9	55	100	25	44,00	43,12	4284	5040	0,800	41,82 €
Q4212-ATN9	60	110	28	56,06	53,90	4055	4770	1,100	53,78 €
Q4213-ATN9	65	120	31	66,25	65,66	3672	4320	1,450	69,78 €
Q4214-ATN9	70	125	31	68,80	72,03	3290	3870	1,500	73,12 €

Dimensions in mm

Self-aligning radial ball bearing

Q1
Q2

Steel

- Self aligning bearing that is unaffected by any errors in alignment
- Static and dynamic loads are radial loads
- Materials:
Rings and balls: steel
ETN9: Polyamide cage
ACC: Steel cage

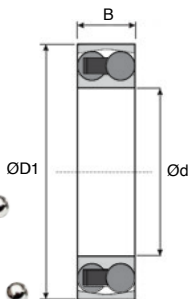


DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD1	B	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
				Dynamic (C)	Static (Co)	Grease	Lubricant Oil		
Q126-ETN9	6	19	6	2,460	0,470	34425	40500	0,009	3,74 €
Q1200-ETN9	10	30	9	5,420	1,160	27540	32400	0,034	3,70 €
Q1201-ETN9	12	32	10	6,120	1,400	24480	28800	0,040	3,90 €
Q2201-ETN9	12	32	14	8,350	1,860	22950	27000	0,053	4,67 €
Q1202-ETN9	15	35	11	7,260	1,720	21420	25200	0,049	3,94 €
Q2202-ETN9	15	35	14	8,540	2,000	19890	23400	0,060	4,82 €
Q1203-ETN9	17	40	12	8,660	2,160	18360	21600	0,073	4,98 €
Q2203-ETN9	17	40	16	10,390	2,500	18360	21600	0,088	5,14 €
Q1204-ETN9	20	47	14	12,450	3,330	15300	18000	0,120	5,10 €
Q2204-ETN9	20	47	18	16,460	4,070	15300	18000	0,140	6,41 €
Q1205-ACC	25	52	15	14,010	3,920	13770	16200	0,140	6,06 €
Q2205-ETN9	25	52	18	16,460	4,310	13770	16200	0,160	6,80 €
Q1305-ETN9	25	62	17	18,620	5,290	11475	13500	0,260	9,62 €
Q2305-ETN9	25	62	24	26,460	6,960	12240	14400	0,340	12,87 €
Q1206-ETN9	30	62	16	15,290	4,560	11475	13500	0,220	7,81 €
Q2206-ETN9	30	62	20	23,320	6,570	11475	13500	0,260	10,74 €
Q1306-ETN9	30	72	19	22,050	6,660	9945	11700	0,390	11,63 €
Q2306-ETN9	30	72	27	30,580	8,620	9945	11700	0,500	18,83 €
Q1207-ETN9	35	72	17	18,620	5,880	9945	11700	0,320	10,59 €
Q2207-ETN9	35	72	23	30,090	8,620	9180	10800	0,400	12,02 €
Q1307-ACC	35	80	21	25,970	8,330	8415	9900	0,510	14,88 €
Q2307-ACC	35	80	31	38,910	10,980	9180	10800	0,680	19,60 €

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD1	B	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
				Dynamic (C)	Static (Co)	lubricant Grease	Oil		
Q1208-ETN9	40	80	18	19,500	6,810	8415	9900	0,420	13,14 €
Q2208-ETN9	40	80	23	31,260	9,800	8415	9900	0,510	13,88 €
Q2308-ACC	40	90	33	52,920	15,680	7650	9000	0,930	26,71 €
Q1209-ACC	45	85	19	22,440	7,640	8415	9900	0,470	13,61 €
Q2209-ACC	45	85	23	31,850	10,390	7650	9000	0,550	16,75 €
Q2309-ACC	45	100	36	62,430	18,910	6885	8100	1,250	40,37 €
Q1210-ACC	50	90	20	25,970	8,970	7650	9000	0,530	15,35 €
Q2210-ACC	50	90	23	33,120	10,980	7268	8550	0,600	18,95 €
Q1310-ETN9	50	110	27	42,730	13,720	6120	7200	1,200	32,52 €
Q2310-ACC	50	110	40	62,430	19,600	7268	8550	1,650	49,46 €
Q1211-ETN9	55	100	21	27,050	10,390	6885	8100	0,710	20,45 €
Q2211-ACC	55	100	25	38,220	13,130	6503	7650	0,810	26,60 €
Q1311-ACC	55	120	29	49,690	17,640	5738	6750	1,600	37,27 €
Q2311-ACC	55	120	43	74,580	23,520	5738	6750	2,100	96,11 €
Q1212-ACC	60	110	22	30,580	11,960	6503	7650	0,900	23,36 €
Q2212-ACC	60	110	28	47,820	16,660	6120	7200	1,100	33,45 €
Q1312-ACC	60	130	31	57,330	21,560	4820	5670	1,950	45,76 €
Q2312-ACC	60	130	46	85,360	27,930	5355	6300	2,600	98,98 €
Q1213-ACC	65	120	23	34,400	13,720	5355	6300	1,150	27,96 €
Q2213-ACC	65	120	31	56,060	19,600	5355	6300	1,450	40,41 €
Q2215-ACC	75	130	31	57,330	21,560	4820	5670	1,600	51,20 €
Q2216-ACC	80	140	33	63,700	24,990	4590	5400	2,000	56,16 €
Q2218-ACC	90	160	40	68,800	27,930	4055	4770	3,400	111,74 €

Dimensions in mm

Tapered roller bearings

QTR

Steel

- Especially designed to handle combined axial and radial loads
- A demountable bearing, i.e. the inner ring and roller cage form a single element that can mounted separately from the external ring
- Static and dynamic loads are radial loads
- Materials:
Steel flanges and cylinders
Pressed steel cage

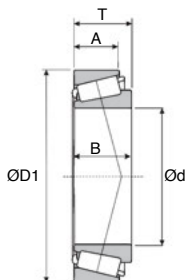


DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	-10%	-15%	-20%		On request

Part number	Ød	ØD1	T	B	A	Load (kN)		Load (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	lubricant Grease	Oil		
QTR30302	15	42	14,3	13	11	22	19	13770	16200	0,095	5,14 €
QTR30203	17	40	13,3	12	11	18	18	13770	16200	0,075	4,26 €
QTR30303	17	47	15,3	14	12	27	24	12240	14400	0,130	5,28 €
QTR32303	17	47	20,3	19	16	34	32	12240	14400	0,170	7,28 €
QTR32004	20	42	15,0	15	12	23	26	12240	14400	0,097	5,53 €
QTR30204	20	47	15,3	14	12	27	27	11475	13500	0,120	4,84 €
QTR30304	20	52	16,3	15	13	33	31	10710	12600	0,170	5,83 €
QTR32304	20	52	22,3	21	18	43	44	10710	12600	0,230	8,16 €
QTR32005	25	47	15,0	15	11,5	26	31	10710	12600	0,110	6,06 €
QTR30205	25	52	16,3	15	13	30	32	9945	11700	0,150	5,37 €
QTR32205	25	52	19,3	18	15	35	43	9945	11700	0,190	7,21 €
QTR32305	25	52	22,0	22	18	46	54	9945	11700	0,230	10,63 €
QTR30305	25	62	18,3	17	15	43	42	9180	10800	0,260	7,21 €
QTR32305	25	62	25,3	24	20	59	61	9180	10800	0,360	11,29 €
QTR32006	30	55	17,0	17	13	35	43	9180	10800	0,170	7,54 €
QTR30206	30	62	17,3	16	14	39	43	8415	9900	0,230	6,91 €
QTR32206	30	62	21,3	20	13	49	55	8415	9900	0,280	8,04 €
QTR33206	30	62	25,0	25	14	63	75	8415	9900	0,370	15,09 €
QTR31306	30	72	20,8	19	17	46	49	7268	8550	0,390	13,77 €
QTR32306	30	72	28,8	27	19,5	75	83	7650	9000	0,550	15,03 €
QTR32007	35	62	18,0	18	14	42	52	8415	9900	0,220	7,84 €
QTR30207	35	72	18,3	17	15	50	54	7268	8550	0,320	9,38 €
QTR32207	35	72	24,3	23	19	64	76	7268	8550	0,430	9,51 €
QTR33207	35	72	28,0	28	22	82	103	7268	8550	0,560	15,75 €
QTR30307	35	80	22,8	21	18	70	72	6885	8100	0,520	11,44 €
QTR31307	35	80	22,8	21	25	60	65	6503	7650	0,520	14,20 €
QTR32307	35	80	32,8	31	25	93	103	6885	8100	0,730	15,61 €

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	-15%	-20%	On request	

Part number	Ød	ØD1	T	B	A	Load (kN)		Load (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	lubricant Grease	Oil		
QTR32008	40	68	19,0	19	14,5	51	69	7268	8550	0,270	10,20 €
QTR33108	40	75	26,0	26	20,5	77	101	6885	8100	0,510	15,12 €
QTR30208	40	80	19,8	18	16	60	66	6503	7650	0,420	9,64 €
QTR32208	40	80	24,8	23	19	77	84	6503	7650	0,530	13,48 €
QTR33208	40	80	32,0	32	25	102	129	6503	7650	0,770	19,42 €
QTR30308	40	90	25,3	23	20	84	93	6120	7200	0,720	12,93 €
QTR31308	40	90	25,3	23	17	83	79	5738	6750	0,720	17,13 €
QTR32308	40	90	35,3	33	27	114	137	6120	7200	1,000	20,22 €
QTR32009	45	75	20,0	20	15,5	57	78	6503	7650	0,340	10,29 €
QTR33109	45	80	26,0	26	20,5	94	111	6120	7200	0,560	22,44 €
QTR30209	45	85	20,8	19	16	64	75	6120	7200	0,480	12,53 €
QTR32209	45	85	24,8	23	19	89	96	6120	7200	0,580	14,92 €
QTR33209	45	85	32,0	32	25	105	140	5738	6750	0,820	21,26 €
QTR30309	45	100	27,3	25	22	105	117	5355	6300	0,970	16,67 €
QTR31309	45	100	27,3	25	18	103	100	5126	6030	0,950	18,57 €
QTR32309	45	100	38,3	36	30	137	166	5355	6300	1,350	23,10 €
QTR32010	50	80	20,0	20	15,5	59	86	6120	7200	0,370	14,17 €
QTR33010	50	80	24,0	24	19	67	100	6120	7200	0,450	17,09 €
QTR33110	50	85	26,0	26	20	84	119	5738	6750	0,590	23,98 €
QTR30210	50	90	21,8	20	17	75	89	5738	6750	0,540	14,04 €
QTR32210	50	90	24,8	23	19	80	98	5738	6750	0,610	15,68 €
QTR33210	50	90	32,0	32	24,5	111	156	5355	6300	0,900	28,02 €
QTR30310	50	110	29,3	27	23	140	137	4820	5670	1,250	19,99 €
QTR31310	50	110	29,3	27	19	119	117	4590	5400	1,200	27,96 €
QTR32310	50	110	42,3	40	33	179	211	4590	5400	1,850	33,73 €
QTR32011	55	90	23,0	23	17,5	79	113	5355	6300	0,550	14,40 €
QTR33011	55	90	27,0	27	21	101	134	5355	6300	0,670	24,16 €
QTR33111	55	95	30,0	30	23	107	152	5126	6030	0,860	32,98 €
QTR30211	55	100	22,8	21	18	101	103	5126	6030	0,700	14,89 €
QTR32211	55	100	26,8	25	21	103	126	5126	6030	0,830	19,84 €
QTR33211	55	100	35,0	35	27	135	186	4820	5670	1,200	28,65 €
QTR30311	55	120	31,5	29	25	162	159	4284	5040	1,550	25,00 €
QTR31311	55	120	31,5	29	21	118	134	4284	5040	1,550	30,82 €
QTR32311	55	120	45,5	43	35	211	254	4284	5040	2,500	41,55 €

Dimensions in mm

Tapered roller bearings

QTR

Steel

- Especially designed to handle combined axial and radial loads
- A demountable bearing, i.e. the inner ring and roller cage form a single element that can mounted separately from the external ring
- Static and dynamic loads are radial loads
- Materials:
Steel flanges and cylinders
Pressed steel cage

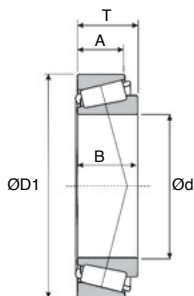


DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	-15%	-20%	On request	

Part number	Ød	ØD1	T	B	A	Load (kN)		Load (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	Lubricant Grease	Oil		
QTR33012	60	95	27.0	27	21	103	140	5126	6030	0,710	25,11 €
QTR33112	60	100	30.0	30	23	114	166	4820	5670	0,920	34,59 €
QTR30212	60	110	23.8	22	19	109	111	4590	5400	0,880	17,71 €
QTR32212	60	110	29.8	28	24	122	156	4590	5400	1,150	21,52 €
QTR33212	60	110	38.0	38	29	164	231	4590	5400	1,600	34,96 €
QTR30312	60	130	33.5	31	26	164	192	4055	4770	1,950	31,80 €
QTR31312	60	130	33.5	31	22	142	162	4055	4770	1,900	34,33 €
QTR32312	60	130	48.5	46	37	224	284	4055	4770	2,850	43,29 €
QTR32013	65	100	23.0	23	17.5	94	124	4590	5400	0,630	21,00 €
QTR33013	65	100	27.0	27	21	107	149	4820	5670	0,780	26,35 €
QTR33113	65	110	34.0	34	26.5	139	203	4284	5040	1,300	38,07 €
QTR30213	65	120	24.8	23	20	129	131	4284	5040	1,150	23,37 €
QTR32213	65	120	32.8	31	27	148	189	4284	5040	1,500	24,42 €
QTR33213	65	120	41.0	41	32	190	264	4055	4770	2,050	44,27 €
QTR30313	65	140	36.0	33	28	190	223	3672	4320	2,400	38,59 €
QTR31313	65	140	36.0	48	39	161	189	3672	4320	2,350	42,27 €
QTR32313	65	140	51.0	37	29	241	338	3456	4320	3,450	55,80 €
QTR32014	70	110	25.0	25	19	99	149	4284	5040	0,840	25,80 €
QTR33014	70	110	31.0	31	25.5	127	192	4284	5040	1,100	27,67 €
QTR33114	70	120	37.0	37	29	168	245	4055	4770	1,700	41,88 €
QTR30214	70	125	26.3	24	21	122	152	4055	4770	1,250	26,29 €
QTR32214	70	125	33.3	31	27	153	203	4055	4770	1,600	28,62 €
QTR33214	70	125	41.0	41	32	197	279	3825	4500	2,100	47,26 €
QTR30314	70	150	38.0	35	30	215	254	3443	4050	2,900	48,12 €
QTR31314	70	150	38.0	35	25	183	215	3443	4050	2,950	50,22 €
QTR32314	70	150	54.0	51	42	291	372	3443	4050	4,300	73,72 €

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød	ØD1	T	B	A	Load (kN)		Load (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	lubricant Grease	Oil		
QTR32015	75	115	25,0	25	19	103	159	4055	4770	0,900	27,99 €
QTR33015	75	115	31,0	31	25,5	131	223	4055	4770	1,150	47,89 €
QTR33115	75	125	37,0	37	29	172	259	3825	4500	1,800	44,17 €
QTR30215	75	130	27,3	25	22	137	172	3825	4500	1,400	28,85 €
QTR32215	75	130	33,3	31	27	157	207	3825	4500	1,700	34,42 €
QTR33215	75	130	41,0	41	31	204	294	3672	4320	2,250	48,18 €
QTR30315	75	160	40,0	37	31	241	284	3290	3870	3,450	64,50 €
QTR31315	75	160	40,0	37	26	204	240	3290	3870	3,500	68,08 €
QTR32016	80	125	29,0	29	22	135	211	3825	4500	1,300	32,49 €
QTR33016	80	125	36,0	36	29,5	164	279	3825	4500	1,650	52,71 €
QTR33116	80	130	37,0	37	29	175	274	3672	4320	1,900	51,00 €
QTR30216	80	140	28,3	26	22	148	179	3672	4320	1,600	37,93 €
QTR32216	80	140	35,3	33	28	183	240	3443	4050	2,050	41,16 €
QTR33216	80	140	46,0	46	35	246	367	3443	4050	2,900	57,54 €
QTR30316	80	170	42,5	39	33	264	313	3290	3870	4,100	67,68 €
QTR31316	80	170	42,5	39	27	219	259	3060	3600	4,050	137,31 €
QTR32316	80	170	61,5	58	48	372	490	3290	3870	6,200	103,21 €
QTR32017	85	130	29,0	29	22	137	219	3672	4320	1,350	40,37 €
QTR33017	85	130	36,0	36	29,5	179	303	3672	4320	1,750	58,09 €
QTR33117	85	140	41,0	41	32	215	333	3443	4050	2,450	56,25 €
QTR30217	85	150	30,5	28	24	172	215	3290	3870	2,050	40,99 €
QTR32217	85	150	38,5	36	30	207	279	3290	3870	2,600	51,46 €
QTR33217	85	150	49,0	49	37	280	421	3290	3870	3,700	71,29 €
QTR30317	85	180	44,5	41	34	296	357	3060	3600	4,850	70,15 €
QTR32018	90	140	32,0	32	24	164	264	3290	3870	1,750	46,30 €
QTR33018	90	140	39,0	39	32,5	211	347	3443	4050	2,200	71,94 €
QTR33118	90	150	45,0	45	35	246	382	3290	3870	3,100	69,00 €
QTR32218	90	160	42,5	40	34	246	333	3060	3600	3,350	58,29 €
QTR30318	90	190	46,5	43	36	323	392	3060	3600	5,650	111,10 €
QTR31318	90	190	46,5	43	30	258	308	2601	3060	5,900	210,28 €
QTR32318	90	190	67,5	64	53	447	597	3060	3600	8,400	166,49 €

Dimensions in mm

Single row cylindrical roller bearings

QNU

Free internal ring

- The external ring has two fixed flanges whereas the internal ring has no flange.
- The bearing can accommodate axial movement of the shaft relative to the housing in both directions.
- Static and dynamic loads are radial loads
- Max working temperature:
Polyamide cage: 120 °C
Steel or brass cage: 150 °C
- Materials:
Steel flanges and cylinders
P: polyamide cage
M: solid brass cage
J: pressed steel cage



Info

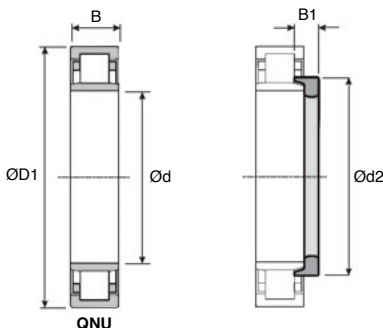
- Angle ring (thrust collar) not supplied

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	-15%	-20%	On request	

Part number	Ød	ØD1	B	ØD2	B1	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	Lubricant Grease	Oil		
QNU202-M	15	35	11	-	-	12	10	19890	23400	0,047	9,19 €
QNU203-M	17	40	12	-	-	17	14	16830	19800	0,068	9,25 €
QNU204-P	20	47	14	-	-	25	22	14535	17100	0,110	10,14 €
QNU2204-M	20	47	18	-	-	29	27	14535	17100	0,140	14,89 €
QNU304-M	20	52	15	31,2	6,50	35	25	13770	16200	0,170	14,40 €
QNU2304-M	20	52	21	-	-	47	37	13770	16200	0,210	14,86 €
QNU205-J	25	52	15	34,7	6,0	28	26	12240	14400	0,140	11,08 €
QNU2205-M	25	52	18	34,7	6,5	33	33	12240	14400	0,170	15,55 €
QNU305-M	25	62	17	38,1	7,0	46	36	11475	13500	0,280	16,86 €
QNU2305-J	25	62	24	38,1	8,0	63	54	11475	13500	0,380	20,53 €
QNU1006-M	30	55	13	-	-	18	17	11475	13500	0,120	25,98 €
QNU2206-P	30	62	20	-	-	54	48	10710	12600	0,260	14,89 €
QNU306-J	30	72	19	45,0	8,5	57	47	9180	10800	0,400	19,62 €
QNU2306-J	30	72	27	-	-	81	74	9180	10800	0,530	22,57 €
QNU207-P	35	72	17	48,1	7,0	55	47	9180	10800	0,300	16,11 €
QNU2207-J	35	72	23	-	-	68	62	9180	10800	0,400	22,24 €
QNU307-J	35	80	21	51,0	9,5	74	62	8415	9900	0,540	19,88 €
QNU2307-J	35	80	31	-	-	104	96	8415	9900	0,720	32,09 €
QNU1008-M	40	68	15	-	-	25	25	13770	16200	0,220	40,75 €
QNU208-J	40	80	18	54,0	8,5	61	52	8415	9900	0,420	19,49 €
QNU2208-J	40	80	23	54,0	9,0	80	74	8415	9900	0,540	21,06 €
QNU308-J	40	90	23	57,5	11,0	91	76	7268	8550	0,730	23,29 €
QNU2308-J	40	90	33	-	-	126	118	7268	8550	0,940	34,42 €

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	List -10%	List -15%	List -20%	On request

Part number	Ød	ØD1	B	ØD2	B1	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	lubricant Grease	Oil		
QNU209-J	45	85	19	59,0	8,5	68	63	7268	8550	0,480	19,69 €
QNU2209-J	45	85	23	-	-	83	80	7268	8550	0,520	28,51 €
QNU309-J	45	100	25	64,4	11,5	110	98	6503	7650	1,000	28,68 €
QNU2309-J	45	100	36	-	-	157	150	6503	7650	1,300	37,87 €
QNU1010-M	50	80	16	-	-	46	55	7268	8550	0,350	59,01 €
QNU210-J	50	90	20	64,0	9,0	72	68	6885	8100	0,490	20,02 €
QNU2210-J	50	90	23	-	-	88	86	6885	8100	0,560	34,56 €
QNU310-J	50	110	27	71,2	13,0	124	110	6120	7200	1,150	30,49 €
QNU2310-J	50	110	40	-	-	182	182	6120	7200	1,700	54,97 €
QNU211-J	55	100	21	70,8	9,5	95	93	6120	7200	0,670	25,95 €
QNU311-J	55	120	29	77,5	9,0	153	140	5355	6300	1,450	41,13 €
QNU2311-J	55	120	43	77,5	9,0	227	227	5355	6300	2,250	65,98 €
QNU212-J	60	110	22	77,5	10,0	106	100	5738	6750	0,810	27,24 €
QNU2212-J	60	110	28	77,5	10,0	143	150	5738	6750	1,100	41,16 €
QNU2312-J	60	130	46	84,3	16,0	255	260	5126	6030	2,750	70,05 €
QNU213-J	65	120	23	84,4	10,0	120	116	5126	6030	1,050	35,71 €
QNU2213-J	65	120	31	84,4	10,5	167	176	5126	6030	1,400	46,60 €
QNU313-J	65	140	33	90,5	15,5	208	192	4590	5400	2,250	53,10 €
QNU1014-M	70	110	20	84,0	10,0	75	91	5355	6300	0,620	66,83 €
QNU214-J	70	125	24	89,4	11,0	134	134	4820	5670	1,150	38,04 €
QNU2214-J	70	125	31	89,4	11,5	176	189	4820	5670	1,500	67,09 €
QNU314-J	70	150	35	97,3	15,5	231	223	4284	5040	2,750	70,41 €
QNU215-J	75	130	25	94,3	11,0	147	153	4590	5400	1,250	39,19 €
QNU2215-J	75	130	31	-	-	182	204	4590	5400	1,600	74,04 €
QNU315-J	75	160	37	104,0	16,5	274	260	4055	4770	3,300	83,31 €
QNU216-J	80	140	26	101,0	12,5	157	163	4284	5040	1,500	48,12 €
QNU2216-J	80	140	33	101,0	12,5	208	240	4284	5040	2,000	91,35 €
QNU316-J	80	170	39	110,0	17,0	294	284	3825	4500	3,950	119,55 €

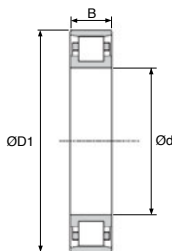
Dimensions in mm

Single row cylinder bearing

QN

Free external flange

- Internal ring has two flanges whereas the external ring has no flange
- The axial displacement of the shaft is contained within the interior of the bearing in both directions.
- Bearings and cylinders are capable of supporting high radial loads and high speeds.
- Static and dynamic loads are radial loads.
- Max working temperature: 150 °C
- Materials:
Steel rings and balls
Pressed steel cage



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	-15%	-20%	On request	

Part number	Ød	ØD1	B	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
				Dynamic (C)	Static (Co)	lubricant	Grease Oil		
QN204-J	20	47	14	25	22	14535	17100	0,110	15,42 €
QN206-J	30	62	16	43	36	10710	12600	0,200	16,70 €
QN306-J	30	72	19	57	47	9180	10800	0,360	19,06 €
QN207-J	35	72	17	55	47	9180	10800	0,300	17,52 €
QN307-J	35	80	21	74	62	8415	9900	0,480	25,60 €
QN208-J	40	80	18	61	52	8415	9900	0,370	20,83 €
QN308-J	40	90	23	91	76	7268	8550	0,640	33,67 €
QN309-J	45	100	25	110	98	6503	7650	0,880	38,65 €
QN210-J	50	90	20	72	68	6885	8100	0,480	27,76 €
QN310-J	50	110	27	124	110	6120	7200	1,150	56,13 €
QN211-J	55	100	21	95	93	6120	7200	0,660	33,67 €
QN311-J	55	120	29	153	140	5355	6300	1,450	58,92 €
QN212-J	60	110	22	106	100	5738	6750	0,810	47,76 €
QN312-J	60	130	31	170	157	5126	6030	1,800	61,86 €
QN213-J	65	120	23	120	116	5126	6030	1,050	48,90 €
QN313-J	65	140	33	208	192	4590	5400	2,250	70,77 €
QN214-J	70	125	24	134	134	4820	5670	1,150	50,68 €
QN314-J	70	150	35	231	223	4284	5040	2,750	113,89 €

Dimensions in mm

Single row cylindrical roller bearings

Single flange on internal ring

QNJ

- The external ring has two fixed flanges whereas the internal ring has a single flange.

- The axial movement of the shaft is restricted in one direction.

- Static and dynamic loads are radial loads

- Max working temperature:

Polyamide cage: 120 °C

Steel or brass cage: 150 °C

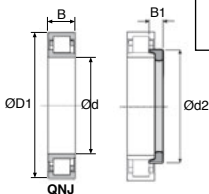
- Materials:

Steel flanges and cylinders

P: polyamide cage

M: solid brass cage

J: pressed steel cage



Info

- Angle ring (thrust collar) not supplied

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	-10%	-15%	-20%		On request

Part number	Ød	ØD1	B	ØD2	B1	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
						Dynamic (C)	Static (Co)	lubricant Grease	Oil		
QNJ202-P	15	35	11	21,5	-	12	10	19890	23400	0,049	8,20 €
QNJ203-P	17	40	12	25,0	-	17	14	16830	19800	0,070	9,16 €
QNJ204-M	20	47	14	29,7	-	25	22	14535	17100	0,110	12,60 €
QNJ304-M	20	52	15	31,2	6,5	35	25	13770	16200	0,170	13,15 €
QNJ205-J	25	52	15	34,7	6	28	26	12240	14400	0,150	10,79 €
QNJ305-J	25	62	17	38,1	7	46	36	11475	13500	0,290	12,93 €
QNJ2305-J	25	62	24	38,1	8	63	54	11475	13500	0,390	19,88 €
QNJ206-P	30	62	16	41,2	7	43	36	10710	12600	0,240	11,11 €
QNJ2206-J	30	62	20	41,2	-	54	48	10710	12600	0,270	18,90 €
QNJ306-J	30	72	19	45,0	8,5	57	47	9180	10800	0,410	19,06 €
QNJ2306-J	30	72	27	45,0	-	81	74	9180	10800	0,540	16,11 €
QNJ207-J	35	72	17	48,1	7	55	47	9180	10800	0,310	16,05 €
QNJ307-J	35	80	21	51,0	9,5	74	62	8415	9900	0,550	19,95 €
QNJ208-J	40	80	18	54,0	8,5	61	52	8415	9900	0,430	20,14 €
QNJ2208-J	40	80	23	54,0	9	80	74	8415	9900	0,550	24,71 €
QNJ308-J	40	90	23	57,5	11	91	76	7268	8550	0,750	23,56 €
QNJ2308-J	40	90	33	57,5	-	126	118	7268	8550	0,960	35,14 €
QNJ209-J	45	85	19	59,0	8,5	68	63	7268	8550	0,490	23,04 €
QNJ309-J	45	100	25	64,4	11,5	110	98	6503	7650	1,050	29,37 €
QNJ210-J	50	90	20	64,0	9	72	68	6885	8100	0,500	23,76 €
QNJ2210-J	50	90	23	64,0	-	88	86	6885	8100	0,590	30,82 €
QNJ310-J	50	110	27	71,2	13	124	110	6120	7200	1,150	37,38 €
QNJ211-J	55	100	21	70,8	9,5	95	93	6120	7200	0,670	25,89 €
QNJ212-J	60	110	22	77,5	10	106	100	5738	6750	0,830	28,85 €
QNJ214-J	70	125	24	89,4	11	134	134	4820	5670	1,150	42,27 €
QNJ215-J	75	130	25	94,3	11	147	153	4590	5400	1,300	44,38 €
QNJ315-J	75	160	37	104,0	16,5	274	260	4055	4770	3,350	93,64 €

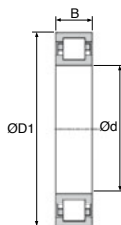
Dimensions in mm

Single row cylindrical roller bearings

QNUP

One fixed internal flange and one free internal flange

- The external ring has two fixed flanges whereas the internal ring has one fixed and one free flange.
- The axial movement of the shaft is restricted in both directions.
- Static and dynamic loads are radial loads
- Max working temperature:
Polyamide cage: 120°C
Steel or brass cage: 150°C
- Materials:
Steel flanges and cylinders
P: polyamide cage
M: solid brass cage
J: pressed steel cage



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød	ØD1	B	Load (kN)		Speed (rpm)		Weight (kg)	Price each 1 to 5
				Dynamic (C)	Static (Co)	Grease	Oil		
QNUP203-M	17	40	12	17	14	16830	19800	0,073	15,15 €
QNUP2203-P	17	40	16	23	21	16830	19800	0,097	25,36 €
QNUP204-P	20	47	14	25	22	14535	17100	0,12	15,87 €
QNUP205-J	25	52	15	28	26	12240	14400	0,14	17,68 €
QNUP2205-M	25	52	18	33	33	12240	14400	0,17	26,94 €
QNUP206-P	30	62	16	43	36	10710	12600	0,22	21,75 €
QNUP2206-J	30	62	20	54	48	10710	12600	0,27	29,34 €
QNUP207-J	35	72	17	55	47	9180	10800	0,32	23,10 €
QNUP2207-P	35	72	23	68	62	9180	10800	0,42	30,78 €
QNUP307-J	35	80	21	74	62	8415	9900	0,51	29,08 €
QNUP2307-J	35	80	31	104	96	8415	9900	0,75	44,20 €
QNUP208-J	40	80	18	61	52	8415	9900	0,4	29,73 €
QNUP2308-J	40	90	33	126	118	7268	8550	0,98	53,86 €
QNUP209-J	45	85	19	68	63	7268	8550	0,45	31,11 €
QNUP210-P	50	90	20	72	68	6885	8100	0,51	31,80 €
QNUP2310-J	50	110	40	182	182	6120	7200	1,8	75,16 €
QNUP211-J	55	100	21	95	93	6120	7200	0,69	35,37 €
QNUP311-P	55	120	29	153	140	5355	6300	1,55	54,55 €
QNUP212-J	60	110	22	106	100	5738	6750	0,86	41,62 €
QNUP213-M	65	120	23	120	116	5126	6030	1,1	47,86 €

Dimensions in mm

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- Stainless steel
- Plastic
- Steel



Combined bearings

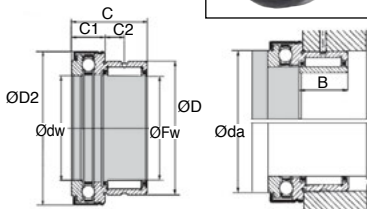
NKX

Needle and roller bearings

- A combination bearing that can handle both axial and radial loads
- As they are supplied without an internal ring; the shaft is used as a raceway and must therefore be hardened and ground.
- The axial bearing has a protective cap
- Materials:
Steel

Info

- When lubricated with grease, the maximum speed is reduced to 60% of that given in the table.
- (¹) The axial load F_a should be 1-2 % of the dynamic load coefficient C (axial)



Mounting dimensions

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød	Radial load (N)		Axial load ⁽¹⁾ (N)		Speed (rpm)		Weight (g)
		Dynamic (C)	Static (Co)	Dynamic (C)	Static (Co)	Oil lubricated		
NKX12Z	12	8500	10500	10000	15000	11000		40
NKX15Z	15	10000	12000	10000	16000	9500		47
NKX17Z	17	11000	14500	10500	17900	8500		55
NKX20Z	20	15000	2500	13500	23000	7500		90
NKX25Z	25	17000	30000	18000	35000	6000		132
NKX30Z	30	21000	34000	19000	39500	5000		148
NKX35Z	35	23000	40000	20500	44650	4600		168
NKX40Z	40	25000	45000	26000	60000	4000		208
NKX45Z	45	26500	51000	27000	67000	3600		265
NKX50Z	50	36000	72000	28000	72000	3300		300

Part number	ØFw	ØD	ØD2 max	C -0,25	C1 -0,2	C2	Ødw	Øda	Price each 1 to 5
NKX12Z	12	21	27,2	23	9	6,5	12	21,7	28,19 €
NKX15Z	15	24	29,2	23	9	6,5	15	23,7	28,88 €
NKX17Z	17	26	31,2	25	9	8,0	17	25,7	30,55 €
NKX20Z	20	30	36,2	30	10	10,5	20	30,7	35,50 €
NKX25Z	25	37	43,2	30	11	9,5	25	37,7	40,34 €
NKX30Z	30	42	48,2	30	11	9,5	30	42,7	51,63 €
NKX35Z	35	47	53,2	30	12	9,0	35	47,7	60,13 €
NKX40Z	40	52	61,2	32	13	10,0	40	55,7	65,65 €
NKX45Z	45	58	66,5	32	14	9,0	45	60,5	75,88 €
NKX50Z	50	62	71,5	35	14	10,0	50	65,5	82,71 €

Dimensions in mm

Combined bearings

Needle and cylindrical rollers

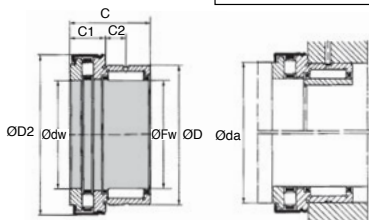
NKXR

- A combination bearing that can handle both axial and radial loads
- As they are supplied without an internal ring; the shaft is used as a raceway and must therefore be hardened and ground.
- The axial bearing has a protective cap
- Materials:
Steel
Plastic end cap



Info

- When lubricated with grease, the maximum speed is reduced to 60% of that given in the table.
- (1) The axial load F_a should be 1-2 % of the dynamic load coefficient C (axial)



DISCOUNTS Mounting dimensions

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	List -15%	List -20%	List -25%	List -30%

Part number	Ød	Radial load (N)		Axial load ⁽¹⁾ (N)		Speed (rpm)		Weight (g)
		Dynamic (C)	Static (Co)	Dynamic (C)	Static (Co)	Oil lubricated		
NKXR15Z	15	10500	11500	13500	27500	12350		45
NKXR17Z	17	11000	14000	15000	32500	11400		53
NKXR20Z	20	15000	23000	23500	52500	9500		84
NKXR25Z	25	17000	29000	32000	75000	8100		125
NKXR30Z	30	21000	34000	34500	85000	7100		141
NKXR35Z	35	23500	40000	38000	98000	6200		165
NKXR40Z	40	25000	45000	54000	143000	5700		214
NKXR45Z	45	26500	51000	57000	162000	4750		260
NKXR50Z	50	36000	72000	60500	169000	4560		288

Part number	ØFw	ØD	ØD1 max	ØD2 max	C	C1	C2	Ødw	Øda	Price each 1 to 5
NKXR15Z	15	24	28,1	29,20	23	9	6,5	15	23,7	39,54 €
NKXR17Z	17	26	30,1	31,20	25	9	8,0	17	25,7	42,47 €
NKXR20Z	20	30	35,1	36,20	30	10	10,5	20	30,7	52,78 €
NKXR25Z	25	37	42,1	43,20	30	11	9,5	25	37,7	57,51 €
NKXR30Z	30	42	47,1	48,20	30	11	9,5	30	42,7	64,59 €
NKXR35Z	35	47	52,1	53,20	30	12	9,0	35	47,7	77,98 €
NKXR40Z	40	52	60,1	61,20	32	13	10,0	40	55,7	90,07 €
NKXR45Z	45	58	65,2	66,50	32	14	9,0	45	60,5	103,21 €
NKXR50Z	50	62	70,2	71,50	35	14	10,0	50	65,5	116,86 €

Dimensions in mm

Axial thrust bearing



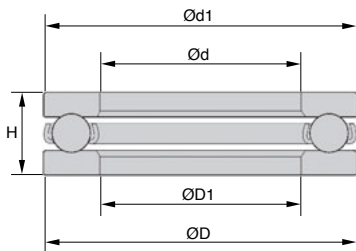
TB

For axial loads

- **Bearing for axial loads**
- Not suitable for radial loads
- Dimensions conform to ISO 104: 2002
- Materials:

Rings and balls: steel

Cage: pressed steel



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	List -15%	List -20%	On request	On request

Part number	Ød (mm)	ØD (mm)	H (mm)	Ød1 (mm)	ØD1 (mm)	Load capacity (kN)		Max speed (rpm)		Weight (kg)	Stock*	Price each 1 to 5
						Dynamic C	Static C ₀	Lubricant Grease	Oil			
TB51100	10	24	9	24	11	9,75	14,99	9945	11700	0,020	✓	2,07 €
TB51200	10	26	11	26	12	12,45	18,23	8415	9900	0,030	✓	4,43 €
TB51101	12	26	9	26	13	10,19	16,27	9945	11700	0,022	✓	2,79 €
TB51201	12	28	11	28	14	13,03	20,38	8415	9900	0,034	✓	4,89 €
TB51102	15	28	9	28	16	10,39	17,93	9180	10800	0,024	✓	2,84 €
TB51202	15	32	12	32	17	16,17	26,46	7650	9000	0,045	✓	6,35 €
TB51103	17	30	9	30	18	11,17	20,78	9180	10800	0,026	✓	3,26 €
TB51203	17	35	12	35	19	16,86	29,40	7268	8550	0,053	✓	6,83 €
TB51104	20	35	10	35	21	14,80	28,42	7650	9000	0,039	✓	3,26 €
TB51204	20	40	14	40	22	22,05	39,69	6120	7200	0,082	✓	7,63 €
TB51105	25	42	11	42	26	18,00	38,00	6885	8100	0,060	✓	3,97 €
TB51205	25	47	15	47	27	27,00	54,00	5738	6750	0,110	✓	9,27 €
TB51305	25	52	18	52	27	34,00	59,00	4820	5670	0,120	✓	12,38 €
TB51405	25	60	24	60	27	54,00	95,00	3825	4500	0,340	✓	26,32 €

*Depending on availability - Dimensions in mm

Part number	Ød (mm)	ØD (mm)	H (mm)	Ød1 (mm)	ØD1 (mm)	Load capacity (kN)		Max speed (rpm)		Weight (kg)	Stock*	Price each 1 to 5
						Dynamic C	Static C ₀	Lubricant Grease	Oil			
TB51106	30	47	11	47	32	19	42	6503	7650	0,069	✓	4,55 €
TB51206	30	52	16	52	32	25	50	5126	6030	0,130	✓	11,09 €
TB51306	30	60	21	60	32	37	70	4055	4770	0,260	-	16,71 €
TB51406	30	70	28	70	32	71	134	3290	3870	0,520	✓	28,54 €
TB51107	35	52	12	52	37	20	50	5738	6750	0,080	✓	6,06 €
TB51207	35	62	18	62	37	34	72	4284	5040	0,220	✓	15,77 €
TB51307	35	68	24	68	37	48	95	3443	4050	0,390	-	24,32 €
TB51407	35	80	32	80	37	85	167	2907	3420	0,740	-	35,44 €
TB51108	40	60	13	60	42	25	62	5355	6300	0,120	✓	7,41 €
TB51208	40	68	19	68	42	46	104	4055	4770	0,270	✓	19,35 €
TB51308	40	78	26	78	42	61	120	3290	3870	0,530	-	27,13 €
TB51408	40	90	36	90	42	110	220	2601	3060	1,100	-	47,62 €
TB51109	45	65	14	65	47	26	68	4820	5670	0,150	✓	7,88 €
TB51209	45	73	20	73	47	38	85	3825	4500	0,320	✓	23,21 €
TB51309	45	85	28	85	47	75	150	3060	3600	0,660	-	37,85 €
TB51409	45	100	39	100	47	127	260	2295	2700	1,420	-	62,38 €
TB51110	50	70	14	70	52	26	74	4820	5670	0,160	✓	9,27 €
TB51210	50	78	22	78	52	48	114	3443	4050	0,370	-	23,68 €
TB51310	50	95	31	85	52	87	186	2754	3240	0,940	-	48,26 €
TB51410	50	110	43	100	52	156	333	2142	2520	2,000	-	84,51 €
TB51211	55	90	25	90	57	61	143	3060	3600	0,590	✓	32,53 €
TB51311	55	105	35	105	57	102	220	2448	2880	1,300	-	68,77 €
TB51112	60	85	17	85	62	41	120	3825	4500	0,300	✓	16,90 €
TB51212	60	95	26	95	62	61	147	2907	3420	0,650	-	34,28 €
TB51312	60	110	35	110	62	99	220	2295	2700	1,350	-	69,93 €
TB51113	65	90	18	90	67	37	106	3672	4320	0,330	-	13,13 €
TB51213	65	100	27	100	67	62	160	2754	3240	0,780	-	40,43 €
TB51313	65	115	36	115	67	104	235	2295	2700	1,500	-	81,52 €
TB51114	70	95	18	95	72	39	118	3443	4050	0,350	-	17,82 €
TB51214	70	105	27	105	72	64	170	2754	3240	0,790	-	47,62 €
TB51314	70	125	40	125	72	132	314	1989	2340	2,000	-	119,10 €
TB51115	75	100	19	100	77	43	143	3290	3870	0,400	-	18,24 €
TB51215	75	110	27	110	77	66	179	2601	3060	0,830	-	57,82 €
TB51315	75	135	44	135	77	160	382	1836	2160	2,600	-	124,15 €
TB51116	80	105	19	105	82	44	150	3290	3870	0,420	✓	19,76 €
TB51216	80	115	28	115	82	75	204	2601	3060	0,910	-	62,68 €
TB51316	80	140	44	140	82	156	382	1836	2160	2,700	-	155,70 €
TB51117	85	110	19	110	87	45	160	3290	3870	0,440	-	27,61 €
TB51217	85	125	31	125	88	96	270	2295	2700	1,200	-	72,52 €
TB51317	85	150	49	150	88	186	456	1683	1980	3,550	-	168,17 €
TB51118	90	120	22	120	92	58	204	2907	3420	0,650	✓	33,53 €
TB51218	90	135	35	135	93	117	319	2142	2520	1,700	-	90,62 €
TB51318	90	155	50	155	93	191	490	1683	1980	3,800	-	206,88 €
TB51120	100	135	25	135	102	83	284	2448	2880	0,970	-	45,76 €
TB51220	100	150	38	150	103	122	338	1836	2160	2,200	-	113,84 €
TB51320	100	170	55	170	103	224	598	1454	1710	4,950	-	272,62 €
TB51122	110	145	25	145	112	85	309	2448	2880	1,050	-	55,24 €
TB51222	110	160	38	160	113	127	382	1836	2160	2,400	-	140,30 €
TB51124	120	155	25	155	122	87	328	2295	2700	1,150	-	95,18 €
TB51224	120	170	39	170	123	137	431	1683	1980	2,650	-	184,68 €
TB51126	130	170	30	170	132	109	417	1989	2340	1,850	-	140,54 €
TB51226	130	190	45	190	133	182	573	1530	1800	4,000	-	235,79 €
TB51128	140	180	31	178	142	109	431	1989	2340	2,050	-	199,14 €
TB51228	140	200	46	197	143	186	608	1454	1710	4,350	-	322,91 €

*Depending on availability - Dimensions in mm

- Limits axial thrusts

- Does not provide guidance in rotation (requires another bearing)
- Limited rotational speed (centrifugal force on the ball bearings)
- Materials:

Ball bearings: Stainless steel hardened to 35-52

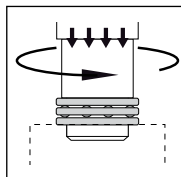
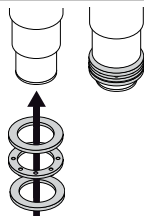
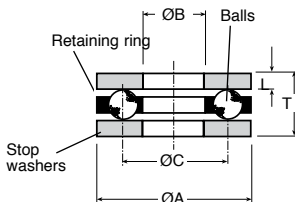
HRC

Retaining ring: Nylon

Stop washers: Stainless steel

Uses

- Vertical shafts
- Any assembly with strong axial forces



rpm	Load (N)									
	15	100	450	900	1200	1800	3600	5000		
TB2SS	391	218	124	97	89	75	62	53		
TB3SS	404	213	129	102	89	80	62	53		
TB4SS	422	178	133	102	93	84	66	57		
TB5SS	422	222	133	102	93	84	66	57		
TB6SS	542	289	173	133	124	106	84	75		
TB7SS	622	329	195	155	142	124	98	89		
TB8SS	778	413	248	195	178	155	124	111		
TB9SS	912	480	289	227	209	182	146	129		
TB10SS	1428	756	458	364	329	289	227	204		

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	$\begin{smallmatrix} +0.13 \\ \varnothing B \\ -0.00 \end{smallmatrix}$	$\begin{smallmatrix} +0.00 \\ \varnothing A \\ -0.13 \end{smallmatrix}$	$\varnothing C$	$L \pm 0.05$	T	No. of balls	Stock*	Price each 1 to 5
TB2SS	5	12	8,70	1,30	4,98	7	✓	24,94 €
TB3SS	6	14	10,30	1,30	4,98	8	✓	28,14 €
TB4SS	7	17	11,90	1,30	4,98	9	✓	28,17 €
TB5SS	8	16	11,90	1,30	4,98	9	✓	27,61 €
TB6SS	10	21	15,10	1,60	6,38	6	✓	29,39 €
TB7SS	12	24	18,30	1,60	6,38	8	✓	32,14 €
TB8SS	16	28	22,20	2,40	8,80	6	✓	45,31 €
TB9SS	19	32	25,40	2,40	8,80	8	✓	57,36 €
TB10SS	25	41	33,30	3,18	11,12	10	✓	94,92 €

*Depending on availability - Dimensions in mm



Cylindrical roller thrust bearings

Thrust bearing for **high** axial loads

TB8

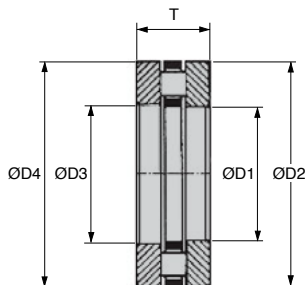
- For use when thrust ball bearings are not suitable
- Comprised of two washers and a roller cage
- Material:
Steel

Info

- Not suitable for radial loads



For high axial loads



DISCOUNTS

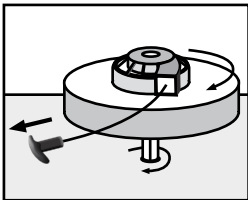
Qty	1+	6+	20+	40+	100+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØA shaft	Load (kN)					Speed (rpm)		Price each 1 to 5
		ØD1	ØD3	ØD4	ØD2	T	Dynamic (C)	Static (Co)	
TB81102TN	15	15	16	28	28	9	13,5	28,0	22,82 €
TB81103TN	17	17	18	30	30	9	15,1	32,9	22,82 €
TB81104TN	20	20	21	35	35	10	23,7	52,6	24,69 €
TB81105TN	25	25	26	42	42	11	32,9	72,0	26,97 €
TB81106TN	30	30	32	47	47	11	34,8	85,0	28,35 €
TB81206TN	30	30	32	52	52	16	63,5	139,0	40,23 €
TB81108TN	40	40	42	60	60	13	55,0	147,5	35,40 €
TB81110TN	50	50	52	70	70	14	60,7	167,0	42,92 €
TB81112TN	60	60	62	85	85	17	102,1	309,5	60,42 €
TB81114TN	70	70	72	105	105	27	186,0	549,7	72,81 €
TB81118TN	90	90	92	120	120	22	140,6	459,0	121,73 €

Dimensions in mm

Freewheels are rotating elements that only transmit power in one direction, this means that in a given direction the driving element will turn the driven element but when the direction is reversed, no power is transmitted.

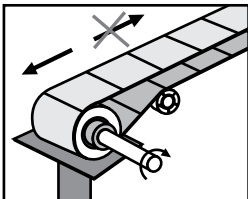
This behaviour makes them suitable for the following types of applications:



Example, starting a flywheel

Limiting speeds (overrunning clutch)

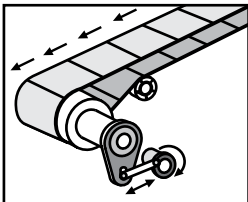
The freewheel connects the two parts of the system but will disengage automatically when the driven part is turning faster than the driving element or a flywheel is left free to turn when the driving element stops. A common application is that of a bicycle pedal



Example: Preventing a conveyor belt from moving backwards when stopped

Backstop

The freewheel turns in one direction only and is normally free running in operation. When the system stops, the freewheel stops any rotating movement in the other direction. For example, in the case of a conveyor belt, the freewheel allows the belt to move forward but blocks any movement in the opposite direction. If freewheels are used for backstop applications, overrun is normally only be applied to the inner ring.



Example: Intermittent movement of a roller belt

Intermittent forward movement (Indexing)

The freewheel converts a back and forth movement into a stepped rotational movement. They can be used for example to drive a motor or mechanical speed control device from a continuous driving rotary source. In this case, the external ring provides the movement whilst it is the internal ring that is driven.



One way needle bearing

Drives in one direction,
rotates freely in the other

HFL

- Transmits a torque in one direction, rotates freely in the other
- Free wheel combined with smooth bearings or rollers
- Withstands radial efforts
- Working temperature: -30°C to +120°C
- Materials:
Ring, needles and spring: Steel
Cage: Plastic

Assembly

- N6 receiving bore
- h5 receptor shaft
treated and ground 57-63 HRC

Info

- ⁽¹⁾ Use with grease or oil.
⁽²⁾ n_{gw} : revolving shaft
⁽³⁾ n_{ga} : revolving bore
 KF*: plastic springs
 (Working temperature -10°C to +70°C,
 N7 bore and h8 shaft)

Drives one way

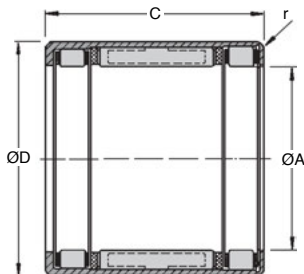


Freely rotates
the other



Not to be used on a bicycle

Until
-40%**



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List -10%	List -15%	List -20%	List -20%	On request

Part number	OA	OD	C -0,3	r mini.	Admissible torque (Nm)	Max. speed ⁽¹⁾ n_{gw} ⁽²⁾	n_{ga} ⁽³⁾	Basic load dynamic C (kN)	static Co (kN)	Stock*	Price each 1 to 5
HFL0822KF**	08	12	22	0,3	3,15	17 000	12 000	4,05	4,15	-	13,24 €
HFL1022	10	14	22	0,3	5,30	14 000	11 000	4,30	4,65	✓	13,48 €
HFL1226	12	18	26	0,3	12,20	11 000	8 000	6,30	6,50	✓	13,76 €
HFL1426	14	20	26	0,3	17,30	9 500	8 000	7,10	7,70	✓	14,49 €
HFL1626	16	22	26	0,3	20,50	8 500	7 500	7,70	9,00	✓	14,82 €
HFL1826	18	24	26	0,3	24,10	7 500	7 500	8,30	10,30	✓	15,10 €
HFL2026	20	26	26	0,3	28,50	7 000	6 500	8,90	11,50	✓	15,39 €
HFL2530	25	32	30	0,3	66,00	5 500	5 500	10,90	14,10	✓	22,37 €
HFL3030	30	37	30	0,3	90,00	4 500	4 500	12,60	17,60	✓	22,86 €
HFL3530	35	42	30	0,3	121,00	3 900	3 900	13,00	19,30	✓	23,30 €

*Depending on availability - Dimensions in mm

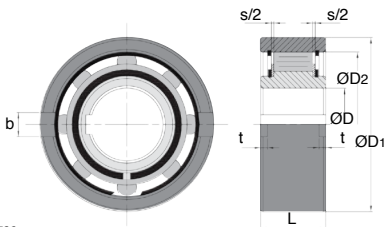
- Transmits torque in one direction, free movement in the other
- Torsion is transmitted from the shaft to the inner ring by use of a keyway and from the external ring either using the grooves on the front face or by interference if the tolerance on the housing bore is K6
- Working temperature $-20^{\circ}/+80^{\circ}\text{C}$ depending on lubricant used
- Max Torque = $2 \times T_N$
- Material: steel

NEW!



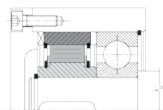
Assembly

- Shaft tolerance h6 or j7
- Bore tolerance H7 or j6 (tolerance must be K6 if grooves on face not used)
- These are not auto-centring freewheels and 1 or 2 bearings should be mounted adjacent to the freewheel such that the external ring rotates centrally to the internal ring.
- Before the system is used, the freewheels should be lubricated using a suitable grease



Info

- 1) Internal ring is faster than the external ring
- 2) External ring is faster than the internal ring



Typical mounting arrangement

DISCOUNTS

Qty	1+	6+	30+
Disc	List	-6%	On request

Part number	ØD (H7)	ØD1 (n6)	L	ØD2	b	t	s	Ring		Torque		Weight (kg)	Price each 1 to 5
								internal(1) (rpm)	external(2) (rpm)	T _N (Nm)	residual (Nm)		
QUSNU12	12	35	13	27	4	1,3	1	3300	5000	12	0,016	0,10	81,90 €
QUSNU15	15	42	18	36	5	1,3	1	2500	3600	30	0,020	0,10	92,28 €
QUSNU20	20	52	21	44	6	2,5	1	2200	3100	78	0,020	0,20	111,54 €
QUSNU25	25	62	24	52	8	2,0	1	1700	2200	125	0,050	0,40	135,83 €
QUSNU30	30	72	27	60	10	3,0	1	1400	2200	255	0,140	0,60	153,24 €

Dimensions in mm

- Transmits torque in one direction, free movement in the other
- Working temperature $-20^{\circ}/+80^{\circ}\text{C}$ depending on lubricant used
- Keyway conforms to DIN6885
- Material: steel

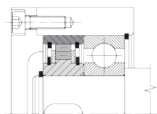
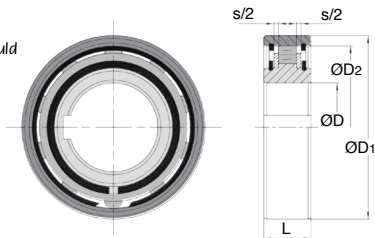
Assembly

- Shaft tolerance h6 or j7
- Bore tolerance H7 or j6 (tolerance must be K6 if grooves on face not used)
- These are not auto-centring freewheels and 1 or 2 bearings should be mounted adjacent to the freewheel such that the external ring rotates centrally to the internal ring.
- Before the system is used, freewheels should be lubricated using a suitable grease

Info

- Oil lubrication is required when idling speed is high

NEW!



Typical mounting arrangement

DISCOUNTS

Qty	1+	6+	30+
Disc	List	-6%	On request

Part number	ØD (H7)	ØD1 (r6)	L	ØD2	s	Ring		Torque (Nm)	Residual		Weight (kg)	Price each 1 to 5
						internal (rpm)	external (rpm)		torque (Nm)	Weight (kg)		
QUS10	10	30	9	25	1	3550	5200	6,8	0,004	0,04		71,34 €
QUS12	12	32	10	26	1	3200	4850	13,0	0,005	0,05		71,34 €
QUS15	15	35	11	30	1	2900	4300	14,0	0,007	0,10		76,70 €
QUS20	20	47	14	40	1	2200	3300	40,0	0,020	0,12		83,58 €
QUS25	25	52	15	45	1	2000	2900	56,0	0,030	0,15		109,70 €
QUS30	30	62	16	55	1	1600	2500	90,0	0,080	0,25		114,89 €

Dimensions in mm

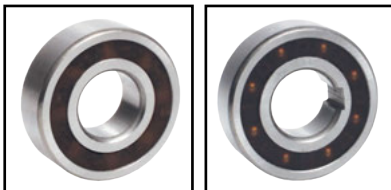
Freewheel with internal bearing

New

QUK
QUKC

Auto-centring

- Transmits torque in one direction, free movement in the other
- Keyway conforms to DIN6885
- Max torque = 2 x TN
- Material: steel



QUK

QUQC

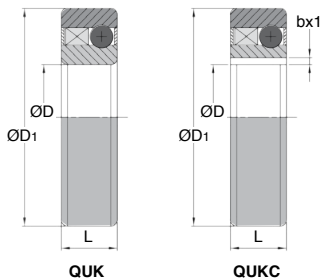
Assembly

- **QUK:**
Shaft tolerance n6
Housing tolerance N6
- **QUKC:**
Shaft tolerance k6
Housing tolerance N6

Info

- Self centring freewheel, pre-greased and fitted with anti-dust protection

NEW!



QUK

QUQC

DISCOUNTS

Qty	1+	6+	30+
Disc	List	-6%	On request

Part number	ØD	ØD1		b		Bearing type	Load capacity		Torque		Weight (kg)	Price each 1 to 5
		(h5)	L	(Js9)	t		Dynamic (N)	Static (N)	Tn (Nm)	residual (Nm)		
Without keyway												
QUK15 ZZ	15 ^{0,01}	35	11	-	-	6202ZZ	7400	3400	16,9	0,009	0,06	35,57 €
QUK17 ZZ	17 ^{0,01}	40	12	-	-	6203ZZ	7900	3800	30,6	0,011	0,07	32,08 €
QUK20 ZZ	20 ^{0,01}	47	14	-	-	6204ZZ	9400	4450	50,0	0,013	0,11	36,73 €
QUK25 ZZ	25 ^{0,01}	52	15	-	-	6205ZZ	10700	5450	85,0	0,020	0,14	38,60 €
QUK30 ZZ	30 ^{0,01}	62	16	-	-	6206ZZ	11700	6450	138,0	0,044	0,21	48,63 €
With keyway												
QUKC15 ZZ	15H7	35	11	5	1,2	6202ZZ	7400	3400	16,9	0,009	0,06	38,47 €
QUKC17 ZZ	17H7	40	12	5	1,2	6203ZZ	7900	3800	30,6	0,011	0,07	35,12 €
QUKC20 ZZ	20H7	47	14	6	1,6	6204ZZ	9400	4450	50,0	0,013	0,11	39,34 €
QUKC25 ZZ	25H7	52	15	8	2,0	6205ZZ	10700	5450	85,0	0,020	0,14	40,92 €
QUKC30 ZZ	30H7	62	16	8	2,0	6206ZZ	11700	6450	138,0	0,044	0,21	51,96 €

Dimensions in mm

Overview of the full range

Bearings:



Ref. **PBGL**
et **PBss**
pages 68-69



Ref. **S2rs**
page 74



Ref. **Q3**
page 76



Ref. **Q6**
pages 70-71



Ref. **Q1-Q2**
pages 78-79



Ref. **Q4**
pages 80-83



Ref. **Szz**
page 72



Ref. **Q4**
page 46



Ref. **QTR**
pages 50-53



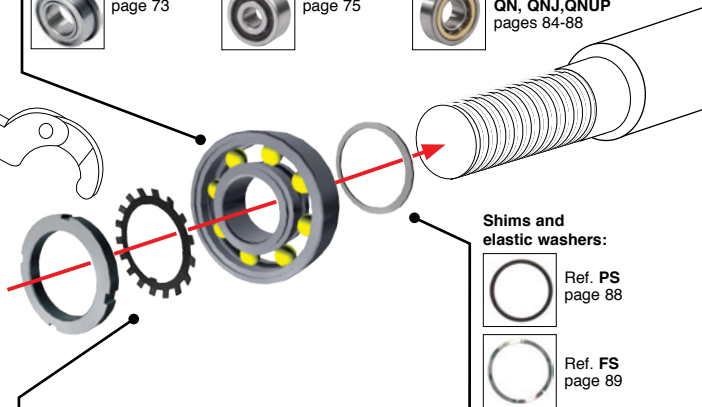
Ref. **SFzz**
page 73



Ref. **Q7**
page 75



Ref. **QNU**,
QN, **QNJ**, **QNUP**
pages 84-88



Shims and elastic washers:



Ref. **PS**
page 88



Ref. **FS**
page 89

Nuts:



Ref. **LR**
pages 108-109



Ref. **FUss**
pages 106-107



Ref. **LF**
pages 110-111



Ref. **EAR**
page 105



KM nut and
MB washer
pages 102-103

Bearing locknut



KM

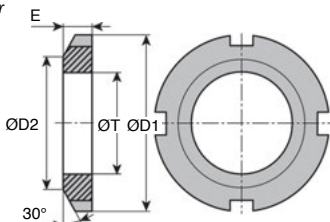
To be used with MB washers

- Frequently used when mounting bearings
- To be used with **MB** washers
- Absolutely secure, not removable
- Requires machining of keyway in threaded part of the shaft
- Material: steel

For axial locking

Accessories

- MB washer



Until
-30%**

DISCOUNTS

Qty	1+	10+	20+	50+
Disc.	List	-30%	-50%	On request

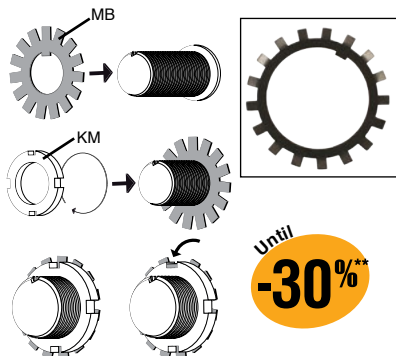
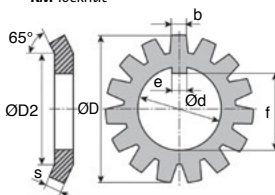
Part number	For washer	Thread ØT	ØD1	ØD2	E	Weight (g)	Stock*	Price each 1 to 9
KM3	MB3	M17x1,0	28	24	5	13	✓	2,18 €
KM4	MB4	M20x1,0	32	26	6	19	✓	1,79 €
KM5	MB5	M25x1,5	38	32	7	25	✓	2,85 €
KM6	MB6	M30x1,5	45	38	7	43	✓	2,36 €
KM7	MB7	M35x1,5	52	44	8	53	✓	3,48 €
KM8	MB8	M40x1,5	58	50	9	85	✓	4,42 €
KM9	MB9	M45x1,5	65	56	10	120	✓	4,42 €
KM10	MB10	M50x1,5	70	61	11	150	✓	4,91 €
KM11	MB11	M55x2,0	75	67	11	160	✓	6,07 €
KM12	MB12	M60x2,0	80	73	11	170	✓	6,38 €
KM13	MB13	M65x2,0	85	79	12	200	✓	8,57 €
KM14	MB14	M70x2,0	92	85	12	240	-	9,24 €
KM15	MB15	M75x2,0	98	90	13	290	-	9,73 €
KM16	MB16	M80x2,0	105	95	15	400	✓	12,59 €
KM17	MB17	M85x2,0	110	102	16	450	-	15,45 €
KM18	MB18	M90x2,0	120	108	16	560	-	17,86 €
KM19	MB19	M95x2,0	125	113	17	660	-	18,17 €
KM20	MB20	M100x2,0	130	120	18	700	-	22,59 €
KM22	MB22	M110x2,0	145	133	19	970	-	27,69 €
KM24	MB24	M120x2,0	155	138	20	1080	-	37,42 €
KM26	MB26	M130x2,0	165	149	21	1250	-	48,05 €
KM28	MB28	M140x2,0	180	160	22	1560	-	53,90 €
KM30	MB30	M150x2,0	195	171	25	2030	-	61,63 €

*Depending on availability - Dimensions in mm

- The tabs around the washer fold down into the tabs on the KM locknut
- The washer being held in place in rotation by the keyway, the system guarantees absolute security
- Material: steel

Accessories

- KM locknut



Until
-30%**

DISCOUNTS

Qty	1+	10+	20+	50+
Disc.	List	-30%	-50%	On request

Part number	For locknut	Ød	ØD	ØD2	e	f	s	Weight (g)	Stock*	Price each 1 to 9
MB3	KM3	17	32	24	4	15,5	1,00	3,1	✓	0,40 €
MB4	KM4	20	36	26	4	18,5	1,00	3,5	✓	0,40 €
MB5	KM5	25	42	32	5	23,0	1,00	6,4	✓	0,45 €
MB6	KM6	30	49	38	5	27,5	1,25	7,8	✓	0,36 €
MB7	KM7	35	57	44	6	32,5	1,25	10,4	✓	0,53 €
MB8	KM8	40	62	50	6	37,5	1,25	12,3	✓	0,67 €
MB9	KM9	45	69	56	6	42,5	1,25	15,2	✓	0,62 €
MB10	KM10	50	74	61	6	47,5	1,25	16,0	✓	1,03 €
MB11	KM11	55	81	67	8	52,5	1,25	19,6	✓	1,07 €
MB12	KM12	60	86	73	8	57,5	1,50	25,3	✓	1,25 €
MB13	KM13	65	92	79	8	62,5	1,50	29,0	✓	1,42 €
MB14	KM14	70	98	85	8	66,5	1,50	30,4	-	1,51 €
MB15	KM15	75	104	90	8	71,5	1,50	35,6	-	1,96 €
MB16	KM16	80	112	95	10	76,5	1,75	46,4	✓	2,46 €
MB17	KM17	85	119	102	10	81,5	1,75	52,4	-	2,90 €
MB18	KM18	90	126	108	10	86,5	1,75	62,3	-	3,30 €
MB19	KM19	95	133	113	10	91,5	1,75	67,0	-	3,97 €
MB20	KM20	100	142	120	12	96,5	1,75	76,5	-	5,18 €
MB22	KM22	110	154	133	12	105,5	1,75	94,0	-	6,42 €
MB24	KM24	120	164	138	14	115,0	2,00	105,0	-	8,30 €
MB26	KM26	130	175	149	14	125,0	2,00	113,0	-	9,73 €
MB28	KM28	140	192	160	15	135,0	2,00	142,0	-	12,41 €
MB30	KM30	150	205	171	15	145,0	2,00	155,0	-	15,99 €

*Depending on availability - Dimensions in mm

Questions ? Need a quote ?

OUR TECHNICAL TEAM

IS HERE TO HELP



- With made to measure items
- Help choosing the right component
- For any other questions

Tel. +33 (0)4 37 496 496

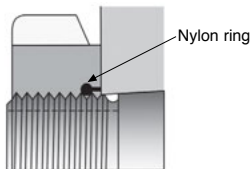
Fax. +33 (0)4 37 490 055

cial2@hpceurope.com

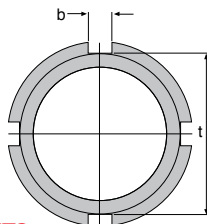
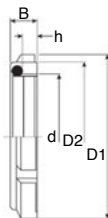
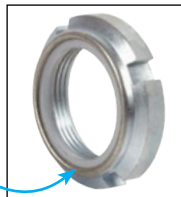
- Self locking nut
- Lock nut with an internal Nylon ring that when in contact with the internal thread produces a restraining force
- Metric thread
- Materials:
 - Steel
 - Nylon internal ring

Advantages

- Economical
- Vibration resistant
- Can be re-used



NEW!
with a
Nylon ring



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

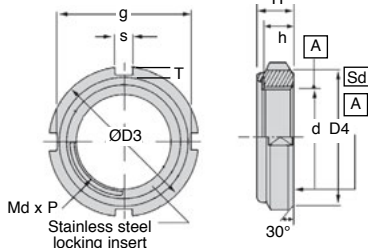
Part number	Thread Ød	B	h	ØD1	ØD2	b	t	Price each 1 to 5
EAR10-075	M10x0.75	7,6	4,4	18	14	3	14	2,13 €
EAR12-100	M12x1	7,6	4,4	21	18	3	18	2,31 €
EAR15-100	M15x1	8,6	5,2	24	21	4	21	2,66 €
EAR17-100	M17x1	8,6	5,2	28	24	4	24	3,12 €
EAR20-100	M20x1	9,6	6,0	32	27	4	27	3,58 €
EAR25-150	M25x1,5	10,5	6,0	38	33	5	33	4,85 €
EAR30-150	M30x1,5	10,7	6,6	44	38	5	38	6,41 €
EAR35-150	M35x1,5	11,3	6,6	50	44	5	44	7,87 €
EAR40-150	M40x1,5	12,3	7,5	56	50	6	50	10,29 €
EAR45-150	M45x1,5	12,3	7,5	62	55	6	55	13,89 €
EAR50-150	M50x1,5	12,9	7,6	68	61	6	61	14,92 €
EAR55-200	M55x2	13,4	7,6	75	68	7	68	21,80 €
EAR60-200	M60x2	13,4	7,6	80	73	7	73	23,77 €
EAR65-200	M65x2	14,5	8,7	85	78	7	78	31,12 €
EAR70-200	M70x2	14,5	8,7	92	84	8	84	33,43 €
EAR75-200	M75x2	15,5	9,7	98	90	8	90	38,99 €
EAR80-200	M80x2	16,5	10,7	105	97	8	97	42,28 €
EAR85-200	M85x2	17,5	11,7	110	102	8	102	49,18 €
EAR90-200	M90x2	17,7	11,9	120	110	10	110	54,38 €
EAR95-200	M95x2	18,7	12,9	125	116	10	116	59,12 €
EAR100-200	M100x2	19,7	13,9	130	120	10	120	64,16 €

Dimensions in mm

- **Specially designed for securing bearings**
- Self locking nut
- Thread ISO 965
- Speed 6000 rpm
- Materials:
Nut: low carbon steel
Locking ring: stainless steel

Usage

- For use with **Q**, **S** and **SF** bearings



Part number	Md x P	ØD3	D4	g
FU00SS	M10 x 0,75	18 +0/-0,20	13 ± 0,20	14 +0/-0,20
FU01SS	M12 x 1,00	22 +0/-0,20	17 ± 0,20	18 +0/-0,20
FU02SS	M15 x 1,00	25 +0/-0,50	21 +0/-0,50	21 +0/-0,50
FU03SS	M17 x 1,00	28 +0/-0,50	24 +0/-0,50	24 +0/-0,50
FU04SS	M20 x 1,00	32 +0/-0,50	26 +0/-0,50	28 +0/-0,50
FU05SS	M25 x 1,50	38 +0/-0,50	32 +0/-0,50	34 +0/-0,50
FU06SS	M30 x 1,50	45 +0/-0,50	38 +0/-0,50	41 +0/-0,50
FU07SS	M35 x 1,50	52 +0/-0,50	44 +0/-0,50	48 +0/-0,50
FU08SS	M40 x 1,50	58 +0/-0,50	50 +0/-0,50	53 +0/-0,50
FU09SS	M45 x 1,50	65 +0/-0,50	56 +0/-0,50	60 +0/-0,50
FU10SS	M50 x 1,50	70 +0/-0,50	61 +0/-0,50	65 +0/-0,50
FU11SS	M55 x 2,00	75 +0/-0,50	67 +0/-0,50	69 +0/-0,50
FU12SS	M60 x 2,00	80 +0/-0,50	73 +0/-0,50	74 +0/-0,50
FU13SS	M65 x 2,00	85 +0/-0,50	79 +0/-0,50	79 +0/-0,50
FU14SS	M70 x 2,00	92 +0/-0,50	85 +0/-0,50	85 +0/-0,50
FU15SS	M75 x 2,00	98 +0/-0,50	90 +0/-0,50	91 +0/-0,50
FU16SS	M80 x 2,00	105 +0/-0,50	95 +0/-0,50	98 +0/-0,50
FU17SS	M85 x 2,00	110 +0/-0,50	102 +0/-0,75	103 +0/-0,50
FU18SS	M90 x 2,00	120 +0/-0,50	108 +0/-0,75	112 +0/-0,50
FU19SS	M95 x 2,00	125 +0/-0,50	113 +0/-0,75	117 +0/-0,50
FU20SS	M100 x 2,00	130 +0/-0,50	120 +0/-0,75	122 +0/-0,50

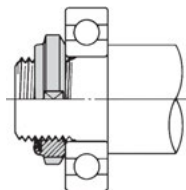
Dimensions in mm

Advantages

- No keyway required
- No locking ring required
- Stays secure at high speeds of rotation
- Resistant to shocks and vibrations
- Can be used with rotation in both directions
- Works at both high and low temperatures

Assembly advice

- Lubricate with oil before use
- Do not force when fitting
- Leave at least 2 threads exposed on shaft once nut fitted



DISCOUNTS

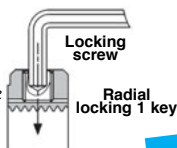
Qty	1+	10+	20+	50+
sc	List	-30%	-50%	On request

Part number	T	S	h	H	Sd	Stock*	Price each 1 to 9
FU00SS	2,00	3 ± 0,10	4	5,20 ± 0,30	0,05	✓	12,57 €
FU01SS	2,00	3 ± 0,10	4	5,40 ± 0,30	0,05	✓	15,10 €
FU02SS	2,00	4 ± 0,20	5	6,50 ± 0,50	0,05	✓	15,10 €
FU03SS	2,00	4 ± 0,20	5	6,40 ± 0,50	0,05	✓	17,62 €
FU04SS	2,00	4 ± 0,20	6	7,70 ± 0,50	0,05	✓	20,14 €
FU05SS	2,00	5 ± 0,20	7	9,10 ± 0,50	0,05	✓	22,68 €
FU06SS	2,00	5 ± 0,20	7	9,10 ± 0,80	0,05	✓	25,18 €
FU07SS	2,00	5 ± 0,20	8	10,20 ± 0,80	0,05	✓	30,25 €
FU08SS	2,50	6 ± 0,20	9	11,20 ± 0,80	0,05	✓	35,30 €
FU09SS	2,50	6 ± 0,20	10	12,50 ± 1,00	0,05	✓	40,35 €
FU10SS	2,50	6 ± 0,20	11	13,50 ± 1,00	0,05	✓	47,92 €
FU11SS	3,00	7 ± 0,20	11	13,50 ± 1,00	0,07	-	52,98 €
FU12SS	3,00	7 ± 0,20	11	13,50 ± 1,00	0,07	-	55,53 €
FU13SS	3,00	7 ± 0,20	12	15,00 ± 1,50	0,07	-	83,30 €
FU14SS	3,50	8 ± 0,20	12	15,00 ± 1,50	0,07	-	95,93 €
FU15SS	3,50	8 ± 0,20	13	15,80 ± 1,50	0,07	-	106,04 €
FU16SS	3,50	8 ± 0,20	15	18,60 ± 1,50	0,07	-	126,23 €
FU17SS	3,50	8 ± 0,20	16	19,20 ± 1,50	0,07	-	151,50 €
FU18SS	4,00	10 ± 0,30	16	20,30 ± 1,50	0,07	-	186,86 €
FU19SS	4,00	10 ± 0,30	17	21,30 ± 1,50	0,07	-	191,94 €
FU20SS	4,00	10 ± 0,30	18	22,30 ± 1,50	0,07	-	217,18 €

*Depending on availability - Dimensions in mm

- Material : steel (high elastic limit)
- Slots: 4 at 90° spacing
- Perpendicularity of bore surface: $\perp$ face/A: 0.005
- Screw: flat-headed Hc class 14.9
- Standard finish:
 - Threads right handed, class 4H
 - Engraved on opposite face

- Ground back face
- Blackened screws

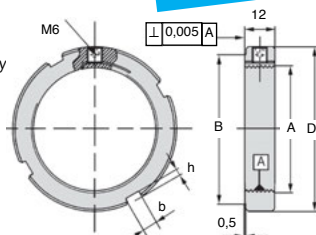


Uses

- The LR nut can be used anywhere radial locking is possible.
- The radial effort produced by tightening the grubscrew is exerted on the flexible key. The developed surface of the key's edges allows a very powerful grip to be exerted.
- The back face, perpendicular to the thread allows a bearing or other mechanical parts to be adjusted and tightened to within precise tolerances

Info

- The following values of tightening torque were obtained for different sized grubscrews:
- M6 screw torque 8Nm
- M8 screw torque 18Nm
- M10 screw torque 36Nm



Unscrewable

DISCOUNTS

Qty	1+	6+	20+
Disc.	Listr -10%	On request	On request

Part number	Thread A	ØD	ØB	C	b x h	Grub screw	Unlocking torque (Nm)*	Admissible axial load (N)	Weight (kg)	Stock*	Price each 1 to 5
LR-1	12x100	24	19	12	4 x 2	M6	23	28500	0,030	✓	52,36 €
LR-2	14x100	26	21	12	4 x 2	M6	26	33500	0,035	✓	56,66 €
LR-3	15x100	30	25	12	4 x 2	M6	29	40500	0,045	✓	63,61 €
LR-4	17x100	32	27	12	4 x 2	M6	32	46100	0,055	✓	64,13 €
LR-5	18x100	32	27	12	4 x 2	M6	37	49000	0,550	✓	64,68 €
LR-6	20x100	35	30	12	4 x 2	M6	42	54600	0,060	✓	65,21 €
LR-7	22x150	35	30	12	4 x 2	M6	47	56600	0,060	✓	65,74 €
LR-8	25x150	40	35	12	5 x 2	M6	53	67100	0,070	✓	66,28 €
LR-9	30x150	45	40	12	5 x 2	M6	59	81100	0,085	✓	66,81 €
LR-10	32x150	46	41	12	5 x 2	M6	65	92900	0,090	✓	72,69 €
LR-11	35x150	50	45	12	5 x 2	M6	75	101900	0,095	✓	77,50 €
LR-12	38x150	52	47	12	5 x 2	M6	83	98000	0,100	✓	78,56 €
LR-13	40x150	55	49	12	6 x 2,5	M6	94	104000	0,100	✓	84,45 €
LR-14	42x150	56	50	12	6 x 2,5	M6	105	109300	0,110	✓	89,82 €
LR-15	45x150	60	54	12	6 x 2,5	M6	118	119200	0,120	-	91,40 €
LR-16	50x150	65	59	12	6 x 2,5	M6	132	134900	0,130	✓	93,01 €
LR-17	52x150	67	61	12	6 x 2,5	M6	147	140400	0,130	-	95,15 €

*Depending of availability - Dimensions in mm

Advantages

- Accurate and firm securing of bearing
- Avoids the need for lock washers and any risk of damage to seals
- Locks nuts without losing accuracy
- Can be re-used many times without loss of accuracy
- Can be used in harsh environments (temperature, vibration, etc...)

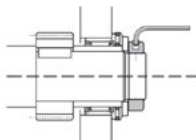
Assembly

- Nuts and key rings assemble easily using standard hook spanners (DIN 1810) that fit into slots around the edge of the nut
- Nuts easily removed by loosening the locking screws on the keys

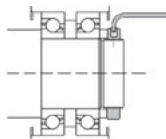
Info.

- Loosening torque and axial load values are for static assemblies.

Values are given as an indication only and HPC cannot be held responsible for their accuracy



Adjustment of a needle bearing on a drill spindle.



Preload adjustment of oblique contact ball bearings.

DISCOUNTS

Qty	1+	6+	20+
Disc.	Listr	-10%	On request

Part number	Thread A	ØD	ØB	C	b x h	Grub screw	Unlocking torque (Nm)*	Admissible axial load (N)	Weight (kg)	Stock*	Price each 1 to 5
LR-18	55x200	75	68	15	7x3,0	M8	512	168900	0,23	-	101,56 €
LR-19	60x200	80	73	15	7x3,0	M8	532	184600	0,25	✓	103,71 €
LR-20	65x200	85	78	15	7x3,0	M8	560	203500	0,27	-	107,98 €
LR-21	70x200	90	82	15	8x3,5	M8	587	219500	0,28	-	112,30 €
LR-22	75x200	95	87	15	8x3,5	M8	615	237000	0,30	-	118,70 €
LR-23	80x200	105	97	15	8x3,5	M8	650	255400	0,42	-	121,91 €
LR-24	85x200	110	102	15	8x3,5	M8	675	273300	0,44	-	123,53 €
LR-25	90x200	115	106	15	10x4,0	M8	713	292300	0,46	-	129,96 €
LR-26	95x200	120	111	15	10x4,0	M8	750	308800	0,49	-	130,49 €
LR-27	100x200	125	116	15	10x4,0	M8	790	325300	0,51	-	145,99 €
LR-28	105x200	130	119	15	12x5,0	M8	830	341700	0,52	-	148,66 €
LR-29	110x200	135	124	15	12x5,0	M8	870	358200	0,55	-	152,41 €
LR-30	115x200	140	129	15	12x5,0	M8	930	377000	0,57	-	163,67 €
LR-31	120x200	145	134	15	12x5,0	M8	960	394000	0,59	-	197,88 €
LR-32	125x200	150	139	15	12x5,0	M8	1040	413800	0,62	-	212,89 €
LR-33	130x200	155	144	15	12x5,0	M8	>2000	434400	0,65	-	228,41 €
LR-34	135x200	165	152	20	14x6,0	M10	>2000	677000	1,10	-	275,46 €
LR-35	140x200	170	157	20	14x6,0	M10	>2000	704400	1,13	-	284,59 €
LR-36	145x200	175	162	20	14x6,0	M10	>2000	729800	1,15	-	303,81 €
LR-37	150x200	180	167	20	14x6,0	M10	>2000	757400	1,20	-	320,92 €

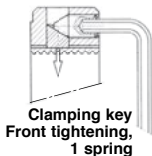
*Depending of availability - Dimensions in mm

Clamping spring

LF Precise adjustment – Front locking

Material : steel (with high elastic limit)

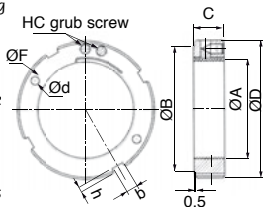
- Notches : 4 at 90° spacing
- Screw(s) : Flat headed Hc (class 14.9)
- Standard finish :
- Right handed threads (class 4H) • Ground working face
- Engraved on reverse face • Blackened finish



Application

- The LF locking nut can be used wherever radial clamping is not possible. It is particularly recommended for components mounted inside holes or deep bores.
- The axial force created by the tightening of the screw is transmitted at 90° by the edges.
- The resulting radial force is applied to the clamping spring
- The contact surface perpendicular to the threaded side allows the adjustment and locking in place of different bearings or other mechanical elements requiring positioning under very precise tolerances.
- In addition to the lateral notches, the holes located on the front face allow positioning of the nut using a suitable spanner.

self-locking



Info.

- * Following locking values were obtained for different sizes of locking screw
- M4 screw 2.5Nm torque • M5 screw 5Nm torque
- M6 screw 8 Nm torque • M8 screw 18Nm torque

DISCOUNTS

Qty	1+	6+	20+
Disc.	Listr -10%		On request

Part number	Thread ØA	ØD	ØB	C	b x h	ØF	Ød	Screw HC*	Unlocking torque (Nm)	Max axial load (N)	Weight (kg)	Price each 1 to 5
LF-1	12 x 1,0	28	22	15	4 x 2,0	20	3,2	1 screw M4	4	36200	0,050	68,73 €
LF-2	14 x 1,0	30	25	15	4 x 2,0	22	3,2		6	42600	0,055	74,51 €
LF-3	15 x 1,0	31	26	15	4 x 2,0	23	3,2		6	51500	0,060	80,37 €
LF-4	17 x 1,0	33	28	15	4 x 2,0	26	3,2	2 screw M4	7	58700	0,065	80,90 €
LF-5	18 x 1,0	34	29	15	4 x 2,0	26	3,2		9	55400	0,070	80,90 €
LF-6	20 x 1,0	37	32	15	4 x 2,0	29	3,2		10	61800	0,080	81,42 €
LF-7	22 x 1,5	39	34	15	4 x 2,0	30	3,2		12	64700	0,090	81,95 €
LF-8	25 x 1,5	43	38	15	5 x 2,0	33	4,2		15	80200	0,100	82,47 €
LF-9	30 x 1,5	48	43	15	5 x 2,0	39	4,2	2 screw M5	20	100600	0,120	83,00 €
LF-10	32 x 1,5	50	45	15	5 x 2,0	41	4,2		24	113500	0,125	88,31 €
LF-11	35 x 1,5	53	48	15	5 x 2,0	44	4,2		29	118500	0,140	93,56 €
LF-12	38 x 1,5	56	51	15	5 x 2,0	47	4,2		35	124500	0,145	94,67 €
LF-13	40 x 1,5	58	52	15	6 x 2,5	50	4,2		41	127100	0,150	101,00 €
LF-14	42 x 1,5	62	56	15	6 x 2,5	52	4,2		45	131300	0,175	106,27 €
LF-15	45 x 1,5	65	59	15	6 x 2,5	55	4,2		55	143400	0,185	107,32 €
LF-16	50 x 1,5	69	63	15	6 x 2,5	59	4,2		70	165200	0,190	109,99 €
LF-17	52 x 1,5	72	66	15	6 x 2,5	62	4,2		85	171900	0,215	114,74 €

Dimensions in mm

Advantages

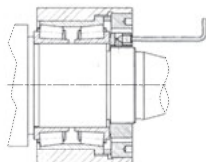
- An accurate and strong solution for securing bearings in their axial position after installation.
- Locking washers are no longer required thus reducing the risk of seal damage.
- The rings can be clamped and locked in place with no loss of axial precision.
- All threading and contact face machining operations are performed in one operation to ensure that squareness and minimum run-out is guaranteed.

Assembly

- The rings are screwed into position using an appropriately sized pin spanner (DIN 1810) on the lateral slots.
- To disassemble, simply unscrew.

Info.

- The values of locking torque and axial load given are for static assemblies. They are indicative purposes only and we decline any responsibility.



Typical application :
Installation of a taper bearing
on a machine tool spindle

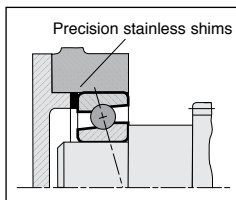
Part number	Thread	ØA	ØD	ØB	C	b x h	ØF	Ød	Screw	Unlocking torque (Nm)	Max axial load (N)	Weight (kg)	Price each 1 to 5
LF-18	55 x 2	75	68	15	7 x 3,0	65	4,2		2 screw M5	105	241300	0,23	120,04 €
LF-19	60 x 2	80	73	20	7 x 3,0	72	4,2			130	263800	0,33	122,16 €
LF-20	65 x 2	85	78	20	7 x 3,0	76	4,2			160	291000	0,35	127,99 €
LF-21	70 x 2	90	82	20	8 x 3,5	81	4,2			200	313900	0,36	131,82 €
LF-22	75 x 2	95	87	20	8 x 3,5	86	4,2		2 screw M6	220	347800	0,39	139,20 €
LF-23	80 x 2	105	97	20	8 x 3,5	93	5,2			240	371300	0,55	143,97 €
LF-24	85 x 2	110	102	20	8 x 3,5	98	5,2			250	394900	0,57	146,05 €
LF-25	90 x 2	115	106	20	10 x 4	104	5,2			265	422500	0,60	151,31 €
LF-26	95 x 2	120	111	20	10 x 4	107	5,2			295	446300	0,63	155,52 €
LF-27	100 x 2	125	116	20	10 x 4	114	5,2			325	470200	0,65	172,39 €
LF-28	105 x 2	130	119	20	12 x 5	118	5,2			365	494000	0,68	173,47 €
LF-29	110 x 2	135	124	20	12 x 5	122	5,2			405	517800	0,72	181,38 €
LF-30	115 x 2	140	129	20	12 x 5	127	5,2		2 screw M8	450	545000	0,75	193,54 €
LF-31	120 x 2	145	134	20	12 x 5	132	5,2			500	574300	0,78	239,90 €
LF-32	125 x 2	150	139	20	12 x 5	137	5,2			560	598500	0,80	258,91 €
LF-33	130 x 2	155	144	20	12 x 5	142	5,2			635	626600	0,85	276,29 €
LF-34	135 x 2	165	152	22	14 x 6	150	6,2		2 screw M8	680	723300	1,15	327,46 €
LF-35	140 x 2	170	157	22	14 x 6	155	6,2			1065	761900	1,20	345,39 €
LF-36	145 x 2	175	162	22	14 x 6	160	6,2			1065	789300	1,25	357,00 €
LF-37	150 x 2	180	167	22	14 x 6	165	6,2			1065	821700	1,30	368,05 €

Dimensions in mm

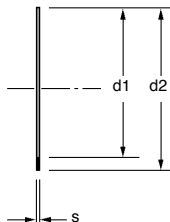
- **Material:**
stainless steel 301
- **Tolerance:** $S = \pm 0.015\text{mm}$
(For thicknesses greater than 0.25mm)
- **Max. temperature:** +430°C

Info.

- When ordering, replace ZZ in the part number by the desired thickness (S)
E.g: **PSx2x3.5x0.8**



Typical application



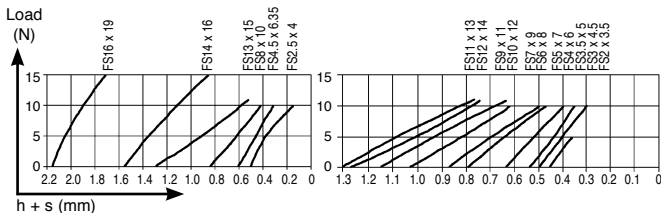
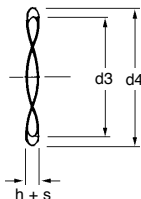
DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	$S \pm 0.01$			d1	d2	Suits bearings with		Price each
						Bore Ø	External Ø	1 to 5
PS2x3,5xZZ	0,08	0,10	-	2,25	3,20	2,00	-	2,71 €
PS2,5x4xZZ	0,08	0,10	-	2,80	3,90	2,50	4	2,71 €
PS3x4,5xZZ	0,08	0,10	0,12	3,30	4,40	3,00	-	2,71 €
PS3,5x5xZZ	0,08	0,10	0,12	3,80	4,90	-	5	2,71 €
PS4x6xZZ	0,10	0,12	0,15	4,30	5,85	4,00	6	2,71 €
PS5x7xZZ	0,10	0,12	0,15	5,30	6,85	5,00	7	2,71 €
PS6x8xZZ	0,12	0,15	0,18	6,30	7,85	6,00	8	2,71 €
PS7x9xZZ	0,12	0,15	0,18	7,30	8,80	7,00	9	2,71 €
PS8x10xZZ	0,15	0,18	0,20	8,30	9,80	8,00	10	2,71 €
PS9x11xZZ	0,15	0,18	0,20	9,30	10,80	9,00	11	2,71 €
PS10x12xZZ	0,18	0,20	0,22	10,30	11,80	10,00	12	2,71 €
PS11x13xZZ	0,18	0,20	0,22	11,30	12,80	-	13	2,71 €
PS12x14xZZ	0,20	0,22	0,25	12,30	13,80	-	14	2,71 €
PS13x15xZZ	0,20	0,22	0,25	13,30	14,80	-	15	2,71 €
PS14x16xZZ	0,22	0,25	0,30	14,35	15,80	-	16	3,33 €
PS15x17xZZ	0,22	0,25	0,30	15,35	16,80	-	17	3,33 €
PS16x19xZZ	0,25	0,30	0,35	16,40	18,80	-	19	3,33 €

Dimensions in mm

- **Material:**
stainless steel 301
- **Tolerance:** $S = \pm 0.015\text{mm}$
(For thicknesses greater than 0.25mm)



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	$h + S \pm 0.05$	$S \pm 0.01$	d3	d4	Suits bearings with		Price each 1 to 5
					Bore Ø	External Ø	
FS2x3,5	0,45	0,08	2,15	3,10	2,00	-	4,79 €
FS2,5x4	0,50	0,08	2,70	3,80	2,50	4	4,79 €
FS3x4,5	0,50	0,10	3,20	4,30	3,00	-	4,79 €
FS3,5x5	0,55	0,10	3,70	4,80	-	5	4,79 €
FS4x6	0,65	0,12	4,20	5,75	4,00	6	4,79 €
FS5x7	0,65	0,12	5,20	6,75	5,00	7	4,79 €
FS6x8	0,70	0,15	6,20	7,75	6,00	8	4,79 €
FS7x9	0,90	0,15	7,20	8,70	7,00	9	4,79 €
FS8x10	0,85	0,18	8,20	9,70	8,00	10	4,79 €
FS9x11	1,15	0,18	9,20	10,70	9,00	11	4,79 €
FS10x12	1,05	0,20	10,20	11,70	10,00	12	4,79 €
FS11x13	1,30	0,20	11,20	12,70	-	13	4,79 €
FS12x14	1,30	0,22	12,20	13,70	-	14	5,44 €
FS13x15	1,30	0,22	13,20	14,70	-	15	5,44 €
FS14x16	1,55	0,25	14,20	15,65	-	16	5,44 €
FS15x17	1,55	0,25	15,20	16,65	-	17	5,44 €
FS16x19	2,15	0,30	16,20	18,55	-	19	5,44 €

Dimensions in mm

12.7mm wide steel feeler strip on rolls

CLQ

Steel or stainless steel

- Rolls of precision feeler strip for adjusting, straightening, positioning or levelling

- Width 12.7mm

- Length per roll: 5 metres

(*except CLQ12-10-001 which is supplied on a 10 metre roll)

- Strip to be cut to form required

- Materials:

Steel 1.1274

Stainless steel 1.4310



steel or stainless steel

NEW!

Applications

- Aligning workpieces before machining

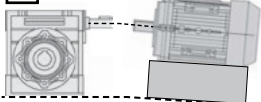
- Aligning differently sized/shaped pieces

- Adjusting valve lash

- Wedging tools

- Adjusting bearings

- Aligning a motor and a pump before coupling



Incorrectly aligned



Wedge adjustment

DISCOUNTS

Qty	1+	3+	5+
Disc.	List	-5%	On request

Part number		Thickness (mm)	Price each 1 to 2	
Steel	Stainless steel		Steel	S/Steel
CLQ12-10-001*	CLQ12-5-001/SS	0,01	93,68 €	51,24 €
CLQ12-5-002	CLQ12-5-002/SS	0,02	39,32 €	34,57 €
CLQ12-5-003	CLQ12-5-003/SS	0,03	15,97 €	17,87 €
CLQ12-5-004	CLQ12-5-004/SS	0,04	15,00 €	15,26 €
CLQ12-5-005	CLQ12-5-005/SS	0,05	14,31 €	12,87 €
CLQ12-5-006	CLQ12-5-006/SS	0,06	11,44 €	12,87 €
CLQ12-5-007	CLQ12-5-007/SS	0,07	10,72 €	12,87 €
CLQ12-5-008	CLQ12-5-008/SS	0,08	10,25 €	12,87 €
CLQ12-5-010	CLQ12-5-010/SS	0,10	9,77 €	11,68 €
CLQ12-5-015	CLQ12-5-015/SS	0,15	10,25 €	13,35 €
CLQ12-5-020	CLQ12-5-020/SS	0,20	10,50 €	14,06 €
CLQ12-5-025	CLQ12-5-025/SS	0,25	10,96 €	15,50 €
CLQ12-5-030	CLQ12-5-030/SS	0,30	10,72 €	16,10 €
CLQ12-5-040	CLQ12-5-040/SS	0,40	12,16 €	20,73 €
CLQ12-5-050	CLQ12-5-050/SS	0,50	11,91 €	22,16 €

Dimensions in mm

- Kit of assorted precision feelers for adjusting, equalising, fixing or positioning
- To be cut to form required
- Materials:
 - Steel 1.1274
 - Stainless steel 1.4310
 - Brass 2.0321

NEW!**Advantage**

- Wide range of thicknesses in each box allows accurate positioning for all applications

Applications

- Aligning workpieces before machining, aligning differently sized/shaped pieces, adjusting valve lash, wedging tools, adjusting bearings

DISCOUNTS

Qty	1+	3+	5+
Disc.	List	-5%	On request

Part number	Format	Number sheets	Material	Contents of box	Price each 1 to 2
CLQ25-300-21/A	25x300	21	steel 1.1274	0,01/0,02/0,03/0,04/0,05/0,06/0,07/0,08/0,09/0,10/0,15/0,20/0,25/0,30/0,40/0,50/0,60/0,70/0,80/0,90/1,00	44,33 €
CLQ50-300-25/A	50x300	25	steel 1.1274	0,01/0,02/0,03/0,04/0,05/0,06/0,07/0,08/0,09/0,10/0,12/0,15/0,18/0,20/0,25/0,30/0,35/0,40/0,45/0,50/0,60/0,70/0,80/0,90/1,00	76,74 €
CLQ50-300-23/A	50x300	23	steel 1.1274	0,03/0,04/0,05/0,06/0,07/0,08/0,09/0,10/0,12/0,15/0,18/0,20/0,25/0,30/0,35/0,40/0,45/0,50/0,60/0,70/0,80/0,90/1,00	63,64 €
CLQ50-300-11/A	50x300	11	steel 1.1274	0,02/0,03/0,05/0,10/0,15/0,20/0,25/0,30/0,40/0,50/1,00	31,48 €
CLQ100-500-9/SS	100x500	9	s/steel 1.4310	0,02/0,05/0,10/0,15/0,20/0,30/0,40/0,50/1,00	91,78 €
CLQ100-500-11/SS	100x500	11	s/steel 1.4310	0,02/0,05/0,10/0,15/0,20/0,25/0,30/0,35/0,40/0,45/0,50	92,96 €
CLQ100-500-11/SS2	100x500	11	s/steel 1.4310	0,50/0,55/0,60/0,70/0,75/0,80/0,85/0,90/0,95/1,00	210,24 €
CLQ150-500-10/SS	150x500	10	s/steel 1.4310	0,025/0,05/0,075/0,1/0,15/0,20/0,25/0,30/0,50	132,05 €
CLQ150-500-10/BR	150x500	10	brass 2.0321	0,025/0,05/0,075/0,1/0,15/0,20/0,25/0,30/0,50	154,93 €

Dimensions in mm

SPHERICAL BUSHING



p.118

HEAVY DUTY MALE ROD END

ECO. range



p.126

FEMALE ROD ENDS



stainless steel

p.133

UNIBAL® FEMALE ROD ENDS



stainless steel

p.134

STRAIGHT CLEVIS
steel or
stainless
steel

NEW



p.137

**HINGE AND
BALL JOINTS**
p.118 - 147

**SURFACE MOUNTING
PLATE**

NEW



steel or
stainless
steel

p.138

**180° BALL AND
SOCKETS JOINTS**



p.140

CLEVIS COMPONENTS



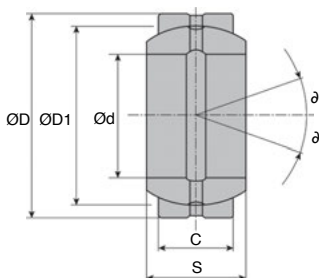
p.142

- DIN 648, series E, ISO 6124/1
- Material: steel

Info.

- Some maintenance required (except GE-E models)

Economy range



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

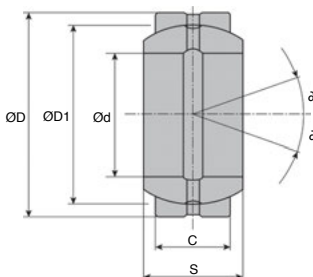
Part number	Od	OD	OD1	S	C	δ	static (N)	dynamic (N)	Weight (g)	Stock*	Price each 1 to 5
GE6E	6 ^{+0.008}	14 ^{+0.008}	10,0	6 ^{+0.12}	4 ^{+0.24}	13°	17000	3400	<10	✓	2,92 €
GE8E	8 ^{+0.008}	16 ^{+0.008}	13,0	8 ^{+0.12}	5 ^{+0.24}	15°	27500	5500	<10	✓	2,92 €
GE10E	10 ^{+0.008}	19 ^{+0.008}	16,0	9 ^{+0.12}	6 ^{+0.24}	12°	40500	8150	10	✓	2,92 €
GE12E	12 ^{+0.008}	22 ^{+0.008}	18,0	10 ^{+0.12}	7 ^{+0.24}	11°	54000	10800	10	✓	2,92 €
GE15ES	15 ^{+0.008}	26 ^{+0.008}	22,0	12 ^{+0.12}	9 ^{+0.24}	8°	85000	17000	20	✓	2,92 €
GE17ES	17 ^{+0.008}	30 ^{+0.008}	25,0	14 ^{+0.12}	10 ^{+0.24}	10°	106000	21200	40	✓	3,16 €
GE20ES	20 ^{+0.010}	35 ^{+0.011}	29,0	16 ^{+0.12}	12 ^{+0.24}	9°	146000	30000	60	✓	3,16 €
GE25ES	25 ^{+0.010}	42 ^{+0.011}	35,5	20 ^{+0.12}	16 ^{+0.24}	7°	240000	48000	110	✓	3,66 €
GE30ES	30 ^{+0.010}	47 ^{+0.011}	40,7	22 ^{+0.12}	18 ^{+0.24}	6°	310000	62000	140	✓	4,63 €
GE35ES	35 ^{+0.012}	55 ^{+0.013}	47,0	25 ^{+0.12}	20 ^{+0.30}	6°	400000	80000	220	-	6,35 €
GE40ES	40 ^{+0.012}	62 ^{+0.013}	53,0	28 ^{+0.12}	22 ^{+0.30}	7°	500000	100000	300	✓	8,33 €
GE45ES	45 ^{+0.012}	68 ^{+0.013}	60,0	32 ^{+0.12}	25 ^{+0.30}	7°	640000	127000	400	-	9,29 €
GE50ES	50 ^{+0.012}	75 ^{+0.013}	66,0	35 ^{+0.12}	28 ^{+0.30}	6°	780000	156000	540	✓	11,76 €
GE60ES	60 ^{+0.015}	90 ^{+0.015}	80,0	44 ^{+0.15}	36 ^{+0.40}	6°	1220000	245000	1000	✓	20,62 €
GE70ES	70 ^{+0.015}	105 ^{+0.015}	92,0	49 ^{+0.15}	40 ^{+0.40}	6°	1560000	315000	1500	-	26,03 €
GE80ES	80 ^{+0.015}	120 ^{+0.015}	105,0	55 ^{+0.15}	45 ^{+0.40}	6°	2000000	400000	2200	-	38,83 €
GE90ES	90 ^{+0.020}	130 ^{+0.018}	115,0	60 ^{+0.20}	50 ^{+0.50}	5°	2450000	490000	2700	-	63,44 €
GE100ES	100 ^{+0.020}	150 ^{+0.018}	130,0	70 ^{+0.20}	55 ^{+0.50}	7°	3050000	610000	4300	-	88,04 €
GE110ES	110 ^{+0.020}	160 ^{+0.020}	140,0	70 ^{+0.20}	55 ^{+0.50}	6°	3250000	655000	4700	-	132,32 €

*Depending on availability - Dimensions in mm

- DIN 648, series E, ISO 6124/1
- Material: steel

Info.

- Requires maintenance



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Od	OD	OD1	S	C	α	Load capacity static (N)	Load capacity dynamic (N)	Weight (g)	Stock*	Price each 1 to 5
GE15ES-2RS	15 ^{+0.008}	26 ^{+0.009}	22,0	12 ^{+0.12}	9 ^{+0.24}	8°	85000	17000	20	-	3,66 €
GE17ES-2RS	17 ^{+0.008}	30 ^{+0.009}	25,0	14 ^{+0.12}	10 ^{+0.24}	10°	106000	21200	40	✓	3,91 €
GE20ES-2RS	20 ^{+0.010}	35 ^{+0.011}	29,0	16 ^{+0.12}	12 ^{+0.24}	9°	146000	30000	60	✓	4,14 €
GE25ES-2RS	25 ^{+0.010}	42 ^{+0.011}	35,5	20 ^{+0.12}	16 ^{+0.24}	7°	240000	48000	110	✓	5,13 €
GE30ES-2RS	30 ^{+0.010}	47 ^{+0.011}	40,7	22 ^{+0.12}	18 ^{+0.24}	6°	310000	62000	140	✓	5,87 €
GE35ES-2RS	35 ^{+0.012}	55 ^{+0.013}	47,0	25 ^{+0.12}	20 ^{+0.30}	6°	400000	80000	220	✓	7,35 €
GE40ES-2RS	40 ^{+0.012}	62 ^{+0.013}	53,0	28 ^{+0.12}	22 ^{+0.30}	7°	500000	100000	300	✓	9,08 €
GE45ES-2RS	45 ^{+0.012}	68 ^{+0.013}	60,0	32 ^{+0.12}	25 ^{+0.30}	7°	640000	127000	400	-	10,79 €
GE50ES-2RS	50 ^{+0.012}	75 ^{+0.013}	66,0	35 ^{+0.12}	28 ^{+0.30}	6°	780000	156000	540	-	14,21 €
GE60ES-2RS	60 ^{+0.015}	90 ^{+0.015}	80,0	44 ^{+0.15}	36 ^{+0.40}	6°	1220000	245000	1000	-	22,12 €
GE70ES-2RS	70 ^{+0.015}	105 ^{+0.015}	92,0	49 ^{+0.15}	40 ^{+0.40}	6°	1560000	315000	1500	-	28,99 €
GE80ES-2RS	80 ^{+0.015}	120 ^{+0.015}	105,0	55 ^{+0.15}	45 ^{+0.40}	6°	2000000	400000	2200	-	45,73 €
GE90ES-2RS	90 ^{+0.020}	130 ^{+0.018}	115,0	60 ^{+0.20}	50 ^{+0.50}	5°	2450000	490000	2700	-	71,30 €
GE100ES-2RS	100 ^{+0.020}	150 ^{+0.018}	130,0	70 ^{+0.20}	55 ^{+0.50}	7°	3050000	610000	4300	-	95,92 €
GE110ES-2RS	110 ^{+0.020}	160 ^{+0.020}	140,0	70 ^{+0.20}	55 ^{+0.50}	6°	3250000	655000	4700	-	147,07 €

*Depending on availability - Dimensions in mm

Spherical bushing DIN 648



GEc

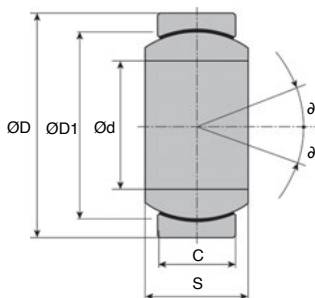
Hard chrome/PTFE contact

- DIN 648, series E, ISO 6124/1
- Material: steel

Advantages

- No maintenance

Maintenance free



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD	ØD1	S	C	α	Load capacity static (N)	Load capacity dynamic (N)	Weight (g)	Stock*	Price each 1 to 5
GE6C	6 ^{+0,008}	14 ^{+0,008}	10,0	6 ^{+0,12}	4 ^{+0,24}	13°	9000	3600	4	✓	4,89 €
GE8C	8 ^{+0,008}	16 ^{+0,008}	13,0	8 ^{+0,12}	5 ^{+0,24}	15°	14600	5850	7	-	1,81 €
GE10C	10 ^{+0,008}	19 ^{+0,009}	16,0	9 ^{+0,12}	6 ^{+0,24}	12°	21600	8650	10	✓	5,38 €
GE12C	12 ^{+0,008}	22 ^{+0,009}	18,0	10 ^{+0,12}	7 ^{+0,24}	11°	28500	11400	10	✓	5,87 €
GE15C	15 ^{+0,008}	26 ^{+0,009}	22,0	12 ^{+0,12}	9 ^{+0,24}	8°	44000	17600	20	✓	7,08 €
GE17C	17 ^{+0,008}	30 ^{+0,009}	25,0	14 ^{+0,12}	10 ^{+0,24}	10°	56000	22400	30	✓	8,07 €
GE20C	20 ^{+0,010}	35 ^{+0,011}	29,0	16 ^{+0,12}	12 ^{+0,24}	9°	78000	31500	60	✓	8,58 €
GE25C	25 ^{+0,010}	42 ^{+0,011}	35,5	20 ^{+0,12}	16 ^{+0,24}	7°	127000	51000	110	✓	9,56 €
GE30C	30 ^{+0,010}	47 ^{+0,011}	40,7	22 ^{+0,12}	18 ^{+0,24}	6°	166000	65500	140	✓	11,27 €

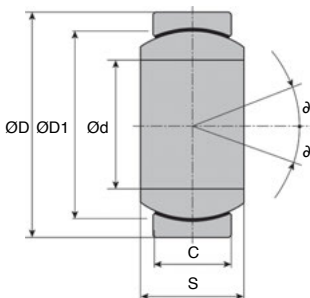
*Depending on availability - Dimensions in mm

- DIN 648, series E, ISO 6124/1
- Material: steel

Advantages

- No maintenance

Maintenance free



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød	ØD	ØD1	S	C	d	Load capacity static (N)	Load capacity dynamic (N)	Weight (g)	Stock*	Price each 1 to 5
GE17ET-2RS	17 ^{+0.008}	30 ^{+0.009}	25.0	14 ^{+0.12}	10 ^{+0.24}	10 ⁰	56000	22400	30	-	10.03 €
GE20ET-2RS	20 ^{+0.010}	35 ^{+0.011}	29.0	16 ^{+0.12}	12 ^{+0.24}	9 ⁰	78000	31500	60	✓	10.29 €
GE25ET-2RS	25 ^{+0.010}	42 ^{+0.011}	35.5	20 ^{+0.12}	16 ^{+0.24}	7 ⁰	127000	51000	110	-	12.76 €
GE30ET-2RS	30 ^{+0.010}	47 ^{+0.011}	40.7	22 ^{+0.12}	18 ^{+0.24}	6 ⁰	166000	65500	140	-	13.75 €
GE35ET-2RS	35 ^{+0.012}	55 ^{+0.013}	47.0	25 ^{+0.12}	20 ^{+0.30}	6 ⁰	224000	112000	220	✓	16.20 €
GE40ET-2RS	40 ^{+0.012}	62 ^{+0.013}	53.0	28 ^{+0.12}	22 ^{+0.30}	7 ⁰	280000	140000	300	-	18.67 €
GE45ET-2RS	45 ^{+0.012}	68 ^{+0.013}	60.0	32 ^{+0.12}	25 ^{+0.30}	7 ⁰	360000	180000	400	-	22.12 €
GE50ET-2RS	50 ^{+0.012}	75 ^{+0.013}	66.0	35 ^{+0.12}	28 ^{+0.30}	6 ⁰	440000	220000	540	-	27.04 €
GE60ET-2RS	60 ^{+0.015}	90 ^{+0.015}	80.0	44 ^{+0.15}	36 ^{+0.40}	6 ⁰	695000	345000	1000	-	43.75 €
GE70ET-2RS	70 ^{+0.015}	105 ^{+0.015}	92.0	49 ^{+0.15}	40 ^{+0.40}	6 ⁰	880000	440000	1500	-	58.52 €
GE80ET-2RS	80 ^{+0.015}	120 ^{+0.015}	105.0	55 ^{+0.15}	45 ^{+0.40}	6 ⁰	1140000	570000	2200	-	86.08 €
GE90ET-2RS	90 ^{+0.020}	130 ^{+0.018}	115.0	60 ^{+0.20}	50 ^{+0.50}	5 ⁰	1370000	695000	2700	-	112.15 €
GE100ET-2RS	100 ^{+0.030}	150 ^{+0.018}	130.0	70 ^{+0.20}	55 ^{+0.50}	7 ⁰	1730000	865000	4300	-	225.32 €
GE110ET-2RS	110 ^{+0.030}	160 ^{+0.025}	140.0	70 ^{+0.20}	55 ^{+0.50}	6 ⁰	1860000	930000	4700	-	282.90 €

*Depending on availability - Dimensions in mm

Steel spherical bearing **DIN ISO 12240-1** **ISO**

CSS Self-lubricating, steel/steel contact

- **Self-aligning spherical bearing** DIN ISO 12240-1 K series
- Working temperature: -30°C to +120°C (150°C occasionally)
- Does not tolerate movement
- Materials:
 - Sphere: steel (100C6), treated, ground and polished.
 - External rig: special self lubricating steel, cold formed on the sphere (acc DIN series K)

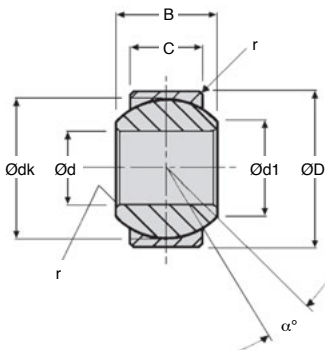


Advantages

- No maintenance required
- Accepts heavy loads
- Resistant to wear

Assembly

- Normal load
Bore M7
Shaft m6
- Heavy load
Bore N7
Shaft m6



DISCOUNTS

Qty	1+	6+	20+	40+	60+	100+
Disc.	List	-10%	-15%	-20%	-30%	On request

Part number	Ød (H7)	B	C	ØD (h6)	Ød1	Ødk	r	Static load Co (daN)	α° Angle of incidence max.	Price each 1 to 5
CSS-06	6	9	6,75	16	8,9	12,700	0,3	1700	13°	✓ 9,79 €
CSS-08	8	12	9,00	19	10,4	15,875	0,3	2800	14°	✓ 10,33 €
CSS-10	10	14	10,50	22	12,9	19,050	0,3	4000	13°	✓ 10,85 €
CSS-12	12	16	12,00	26	15,4	22,225	0,3	5300	13°	✓ 11,88 €
CSS-16	16	21	15,00	32	19,3	28,575	0,3	8500	15°	✓ 17,32 €
CSS-20	20	25	18,00	40	24,3	34,925	0,3	12500	14°	✓ 27,79 €
CSS-30	30	37	25,00	55	34,8	50,800	0,6	25400	17°	✓ 66,29 €

*Depending on availability - Dimensions in mm

- Self aligning bearing conforming to DIN ISO 12240-1, series E (DIN648)
- Housing: Stainless steel X6CrNiMoTi17-2-2 with a PTFE coating
- Ball: Stainless steel X105CrMo17, hardened and polished
- No lubrication required
- Operating temperature : -50° to +200°C

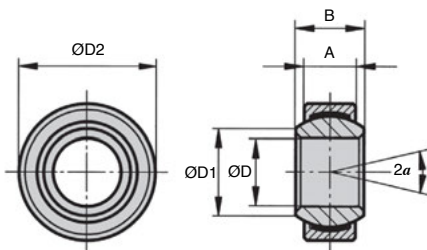
Assembly

- Shaft tolerance g7
- Ball bore tolerance jS7

Advantages

- Corrosion resistant and requiring no maintenance, these bearings are suitable for heavy duty applications

stainless steel



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	ØD	Tolerance (µm)	ØD1	ØD2 (h5)	A	B	Max. static load (kN)	Tilting angle <i>a</i>	Weight (g)	Stock*	Price each 1 to 5
CSS-06/SS	6	0/-8	8,0	14	4	6	9,0	13°	4	✓	42,49 €
CSS-08/SS	8	0/-8	10,2	16	5	8	15,6	15°	7	✓	28,29 €
CSS-10/SS	10	0/-8	13,2	19	6	9	23,4	12°	11	✓	36,87 €
CSS-12/SS	12	0/-8	14,9	22	7	10	32,0	11°	16	✓	38,71 €
CSS-15/SS	15	0/-8	18,4	26	9	12	50,0	8°	26	-	62,96 €
CSS-16/SS	16	0/-8	20,7	30	10	14	65,0	10°	49	✓	34,09 €
CSS-17/SS	17	0/-8	20,7	30	10	14	65,0	10°	38	-	72,21 €
CSS-20/SS	20	0/-10	24,2	35	12	16	90,5	9°	61	✓	84,84 €
CSS-25/SS	25	0/-10	29,3	42	16	20	159,0	7°	110	-	99,88 €
CSS-30/SS	30	0/-10	34,2	47	18	22	197,0	6°	140	-	122,76 €

Dimensions in mm

- Compensates for alignment and parallelism between shaft and housing
- Allows oscillating movements at slow speeds
- Material: Self-lubricating stainless steel Uniflon®E
- Requires a P7 toleranced housing

Advantages

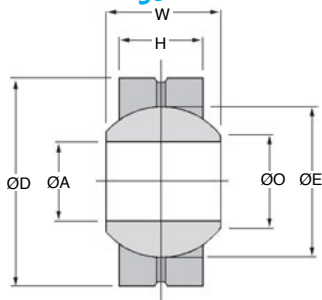
- No lubrication or other maintenance required

Uses

- Occasional heavy loads
- Areas where maintenance would be difficult



Swiss precision



DISCOUNTS

Qty	1+	10+	24+
Disc.	List	-20%	On request

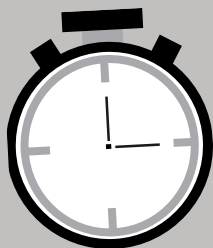
Part number	Static radial load (daN)	Static axial load (daN)	ØA (H6)	ØD (h6)	H	ØO	W	Sphere Weight (g)	Price each 1 to 9
SSE3.45	790	250	3	12	4,50	5,18	6	7,93	104,27 €
SSE5.45	1500	440	5	16	6,00	7,71	8	11,11	96,07 €
SSE6.45	1960	500	6	18	6,75	8,96	9	12,70	103,58 €
SSE8.45	3170	620	8	22	9,00	10,40	12	15,88	107,35 €
SSE10.45	4530	750	10	26	10,50	12,92	14	19,05	137,84 €
SSE12.45	6040	880	12	30	12,00	15,43	16	22,23	115,16 €
SSE14.45	7550	1000	14	34	13,50	16,86	19	25,40	195,85 €
SSE16.45	9440	1130	16	38	15,00	19,39	21	28,58	272,29 €
SSE18.45	11780	1250	18	42	16,50	21,89	23	31,75	383,99 €

Dimensions in mm

Straight to your door!

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**Only for items in stock*

DGSA DGSA2RS

Steel/steel contact

- DIN 648, series E, shape B, ISO 6126
- Material: steel C45

Maintenance

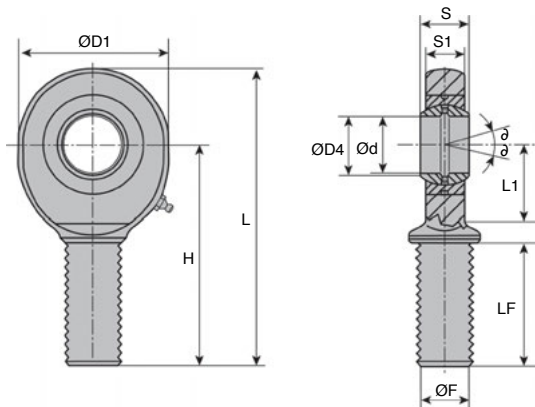
- Some maintenance required (except **DGSA-E** models)
- (1): No maintenance
- (2): Lubrication through hole in the head of the rod end

Economy range



Part number	Ød	S	ØD4	H	ØD1	S1	L	L1
Without seal								
DGSA6E ⁽¹⁾	6 ^{+0,008}	6 ^{+0,12}	8,0	36	21	4,3	46,5	12,0
DGSA8E ⁽¹⁾	8 ^{+0,008}	8 ^{+0,12}	10,2	42	24	6,0	54,0	14,0
DGSA10E ⁽¹⁾	10 ^{+0,008}	9 ^{+0,12}	13,2	48	29	7,0	62,5	15,0
DGSA12E ⁽¹⁾	12 ^{+0,008}	10 ^{+0,12}	15,0	54	34	8,0	71,0	19,0
DGSA15ES ⁽²⁾	15 ^{+0,008}	12 ^{+0,12}	18,4	63	40	10,0	83,0	20,0
DGSA17ES ⁽²⁾	17 ^{+0,008}	14 ^{+0,12}	20,7	69	46	11,0	92,0	23,0
DGSA20ES	20 ^{+0,010}	16 ^{+0,12}	24,1	78	53	13,0	104,5	27,5
DGSA25ES	25 ^{+0,010}	20 ^{+0,12}	29,3	94	64	17,0	126,0	32,0
DGSA30ES	30 ^{+0,010}	22 ^{+0,12}	34,2	110	73	19,0	146,5	37,0
With seal								
DGSA35ES-2RS	35 ^{+0,012}	25 ^{+0,12}	39,7	140	82	21,0	181,0	43,0
DGSA40ES-2RS	40 ^{+0,012}	28 ^{+0,12}	45,0	150	92	23,0	196,0	48,0
DGSA45ES-2RS	45 ^{+0,012}	32 ^{+0,12}	50,7	163	102	27,0	218,0	52,0
DGSA50ES-2RS	50 ^{+0,012}	35 ^{+0,12}	56,0	185	112	30,0	241,0	60,0
DGSA60ES-2RS	60 ^{+0,015}	44 ^{+0,15}	66,8	210	135	38,0	277,5	75,0
DGSA70ES-2RS	70 ^{+0,015}	49 ^{+0,15}	77,8	235	160	42,0	315,0	87,0
DGSA80ES-2RS	80 ^{+0,015}	55 ^{+0,15}	89,4	270	180	47,0	360,0	100,0

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number	LF	Angle δ	$\varnothing F$	Load capacity		Weight (kg)	Stock*	Price each 1 to 5
				Static (N)	Dynamic (N)			
Without seal								
DGSA6E	18	13°	M6x1,00	10200	3400	0,01	✓	8,79 €
DGSA8E	22	15°	M8x1,25	16000	5500	0,03	✓	8,79 €
DGSA10E	27	12°	M10x1,50	22000	8100	0,05	✓	9,16 €
DGSA12E	30	11°	M12x1,75	30400	10800	0,08	✓	9,16 €
DGSA15ES	34	8°	M14x2,00	44800	17000	0,14	✓	9,16 €
DGSA17ES	36	10°	M16x2,00	56500	21200	0,19	✓	9,47 €
DGSA20ES	43	9°	M20x1,50	75600	30000	0,31	✓	11,61 €
DGSA25ES	53	7°	M24x2,00	88200	48000	0,56	✓	15,15 €
DGSA30ES	65	6°	M30x2,00	119000	62000	0,89	✓	20,46 €
With seal								
DGSA35ES-2RS	82	6°	M36x3,00	159000	80000	1,40	✓	31,77 €
DGSA40ES-2RS	86	7°	M39x3,00	194000	100000	1,80	-	41,31 €
DGSA45ES-2RS	94	7°	M42x3,00	259000	127000	2,60	-	52,63 €
DGSA50ES-2RS	106	6°	M45x3,00	313000	156000	3,40	-	58,29 €
DGSA60ES-2RS	115	6°	M52x3,00	485000	245000	5,90	-	111,30 €
DGSA70ES-2RS	125	6°	M56x4,00	564000	315000	8,20	-	136,04 €
DGSA80ES-2RS	140	6°	M64x4,00	689000	400000	13,10	-	203,22 €

*Depending on availability - Dimensions in mm

DGSI DGSI2RS

Steel/steel contact

- DIN 648, series E, shape B, ISO 6126
- Material: steel C45

Maintenance

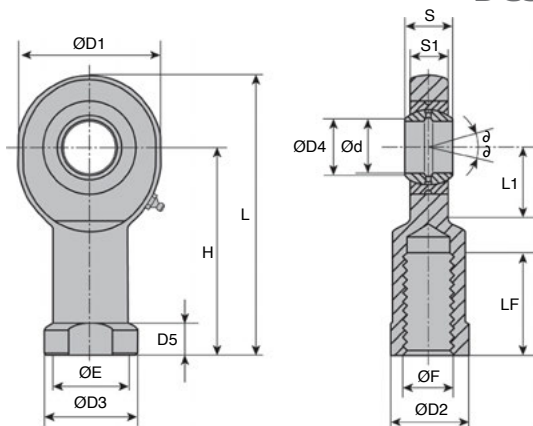
- Some maintenance required (except **DGSI-E** models)
- (1): No maintenance
- (2): Lubrication through hole in the head of the rod end

Economy range



Part number	Ød	S	ØD4	H	ØD1	ØD3	ØE	ØD2	D5	S1	L	L1
Without seal												
DGSI6E(1)	6 ^{+0.008}	6 ^{+0.12}	8,0	30	21	13	10,5	11	5,0	4,3	40,5	10,5
DGSI8E(1)	8 ^{+0.008}	8 ^{+0.12}	10,2	36	24	15	12,0	13	5,0	6,0	48,0	12,0
DGSI10E(1)	10 ^{+0.008}	9 ^{+0.12}	13,2	43	29	18	15,0	15	6,5	7,0	57,5	14,0
DGSI12E(1)	12 ^{+0.008}	10 ^{+0.12}	15,0	50	34	20	17,0	18	6,5	8,0	67,0	17,5
DGSI15ES(2)	15 ^{+0.008}	12 ^{+0.12}	18,4	61	40	24	20,0	21	8,0	10,0	81,0	20,0
DGSI17ES(2)	17 ^{+0.008}	14 ^{+0.12}	20,7	67	46	28	23,0	24	10,0	11,0	90,0	23,0
DGSI20ES	20 ^{+0.010}	16 ^{+0.12}	24,1	77	53	35	27,5	32	10,0	13,0	103,5	27,5
DGSI25ES	25 ^{+0.010}	20 ^{+0.12}	29,3	94	64	42	33,5	36	12,0	17,0	126,0	32,0
DGSI30ES	30 ^{+0.010}	22 ^{+0.12}	34,2	110	73	50	40,0	41	15,0	19,0	146,5	37,0
With seal												
DGSI35ES-2RS	35 ^{+0.012}	25 ^{+0.12}	39,7	125	82	58	47,0	50	15,0	21,0	166,0	42,0
DGSI40ES-2RS	40 ^{+0.012}	28 ^{+0.12}	45,0	142	92	65	52,0	55	18,0	23,0	188,0	48,0
DGSI45ES-2RS	45 ^{+0.012}	32 ^{+0.12}	50,7	145	102	70	58,0	60	20,0	27,0	196,0	52,0
DGSI50ES-2RS	50 ^{+0.012}	35 ^{+0.12}	56,0	160	112	75	62,0	65	20,0	30,0	216,0	59,0
DGSI60ES-2RS	60 ^{+0.015}	44 ^{+0.15}	66,8	175	135	88	70,0	75	20,0	38,0	242,0	75,0
DGSI70ES-2RS	70 ^{+0.015}	49 ^{+0.15}	77,8	200	160	98	85,0	80	20,0	42,0	280,0	87,0
DGSI80ES-2RS	80 ^{+0.015}	55 ^{+0.15}	89,4	230	180	110	95,0	100	25,0	47,0	320,0	100,0

Dimensions in mm



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number	LF	Angle δ	ØF	Load capacity Static (N)	Dynamic (N)	Weight (kg)	Stock*	Price each 1 to 5
Without seal								
DGSI6E	11	13°	M6x1,00	8100	3400	0,02	✓	9,50 €
DGSI8E	15	15°	M8x1,25	12900	5500	0,04	✓	9,50 €
DGSI10E	20	12°	M10x1,50	17600	8100	0,06	✓	9,50 €
DGSI12E	24	11°	M12x1,75	24500	10800	0,09	✓	10,57 €
DGSI15ES	30	8°	M14x2,00	36000	17000	0,18	✓	10,57 €
DGSI17ES	34	10°	M16x2,00	45000	21200	0,22	✓	15,84 €
DGSI20ES	40	9°	M20x1,50	60000	30000	0,35	✓	17,28 €
DGSI25ES	48	7°	M24x2,00	83000	48000	0,64	✓	17,28 €
DGSI30ES	56	6°	M30x2,00	110000	62000	0,93	-	22,57 €
With seal								
DGSI35ES-2RS	60	6°	M36x3,00	146000	80000	1,30	-	26,45 €
DGSI40ES-2RS	67	7°	M39x3,00	180000	100000	2,01	-	46,95 €
DGSI45ES-2RS	65	7°	M42x3,00	240000	127000	2,50	-	58,29 €
DGSI50ES-2RS	69	6°	M45x3,00	290000	156000	3,50	-	75,95 €
DGSI60ES-2RS	73	6°	M52x3,00	450000	245000	5,50	-	111,30 €
DGSI70ES-2RS	80	6°	M56x4,00	610000	315000	8,60	-	167,86 €
DGSI80ES-2RS	85	6°	M64x4,00	750000	400000	12,00	-	212,06 €

*Depending on availability - Dimensions in mm

Male rod ends **DIN ISO 12240-4**

CMM_{RH} Steel/self-lubricating bronze contact **CMM_{LH}**

- Male threaded rod end conforming to DIN ISO 12240-4 K series

- Static axial load = 0.2 x static radial load

- Materials:

Sphere: Steel 100CG ground and polished

Insert: Bronze

Housing:

sizes 5 to 12- low carbon steel

sizes 16 to 35 - high carbon steel alloy,
surface is galvanised and passivated

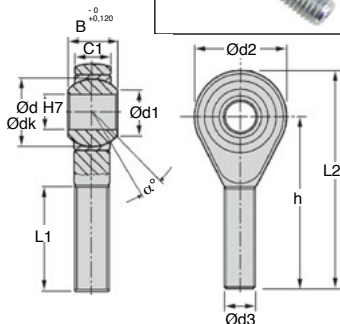
- Working temperature: -30°C to +120°C
(150°C occasionally)

Advantages

- Self-lubricating
- No maintenance
- Bearing surface wear-resistant
- Low friction

Uses

- Oscillating movements



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	Ød	Ød3	B	C1	Ød1	Ød2	Ødk	h	L1	L2
CMM.00.05	5	M5 x 0,8	8	6,00	7,70	18	11,112	33	19	42
CMM.00.06	6	M6 x 1	9	6,75	8,90	20	12,700	36	21	46
CMM.00.08	8	M8 x 1,25	12	9,00	10,40	24	15,875	42	25	54
CMM.00.10	10	M10 x 1,5	14	10,50	12,90	28	19,050	48	28	62
CMM.00.12	12	M12 x 1,75	16	12,00	15,40	32	22,225	54	32	70
CMM.00.16	16	M16 x 2	21	15,00	19,30	42	28,575	66	37	87
CMM.00.20	20	M20 x 2,5	25	18,00	24,30	50	34,925	78	45	103

Part number		Radial static load F _s (daN)	Axial holding load of the ball (daN)	Movement angle α°	Weight (g)	Stock* RH	Stock* LH	Price each 1 to 5	
RH threading	LH threading							RH	LH
CMM.00.05/RH	CMM.00.05/LH	300	100	13	15	✓	-	18,02 €	20,77 €
CMM.00.06/RH	CMM.00.06/LH	400	120	13	22	✓	✓	10,98 €	12,72 €
CMM.00.08/RH	CMM.00.08/LH	800	170	14	38	✓	✓	11,60 €	13,44 €
CMM.00.10/RH	CMM.00.10/LH	1 300	200	13	63	✓	✓	13,03 €	15,07 €
CMM.00.12/RH	CMM.00.12/LH	1 700	270	13	100	✓	✓	15,82 €	18,28 €
CMM.00.16/RH	CMM.00.16/LH	4 800	550	15	195	✓	✓	34,46 €	39,80 €
CMM.00.20/RH	-	5 200	600	14	370	✓	-	52,65 €	-

*Depending on availability - Dimensions in mm

Steel/self-lubricating bronze contact

CFF_{RH} CFF_{LH}

- Female threaded rod end conforming to DIN ISO 12240-4 K series

- Materials:

Sphere: Steel 100CG ground and polished

Insert: Bronze

Housing:

sizes 5 to 12- low carbonised steel

sizes 16 to 35 - high carbon steel alloy,

surface is galvanised and passivated

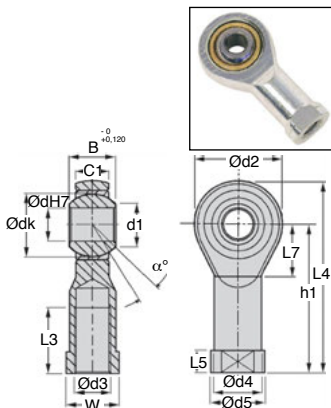
- Working temperature: -30°C to +120°C
(150°C occasionally)

Advantages

- Self-lubricating
- No maintenance
- Bearing surface wear-resistant
- Low friction

Usage

- Oscillating movements



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	Ød	Ød3	B	C1	Ød1	Ød2	Ød4	Ød5	Ødk	h1	L3	L4	L5	L7	W
CFF.00.05	5	M5x0,8	8	6,00	7,70	18	9,00	11	11,112	27	10	36	4,00	10	9
CFF.00.06	6	M6x1	9	6,75	8,90	20	10,00	13	12,700	30	12	40	5,00	11	11
CFF.00.08	8	M8x1,25	12	9,00	10,40	24	12,50	16	15,875	36	16	48	5,00	13	14
CFF.00.10	10	M10x1,5	14	10,50	12,90	28	15,00	19	19,050	43	20	57	6,50	15	17
CFF.00.12	12	M12x1,75	16	12,00	15,40	32	17,50	22	22,225	50	22	66	6,50	17	19
CFF.00.16	16	M16x2	21	15,00	19,30	42	22,00	27	28,575	64	28	85	8,00	23	22
CFF.00.20	20	M20x2,5	25	18,00	24,30	50	27,50	34	34,925	77	33	102	10,00	27	30
CFF.00.30	30	M30x2	37	25,00	34,80	70	40,00	50	50,800	110	51	145	15,00	36	41
CFF.00.35	35	M36x2	43	28,00	37,70	80	46,00	58	57,150	125	56	165	17,00	41	50

Part number	Radial static load F _s (daN)	Axial holding load of the ball (daN)	Movement angle α°	Weight (g)	Stock* RH	Stock* LH	Price each 1 to 5 RH	Price each 1 to 5 LH
RH threading	LH threading							
CFF.00.05/RH	CFF.00.05/LH	600	100	13	19	✓	✓	12,82 € 14,83 €
CFF.00.06/RH	CFF.00.06/LH	700	120	13	26	✓	✓	10,98 € 12,72 €
CFF.00.08/RH	CFF.00.08/LH	1 200	170	14	46	✓	✓	11,54 € 13,35 €
CFF.00.10/RH	CFF.00.10/LH	1 400	200	13	76	✓	✓	13,03 € 15,07 €
CFF.00.12/RH	CFF.00.12/LH	1 900	270	13	110	✓	✓	15,82 € 18,28 €
CFF.00.16/RH	CFF.00.16/LH	4 800	550	15	220	✓	✓	31,75 € 36,65 €
CFF.00.20/RH	CFF.00.20/LH	5 200	600	14	409	✓	-	57,40 € 66,23 €
CFF.00.30/RH	CFF.00.30/LH	10 800	1 200	17	1 140	✓	-	135,52 € 156,39 €
CFF.00.35/RH	CFF.00.35/LH	12 400	1 400	19	1 600	-	-	166,23 € 191,82 €

*Depending on availability - Dimensions in mm

CMMss Stainless steel/self-lubricating bronze

- Male threaded rod end conforming to DIN ISO 12240-4 K series

- Materials:

Sphere: Stainless steel 420, ground and polished

Insert: self lubricating bronze

Housing: Stainless steel 304

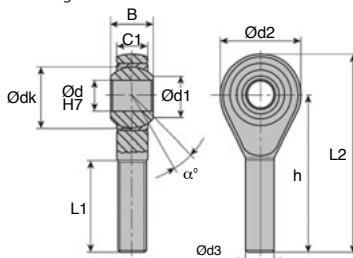


Advantages

- Self-lubricating
- No maintenance
- Bearing surface resistant to wear
- Low friction

Uses

- Oscillating movements



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	Ød	Ød3	B	C1	Ød1	Ød2	Ødk	h	L1	L2
CMM.00.06/RH/SS	6	M6x1,00	9	6,75	8,90	20	12,700	36	21	46
CMM.00.08/RH/SS	8	M8x1,25	12	9,00	10,40	24	15,875	42	25	54
CMM.00.10/RH/SS	10	M10x1,50	14	10,50	12,90	28	19,050	48	28	62
CMM.00.12/RH/SS	12	M12x1,75	16	12,00	15,40	32	22,225	54	32	70
CMM.00.16/RH/SS	16	M16x2,00	21	15,00	19,30	42	28,575	66	37	87
CMM.00.20/RH/SS	20	M20x2,50	25	18,00	24,30	50	34,925	78	45	103

Part number	Radial static load F _s (daN)	Axial holding load of the ball (daN)	Movement angle α°	Weight (g)	Stock*	Price each 1 to 5
CMM.00.06/RH/SS	400	120	13°	21	✓	51,80 €
CMM.00.08/RH/SS	800	170	14°	40	✓	64,17 €
CMM.00.10/RH/SS	1300	200	13°	64	✓	79,17 €
CMM.00.12/RH/SS	1700	270	13°	97	✓	93,13 €
CMM.00.16/RH/SS	4800	550	15°	208	-	172,85 €
CMM.00.20/RH/SS	5200	600	14°	367	-	195,90 €

*Depending on availability - Dimensions in mm

Stainless steel/self-lubricating bronze contact CFFss

- Female threaded rod end conforming to DIN ISO 12240-4

K series

- Materials:

Sphere: Stainless steel 420,
ground and polished
Insert: self lubricating bronze
Housing: Stainless steel 304

Economy range

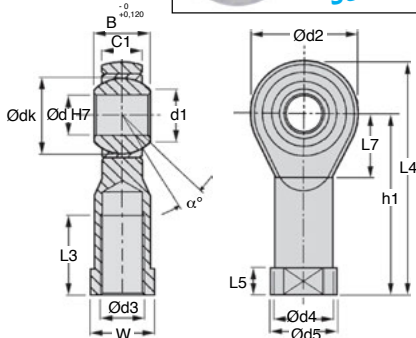


Advantages

- Self-lubricating
- No maintenance required
- Bearing surface resistant to wear
- Low friction

Uses

- Oscillating movements



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	Ød	Ød3	B	C1	Ød1	Ød2	Ød4	Ød5	Ødk	h1	L3	L4	L5	L7	W
CFF.00.06/SS	6	M60x1	9	6,75	8,90	20	10,00	13	12,70	30	12	40	5,00	11	11
CFF.00.08/SS	8	M80x1,25	12	09,00	10,40	24	12,50	16	15,90	36	16	048	05,00	13	14
CFF.00.10/SS	10	M10x1,5	14	10,50	12,90	28	15,00	19	19,10	43	20	057	06,50	15	17
CFF.00.12/SS	12	M12x1,75	16	12,00	15,40	32	17,50	22	22,22	50	22	066	06,50	17	19
CFF.00.16/SS	16	M16x2	21	15,00	19,30	42	22,00	27	28,60	64	28	085	08,00	23	22
CFF.00.20/SS	20	M20x2,5	25	18,00	24,30	50	27,50	34	34,90	77	33	102	10,00	27	30

Part number RH threading	Radial static load F _s (daN)	Axial holding load of the ball (daN)	Movement angle α°	Weight (g)	Stock*	Price each 1 to 5
CFF.00.06/RH/SS	700	120	13	25	✓	51,80 €
CFF.00.08/RH/SS	1 200	170	14	46	✓	64,17 €
CFF.00.10/RH/SS	1 400	200	13	75	✓	79,17 €
CFF.00.12/RH/SS	1 900	270	13	112	✓	93,13 €
CFF.00.16/RH/SS	4 800	550	15	222	-	172,85 €
CFF.00.20/RH/SS	5 200	600	14	406	-	195,90 €

*Depending on availability - Dimensions in mm

- Male threaded rod end

- Axial static load = 0.2 x radial static load

- Materials:

Housing: stainless steel 303

Insert: stainless steel 303

Sphere: stainless steel 420

Coating UNIFLON®

between ring and ball

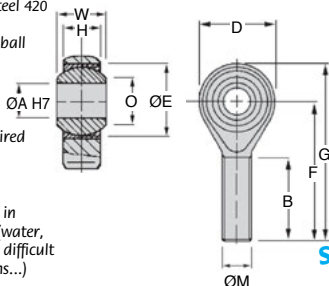
Swiss precision

Advantages

- Long life expectancy
- Low friction
- No maintenance required
- Corrosion resistant

Uses

- Oscillating movement in hostile environments (water, salt, dampness, other difficult atmospheric conditions...)



stainless steel

DISCOUNTS

Qty	1+	10+	24+
Disc.	List	-20%	On request

Part number	ØA	B	D	F	G	H	ØM	O	W
SME3.45	3	15	12	27	33	4,50	M3 x 0,50	05,18	06
SME5.45	5	20	16	33	41	6,00	M5 x 0,80	07,71	08
SME6.45	6	22	18	36	45	6,75	M6 x 1	08,96	09
SME8.45	8	25	22	42	53	9,00	M8 x 1,25	10,40	12
SME10.45	10	29	26	48	61	10,50	M10 x 1,50	12,92	14
SME12.45	12	33	30	54	69	12,00	M12 x 1,75	15,43	16
SME14.45	14	36	34	60	77	13,50	M14 x 2	16,86	19
SME16.45	16	40	38	66	85	15,00	M16 x 2	19,39	21
SME18.45	18	44	42	72	93	16,50	M18 x 1,50	21,89	23

Part number	Radial static load (daN)	Sphere ØE	Weight (g)	Price each 1 to 9
SME3.45	50	7,93	5	198,57 €
SME5.45	150	11,11	13	139,57 €
SME6.45	210	12,70	19	141,94 €
SME8.45	400	15,88	35	122,53 €
SME10.45	600	19,05	57	151,08 €
SME12.45	770	22,23	87	172,30 €
SME14.45	940	25,40	120	286,75 €
SME16.45	1140	28,58	170	320,00 €
SME18.45	1370	31,75	240	497,09 €

Dimensions in mm

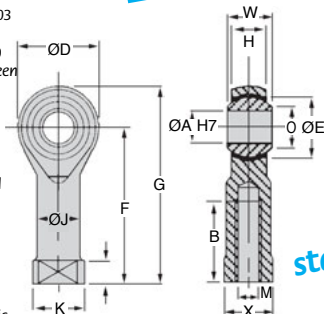
- **Female threaded rod end**
- Axial static load = 0.2 x radial static load
- Materials:
Housing: stainless steel 303
Insert: stainless steel 303
Sphere: stainless steel 420
Coating: UNIFLON® between ring and sphere

Advantages

- Long life expectancy
- Low friction
- No maintenance required
- Corrosion resistant

Uses

- Oscillating movement in hostile environments (water, salt, dampness, other difficult atmospheric conditions...)



Swiss precision



stainless steel

DISCOUNTS

Qty	1+	10+	24+
Disc.	List	-20%	On request

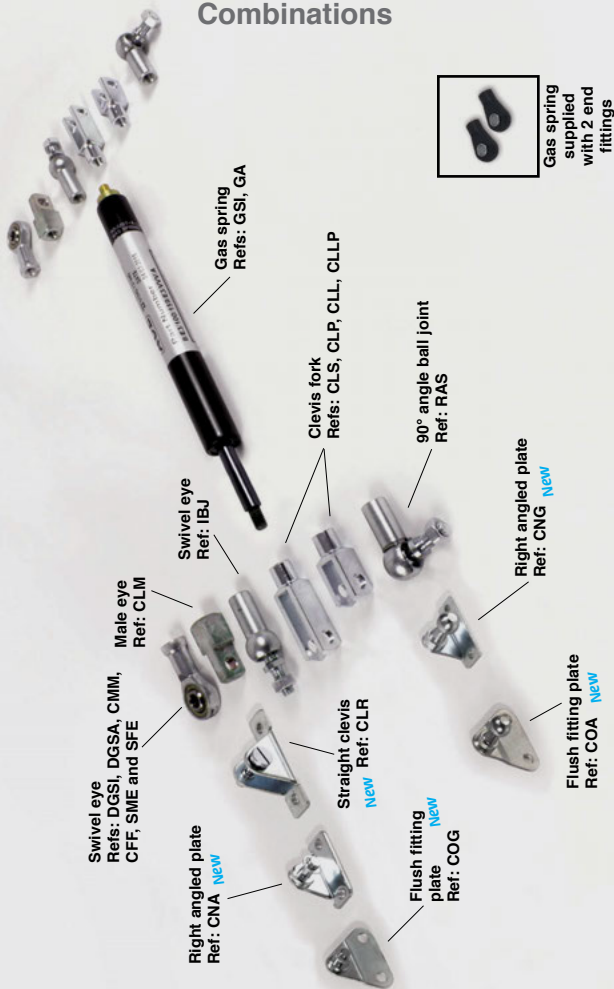
Part number	ØA	B	ØD	F	G	H	ØJ	K	L	M	O	W	X
SFE3.45	3	10	12	21	27	4,50	5,00	6,50	3,00	M3 x 0,50	5,18	6	5,50
SFE5.45	5	14	16	27	35	6,00	7,50	9,50	4,00	M5 x 0,80	7,71	8	8,00
SFE6.45	6	14	18	30	39	6,75	9,50	12,00	5,00	M6 x 1	8,98	9	10,00
SFE8.45	8	17	22	36	47	9,00	12,50	16,00	5,00	M8 x 1,25	10,40	12	13,00
SFE10.45	10	20	26	43	56	10,50	15,00	19,00	6,50	M10 x 1,50	12,92	14	16,00
SFE12.45	12	22	30	50	65	12,00	17,50	22,00	6,50	M12 x 1,75	15,43	16	18,00
SFE14.45	14	27	34	57	74	13,50	20,00	25,00	8,00	M14 x 2	16,86	19	21,00
SFE16.45	16	33	38	64	83	15,00	22,00	27,00	8,00	M16 x 2	19,39	21	24,00
SFE18.45	18	36	42	71	92	16,50	25,00	31,00	10,00	M18 x 1,50	21,89	23	27,00

Part number	Radial static load (daN)	Sphere ØE	Weight (g)	Price each 1 to 5
SFE3.45	160	6,00	7	198,57 €
SFE5.45	250	11,11	14	129,44 €
SFE6.45	300	12,70	22	115,16 €
SFE8.45	450	15,88	38	122,53 €
SFE10.45	600	19,05	70	149,10 €
SFE12.45	770	22,23	110	172,26 €
SFE14.45	940	25,40	150	167,32 €
SFE16.45	1140	28,58	200	303,54 €
SFE18.45	1370	31,75	280	540,80 €

Dimensions in mm

Gas spring accessories

Combinations



For use with a male clevis

CLR
CLRss

- For fixing a gas spring

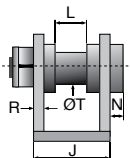
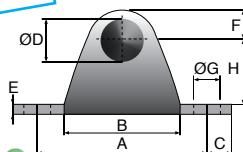
- Materials:

Steel

316L stainless steel

Advantages

- Allows gas springs to be mounted using a mounting plate and a CLM male clevis

**NEW!****DISCOUNTS**

Qty	1+	6+	10+	15+	20+
Disc.	List	-10%	-15%	-20%	On request

Part number	A	B	C	E	F	ØG	H	J	ØD	ØT	N	L	R	Max load (N)	Price each 1 to 5
Steel															
CLR-6	51	36	9,5	2,5	9	6,5	20	18	13	6	4,0	6,5	2,5	500	15,46 €
CLR-8	51	36	9,5	2,5	9	6,5	20	18	13	8	4,0	13	2,5	1800	15,46 €
Stainless steel															
CLR-6/SS	51	36	9,5	2,5	9	6,5	20	18	13	6	4,0	6,5	2,5	500	110,64 €
CLR-8/SS	51	36	9,5	2,5	9	6,5	20	18	13	8	4,0	13	2,5	1800	101,71 €

Dimensions in mm

Surface mounting plate

NewSteSta

COA
COG

For ball joint or clevis

- For fixing a gas spring

- Materials:

Steel

316L stainless steel

Advantages

- Allows gas springs to be mounted by combining a mounting plate with a RAS/IBJ ball joint or a CLM clevis

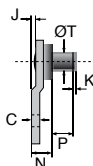
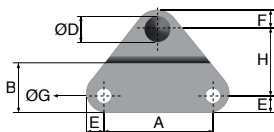
NEW!

steel or
stainless steel



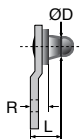
COA

COG



COA

Use with a clevis



COG

Use with a ball joint

DISCOUNTS

Qty	1+	6+	10+	15+	20+
Disc.	List	-10%	-15%	-20%	On request

Use with a clevis

Part number	Steel	S/steel	A	B	C	E	F	ØG	H	J	K	ØT	N	P	Max load (N)	Price each 1 to 5	Steel	S/steel
COA-4	-		18	13	1,5	5	5	4,3	16	1	2	4	4,5	4,5	180	15,23 €	-	
COA-6	COA-6/SS		18	13	1,5	5	5	4,3	15,6	1	2,5	6	6,5	6,5	180	15,46 €	11,73 €	
COA-8	COA-8/SS		55	23	3	7	10	5,3	30	2	5	8	10,0	11	1200	15,46 €	11,81 €	

Use with a ball joint

Part number	Steel	S/steel	A	B	C	E	F	ØG	H	J	ØD	L	R	Max load (N)	Price each 1 to 5	Steel	S/steel
COG-3,5	-		18	13	1,5	5	5	4,3	16	1	8	13,5	5,5	180	14,75 €	-	
COG-5	COG-5/SS		18	13	1,5	5	5	4,3	15,6	1	8	13,5	5,5	180	15,46 €	11,73 €	
COG-8	COG-8/SS		55	23	3	7	10	5,3	30	2	13	17,5	8	1200	15,46 €	11,73 €	

Dimensions in mm

For ball joint or clevis

CNA
CNG

- For fixing a gas spring

- Materials:

Steel

316L stainless steel

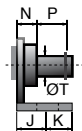
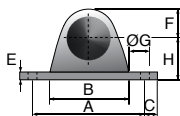
Advantages

- Allows gas springs to be mounted by combining mounting plates with a **RAS/IBJ** ball joint or a **CLS / CLL** clevis


CNA

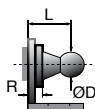
CNG

NEW!



CNA

Use with a clevis



CNG

Use with a ball joint

DISCOUNTS

Qty	1+	6+	10+	15+	20+
Disc.	List	-10%	-15%	-20%	On request

Use with a clevis

Part number	Steel	S/steel	A	B	C	E	F	ØG	H	J	K	ØT	N	P	Max load (N)	Price each 1 to 5	Steel	S/steel
CNA-4	-	-	19	16	3	1,5	4	3,4	10	5,75	4,25	4	3,5	4,5	180	13,30 €	-	-
CNA-6	CNA-6/SS	-	40	34	5	2	10	5,3	16	10	10	6	6,0	7	400	15,46 €	44,92 €	-
CNA-8	CNA-8/SS	-	40	34	5	2	10	5,3	16	10	10	8	7,0	11	1800	15,46 €	44,92 €	-

Use with a ball joint

Part number	Steel	S/steel	A	B	C	E	F	ØG	H	J	K	ØD	L	R	Max load (N)	Price each 1 to 5	Steel	S/steel
CNG-3,5	-	-	19	16	3	1,5	4	3,4	10	5,75	4,25	8	12,5	4,5	180	13,30 €	-	-
CNG-5	CNG-5/SS	-	40	34	5	2	10	5,3	16	10	10	8	13	5	400	15,46 €	44,92 €	-
CNG-8	CNG-8/SS	-	40	34	5	2	10	5,3	16	10	10	13	14,5	5	1800	15,46 €	44,92 €	-

Dimensions in mm

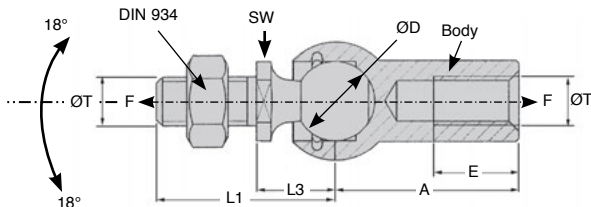
180° ball and socket joints



IBJ

Steel/steel contact

- In line ball and socket joint similar to DIN71802
- Body conforms to DIN 71805
- Shank conforms to DIN71803
- Material: zinc plated steel



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	ØD	ØT	A	L1	L3	E	SW	Axial load F (N)	Weight (kg)	Stock*	Price each 1 to 5
IBJ-5	8	M5	22	19,2	9	10,2	7	30	0,015	✓	4,91 €
IBJ-6	10	M6	25	23,5	11	11,5	8	40	0,025	✓	6,28 €
IBJ-8	13	M8	30	29,5	13	14,0	11	60	0,053	✓	6,65 €
IBJ-10	16	M10	35	36,0	16	15,5	13	80	0,104	✓	9,21 €
IBJ-14x1.5	19	M14x1,5	45	48,0	20	21,5	16	100	0,221	✓	23,48 €

*Depending on availability - Dimensions in mm

Steel/steel or stainless steel/stainless steel contact **RAS** **RASs**

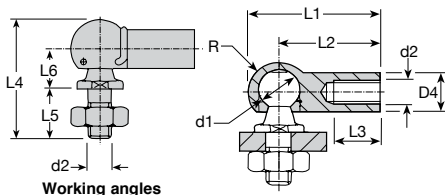
- **Conforms to DIN 71802**
- Working angle: Lateral $\pm 15^\circ$
Front to back $\pm 18^\circ$
- Materials:
passivated galvanised steel
stainless steel 303
- Retained in housing by a fastener
- For the left hand threaded version, only the female part has a left hand thread

steel or stainless steel

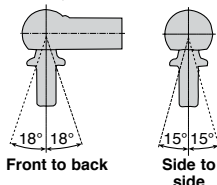


Advantages

- Wear resistant



Sizes	Fixing A/F	Max. radial and axial static force. kp
M5	7	30
M6	8	70
M8	11	150
M10	13	200
M12	13	200



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-15%	-20%	-30%	On request

Part number	Steel	S. steel	d1	d2	D4	L1	L2	L3	L4	L5	L6	R	Stock* S. Steel	Steel	Price each 1 to 5
Right hand thread															
RAS5	RAS5/SS	8	M5	8	28,5	22,0	10,2	25,0	10,2	9,0	6,4	✓	✓	✓	4,79 € 7,05 €
RAS6	RAS6/SS	10	M6	10	32,5	25,0	11,5	30,0	12,5	11,0	7,5	✓	✓	✓	4,97 € 7,22 €
RAS8	RAS8/SS	13	M8	13	39,5	30,0	14,0	38,0	16,5	13,0	9,7	✓	✓	✓	6,06 € 9,21 €
RAS10	RAS10/SS	16	M10	16	47,0	35,0	15,5	47,5	20,0	16,0	12,0	✓	✓	✓	8,17 € 16,30 €
RAS12	RAS12/SS	16	M12	16	47,0	35,0	15,0	47,5	20,0	16,0	12,0	✓	✓	✓	11,51 € 19,10 €
Left hand thread															
RAS5L	-	8	M5	8	28,5	22,0	10,5	25,0	10,2	9,0	6,4	✓	-	-	5,54 € -
RAS6L	-	10	M6	10	32,5	25,0	11,5	30,0	12,5	11,0	7,5	✓	-	-	5,59 € -
RAS8L	-	13	M8	13	39,5	30,0	14,0	38,0	16,5	13,0	9,7	✓	-	-	6,70 € -
RAS10L	-	16	M10	16	47,0	35,0	15,5	47,5	20,0	16,0	12,0	✓	-	-	8,82 € -
RAS12L	-	16	M12	16	47,0	35,0	15,0	47,5	20,0	16,0	12,0	✓	-	-	13,66 € -

*Depending on availability - Dimensions in mm

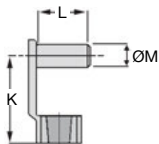
CLS CLP

Steel

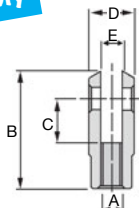
- Clevis of linkage
- Material: Medium hard steel 9S Mn Pb28, R= 500 N/mm²
- Conforms to DIN 71752
- **Not sold individually, please contact us for details**



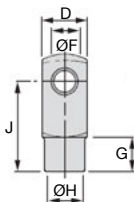
Quick assembly



CLP Clip



CLS Clevis



DISCOUNTS

Qty	1+	6+	20+	50+	100+	250+
Disc.	List	-10%	-20%	-30%	-40%	On request

Clevis

Part number	A	B	C	D	E (B13)	ØF (H9)	G	ØH	J	Static load Co (daN)	Stock*	Price each 1 to 5
CLS-4	M4 x 0,70	21	8	8	4	4	6,00	8	16	320	✓	2,09 €
CLS-5	M5 x 0,80	26	10	10	5	5	7,50	9	20	500	✓	1,64 €
CLS-6	M6 x 1,00	31	12	12	6	6	9,00	10	24	720	✓	1,45 €
CLS-8	M8 x 1,25	42	16	16	8	8	12,00	14	32	1280	✓	1,84 €
CLS-10	M10 x 1,50	52	20	20	10	10	15,00	18	40	2000	✓	2,65 €
CLS-12	M12 x 1,75	62	24	24	12	12	18,00	20	48	2880	✓	4,93 €
CLS-16	M16 x 2,00	83	32	32	16	16	24,00	26	64	5120	✓	10,11 €
CLS-10C	M10 x 1,25	52	20	20	10	10	15,00	18	40	-	✓	2,80 €
CLS-12C	M12 x 1,25	62	24	24	12	12	18,00	20	48	-	✓	4,93 €
CLS-16C	M6 x 1,50	83	32	32	16	16	24,00	26	64	-	✓	10,17 €

Spring clip

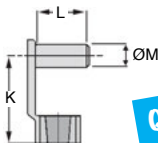
Part number	K	L	ØM	Stock*	Price each 1 to 5
CLP-4	15	9	4	✓	0,67 €
CLP-5	19	12	5	✓	0,72 €
CLP-6	23	14	6	✓	0,72 €
CLP-8	31	19	8	✓	0,67 €
CLP-10	39	23	10	✓	0,78 €
CLP-12	47	28	12	✓	1,30 €
CLP-16	62	36	16	✓	2,22 €

*Depending on availability - Dimensions in mm

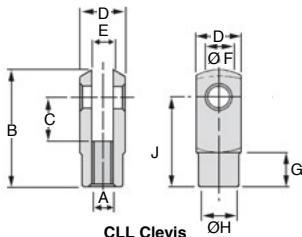
Steel

CLL CLLP

- Material: Medium hard steel 9S Mn Pb28, R= 500 N/mm²
- Conforms to DIN 71752
- **Not sold individually, please contact us for details**



CLLP Clip



CLL Clevis

Quick assembly



DISCOUNTS

Qty	1+	6+	20+	50+	100+	250+
Disc.	List	-10%	-20%	-30%	-40%	On request

Clevis

Part number	A	B	C	D	E (B13)	ØF (H9)	G	ØH	J	Static load Co (daN)	Stock*	Price each 1 to 5
CLL-5	M5 x 0,80	36	20	10	5	5	7,50	9	30	500	✓	1,68 €
CLL-6	M6 x 1,00	43	24	12	6	6	9,00	10	36	720	✓	1,80 €
CLL-8	M8 x 1,25	58	32	16	8	8	12,00	14	48	1280	✓	2,60 €
CLL-10	M10 x 1,5	72	40	20	10	10	15,00	18	60	2000	✓	4,34 €
CLL-12	M12 x 1,75	86	48	24	12	12	18,00	20	72	2880	✓	7,01 €

Spring clip

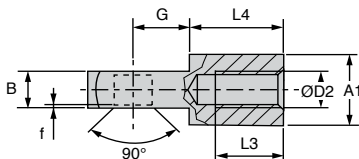
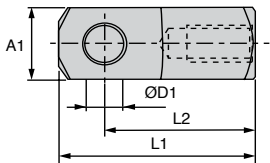
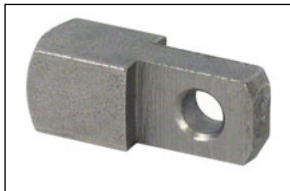
Part number	K	L	ØM	Stock*	Price each 1 to 5
CLLP-5	29	12	5	✓	0,72 €
CLLP-6	35	14	6	✓	0,72 €
CLLP-8	47	19	8	✓	0,78 €
CLLP-10	59	23	10	✓	0,88 €
CLLP-12	71	28	12	✓	1,48 €

*Depending on availability - Dimensions in mm

CLM CLMss

Steel or stainless steel

- Clevis of linkage
- Threaded end piece for clevis conforming to DIN71752, short version
- Steel 11SMnPb30+C, galvanised
- Stainless steel 303



DISCOUNTS

Qty	1+	6+	20+	50+	100+	250+
Disc.	List	-10%	-20%	-30%	-40%	On request

Part number	ØD1 H9	ØD2	B	A1 h11	L1 +/-0,5	L2 +/-0,3	L3	L4 +/-0,2	G +/-0,5	f +/-0,2	Masse (g)	Prix Uni. 1 à 5
Steel model												
CLM-4	4	M4x0,7	4	8	21	16	6	10,0	6,0	0,5	6	2,63 €
CLM-5	5	M5x0,8	5	10	26	20	8	12,5	7,5	0,5	12	2,42 €
CLM-6	6	M6x1	6	12	31	24	11	15,0	9,0	0,5	21	3,11 €
CLM-8	8	M8x1,25	8	16	42	32	14	20,0	12,0	0,5	51	4,35 €
CLM-10	10	M10x1,5	10	20	52	40	18	25,0	15,0	0,5	98	6,19 €
CLM-12	12	M12x1,75	12	24	62	48	22	30,0	18,0	0,5	168	11,13 €
CLM-16	16	M16x2	16	32	83	64	30	40,0	24,0	1,0	397	15,78 €
Stainless steel model												
CLM-4/SS	4	M4x0,7	4	8	21	16	6	10,0	6,0	0,5	6	8,35 €
CLM-5/SS	5	M5x0,8	5	10	26	20	8	12,5	7,5	0,5	12	7,29 €
CLM-6/SS	6	M6x1	6	12	31	24	11	15,0	9,0	0,5	21	10,25 €
CLM-8/SS	8	M8x1,25	8	16	42	32	14	20,0	12,0	0,5	51	11,36 €
CLM-10/SS	10	M10x1,5	10	20	52	40	18	25,0	15,0	0,5	98	17,47 €
CLM-12/SS	12	M12x1,75	12	24	62	48	22	30,0	18,0	0,5	168	32,02 €
CLM-16/SS	16	M16x2	16	32	83	64	30	40,0	24,0	1,0	397	56,90 €

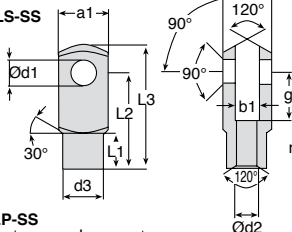
*Depending on availability - Dimensions in mm

With stainless steel circlips

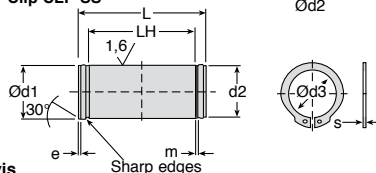
CLSs
CLPss

- Chape de tringlerie
- Material: stainless steel 303
- To DIN 71752, DIN 471-UNI7435
- Spring clip supplied with 2 circlips

Clevis CLS-SS



Clip CLP-SS



Clevis

Sharp edges

stainless steel

Clip
CLP-SS

CLS-SS



CLP-SS

DISCOUNTS

Qty.	1+	6+	20+	50+	100+	250+
Disc.	List	-10%	-20%	-30%	-40%	On request

Part number	Ød2 (6H)	b1 (B13)	a1 (h11)	a2	Ød1 (h9)	±0,3 d3	±0,2 L1	±0,5 L3	±0,3 L2	±0,5 g	Static load Co (daN)	Stock*	Price each 1 to 5
CLS-5SS	M5	5	10	10 ^{+0,30 -0,16}	5	9	7,5	26	20	10	500	✓	6,31 €
CLS-6SS	M6	6	12	12 ^{+0,30 -0,16}	6	10	9,0	31	24	12	720	✓	6,85 €
CLS-8SS	M8	8	16	16 ^{+0,30 -0,16}	8	14	12,0	42	32	16	1280	✓	15,00 €
CLS-10CSS	M10x1,25	10	20	20 ^{+0,30 -0,16}	10	18	15,0	52	40	20	-	✓	25,13 €
CLS-12SS	M12x1,75	12	24	24 ^{+0,30 -0,16}	12	20	18,0	62	48	24	2880	✓	32,64 €
CLS-16CSS	M16x1,5	16	32	32 ^{+0,30 -0,16}	16	26	24,0	83	64	32	-	✓	75,18 €
CLS-20CSS	M20x1,5	20	40	40 ^{+0,50 -0,20}	20	34	30,0	105	80	40	-	-	107,72 €

Spring clip

References	Ød1 (h11)	d2	L ^{+0,3}	LH ^{+0,3}	m (H13)	e	Circlip size s (h11)	Stock*	Price each 1 to 5	
CLP-5SS	5	4,8 ^{+0 -0,048}	15,0	10,5	0,7	0,5	4,7 ^{+0,04 -0,15}	0,6	✓	2,75 €
CLP-6SS	6	5,7 ^{+0 -0,048}	17,0	12,5	0,8	0,5	5,6 ^{+0,04 -0,15}	0,7	✓	3,15 €
CLP-8SS	8	7,6 ^{+0 -0,058}	21,5	16,5	0,9	0,5	7,4 ^{+0,06 -0,18}	0,8	✓	3,34 €
CLP-10SS	10	9,6 ^{+0 -0,058}	26,0	20,5	1,1	0,5	9,3 ^{+0,1 -0,36}	1,0	✓	4,02 €
CLP-12SS	12	11,5 ^{+0 -0,110}	31,0	24,5	1,1	1,0	11,0 ^{+0,1 -0,36}	1,0	✓	4,63 €
CLP-16SS	16	15,2 ^{+0 -0,110}	40,0	32,5	1,1	1,0	14,7 ^{+0,1 -0,36}	1,0	✓	7,15 €
CLP-20SS	20	19,0 ^{+0 -0,130}	50,0	40,5	1,3	1,5	18,5 ^{+0,13 -0,42}	1,2	-	12,76 €

*Depending on availability - Dimensions in mm

Swivelling base clevis

CLS-R
CLL-R

Long and short ranges

- Clevis similar to DIN71752

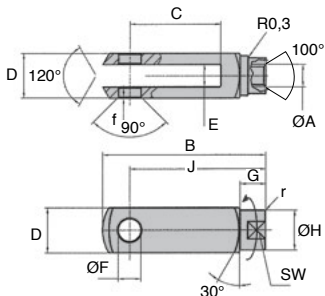
- Materials:

Steel 11SMnPb30

white galvanised finish

Advantages

- The possibility to make adjustments after installation removes the need to have a left-handed thread



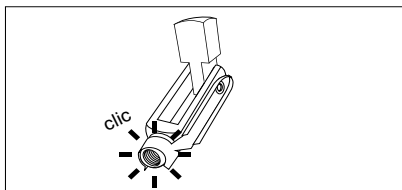
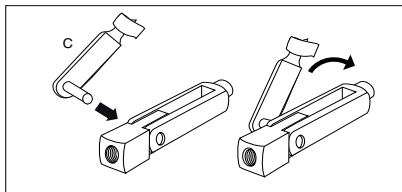
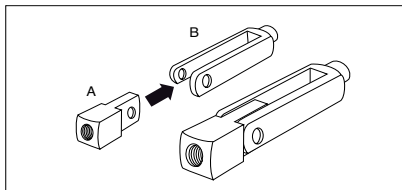
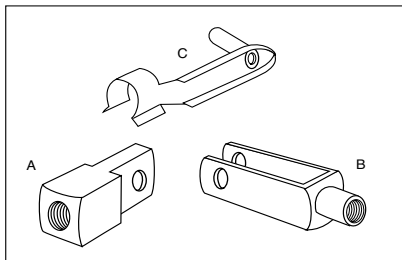
DISCOUNTS

Qty	1+	6+	20+	50+	100+	250+
Disc.	List	-10%	-20%	-30%	-40%	On request

Part number	ØA	B	C (+/-0,5)	D	E	ØF (H9)	G	ØH	J	SW	Static load Co(daN)	Price each 1 to 5
Short range												
CLS-5R	M5x0,8	36	20	10	5	5	4	8,8	30	7	80	5,33 €
CLS-6R	M6x1	43	24	12	6	6	5,6	10,2	36	9	240	5,63 €
CLS-8R	M8x1,25	42	16	16	8	8	8,2	14	32	12	340	5,86 €
CLS-10R	M10x1,5	52	20	20	10	10	11,8	17,8	40	16	600	6,97 €
CLS-12R	M12x1,75	62	24	24	12	12	14	20	48	18	1400	8,48 €
Long range												
CLL-8R	M8x1,25	58	32	16	8	8	8,2	14	48	12	340	6,51 €
CLL-10R	M10x1,5	72	40	20	10	10	11,5	17,8	60	16	600	7,86 €
CLL-12R	M12x1,75	86	48	24	12	12	14	20	72	18	1400	11,58 €

Dimensions in mm

Instruction notice



PRECISION LINEAR ROTARY



p.150

COMPACT PRECISION SLIDE

stainless
steel



p.160

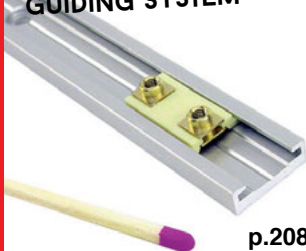
LINEAR BALL SLIDE

stainless
steel



p.170

DRYLIN® N MINIATURE GUIDING SYSTEM



p.208

DRYLIN® W GUIDING SYSTEM



p.214

END CAP



p.234

PRECISION LINEAR BEARING



p.241

LINEAR GUIDE p.150 - 289

UTILITRACK® 3 WHEEL CARRIAGE



p.258

HALF-RAIL GUIDE



p.268

CAM FOLLOWER



p.278

CAM FOLLOWER LUBRICATING UNIT



p.285



LSAG IKO

LSAGc

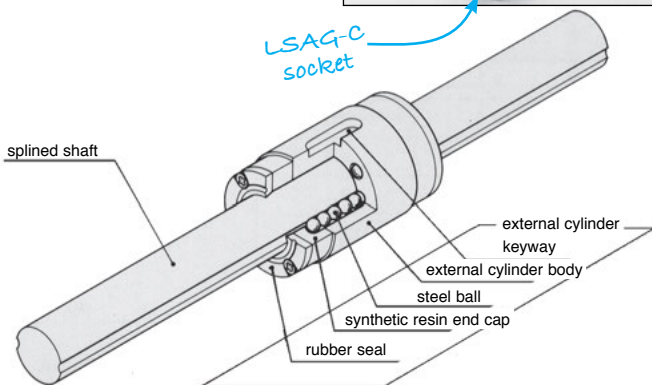
LSAGF-C

Introduction



LSAGF-C
socket

LSAG-C
socket



The LSAG series of linear ball splines consists of a splined shaft and an external cylinder. Two rows of rotating balls are housed in the external cylinder and turn on tracks in the shaft. These tracks have been precision-ground and allow **an almost unlimited lateral movement**. The splines stop the cylinder from rotating around the shaft. **It is therefore impossible to drive the cylinder in rotation**. The splined shaft and the external cylinder can be replaced easily.

As with the linear slide rule series, the concept of two tracks for rotating balls having four point contact has been put in place for this simple, compact, and efficient linear system. **This series is suited to applications requiring a smooth lateral movement and a precise angle positioning** such as LCD manufacturing machines, integrated circuit production, industrial robots, measuring apparatus, etc...

Two types of external cylinder: the standard type **LSAG-C** and the flanged type **LSAGF-C** are available thus covering the majority of most applications.

User safety

The normal continuous operating temperature of the LWL linear slides is 100°C with occasional use at up to 120°C. If your application will exceed 100°C, please contact us for advice. When mounting two or more cylinders on to one shaft, we recommend only attaching one cylinder with a key, with the proviso that the moment of rotation could be supported by a single cylinder. Where it is necessary to use two (or more) keys to attach two (or more) cylinders or to assemble two cylinders end-to-end, please consult us.

Adjusting the cylinder

Generally, a transition fit (J7) is required between the external cylinder of and the housing bore. When high accuracy and rigidity are not required, a clearance fit (H7) may also be acceptable.

Load capacity and life expectancy

Basic dynamic load

The basic dynamic load rating is defined as a constant load, both in direction and magnitude to which a group of identical LSAG linear splines are subjected individually and where 90% of the slides in that group can travel for 50km without suffering material damage due to rolling contact fatigue.

Basic static load capacity

The basic static load rating (Figure 1) is defined as a static load that gives a prescribed constant stress at the centre of the contact area between the rolling element and track whilst receiving the maximum load.

Dynamic torque

The dynamic torque rating is defined as the moment of rotation at constant load, both in direction and magnitude to which a group of identical LSAG linear splines are subjected individually and where 90% of the slides in that group can travel for 50km without suffering material damage due to rolling contact fatigue.

Static moment of torsion and static moment

The static torque (figure 1) and the static moment (figure 2) are defined as exerting a constant contact at the centre of the contact zone of the moving parts and the tracks where the maximum load is exerted. The T_x values in the tables apply to one cylinder or to two cylinders placed end-to-end.

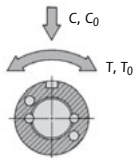


Figure 1 Load direction and torque

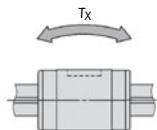


Figure 2 Moment direction

Life expectancy

The life expectancy of LSAG linear rotary ball splines can be calculated using the following formula:

$$L = 50 \left(\frac{C}{f_w Fr} \right)^3 \quad (1)$$

$$L = 50 \left(\frac{T}{f_w Fr} \right)^3 \quad (2)$$

where:

L : Life expectancy in kilometres (or 10^3m)

Fr : calculated radial load

C : Basic Dynamic load capacity (N)

Ft : moment of torsion

T : Dynamic load (N)

f_w : load factor (see table 1)

In applications where the stroke length and the number of strokes per minute are known, the life expectancy in hours can be calculated as follows:

$$L_h = \frac{10^6 L}{2 S n_1 \times 60} \quad (3)$$

L_h : Life expectancy in hours (**h**) **S** : Stroke length (mm)

n₁ : Number of strokes per minute (**spm**)

Table 1 Load factor

Operating conditions	f _w
Smooth working without vibrations and/or shocks	1.0 ~ 1.2
Normal working	1.2 ~ 1.5
Working with vibrations and/or shocks	1.5 ~ 3.0

Static security factor

Excessively heavy loads or violent shocks can cause permanent damage to the balls or tracks, causing the overall performance to suffer. The acceptable load will depend on the working conditions and the application, the factor of safety will be determined based on these requirements.

The static safety factor of the LSAG series splined cylindrical linear ball guidance models is calculated using the formula below. Common values are given in table 2.

f_s : static safety factor

C₀ : basic static load capacity

$$f_s = \frac{C_0}{P_0} \quad (4)$$

P₀ : static load

P_{ro} : static radial load

T₀ : static torque

P_{to} : static moment

Table 2 Static safety factor

Operating conditions	fs
Smooth working without vibrations and/or shocks	3 ~ 5
Normal working	2 ~ 4
Working with vibrations and/or shocks	1 ~ 3

Splined shaft

The geometrical moment of inertia of the section and the shaft section modulus are given in table 3.

Table 3 Geometrical moment of inertia of the section and shaft section modulus

PART NUMBER	Geometrical moment of inertia (mm ⁴)		Section modulus (mm ³)	
	Compact shaft	Hollow shaft	Compact shaft	Hollow shaft
LSAG(T) 5 R	29	29	12	12
LSAG(T) 6 R	61	61	21	21
LSAG(T) 8 R	190	190	49	49
LSAG(T) 10 R	470	460	95	94
LSAG(T) 12 R	990	960	170	160

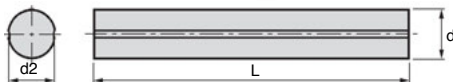
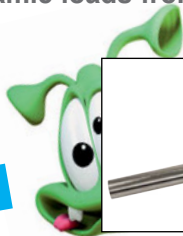
Lubrication and dust protection

LSAG splined slides are supplied lubricated with a Lithium soap based grease containing extreme pressure additives.

LSAG series precision linear rotary ball splines are protected from dust by special rubber seals. In a particularly polluted atmosphere, for example where sand or swarf can fall on to the shaft, we recommend you install protection for the whole shaft.

- Shafts and cylindrical slides have separate part numbers, remember to order both
- 2 rows of ball which prevent the cylinder from rotating
- Material: Steel

Anti-rotation

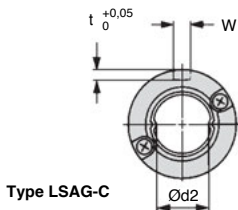


DISCOUNTS

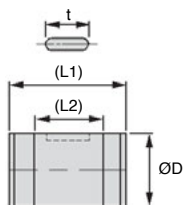
Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Ød	Ød2	L	Max. length (mm)	Type of cylinder	Weight / 100mm (g)	Stock*	Price each 1 to 4
LSAG5-100	5 0/0.012	4,2	100	200	-	14,9	✓	64,00 €
LSAG5-150	5 0/0.012	4,2	150	200	-	14,9	-	95,64 €
LSAG5-200	5 0/0.012	4,2	200	200	-	14,9	-	130,58 €
LSAG5-C	5 0/0.012	-	Cylinder	-	Standard	-	✓	92,51 €
LSAG5F-C	5 0/0.012	-	Cylinder	-	Flanged	-	✓	111,56 €
LSAG6-150	6 0/0.012	5,2	150	300	-	19,0	✓	89,23 €
LSAG6-200	6 0/0.012	5,2	200	300	-	19,0	-	124,36 €
LSAG6-250	6 0/0.012	5,2	250	300	-	19,0	-	158,05 €
LSAG6-300	6 0/0.012	5,2	300	300	-	19,0	-	191,18 €
LSAG6-C	6 0/0.012	-	Cylinder	-	Standard	-	✓	95,64 €
LSAG6F-C	6 0/0.012	-	Cylinder	-	Flanged	-	-	114,87 €
LSAG8-150	8 0/0.015	7,0	150	500	-	39,0	✓	76,42 €
LSAG8-200	8 0/0.015	7,0	200	500	-	39,0	-	95,64 €
LSAG8-250	8 0/0.015	7,0	250	500	-	39,0	-	121,07 €
LSAG8-300	8 0/0.015	7,0	300	500	-	39,0	-	145,60 €
LSAG8-400	8 0/0.015	7,0	400	500	-	39,0	-	197,56 €
LSAG8-500	8 0/0.015	7,0	500	500	-	39,0	-	255,05 €
LSAG8-C	8 0/0.015	-	Cylinder	-	Standard	-	✓	98,75 €
LSAG8F-C	8 0/0.015	-	Cylinder	-	Flanged	-	-	117,96 €
LSAG10-200	10 0/0.015	8,9	200	600	-	60,5	✓	64,00 €
LSAG10-300	10 0/0.015	8,9	300	600	-	60,5	-	102,04 €
LSAG10-400	10 0/0.015	8,9	400	600	-	60,5	✓	140,11 €
LSAG10-500	10 0/0.015	8,9	500	600	-	60,5	-	178,55 €
LSAG10-600	10 0/0.015	8,9	600	600	-	60,5	-	216,97 €
LSAG10-C	10 0/0.015	-	Cylinder	-	Standard	-	✓	105,33 €
LSAG10F-C	10 0/0.015	-	Cylinder	-	Flanged	-	✓	125,11 €

*Depending on availability - Dimensions in mm

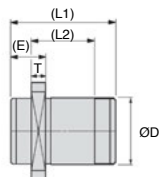
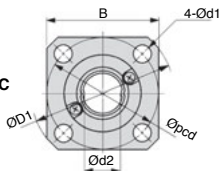


Type LSAG-C



Part number	Weight (g)	ØD	L1	L2	W	I	t	Basic dynamic load C (N)	Basic static load Co (N)	Dynamic torque T (Nm)	Static torque To (Nm)	Static moment Tx (Nm) ⁽¹⁾
LSAG5-C	4,8	10 ^{0/-0,09}	18	9,4	2,0	6,0	1,2	588	637	1,76	1,96	1,08 7,84
LSAG6-C	8,9	12 ^{0/-0,011}	21	12,4	2,0	8,0	1,2	715	852	2,45	3,04	1,76 11,76
LSAG8-C	15,5	15 ^{0/-0,013}	35	14,6	2,5	8,5	1,5	1176	1372	5,49	6,17	3,23 21,56
LSAG10-C	31,5	19 ^{0/-0,013}	30	18,2	3,0	11,0	1,8	1862	2156	10,78	12,74	6,96 41,16

Type LSAGF-C

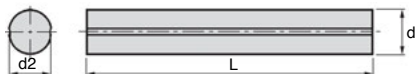


Part number	Weight (g)	ØD	L1	L2	ØD1	B	E	T	Øpcd	Ød1
LSAG5F-C	8,9	10 ^{0/-0,09}	18	9,4	23	18	7	2,7	17	3,4
LSAG6F-C	13,9	12 ^{0/-0,011}	21	12,4	25	20	7	2,7	19	3,4
LSAG8F-C	23,5	15 ^{0/-0,013}	25	14,6	28	22	9	3,8	22	3,4
LSAG10F-C	45,0	19 ^{0/-0,013}	30	18,2	36	28	10	4,1	28	4,5

Part number	Basic dynamic load C (N)	Basic static load Co (N)	Static torque T (Nm)	Static torque To (Nm)	Static moment Tx (Nm) ⁽¹⁾
LSAG5F-C	588	637	1,76	1,96	1,08 7,84
LSAG6F-C	715	852	2,45	3,04	1,76 11,76
LSAG8F-C	1176	1372	5,49	6,17	3,23 21,56
LSAG10F-C	1862	2156	10,78	12,74	6,96 41,16

(1) Tx: The values in the second column are for two cylinders in close contact

- Shafts and cylindrical slides have separate part numbers, remember to order both
- 2 rows of ball which prevent the cylinder from rotating
- Material: Steel

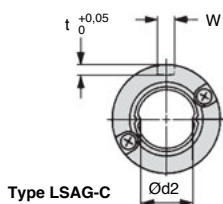


DISCOUNTS

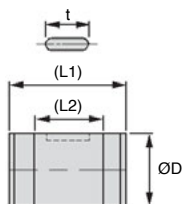
Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Ød	Ød2	L	Max. length (mm)	Type of cylinder	Weight / 100mm (g)	Stock*	Prix Uni. 1 à 4
LSAG12-200	12,0 Ø0,018	10,9	200	800	-	87,5	✓	64,00 €
LSAG12-300	12,0 Ø0,018	10,9	300	800	-	87,5	-	98,75 €
LSAG12-400	12,0 Ø0,018	10,9	400	800	-	87,5	✓	140,49 €
LSAG12-800	12,0 Ø0,018	10,9	800	800	-	87,5	-	312,13 €
LSAG12-C	12,0 Ø0,018	-	Cylinder	-	Standard	-	✓	114,87 €
LSAG12F-C	12,0 Ø0,018	-	Cylinder	-	Flanged	-	✓	131,32 €
LSAG15-200	13,6 Ø0,018	11,6	200	1000	-	111,0	✓	64,00 €
LSAG15-300	13,6 Ø0,018	11,6	300	1000	-	111,0	-	102,04 €
LSAG15-400	13,6 Ø0,018	11,6	400	1000	-	111,0	-	146,52 €
LSAG15-C	13,6 Ø0,018	-	Cylinder	-	Standard	-	-	127,68 €
LSAG15F-C	13,6 Ø0,018	-	Cylinder	-	Flanged	-	✓	151,11 €
LSAG20-300	18,2 Ø0,021	15,7	300	1000	-	202,0	✓	95,64 €
LSAG20-400	18,2 Ø0,021	15,7	400	1000	-	202,0	✓	133,90 €
LSAG20-500	18,2 Ø0,021	15,7	500	1000	-	202,0	-	178,55 €
LSAG20-600	18,2 Ø0,021	15,7	600	1000	-	202,0	-	223,00 €
LSAG20-1000	18,2 Ø0,021	15,7	1000	1000	-	202,0	-	426,87 €
LSAG20-C	18,2 Ø0,021	-	Cylinder	-	Standard	-	✓	146,52 €
LSAG20F-C	18,2 Ø0,021	-	Cylinder	-	Flanged	-	✓	190,63 €
LSAG25-300	22,6 Ø0,021	19,4	300	1200	-	310,0	-	108,29 €
LSAG25-400	22,6 Ø0,021	19,4	400	1200	-	310,0	-	127,47 €
LSAG25-500	22,6 Ø0,021	19,4	500	1200	-	310,0	-	210,39 €
LSAG25-600	22,6 Ø0,021	19,4	600	1200	-	310,0	-	235,81 €
LSAG25-800	22,6 Ø0,021	19,4	800	1200	-	310,0	-	302,80 €
LSAG25-1100	22,6 Ø0,021	19,4	1100	1200	-	310,0	-	508,49 €
LSAG25-1200	22,6 Ø0,021	19,4	1200	1200	-	310,0	-	576,57 €
LSAG25-C	22,6 Ø0,021	-	Cylinder	-	Standard	-	-	168,82 €
LSAG25F-C	22,6 Ø0,021	-	Cylinder	-	Flanged	-	-	223,00 €
LSAG30-400	27,2 Ø0,021	23,5	400	1200	-	450,0	-	191,18 €
LSAG30-500	27,2 Ø0,021	23,5	500	1200	-	450,0	-	229,42 €
LSAG30-600	27,2 Ø0,021	23,5	600	1200	-	450,0	-	274,08 €
LSAG30-700	27,2 Ø0,021	23,5	700	1200	-	450,0	-	324,96 €
LSAG30-800	27,2 Ø0,021	23,5	800	1200	-	450,0	-	375,47 €
LSAG30-1100	27,2 Ø0,021	23,5	1100	1200	-	450,0	-	560,66 €
LSAG30-1200	27,2 Ø0,021	23,5	1200	1200	-	450,0	-	624,35 €
LSAG30-C	27,2 Ø0,021	-	Cylinder	-	Standard	-	-	191,18 €
LSAG30F-C	27,2 Ø0,021	-	Cylinder	-	Flanged	-	-	262,54 €

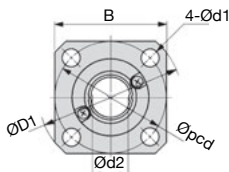
*Depending on availability - Dimensions in mm



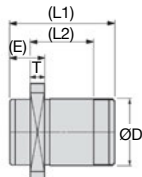
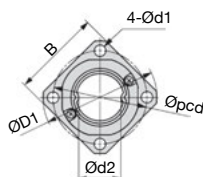
Type LSAG-C



Part number	Weight (g)	ØD	L1	L2	W	I	t	Basic dynamic load C (N)	Basic static load Co (N)	Dynamic torque T (Nm)	Static torque To (Nm)	Static moment Tx (Nm) ⁽¹⁾
LSAG5-C	4,8	10 ^{0/-0,09}	18	9,4	2,0	6,0	1,2	588	637	1,76	1,96	1,08
LSAG6-C	8,9	12 ^{0/-0,011}	21	12,4	2,0	8,0	1,2	715	852	2,45	3,04	1,76
LSAG8-C	15,5	15 ^{0/-0,013}	35	14,6	2,5	8,5	1,5	1176	1372	5,49	6,17	3,23
LSAG10-C	31,5	19 ^{0/-0,013}	30	18,2	3,0	11,0	1,8	1862	2156	10,78	12,74	6,96



Type LSAGF-C



Part number	Weight (g)	ØD	L1	L2	ØD1	B	E	T	Øpcd	Ød1
LSAG12F-C	59	21 ^{0/-0,013}	35	23,0	38	30	10	4,0	30	4,5
LSAG15F-C	77	23 ^{0/-0,013}	40	27,0	40	31	11	4,5	32	4,5
LSAG20F-C	150	30 ^{0/-0,016}	50	33,0	46	35	14	5,5	38	4,5
LSAG25F-C	255	37 ^{0/-0,016}	60	39,2	57	43	17	6,6	47	5,5
LSAG30F-C	476	45 ^{0/-0,016}	70	43,0	65	50	21	7,5	54	6,6

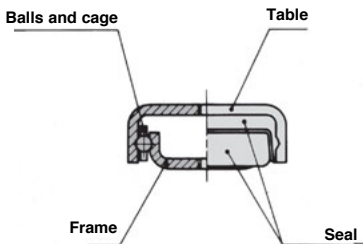
Part number	Basic dynamic load C (N)	Basic static load Co (N)	Dynamic torque T (Nm)	Static torque To (Nm)	Static moment Tx (Nm) ⁽¹⁾
LSAG12F-C	2156	2646	14,7	18,6	10,78
LSAG15F-C	4214	6076	31,4	45,0	27,44
LSAG20F-C	6566	9016	65,7	90,0	49,00
LSAG25F-C	11172	14308	139,0	178,0	93,00
LSAG30F-C	15386	19404	231,0	291,0	147,00

(1) Tx: The values in the second column are for two cylinders in close contact

Linear rail type BSP

Non Recirculating Ball version

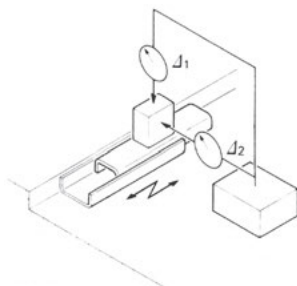
A special synthetic resin cage is used to hold the balls and eliminate ball contact noise. Extremely smooth and light movement without sticking or slipping is obtained even when stroke length is limited.



BSP linear slides are light weight and compact and comprise a U-shaped table and bed or track rail made from stainless steel sheet by precision forming. The raceway grooves are accurately ground on the table and bed or track rail. BSP linear slides offer high performance and durability, making them suitable for use in measuring equipment, IC manufacturing and inspection devices etc. They have also been successfully used as a precision linear motion guides for the read/write heads of hard disk drives.

Accuracy

The operational accuracy of the BSP linear slide is shown in the table below



Stroke length (mm)	Working parallelism between frame centre and assembly surface of the table D1 (μm)	Working parallelism between frame centre and assembly surface of the table D2 (μm)
0 to 18	0,003	0,006
18 to 30	0,004	0,008
30 to 50	0,005	0,010
50 to 80	0,006	0,012

Load rating

Basic dynamic load rating

The basic dynamic load rating is defined as a constant load, both in direction and magnitude to which a group of identical Precision Linear Slides are subjected individually and where 90% of the slides in that group can travel for 50km without suffering material damage due to rolling contact fatigue.

Basic static load rating

The basic static load rating is defined as a static load that gives a prescribed constant stress at the centre of the contact area between the rolling element and track whilst supporting the maximum load.

Life expectancy

The life expectancy of BSP linear slides is given by the following formulae:

$$L=50 \left(\frac{C}{P} \right)$$

$$Lh = \frac{10^6 L}{2Sn_1 \times 60}$$

where:

L: Life expectancy in kilometres, 10^3 m

C: Basic dynamic load rating, (N)

P: Applied load, (N)

Lh: Life expectancy in hours, (h)

S: Stroke length, (mm)

n₁: Number of strokes per minute, (spm)



Precautions when using

- 1- To obtain consistently high accuracy in operation, the applied load should not exceed 20% of the basic static load rating.
- 2- To maximize the accuracy of BSP or BSPG slides, centre the applied load over the table or bed and choose a slide length that is greater than the stroke length required.
- 3- Unevenly applied loads and high fluctuating velocities may dislocate the position of the ball cage in the sliding parts. Therefore, it is recommended that the cage is periodically repositioned to its proper location by cycling the BSP type over its full stroke length.
- 4- Precision Linear Slide does not incorporate a mechanical stop. When over stroke can be expected during normal operation, add a mechanical stop at an appropriate location.
- 5- In order to ensure smooth motion of BSP and BSR linear slides, before operating them for the first time, it is recommended to remove the rust prevention oil with a suitable cleaning agent, and then apply a high grade lubricating oil or grease to the raceways.

- **Non recirculating ball type linear slide**
- Balls contained in resin cage
- Smooth movement
- Light and compact
- U-shaped guide rail and table
- High performance
- Durability
- Max. speed: 3m/s
- Max. working temperature: +100°C (occasional +120°C)

stainless steel

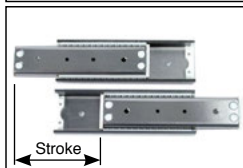


Uses

- Measuring equipment, writing head
- Hard disks, scanners

Info.

- To obtain high operating accuracy, do not exceed 20% of basic static load
- Centre the load on the rail or table.
- No stop at the end of the stroke
- Sensitive to dust: in case of contamination, clean with a chemical product then regrease with a high-grade lubricant.
- * For M2.6 holes, M2.5 screws can be used



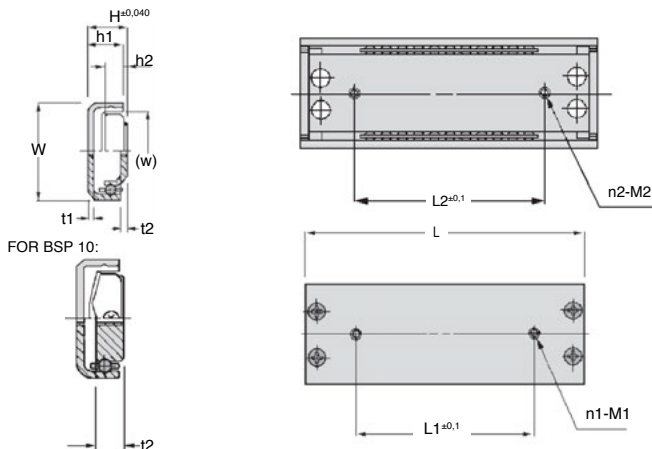
Stroke up to 63mm

DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Nominal dimensions (mm)				Max. stroke length	Table dimensions (mm)			
	W	H	L			L1	n1-M1	h1	t1
BSP1025SL	10	6	25	15	15	2-M2,6*	5,80	1,10	
BSP1035SL	10	6	35	26	25	2-M2,6*	5,80	1,10	
BSP1045SL	10	6	45	38	35	2-M2,6*	5,80	1,10	
BSP1530SL	15	8	30	22	14	2-M3	7,00	1,20	
BSP1540SL	15	8	40	24	24	2-M3	7,00	1,20	
BSP1550SL	15	8	50	32	34	2-M3	7,00	1,20	
BSP1560SL	15	8	60	40	40	2-M3	7,00	1,20	
BSP2040SL	20	10	40	22	24	2-M3	9,00	1,40	
BSP2050SL	20	10	50	28	34	2-M3	9,00	1,40	
BSP2060SL	20	10	60	34	40	2-M3	9,00	1,40	
BSP2070SL	20	10	70	40	45	2-M3	9,00	1,40	
BSP2080SL	20	10	80	53	50	2-M3	9,00	1,40	
BSP2550SL	25	10	50	26	34	2-M3	9,00	1,60	
BSP2560SL	25	10	60	32	40	2-M3	9,00	1,60	
BSP2570SL	25	10	70	40	45	2-M3	9,00	1,60	
BSP2580SL	25	10	80	51	50	2-M3	9,00	1,60	
BSP25100SL	25	10	100	63	60	2-M3	9,00	1,60	

Dimensions in mm



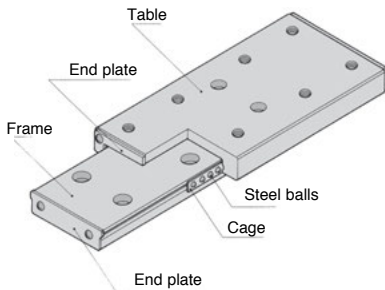
Frame dimensions (mm)					Load dynamic C (N)	Load static Co (N)	Weight (g)	Stock*	Price each. 1 to 4
w	L2	n2-M2	h2	t2					
6,20	15	2-M2,6*	3,70	2,70	294	156	6,20	✓	59,56 €
6,20	25	2-M2,6*	3,70	2,70	343	196	8,80	✓	63,79 €
6,20	35	2-M2,6*	3,70	2,70	392	235	11,30	✓	66,23 €
11,20	14	2-M3	4,50	1,20	343	196	11,00	✓	81,02 €
11,20	24	2-M3	4,50	1,20	470	303	14,70	✓	87,38 €
11,20	34	2-M3	4,50	1,20	548	382	18,40	✓	94,73 €
11,20	40	2-M3	4,50	1,20	627	460	22,10	✓	101,72 €
16,00	24	2-M3	6,20	1,40	627	382	23,70	-	95,08 €
16,00	34	2-M3	6,20	1,40	744	490	29,70	-	102,08 €
16,00	40	2-M3	6,20	1,40	852	597	35,70	-	110,83 €
16,00	45	2-M3	6,20	1,40	960	705	41,70	-	122,41 €
16,00	50	2-M3	6,20	1,40	980	764	47,60	✓	130,81 €
20,50	34	2-M3	5,70	1,60	744	490	37,60	✓	108,11 €
20,50	40	2-M3	5,70	1,60	852	597	45,30	-	118,69 €
20,50	45	2-M3	5,70	1,60	960	705	52,90	-	127,80 €
20,50	50	2-M3	5,70	1,60	980	764	60,50	-	144,72 €
20,50	60	2-M3	5,70	1,60	1170	980	75,80	-	162,10 €

*Depending on availability - Dimensions in mm

BWU linear rail

Advantages

- Consists of a robust table and frame equipped with precision balls
- Simplicity of design and compact size ensure optimum performance



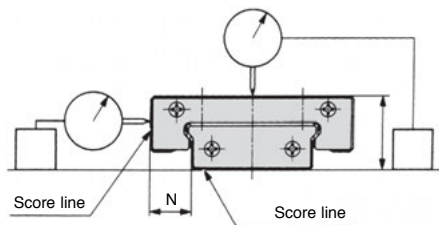
BWU linear slides act as simple and compact linear motion rolling guides for limited stroke lengths. The units incorporate steel balls assembled in two rows between a solid table and a bed, each ball making contact with the ground raceways of the table and bed at four points so that stable accuracy and high rigidity are obtained even under fluctuating or complex loads.

BWU slide units achieve highly accurate and smooth linear motion, since retainers are used to hold the steel balls in place and prevent them from touching.

The table, balls, retainers, bed, end stopper plates, etc. are made from stainless steel to give superior corrosion and heat resistance. Therefore, BWU linear slides are suitable for use in clean rooms or in medical equipment, IC manufacturing equipment, vacuum apparatus, etc.

Accuracy

The operational accuracy of the BSP linear slide is shown in the table below:



Parameter	Deviation and variation (mm)
Tolerance on H	+/- 0,040
Tolerance on N	+/- 0,050

Operational accuracy:

Nominal length of slide L du patin (mm)		Central parallelism (1)	Side parallelism (2)
from	to		
-	50	4	6
50	80	5	8
80	120	6	9

Note (1) : The value of parallelism at table centre shows the maximum variation of height measured at the table centre along the length of the stroke.

Note (2) : The value of parallelism at table side shows a maximum variation of height measured at table side along the length of the stroke.

Life expectancy

The life expectancy of BWU precision slides is given by the following formula:

$$L=50 \left(\frac{C}{P} \right)^3$$

where:

L : Life expectancy in kilometres (10^3 m)

C : Basic dynamic load rating, (N)

P : Equivalent load, (N)

Actual loads applied to the linear guide sometimes exceed the theoretically calculated load due to vibration and shocks caused by the operation of the machine. A more realistic life expectancy can be calculated using the following formula which takes the load factor into account:

$$L=50 \left(\frac{C}{f_w F_c} \right)^3$$

where:

f_w : load factor (see table)

F_c : Theoretical load (N)

In applications where the stroke length and the number of strokes per minute are known, the life expectancy in hours can be calculated as follows:

$$L_h = \frac{10^6 L}{2Sn \times 60}$$

where:

L_h : life expectancy in hours (h)

S : Stroke length (mm)

n : Number of strokes per minute (spm)

Load factor

Operating conditions	f _w
Smooth working without vibrations and/or shocks	1 ~ 1.2
Normal working	1.2 ~ 1.5
Working with shocks	1.5 ~ 3

Static security factor

The static security factor (f_s) of precision slides is calculated using the formula below, general values are given in the table:

$$f_s = \frac{C_0}{P_0}$$

for which:

f_s : static security factor

C_0 : capacity of basic static load (N)

P_0 : static load (N)

Operating conditions	f_s
Working with vibrations and/or shocks	3 ~ 5
High performance working	2 ~ 4
Normal working	1 ~ 3

Precautions of use

- 1- In order to ensure smooth motion of BWU precision slides, before operating them for the first time, it is recommended to remove the rust prevention oil with a suitable cleaning agent, and then apply a high grade lubricating oil or grease to the raceways.
- 2- BWU precision slides do not incorporate any mechanical stops. When over stroke can be expected during normal operation, add a mechanical stop at a suitable location.
- 3- To maximize the accuracy of BWU precision slides, centre the applied load over the table or bed and choose a slide length that is greater than the stroke length required.
- 3- Unevenly applied loads and high fluctuating velocities may dislocate the position of the ball cage in the sliding part. Therefore, it is recommended that the cage is periodically repositioned to its proper location by cycling the BWU precision slide over its full stroke length for a given number of strokes or for a given time.
- 5- BWU precision slides can operate at high temperatures because they contain no synthetic parts. However if the slide is required to operate at temperatures in excess of 100°C, please consult us for advice.
- 6- BWU precision slides can be operated at speeds lower than 30 metres per minute.

- Non recirculating ball type precision linear slide

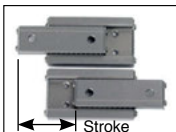
- Compact linear guide
- Limited stroke length
- 2 rows of balls
- Each ball is in contact with the 4 point slide
- Smooth and accurate movement
- Accepts fluctuating and complex loads
- Corrosion-resistant
- Max. speed: 3m/s
- Max. working temperature: +140°C (above +100°C, certain dimensions can change and the life expectancy may be reduced).



stainless steel

Uses

- Clean rooms
- Medical environments

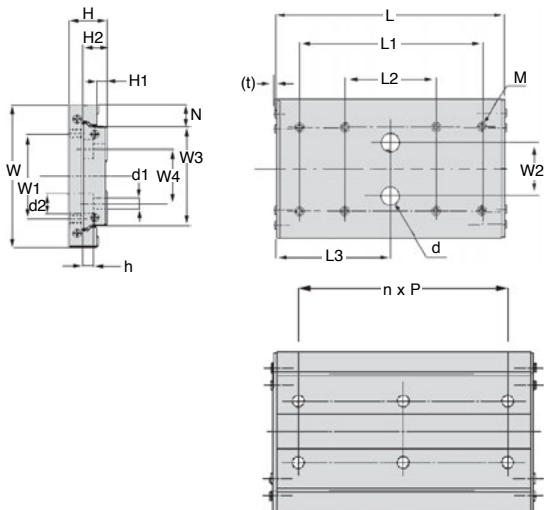


Stroke up to 66mm



Part number	Nominal dimensions (mm)											Nol. of holes M	Table dimensions (mm)						
	Table (g)	Frame (g/m)	W	H	H1	N	L	Max. stroke	W1	L1	L2		M. max depth threaded hole	W2	L3	d	t		
BWU25-45	41,60	24,30	25	9	1,80	5,50	45	26	10	25	-	4	M3 3,00	-	-	-	0,90		
BWU25-60	55,70	33,00	25	9	1,80	5,50	60	36	10	25	-	4	M3 3,00	-	-	-	0,90		
BWU25-75	68,40	40,80	25	9	1,80	5,50	75	46	10	55	25	8	M3 3,00	-	37,50	6,50	0,90		
BWU30-45	56,90	45,40	30	12	3,40	6,00	45	28	14	25	-	4	M3 3,50	-	-	-	1,00		
BWU30-60	76,10	61,50	30	12	3,40	6,00	60	34	14	25	-	4	M3 3,50	-	-	-	1,00		
BWU30-75	93,80	76,10	30	12	3,40	6,00	75	46	14	55	25	8	M3 3,50	-	37,50	6,50	1,00		
BWU40-60	125,00	93,00	40	14	3,50	8,00	60	38	20	40	-	4	M4 4,50	-	-	-	1,00		
BWU40-80	167,00	125,00	40	14	3,50	8,00	80	46	20	40	-	4	M4 4,50	-	-	-	1,00		
BWU40-100	207,00	155,00	40	14	3,50	8,00	100	62	20	80	40	8	M4 4,50	-	50,00	8,00	1,00		
BWU60-60	195,00	194,00	60	16	3,60	9,00	60	32	36	40	-	4	M4 5,00	-	-	-	1,10		
BWU60-80	261,00	261,00	60	16	3,60	9,00	80	44	36	40	-	4	M4 5,00	-	-	-	1,10		
BWU60-100	321,00	325,00	60	16	3,60	9,00	100	54	36	80	40	8	M4 5,00	23	50,00	8,00	1,10		
BWU60-120	286,00	391,00	60	16	3,60	9,00	120	66	36	100	40	8	M4 5,00	23	60,00	8,00	1,10		

*Depending on availability - Dimensions in mm



Frame dimensions (mm)									Dynamic load C (N)	Static load C (N)	Max. load F (N)	Static moment T0 (Nm)	Stock*	Price each
W3	H2	W4	n	P	No. of holes d1	d1	d2	h						
14	5,20	-	1	30	2	3,50	6,00	3,20	927	1510	504	11,3	✓	191,25 €
14	5,20	-	1	30	2	3,50	6,00	3,20	1150	2060	688	15,4	-	225,39 €
14	5,20	-	2	30	3	3,50	6,00	3,20	1360	2610	871	19,5	-	252,71 €
18	7,50	-	1	30	2	3,50	6,50	4,50	1480	2200	733	20,9	✓	218,59 €
18	7,50	-	1	30	2	3,50	6,50	4,50	1820	3180	1060	30,2	-	245,83 €
18	7,50	-	2	30	3	3,50	6,50	4,50	2220	3910	1300	37,2	✓	286,84 €
24	8,50	-	1	40	2	4,50	8,00	4,50	2390	3440	1150	43,3	✓	279,99 €
24	8,50	-	1	40	2	4,50	8,00	4,50	3090	4970	1660	62,6	✓	334,66 €
24	8,50	-	2	40	3	4,50	8,00	4,50	3580	6110	2040	77,0	-	382,43 €
42	10,00	23	1	40	4	4,50	8,00	4,50	3660	4930	2640	107,0	-	355,19 €
42	10,00	23	1	40	4	4,50	8,00	4,50	4570	6780	2260	148,0	-	423,46 €
42	10,00	23	2	40	6	4,50	8,00	4,50	5410	8630	2880	188,0	-	494,18 €
42	10,00	23	2	40	6	4,50	8,00	4,50	6200	10500	3490	228,0	-	560,04 €

*Depending on availability - Dimensions in mm

Linear ball slide

LWL **IKO**

LWLC

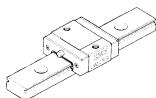
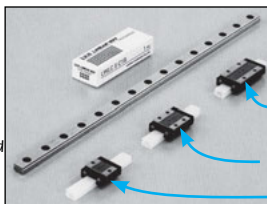
LWLC-C

LWLG-C

LWLC1H

Linear slide: LWL series with ball cage
The slides and guidance rails are stocked separately and can therefore be delivered quickly in whatever combination of size and quantities required.

Introduction

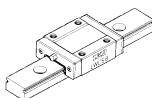


LWLC

7 to 20

<short slide

- Slide only attaches on top
- Slide length: short
- Load capacity: weak

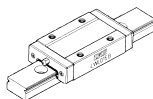


LWLG-C1H

5 to 20

<self-lubricating slide>

- Slide only attaches on top
- Slide length: normal
- Load capacity: normal

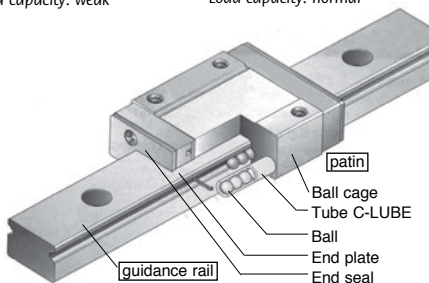


LWLG

7 to 20

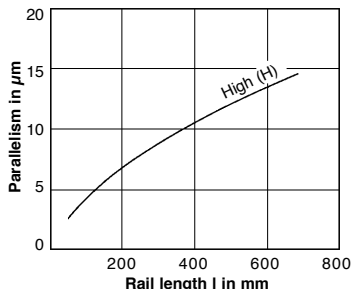
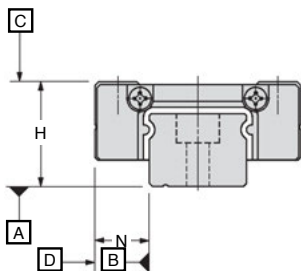
<long slide high rigidity>

- Slide only with attaches on top
- Slide length: long
- Load capacity: excellent



The LWL linear slide consists of a miniature slide and a guide rail. The two rows of precision ball bearings give four point contact with the rail thus offering accuracy, stability and rigidity even when under complex or variable loads

The stainless steel balls are held in a cage which permits easy manipulation of the slide. All the dimensions of the slides and the rails are checked individually allowing interchangeability between parts.



Accuracy

The accuracy of the LWL linear slides are given below.

Tolerance on H (mm)	±0,020
Tolerance on N ⁽²⁾ (mm)	±0,025
Variation on H ⁽¹⁾ (mm)	0,015
Variation on N ^{(2) (3)} (mm)	0,020
Parallelism between C and A (mm)	See graph below
Parallelism between D and B (mm)	See graph below

Note:

- (1) This is the difference in the dimension H between two slides mounted on the same track or on a pair of tracks when H is measured at a specified position.
- (2) This is the difference in the dimension N between two slides mounted on the same track or on a pair of tracks when N is measured at a specified position.
- (3) These values also apply to an assembly with reversed reference surfaces.

Note: These values also apply when dimensions are measured at the centre of each slide assembled on a rail attached to a flat base.

Preload

IKO LWL interchangeable linear slides are only available as standard with a preload that is equivalent to no preload or very low.

Life expectancy

The life expectancy of an LWL linear slide can be calculated using the following formula:

$$L = 50 \left(\frac{C}{P} \right)^{10/3} \quad (1)$$

where:

L : life expectancy in kilometres (or **10³ m**)

C : Basic Dynamic load capacity (**N**)

P : Applied load (**N**)

Actual loads applied to the linear guide sometimes exceed the theoretically calculated load due to vibration and shocks caused by the operation of the machine. A more realistic life expectancy can be calculated using the following formula which takes the load factor into account:

$$L = 50 \left(\frac{C}{f_w F_c} \right)^{10/3} \quad (2)$$

where:

f_w : load factor (see table 1)

F_c : Calculated theoretical load (**N**)

In applications where the stroke length and the number of strokes per minute are known, the life expectancy in hours can be calculated as follows:

$$L_h = \frac{10^6 L}{2 S n \times 60} \quad (3)$$

where:

L_h : Life expectancy in hours (**h**)

S : Stroke length (**mm**)

n : Number of strokes per minute (**spm**)

Table 1: Load factor

Operating conditions	f _w
Smooth working without vibrations and/or shocks	1 ~ 1.2
Normal working	1.2 ~ 1.5
Working with shocks	1.5 ~ 3

Static security factor

The static security factor of LWL linear slide rules is calculated using the formula below. The general values are given in table 6.

$$f_s = \frac{C_0}{(4) P_0}$$

for which:

f_s : static security factor

C₀ : Basic static load rating (**N**)

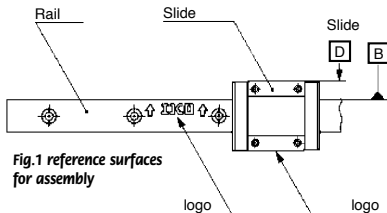
P₀ : static load (**N**)

Table 2: Static security factor

Operating conditions	f _s
Smooth working without vibrations and/or shocks	3 ~ 5
High performance working	2 ~ 4
Normal working	1 ~ 3

Assembly

To assemble LWL slides, correctly fit the slide and rail reference surfaces to the table and frame reference surfaces, then fix them together solidly.



Reference surface

The slide reference surface is always opposite the surface where the brand-name is marked. The rail reference surface is marked by the manufacturer's logo engraved on the upper surface. It is always on the side indicated by the arrows engraved with the manufacturer's logo (see fig.1).

Safety

1 Manipulation

On delivery, the slide is attached to a dummy rail. To assemble the slide onto the guidance rail, line up the grooves on the sides of the slide making sure the slide stays on the mock rail. Then carefully move the slide from the dummy rail onto the guidance rail.



2 Load considerations when multiple slide units are mounted close together

When using multiple slide units mounted close together, the actual load may be greater than the calculated load depending on the accuracy of the mounting and reference surfaces of the machine. In such a case, it is suggested to assume a greater load than that previously calculated.

3 Example of multiple slide units mounted close together

Referring to Figure 2, the reference mounting surfaces B and D of the LWL linear slides are accurately finished by grinding. Stable and high accurate linear motion will be obtained by finishing the mating mounting surfaces of machines or equipment to the same high accuracy and correctly mounting the guides on these surfaces.

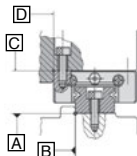


Fig. 2 Assembly example

4 Working temperature

The normal continuous operating temperature of the LWL linear slides is 100°C with occasional use at up to 120°C. If your application will exceed 100°C, please contact us for advice.

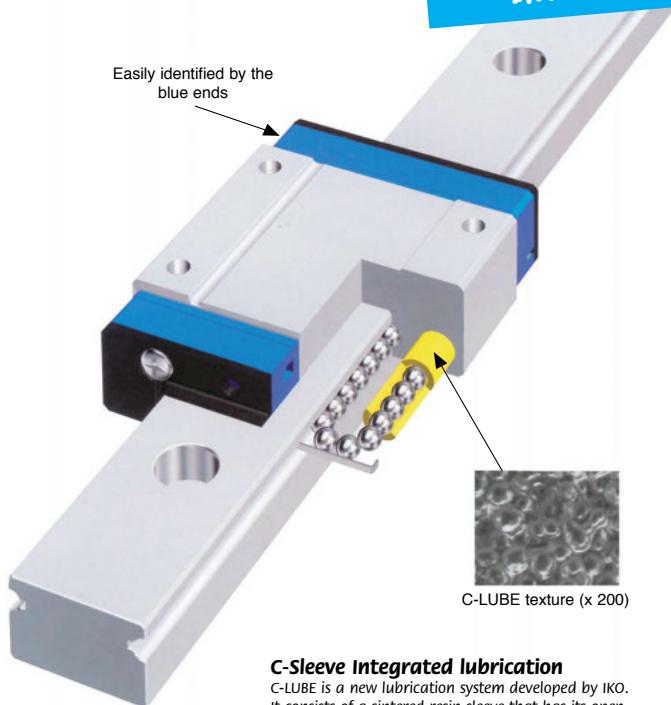
Linear ball slide

LWL **IKO**

C-LUBE self lubricating slide
for LWL slides

Use in place of standard
LWL slides

Easily identified by the
blue ends



C-LUBE texture (x 200)

C-Sleeve Integrated lubrication

C-LUBE is a new lubrication system developed by IKO. It consists of a sintered resin sleeve that has its open pores impregnated with lubricating oil.

C-LUBE with its integrated lubrication system, offers many advantages to the user

Limited maintenance

Reduced maintenance. Being self lubricating, C-LUBE slides require very infrequent maintenance (every 5 years or 20,000kms)

Light and compact

Clever design means that the self-lubricating C-LUBE slide is very compact
(Same dimensions as the LWL slides)

Smooth movement

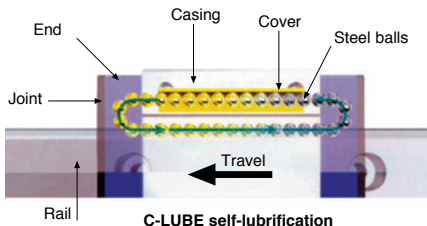
C-LUBE slides are not in contact with the track rail. This permits smooth and light slide motion without increasing the rolling resistance

Clean

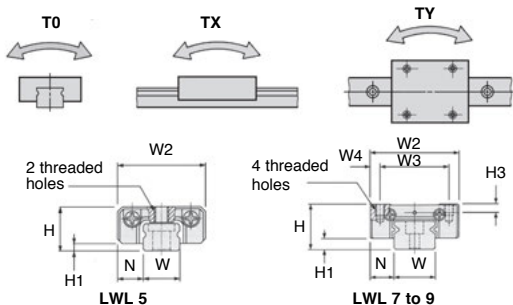
There is no risk that C-LUBE slides will spray excess lubricant to nearby machines or surfaces

In stainless steel

C-LUBE slides are manufactured in corrosion resistant stainless steel.
This makes the units suitable for applications in special environments where lubricants and corrosion protection oils are prohibited



Circulating in the slide, the steel balls pass through the C-LUBE cover and are covered in lubricant. This is then deposited on the moving parts. This means that the balls, the recirculation path and the rails are all self lubricated during use and maintenance intervals can be extended.



	LWL5C-C1H	LWL5-C1H	LWL7C-C1H	LWL7G-C1H	LWL7-C1H
Weight (g)					
Slide	3,40	4,30	7,10	9,10	14,00
rail (par 100mm)	12,00	12,00	22,00	22,00	22,00
Total dimensions (mm)					
H+/- 0,02	6,00	6,00	8,00	8,00	8,00
H1	1,00	1,00	1,50	1,50	1,50
N+/- 0,025	3,50	3,50	5,00	5,00	5,00
Slide dimensions (mm)					
W2	12,00	12,00	17,00	17,00	17,00
W3	8,00	8,00	12,00	12,00	12,00
W4	2,00	2,00	2,50	2,50	2,50
L1	16,00	19,00	19,00	23,50	31,00
L2	-	-	-	8,00	12,00
L3	9,60	12,60	9,60	14,30	21,60
M1 x depth	M2 x 1,5	M2 x 1,5	M2 x 2,5	M2 x 2,5	M2 x 2,5
H3	1,20	1,20	1,50	1,50	1,50
Rail dimensions (mm)					
W	5,00	5,00	7,00	7,00	7,00
H4	3,70	3,70	5,00	5,00	5,00
d3	2,40	2,40	2,40	2,40	2,40
d4	3,60	3,60	4,20	4,20	4,20
h	0,80	0,80	2,30	2,30	2,30
E	7,50	7,50	7,50	7,50	7,50
F	15,00	15,00	15,00	15,00	15,00
Rail fixing holes	M2 x 6	M2 x 6	M2 x 6	M2 x 6	M2 x 6
Basic dynamic load C (N)	514	612	856	1200	1510
Basic static load Co (N)	872	1130	1180	1960	2750
* Static torque					
T0 (Nm)	2,00	3,00	4,30	7,20	10,00
Tx (Nm)	1,50	2,40	1,90	4,90	9,10
	9,00	13,30	15,40	29,20	52,60
Ty (Nm)	1,20	2,00	1,60	4,10	7,70
	7,60	11,20	12,90	24,50	44,10

Data given in row T0 and first rows of Tx and Ty are for a single slide

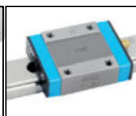
Data given in second rows of Tx and Ty are for a two slides in close contact

LWL **IKO** Dynamic load from 1070 N to 3780 N

- **Linear slide for normal loads**
- Recirculating ball type linear slide
- Material: Similar to stainless steel 440C
- Standard accuracy
- For LWL5, the ball are made of steel and are not contained
- Max. speed: 3m/s
- Max. temperature: +100°C (continuous) +120°C (occasionally)
- **Note. Rails and slides have separate part numbers, remember to order both**



Short slide
LWLC-C1H



Self-lubricating
slide LWL-C1H

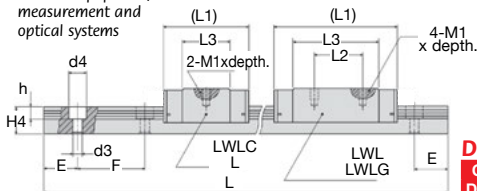
stainless steel



Long slide
LWLG-C1H

Uses

- Medical equipment, measurement and optical systems

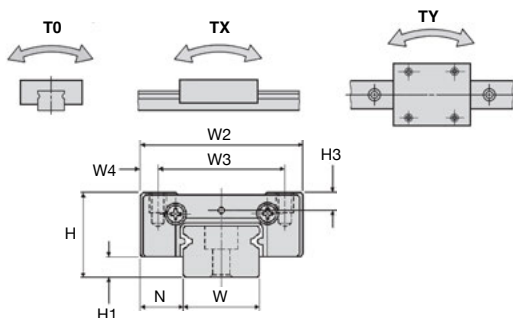


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L (mm)	No. of holes	Max. length	Type of slide	Stock*	Price each 1 to 4
LWL9-60	60	3	860	-	✓	31,40 €
LWL9-120	120	6	860	-	✓	67,69 €
LWL9-160	160	8	860	-	-	90,28 €
LWL9-240	240	12	860	-	✓	135,41 €
LWL9-280	280	14	860	-	✓	157,98 €
LWL9-480	480	24	860	-	-	270,90 €
LWL9-720	720	36	860	-	-	406,41 €
LWL9-860	860	43	860	-	-	485,38 €
LWL9C-C1H	-	Slide	-	Short Autolubricant	✓	58,37 €
LWL9G-C1H	-	Slide	-	Long Autolubricant	✓	88,66 €
LWL9-C1H	-	Slide	-	Self-lubricating	✓	73,98 €
LWL12-50	50	3	1000	-	✓	27,23 €
LWL12-100	100	4	1000	-	✓	54,57 €
LWL12-150	150	6	1000	-	✓	81,87 €
LWL12-200	200	8	1000	-	✓	109,16 €
LWL12-275	275	11	1000	-	✓	150,12 €
LWL12-350	350	14	1000	-	✓	191,11 €
LWL12-400	400	16	1000	-	✓	218,39 €
LWL12-475	475	19	1000	-	-	259,36 €
LWL12-1000	1000	40	1000	-	-	546,12 €
LWL12C-C1H	-	Slide	-	Short Autolubricant	✓	59,02 €
LWL12G-C1H	-	Slide	-	Long Autolubricant	✓	95,31 €
LWL12-C1H	-	Slide	-	Self-lubricating	✓	78,73 €

*Depending on availability - Dimensions in mm



	LWL9C-C1H	LWL9G-C1H	LWL9-C1H	LWL12C-C1H	LWL12G-C1H	LWL12-C1H
Weight (g)						
Slide	11,00	18,00	28,00	22,00	34,00	51,00
rail (par 100mm)	35,00	35,00	35,00	65,00	65,00	65,00
Total dimensions (mm)						
H+/- 0,02	10,00	10,00	10,00	13,00	13,00	13,00
H1	2,00	2,00	2,00	3,00	3,00	3,00
N+/- 0,025	5,50	5,50	5,50	7,50	7,50	7,50
Slide dimensions (mm)						
W2	20,00	20,00	20,00	27,00	27,00	27,00
W3	15,00	15,00	15,00	20,00	20,00	20,00
W4	2,50	2,50	2,50	3,50	3,50	3,50
L1	21,50	30,00	40,50	25,00	34,00	44,00
L2	-	10,00	15,00	-	15,00	20,00
L3	11,90	20,80	30,90	13,00	21,60	32,00
M1 x depth	M3 x 3	M3 x 3	M3 x 3	M3 x 3,5	M3 x 3,5	M3 x 3,5
H3	2,20	2,20	2,20	2,70	2,70	2,70
Rail dimensions (mm)						
W	9,00	9,00	9,00	12,00	12,000	12,00
H4	6,00	6,00	6,00	8,00	8,00	8,00
d3	3,50	3,50	3,50	3,50	3,50	3,50
d4	6,00	6,00	6,00	6,50	6,50	6,50
h	3,50	3,50	3,50	4,50	4,50	4,50
E	10,00	10,00	10,00	12,50	12,50	12,50
F	20,00	20,00	20,00	25,00	25,00	25,00
Rail fixing holes	M3 x 8	M3 x 8	M3 x 8	M3 x 8	M3 x 8	M3 x 8
Basic dynamic load C(N)	1070	1610	2080	2000	2960	3780
Basic static load Co (N)	1540	2860	4180	2470	4450	6430
* Static torque						
T0 (Nm)	7,20	13,30	19,40	15,30	27,60	39,90
Tx (Nm)	3,00	9,40	19,40	5,50	16,00	36,80
	22,20	53,00	16,20	43,30	96,60	19,40
Ty (Nm)	2,50	7,90	16,30	4,70	13,40	27,00
	18,60	44,50	85,60	36,30	81,10	145,00

Data given in row T0 and first rows of Tx and Ty are for a single slide

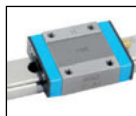
Data given in second rows of Tx and Ty are for a two slides in close contact

LWL IKO Dynamic load from 3120 N to 7350 N

- **Linear slide for normal loads**
- Recirculating ball type linear slide
- Material: Similar to stainless steel 440C
- Standard accuracy
- Max. speed: 3m/s
- Max. temperature: +100°C (continuous)
+120°C (occasionally)
- **Note. Rails and slides have separate part numbers, remember to order both**



Short slide
LWLC-C1H



Self-lubricating
slide LWL-C1H

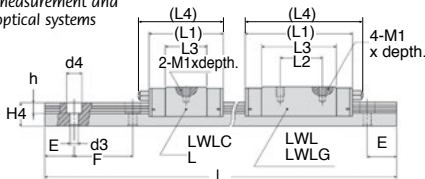
stainless steel



Long slide
LWLG-C1H

Uses

- Medical equipment, measurement and optical systems

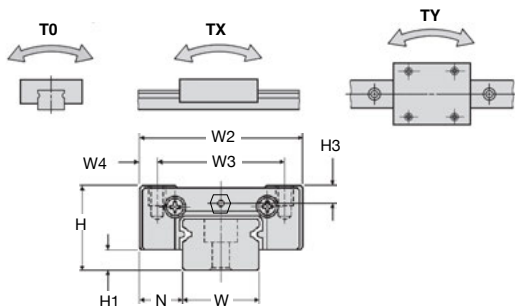


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L (mm)	No. of holes	Max length	Type of slide	Stock*	Price each 1 to 4
LWL15-80	80	2	1000	-	✓	49,34 €
LWL15-120	120	3	1000	-	✓	75,15 €
LWL15-160	160	4	1000	-	✓	100,22 €
LWL15-240	240	6	1000	-	✓	150,36 €
LWL15-320	320	8	1000	-	✓	200,52 €
LWL15-440	440	11	1000	-	-	275,73 €
LWL15-480	480	12	1000	-	-	300,82 €
LWL15-560	560	14	1000	-	-	350,95 €
LWL15-680	680	17	1000	-	-	426,21 €
LWL15-960	960	24	1000	-	-	601,68 €
LWL15-1000	1000	25	1000	-	-	626,76 €
LWL15C-C1H	-	Slide	-	Short Autolubricant	✓	65,90 €
LWL15G-C1H	-	Slide	-	Long Autolubricant	✓	106,41 €
LWL15-C1H	-	Slide	-	Self-lubricating	✓	88,66 €
LWL20-120	120	2	1440	-	✓	78,67 €
LWL20-180	180	3	1440	-	✓	118,02 €
LWL20-240	240	4	1440	-	✓	157,42 €
LWL20-360	360	6	1440	-	✓	236,14 €
LWL20-480	480	8	1440	-	✓	314,89 €
LWL20-660	660	11	1440	-	-	433,00 €
LWL20-840	840	14	1440	-	✓	551,10 €
LWL20-960	960	16	1440	-	✓	629,83 €
LWL20C-C1H	-	Slide	-	Short Autolubricant	✓	72,51 €
LWL20G-C1H	-	Slide	-	Long Autolubricant	✓	116,49 €
LWL20-C1H	-	Slide	-	Self-lubricating	✓	97,26 €

*Dans la limite du disponible - Dimensions en mm



	LWL15C-C1H	LWL15G-C1H	LWL15-C1H	LWL20C-C1H	LWL20G-C1H	LWL20-C1H
Weight (g)						
Slide	42,00	63,00	95,00	89,00	130,00	196,00
rail (par 100mm)	107,00	107,00	156,00	156,00	156,00	156,00
Total dimensions (mm)						
H+/- 0,02	16,00	16,00	16,00	20,00	20,00	20,00
H1	4,00	4,00	4,00	5,00	5,00	5,00
N+/- 0,025	8,50	8,50	8,50	10,00	10,00	10,00
Slide dimensions (mm)						
W2	32,00	32,00	32,00	40,00	40,00	40,00
W3	25,00	25,00	25,00	30,00	30,00	30,00
W4	3,50	3,50	3,50	5,00	5,00	5,00
L1	32,00	42,00	57,00	38,00	50,00	68,00
L2	-	20,00	25,00	-	25,00	30,00
L3	17,70	27,90	42,70	22,30	34,60	52,30
L4	36,00	47,00	62,00	42,00	55,00	72,00
M1 x depth	M3 x 4,0	M3 x 4,0	M3 x 4,0	M4 x 6,0	M4 x 6,0	M4 x 6,0
H3	3,10	3,10	3,10	4,20	4,20	4,20
Rail dimensions (mm)						
W	15,00	15,00	15,00	20,00	20,00	20,00
H4	10,00	10,00	10,00	11,00	11,00	11,00
d3	3,50	3,50	3,50	6,00	6,00	6,00
d4	6,50	6,50	6,50	9,50	9,50	9,50
h	4,50	4,50	4,50	5,50	5,50	5,50
E	20,00	20,00	20,00	30,00	30,00	30,00
F	40,00	40,00	40,00	60,00	60,00	60,00
Rail fixing holes	M3 x 10	M3 x 10	M3 x 10	M5 x 14	M5 x 14	M5 x 14
Basic dynamic load C(N)	3120	4390	5750	4070	5830	7350
Basic static load Co (N)	4040	6730	10100	5490	9420	13000
* Static torque						
T0 (Nm)	31,10	51,80	77,70	56,00	96,10	136,00
Tx (Nm)	12,10	30,80	66,00	80,00	54,60	106,00
	87,60	178,00	351,00	138,00	291,00	549,00
Ty (Nm)	10,00	25,90	56,00	16,90	45,80	89,00
	73,50	149,00	294,00	116,00	244,00	461,00

Data given in row T0 and first rows of Tx and Ty are for a single slide

Data given in second rows of Tx and Ty are for a two slides in close contact

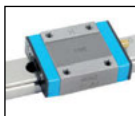
- **Linear slide for normal loads**
- Recirculating ball type linear slide
- Material: Similar to stainless steel 440C
- Standard accuracy
- Max. speed: 3m/s
- Max. temperature: +100°C (continuous)
+120°C (occasionally)
- **Note. Rails and slides have separate part numbers, remember to order both**

Uses

- Medical equipment, measurement and optical systems



Short slide
LWLC-C1H

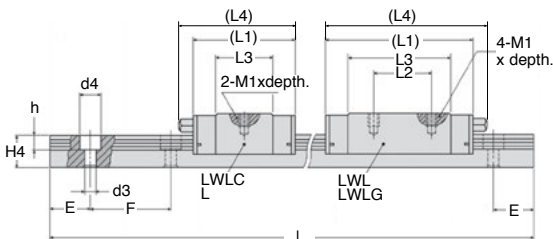


Self-lubricating
slide LWL-C1H



Long slide
LWLG-C1H

stainless steel

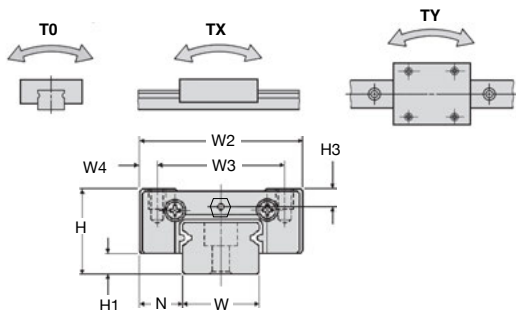


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L (mm)	N° of holes	Max length	Type of slide	Price each 1 to 4
LWL25-120	120	2	960	-	97.03 €
LWL25-240	240	4	960	-	196.96 €
LWL25-360	360	6	960	-	295.43 €
LWL25-480	480	8	960	-	393.91 €
LWL25-600	600	10	960	-	492.39 €
LWL25-720	720	12	960	-	590.87 €
LWL25-840	840	14	960	-	689.35 €
LWL25-960	960	16	960	-	787.82 €
LWL25C-C1H	-	Slide	-	Short Autolubricant	116.18 €
LWL25G-C1H	-	Slide	-	Long Autolubricant	186.60 €
LWL25-C1H	-	Slide	-	Self-lubricating	155.67 €

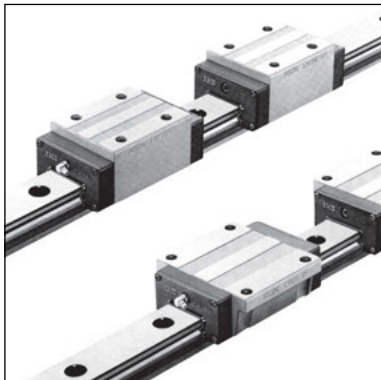
*Depending on availability - Dimensions in mm



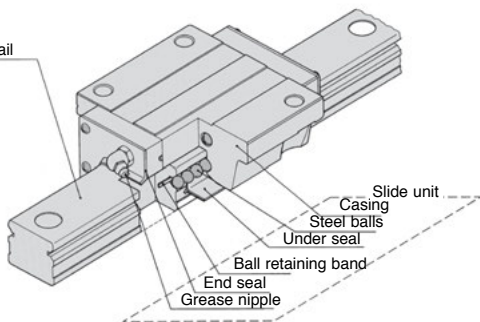
	LWL25C-C1H	LWL25-C1H	LWL25G-C1H
Weight (g)			
Slide	190	315	413
rail (par 100mm)	243	243	243
Total dimensions (mm)			
H+/- 0,02	25	25	25
H1	5	5	5
N+/- 0,025	12,5	12,5	12,5
Slide dimensions (mm)			
W2	48	48	48
W3	35	35	35
W4	6,5	6,5	6,5
L1	55	78	98
L2	-	35	40
L3	31,9	55,7	75,5
L4	65	89	108
M1 x depth	M6 x 7	M6 x 7	M6 x 7
H3	5	5	5
Rail dimensions (mm)			
W	23	23	23
H4	15	15	15
d3	7	7	7
d4	11	11	11
h	9	9	9
E	30	30	30
F	60	60	60
Rail fixing holes	M6 x 16	M6 x 16	M6 x 16
Basic dynamic load C(N)	9120	13500	16700
Basic static load Co (N)	10600	18500	25200
* Static torque			
T0 (Nm)	128	223	303
Tx (Nm)	57,4	163	293
	380	887	1480
Ty (Nm)	48,1	137	246
	319	744	1240

Data given in row T0 and first rows of Tx and Ty are for a single slide

Data given in second rows of Tx and Ty are for a two slides in close contact



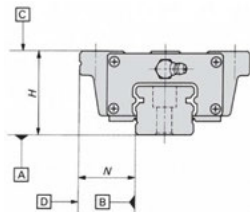
Guide rail



The LWH series of interchangeable linear guides are lateral movement guides with a high load capacity of which the stroke-length is limited only by the length of the guide rails. The dimensional accuracy of both the slides and the rails is controlled 100% during manufacture to ensure interchangeability and all components can therefore be added or replaced freely. The conception of a double track, use of large diameter steel balls in 4 point contact with the rail not only provide a accurate and repeated linear movement, but also high rigidity, even under combined or variable loads.

Accuracy

Accuracy of total assembly (mm)		
Tolerance on H		$\pm 0,040$
Tolerance on N ⁽³⁾		$\pm 0,050$
On 1	Variation on H ⁽¹⁾	0,015
total	Variation on N ⁽²⁾⁽³⁾	0,020
Variation on H for multiple units ⁽⁴⁾		0,040
Parallelism between C and A		See Fig. 1.
Parallelism entre D and B		See Fig. 1



Note (1): This is the difference in the dimension H between two slides mounted on the same track or on a pair of tracks when H is measured at a specified position.

Note (2): This is the difference in the dimension N between two slides mounted on the same track or on a pair of tracks when N is measured at a specified position.

Note (3): These values also apply when the reference surfaces are assembled opposite each other.

Note (4): The difference in the dimension H for multiple assemblies represents the dimensional variation between the slides of an arbitrary number of assemblies having the same accuracy class.

Note: All of the above are applicable only when the dimensions are measured at the centre of the slide mounted on a rail attached to a flat base.

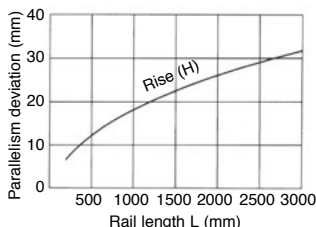


Fig.1 Working parallelism

Lubricification

These linear slides are supplied lubricated with a Lithium soap based grease (Class 2) containing extreme pressure additives. A stoppered grease injector is supplied with each slide, this should be attached before use.

Assembly

To assemble LWH linear slides, correctly position the assembly reference surfaces of the slide and rail on the reference surfaces of the table or frame and fasten securely.

Reference mounting surface

The reference side of the slide is the opposite side to the surface carrying the manufacturer's logo. In the same way, the reference side of the rail is that one opposite the upper surface which is marked with the manufacturer's logo.

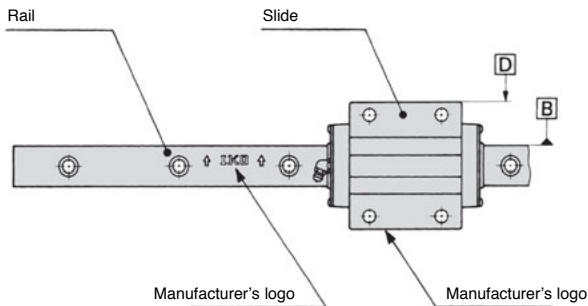


Fig.2 Assembly reference surfaces

Assembly recommendations

1- Manipulation

Every slide is supplied mounted on a dummy rail. When assembling the slide onto its guide rail, align the slots of the dummy rail with the guide rail and then move the slide on to the guide rail keeping the parts aligned correctly.

f_w : load factor (see table 1)

F_c : calculated theoretical load, N

2- Multiple slides mounted side by side

Every slide is supplied mounted on a dummy rail. When assembling the slide onto its guide rail, align the slots of the dummy rail with the guide rail and then move the slide on to the guide rail keeping the parts aligned correctly.

3- Example of multiple slide units mounted close together

Referring to Figure 3, the reference mounting surfaces **B** and **D** and mounting surfaces **A** and **C** of the LWH linear slides have an accurately ground finish. Stable and high accurate linear motion will be obtained by finishing the mounting surfaces of machines or equipment to the same high accuracy and correctly mounting the guides on these surfaces.

It is recommended to machine a fillet at the corner of the mating reference mounting surfaces as shown in Fig. 4 . However, a radius smaller than **R₁** of the slide or smaller than **R₂** of the rail(see table 1) is also possible.

The heights of flanges on assembly reference surfaces are also given in table 1.

Fig.3 : Typical assembly

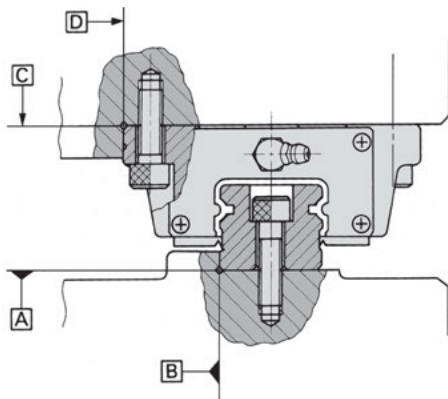
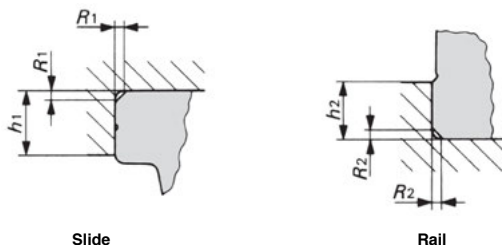


Table 1 : Accuracy



Part number	Slide		Rail	
	Radius R1 (max.)	Height of flange h1	Radius R2 (max.)	Height of flange h2
LWH15	0,5	4	0,5	0,5
LWH20	0,5	5	0,5	0,5
LWH25	1,0	6	1,0	1,0
LWH30	1,0	8	1,0	1,0
LWH35	1,0	8	1,0	1,0
LWH45	1,5	8	1,7	1,7

Note : These values apply to all types of slides

4- Mounting bolt tightening torque

Table 2 gives the tightening torque of fastening bolts in normal use.

Table 2 : Mounting bolt tightening torque

Bolt dimensions	Locking torque (Nm)
M4 x 0,7	40
M5 x 0,8	80
M6 x 1	130
M8 x 1,25	320
M10 x 1,5	640
M12 x 1,75	1100

5- Working temperature

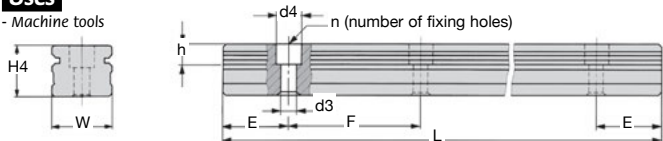
The normal continuous operating temperature of the LWH linear slides is 100°C with occasional use at up to 120°C. If your application will exceed 100°C, please contact us for advice.

- Linear slide for heavy loads not subject to vibrations or shocks
- Recirculating ball type linear slide
- Standard accuracy
- Rails and slides have separate part numbers, remember to order both
- Linear slide with steel balls



Uses

- Machine tools

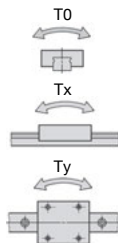
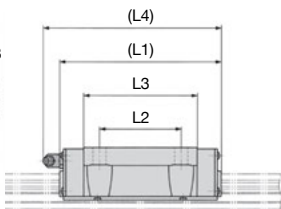
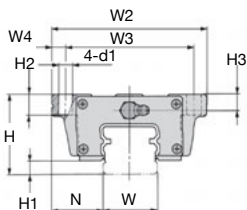


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Stock*	Price each 1 to 4
LWH15-180	180	3	1500	-	✓	54.61 €
LWH15-240	240	4	1500	-	✓	72.84 €
LWH15-360	360	6	1500	-	✓	109.30 €
LWH15-480	480	8	1500	-	✓	145.75 €
LWH15-660	660	11	1500	-	-	200.42 €
LWH15-900	900	15	1500	-	-	273.35 €
LWH15-1200	1200	20	1500	-	-	364.48 €
LWH15-1500	1500	25	1500	-	-	455.62 €
LWH15-C	-	Slide	-	Standard	✓	159.86 €
LWH20-240	240	4	1980	-	✓	78.09 €
LWH20-480	480	8	1980	-	✓	156.28 €
LWH20-660	660	11	1980	-	✓	214.91 €
LWH20-840	840	14	1980	-	✓	273.57 €
LWH20-1020	1020	17	1980	-	-	332.20 €
LWH20-1200	1200	20	1980	-	-	390.84 €
LWH20-1500	1500	25	1980	-	-	488.54 €
LWH20-1980	1980	33	1980	-	-	644.91 €
LWH20-C	-	Slide	-	Standard	✓	178.17 €
LWH20G-C	-	Slide	-	Long	-	227.39 €
LWH25-240	240	4	3000	-	✓	82.49 €
LWH25-480	480	8	3000	-	✓	165.08 €
LWH25-660	660	11	3000	-	✓	227.00 €
LWH25-840	840	14	3000	-	-	288.91 €
LWH25-1020	1020	17	3000	-	-	350.83 €
LWH25-1200	1200	20	3000	-	-	412.79 €
LWH25-1500	1500	25	3000	-	-	516.03 €
LWH25-1980	1980	33	3000	-	-	681.17 €
LWH25-3000	3000	50	3000	-	-	1 032.11 €
LWH25-C1H	-	Slide	-	Standard	✓	190.40 €
LWH25G-C	-	Slide	-	Long	✓	245.70 €

*Depending on availability - Dimensions in mm

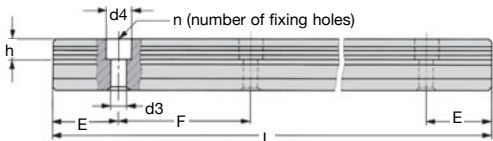
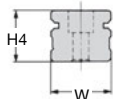


	LWH15-C	LWH20-C	LWH20G-C	LWH25-C	LWH25G-C
Weight (kg)					
Slide	0,22	0,48	0,71	0,70	0,93
Rail (by m)	1,47	2,56	2,56	3,50	3,50
Total dimensions					
H±0,04	24,00	30,00	30,00	36,00	36,00
H1	4,50	5,00	5,00	6,00	6,00
N±0,05	16,00	21,50	21,50	23,50	23,50
Slide dimensions					
W2	47,00	63,00	63,00	70,00	70,00
W3	38,00	53,00	53,00	57,00	57,00
W4	4,50	5,00	5,00	6,50	6,50
L1	66,00	83,00	112,00	95,00	118,00
L2	30,00	40,00	40,00	45,00	45,00
L3	44,60	57,50	86,00	64,70	87,40
L4	69,00	95,00	124,00	106,00	129,00
d1	4,50	6,00	6,00	7,00	7,00
H2	7,00	10,00	10,00	10,00	10,00
H3	4,50	5,50	5,50	6,50	6,50
Rail dimensions					
W	15,00	20,00	20,00	23,00	23,00
H4	15,00	18,00	18,00	22,00	22,00
d3	4,50	6,00	6,00	7,00	7,00
d4	8,00	9,50	9,50	11,00	11,00
h	6,00	8,50	8,50	9,00	9,00
E	30,00	30,00	30,00	30,00	30,00
F	60,00	60,00	60,00	60,00	60,00
Rail fixing screw	M4 x 16	M5 x 18	M5 x 18	M6 x 22	M6 x 22
Dynamic load					
C (N)	9320	14520	19030	20110	24320
Static load					
C _o (N)	14520	21875	32860	29820	39820
Static moment					
T _o (Nm)	116	240	360	375	500
T _x (Nm)	99	202	435	320	550
T _y (Nm)	575	1130	2200	1750	2845
	99	202	435	320	550
	575	1130	2200	1750	2845

- Linear slide for heavy loads not subject to vibrations or shocks
- Recirculating ball type linear slide
- Standard accuracy
- Rails and slides have separate part numbers, remember to order both
- Linear slide with steel balls

Uses

- Machine tools

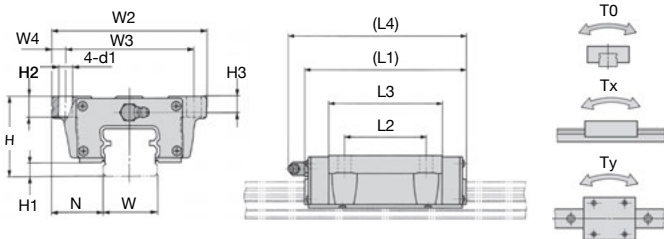


DISCOUNTS

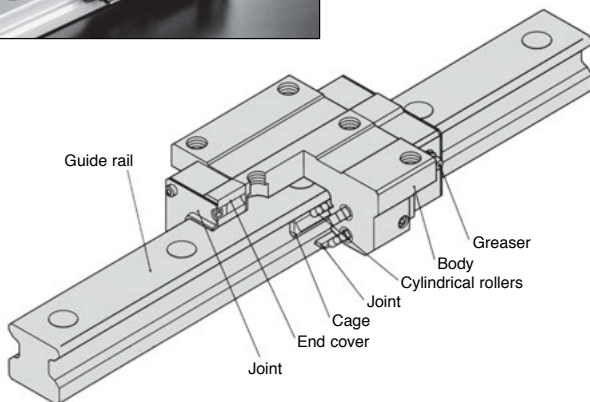
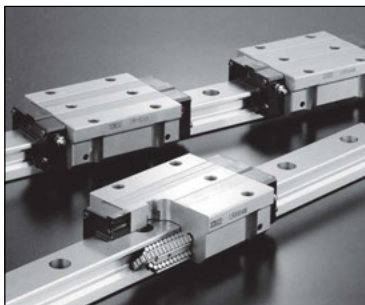
Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Stock*	Price each 1 to 4
LWH30-480	480	6	2960	-	-	196,70 €
LWH30-640	640	8	2960	-	-	262,29 €
LWH30-800	800	10	2960	-	-	327,89 €
LWH30-1040	1040	13	2960	-	-	426,27 €
LWH30-1200	1200	15	2960	-	-	491,85 €
LWH30-1520	1520	19	2960	-	-	623,05 €
LWH30-2000	2000	25	2960	-	-	819,79 €
LWH30-2960	2960	37	2960	-	-	1 213,33 €
LWH30-C	-	Slide	-	Standard	-	227,39 €
LWH30G-C	-	Slide	-	Long	-	294,95 €
LWH35-480	480	6	2960	-	-	265,20 €
LWH35-640	640	8	2960	-	-	353,66 €
LWH35-800	800	10	2960	-	-	442,08 €
LWH35-1040	1040	13	2960	-	-	574,70 €
LWH35-1200	1200	15	2960	-	-	663,15 €
LWH35-1520	1520	19	2960	-	-	840,00 €
LWH35-2960	2960	37	2960	-	-	1 635,87 €
LWH35-C	-	Slide	-	Standard	-	313,33 €
LWH35G-C	-	Slide	-	Long	-	411,68 €
LWH45-840	840	8	2940	-	-	547,20 €
LWH45-1050	1050	10	2940	-	-	684,01 €
LWH45-1260	1260	12	2940	-	-	820,83 €
LWH45-1470	1470	14	2940	-	-	957,63 €
LWH45-1995	1995	19	2940	-	-	1 299,68 €
LWH45-2940	2940	28	2940	-	-	1 915,37 €
LWH45-C	-	Slide	-	Standard	-	416,47 €
LWH45G-C	-	Slide	-	Long	-	566,53 €

*Depending on availability - Dimensions in mm



	LWH30-C	LWHG30-C	LWH35-C	LWHG35-C	LWH45-C	LWHG45-C
Weight (kg)						
Slide	1,28	1,69	1,78	2,35	3,17	4,34
Rail (by m)	4,82	4,82	6,85	6,85	10,70	10,70
Total dimensions						
H±0,04	42,00	42,00	48,00	48,00	60,00	60,00
H1	7,00	7,00	8,00	8,00	10,00	10,00
N±0,05	31,00	31,00	33,00	33,00	37,50	37,50
Slide dimensions						
W2	90,00	90,00	100,00	100,00	120,00	120,00
W3	72,00	72,00	82,00	82,00	100,00	100,00
W4	9,00	9,00	9,00	9,00	10,00	10,00
L1	113,00	139,00	123,00	151,00	147,00	190,00
L2	52,00	52,00	62,00	62,00	80,00	80,00
L3	80,60	106,60	86,20	114,00	103,40	146,60
L4	124,00	150,00	135,00	163,00	158,00	201,00
d1	9,00	9,00	9,00	9,00	12,00	12,00
H2	10,00	10,00	13,00	13,00	15,00	15,00
H3	8,00	8,00	10,00	10,00	13,00	13,00
Rail dimensions						
W	28,00	28,00	34,00	34,00	45,00	45,00
H4	25,00	25,00	28,00	28,00	34,00	34,00
d3	9,00	9,00	9,00	9,00	14,00	14,00
d4	14,00	14,00	14,00	14,00	20,00	20,00
h	12,00	12,00	12,00	12,00	17,00	17,00
E	40,00	40,00	40,00	40,00	52,50	52,50
F	80,00	80,00	80,00	80,00	105,00	105,00
Rail fixing screw	M8 x 28	M8 x 28	M8 x 28	M8 x 28	M12 x 35	M12 x 35
Dynamic load						
C (N)	28050	33550	37000	44920	56600	71300
Static load						
C _o (N)	42180	55230	55700	74260	83200	117720
Static moment						
T _o (Nm)	645	840	875	1165	1715	2430
T _x (Nm)	550	925	655	1125	1195	2320
	2900	4630	3610	5775	6425	11475
T _y (Nm)	550	925	600	1040	1098	2120
	2900	4630	3315	5300	5900	10500



LRX series linear roller slides are highly reliable, highly accurate, are extremely rigid and are noted for their smooth movement. The four rows of rollers are contained in an extremely rigid body with the rollers arranged in such a way as to guarantee the parallelism of their axes. With elastic deformation and tendency to bend under high or variable loads being extremely low, this range is particularly adapted to applications involving shocks and/or vibrations, such as high speed machine tools and industrial robots for which a high rigidity and precision are required.

The dimensional accuracy of the slides and rails is individually checked during manufacture so that they can be replaced easily during their lifetime. Rails can be placed end-to-end to create the required stroke-length. Different sizes of slide; short, standard and long (with higher rigidity) are available to suit all applications.

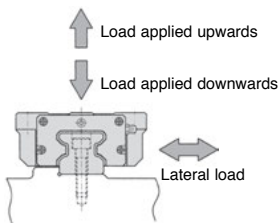


Figure 2 Load directions

Load capacity and life expectancy

Basic dynamic load

The basic dynamic load rating is defined as a constant load, both in direction and magnitude to which a group of identical Precision Linear Slides are subjected individually and where 90% of the slides in that group can travel for 50km without suffering material damage due to rolling contact fatigue. LRX linear slides are designed to handle dynamic loads equally whether applied upwards, downwards or laterally.

Basic static load capacity

The basic static load rating is defined as a static load that gives a prescribed constant stress at the centre of the contact area between the rolling element and track whilst receiving the maximum load. The static load limit applies to lateral movement of the LRX slide, generally used along with the static security factor.

Static moment

The static moment rating is defined as a static moment load (See Fig. 3) that gives a prescribed constant contact stress at the centre of the contact area between the slide and the track receiving the maximum load.

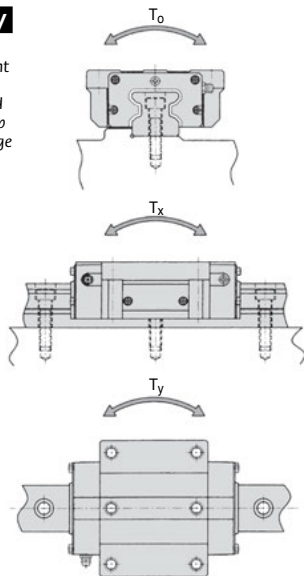
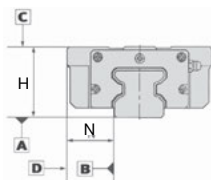


Figure 3: Static moment

Accuracy

Accuracy of a slide and rail assembly		Rail High accuracy (H)
Slide	High Accuracy (H) Accuracy (P)	High accuracy -
Tolerance sur H		$\pm 0,040$
Tolérance sur N ⁽³⁾		$\pm 0,050$
For 1 batch :		
Variation on H ⁽¹⁾		0,015
Variation on H ⁽²⁾⁽³⁾		0,020
Variation on H formultiple assemblies ⁽⁴⁾		0,035
Working parallelism between C and A		Fig. 1.
Working parallelism between D and B		Fig. 1.



Note (1): This is the difference in the dimension H between two slides mounted on the same track or on a pair of tracks when H is measured at a specified position

Note (2): This is the difference in the dimension N between two slides mounted on the same track or on a pair of tracks when N is measured at a specified position

Note (3): These values also apply when the reference surfaces are assembled opposite each other.

Note (4): The difference in the dimension H for multiple assemblies represents the dimensional variation between the slides of an arbitrary number of assemblies having the same accuracy class.

Note: All of the above are applicable only when the dimensions are measured at the centre of the slide mounted on a rail attached to a flat base.

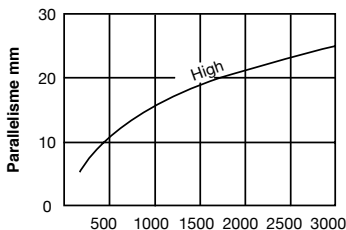


Fig.1 Working parallelism

Life expectancy

The life expectancy of an LRX linear slide can be calculated using the following formula:

$$L = 50 \left(\frac{C}{P} \right)^{10/3} \text{ (1)}$$

where:

L : Life expectancy in kilometres (or **10³ m**)

P : Applied load (**N**)

C : Basic Dynamic load capacity (**N**)

Actual loads applied to the linear guide sometimes exceed the theoretically calculated load due to vibration and shocks caused by the operation of the machine. A more realistic life expectancy can be calculated using the following formula which takes the load factor into account:

$$L = 50 \left(\frac{C}{fwFc} \right)^{10/3} \text{ (2)}$$

where:

fw : load factor (see table 1)

Fc : calculated theoretical load, **N**

In cases where the stroke length and the number of strokes per minute are known, working life can be expressed in hours with the following formula:

$$Lh = \frac{10^6 L}{2Sn_1 \times 60} \text{ (3)}$$

where:

Lh : Life expectancy in hours (**h**)

S : Stroke length (**mm**)

n1 : Number of strokes per minute (**spm**)

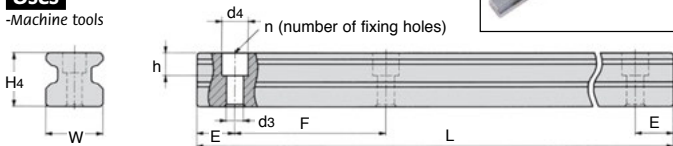
Table 1 Load factor:

Operating conditions	fw
Smooth working without vibrations and/or shocks	1,0 ~ 1,2
Normal working	1,2 ~ 1,5
Working with vibrations and/or shocks	1,5 ~ 3,0

- Linear slide for heavy loads and subject to vibrations or shocks
- Linear slide with cylindrical rollers
- Material : steel
- Rails and slides have separate part numbers, remember to order both

Uses

- Machine tools

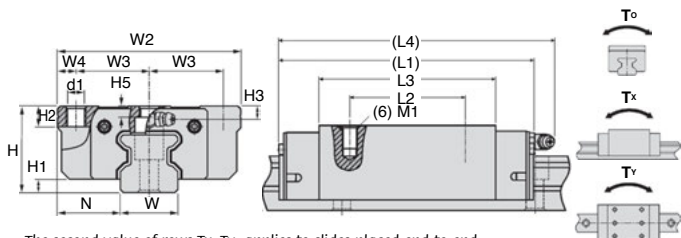


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Price each 1 to 4
LRX15-180	180	3	1500	-	42,58 €
LRX15-240	240	4	1500	-	56,83 €
LRX15-360	360	6	1500	-	85,26 €
LRX15-480	480	8	1500	-	113,75 €
LRX15-660	660	11	1500	-	156,39 €
LRX15-1500	1500	25	1500	-	355,62 €
LRX15-C	-	Slide	-	Standard	261,04 €
LRX15G-C	-	Slide	-	Long	295,07 €
LRX20-240	240	4	1980	-	63,69 €
LRX20-480	480	8	1980	-	127,45 €
LRX20-660	660	11	1980	-	175,29 €
LRX20-840	840	14	1980	-	223,09 €
LRX20-1020	1020	17	1980	-	270,91 €
LRX20-1200	1200	20	1980	-	318,73 €
LRX20-1500	1500	25	1980	-	398,43 €
LRX20-1980	1980	33	1980	-	525,96 €
LRX20-C	-	Slide	-	Standard	280,38 €
LRX20G-C	-	Slide	-	Long	314,38 €
LRX25-240	240	4	3000	-	66,47 €
LRX25-480	480	8	3000	-	133,00 €
LRX25-660	660	11	3000	-	182,91 €
LRX25-840	840	14	3000	-	232,80 €
LRX25-1020	1020	17	3000	-	282,73 €
LRX25-1200	1200	20	3000	-	332,65 €
LRX25-1500	1500	25	3000	-	415,82 €
LRX25-3000	3000	50	3000	-	831,71 €
LRX25-C	-	Slide	-	Standard	295,07 €
LRX25G-C	-	Slide	-	Long	324,09 €

*Depending on availability - Dimensions in mm



- The second value of rows Tx, Ty, applies to slides placed end-to-end
- For models LRX 20-C and LRXG20-C, the slides can only be mounted on top of the rail.

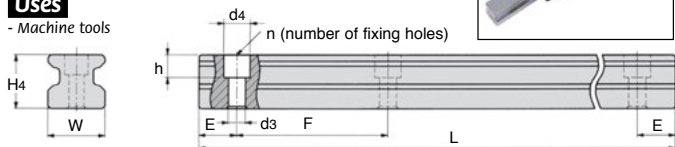
	LRX15-C	LRX15G-C	LRX20-C	LRX20G-C	LRX25-C	LRX25G-C	LRX30-C	LRX30G-C	LRX30G-C
Weight (kg)									
Slide	0,20	0,28	0,44	0,61	0,67	0,84	1,20	0,78	1,58
Rail (par m)	1,65	1,60	2,73	2,73	3,59	3,59	5,01	5,01	5,01
Total dimensions									
H±0,04	24,00	24,00	30,00	30,00	36,00	36,00	42,00	42,00	42,00
H1	4,00	4,00	5,00	5,00	6,00	6,00	6,50	6,50	6,50
N±0,05	16,00	16,00	21,50	21,50	23,50	23,50	31,00	31,00	31,00
Slide dimensions									
W2	47,00	47,00	63,00	63,00	70,00	70,00	90,00	90,00	90,00
W3	19,00	19,00	26,50	26,50	28,50	28,50	36,00	36,00	36,00
W4	4,50	4,50	5,00	5,00	6,50	6,50	9,00	9,00	9,00
L1	68,00	84,00	86,00	106,00	98,00	113,00	113,00	85,00	134,00
L2	30,00	30,00	40,00	40,00	45,00	45,00	52,00	-	52,00
L3	40,00	56,00	51,60	71,60	60,00	75,00	70,40	42,40	91,40
L4	71,00	87,00	94,00	114,00	107,00	122,00	123,00	95,00	144,00
d1	4,40	4,40	-	-	7,00	7,00	8,50	8,50	8,50
M1	M5	M5	M6	M6	M8	M8	M10	M10	M10
H2	7,00	7,00	10,00	10,00	10,00	10,00	10,00	10,00	10,00
H3	3,50	3,50	4,00	4,00	5,00	5,00	6,50	6,50	6,50
H5	3,00	3,00	3,50	3,50	5,00	5,00	5,50	5,50	5,50
Rail dimensions									
W	15,00	15,00	20,00	20,00	23,00	23,00	28,00	28,00	28,00
H4	16,50	16,50	21,00	21,00	24,50	24,50	28,00	28,00	28,00
d3	4,50	4,50	6,00	6,00	7,00	7,00	9,00	9,00	9,00
d4	8,00	8,00	9,50	9,50	11,00	11,00	14,00	14,00	14,00
h	6,00	6,00	8,50	8,50	9,00	9,00	12,00	12,00	12,00
E	30,00	30,00	30,00	30,00	30,00	30,00	40,00	40,00	40,00
F	60,00	60,00	60,00	60,00	60,00	60,00	80,00	80,00	80,00
Rail fixing screw	M4 x 16	M4 x 16	M5 x 20	M5 x 20	M6 x 25	M6 x 25	M8 x 28	M8 x 28	M8 x 28
Dynamic load									
C (N)	9410	12200	19200	24700	26200	31200	35400	23800	43500
Static load									
C ₀ (N)	19900	27900	42500	58700	56000	70000	74100	44400	96300
Static moment									
T ₀ (Nm)	187	262	548	757	829	1040	1340	804	1740
T _x (Nm)	135	261	377	710	570	881	880	328	1470
T _y (Nm)	938	1580	2510	4180	3780	5360	5750	2730	8710

Dimensions in mm

- Linear slide for heavy loads and subject to vibrations or shocks
- Linear slide with cylindrical rollers
- Material : steel
- Rails and slides have separate part numbers, remember to order both

Uses

- Machine tools

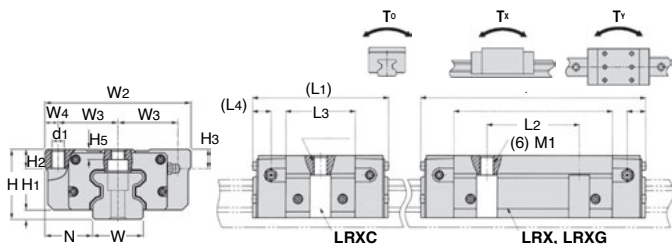


DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Price each 1 to 4
LRX30-480	480	6	2960	-	161,16 €
LRX30-640	640	8	2960	-	212,65 €
LRX30-800	800	10	2960	-	265,81 €
LRX30-1040	1040	13	2960	-	345,57 €
LRX30-1200	1200	15	2960	-	398,73 €
LRX30-1520	1520	19	2960	-	505,08 €
LRX30-2960	2960	37	2960	-	983,68 €
LRX30-C	-	Slide	-	Standard	338,33 €
LRX30C-C	-	Slide	-	Short	275,78 €
LRX30G-C	-	Slide	-	Long	386,69 €
LRX35-480	480	6	2960	-	199,03 €
LRX35-640	640	8	2960	-	265,41 €
LRX35-800	800	10	2960	-	331,78 €
LRX35-1040	1040	13	2960	-	431,32 €
LRX35-1200	1200	15	2960	-	497,68 €
LRX35-1520	1520	19	2960	-	630,45 €
LRX35-2960	2960	37	2960	-	1 227,75 €
LRX35-C	-	Slide	-	Standard	433,34 €
LRX35C-C	-	Slide	-	Short	277,55 €
LRX35G-C	-	Slide	-	Long	603,18 €
LRX45-840	840	8	2940	-	491,37 €
LRX45-1050	1050	10	2940	-	614,27 €
LRX45-1260	1260	12	2940	-	737,12 €
LRX45-1470	1470	14	2940	-	860,01 €
LRX45-1995	1995	19	2940	-	1 167,20 €
LRX45-2940	2940	28	2940	-	1 720,14 €
LRX45-C	-	Slide	-	Standard	609,47 €
LRX45C-C	-	Slide	-	Short	415,26 €
LRX45G-C	-	Slide	-	Long	821,38 €

*Depending on availability - Dimensions in mm



- The second value of rows Tx, Ty, applies to slides placed end-to-end.
- For models LRX 20-C and LRXG20-C, the slides can only be mounted on top of the rail.

	LRX35-C	LRX35C-C	LRX35G-C	LRX45-C	LRX45C-C	LRX45G-C
Weight (kg)						
Slide	1,76	1,13	2,41	3,26	2,11	4,60
Rail (by m)	6,88	6,88	6,88	10,80	10,80	10,80
Total dimensions						
H±0,04	48,00	48,00	48,00	60,00	60,00	60,00
H1	6,40	6,40	6,40	8,00	8,00	8,00
N±0,05	33,00	33,00	33,00	37,50	37,50	37,50
Slide dimensions						
W2	100,00	100,00	100,00	120,00	120,00	120,00
W3	41,00	41,00	41,00	50,00	50,00	50,00
W4	9,00	9,00	9,00	10,00	10,00	10,00
L1	124,00	92,00	152,00	154,00	114,00	194,00
L2	62,00	-	62,00	80,00	-	80,00
L3	78,60	46,60	106,60	99,00	59,00	139,00
L5	12,5	12,5	12,5	17,5	17,5	17,5
d1	8,5	8,5	8,5	10,5	10,5	10,5
M1	M10	M10	M10	M12	M12	M12
H2	13,00	13,00	13,00	15,00	15,00	15,00
H3	13,00	13,00	13,00	16,00	16,00	16,00
H5	7,00	7,00	7,00	11,00	11,00	11,00
Rail dimensions						
W	34,00	34,00	34,00	45,00	45,00	45,00
H4	32,00	32,00	32,00	38,00	38,00	38,00
d3	9,00	9,00	9,00	14,00	14,00	14,00
d4	14,00	14,00	14,00	20,00	20,00	20,00
h	12,00	12,00	12,00	17,00	17,00	17,00
E	40,00	40,00	40,00	52,50	52,50	52,50
F	80,00	80,00	80,00	105,00	105,00	105,00
Rail fixing screw	M8 x 35	M8 x 35	M8 x 35	M12 x 40	M12 x 40	M12 x 40
Dynamic load						
C (N)	48200	32500	60900	78200	78200	101000
Static load						
C _o (N)	99600	59700	134000	159000	159000	222000
Static moment						
T _o (Nm)	2160	1300	2920	4410	4410	6180
T _x (Nm)	1350	504	2430	2690	2690	5200
T _y (Nm)	8430	3940	13700	16700	16700	28800

Dimensions in mm



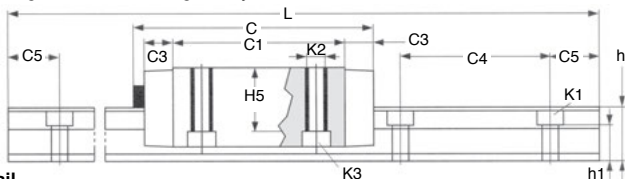
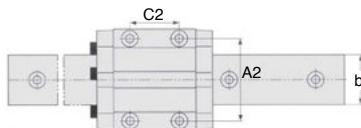
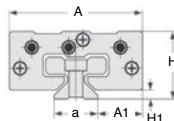
TS01 TW01

Loads up to 7000N

- **Linear slide with sliding insert**
- High static load capacity regardless of load position
- Max. speed: 10m/s
- Working temp.: -40°C to +90°C
- Materials:
 Rail: anodised aluminium AlMgSi0.5
 Slide: colourless anodised aluminium AlMgSi0.5
 Sliding parts: iglidur® J
 Cover: plastic
 (All steel parts are galvanised)

Advantages

- Silent
- Not sensitive to dirt or humidity
- Corrosion-resistant
- Light
- Withstands shocks and vibrations
- High resistance to wear
- No maintenance required
- Adjustable backlash
- Sliding element can be changed easily



Rail

Part number	L max. (mm)	a (-0.2)	b	C4	C5 Min.	C5 max.	h	h1	K1 for screw DIN 912
TS01-15	3960	15	22	60	20	49	15,5	10,0	M4
TS01-20	3960	20	31	60	20	49	19,0	12,3	M5
TS01-25	3960	23	34	60	20	49	21,5	13,8	M6
TS01-30	3960	28	40	80	20	59	26,0	15,8	M8

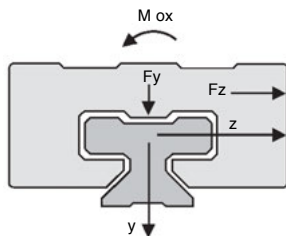
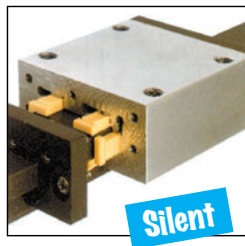
Slide

Part number	H (±0.35)	A	C max.	A1 (±0.35)	A2	C1	C2	C3	H1 (±0.35)	H5	K2 Thread	Nm (max.)	K3 for screw DIN 912
TW01-15	24	47	74	16,0	38	50	30	9	4,0	16,0	M5	1,5	M4
TW01-20	30	63	87	21,5	53	61	40	10	5,0	19,8	M6	2,5	M5
TW01-25	36	70	96	23,5	57	68	45	11	5,0	24,8	M8	6,0	M6
TW01-30	42	90	109	31,0	72	79	52	12	6,5	27,0	M10	15,0	M8

*Dimensions in mm

Advantages

- DryLin®T slides have been designed for use in automated machines and storage systems.
- These slides can be used in many different environments. They are light, shock-resistant and silent.
- Drylin®T slides have the same physical dimensions as recirculating-ball slides.
- The linear bearings which are placed between the slide and the rail are comprised of six sliding segments in iglidur® J and are adjustable (Already pre-set in factory).
- Please note that a minimum amount of backlash is necessary for the slide to function correctly.
- Please contact us for help with design calculations, advice on the choice of slides or information on backlash adjustment or assembly.



Dynamic load

Size	F _Y MAX (N)	F _Z MAX (N)	M _{OZ} (Nm)
15	2000	2000	32
20	3700	3700	85
25	5000	5000	125
30	7000	7000	200

DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Standard length	(mm) l _y	(mm ⁴) l _z	(mm ⁴)	Weight (kg)	Type	Stock*	Price each 1 to 5
TS01-15-0500	500	6440	4290	0,30	Rail	✓	67,17 €	
TS01-15-1000	1000	6440	4290	0,60	Rail	✓	112,13 €	
TW01-15	-	-	-	0,11	Slide	✓	83,40 €	
TS01-20-0500	500	22570	11520	0,50	Rail	✓	68,47 €	
TS01-20-1000	1000	22570	11520	1,00	Rail	✓	114,74 €	
TW01-20	-	-	-	0,19	Slide	✓	85,68 €	
TS01-25-0500	500	34700	19300	0,65	Rail	-	79,40 €	
TS01-25-1000	1000	34700	19300	1,30	Rail	✓	136,59 €	
TW01-25	-	-	-	0,29	Slide	✓	105,41 €	
TS01-30-0500	500	70040	40780	0,95	Rail	-	94,36 €	
TS01-30-1000	1000	70040	40780	1,90	Rail	-	166,54 €	
TW01-30	-	-	-	0,50	Slide	✓	110,35 €	

*Depending on availability - Dimensions in mm

Manual locking clamp



HK

For **IKO**® LWL guide rails

- For IKO LWL7 to LWL15 rails
- Simple, solid construction
- Contact surfaces held in floating position
- Precise positioning
- Gripping force up to 180N

Applications

- Pick and place machines
- Measuring systems
- Mounting accessories

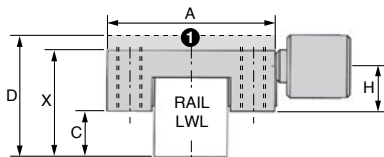
✓ INCREASED STOCK

Operating principle

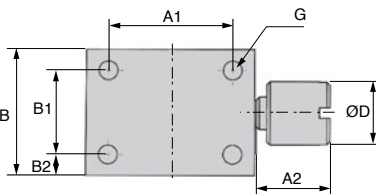
- Tightening screw

Info.

- This product is not available for LWL5 and LWL20 rails
- Dimension C must be respected
- ① Adaptor plate (optional accessory)



✓ SIZES IN STOCK



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-10%	On request

Part number	For rail	Holding force (N)	Tightening torque (Nm)	A	A1	A2	B	B1	B2	C	X	G	ØD	H	Price each 1 to 4
HK0700M	LWL7	65	0,15	17	12	7	12	8	2	2,0	8	M2	6	4,30	178,54 €
HK0900M	LWL9	100	0,24	20	15	9	17	11	3	2,7	10	M3	8	5,35	231,82 €
HK1200M	LWL12	150	0,50	27	20	10	19	13	3	3,5	13	M3	10	7,15	244,70 €
HK1500M	LWL15	180	1,02	32	25	14	20	14	3	5,0	16	M3	12	8,05	255,96 €

Dimensions in mm



Manual locking clamp

For **IKO**® LWH guide rails

HK

- For IKO LWH15 to LWH45 rails
- Simple, solid construction
- Contact surfaces held in floating position
- Precise positioning
- Gripping force up to 2000N

Applications

- Pick and place machines
- Measuring systems
- Mounting accessories

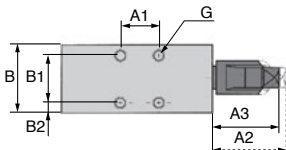
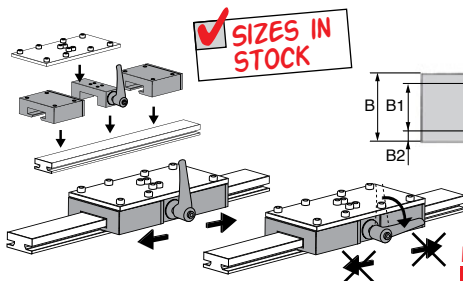
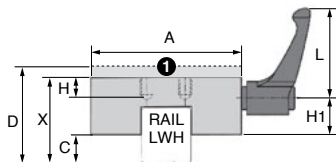


Operating principle

- With indexing handle

Info.

- Attention : Dimension C must be respected
- Adaptor plate (optional accessory)
- X Operating height
- ① D Mounting height of linear rail (Inc adaptor plate if applicable)



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-10%	On request

Part number	For rail	Holding force (N)	(Nm)	A	A1	A2	A3	B	B1	B2	C	X	G	L	H	H1	Price each 1 to 4
HK1501A	LWH15	1200	5	47	17	33,5	30,5	25	17	4,0	6,5	24	M4	44	5	12,5	170,31 €
HK2001A	LWH20	1200	7	60	15	41,5	38,5	24	15	4,5	10	30	M5	63	6	13,0	179,49 €
HK2501A	LWH25	1200	7	70	20	41,5	38,5	30	20	5,0	12	36	M6	63	8	15,0	185,13 €
HK3001A	LWH30	2000	15	90	22	50,5	46,5	39	22	8,5	12	42	M6	78	8	21,5	193,49 €
HK3501A	LWH35	2000	15	100	24	50,5	46,5	39	24	7,5	16	48	M8	78	10	21,5	199,14 €
HK4501A	LWH45	2000	15	120	26	50,5	46,5	44	26	9,0	18	60	M10	78	14	26,5	217,31 €

Dimensions in mm

Manual locking clamp



HK

For IKO® LRX rails

- For IKO LRX15-LRX45 rails
- Simple, solid construction
- Contact surfaces held in floating position
- Precise positioning
- Gripping force up to 2000N

Applications

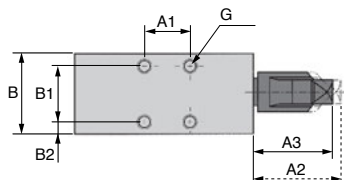
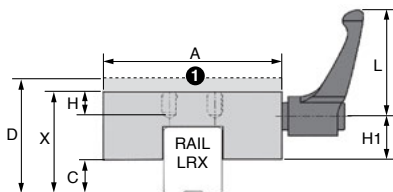
- Pick and place machines
- Measuring systems
- Mounting accessories

Operating principle

- With indexing handle

Info.

- Attention : Dimension C must be respected
- ① Adaptor plate (optional accessory)
- X Operating height
- D Mounting height of linear rail (inc adaptor plate if applicable)
- Product not suitable for LRX25 or LRX30 rails



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-10%	On request

Part number	For rail	Holding force (N)	(Nm)	A	A1	A2	A3	B	B1	B2	C	X	G	L	H	H1	Price each 1 to 4
HK1510B	LRX15	1200	7	47	38	33,5	30,5	29	20	4,5	6,5	24	M5	44	6	13,4	211,35 €
HK2010B	LRX20	1200	5	60	15	33,5	30,5	24	15	4,5	7	30	M5	44	6	17,5	231,34 €
HK3501A	LRX35	2000	15	100	24	50,5	46,5	39	24	7,5	16	48	M8	78	10	21,5	199,14 €
HK4501A	LRX45	2000	15	120	26	50,5	46,5	44	26	9	18	60	M10	78	14	26,5	217,31 €

Dimensions in mm



Manual locking clamp

For Drylin® T guide rails

HK

- For Drylin® T TS-01-15 to TS-01-30 rails

- Gripping force up to 500N

- With indexing handle

Advantages

- Simple, solid construction

- Contact surfaces held in floating position

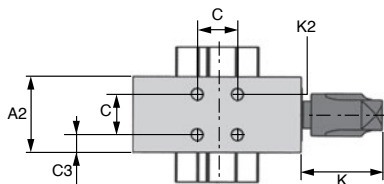
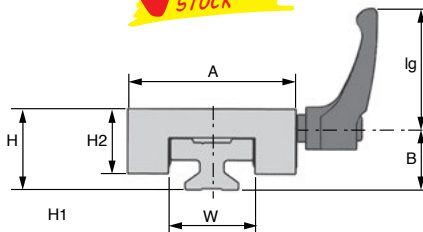
- Precise positioning

Applications

- Pick and place machines

- Measuring systems

- Mounting accessories



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-10%	On request

Part number	rail	A	W	A2	H	H2	For K	K2	C	C3	lg	B	Price each 1 to 4
HK1511A	TS01-15	47	22	23	24	20,0	30	M4x5	15	4,0	44,00	18,9	180,52 €
HK2011A	TS01-20	63	31	28	30	24,0	30	M5x6	15	6,5	44,00	23,0	194,75 €
HK2511A	TS01-25	70	34	35	36	31,0	39	M6x8	20	7,5	63,63	26,2	196,34 €
HK3011A	TS01-30	90	40	38	42	35,5	47	M6x8	20	9,0	78,00	32,4	201,51 €

Dimensions in mm

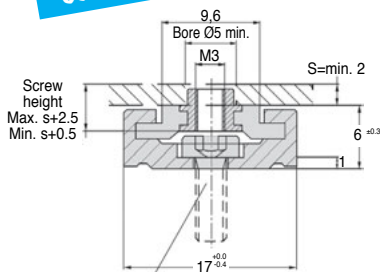


NK17 NW17

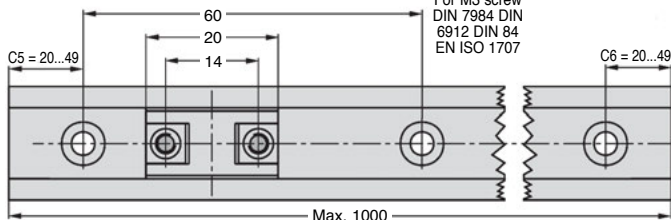
Loads up to 50N

- **Linear rail with polymer slide**
- Reduced size (both height and surface)
- Dry working, no maintenance required
- Not affected by dust
- Corrosion-resistant
- Reduced coefficient of friction means wear is reduced
- Reduced weight thanks to use of a combination of aluminium and plastic
- Very high speeds and acceleration possible
- Replaceable sliding parts in iglidur® J
- **Materials:**
 - Slide body: Plastic
 - Rails: Anodised aluminium
- Symmetrical hole pattern, C5=C6

Small but effective



For M3 screw
DIN 7984 DIN
6912 DIN 84
EN ISO 1707



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Type	Weight (g)	Stock*	Price each 1 to 4
NK02-17-1000	1 Rail (1000mm) + 1 slide	151,7	✓	47,80 €
NW02-17	1 slide only	1,7	✓	4,25 €

*Depending on availability - Dimensions in mm

Load up to 500N

NK27
NW27

- **Linear rail with polymer slide**
- Reduced size (both height and surface)
- Dry working, no maintenance required
- Not affected by dust
- Corrosion-resistant
- Reduced coefficient of friction means wear is reduced
- Reduced weight thanks to use of a combination of aluminium and plastic
- Very high speeds and acceleration possible
- Replaceable sliding parts in iglidur® J
- Materials:
 - Slide body: Zinc
 - Rails: Anodised aluminium
- Symmetrical hole pattern, C5=C6



NS & NW-01



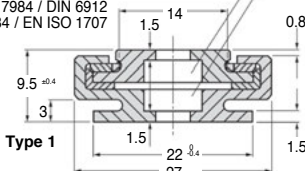
NS & NW-02

Small but effective

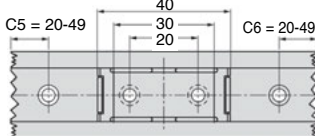
Options

- Rail length up to 3000mm max.

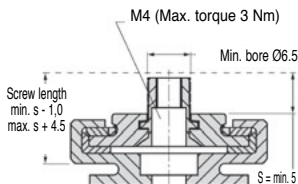
For M4 screw
DIN 7984 / DIN 6912
DIN 84 / EN ISO 1707



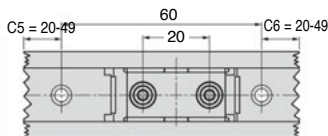
Type 1



Type 1



Type 2



Type 2

DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Type	Weight (g)	Stock*	Price each 1 to 4
NK01-27-1000	1 Rail (1000mm) + 1 slide type 1	300,8	✓	61,50 €
NK02-27-1000	1 Rail (1000mm) + 1 slide type 2	302,5	✓	63,60 €
NW01-27	1 slide type 1 only	10,8	✓	4,78 €
NW02-27	1 slide type 2 only	12,5	✓	6,90 €

*Depending on availability - Dimensions in mm

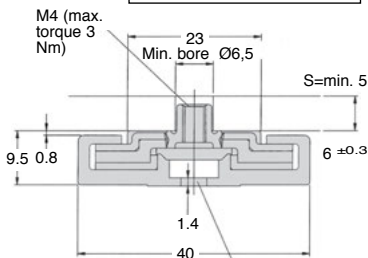
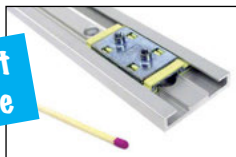


NK40 NW40

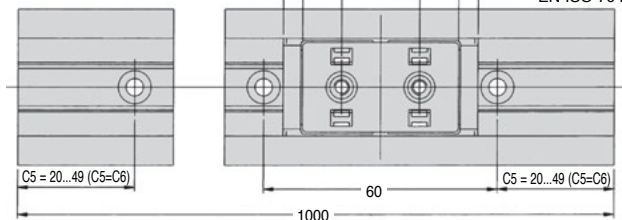
Load up to 700N

- Linear rail with polymer slide
- Reduced size (both height and surface)
- Dry working, no maintenance required
- Not affected by dust
- Corrosion-resistant
- Reduced coefficient of friction means wear is reduced
- Reduced weight thanks to use of a combination of aluminium and plastic
- Very high speeds and acceleration possible
- Replaceable sliding parts in iglidur® J
- Materials:
 - Slide body: Zinc
 - Rails: Anodised aluminium
- Symmetrical hole pattern, C5=C6

Small but effective



For M4 screw
DIN 7984 DIN
6912 DIN 84
EN ISO 1707
EN ISO 7045



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Type	Weight (g)	Stock*	Price each 1 to 4
NK02-40-1000	1 Rail (1000mm) + 1 slide	480	✓	78,21 €
NW02-40	1 slide only	30	✓	8,93 €

*Depending on availability - Dimensions in mm



DryLin® N miniature guiding system

Load up to 1000N

NK80
NW80

Small but
effective

- Linear rail with polymer slide
- Reduced size (both height and surface)
- Dry working, no maintenance required
- Not affected by dust
- Corrosion-resistant
- Reduced coefficient of friction means wear is reduced
- Reduced weight thanks to use of a combination of aluminium and plastic
- Very high speeds and acceleration possible
- Replaceable sliding parts in iglidur® J
- Materials:

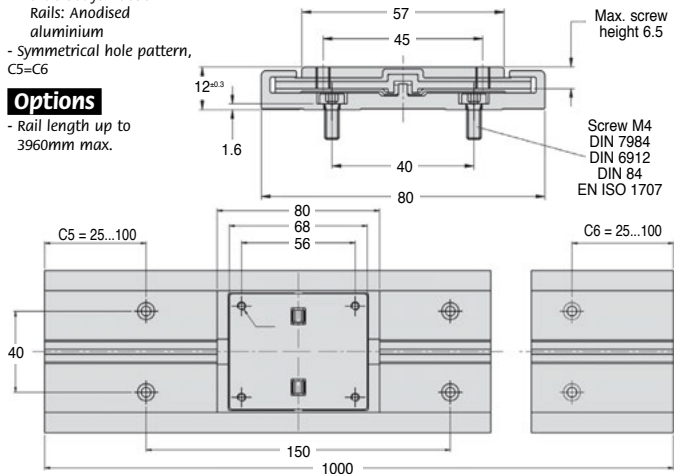
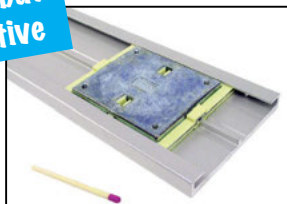
Slide body: Plastic

Rails: Anodised aluminium

- Symmetrical hole pattern, C5=C6

Options

- Rail length up to 3960mm max.



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	Type	Weight (g)	Stock*	Price each 1 to 4
NK02-80-1000	1 Rail (1000mm) + 1 slide	1240	✓	106,74 €
NW02-80	1 slide only	100	✓	14,12 €

*Depending on availability - Dimensions in mm

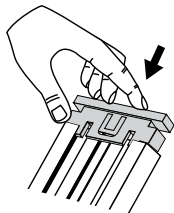
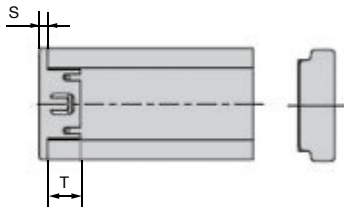
- **Rail end cap**
- The end caps are compatible with Drylin® N guide rails and prevent carriages sliding off whilst offering an aesthetic finish and protection against cuts from sharp edges

Advantages

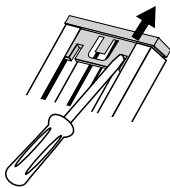
- Easy mounting
- Low cost
- Can be removed
- High retention force

Material

- Polymer



Easily assembled by hand



Disassembled using a screwdriver

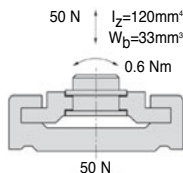
DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	S	T	For rail	Price each. 1 to 4
NSKB-17	1,5	7	NK02-17	8,42 €
NSKB-27	2	8	NK01-27, NK02-27	9,01 €
NSKB-40	1,5	8	NK02-40	On request
NSKB-80	2	17	NK02-80	12,37 €

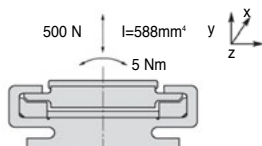
Dimensions in mm

Maximum loads



$I_y=1700\text{mm}^4$
 $W_b=200\text{mm}^3$

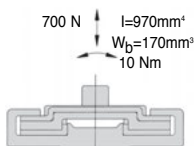
NK02-17



$I=6524\text{mm}^4$

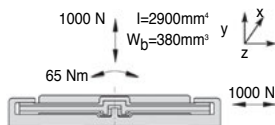
NK01-27

NK02-27



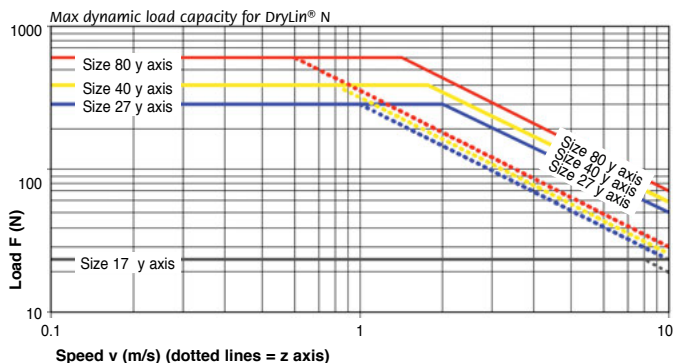
700 N
 $I=26400\text{mm}^4$
 $W_b=660\text{mm}^3$

NK02-40



1000 N

NK02-80



Introduction

Your choice of length and width

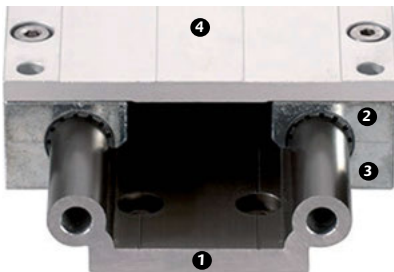
DryLin®W is a low cost linear guiding system that was developed to provide both design flexibility and quick assembly in both single and double rail configurations. The hard anodised aluminium rails means that DryLin®W systems are reputed for their low wear, low coefficients of friction, their resistance to dirt and their quiet operation.

Characteristics

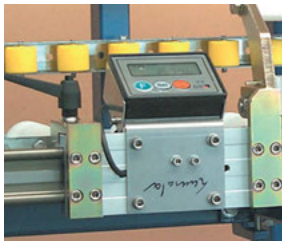
- Sliding elements are maintenance free
- Maximum speed: 15 m/s
- Working temperature: -40°C to +90°C

Advantages

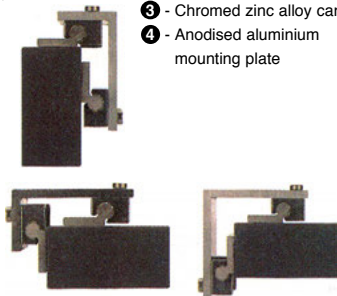
- Easily mounting, no maintenance required
- Low cost sliding carriage made from chromed zinc alloy and fitted with an iglidur® J200 liner
- Extremely light and lubricant free
- Unsupported sections allowed
- Single rail systems possible
- Not affected by dirt or dust
- Highly robust, wear and corrosion resistant
- Noiseless operation
- Hardened anodised aluminium rails
- Sliding elements fitted with iglidur® J200 liners
- Physical dimensions match those of standard aluminium profiles
- Low coefficient of friction



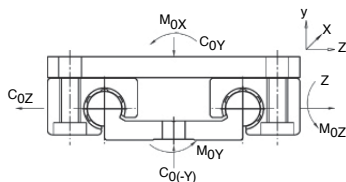
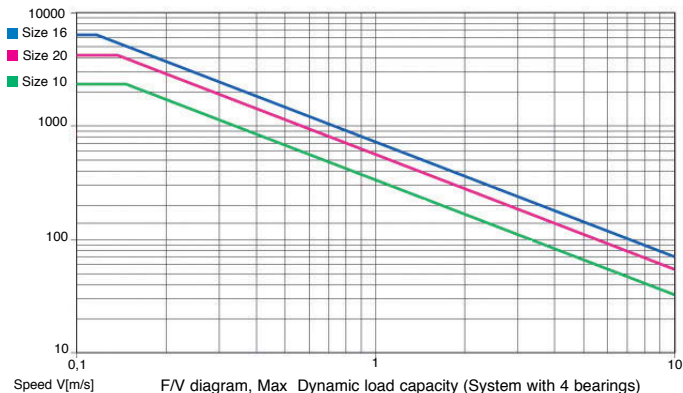
- ① - Hardened anodised aluminium rails
- ② - Smooth iglidur® J200 liners
- ③ - Chromed zinc alloy carriage
- ④ - Anodised aluminium mounting plate

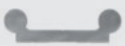


DryLin® W used for a stop dog in the glass industry



DryLin® W – Highest design flexibility



Rails available	Size 10 (mm)		Size 16 (mm)	Size 20 (mm)
 Single round rail	•		•	•
 Double rail	40 ² •	80 ² •	60 ² •	80 ² •

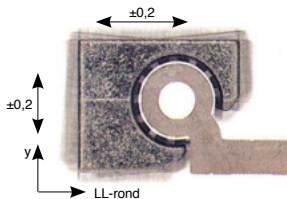
Design and assembly guide



Bearings able to float in all axes ($\pm 1\text{mm}$) compensate for misalignment and parallelism errors

Design

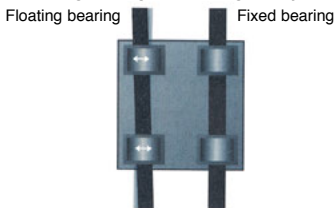
- **Floating bearings:**
- Facilitate assembly
- Only required where the rail or the system is welded
- Although DryLin® W is a profile rail system, it is able to compensate angular rotation errors about the x-axis. An angular adjustment of $\pm 7^\circ$ is possible. This effectively eliminates the problems known to occur when fitting to sheet metal.



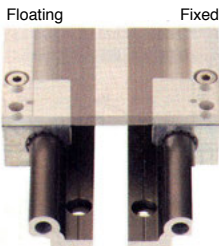
Floating bearings are available on request

Assembly

Floating bearings for linear guide systems



Automatic compensation of parallelism errors



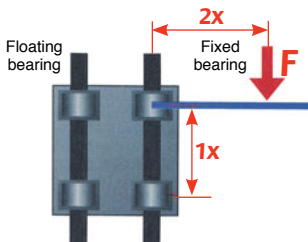
Assembly using rails

Eccentric Forces

When using linear plain bearings it is important to ensure that the acting forces follow the 2:1 Rule (see drawing). If either the load or the drive force (F) is greater than twice the bearing length ($1x$), then a binding or interrupted motion may occur. It is caused by rubbing. The further the bearing is distanced from the guide bearing, the greater the wear and required moving force.

info.

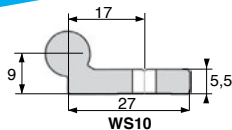
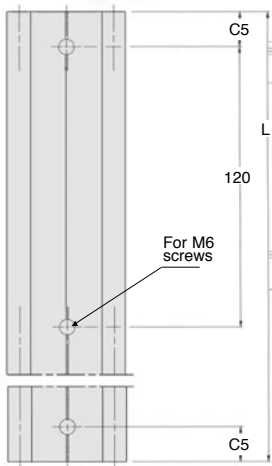
- If this guide is not followed, then the movement may become jerky or the system may jam.



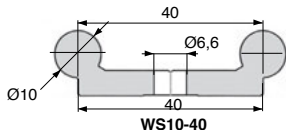
Distance acceptable for applied loads



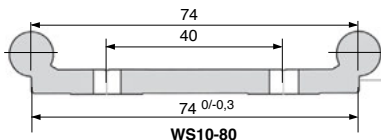
- Material: hard anodised aluminium
- Standard length: 1000mm
- Option:** Other lengths available (up to 4000mm)
- for slide **WJUM10** and **WJRM10**



WS10



WS10-40



WS10-80

DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Length L (mm)	Max. length L (mm)	C5 mini	C5 maxi	Iy (mm ⁴)	Iz (mm ⁴)	Wby (mm ³)	Wbz (mm ³)	Weight (kg/m)	Stock*	Price each 1 to 5
WS10	1000	4000	20	79,5	19000	2850	1000	310	0,62	✓	64,60 €
WS10-40	1000	4000	20	79,5	91000	5100	3600	590	1,00	✓	94,90 €
WS10-80	1000	4000	20	79,5	388000	6100	9200	650	1,50	✓	158,06 €

*Depending on availability - Dimensions in mm

DryLin® W bearing block

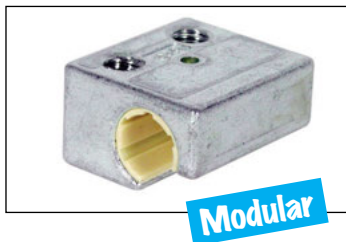


WJUM10 Size 10 - For loads of up to 1200N

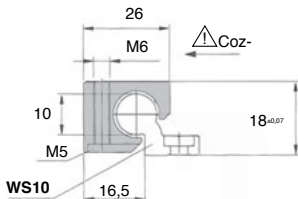
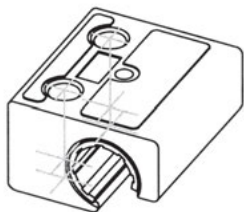
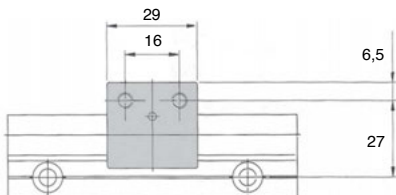
- Material:
Housing: Zamak
Liner: iglidur®J200

Advantages

- Full design flexibility using **WS10** single rails and **WJUM01-10** slides



Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Type	Backlash (mm)	Weight (g)	Max. static load (20°C)			Stock*	Price each 1 to 5
				Coy (N)	Coz+ (N)	Coz- (N)		
WJUM01-10	Fixed	0	27	1200	1200	250	✓	8,37 €
WJUM01-10-LL	Floating	±0,2	27	1200	1200	250	✓	8,37 €

*Depending on availability - Dimensions in mm



A **WW10** slide comprises:

- 1 mounting plate
- 4 WJUM01-10 bearing block

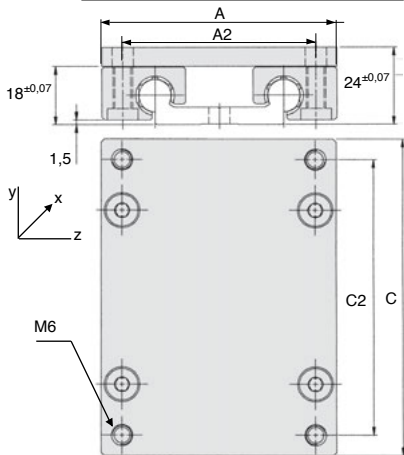
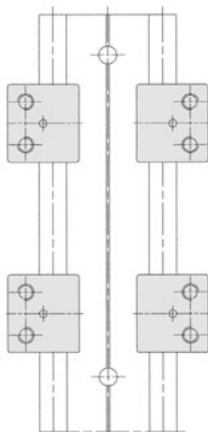
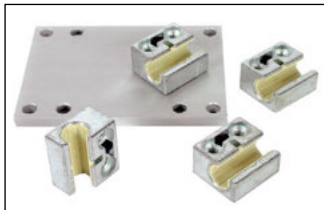
Advantages

- Low profile design

Accessories

- **WS10-40** and **WS10-80** rails

Modular



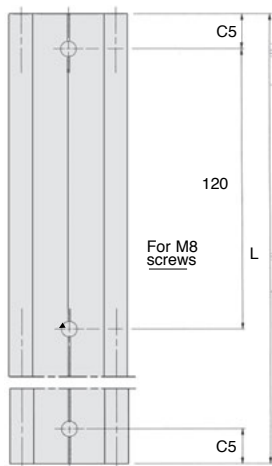
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

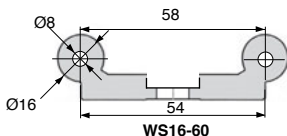
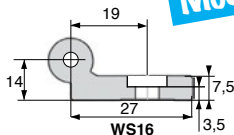
Part number	A	C	A2	C2	Max. static load (20°C)					Weight (kg)	Stock*	Price each 1 to 5
					Coy (N)	Coz (N)	Mox (N)	Moy (Nm)	Moz (Nm)			
WW10-40-10	73	100	60	87	4800	4800	96	170	170	0,29	✓	81,49 €
WW10-40-15	73	150	60	137	4800	4800	96	290	290	0,34	✓	86,15 €
WW10-40-20	73	200	60	187	4800	4800	96	410	410	0,40	✓	91,18 €
WW10-80-10	107	100	94	87	4800	4800	178	170	170	0,34	✓	87,14 €
WW10-80-15	107	150	94	137	4800	4800	178	290	290	0,42	✓	93,15 €
WW10-80-20	107	200	94	187	4800	4800	178	410	410	0,50	✓	102,98 €

*Depending on availability - Dimensions in mm

- Material: Hard anodised aluminium
- Standard length : 1000mm
- Other lengths available (up to 4000 mm)
- for slide **WJUM16** and **WJRM16**



Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List -10%	On request	On request

Part number	Length L (mm)	Max. length L (mm)	C5 mini	C5 maxi	Iy (mm ⁴)	Iz (mm ⁴)	Wby (mm ³)	Wbz (mm ³)	Weight (kg/m)	Stock*	Price each 1 to 5
WS16	1000	4000	20	79,5	36000	12900	1800	940	0,98	✓	87,17 €
WS16-60	1000	4000	20	79,5	36760	26100	9900	1900	1,96	✓	184,67 €

*Depending on availability - Dimensions in mm



DryLin®W bearing block

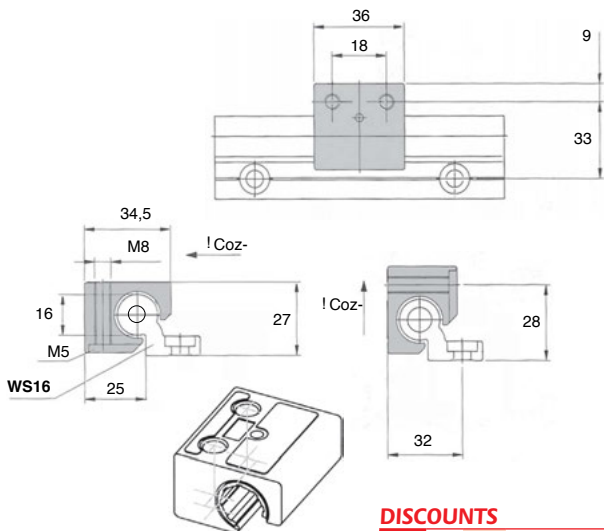
Size 16 - For loads of up to 2100N **WJUM16**

- Material:
Housing: Zamak
Liner: iglidur®J200

Advantages

- Full design flexibility using **WS16** single rails and **WJUM01-16** slides

Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Type	backlash	Weight (g)	Max. static load (20°C) Coy (N)	Coz+ (N)	Coz- (N)	Stock*	Price each 1 to 5
WJUM01-16	Fixes	0	100	2100	2100	400	✓	15,37 €
WJUM01-16-LL	Floating	±0,2	100	2100	2100	400	-	15,39 €

*Depending on availability - Dimensions in mm

A **WW16** slide comprises:

- 1 mounting plate
- 4 WJUM01-16 bearing block

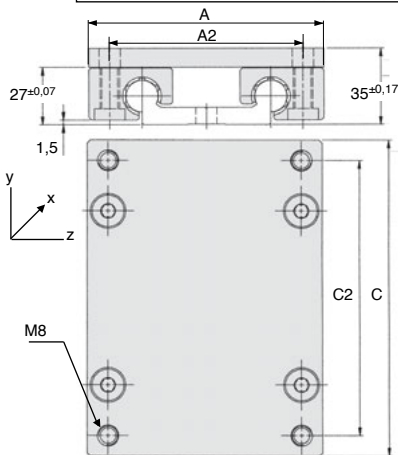
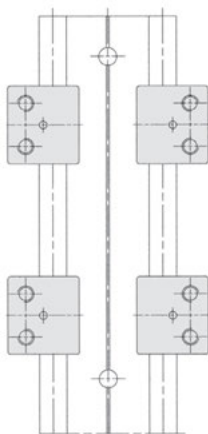
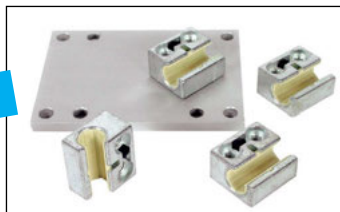
Advantage

- Low profile design

Accessories

- **WS10-40** and **WS10-80** rails

Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	A	C	A2	C2	Max. static load (20°C)					Weight (kg)	Stock*	Price each 1 to 5
					Coy (N)	Coz (N)	Mox (N)	Moy (Nm)	Moz (Nm)			
WW16-60-10	104	100	86	82	8400	8400	240	270	270	0,71	-	110,29 €
WW16-60-15	104	150	86	132	8400	8400	240	480	480	0,84	✓	120,72 €
WW16-60-20	104	200	86	182	8400	8400	240	690	690	0,97	-	133,05 €

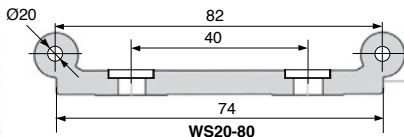
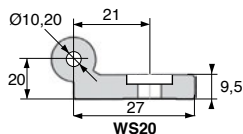
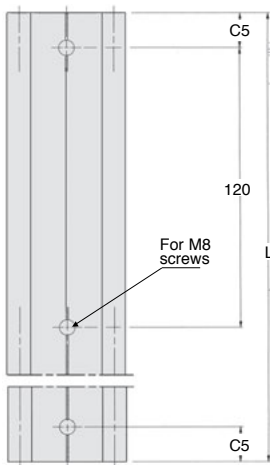
*Depending on availability - Dimensions in mm



- Material: Hard anodised aluminium
- Standard length: 1000mm
- Other lengths available (up to 4000 mm)
- for slide **WJUM20** and **WJRM20**



Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Length L (mm)	Max. length L (mm)	C5 mini	C5 maxi	Iy (mm ⁴)	Iz (mm ⁴)	Wby (mm ³)	Wbz (mm ³)	Weight (kg/m)	Stock*	Price each 1 to 5
WS20	1000	4000	20	79,5	9000	2850	1000	310	1,32	✓	102,02 €
WS20-80	1000	4000	20	79,5	108000	78700	21000	4000	3,30	✓	217,03 €

*Depending on availability - Dimensions in mm

DryLin® W bearing block

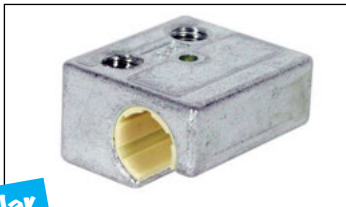


WJUM20 Size 20 - For loads of up to 3200N

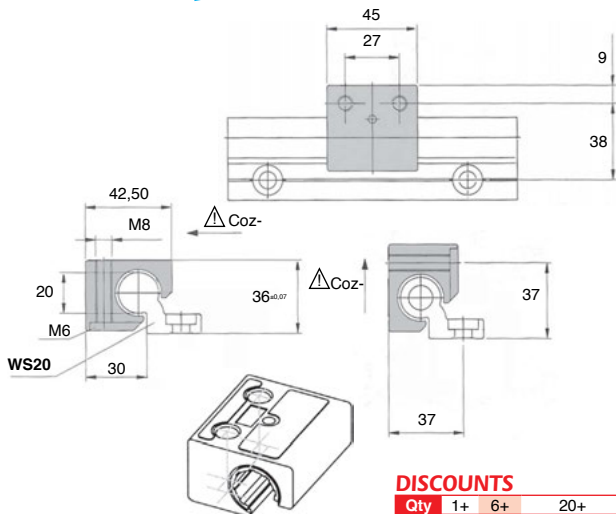
- Material:
Housing: Zamak
Liner: iglidur®J200

Advantage

- Full design flexibility using **WS20** single rails and **WJUM01-20** slides



Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Type	Backlash (mm)	Weight (g)	Coy (N)	Coz+ (N)	Coz- (N)	Stock*	Price each 1 to 5
WJUM01-20	Fixed	0	190	3200	3200	500	✓	16,28 €
WJUM01-20-LL	Floating	±0,25	190	3200	3200	500	✓	16,28 €

*Depending on availability - Dimensions in mm



A **WW20** slide comprises:

- 1 mounting plate
- 4 WJUM01-20 bearing blocks

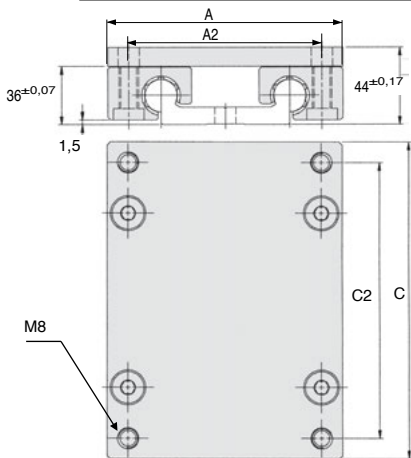
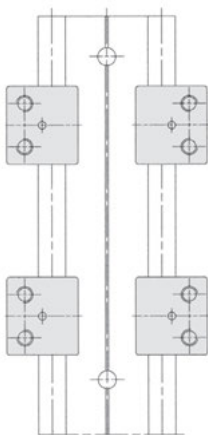
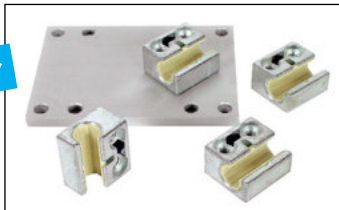
Advantages

- Low profile design

Accessories

- **WS20-80** rails

Modular



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	A	C	A2	C2	Max. static load (20°C)					Weight (kg)	Stock*	Price each 1 to 5
					Coy (N)	Coz (N)	Mox (N)	Moy (Nm)	Moz (Nm)			
WW20-80-15	134	150	116	132	12800	12800	525	670	670	1,20	✓	114,68 €
WW20-80-20	134	200	116	182	12800	12800	525	990	990	1,30	-	123,16 €
WW20-80-25	134	250	116	232	12800	12800	525	1250	1250	1,50	-	131,01 €

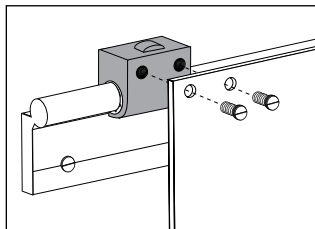
*Depending on availability - Dimensions in mm

Linear guide system **Drylin® W**

WJRM

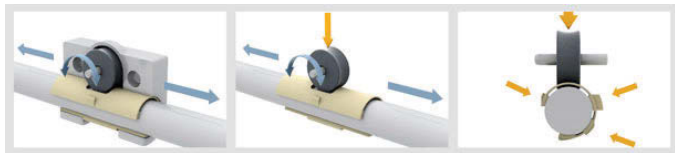
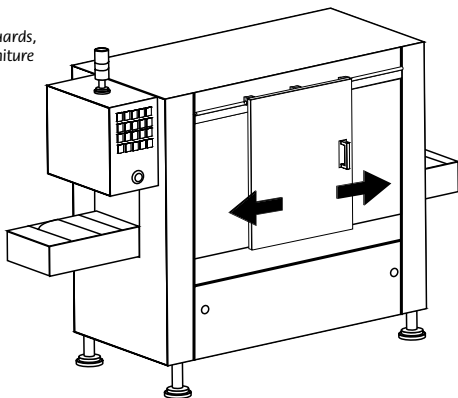
Hybrid bearings

- Drylin W hybrid bearings offer a unique combination of sliding and rolling movement. Depending on the mounting arrangement used, the use of maintenance free rollers reduce the driving force required. Any shear forces or shock forces are absorbed by the bearing. This hybrid bearing is ideally suited for manual adjustments especially in the applications such as door adjustments.
- Low driving force required, coefficient of friction 0.04 to 0.05µ
- Highly cost effective solution
- Can be used with any of 7 profiles rails such as WS10, WS16 and WS20



Application

- Adjustable doors, machine guards, simple handling systems, furniture



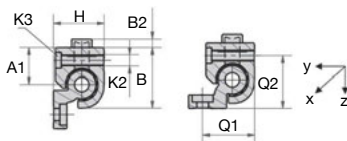
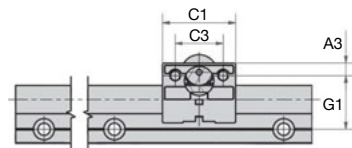
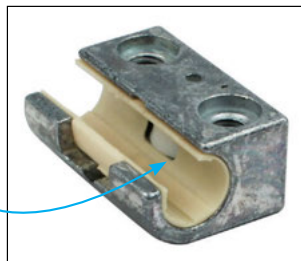
- Material :

Zamack

Liner manufactured from iglidur J

Advantages

- No lubrication required
- Small size
- Lightweight



WJRM01-10
WJRM01-16
WJRM01-20

WJRM02-10
WJRM01-16
WJRM01-20

DISCOUNTS

Qty	1+	6+	20+
Disc.	List -10%	List -10%	On request

Part number	Static load (W)	Dynamic load capacity for a total travel distance of (km)				F _{xv} Max (N.m/s)
		10 (N)	100 (N)	200 (N)		
WJRM01-10	250	250	90	50		50
WJRM02-10	250	250	90	50		50
WJRM01-16	400	400	140	70		80
WJRM01-20	550	550	200	100		80

Part number	A1	A3	B	B2	C1	C3	G1	H	K2	K3	Q1	Q2	Weight (g)	Price each 1 to 5
WJRM01-10	16,5	6,5	26	2,5	35	22	27	18	M6	M5	-	-	46	21,51 €
WJRM02-10	16,5	6,5	26	2,5	35	22	27	18	M6	M5	26	19	46	21,51 €
WJRM01-16	25	9	34,5	5	48	30	33	27	M8	M6	32	28	131	47,01 €
WJRM01-20	30	9	42,5	6	52	34	38	36	M8	M6	37	37	232	54,88 €

Dimensions in mm

Supported shaft for linear guide **AluSte Stock**

FTSN Mounting without sag or deflection

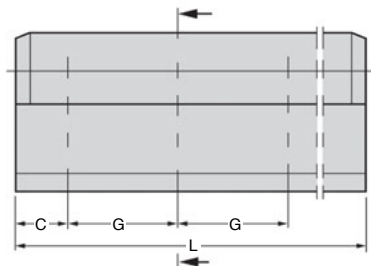
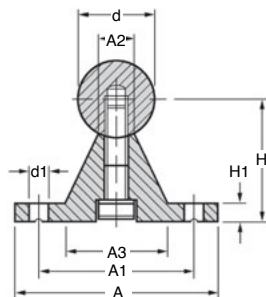
- **Comprises a shaft and its support**
- Normally used where the load is heavy when compared to the shaft length
- Shaft support has closely spaced pre-drilled mounting holes
- Material:
Support: Ground aluminium
Shaft: CK55 steel hardened (62HRC) and ground

Options

- Other lengths possible (up to 6000mm)

Accessories

- **KB-OP** and **TK-OB** linear bearings



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-15%	-20%	On request

Part number	d	A	H	A1	A2	A3	H1	C	d1	G	Standard length (mm)	Price each 1 to 4
FTSN-12G	12	40	22	29	5,4	15	5	37,5	4,5	75	1000	✓ 271,17 €
FTSN-16G	16	45	26	33	7,0	19	5	50,0	5,5	100	1000	✓ 208,59 €
FTSN-20G	20	52	32	37	8,1	23	6	50,0	6,6	100	1000	✓ 239,90 €
FTSN-25G	25	57	36	42	10,3	26	6	60,0	6,6	120	1000	- 255,52 €
FTSN-30G	30	69	42	51	11,0	29	7	75,0	9,0	150	1000	- 333,75 €
FTSN-40G	40	73	50	55	15,0	36	9	100,0	9,0	200	1000	- 417,23 €

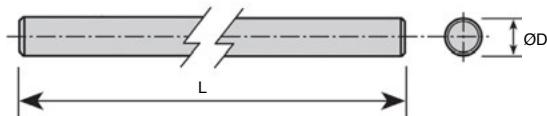
*Depending on availability - Dimensions in mm

Recommended for use
with RJUM linear bearings

AWMP

- Shaft recommended for use with DryLin® RJUM bearings

- Material: Drawn aluminium AIMgSi0 5F22
- Linearity conforms to DIN EN574-3
- Hardness: 75HB
- Hard anodised surface
- Specific electric resistance: 4×10^{-11} Ohm mm^2/m
- Chemical resistance: $2 < \text{pH} < 9$
- **Not compatible with linear ball bearings, see Z-A or Z-B shafts instead**



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-15%	-20%	On request

Part number	Version	Diameter ØD (mm)	Tolerance	Length L (mm)	Weight (kg/m)	Stock*	Price each 1 to 5
AWMP8-1000	Solid shaft	8	h8	1000	0,14	✓	20,42 €
AWMP10-1000	Solid shaft	10	h8	1000	0,22	✓	26,31 €
AWMP12-1000	Solid shaft	12	h8	1000	0,32	✓	32,78 €
AWMP16-1000	Solid shaft	16	h8	1000	0,57	✓	45,03 €
AWMP20-1000	Solid shaft	20	h8	1000	0,89	✓	61,10 €
AWMP25-1000	Solid shaft	25	h8	1000	1,41	✓	82,43 €
AWM30-1000	Hollow shaft	30x7,5	h10	1000	1,48	-	129,46 €
AWM40-1000	Hollow shaft	40x10	h10	1000	2,63	-	243,22 €
AWM50-1000	Hollow shaft	50x11	h10	1000	3,75	-	322,40 €

*Depending on availability - Dimensions in mm

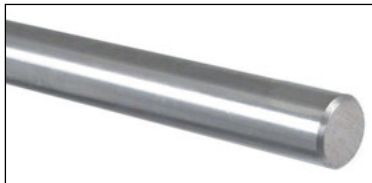
Shaft for linear guides



ZA

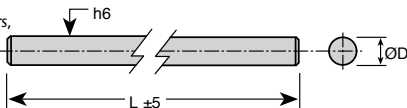
Hardened ground steel

- **Hardened steel shaft for linear guides**
- Material: Cf 53 hardened by high frequency (60±3 HRC)
- Hardened depth: 0.8 to 2.6mm, conforms to DIN 6773
- Standard length 1000mm
- External diameter tolerance, h6
- Straightness t3/1000mm
- Surface roughness Ra = 0.25µm
- Ends machined + deburred but not chamfered



Options

- Available in 3mm and 4mm diameters, please contact us for details. Please see following pages for details of machining options



For lengths greater than 1000mm, please contact us

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-20%	-25%	-30%	On request

Part number	Nominal ØD (h6)	Hardened depth (mm)	Circularity t1 (µm)	Cylindricity t2 (µm)	Straightness t3 (mm/m)	Standard length L (mm)	Max. length L (mm)	Weight (kg/m)	Stock*	Price each 1 to 5 (for 1m)
Z-5-1000A	5	0,5-0,8	4	6	0,16	1000	3200	0,15	✓	28,09 €
Z-6-1000A	6	0,5-0,8	4	6	0,16	1000	3000	0,22	✓	23,64 €
Z-8-1000A	8	0,6-0,9	4	6	0,16	1000	3000	0,39	✓	10,62 €
Z-10-1000A	10	0,7-1,0	4	6	0,12	1000	4500	0,61	✓	14,16 €
Z-12-1000A	12	0,8-1,2	5	8	0,12	1000	6000	0,89	✓	16,52 €
Z-14-1000A	14	0,9-1,3	5	8	0,12	1000	6000	1,21	✓	23,64 €
Z-15-1000A	15	1,0-1,4	5	8	0,12	1000	6000	1,37	✓	23,64 €
Z-16-1000A	16	1,1-1,5	5	8	0,10	1000	6000	1,57	✓	20,32 €
Z-18-1000A	18	1,1-1,5	5	8	0,10	1000	6000	1,98	✓	30,74 €
Z-20-1000A	20	1,2-1,5	6	9	0,10	1000	6000	2,45	-	50,01 €
Z-25-1000A	25	1,5-1,7	6	9	0,10	1000	6000	3,83	✓	34,33 €
Z-30-1000A	30	1,5-1,9	6	9	0,10	1000	6000	5,51	✓	51,01 €
Z-40-1000A	40	1,6-2,0	7	11	0,10	1000	6000	9,80	✓	82,80 €
Z-50-1000A	50	2,2-2,6	7	11	0,10	1000	6000	15,30	-	132,48 €
Z-60-1000A	60	2,2-2,6	8	13	0,10	1000	6000	22,10	-	189,28 €
Z-80-1000A	80	2,2-2,6	8	13	0,10	1000	6000	39,20	-	359,68 €

*Depending on availability - Dimensions in mm

- **Hardened steel shaft for linear guides**
- Material: Stainless steel X90 CrMoV18 hardened by high frequency (55±3 HRC)
- Hardened depth: 0.8 to 2.6mm, conforms to DIN 6773
- Standard length 1000mm
- External diameter tolerance h6
- Straightness t3/1000mm
- Surface roughness Ra = 0,25µm
- Ends machined + deburred but not chamfered



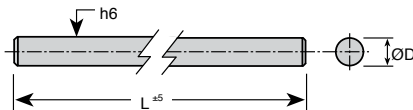
Options

- Please contact us for details of machining options

Advantages

- High resistance to corrosion and acids

For lengths greater than 1000mm please contact us



DISCOUNTS

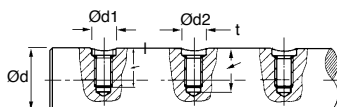
Qty	1+	6+	20+	40+
Disc.	List	-25%	-30%	On request

Part number	Nominal ØD (h6)	Treating depth (mm)	Circularity t1 (µm)	Cylindricity t2 (µm)	S/steel t3 (mm/m)	Standard length L (mm)	Max. length L (mm)	Weight (kg/m)	Stock*	Price each 1 to 5 (for 1m)
Z-6-1000B	6	0.5-0.8	4	6	0.16	1000	3000	0.22	✓	53,22 €
Z-8-1000B	8	0.6-0.9	4	6	0.16	1000	3000	0.39	✓	42,56 €
Z-10-1000B	10	0.7-1.0	4	6	0.16	1000	4500	0.61	✓	49,68 €
Z-12-1000B	12	0.8-1.2	5	8	0.12	1000	6000	0.89	✓	49,68 €
Z-16-1000B	16	1.1-1.5	5	8	0.12	1000	6000	1.57	✓	75,71 €
Z-20-1000B	20	1.2-1.6	6	9	0.10	1000	6000	2.45	✓	112,39 €
Z-25-1000B	25	1.5-1.7	6	9	0.10	1000	6000	3.83	✓	177,44 €
Z-30-1000B	30	1.5-1.9	6	9	0.10	1000	6000	5.51	✓	260,26 €
Z-40-1000B	40	2.5-3.0	7	11	0.10	1000	3000	9.80	-	402,24 €
Z-50-1000B	50	2.7-3.2	7	11	0.10	1000	3000	15.30	-	591,58 €

*Depending on availability - Dimensions in mm

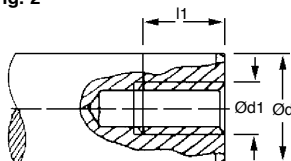
Send your drawing to email:
cial2@hpceurope.com

Fig. 1



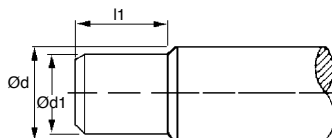
Recommended thread				
Ød	d1 min	d2 max	t	l
12	M4	M4	9	6
16	M5	M5	11	8
20	M5	M6	12	8
25	M5	M8	15	10
30	M6	M10	18	12

Fig. 2



Recommended thread	
Ød	Ød1
8-15	M4-M5
16-22	M5-M8
25-32	M10-M12

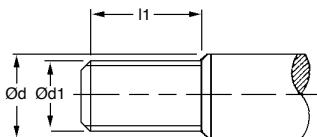
Fig. 3



- Alternatives diameters are available
- Can be either machined or ground

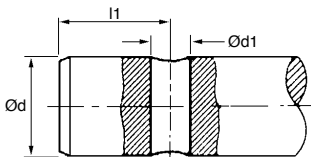
Send your drawing to email:
cial2@hpceurope.com

Fig. 4



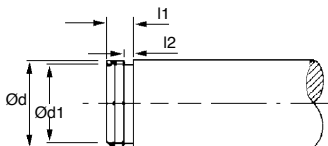
- Shaft end is threaded.
- The end of the shaft may be annealed (depends on diameter and thread).
- The undercut of the soft thread can be with or without a slit.

Fig. 5



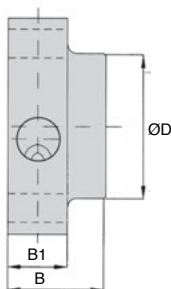
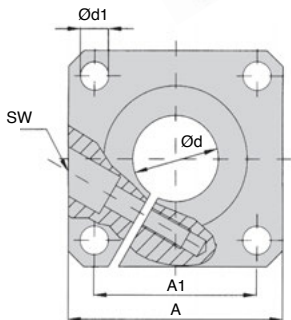
- Shaft end with transversal bore.
- Shaft is annealed around the bore. If annealing is not possible, each side will be milled.

Fig. 6



- Shaft end with slot for circlip.
- If requested, hardened shafts can be softened or annealed (to DIN 471).

- For linear guide shaft
- End support bracket
- Material: Aluminium
- Adjustable backlash
- Mounting holes conform to DIN912 8.8



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-5%	-10%	On request

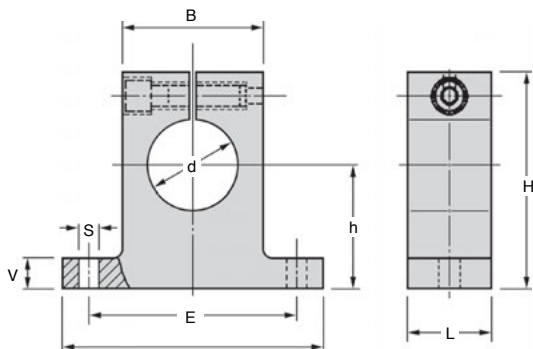
Part number	Ød	A	B	ØD	A1	Ød1	B1	SW	Weight (kg)	Stock*	Price each 1 to 4
SFWR-12	12	40	20	23,5	30 ^{+0,12}	5,5	12	M3	0,05	✓	50,59 €
SFWR-16	16	50	20	27,5	35 ^{+0,12}	5,5	12	M3	0,08	✓	57,54 €
SFWR-20	20	50	23	33,5	38 ^{+0,15}	6,6	14	M4	0,10	✓	64,49 €
SFWR-25	25	60	25	42,0	42 ^{+0,15}	6,6	16	M5	0,15	✓	73,44 €
SFWR-30	30	70	30	49,5	54 ^{+0,25}	9,0	19	M6	0,24	✓	94,28 €
SFWR-40	40	100	40	65,0	68 ^{+0,25}	11,0	26	M8	0,66	✓	114,14 €
SFWR-50	50	100	50	75,0	75 ^{+0,25}	11,0	36	M8	0,82	-	154,46 €

*Depending on availability - Dimensions in mm

- **End support**
- Material: Aluminium
- Adjustable backlash
- Mounting holes conform to DIN912 8.8

Accessories

- Ground shafts **Z-A, Z-B**



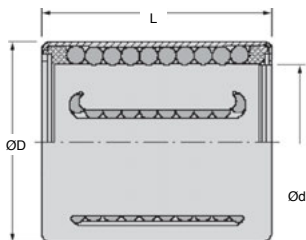
DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	d	h	B	H	L	A	S	V	E	Stock*	Price each 1 to 4
FGWA-12	12	20	20	35	12	42	5,5	5,5	32	✓	13,70 €
FGWA-16	16	25	26	42	15	50	5,5	6,5	40	✓	15,25 €
FGWA-20	20	30	32	50	20	60	5,5	8,0	45	✓	19,04 €
FGWA-25	25	35	38	58	25	74	6,6	9,0	60	✓	21,71 €
FGWA-30	30	40	45	68	30	84	9,0	10,0	68	✓	33,56 €
FGWA-40	40	50	56	86	30	108	11,0	12,0	86	✓	64,09 €
FGWA-50	50	60	80	100	40	130	11,0	14,0	108	-	99,17 €

*Depending on availability - Dimensions in mm

- **Compact cylindrical bearing**
- With integrated seals
- Material:
 - Housing: Pressed sheet steel
 - Balls: Steel 70 HRC +/-2
- Only for linear movement (not rotation)



Part number	normal backlash		reduced backlash	
	bore	shaft	bore	shaft
Steel or cast iron housing	H7	h6	H6	j7
Light alloy housing	K7	h6	K6	j5

DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

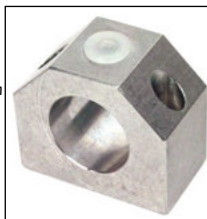
Part number	Ød (mm)	ØD (mm)	L (mm)	Weight (g)	Loads		Price each 1 to 4
					Dynamic Cr (N)	Static Co (N)	
KH12-28-LL	12	19	28	18,5	605	495	✓ 14,05 €
KH14-28-LL	14	21	28	20,5	600	505	✓ 14,34 €
KH16-30-LL	16	24	30	27,5	775	600	✓ 16,29 €
KH20-30-LL	20	28	30	32,5	1050	880	✓ 14,73 €
KH25-40-LL	25	35	40	66,0	1830	1560	✓ 18,03 €
KH30-50-LL	30	40	50	95,0	2700	2450	✓ 25,29 €
KH40-60-LL	40	52	60	182,0	4250	4000	✓ 42,92 €
KH50-70-LL	50	62	70	252,0	5300	5700	- 60,00 €

*Depending on availability - Dimensions in mm

- **Closed housing**
- **SA:** Housing only
- **SAKH:** Housing and light KH bearing with seal
- Material: anodised aluminium

Accessories

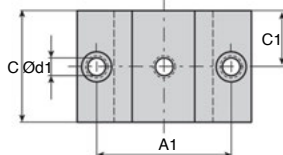
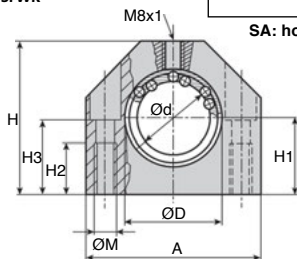
- Hardened ground shafts
- **Z-A, Z-B**
- End support for shafts **FGWA, SFWR**



SA: housing only



SAKH: housing + KH bearing



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	Housing only	Housing and bearing	For shaft Ød	ØD	A	C	H	A1 +/-0,15	C1
SA12	SAKH-12-LL		12	19	40	28	33	29	14
SA16	SAKH-16-LL		16	24	45	30	38	34	15
SA20	SAKH-20-LL		20	28	53	30	45	40	15
SA25	SAKH-25-LL		25	35	62	40	54	48	20
SA30	SAKH-30-LL		30	40	67	50	60	53	25
SA40	SAKH-40-LL		40	52	87	60	76	69	30
SA50	SAKH-50-LL		50	62	103	70	92	82	35

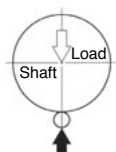
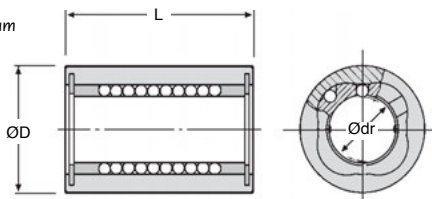
Part number	Housing only	Housing and bearing	H1 +0,010 -0,02	H2	H3	ØM	Ød1	Stock* Housing + bearing	Price each 1 to 4 Housing only + bearing
SA12	SAKH-12-LL		17	11	16	M5	4,3	✓	35,07 € 49,79 €
SA16	SAKH-16-LL		19	11	18	M5	4,3	✓	36,65 € 55,56 €
SA20	SAKH-20-LL		23	13	22	M6	5,3	✓	40,85 € 61,84 €
SA25	SAKH-25-LL		27	18	26	M8	6,6	✓	51,37 € 74,43 €
SA30	SAKH-30-LL		30	18	29	M8	6,6	✓	67,07 € 98,58 €
SA40	SAKH-40-LL		39	22	38	M10	8,4	-	99,62 € 145,79 €
SA50	SAKH-50-LL		47	26	46	M12	10,5	-	131,12 € 188,83 €

*Depending on availability - Dimensions in mm

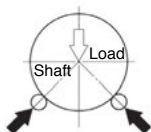
- Miniature slide bearing
- Material: steel

Assembly

- Recommended tolerances:
Standard assembly
Shaft: $6\mu\text{m} / -14\mu\text{m}$
Housing: $0 / +12\mu\text{m}$
Precise assembly
Shaft: $-4\mu\text{m} / -9\mu\text{m}$
Housing: $0 / +8\mu\text{m}$
- Depth of hardening: min. 0.8mm
- Surface hardness: HRC 58-64
- Surface roughness: min. Ra 0.8 μm



Load in direction A
Case A



Load in direction B
Case B

DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-10%	On request

Part number	Shaft Ø (mm)	No. of ball tracks	Max. Weight (g)	Max. eccentricity (μm)	Basic dynamic load - C		Basic static load - CO	
					Case A (N)	Case B (N)	Case A (N)	Case B (N)
LBE3M	3	4	1,8	4	18,40	21,20	39,40	55,80
LBE4M	4	4	2,8	4	23,50	27,00	48,60	68,70
LBE5M	5	4	3,8	4	51,30	53,00	108,00	152,00

Part number	Ødr Tolerance (μm)	ØD Tolerance (μm)	L Tolerance (μm)	Stock*	Price each 1 to 5
LBE3M	3^{+0}_{-8}	7^{+0}_{-8}	10^{+0}_{-120}	✓	33,51 €
LBE4M	4^{+0}_{-8}	8^{+0}_{-8}	12^{+0}_{-120}	✓	31,34 €
LBE5M	5^{+0}_{-8}	10^{+0}_{-8}	15^{+0}_{-120}	✓	30,55 €

*Depending on availability - Dimensions in mm

Economy range

KBww
KBSww

- **Precise guiding accuracy**
- Integrated seals
- Working temperature range -20°C to +80°C
- Material:

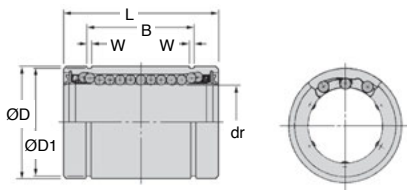
Housing: Steel or stainless steel

Ball raceway: Polyamide

info.

- Should be used with **Z-A** or **Z-B** hardened and ground shafts

Economy range



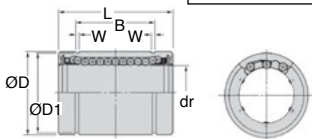
DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-30%	On request

Part number	dr	ØD	L	B	W	D1	Loads		Stock ^k	Price each 1 to 4
							Dynamic C (N)	Static Co (N)		
Steel with polyamide raceway										
KB-8-WW	8 ^{0_{+0,008}}	16 ^{0_{+0,008}}	25 ^{0_{-0,2}}	16,5 ^{0_{+0,2}}	1,10	15,2	265	402	✓	9,17 €
KB-12-WW	12 ^{0_{+0,008}}	22 ^{0_{+0,009}}	32 ^{0_{-0,2}}	22,9 ^{0_{+0,2}}	1,30	21,0	510	784	✓	10,70 €
KB-16-WW	16 ^{-0,001_{+0,009}}	26 ^{0_{+0,009}}	36 ^{0_{-0,2}}	24,9 ^{0_{+0,2}}	1,30	24,9	578	892	✓	12,09 €
KB-20-WW	20 ^{-0,001_{+0,009}}	32 ^{0_{-0,111}}	45 ^{0_{-0,2}}	31,5 ^{0_{+0,2}}	1,60	30,3	862	1370	✓	12,74 €
KB-25-WW	25 ^{-0,001_{+0,011}}	40 ^{0_{+0,111}}	58 ^{0_{-0,3}}	44,1 ^{0_{+0,3}}	1,85	37,5	980	1570	✓	22,29 €
KB-30-WW	30 ^{-0,001_{+0,011}}	47 ^{0_{-0,111}}	68 ^{0_{-0,3}}	52,1 ^{0_{+0,3}}	1,85	44,5	1570	2740	✓	25,77 €
KB-40-WW	40 ^{-0,002_{+0,013}}	62 ^{0_{-0,13}}	80 ^{0_{-0,3}}	60,6 ^{0_{+0,3}}	2,15	59,0	2160	4020	✓	44,19 €
Stainless steel with polyamide raceway										
KBS-12-WW	12 ^{0_{+0,008}}	22 ^{0_{+0,009}}	32 ^{0_{-0,2}}	22,9 ^{0_{+0,2}}	1,30	21,00	510	784	✓	29,16 €
KBS-16-WW	16 ^{-0,001_{+0,009}}	26 ^{0_{+0,009}}	36 ^{0_{-0,2}}	24,9 ^{0_{+0,2}}	1,30	24,90	578	892	✓	40,83 €
KBS-20-WW	20 ^{-0,001_{+0,009}}	32 ^{0_{-0,111}}	45 ^{0_{-0,2}}	31,5 ^{0_{+0,2}}	1,60	30,30	862	1370	✓	47,87 €
KBS-25-WW	25 ^{-0,001_{+0,011}}	40 ^{0_{+0,111}}	58 ^{0_{-0,3}}	44,1 ^{0_{+0,3}}	1,85	37,50	980	1570	✓	70,06 €
KBS-30-WW	30 ^{-0,001_{+0,011}}	47 ^{0_{-0,111}}	68 ^{0_{-0,3}}	52,1 ^{0_{+0,3}}	1,85	44,50	1570	2740	-	93,44 €
KBS-40-WW	40 ^{-0,002_{+0,013}}	62 ^{0_{-0,13}}	80 ^{0_{-0,3}}	60,6 ^{0_{+0,3}}	2,15	59,00	2160	4020	-	151,83 €

*Depending on availability - Dimensions in mm

- Bearing with solid external ring
- Closed construction
- Radial backlash cannot be adjusted
- Easy to install
- Very good guiding precision
- Integrated seals
- Working temperature:
steel/polyamide: -20°C to +80°C
steel/steel: -20°C/+110°C
- Materials:
Body: Steel 100C6
Balls: Steel 70 HRC ±2
Track: Steel or polyamide



Info.

- Should only be used with Z-A or Z-B hardened and ground shafts

DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	dr	ØD	L	B	W	D1	Loads		Stock*	Price each 1 to 4
							Dynamic C (N)	Static Co (N)		
With steel track										
KB-5-UU	5	12	22	14,5	1,10	11,50	206	265	✓	41,33 €
KB-8-UU	8	16	25	16,5	1,10	15,20	265	402	✓	25,00 €
KB-10-UU	10	19	29	22,0	1,30	18,00	372	549	✓	26,53 €
KB-12-UU	12	22	32	22,9	1,30	21,00	510	784	✓	28,51 €
KB-16-UU	16	26	36	24,9	1,30	24,90	578	892	✓	34,11 €
KB-20-UU	20	32	45	31,5	1,60	30,30	862	1370	✓	41,10 €
KB-25-UU	25	40	58	44,1	1,85	37,50	980	1570	✓	54,73 €
KB-30-UU	30	47	68	52,1	1,85	44,50	1570	2740	✓	71,46 €
KB-40-UU	40	62	80	60,6	2,15	59,00	2160	4020	✓	117,90 €
KB-60-UU	60	90	125	101,7	3,15	72,00	4700	9800	-	258,24 €
KB-80-UU	80	120	165	133,7	4,15	116,00	7350	16000	-	511,61 €
With polyamide track										
KB-5-UUG	5	12	22	14,5	1,10	11,50	206	265	✓	18,00 €
KB-8-UUG	8	16	25	16,5	1,10	15,20	265	402	✓	16,29 €
KB-10-UUG	10	19	29	22,0	1,30	18,00	372	549	✓	16,88 €
KB-12-UUG	12	22	32	22,9	1,30	21,00	510	784	✓	17,43 €
KB-16-UUG	16	26	36	24,9	1,30	24,90	578	892	✓	21,90 €
KB-20-UUG	20	32	45	31,5	1,60	30,30	862	1370	✓	28,69 €
KB-25-UUG	25	40	58	44,1	1,85	37,50	980	1570	-	38,82 €
KB-30-UUG	30	47	68	52,1	1,85	44,50	1570	2740	✓	51,78 €
KB-40-UUG	40	62	80	60,6	2,15	59,00	2160	4020	-	81,05 €
KB-50-UUG	50	75	100	77,6	2,65	72,00	3820	7940	-	129,47 €
KB-60-UUG	60	90	125	101,7	3,15	86,50	4700	9800	-	171,21 €

*Depending on availability - Dimensions in mm

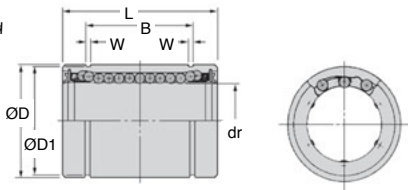
High load capacity

- **Bearing with solid external ring**
- Closed construction
- Radial backlash cannot be adjusted
- Easy to install
- Very good guiding accuracy
- Integral seals
- Working temperature:
steel/polyamide: -20°C to +80°C
steel/steel: -20°C to +140°C
- Materials:
Cylinder: Stainless steel
Balls: Stainless steel
Track: Stainless steel or polyamide

**Info.**

- Should be used with a **Z-B** hardened and ground shaft

For hostile environments

**DISCOUNTS**

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	dr	ØD	L	B	W	D1	Dynamic C (N)	Static Co (N)	Price each 1 to 4
With stainless steel track									
KBS-12-UU	12 ⁰ _{+0,008}	22 ⁰ _{-0,009}	32 ⁰ _{-0,2}	22,9 ⁰ _{-0,2}	1,30	21,00	510	784	✓ 72,38 €
KBS-16-UU	16 ^{-0,001} _{+0,009}	26 ⁰ _{-0,009}	36 ⁰ _{-0,2}	24,9 ⁰ _{-0,2}	1,30	24,90	578	892	✓ 87,58 €
KBS-20-UU	20 ^{-0,001} _{+0,009}	32 ⁰ _{-0,011}	45 ⁰ _{-0,2}	31,5 ⁰ _{-0,2}	1,60	30,30	862	1370	✓ 99,26 €
KBS-25-UU	25 ^{-0,001} _{+0,011}	40 ⁰ _{-0,011}	58 ⁰ _{-0,3}	44,1 ⁰ _{-0,3}	1,85	37,50	980	1570	- 140,15 €
KBS-30-UU	30 ^{-0,001} _{+0,011}	47 ⁰ _{-0,011}	68 ⁰ _{-0,3}	52,1 ⁰ _{-0,3}	1,85	44,50	1570	2740	- 181,03 €
KBS-40-UU	40 ^{-0,002} _{+0,013}	62 ⁰ _{-0,013}	80 ⁰ _{-0,3}	60,6 ⁰ _{-0,3}	2,15	59,00	2160	4020	- 292,06 €
KBS-50-UU	50 ^{-0,002} _{+0,013}	75 ⁰ _{-0,013}	100 ⁰ _{-0,3}	77,6 ⁰ _{-0,3}	2,65	72,00	3820	7940	- 408,87 €
With polyamide track									
KBS-12-UUG	12 ⁰ _{+0,008}	22 ⁰ _{-0,009}	32 ⁰ _{-0,2}	22,9 ⁰ _{-0,2}	1,30	21,00	510	784	✓ 49,04 €
KBS-16-UUG	16 ^{-0,001} _{+0,009}	26 ⁰ _{-0,009}	36 ⁰ _{-0,2}	24,9 ⁰ _{-0,2}	1,30	24,90	578	892	✓ 58,36 €
KBS-20-UUG	20 ^{-0,001} _{+0,009}	32 ⁰ _{-0,011}	45 ⁰ _{-0,2}	31,5 ⁰ _{-0,2}	1,60	30,30	862	1370	✓ 75,88 €
KBS-25-UUG	25 ^{-0,001} _{+0,011}	40 ⁰ _{-0,011}	58 ⁰ _{-0,3}	44,1 ⁰ _{-0,3}	1,85	37,50	980	1570	✓ 102,78 €
KBS-30-UUG	30 ^{-0,001} _{+0,011}	47 ⁰ _{-0,011}	68 ⁰ _{-0,3}	52,1 ⁰ _{-0,3}	1,85	44,50	1570	2740	- 140,15 €
KBS-40-UUG	40 ^{-0,002} _{+0,013}	62 ⁰ _{-0,013}	80 ⁰ _{-0,3}	60,6 ⁰ _{-0,3}	2,15	59,00	2160	4020	- 216,10 €
KBS-50-UUG	50 ^{-0,002} _{+0,013}	75 ⁰ _{-0,013}	100 ⁰ _{-0,3}	77,6 ⁰ _{-0,3}	2,65	72,00	3820	7940	- 315,41 €

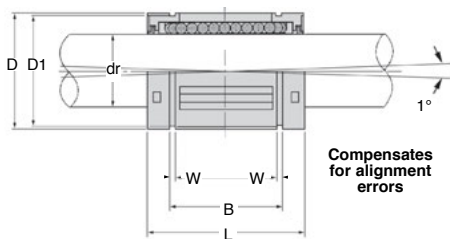
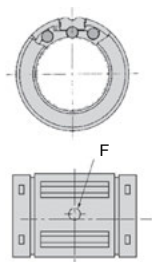
*Depending on availability - Dimensions in mm

TKUU Compensates for any flexing of the shaft

- Self aligning closed linear bearing
- Compensates for any alignment errors or flexing of the shaft
- Integral seals
- Materials:
Bearing: Thermoplastic
Balls: Steel 70 HRC²

Accessories

- Z-A and Z-B hardened and ground shafts
- NSB and S2B housings



Until
-20%**

DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	dr	D	L	W	D1	h	F	J	G	B	Loads		Stock*	Price each 1 to 4
											Dyn. C (N)	Stat. Co (N)		
TK-12-UU	12	22	32	1,30	21,00	-	3	0,7	-	22,9	1020	1290	✓	21,44 €
TK-16-UU	16	26	36	1,30	24,90	-	3	0,7	-	24,9	1250	1550	✓	26,31 €
TK-20-UU	20	32	45	1,60	30,30	-	3	0,9	-	31,5	2090	2630	✓	34,10 €
TK-25-UU	25	40	58	1,85	37,50	-	3	1,4	1,5	44,1	3780	4720	✓	44,82 €
TK-30-UU	30	47	68	1,85	44,50	-	3	2,2	2,0	52,1	5470	6810	✓	61,39 €
TK-40-UU	40	62	80	2,15	59,00	-	3	2,7	1,5	60,6	6590	8230	✓	93,85 €

*Depending on availability - Dimensions in mm



Closed polymer **DryLin®R** bearing

Unaffected by dirt

RJUM01
RJZM01

- Closed bearing with polymer slide surface

- Max. speed

Dry working 8m/s

With lubrication >10 m/s

- Working temperature from -60°C to +100°C

(wear increases if temperature >80°C)

- Max. load 35 N/mm²

- Recommended load 5N/mm² (linear)

- Material:

Housing: Aluminium

Bearing: DryLin®R

Advantages

- Maintenance free

- Self lubricating

- 20% of weight of equivalent steel version

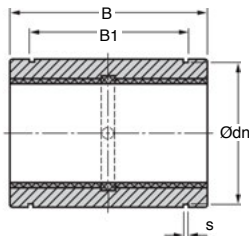
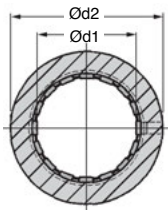
- Silent in operation

Fast and silent



Accessories

- AWM aluminium shaft



Until
-22%**

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød1	Tolerance	Ød2 (h7)	B (h10)	B1 (H10)	s (H10)	Ødn	Stock*	Price each 1 to 5
RJZM01-05	5	0,02 - 0,05	12	22	14,20	1,10	11,50	✓	14,68 €
RJZM01-08	8	0,02 - 0,05	16	25	16,20	1,10	15,20	✓	14,98 €
RJUM01-10	10	0,02 - 0,05	19	29	21,60	1,30	17,50	✓	16,13 €
RJUM01-12	12	0,02 - 0,05	22	32	22,60	1,30	20,50	✓	19,22 €
RJUM01-16	16	0,02 - 0,05	26	36	24,60	1,30	24,20	✓	21,07 €
RJUM01-20	20	0,02 - 0,06	32	45	31,20	1,60	29,60	✓	26,40 €
RJUM01-25	25	0,02 - 0,06	40	58	43,70	1,85	36,50	✓	34,02 €
RJUM01-30	30	0,02 - 0,07	47	68	51,70	1,85	43,50	✓	43,62 €
RJUM01-40	40	0,02 - 0,07	62	80	60,30	2,15	57,80	-	71,43 €
RJUM01-50	50	0,02 - 0,09	75	100	77,30	2,65	70,50	-	104,89 €

*Depending on availability - Dimensions in mm

Linear ball bearings + shaft

Possible combinations

Closed linear ball bearing:



Ref. **KH**
page 236



Ref. **KBSuu**
pages 241



Ref. **LBE**
page 238



Ref. **TKuu**
pages 242



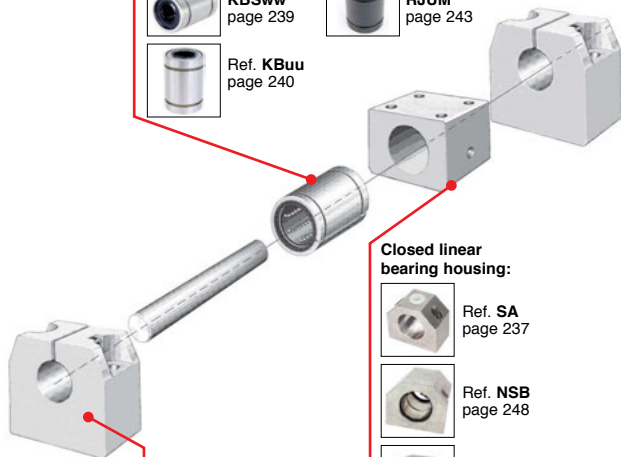
Ref. **KBww**,
KBSww
page 239



Ref. **RJZM**,
RJUM
page 243



Ref. **KBuu**
page 240



Closed linear bearing housing:



Ref. **SA**
page 237



Ref. **NSB**
page 248



Ref. **S2B**
page 249



Ref. **RJUM05, 06**
page 254

Shaft end supports:



Ref. **FGWA**
page 235



Ref. **SFWR**
page 234

High load capacity

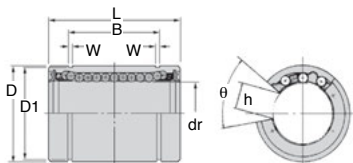
- **Open linear bearing with sold external ring**
- Use shafts supported at the ends to avoid excessive flexing.
- Integrated seals
- Material:
Housing: Steel 100C6
Balls: Steel 70 HRC +/-2
Track: Steel or polyamide

Option

- Stainless steel linear bearing

Info.

- Should be used with a **FSTN** supported shaft

**DISCOUNTS**

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	dr	D	L	B	W	D1	h1	θ	Loads Dynamic C (N)	Static Co (N)	Price each 1 to 4
With steel track											
KB-12OP-UU	12	22 ^{+0,000 -0,009}	32 ^{+0,000 -0,008}	22,9 ^{+0,0 -0,2}	1,30 ^{+0,0 -0,2}	21,00	7,5	78°	510	784	✓ 34,79 €
KB-16OP-UU	16	26 ^{+0,000 -0,009}	36 ^{+0,001 -0,009}	24,9 ^{+0,0 -0,2}	1,30 ^{+0,0 -0,2}	24,90	10,0	78°	578	892	✓ 41,48 €
KB-20OP-UU	20	32 ^{+0,000 -0,011}	45 ^{+0,001 -0,009}	31,5 ^{+0,0 -0,2}	1,60 ^{+0,0 -0,2}	30,30	10,0	60°	862	1370	✓ 50,18 €
KB-25OP-UU	25	40 ^{+0,000 -0,011}	58 ^{+0,001 -0,011}	44,1 ^{+0,0 -0,3}	1,85 ^{+0,0 -0,3}	37,50	12,5	60°	980	1570	✓ 66,78 €
KB-30OP-UU	30	47 ^{+0,000 -0,011}	68 ^{+0,001 -0,011}	52,1 ^{+0,0 -0,3}	1,85 ^{+0,0 -0,3}	44,50	12,5	50°	1570	2740	✓ 86,98 €
KB-40OP-UU	40	62 ^{+0,000 -0,013}	80 ^{+0,002 -0,013}	60,6 ^{+0,0 -0,3}	2,15 ^{+0,0 -0,3}	59,00	16,8	50°	2160	4020	✓ 143,82 €
KB-50OP-UU	50	75 ^{+0,000 -0,015}	100 ^{+0,002 -0,015}	77,6 ^{+0,0 -0,4}	2,65 ^{+0,0 -0,4}	72,00	21,0	50°	3820	7940	- On request
KB-60OP-UU	60	90 ^{+0,000 -0,015}	125 ^{+0,002 -0,015}	101,7 ^{+0,0 -0,4}	3,15 ^{+0,0 -0,4}	86,50	27,2	54°	4700	9800	- 315,09 €
KB-80OP-UU	80	120 ^{+0,000 -0,015}	165 ^{+0,004 -0,016}	133,7 ^{+0,0 -0,4}	4,15 ^{+0,0 -0,4}	116,00	36,3	54°	7350	16000	- 561,69 €
With polyamide track											
KB-12OP-UUG	12	22 ^{+0,000 -0,009}	32 ^{+0,000 -0,008}	22,9 ^{+0,0 -0,2}	1,30 ^{+0,0 -0,2}	21,00	7,5	78°	510	784	✓ 21,34 €
KB-16OP-UUG	16	26 ^{+0,000 -0,009}	36 ^{+0,001 -0,009}	24,9 ^{+0,0 -0,2}	1,30 ^{+0,0 -0,2}	24,90	10,0	78°	578	892	✓ 27,00 €
KB-20OP-UUG	20	32 ^{+0,000 -0,011}	45 ^{+0,001 -0,009}	31,5 ^{+0,0 -0,2}	1,60 ^{+0,0 -0,2}	30,30	10,0	60°	862	1370	- 34,91 €
KB-25OP-UUG	25	40 ^{+0,000 -0,011}	58 ^{+0,001 -0,011}	44,1 ^{+0,0 -0,3}	1,85 ^{+0,0 -0,3}	37,50	12,5	60°	980	1570	✓ 47,29 €
KB-30OP-UUG	30	47 ^{+0,000 -0,011}	68 ^{+0,001 -0,011}	52,1 ^{+0,0 -0,3}	1,85 ^{+0,0 -0,3}	44,50	12,5	50°	1570	2740	- 64,16 €
KB-40OP-UUG	40	62 ^{+0,000 -0,013}	80 ^{+0,002 -0,013}	60,6 ^{+0,0 -0,3}	2,15 ^{+0,0 -0,3}	59,00	16,8	50°	2160	4020	- 100,22 €
KB-50OP-UUG	50	75 ^{+0,000 -0,015}	100 ^{+0,002 -0,015}	77,6 ^{+0,0 -0,4}	2,65 ^{+0,0 -0,4}	72,00	21,0	50°	3820	7940	- 161,06 €
KB-60OP-UUG	60	90 ^{+0,000 -0,015}	125 ^{+0,002 -0,015}	101,7 ^{+0,0 -0,4}	3,15 ^{+0,0 -0,4}	86,50	27,2	54°	4700	9800	- 212,89 €

*Depending on availability - Dimensions in mm



TKUUOP Compensates for any flexing of the shaft

- Open self aligning linear bearing

- Integrated seals

- Material:

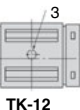
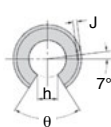
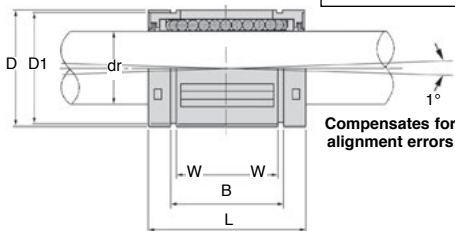
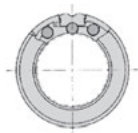
Housing: Thermoplastic

Balls: Steel 70 HRC ± 2

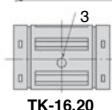
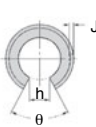
Accessories

- Z-A and Z-B hardened and ground shafts

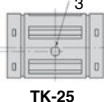
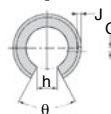
- NSO and S20 housings



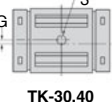
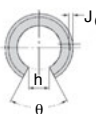
TK-12



TK-16,20



TK-25



TK-30,40

DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	dr	D	L	W	D1	h	J	G	B	θ	Loads Dyn C(N)	Stat. Co (N)	Stock*	Price each 1 to 4
TK-12-UUOP	12	22	32	1,30	21,0	6,5	0,7	-	22,9	66°	1020	1290	✓	24,48 €
TK-16-UUOP	16	26	36	1,30	24,9	9,0	0,7	-	24,9	68°	1250	1550	✓	30,63 €
TK-20-UUOP	20	32	45	1,60	30,3	9,0	0,9	-	31,5	55°	2090	2630	✓	40,13 €
TK-25-UUOP	25	40	58	1,85	37,5	11,5	1,4	1,5	44,1	57°	3780	4720	✓	54,05 €
TK-30-UUOP	30	47	68	1,85	44,5	14,0	2,2	2,0	52,1	57°	5470	6810	✓	72,32 €
TK-40-UUOP	40	62	80	2,15	59,0	19,5	2,7	1,5	60,6	56°	6590	8230	✓	112,67 €

*Depending on availability - Dimensions in mm

Linear ball bearings + shaft

Possible combinations

Ideal for long shaft lengths

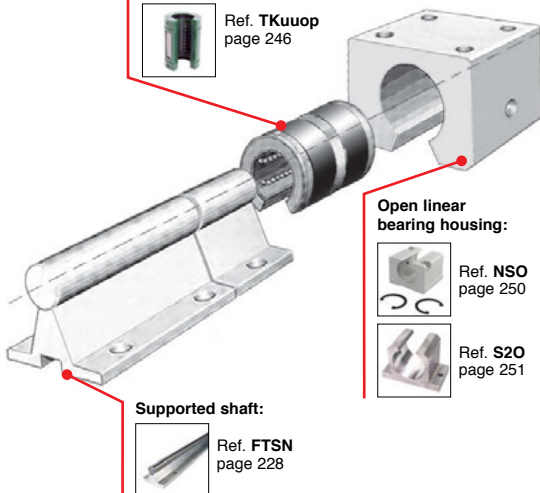
Open linear ball bearing:



Ref. **KBopuu**
page 245



Ref. **TKuuop**
page 246



Open linear bearing housing:



Ref. **NSO**
page 250



Ref. **S2O**
page 251

Supported shaft:



Ref. **FTSN**
page 228

Standard linear bearing housing **Alu** **Stock**

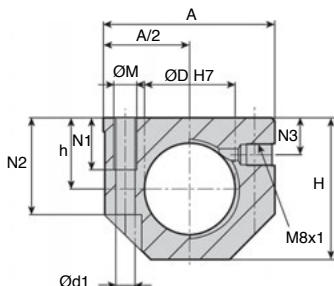
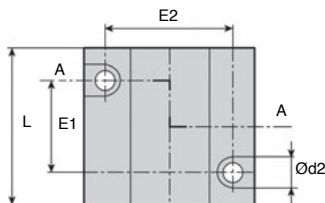
NSB

For KB, TK and RJUM bearings

- Housing for closed bearing
- Bearing not supplied
- Material : Aluminium

Options

- Compatible with **KB**, **TK** and **RJUM** ranges



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

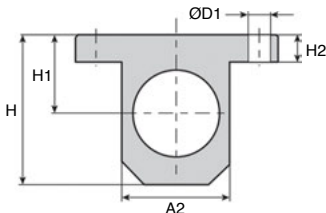
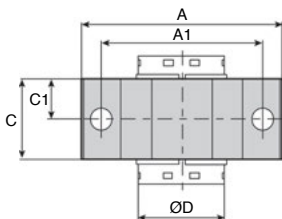
Part number	For shaft Ød	ØD	H	h +0.01/-0.02	A	L +0.3	N1	N2	N3	E1 +0.2	E2 +0.2	Ød1	Ød2	ØM	Stock*	Price each 1 to 4
NSB12	12	22	35	18	43	39	13	25	10	23	32	4,2	8	M5	✓	38,55 €
NSB16	16	26	42	22	53	43	13	30	12	26	40	5,2	10	M6	✓	43,77 €
NSB20	20	32	50	25	60	54	18	34	13	32	45	6,8	11	M8	✓	47,94 €
NSB25	25	40	60	30	78	67	22	40	15	40	60	8,6	15	M10	✓	60,45 €
NSB30	30	47	70	35	87	79	22	48	16	45	68	8,6	15	M10	✓	69,87 €

*Depending on availability - Dimensions in mm

- Housing for closed bearing
- Bearing not supplied
- Material : Aluminium

Options

- Compatible with **KB**, **TK** and **RJUM** ranges



Typical application

DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	For shaft Ød	ØD	H	C	A	A1 +/-0.15	C1	H1 +/-0.015	H2	A2	ØD1	Stock*	Price each 1 to 4
S2B12	12	22	35,0	20	52	42	10	18	6	30	5,3	✓	23,94 €
S2B16	16	26	40,5	22	56	46	11	22	7	34	5,3	✓	27,09 €
S2B20	20	32	48,0	28	70	58	14	25	8	40	6,4	✓	29,17 €
S2B25	25	40	58,0	40	80	68	20	30	10	50	6,4	✓	37,50 €
S2B30	30	47	67,0	48	88	76	24	35	10	58	6,4	✓	47,94 €
S2B40	40	62	85,0	56	108	94	28	45	12	74	8,4	-	58,38 €
S2B50	50	75	100,0	72	135	116	36	50	12	96	10,5	-	86,53 €

*Depending on availability - Dimensions in mm

Housing for open linear bearing

NSO For KB-OP and TK-OP bearings

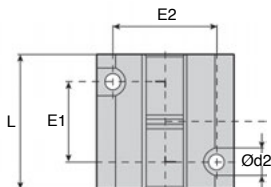
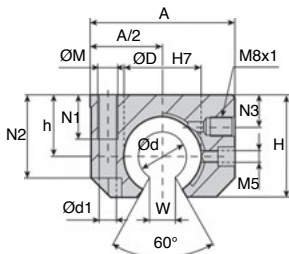
- Open housing for open bearing
- Bearing not supplied
- Material:
Aluminium
- Circlips used for assembly

Options

- Compatible with **KB-OP** and **TK-OP** ranges

Advantages

- Use with long supported shafts to avoid flexing.



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	For shaft Ød	ØD	H	h	A	L	E1	E2	N1
NSO12	12	22	28	18	43	39	23	32	11
NSO16	16	26	35	22	53	43	26	40	13
NSO20	20	32	42	25	60	54	32	45	18
NSO25	25	40	51	30	78	67	40	60	22
NSO30	30	47	60	35	87	79	45	68	22
NSO40	40	62	77	45	108	91	58	86	26

Part number	N2	N3	Ød1	Ød2	ØM	W	Masse (g)	Stock*	Price each 1 to 4
NSO12	23,5	8	4,2	8	M5	7,0	110	✓	58,38 €
NSO16	30,0	12	5,2	10	M6	9,4	170	✓	60,45 €
NSO20	34,0	13	6,8	11	M8	10,2	300	✓	66,72 €
NSO25	40,0	15	8,6	15	M10	12,5	570	✓	80,26 €
NSO30	48,0	16	8,6	15	M10	13,9	860	✓	94,89 €
NSO40	60,0	20	10,3	18	M12	18,0	1600	✓	159,57 €

*Depending on availability - Dimensions in mm

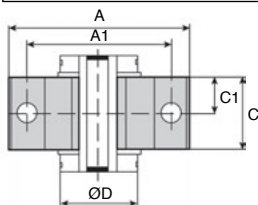
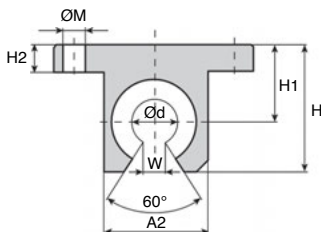
- Open housing for open bearing
- Bearing not supplied
- Material : Aluminium

Options

- Compatible with KB-OP and TK-OP ranges

Advantages

- Use with long supported shafts to avoid flexing.



DISCOUNTS

Qty	1+	5+	10+	25+
Disc.	List	-6%	-12%	On request

Part number	For shaft Ød	ØD	H	C	A	A1 ±0.15
S2012	12	22	28,0	20	52	42
S2016	16	26	33,5	22	56	46
S2020	20	32	42,0	28	70	58
S2025	25	40	51,0	40	80	68
S2030	30	47	60,0	48	88	76
S2040	40	62	77,0	56	108	94
S2050	50	75	93,0	72	135	116

Part number	C1	H1 ±0.015	H2	W	A2	ØM	Price each 1 to 4
S2012	10	18	6	7,0	30	5,3	On request
S2016	11	22	7	9,4	34	5,3	43,11 €
S2020	14	25	8	10,0	40	6,4	45,05 €
S2025	20	30	10	12,5	50	6,4	58,91 €
S2030	24	35	10	12,5	58	6,4	79,92 €
S2040	28	45	12	16,8	74	8,4	100,86 €
S2050	36	50	12	21,0	96	10,5	141,95 €

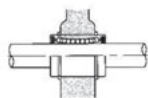
*Depending on availability - Dimensions in mm

How to mount slide bushes

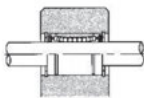
Technical info

How to mount slide bushes

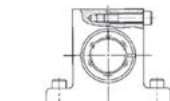
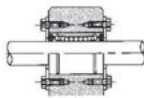
Alternative mounting arrangement:



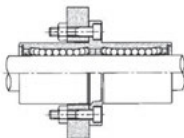
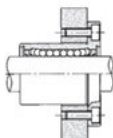
Using circlips



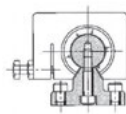
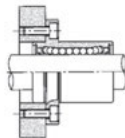
Using a mounting plat



Clearance adjustable type



With mounting flange



Open type

Adjusting the clearance

Series	Accuracy	Shaft		Bushes	
		Clearance fir	Transition fit	Tolerance	Transition fit
KB	High	h6	j6	H7	j7
KB-W	High	h6	-	H7	-

The standard fits shown in the table are those normally used for these slide bushes.

A transition fit is used to reduce the clearance and to increase accuracy. Customised modification of the clearance between the bearing and the shaft is also possible.

The pre-load for clearance adjustable and open type slide bearings should be adjusted carefully so as not to exceed the limits of the radial clearances given in the above table.

A flange type bush is generally inserted into an installation bore that is slighter greater than the outer cylinder. However if the outer cylinder is a pilot type, a H7 tolerance is recommended.

How to install slide bushes

Technical info

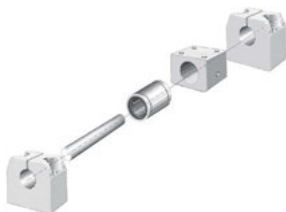
Installation instructions

Ensure that all burrs are removed from the shaft and then carefully mount the slide bush aligning it with the centre of the bore. Ball elements may be released if excessive force is used.

When two or more shafts are used, the parallelism of the shafts will affect the smoothness of the movement and the life of the slide bushes.

The parallelism should be checked by moving the slide bush along the length of the shaft to check for freedom of movement before the shaft is finally installed.

	KB12 to 16(G)-OP	KB20(G)-OP	KB25 to 80(G)-OP
Loading from above			
Loading from below			



Assembling a closed slide bush and shaft



Assembling an open slide bush and shaft

RJUM05 RJUM06

Unaffected by dirt

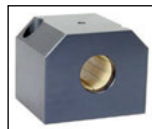
- Housing for closed bearing
- Two versions available: short (RJUM05) or long (RJUM06)
- Interchangeable with standard bearing housings
- Easy to use
- Recommended tolerance: h7
- Material:

Housing: Aluminium
Liner: iglidur® J

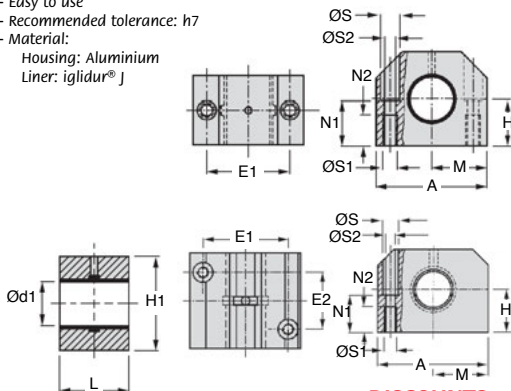
Fast and silent



RJUM05



RJUM06



Until
-35%**

DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	$\varnothing d1$	Tolerance	H	H1	A	M	E1	E2	$\varnothing S$	$\varnothing S1$	$\varnothing S2$	N1	N2	L	Price each 1 to 5
Short version															
RJUM05-12	12	0,02 / 0,05	17	33	40	20,0	29	-	8	M5	4,3	16	11	28	57,00 €
RJUM05-16	16	0,02 / 0,05	19	38	45	22,5	34	-	18	M5	4,3	18	11	30	57,16 €
RJUM05-20	20	0,02 / 0,06	23	45	53	26,5	40	-	19,5	M6	5,3	22	13	30	64,15 €
RJUM05-25	25	0,02 / 0,06	27	54	62	31,0	48	-	11	M8	6,6	26	18	40	66,96 €
RJUM05-30	30	0,03 / 0,07	30	60	67	33,5	53	-	11	M8	6,6	29	18	50	76,48 €
RJUM05-40	40	0,03 / 0,07	39	76	87	43,5	69	-	14	M10	8,4	38	22	60	99,85 €
RJUM05-50	50	0,04 / 0,09	47	92	103	51,5	82	-	19	M12	10,5	46	26	70	135,54 €
Long version															
RJUM06-12	12	0,02 / 0,05	18	35	43	21,5	32	23	8	M5	4,3	16,5	11	39	67,94 €
RJUM06-16	16	0,02 / 0,05	22	42	53	26,5	40	26	10	M6	5,3	21	13	43	75,54 €
RJUM06-20	20	0,02 / 0,06	25	50	60	30,0	45	32	11	M8	6,6	24	18	54	81,36 €
RJUM06-25	25	0,02 / 0,06	30	60	78	39,0	60	40	15	M10	8,4	29	22	67	91,08 €
RJUM06-30	30	0,03 / 0,07	35	70	87	43,5	68	45	15	M10	8,4	34	22	79	99,43 €
RJUM06-40	40	0,03 / 0,07	45	90	108	54,0	86	58	18	M12	10,5	44	26	91	115,81 €
RJUM06-50	50	0,04 / 0,09	50	105	132	66,0	108	50	20	M16	13,5	49	34	113	223,97 €

Dimensions in mm

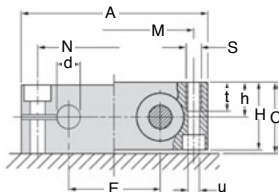
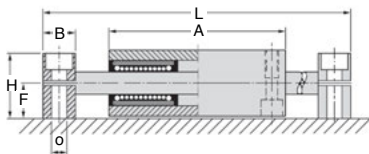
- Shafts supported at the ends
- **This linear table comprises 2 h6 tolerated shafts, 2 shaft supports, 4 KBWW precision bearings and a sliding plate**
- Materials:
Plate + end supports: Aluminium
Shafts + bearings: steel

Options

- Available in lengths up to 1500mm. If longer length required, please contact us for details of model FSKBO



With 4 linear bearings



Part number	d	A	H	M screw centres on plate	E	h	u	S	t
SMLS-12	12	85	32	73	42	16,0	5,3	M60	13
SMLS-16	16	100	36	88	54	18,0	5,3	M60	13
SMLS-20	20	130	46	115	75	23,0	6,4	M80	18
SMLS-25	25	160	56	140	88	28,0	8,4	M10	22
SMLS-30	30	180	64	158	96	32,0	10,5	M12	26
SMLS-40	40	230	80	202	122	40,0	13,5	M16	34
SMLS-50	50	280	96	250	152	48,0	13,5	M18	34

Part number	C	F	o	B	End N screw centres	Length L (mm)	Stock*	Price each
SMLS-12	34	18,0	6,6	14	70	1000	✓	288,24 €
SMLS-16	38	20,0	9,0	18	82	1000	✓	334,08 €
SMLS-20	48	25,0	11,0	20	108	1000	✓	418,57 €
SMLS-25	58	30,0	13,5	25	132	1000	✓	581,95 €
SMLS-30	67	35,0	13,5	25	150	1000	-	734,33 €
SMLS-40	84	44,0	17,5	30	190	1000	-	1 138,29 €
SMLS-50	100	52,0	17,5	30	240	1000	-	On request

*Depending on availability - Dimensions in mm

Utilitrak® linear guides

UTK 

Presentation

The Utilitrak® linear guide system is designed for applications where low cost, easy installation and minimal maintenance requirements are the primary design objectives.



Designed primarily for transport type applications, Utilitrak® is intended for use where load capacity, stiffness, and positional accuracy are less demanding than machine tool grade applications. Utilitrak® offers a low cost alternative to recirculating ball guide technologies, which often require a considerable amount of surface preparation, adding significantly to the total installed cost.

UTK- SW: Hardened and ground steel channel with precision steel wheels.

UTK- PW: Aluminium alloy channel with polymer over-moulded wheels.



Features and benefits

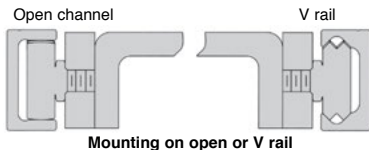
- Frictionless operation
- Low noise
- Smooth running
- High speed capacity
- Unlimited travel lengths
- High load capacity
- Resistant to contamination by dust

Load Capacity

- The load capacity ratings in this guide are based on 100km of service life. As with any linear bearing technology, the choice of the size of the Utilitrak® track should be done conservatively. If the guide selection is such that load capacities are marginal, it may be appropriate to consider the next larger size.

Lubrication

- The recirculating elements within DualVee® guide wheels are permanently lubricated and sealed against the operating environment. The contact surfaces between the wheel and channel do however require lubrication to maximize the life and speed of the guide. All Utilitrak® carriages come complete with lubricators, consisting of an oil saturated felt pad within a housing. Lubricators should be periodically checked and re-oiled to ensure that a sufficient coating of lubricant is maintained on the channel guideway surfaces.



Accuracy

- The accuracy of the Utilitrak® system is defined differently than typical recirculating ball guides. These are designed primarily for "high end" positioning applications, such as machine tool guideways, Cartesian coordinate robotics and precision XY inspection equipment. These guides are more rigidly defined in terms of the running parallelism of carriages to rail, and are measured as a function of rail length. Their higher cost can be attributed to the grinding and finishing operations necessary to achieve these tight tolerances.
- Utilitrak®, in contrast, has been developed for "lower end" transport applications. The definition of accuracy in this class of guide is independent of channel length, and is measured solely by the parallelism maintained between the critical channel surfaces, this does not vary by more than 0.05 mm over the entire length of the channel. As with any linear guide, installed accuracy is directly related to the straightness and flatness of the surface to which it is mounted. Because the guide will conform to the mounting surface, it is important for that surface to be more rigid than the Utilitrak® channel.

Life expectancy

The sum of the applied loads divided by system load capacity should be less than or equal to 1:

$$LF = \frac{F_R}{F_R (MAX)} + \frac{F_A}{F_A (MAX)} + \frac{M_R}{M_R (MAX)} + \frac{M_Y}{M_Y (MAX)} + \frac{M_P}{M_P (MAX)} \leq 1$$

The applied force on the system is equivalent to:

$$F = F_{R(MAX)} * LF$$

Knowing the equivalent applied load,
the system life can now be calculated:

$$L_{km} = 100 * \left(\frac{C}{F} * \frac{1}{f_c} \right)^3$$

L_{km} = System life in kilometres

C = System dynamic load rating

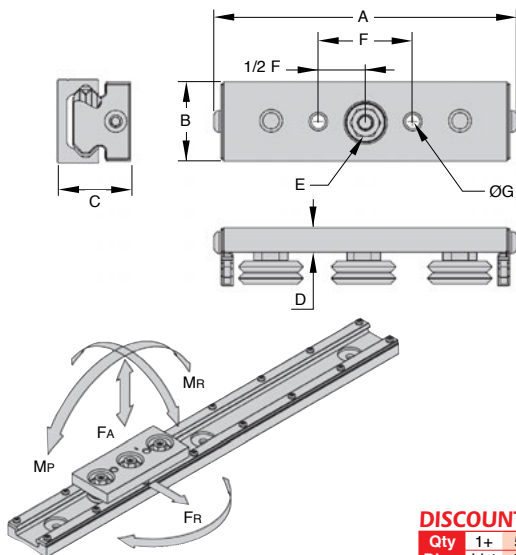
F = Equivalent load

f_c = Correction factor

Correction factor table

Environmental factor	Correction value
No shock or vibration, clean working environment, speed <1m/s	1,46
Light shocks or vibration, speed between 1m/s to 2m/s	1,85
Shocks, vibrations, harsh environment, speed >2m/s	3

- V style carriage assembly for UTK-PWR aluminium channel
- Light to medium duty transport applications
- Extremely low noise
- Lightweight and economical



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

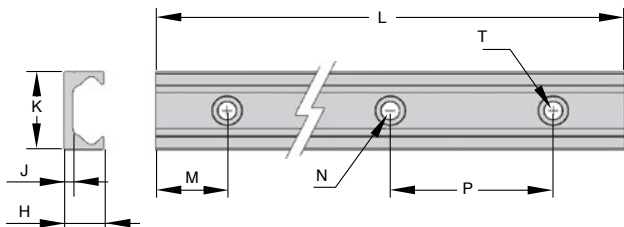
Part number	A	B	C	D	E Socket size	F	ØG	Radial FR	Load capacity					C	Stock*	Price each 1 to 4
									FA	MP	My	MR				
UTK0-PWC	79,9	18	22,0	7,9	8	22	M4x0,7	55	88	3	1,5	1	130	-		165,86 €
UTK1-PWC	113,5	24	26,3	8,8	10	40	M6x1	110	155	8	3,0	2	200	✓		135,76 €
UTK2-PWC	144,2	38	35,0	11,8	13	45	M8x1,25	165	311	18	8,0	4	350	✓		153,83 €

*Depending of availability - Dimensions in mm

- Matching component for UTK-PW Series V wheel carriage assemblies
- U shaped aluminium alloy (6063-T6) channel
- Lightweight
- Tolerance on length +/-2mm

Option

- Increased length, max 3600mm


DISCOUNTS

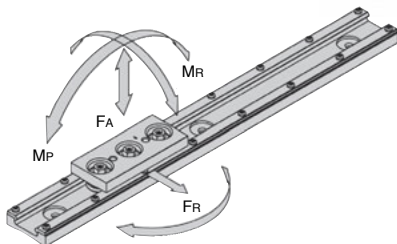
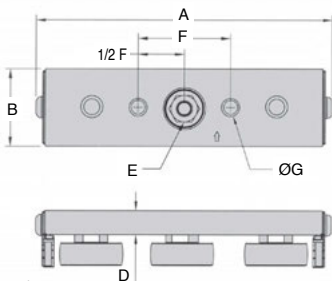
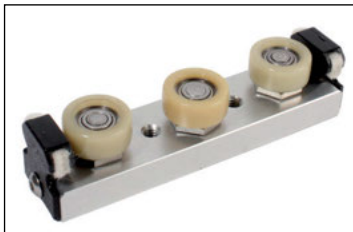
Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	H	J	K	L	M	N Ø x depth (counterbore)	T (Ø hole)	P	Rail weight (kg/m)	Carriage weight (g)	Stock*	Price each 1 to 4
UTK0-PWR	11,0	4,0	20	1000	20	8,3 x 3	4,8	80	0,30	46	-	92,67 €
UTK1-PWR	15,0	4,0	26	1000	20	9,8 x 2,8	5,8	80	0,50	92	✓	101,01 €
UTK2-PWR	19,7	4,5	40	1000	20	14,3 x 3	8,8	80	0,93	243	✓	147,54 €

*Depending of availability - Dimensions in mm



- Crown roller style carriage for use with UTK-PWRR aluminium channel
- Intended for radial loads only
- Reduced noise
- Light and economic



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	A	B	C	D	allen key	F	ØG	Admissible load					C	Price each 1 to 4
								Radial Fr	Axial Fa	MP	My	MR		
UTK0-PWCR	79,9	18	22,0-23,1	7,9	8	22	M4x0,7	55	0	0	1,5	0	130	166,33 €
UTK1-PWCR	113,5	24	25,3-27,6	8,8	10	40	M6x1	110	0	0	3,0	0	200	140,99 €
UTK2-PWCR	144,2	38	34,7-37,4	11,8	13	45	M8x1,25	165	0	0	8,0	0	350	154,23 €

Dimensions in mm



aluminium

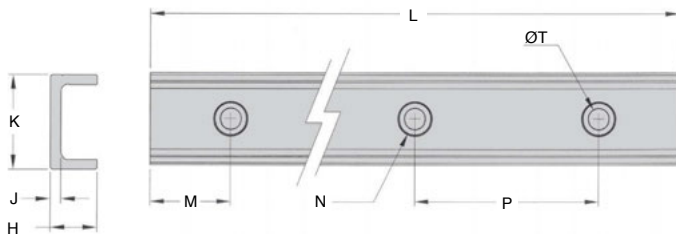


UTKPWRR

- For use with UTK-PWCR roller carriages
- V shaped channel made from aluminium 6063-T6
- Lightweight
- Length may vary +/- 2mm

Option

- Max rail length : 3600mm



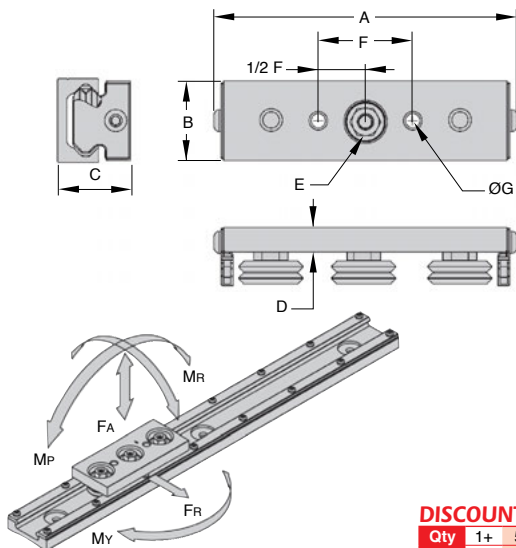
DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	H	J	K	L	M	Dia x depth (counterbore)	T (Ø hole)	P	Rail weight (kg/m)	Carriage weight (g)	Price each 1 to 4
UTK0-PWRR	11,0	4,0	20	1000	20	8,3 x 3	4,8	80	0,29	47	92,89 €
UTK1-PWRR	15,0	4,0	26	1000	20	9,8 x 2,8	5,8	80	0,43	94	101,27 €
UTK2-PWRR	19,7	4,5	40	1000	20	14,3 x 3	8,8	80	0,80	246	147,87 €

Dimensions in mm

- Matching component for UTK-SWR Series V wheel carriage assemblies
- Suitable for medium/heavy loads
- Suitable for high speeds
- Smooth frictionless operation



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

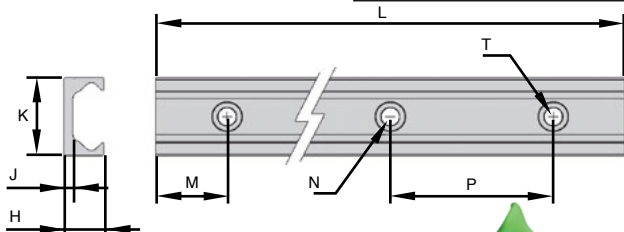
Part number	A	B	C	D	E Socket size	F	ØG	Radial Fr	Load capacity Axial	FA	MP	MY	MR	C	Stock*	Price each 1 to 4
UTK1-SWC	113,5	24	26,3	8,8	10	40	M6x1	2440	719	18	30,5	7,0	5600		✓	182,91 €
UTK2-SWC	144,2	38	35,0	11,8	13	45	M8x1,25	5300	1475	58	100,0	22,7	10200		-	222,36 €
UTK3-SWC	201,3	55	50,0	15,8	15	60	M10x1,5	11800	5100	229	346,0	118,0	21600		-	282,72 €

*Depending of availability - Dimensions in mm

- Matching component for UTK-SWC Series V wheel carriage assemblies
- Carbon bearing steel with hardened steel raceways
- Running surface smooth to Ra 0.8µm
- Tolerance on length +/-2mm

Option

- Increased length, max 3600mm


DISCOUNTS

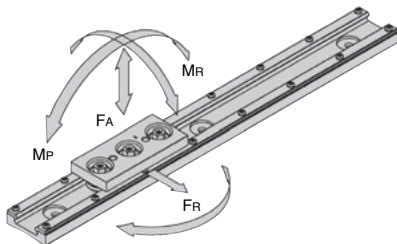
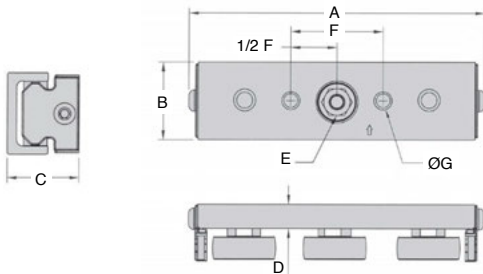
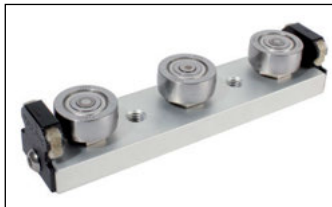
Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	H	J	K	L	M	N Ø x depth (counterbore)	T (Ø hole)	P	Rail weight (kg/m)	Carriage weight (g)	Stock*	Price each 1 to 4
UTK1-SWR	15,0	4,0	26	1000	20	9,8 x 2,8	5,8	80	1,46	114	✓	245,26 €
UTK2-SWR	19,7	4,5	40	1000	20	14,3 x 3	8,8	80	2,70	330	-	314,02 €
UTK3-SWR	30,0	8,0	58	1000	20	14,3 x 5	8,8	80	5,91	943	-	465,38 €

*Depending of availability - Dimensions in mm



- Crown roller style carriage for use with UTK-SWRR steel channel
- Intended for radial loads only
- Suitable for higher speeds
- Smooth friction free operation



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	A	B	C	D	E Allen key	F	ØG	Admissible load					C	Price each 1 to 4
								Radial Fr	Axial FA	MP	MY	MR		
UTK1-SWCR	113,5	24	25,3-27,6	8,8	10	40	M6x1	2440	0	0	30,5	0	5600	176,01 €
UTK2-SWCR	144,2	38	34,7-37,4	11,8	13	45	M8x1,25	5300	0	0	100,0	0	10200	226,70 €
UTK3-SWCR	201,3	55	46,3-53,4	15,8	15	60	M10x1,5	11800	0	0	346,0	0	21600	282,72 €

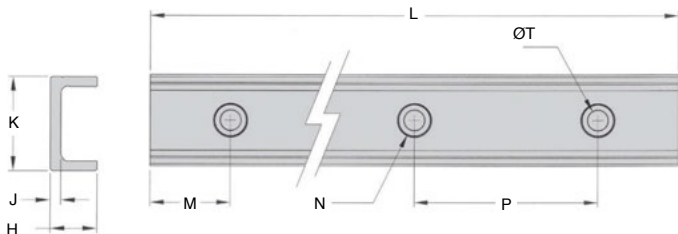
Dimensions in mm



- For use with STK-PWCR roller carriages
- Carbon bearing steel with hardened steel raceways
- Smoothness Ra 0.8µm
- Length may vary +/- 2mm

Option

- Max rail length : 3600mm



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	H	J	K	L	M	Dia x depth (counterbore) (Ø hole)	T (Ø hole)	P	Rail weight (kg/m)	Slide weight (g)	Price each 1 to 4
UTK1-SWRR	15,0	4,0	26	1000	20	9,8 x 2,8	5,8	80	1,33	121	245,83 €
UTK2-SWRR	19,7	4,5	40	1000	20	14,3 x 3	8,8	80	2,47	320	314,73 €
UTK3-SWRR	30,0	8,0	58	1000	20	14,3 x 5	8,8	80	5,36	910	466,42 €

Dimensions in mm

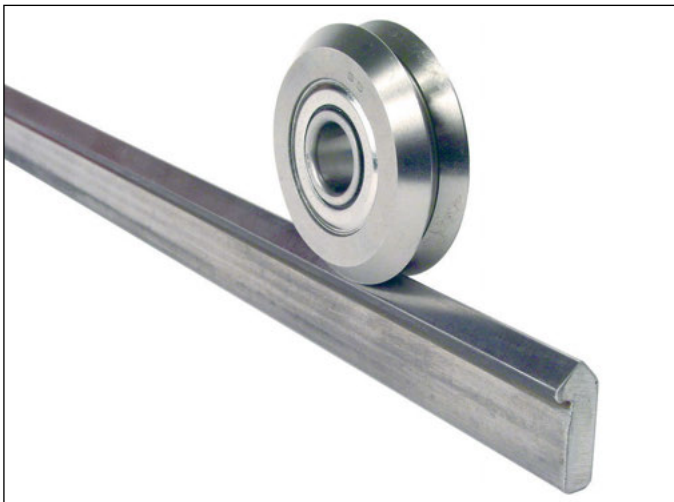
Half-rail guide

Introduction

Simple and easy to use

The half-rail guiding system is an efficient and proven method that offers very precise linear guiding for all sorts of applications.

The arrangement shown below can be assembled quickly and cheaply without the need for special equipment, a drill is all that is required.

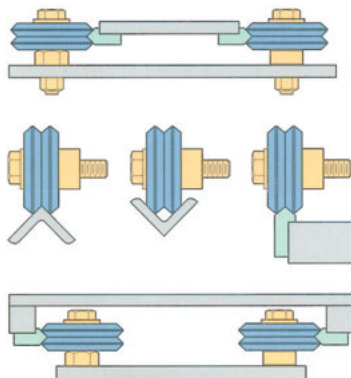
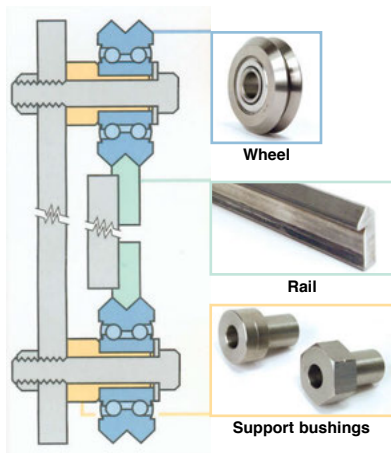


Characteristics

The guidance wheels are ground. The rollers are made up of two rows of pre-lubricated angular contact balls, available in protected or sealed versions.

The rails are made of cold-drawn carbon steel. They can be delivered with or without the tracks hardened and polished. The other surfaces are untreated so they can be machined later if required. Eccentric hubs are positioned opposite concentric hubs to facilitate the initial setting-up of the system.

Examples of typical mounting arrangements



- Pre-lubricated bearings with 2 rows of balls Angular contact, External surface ground and lightly lubricated, Tolerances ABEC - 1
- **HW-X:** steel SAE 52100, hardened 60-62 HRC, rubber joints
- **HW-X/SS:** stainless steel AISI 440C, hardened 58-60 HRC, rubber joints

Working life

- Loads are calculated for an operational life of 2,500 hours
- Service factor: divide the accepted load by the appropriate service factor

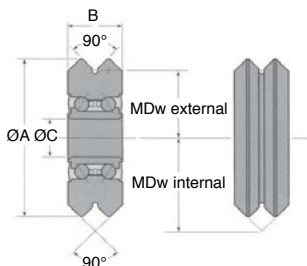
FS=0.5. Occasional use, no shocks, well lubricated

FS=1.0. Normal operation, lightly lubricated

FS=2.0. Subject to shocks, no lubrication or dust present



Typical application



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	ØA	B	ØC	MDw int.	Dynamic radial load (kg)					Radial static load (kg)	Dynamic axial load (kg)	Stock*	Price each 1 to 4
					MDw ext.	at 33 rpm	at 100 rpm	at 500 rpm	at 1000 rpm				
Steel, rubber joints													
HW-1X	19,55	7,87	4,76	7,92	11,86	156	108	63	49	112	17	✓	74,33 €
HW-2X	30,73	11,09	9,52	12,70	18,23	317	218	128	101	270	36	✓	84,26 €
HW-3X	45,72	15,87	12,00	19,05	26,97	598	414	243	193	450	54	✓	111,65 €
HW-4X	59,94	19,05	15,01	25,40	34,92	900	623	364	290	702	81	✓	141,74 €
Stainless steel, rubber joints													
HW-1X/SS	19,55	7,87	4,76	7,92	11,86	140	96	56	44	100	15	-	122,67 €
HW-2X/SS	30,73	11,09	9,52	12,70	18,23	252	174	102	81	216	29	-	137,31 €
HW-3X/SS	45,72	15,87	12,00	19,05	26,97	481	333	193	155	362	43	-	198,70 €
HW-4X/SS	59,94	19,05	15,01	25,40	34,92	715	495	290	230	558	64	-	234,86 €

*Depending on availability - Dimensions in mm



Guide rail

HTS
HTT

- **Rail HTS:** steel AISI C1042, cold-drawn, untreated, oiled
- **Rail HTS/SS:** stainless steel AISI 400, cold-formed, untreated, oiled
- **Rail HTT:** steel AISI C1042, track hardened to 53 HRC min., polished, oiled
- **Rail HTT/SS:** stainless steel AISI 400, track hardened to 40 HRC min., polished, oiled
- The flat part under the flange is not hardened, to allow mounting holes to be drilled.

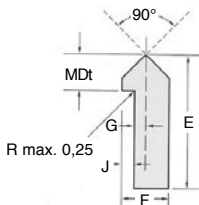
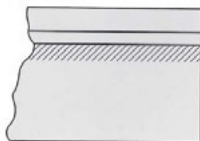


Option

- Max. length 6096mm
(except **HTT-4/SS** : 5790mm)



Typical application



DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number	E	Standard length (mm)	F	G	J	MDt	Weight (kg/m)	Stock*	Price each 1 to 4
Steel									
HTS-1	11,09	1000	4,74	0,78	1,57	3,17	0,272	✓	49,78 €
HTS-2	15,87	1000	6,35	0,78	2,36	4,75	0,509	✓	82,85 €
HTS-3	22,22	1000	8,71	1,57	2,76	6,35	1,020	✓	168,41 €
HTS-4	26,97	1000	11,09	2,36	3,17	7,92	1,630	✓	280,31 €
Stainless steel									
HTS-1/SS	11,09	1000	4,74	0,78	1,57	3,17	0,272	-	99,19 €
HTS-2/SS	15,87	1000	6,35	0,78	2,36	4,75	0,509	-	165,55 €
HTS-3/SS	22,22	1000	8,71	1,57	2,76	6,35	1,020	-	336,33 €
HTS-4/SS	26,97	1000	11,09	2,36	3,17	7,92	1,630	-	559,53 €
Treated steel									
HTT-1	11,09	1000	4,74	0,78	1,57	3,17	0,272	-	99,60 €
HTT-2	15,87	1000	6,35	0,78	2,36	4,75	0,509	-	146,72 €
HTT-3	22,22	1000	8,71	1,57	2,76	6,35	1,020	-	257,50 €
HTT-4	26,97	1000	11,09	2,36	3,17	7,92	1,630	-	386,70 €
Treated stainless steel									
HTT-1/SS	11,09	1000	4,74	0,78	1,57	3,17	0,272	-	199,44 €
HTT-2/SS	15,87	1000	6,35	0,78	2,36	4,75	0,509	-	291,51 €
HTT-3/SS	22,22	1000	8,71	1,57	2,76	6,35	1,020	-	514,58 €
HTT-4/SS	26,97	1000	11,09	2,36	3,17	7,92	1,630	-	772,64 €

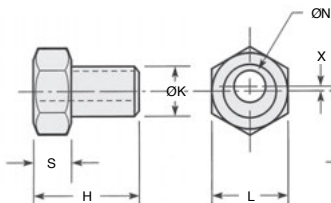
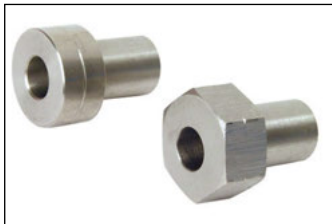
*Depending on availability - Dimensions in mm



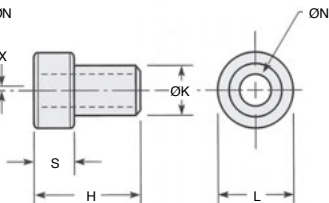
- **HBM-X:** Adjustable support bush with eccentric mounting hole. By rotating the bush, any backlash between the guide wheel and the rail can be eliminated.
- **HBM:** Fixed bush with a concentric mounting hole. They should be used where they support the majority of the load.

Info.

- * fits into the bore of the corresponding wheel
- ** assumes eccentric bush will be mounted in its central position thus allowing adjustment from +X to -X



HBM-X : Adjustable eccentric support bush



HBM: Fixed concentric bush

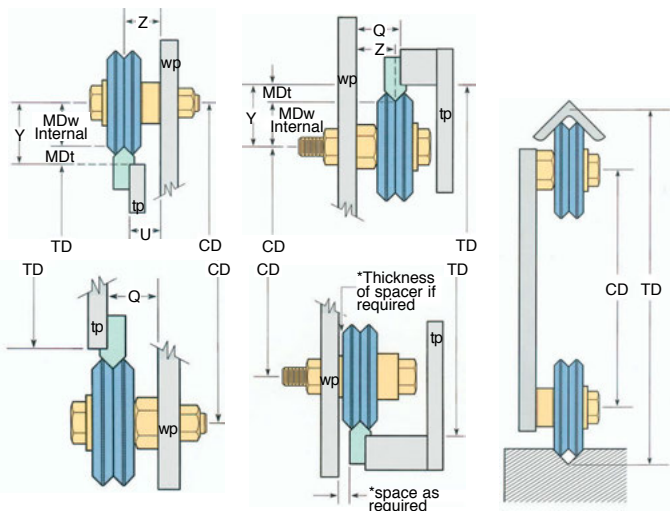
DISCOUNTS

Qty	1+	5+	10+	15+
Disc.	List	-10%	-15%	On request

Part number					For OM			Weight		Stock*	Price each 1 to 4	
Steel	Stainless	H	ØK*	L	ØN	screw	X**	S	(g)		Steel	Stainless
Eccentric support bush												
HBM-1X	HBM-1X/SS	13,97	4,75	11,11	3,6	3,5	0,30	6,30	5	✓	11,87 €	22,00 €
HBM-2X	HBM-2X/SS	17,93	9,51	14,28	6,1	6,0	0,60	7,13	11	✓	12,71 €	26,24 €
HBM-3X	HBM-3X/SS	25,14	11,99	19,05	8,1	8,0	1,06	9,52	26	✓	18,07 €	36,08 €
HBM-4X	HBM-4X/SS	29,90	14,99	22,22	10,1	10,0	1,52	11,09	45	✓	19,93 €	48,06 €
Concentric support bush												
HBM-1	HBM-1/SS	13,97	4,75	11,11	3,6	3,5	0,30	6,30	5	✓	6,51 €	11,00 €
HBM-2	HBM-2/SS	17,93	9,51	14,28	6,1	6,0	0,60	7,13	11	✓	7,28 €	14,41 €
HBM-3	HBM-3/SS	25,14	11,99	19,05	8,1	8,0	1,06	9,52	26	✓	11,19 €	20,75 €
HBM-4	HBM-4/SS	29,90	14,99	22,22	10,1	10,0	1,52	11,09	45	✓	12,26 €	32,44 €

*Depending on availability - Dimensions in mm

Mounting dimensions



External assembly dimensions
 $TD + 2Y = CD$

Internal mounting formula
 $TD + 2Y = CD$

$TD - 2MDw \text{ exterior} = CD$

Where CD is less than wheel diameter, guide wheels must be offset for proper clearance

Legend

- MDw external= Wheel mounting distance based on external V
- MDw internal= Wheel mounting distance based on interior V
- MDt = rail mounting distance
- TD = distance between rails
- CD = centre distance between wheel axles
- $Y = MDt + MDw \text{ internal}$
- wp = Wheel plate
- tp = Track plate
- Z = Distance from wp to centre of wheel
- $Q = Z + G$
- $U = Z - G$
- G = Distance from tp to centre line of rail

	Z	Q	U	Y
Size 1	10,31	11,09	9,52	11,09
Size 2	12,70	13,48	11,91	17,44
Size 3	17,44	19,05	15,87	25,40
Size 4	20,62	23,01	18,26	33,32

Half-rail guide

Load calculations

Examples

- L = load (kg)
- LR = radial load per wheel (kg)
- LM = axial load per wheel (kg)
- A = dimensions (mm)
- B = dimensions (mm)
- F_s = service factor (see **HW** guide wheel)

Centred axial load

- $LM1 = \frac{L \times B}{A + B} \times F_s$
- $LM2 = (L \times F_s) - LM1$

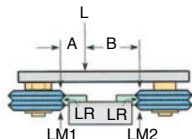
Example :

$L = 22\text{kg}$, $A = 100\text{mm}$, $B = 160\text{mm}$, $F_s = 1$ (normal service)

$$LM1 = \frac{22 \times 160}{100 + 160} \times 1 = 13,53\text{kg}$$

$$LM2 = (22 \times 1) - 13,53 = 8,47\text{kg}$$

LR = higher than $LM1$ or $LM2$, compare these values to axial and radial capacities of **HW** guide wheels.



Offset loads

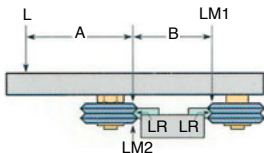
- $LM1 = \frac{L \times A}{B} \times F_s$
- $LM2 = (L \times F_s) + LM1$

Example:

$L = 22\text{kg}$, $A = 150\text{mm}$, $B = 100\text{mm}$, $F_s = 1$ (normal use)

$$LM1 = \frac{22 \times 150}{100} \times 1 = 33\text{kg}$$

$$LM2 = (22 \times 1) + 33 = 55\text{kg}$$



Combined axial and radial loads

- $LM1 = \frac{L \times A}{B} \times F_s$
- $LR1 = (L \times F_s) + LM1$
- $LM2 = LM1$

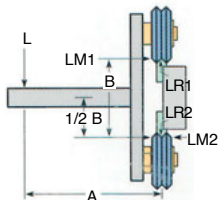
Example:

$L = 22\text{kg}$, $A = 150\text{mm}$, $B = 250\text{mm}$, $F_s = 1$ (normal service)

$$LM1 = \frac{22 \times 150}{250} \times 1 = 13,2\text{kg}$$

$$LR1 = (22 \times 1) + 13,2 = 35,2\text{kg}$$

Compare these values to the axial and radial capacities given for **HW** guide wheels



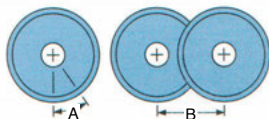
General instructions

Rails and rail supports

- 1- The straightness, flatness, and parallelism of the rail supports determine the system accuracy. Laminated or cold-drawn material is generally sufficient. A higher accuracy is however obtained by using a support with ground surfaces and edges. The edges receiving the rail must be chamfered by about 0.5mm at 45°, in order to fit with the round-off of the rail flange.
- 2- For continuous or heavy loads, we recommend you use **HTT** type rails with treated tracks. For prototypes or light and intermittent loads, untreated **HTS** type rails are often sufficient.
- 3- When constructing track systems longer than 6 metres, the joints on parallel tracks should be staggered for greater accuracy and smoothness.

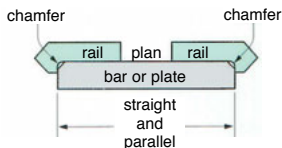
Lubrication

- 4- As the wheel circumference is greater on the external diameter than on the internal diameter, this results in the wheel wiping the rail, which produces a self cleaning effect. We recommend you apply a film of grease, which will increase the working life of both wheels and rails.



Assembly and wheel alignment

- 5- The (fixed) concentric bushes determine the system alignment. They should be placed on the side with the heaviest load.



- 6- A normal adjustment can be obtained by turning the eccentric bushing until the wheel is in contact with the rail and can still turn between the thumb and index finger. If the bushing is screwed too tight, it may exert a pressure on the wheel that exceeds admissible values.
- 7- We advise you assemble the wheel in such a way that the radial loads are predominant.
- 8- Do not use half-rail guide based system for applications where a system failure could cause a serious accident or injury.
- 9- Oscillating motion resulting in less than one full revolution of the wheel under load can cause accelerated wear on the internal bearing elements. The table below indicates the minimum angles of rotation recommended (A) and the corresponding linear displacement (B).

Wheel size	HW-1	HW-2	HW-3	HW-4
A	75°	73°	75°	69°
B	10,41	16,25	25,14	30,48

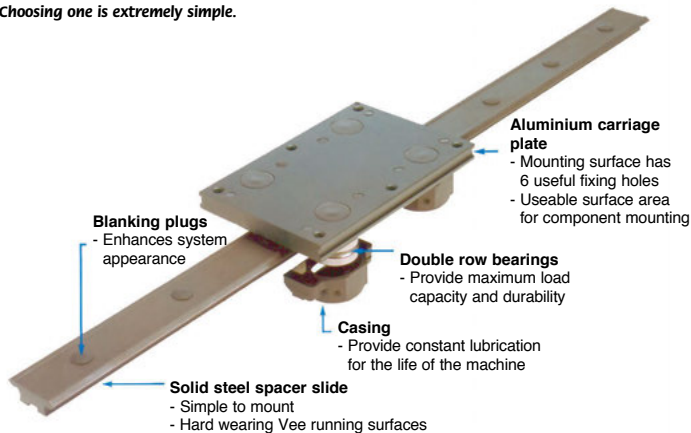
V- rail guidance system

Introduction

These systems use single piece rollers and lubrication elements to ensure a long and incident free working life

Our special profile rails are designed to be suitable for all applications and are cold drawn and with hardened tracks, provide high accuracy and a long working life, even in the most hostile environments.

Choosing one is extremely simple.



Advantages

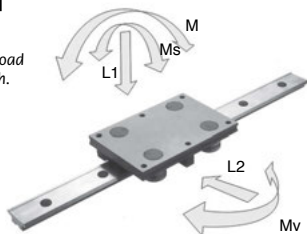
- Especially suitable for high speed/short stroke applications
- Reduced installation time, simply bolt the slide in position
- Can be fitted to un-machined surfaces if required
- Suitable for fitting to standard aluminium profiles
- High quality slides mean smooth frictionless movement
- Single piece construction of the carriage for a long and trouble free life
- Integrated cap seals protect the bearings from dirt and ensure continuous lubrication
- Hardened slide with low wear characteristics
- Quiet in operation

V- rail guidance system

Capacity and working life

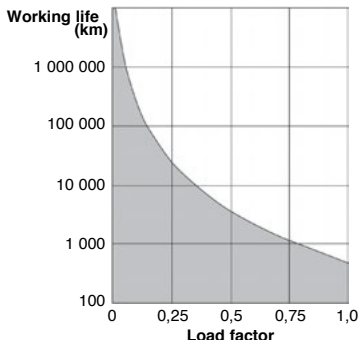
Calculating the expectancy life

Most applications involve central L1 loads.
In these cases simply divide your load (N) by the carriage L1 capacity figure below to determine a load factor. Then simply read off the life from the graph.
For offset loads you will need to add the relevant load factors to determine the total.
Load Factor should not exceed 1.



Part number	L1(N)	L2(N)	Carriage capacity		
			Ms(Nm)	Mv(Nm)	M(Nm)
HCV20	435	685	4	19	12
HCV25	800	1500	9	56	30
HCV44	2800	4700	57	243	146
HCV76	10000	10000	360	990	900

$$\text{Load factor} = \frac{\text{Real load}}{\text{Carriage capacity}} = \frac{L1}{L1(\max)} + \frac{L2}{L2(\max)} + \frac{Ms}{Ms(\max)} + \frac{Mv}{Mv(\max)} + \frac{M}{M(\max)}$$



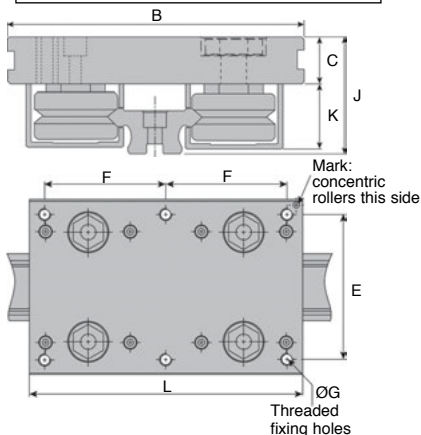
- **Max. speed: 8 m/s**
- Working temperature: -20°C to +60°C
- Cap Seals will be supplied lubricated, further lubrication is not normally necessary unless a high duty cycle/speed is involved. In these cases lubrication with a NLGI grease (consistency No. 2) will suffice.

Materials

- **Roller:** steel ring and balls AISI52100 hardened, high traction resistance blackened steel axle, plastic cage.
- **Plate:** black anodised high resistance aluminium alloy.
- **Plate and rail caps:** plastic
- **Cap seal**
Body: Thermoplastic elastomer
Inserts: Impact resistant plastic
Wipers: Felt

Frictional resistance

- Frictional resistance use $0.02 \times \text{Load (N)}$
- + Seal Friction (N)



DISCOUNTS

Qty	1+	2+	5+
Disc.	List	-10%	On request

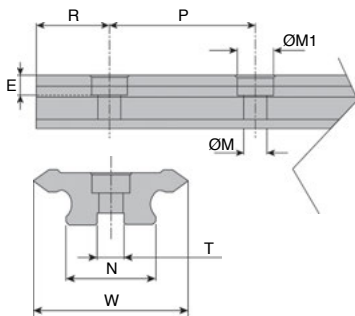
Part number	B	C	J	K	L	E	F	ØG	Joint and scraper friction (N)	Price each 1 to 5
HCV20	64	10,0	24,95	14,0	100	50	44	M5	4	278,22 €
HCV25	80	11,5	30,70	18,0	135	65	60	M6	7	296,94 €
HCV44	116	14,5	38,70	22,5	180	96	80	M8	15	363,41 €
HCV76	185	20,0	58,70	36,5	300	160	135	M10	28	571,10 €

Dimensions in mm

- **Material: steel AISI52100 hardened to 58-62HRC**
- Rails delivered with black finish (blackened or equivalent)

Info

- When ordering, add the length of the rail to the part number.



DISCOUNTS

Qty	1+	2+	5+
Disc.	List -10%	List -10%	On request

Part number	W	N	R	P	ØM	ØM1	E	T
HRV20	20	12,4	43	90	4,5	8	4,1	5 x 2,0
HRV25	25	15,4	43	90	5,5	10	5,1	6 x 2,5
HRV44	44	26,4	43	90	7,0	11	6,1	8 x 3,0
HRV76	76	50,4	88	180	14,0	20	12,0	15 x 5,0

		Price for					
Part number	With carriage	266mm	356mm	536mm	1076mm	1436mm	1976mm
HRV20	HCV20	320,75 €	335,14 €	363,97 €	450,29 €	507,86 €	594,25 €
HRV25	HCV25	347,22 €	364,21 €	398,25 €	500,29 €	568,32 €	670,35 €
HRV44	HCV44	436,90 €	461,72 €	511,44 €	660,60 €	760,06 €	909,20 €
HRV76	HCV76	-	-	752,52 €	935,34 €	1 057,18 €	1 240,01 €

Dimensions in mm

Cam follower without axial guide

NAST IKO

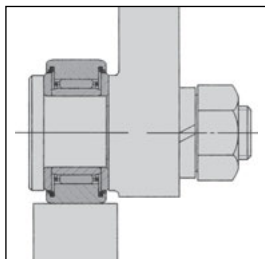
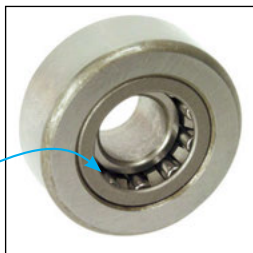
With interior ring

- For shaft diameters from 6mm to 50mm
- Without external cylindrical cage
- Without wiper seals
- Material: steel
- Working temperature: -20°C to +120°C

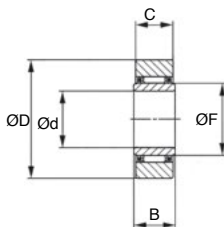
Assembly

- Use with rails with a minimum hardness of 40 HRC
- Tolerance of shaft: g6, h6

Ring



Typical application



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

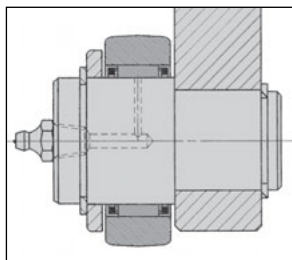
Part number	Ød	ØD	B	C	ØF	Static load Co (N)	Dynamic load C (N)	Max. load on rail (N)	Weight (g)	Stock*	Price each 1 to 5
NAST-6	6	19	10	9,8	10	4550	4160	3550	17,8	✓	13,98 €
NAST-8	8	24	10	9,8	12	5890	5650	3980	28,0	✓	15,40 €
NAST-10	10	30	12	11,8	14	9680	9790	5610	49,5	✓	24,57 €
NAST-12	12	32	12	11,8	16	10900	10500	5990	58,0	-	25,35 €
NAST-15	15	35	12	11,8	20	14300	12400	6550	62,0	-	26,22 €
NAST-17	17	40	16	15,8	22	20900	17600	10900	109,0	✓	27,95 €
NAST-20	20	47	16	15,8	25	24500	19400	12800	157,0	✓	31,32 €
NAST-25	25	52	16	15,8	30	28400	20800	14100	180,0	✓	33,58 €
NAST-30	30	62	20	19,8	38	45400	30500	22100	320,0	-	38,72 €
NAST-35	35	72	20	19,8	42	50600	32400	25700	440,0	-	39,84 €
NAST-40	40	80	20	19,8	50	61100	35900	26900	530,0	✓	49,68 €
NAST-45	45	85	20	19,8	55	66400	37400	28500	580,0	-	53,34 €
NAST-50	50	90	20	19,8	60	71700	38900	30200	635,0	-	60,68 €

*Depending on availability - Dimensions in mm

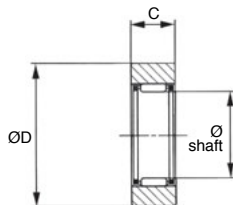
- For shaft diameters from 7mm to 60mm
- With external cylindrical cage
- Without wiper seals
- Material: steel
- Working temperature: -20°C to +120°C

Assembly

- Use with rails with a minimum hardness of 40 HRC
- Tolerance of shaft: g6, h6
- Shaft hardness: 58-64 HRC, Ra 0.2



Typical application



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

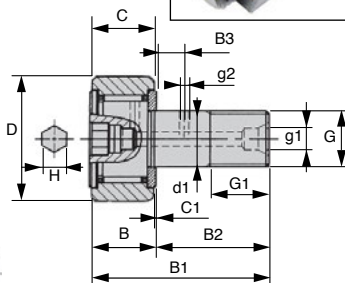
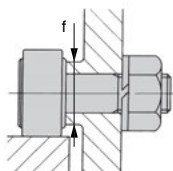
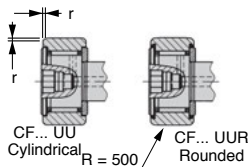
Part number	Shaft Ø	ØD	C	Static load Co (N)	Dynamic load C (N)	Weight (g)	Stock*	Price each 1 to 5
RNaST-5	07	16	07,8	2390	2710	8,9	✓	15,60 €
RNaST-6	10	19	09,8	4550	4160	13,9	✓	16,92 €
RNaST-8	12	24	09,8	5890	5650	23,5	✓	17,63 €
RNaST-10	14	30	11,8	9680	9790	42,5	✓	18,28 €
RNaST-12	16	32	11,8	10900	10500	49,5	✓	19,42 €
RNaST-15	20	35	11,8	14300	12400	50,0	✓	20,29 €
RNaST-17	22	40	15,8	20900	17600	90,0	-	20,19 €
RNaST-20	25	47	15,8	24500	19400	135,0	✓	22,32 €
RNaST-25	30	52	15,8	28400	20800	152,0	-	25,06 €
RNaST-30	38	62	19,8	45400	30500	255,0	-	28,06 €
RNaST-35	42	72	19,8	50600	32400	375,0	-	30,95 €
RNaST-40	50	80	19,8	61100	35900	420,0	-	36,48 €
RNaST-45	55	85	19,8	66400	37400	460,0	-	37,43 €
RNaST-50	60	90	19,8	71700	38900	500,0	-	41,75 €

*Depending on availability - Dimensions in mm

CFUU **IKO**
CFUUR

Roller diameter 10-90mm

- **Axle mounted cam follower**
- With synthetic rubber joints placed in the external ring
- Easy assembly with allen key (except for existing stock of older version)
- Diameter of housing 3 to 30mm, tolerance H7
- Material: carbon steel



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number		d1 (h7)	D (h5)	C ⁺⁰ _{-0.12}	G	G1	B	B1	B2	H	Type	Price each. 1 to 5
Crowned outer ring	Cylindrical outer ring											
CF3UUR	CF3UU	3	10	7	M3x0.5	5.0	8.0	17.0	9.0	2	-	37.03 € 35.22 €
CF4UUR	CF4UU	4	12	8	M4x0.7	6.0	9.0	20.0	11.0	2.5	-	32.71 € 31.04 €
CF5UUR	CF5UU	5	13	9	M5x0.8	7.5	10.0	23.0	13.0	3	-	30.57 € 29.12 €
CF6UUR	CF6UU	6	16	11	M6x1	8.0	12.2	28.2	16.0	3	✓	25.90 € 25.90 €
CF8UUR	CF8UU	8	19	11	M8x1.25	10.0	12.2	32.2	20.0	4	✓	27.04 € 27.04 €
CF10UUR	CF10UU	10	22	12	M10x1.25	12.0	13.2	36.2	23.0	4	✓	28.45 € 28.45 €
CF10-1UUR	CF10-1UU	10	26	12	M10x1.25	12.0	13.2	36.2	23.0	5	✓	30.18 € 30.18 €
CF12UUR	CF12UU	12	30	14	M12x1.5	13.0	15.2	40.2	25.0	6	✓	35.93 € 35.93 €
CF12-1UUR	CF12-1UU	12	32	14	M12x1.5	13.0	15.2	40.2	25.0	6	✓	37.92 € 37.92 €
CF16UUR	CF16UU	16	35	18	M16x1.5	17.0	19.6	52.1	32.5	6	✓	42.46 € 42.46 €
CF18UUR	CF18UU	18	40	20	M18x1.5	19.0	21.6	58.1	36.5	8	-	50.13 € 50.13 €
CF20UUR	CF20UU	20	52	24	M20x1.5	21.0	25.6	66.1	40.5	8	-	66.94 € 66.94 €
CF20-1UUR	CF20-1UU	20	47	24	M20x1.5	21.0	25.6	66.1	40.5	8	-	65.64 € 65.64 €
CF24UUR	CF24UU	24	62	29	M24x1.5	25.0	30.6	80.1	49.5	12	✓	84.78 € 84.78 €
CF24-1UUR	CF24-1UU	24	72	29	M24x1.5	25.0	30.6	80.1	49.5	12	-	94.54 € 94.54 €
CF30UUR	CF30UU	30	80	35	M30x1.5	32.0	37.0	100.0	63.0	17	-	123.77 € 123.77 €
CF30-1UUR	CF30-1UU	30	85	35	M30x1.5	32.0	37.0	100.0	63.0	17	-	142.20 € 142.20 €
CF30-2UUR	CF30-2UU	30	90	35	M30x1.5	32.0	37.0	100.0	63.0	17	-	146.14 € 146.14 €

*Depending on availability - Dimensions in mm

Info.

- (1) Max speed when lubricated with grease. For oil lubrication, the max speed is 30% higher. For cam followers with seals, the max speed is equivalent to 80% of this value.
- All the followers come with grease nipples: at the end of the axle on the roller side, on the threaded side, and on the cylindrical section, except for those models marked * which only have one hole on the roller side.
- Information given for the rails apply to all cam follower models.

Track capacity

Hardness (HRc)	Tensile strength (N/mm ²)	Crowned outer ring	cylindrical outer ring
20	760	0,22	0,37
25	840	0,31	0,46
30	950	0,45	0,58
35	1080	0,65	0,75
38	1180	0,85	0,89
40	1250	1,00	1,00
42	1340	1,23	1,15
44	1435	1,52	1,32
46	1530	1,85	1,51
48	1635	2,27	1,73
50	1760	2,80	1,99
52	1880	3,46	2,29
54	2015	4,21	2,61
56	2150	5,13	2,97
58	2290	6,26	3,39

Crowned type part number	Track capacity (N)	Crowned type part number	Track capacity (N)	Cylindrical type part number	Track capacity (N)	Cylindrical type part number	Track capacity (N)	Miniature cam follower	Track capacity (N)
CF3R	-	CF16	3060	CF3	1360	CF16	11200	CFS2,5	298
CF4R	-	CF18	3660	CF4	1790	CF18	14500	CFS3	485
CF5R	-	CF20	5190	CF5	2210	CF20	23200	CFS4	799
CF6R	1 040	CF20-1R	4530	CF6	3400	CF20-1	21000	CFS5	1210
CF8R	1330	CF24R	6580	CF8	4040	CF24	34300	CFS6	1680
CF10R	1610	CF24-1R	8020	CF10	4680	CF24-1	39800	-	-
CF10-1R	2030	CF30R	9220	CF10-1	5530	CF30	52700	-	-
CF12R	2470	CF30-1R	9990	CF12	7010	CF30-1	56000	-	-
CF12-1R	2710	CF30-2R	10800	CF12-1	7480	CF30-2	59300	-	-

Références	B3	C1	g1	g2	r mini	Min. flange Ø f (mm)	Max. tightening torque (Nm)	Basic dynamic load C (N)	Basic static load C (N)	Max. allowable load (N)	Max speed (1) (rpm)	Weight (g)
CF3UU	-	0,5	-	-	0,2	6,8	0,40	1500	1020	384	50000	4,3
CF4UU	-	0,5	-	-	0,3	8,3	0,78	2070	1590	834	34000	7,4
CF5UU	-	0,5	-	-	0,3	9,3	1,60	2520	2140	1260	38000	10,3
CF6UU	-	0,6	-	-	0,3	11,0	2,70	3660	3650	1950	22000	18,5
CF8UU	-	0,6	-	-	0,3	13,0	6,50	4250	4740	4620	17000	28,5
CF10UU	-	0,6	-	-	0,3	16,0	13,80	5430	6890	6890	14000	45,0
CF10-1UU	-	0,6	-	-	0,3	16,0	13,80	5430	6890	6890	14000	60,0
CF12UU	6	0,6	4	3	0,6	21,0	21,90	7910	9790	9790	11000	95,0
CF12-1UU	6	0,6	4	3	0,6	21,0	21,90	7910	9790	9790	11000	105,0
CF16UU	8	0,8	4	3	1,0	26,0	58,50	12000	18300	18300	8500	170,0
CF18UU	8	0,8	6	3	1,0	29,0	86,20	14800	25200	25200	7000	250,0
CF20UU	9	0,8	6	4	1,0	34,0	119,00	20700	34600	34600	6500	460,0
CF20-1UU	9	0,8	6	4	1,0	34,0	119,00	20700	34600	34600	6500	385,0
CF24UU	11	0,8	6	4	1,0	40,0	215,00	30500	52600	52000	5500	815,0
CF24-1UU	11	0,8	6	4	1,0	40,0	215,00	30500	52600	52000	5500	1140,0
CF30UU	15	1,0	6	4	1,0	49,0	438,00	45400	85100	85100	4000	1870,0
CF30-1UU	15	1,0	6	4	1,0	49,0	438,00	45400	85100	85100	4000	2030,0
CF30-2UU	15	1,0	6	4	1,0	49,0	438,00	45400	85100	85100	4000	2220,0

Dimensions in mm

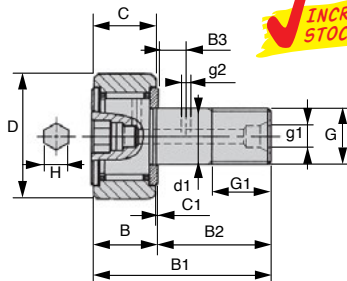
Cam follower stainless steel

IKO
CFUUR/SS

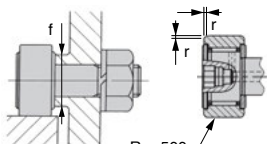
Bearing diameters from 10 to 52mm

- Axle mounted cam followers
- With synthetic rubber seals mounted in the external ring
- Easy fitted using an allen key
- For mounting holes from 3 to 20mm, tolerance H7
- Material - Stainless steel

stainless steel



✓ INCREASED STOCK



R = 500 CF... UUR/SS

DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part numbers	Ø Min shoulder size (mm)	Max tightening torque (Nm)	Dynamic load C (N)	Static load base C (N)	max. load (N)	Max speed (1) (t/min)	g1 (mm)	g2 (mm)	r min. (mm)	Weight (g)
CF3UUR/SS	6.8	0.34	1200	813	384	50000	-	-	0.2	4.3
CF4UUR/SS	8.3	0.78	1650	1270	834	34000	-	-	0.3	7.4
CF5UUR/SS	9.3	1.60	1930	1730	1260	38000	-	-	0.3	10.3
CF6UUR/SS	11.0	2.70	2930	2920	1950	22000	-	-	-	18.5
CF8UUR/SS	13.0	6.50	3400	3790	3790	17000	-	-	-	28.5
CF10UUR/SS	16.0	13.80	4340	5510	5510	14000	-	-	-	45.0
CF12UUR/SS	21.0	21.90	6330	7830	7830	11000	4	3	-	95.0
CF16UUR/SS	26.0	58.50	9620	14700	14700	8500	4	3	-	170.0
CF18UUR/SS	29.0	86.20	14800	25200	25200	7000	6	3	1.0	250.0
CF20UUR/SS	34.0	119.0	20700	34600	34600	6500	6	4	1.0	460

Part number	Ød1	ØD													Price each
Crowned outer ring	(h7)	(h5)	C	ØG	G1	B	B1	B2	B3	C1	H	Stock*	1 to 5		
CF3UUR/SS	3	10	7	M3 x 0,5	5,0	8,0	17,0	9,0	-	0,5	2	✓	✓	65,44	€
CF4UUR/SS	4	12	8	M4 x 0,7	6,0	9,0	20,0	11,0	-	0,5	2,5	✓	✓	57,39	€
CF5UUR/SS	5	13	9	M5 x 0,8	7,5	10,0	23,0	13,0	-	0,5	3	✓	✓	53,74	€
CF6UUR/SS	6	16	11	M6 x 1	8,0	12,2	28,2	16,0	-	0,6	3	✓	✓	50,27	€
CF8UUR/SS	8	19	11	M8 x 1,25	10,0	12,2	32,2	20,0	-	0,6	4	✓	✓	51,66	€
CF10UUR/SS	10	22	12	M10 x 1,25	12,0	13,2	36,2	23,0	-	0,6	4	✓	✓	51,66	€
CF12UUR/SS	12	30	14	M12 x 1,5	13,0	15,2	40,2	25,0	6	0,6	6	✓	✓	64,71	€
CF16UUR/SS	16	35	18	M16 x 1,5	17,0	19,6	52,1	32,5	8	0,8	6	✓	✓	77,07	€
CF18UUR/SS	18	40	20	M18 x 1,5	19,0	21,6	58,1	36,5	8	0,8	8	✓	✓	94,11	€
CF20UUR/SS	20	52	24	M20 x 1,5	21,0	25,6	66,1	40,5	9	0,8	8	-	-	127,23	€

*Depending on availability - Dimensions in mm

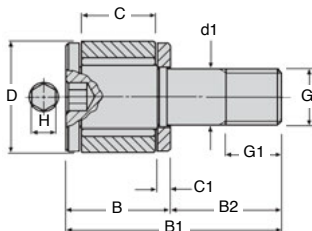
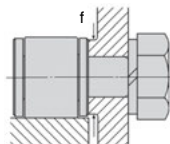
Roller diameter 10-90mm

IKO

CFS
CFSv

- Miniature axle mounted cam follower
- Not fitted with seals
- Diameter of housing 2.5 to 6mm, tolerance H6
- Assemble using an Allen key
- Material: carbon steel

Miniature



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number	Min. flange Ø f (mm)	Max. tightening torque (Nm)	Basic dynamic load C (N)	Basic static load C (N)	Max. admissible load (N)
CFS2,5	4,8	0,18	428	351	351
CFS2,5V	4,8	0,18	1000	1080	360
CFS3	5,8	0,33	629	611	484
CFS3V	5,8	0,33	1420	1790	484
CFS4	7,7	0,78	1120	1120	919
CFS4V	7,7	0,78	2370	3000	919
CFS5	9,6	1,58	1570	1850	1570
CFS5V	9,6	1,58	3180	4700	1570
CFS6	11,6	2,68	2090	2200	2150
CFS6V	11,6	2,68	4610	6250	2150

Part number		With joint needles	d1 (h6)	D ^{+0 -0,008}	C ^{+0 -0,12}	G	G1	B	B1	B2	C1	H	Stock	Stock	Price each 1 to 5
With cage	With joint needles												With cage	With joint needles	
CFS2.5	CFS2.5V	2,5	5	3	M2,5 x 0,45	2,5	4,5	9,5	5	0,7	0,9	✓	✓	-	68,44 €
CFS3	CFS3V	3,0	6	4	M3 x 0,5	3,0	5,5	11,5	6	0,7	1,3	✓	✓	✓	63,80 €
CFS4	CFS4V	4,0	8	5	M4 x 0,7	4,0	7,0	15,0	8	1,0	1,5	✓	✓	✓	52,78 €
CFS5	CFS5V	5,0	10	6	M5 x 0,8	5,0	8,0	18,0	10	1,0	2,0	✓	✓	✓	51,17 €
CFS6	CFS6V	6,0	12	7	M6 x 1	6,0	9,5	21,5	12	1,2	2,5	✓	✓	✓	46,48 €

*Depending on availability - Dimensions in mm

Eccentric cam follower

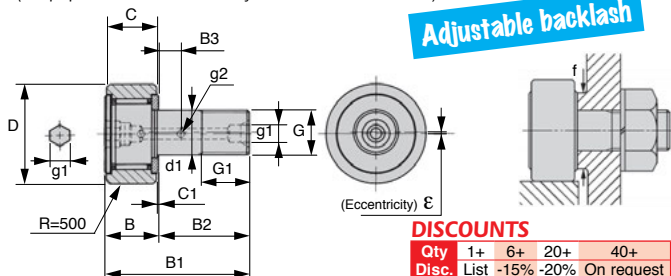


Roller diameter from 16 to 40mm **IKO** CFES

- **Axle mounted eccentric cam follower**
- Synthetic rubber joints fitted to external ring
- Assemble using a screwdriver
- Diameter of housing 6 to 18mm, tolerance H7
- Material: carbon steel

Info.

- All the followers come with grease nipples: at the end of the axle on the roller side, on the threaded side, and on the cylindrical section,
(Except for cam < 10 mm with only one hole on the roller side).



DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number	Min. flange Ø f (mm)	Torque (Nm)	C (N)	Max.	Max. speed	g1	g2	r	Eccen-
	Max. locking	Basic dynamic load	Basic static load C (N)	admissible load (N)	(1) (rpm)	(mm)	(mm)	mini. (mm)	tricity ε (mm)
CFES6UUR	11	12,7	3660	3650	1980	-	-	0,3	0,25
CFES8UUR	13	6,5	4250	4740	4670	-	-	0,3	0,25
CFES10UUR	16	13,8	5430	6890	6890	-	-	0,3	0,30
CFES10-1UUR	16	13,8	5430	6890	6890	-	-	0,3	0,30
CFES12UUR	21	21,9	7910	9790	9790	4	3	0,6	0,40
CFES12-1UUR	21	21,9	7910	9790	9790	4	3	0,6	0,40
CFES16UUR	26	58,5	12000	18300	18300	4	3	0,6	0,50
CFES18UU	29	86,2	14800	25200	25200	6	3	1,0	0,60

Part number	d1 (h7)	D (h5)	C ^{+0,12 -0,12}	G	G1	B	B1	B2	B3	C1	Stock*	Price each 1 to 5
CFES6UUR	6	16	11	M6 x 1,00	8	12,2	28,2	16,0	-	0,6	✓	38,88 €
CFES8UUR	8	19	11	M8 x 1,25	10	12,2	32,2	20,0	-	0,6	✓	40,41 €
CFES10UUR	10	22	12	M10 x 1,25	12	13,2	36,2	23,0	-	0,6	✓	44,67 €
CFES10-1UUR	10	26	12	M10 x 1,25	12	13,2	36,2	23,0	-	0,6	✓	47,17 €
CFES12UUR	12	30	14	M12 x 1,50	13	15,2	40,2	25,0	6	0,6	✓	50,36 €
CFES12-1UUR	12	32	14	M12 x 1,50	13	15,2	40,2	25,0	6	0,6	-	44,59 €
CFES16UUR	16	35	18	M16 x 1,50	17	19,6	52,1	32,5	8	0,8	-	60,62 €
CFES18UU	18	40	20	M18 x 1,50	19	21,6	58,1	36,5	8	0,8	✓	71,98 €

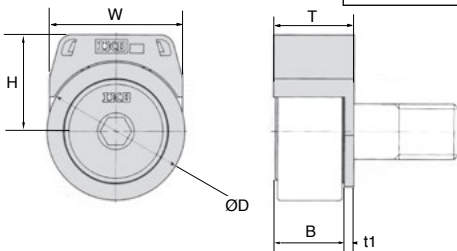
*Depending on availability - Dimensions in mm

Cam follower lubricating unit

For CF and CFES cams

CFCL

- C-Lube lubricating unit
- Solid lubricant
- Do not apply any load directly on the lubricating unit
- Unit cannot be refilled
- Replace unit when empty
- Do not clean using organic solvents
- Do not use in any environment where contamination must be avoided
- Working temp range : -15 to 80°C



C-Lube solid lubricant



+



=



IKD
CF + CFES
cam followers

IKD
CL Lubricating
unit

Maintenance
free cam

DISCOUNTS

Qty	1+	6+	20+	40+
Disc.	List	-15%	-20%	On request

Part number	W	H	T	t1	For cam	Price each 1 to 5
CF6-CL	15,4	12,6	14,0	1,5	CF6, CFES6	15,73 €
CF8-CL	18,4	14,2	14,0	1,5	CF8, CFES8	16,12 €
CF10-CL	21,0	17,0	15,5	2,0	CF10, CFES10	16,98 €
CF10-1-CL	21,0	19,2	15,5	2,0	CF10-1, CFES10-1	16,98 €
CF12-CL	29,0	21,0	17,5	2,0	CF12, CFES12	17,84 €
CF12-1-CL	29,0	22,0	17,5	2,0	CF12-1, CFES12-1	17,84 €
CF16-CL	33,8	27,4	23,4	2,5	CF16, CFES16	22,46 €
CF18-CL	38,8	30,4	25,4	2,5	CF18, CFES18	22,81 €
CF20-CL	45,8	38,4	29,9	3,0	CF20	30,46 €
CF20-1-CL	45,8	35,4	29,9	3,0	CF20-1	30,46 €

Dimensions in mm

PRF_{PSA} **MiniTec**
Z12

- *Materials:*

Steel shaft: Cf53 hardened (62 +/-2 HRC) Stainless steel

Shaft end stop: grey power coated alu

(Fixing kit supplied)

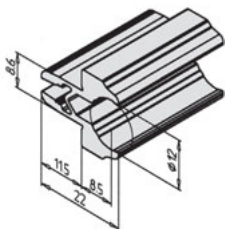


Assembly

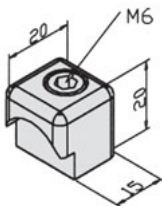
- Insert the shaft support profile into the profile slot
- Secure with M5x10 grubscrews
- Insert the shaft into the support profile with the aid of a plastic mallet if necessary

Accessories

- Roller **PRF-GAL-12**
- Shaft end stop **PRF-12-AA**



PRF-12-PSA



PRF-12-AA

 INCREASED STOCK

DISCOUNTS

Qty	1+	50+	100+
Disc.	List	-5%	On request

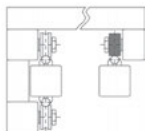
DISCOUNTS Shafts Z

Qty	1+	6+	20+	40+	60+
Disc.	List	-20%	-25%	-30%	On request

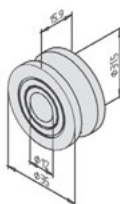
Part number	For profile	Material	Length	Weight (kg/m)	Stock*	Price each
Shaft support profile						
PRF-12-PSA	all types	-	3000	0,36	✓	24,59 €
Linear guidance shaft						
Z-12-3000A		steel	3000	0,89	-	49,61 €
Z-12-3000B		stainless steel	3000	0,89	-	159,73 €
Shaft end stop						
PRF-12-AA		-	-	0.03	✓	6.67 €

*Depending on availability - Dimensions in mm

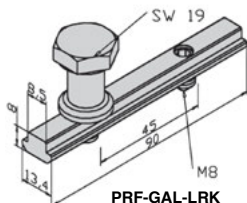
- **Guiding wheel**
- Double row bearing
- Roller **PRF-GAL** can compensate for small amounts of backlash for parallel working guidance systems
- **PRF-GAL-12** is used with a Ø12mm guide shaft such as **Z-12-3000A** or **Z-12-3000B**
- Material: steel



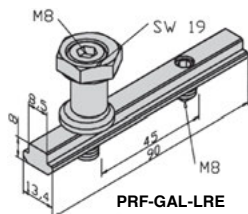
PRF-GAL



PRF-GAL-12



PRF-GAL-LRK



PRF-GAL-LRE



PRF-GAL-LRK

PRF-GAL-LRE



DISCOUNTS

Qty	1+	50+	100+
Disc.	List	-5%	On request

Part number	Profile	Static (N)	Load Dynamic(N)	Weight (kg)	Stock*	Price each 1 to 49
Roller						
PRF-GAL	Flat	5100	8600	0,060	-	29,89 €
PRF-GAL-12	Concave Ø12	6000	10500	0,068	✓	22,20 €
Fixing kit for roller						
PRF-GAL-LRK	concentric	-	-	0,100	✓	13,89 €
PRF-GAL-LRE	Eccentric	-	-	0,100	✓	17,24 €

*Depending on availability - Dimensions in mm

Cable-carrier chain for aluminium profile

PRFCH **MiniTec** For profile PRF4545-G-3

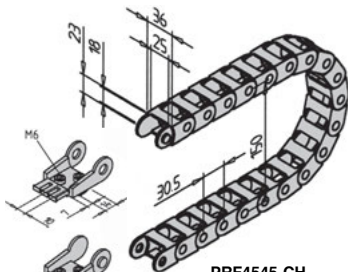
- Supplied in metre lengths, this chain simply clips together
- 2 part fixing link required
- Material: black plastic

Uses

- For supporting and guiding cables/hoses on moveable structures such as trolleys

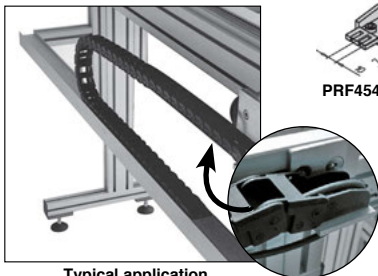
Assembly

- PRF4545-ACH links permit multiple chains to be joined to obtain the total length required
- Clip chains together to get the length desired



PRF4545-CH

PRF4545-ACH



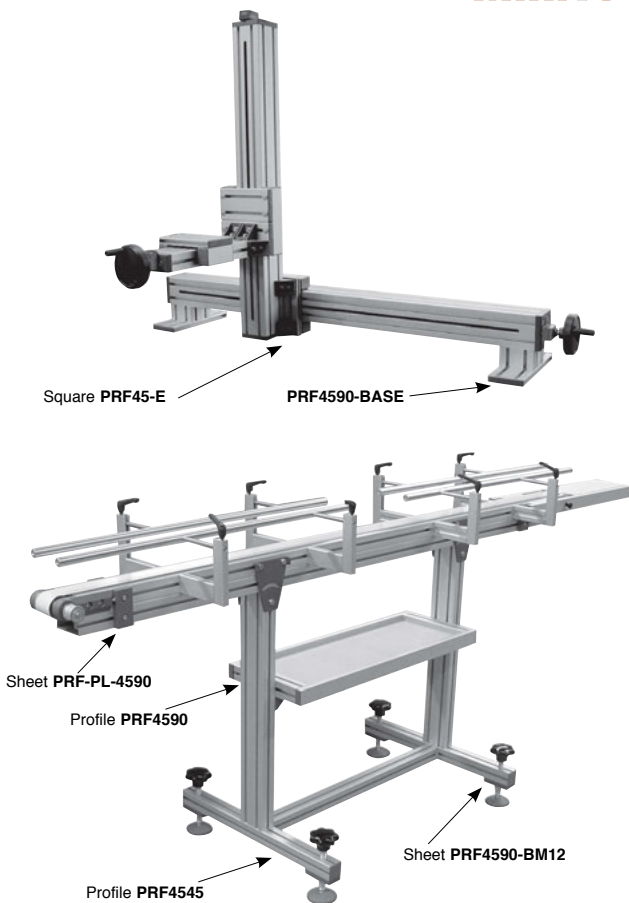
Typical application

DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Type	Length (mm)	Weight (kg)	Price each 1 to 4
PRF4545-CH	Cable-carrier chain	1000	0,341	108,09 €
PRF4545-ACH	Link	-	0,058	24,01 €

Dimensions in mm



**HIGH HELIX
CYLINDRICAL NUT**



p.293

**STEEL OR STAINLESS
STEEL 316L LEADSCREW**



p.296

**CYLINDRICAL
POLYMER NUT**



p.300

**LEADSCREW LOCKING
RING**



p.309

**BEARING BLOCK FOR
LEADSCREW**



p.310

**MINIATURE
BALLSCREW**



p.314

**DRIVING
SCREWS**

p.292 - 325

**BEARING HOUSING
FOR MINIATURE
BALLSCREW**



p.316

**BALLSCREW, SUPPLIED
BY THE METRE**



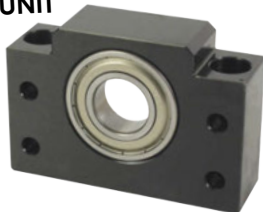
p.318

FLANGED BALLSCREW



p.321

**BALLSCREW BEARING
UNIT**



p.325

High helix leadscrew



LPR

Travel of up to 100mm per rotation

- **Leadscrew only**
- Right handed thread
- For rapid adjustment applications as an alternative to using pneumatic systems or toothed drive belts
- No locking mechanism

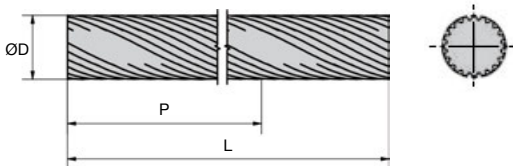


Accessories

- Compatible with ECR high helix nuts

Info

- Max length 2000mm



✓ INCREASED STOCK



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	ØD	Pitch P (mm)	Length L (mm)	Stock*	Price each 1 to 4
LPR1012-1000/SS	10	12	1000	✓	68,34 €
LPR1050-1000/SS	10	50	1000	✓	94,80 €
LPR18100-1000/SS	18	100	1000	-	316,78 €

Dimensions in mm

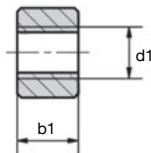
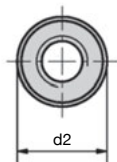
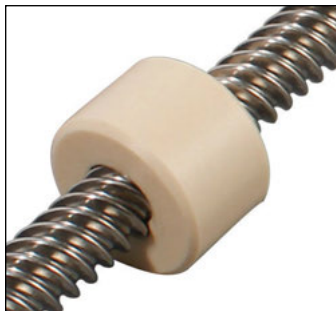
- **Nut only**
- No lubrication required, hard wearing
- For rapid adjustment applications as an alternative to pneumatic systems or toothed drive belts
- Resistant to wear, long working life expectancy
- Not suitable for applications requiring accuracies of 10µm or better. Or for applications requiring efficiencies of 50% or greater
- Working temp range : -20 to +90°C
- Material : Iglidur

Accessories

- Run with high helix leadscrew LPR

Advantages

- No lubrication required
- Dust resistant
- Corrosion resistant



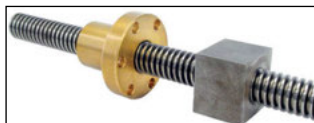
DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Ød1	Pitch P (mm)	Ød2	b1	Stock*	Price each 1 to 4
ECPR1012	10	12	22	15	✓	52,55 €
ECPR1050	10	50	22	15	✓	86,60 €
ECPR18100	18	100	30	27	-	94,52 €

Dimensions in mm

- Cold rolled (plastic deformation)
- Conforms to ISO 2901 / 2903
- Capable of transmitting large forces
- Good surface finish
- Material: Half-hard steel XC38
- Thread tolerance: 7e

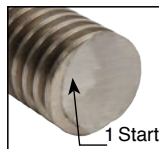
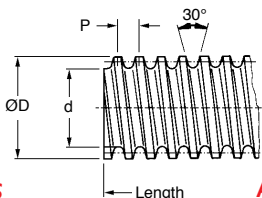


Uses

- Lathe drive screws
- Other machine tools

Options

- Available in lengths up to 6000mm (for diameters 30mm or greater)



A DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request
Lngt.	1000	2000	3000	6000 mm
Price	Uni.	x2,12	x3,18	On request

B DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	5+	10+
Disc.	List	-5%	On request
Lngt.	1000	2000	3000
Price	Uni.	x2,12	x3,18

Part number	ØD	Pitch P (mm)	d mini.	Weight (kg/m)	Stock*	Price each per metre
						1 to 9 40 to 59**
LFM102	10	2	6,89	0,46	✓	A 7,93 € A 4,76 €
LFM123	12	3	07,68	0,65	✓	A 11,65 € A 6,99 €
LFM143	14	3	09,68	0,93	✓	A 15,72 € A 9,43 €
LFM164	16	4	10,47	1,15	✓	A 19,03 € A 11,42 €
LFM184	18	4	12,47	1,52	✓	A 24,35 € A 14,61 €
LFM204	20	4	14,47	1,91	✓	A 28,99 € A 17,40 €
LFM225	22	5	15,29	2,30	✓	A 33,97 € A 20,38 €
LFM245	24	5	17,27	2,80	✓	A 38,88 € A 23,33 €
LFM285	28	5	21,27	3,90	✓	A 53,72 € A 32,24 €
LFM306	30	6	21,56	4,33	✓	A 57,99 € A 34,79 €
LFM326	32	6	23,56	5,00	✓	A 67,72 € A 40,63 €
LFM366	36	6	27,56	6,55	✓	B 50,89 € B On request
LFM407	40	7	30,38	8,00	✓	B 64,70 € B On request
LFM447	44	7	34,38	9,86	✓	B 84,87 € B On request
LFM508	50	8	39,17	12,76	✓	B 105,09 € B On request
LFM559	55	9	42,98	15,40	-	B 138,73 € B On request
LFM609	60	9	47,98	18,65	-	B 153,76 € B On request
LFM7010	70	10	56,82	25,65	-	B 209,67 € B On request
LFM8010	80	10	66,82	34,21	-	B 294,02 € B On request
LFM9012	90	12	74,44	43,00	-	B 433,84 € B On request
LFM9516	95	16	73,71	45,60	-	B 423,85 € B On request
LFM10016	100	16	78,71	51,00	-	B 477,15 € B On request
LFM12016	120	16	98,71	76,00	-	B 697,27 € B On request

*Depending on availability - Dimensions in mm

** refer to discounts

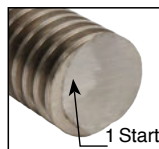
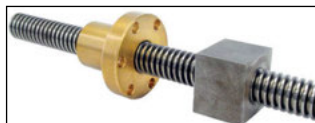
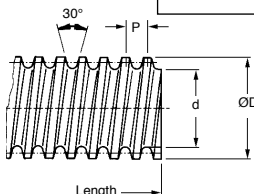
- Cold rolled (plastic deformation)
- Conforms to ISO 2901 / 2903
- Capable of transmitting large forces
- Good surface finish
- Material: Half-hard steel XC38
- Thread tolerance: 7e

Uses

- Lathe drive screws
- Other machine tools

Options

- Available in lengths up to 6000mm (for diameters 30mm or greater)



A DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request
Lngt.	1000	2000	3000	6000 mm
Price	Uni.	x2,12	x3,18	On request

B DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	5+	10+
Disc.	List	-5%	On request
Lngt.	1000	2000	3000 6000 mm
Price	Uni.	x2,12	x3,18 On request

Part number	ØD	Pitch P (mm)	d mini.	Weight (kg/m)	Stock*	Price each per metre
						1 to 9 40 to 59**
LFM102/LH	10	2	6,89	0,46	✓	A 9,91 € A 5,95 €
LFM123/LH	12	3	07,68	0,65	✓	A 15,12 € A 9,07 €
LFM143/LH	14	3	09,68	0,93	✓	A 19,44 € A 11,66 €
LFM164/LH	16	4	10,47	1,15	✓	A 25,50 € A 15,30 €
LFM184/LH	18	4	12,47	1,52	✓	A 27,74 € A 16,65 €
LFM204/LH	20	4	14,47	1,91	✓	A 34,53 € A 20,72 €
LFM225/LH	22	5	15,29	2,30	✓	A 37,15 € A 22,29 €
LFM245/LH	24	5	17,27	2,80	✓	A 43,72 € A 26,23 €
LFM285/LH	28	5	21,27	3,90	✓	A 61,68 € A 37,01 €
LFM306/LH	30	6	21,56	4,33	✓	A 63,75 € A 38,26 €
LFM326/LH	32	6	23,56	5,00	✓	A 77,21 € A 46,32 €
LFM366/LH	36	6	27,56	6,55	-	B 55,49 € B On request
LFM407/LH	40	7	30,38	8,00	-	B 77,49 € B On request
LFM447/LH	44	7	34,38	9,86	-	B 109,95 € B On request
LFM508/LH	50	8	39,17	12,76	-	B 124,82 € B On request
LFM559/LH	55	9	42,98	15,40	-	B On request B On request
LFM609/LH	60	9	47,98	18,65	-	B 190,07 € B On request
LFM7010/LH	70	10	56,82	25,65	-	B 259,23 € B On request
LFM8010/LH	80	10	66,82	34,21	-	B 381,09 € B On request
LFM9012/LH	90	12	74,44	43,00	-	B On request B On request
LFM9516/LH	95	16	73,71	45,60	-	B On request B On request
LFM10016/LH	100	16	78,71	51,00	-	B On request B On request
LFM12016/LH	120	16	98,71	76,00	-	B On request B On request

*Depending on availability - Dimensions in mm

** refer to discounts

- Cold rolled (plastic deformation)
- Conforms to ISO 2901 / 2903
- Capable of transmitting large forces
- Good surface finish
- Material: Stainless steel 316L

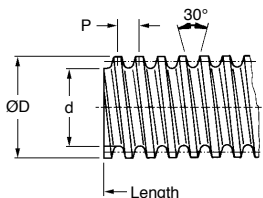
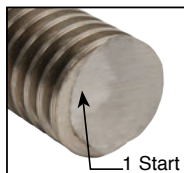
Uses

- Lathe drive screws
- Other machine tools

Options

- Available in lengths up to 6000mm (subject to diameter)

stainless steel



A DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request
Lngt.	1000	2000	3000	6000 mm
Price	Uni.	x2,12	x3,18	On request

B DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	5+	10+	
Disc.	List	-5%	On request	
Lngt.	1000	2000	3000	6000 mm
Price	Unj.	x2.12	x3.18	On request

Part number	ØD	Pitch P (mm)	d mini.	Weight (kg/m)	Stock*	Price each per metre	
						1 to 9	40 to 59**
LSM102	10	2	6,89	0,48	✓	A 52,67 €	A 31,60 €
LSM123	12	3	7,84	0,65	✓	A 39,48 €	A 23,69 €
LSM164	16	4	10,80	1,15	✓	A 66,31 €	A 39,79 €
LSM184	18	4	12,80	1,52	✓	A 84,83 €	A 50,90 €
LSM204	20	4	14,80	1,91	✓	A 103,24 €	A 61,95 €
LSM245	24	5	17,50	2,80	✓	A 146,51 €	A 87,90 €
LSM285	28	5	21,50	3,90	✓	A 212,83 €	A 127,70 €
LSM306	30	6	21,90	4,33	✓	B 147,96 €	B On request
LSM326	32	6	23,90	5,00	✓	B 172,77 €	B On request
LSM366	36	6	27,90	6,55	✓	B 219,45 €	B On request
LSM407	40	7	30,50	8,00	-	B 291,83 €	B On request
LSM508	50	8	39,17	12,76	-	B 454,08 €	B On request

*Depending on availability - Dimensions in mm

** refer to discounts

Left hand thread, 1 start

LSMLH

- Cold rolled (plastic deformation)
- Conforms to ISO 2901 / 2903
- Capable of transmitting large forces
- Good surface finish
- Material: Half-hard steel XC38
- Thread tolerance: 7e

stainless steel

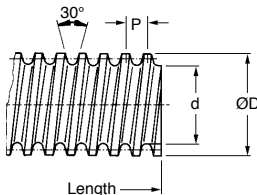
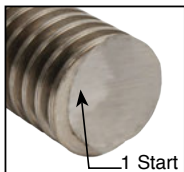


Uses

- Lathe drive screws
- Other machine tools

Options

- Available in lengths up to 6000mm (subject to diameter)



A DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	10+	20+	40+
Disc.	List -30%	-40%	On request	
Lngt.	1000	2000	3000	6000 mm
Price	Uni.	x2,12	x3,18	On request

B DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	5+	10+
Disc.	List -5%		On request
Lngt.	1000	2000	3000 6000 mm
Price	Uni.	x2,12	x3,18 On request

Part number	ØD	Pitch P (mm)	d mini.	Weight (kg/m)	Price each per metre
					1 to 9 40 to 59**
LSM123/LH	12	3	7,84	0,65	A 64,60 € A 38,76 €
LSM164/LH	16	4	10,80	1,15	A 83,72 € A 50,23 €
LSM184/LH	18	4	12,80	1,52	A On request A On request
LSM204/LH	20	4	14,80	1,91	A 119,10 € A 71,46 €
LSM245/LH	24	5	17,50	2,80	A 149,30 € A 89,57 €
LSM285/LH	28	5	21,50	3,90	A On request A On request
LSM306/LH	30	6	21,90	4,33	B 149,59 € B On request
LSM326/LH	32	6	23,90	5,00	B 192,52 € B On request
LSM366/LH	36	6	27,90	6,55	B 209,53 € B On request
LSM407/LH	40	7	30,50	8,00	B 322,68 € B On request

*Depending on availability - Dimensions in mm

** refer to discounts

LRH 1 right hand start, 1 left hand start

- Lead screw with 1 right hand thread and 1 left hand thread
- Machined trapezoidal thread conforming to BS 5346
- Thread tolerance: 7e
- Material: Half-hard steel



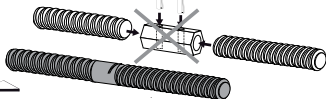
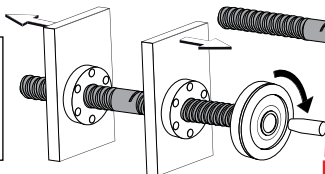
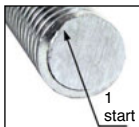
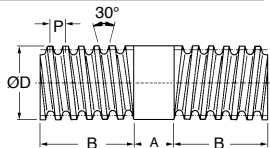
Uses

- Lathe drive screws
- Other machine tools

Accessories

- Steel and bronze nuts **BFM, VKM, SKM, LRM, KSM**

Machined thread



DISCOUNTS

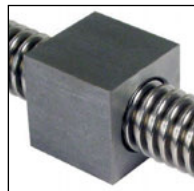
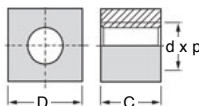
Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	ØD	Pitch P (mm)	A (mm)	B (mm)	Stock*	Price each 1 to 4
Length 1000mm						
LRH164-1	16	4	20	490	✓	77,64 €
LRH184-1	18	4	20	490	✓	90,15 €
LRH204-1	20	4	20	490	✓	104,30 €
LRH245-1	24	5	20	490	✓	118,91 €
LRH285-1	28	5	20	490	✓	132,85 €
LRH306-1	30	6	20	490	✓	144,31 €
LRH326-1	32	6	20	490	-	156,62 €
LRH366-1	36	6	20	490	✓	198,36 €
Length 2000mm						
LRH164-2	16	4	20	990	✓	156,72 €
LRH184-2	18	4	20	990	-	181,93 €
LRH204-2	20	4	20	990	✓	210,54 €
LRH245-2	24	5	20	990	✓	239,90 €
LRH285-2	28	5	20	990	✓	267,89 €
LRH306-2	30	6	20	990	✓	291,02 €
LRH326-2	32	6	20	990	-	315,79 €
LRH366-2	36	6	20	990	-	399,95 €

*Depending on availability - Dimensions in mm

1 trapezoidal right or left-hand thread VKM VKMLH

- Right or left hand thread
- Thread conforms to NFE 03.616
- Material: Steel S300Pb
- Machined nut
- Thread tolerance: 7H



Accessories

- LFM steel leadscrew or
- LSM stainless steel leadscrew

DISCOUNTS A

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

DISCOUNTS B

Qté	1+	5+	10+
Rem.	List	-5%	On request

Part number	Ød	Pitch P	D	C	Weight (kg)	Stock*	Price each
							1 to 9 40 to 59**
Right-hand thread							
VKM102	10	2	17	15	0,027	✓	A 2,94 € A 1,77 €
VKM123	12	3	25	18	0,076	✓	A 5,09 € A 3,06 €
VKM143	14	3	25	20	0,079	✓	A 6,00 € A 3,60 €
VKM164	16	4	28	24	0,119	✓	A 6,41 € A 3,85 €
VKM184	18	4	30	28	0,154	✓	A 7,53 € A 4,52 €
VKM204	20	4	35	30	0,259	✓	A 8,50 € A 5,10 €
VKM225	22	5	35	33	0,240	✓	A 10,56 € A 6,33 €
VKM245	24	5	40	36	0,354	✓	A 11,88 € A 7,13 €
VKM285	28	5	45	42	0,506	✓	A 14,94 € A 8,96 €
VKM306	30	6	45	45	0,513	✓	A 17,38 € A 10,42 €
VKM326	32	6	55	48	0,891	✓	A 25,61 € A 15,37 €
VKM366	36	6	60	54	1,163	✓	B 23,01 € B On request
VKM407	40	7	60	60	1,216	✓	B 28,75 € B On request
VKM447	44	7	65	66	1,538	-	B 44,42 € B On request
Left-hand thread							
VKM102/LH	10	2	17	15	0,027	✓	A 4,73 € A 2,84 €
VKM123/LH	12	3	25	18	0,076	✓	A 6,23 € A 3,74 €
VKM143/LH	14	3	25	20	0,079	✓	A 6,91 € A 4,15 €
VKM164/LH	16	4	28	24	0,119	✓	A 7,57 € A 4,55 €
VKM184/LH	18	4	30	28	0,154	✓	A 9,12 € A 5,47 €
VKM204/LH	20	4	35	30	0,259	✓	A 10,25 € A 6,15 €
VKM225/LH	22	5	35	33	0,240	✓	A 12,13 € A 7,28 €
VKM245/LH	24	5	40	36	0,354	✓	A 13,60 € A 8,16 €
VKM285/LH	28	5	45	42	0,506	-	A 17,38 € A 10,42 €
VKM306/LH	30	6	45	45	0,513	-	A 20,98 € A 12,59 €
VKM326/LH	32	6	55	48	0,891	-	A 30,17 € A 18,10 €
VKM366/LH	36	6	60	54	1,163	-	B 27,37 € B On request
VKM407/LH	40	7	60	60	1,216	-	B 35,28 € B On request
VKM447/LH	44	7	65	66	1,538	-	B 53,32 € B On request

*Depending on availability - Dimensions in mm

** refer to discounts

Cylindrical polymer nut



WSRM

1 trapezoidal right-hand thread

- Material: **iglidur® W300**
- Working temperature: up to 90°C

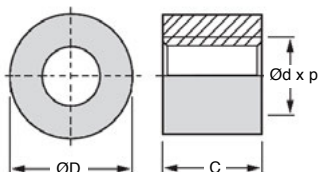
Accessories

- **LFM** steel lead screw or **LSM** stainless steel screw

Advantages

- Dry working
- Not affected by dirt
- No maintenance required
- No corrosion
- Silent in operation

No maintenance



DISCOUNTS

Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød	Pitch P	ØD	C	Stock*	Price each 1 to 5
WSRM102	10	2	22	15	✓	27,72 €
WSRM123	12	3	26	18	✓	33,81 €
WSRM164	16	4	30	24	✓	44,95 €
WSRM184	18	4	30	27	✓	48,24 €
WSRM204	20	4	30	25	✓	49,82 €
WSRM245	24	5	50	36	-	67,74 €
WSRM285	28	5	60	42	-	76,54 €
WSRM306	30	6	60	45	-	79,58 €

*Depending on availability - Dimensions in mm



Flanged polymer nut

1 trapezoidal right-hand thread

WFRM

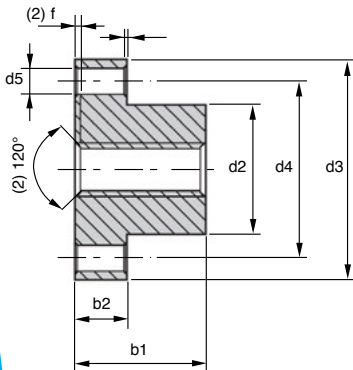
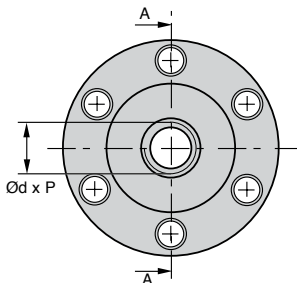
- Material: **iglidur®** W300

Advantages

- Dry working
- Not affected by dirt
- No maintenance required
- No corrosion
- Silent in operation

Accessories

- **LFM** steel lead screw or **LSM** stainless steel lead screw



No maintenance

DISCOUNTS

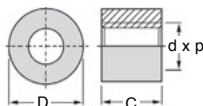
Qty	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Ød	Pitch P	d2	d3	d4	d5	b1	b2	Stock*	Price each 1 to 5
WFRM102	10	2	25	42	34	5	25	10	✓	30,88 €
WFRM123	12	3	28	48	38	6	35	12	✓	37,72 €
WFRM164	16	4	28	48	38	6	35	12	✓	48,24 €
WFRM184	18	4	28	48	38	6	35	12	✓	57,36 €
WFRM204	20	4	32	55	45	7	44	12	✓	57,56 €
WFRM245	24	5	32	55	45	7	44	12	✓	79,83 €
WFRM306	30	6	38	62	50	7	46	14	✓	86,87 €

*Depending on availability - Dimensions in mm

KSM 1 trapezoidal right or left-hand thread KSM_{LH}

- Right or left-hand thread
- Thread conforms to NFE 03.616
- Machined nut
- Thread tolerance: 7H
- Material: Steel 11SMnPb37



Accessories

- LFM steel leadscrew or LSM stainless steel leadscrew

DISCOUNTS A

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

DISCOUNTS B

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Ød	Pitch P	D	C	Weight (kg)	Stock*	Price each
							1 to 9 20 to 39**
Right-hand thread							
KSM102	10	2	22	15	0,035	✓	A 3,76 € A 2,25 €
KSM123	12	3	26	18	0,055	✓	A 4,07 € A 2,45 €
KSM143	14	3	30	21	0,090	✓	A 5,09 € A 3,06 €
KSM164	16	4	36	24	0,155	✓	A 6,67 € A 4,00 €
KSM184	18	4	40	27	0,215	✓	A 7,57 € A 4,55 €
KSM204	20	4	45	30	0,305	✓	A 9,47 € A 5,68 €
KSM225	22	5	45	33	0,322	✓	A 10,25 € A 6,15 €
KSM245	24	5	50	36	0,440	✓	A 12,04 € A 7,23 €
KSM285	28	5	60	42	0,740	✓	A 18,99 € A 11,40 €
KSM306	30	6	60	45	0,765	✓	A 19,84 € A 11,91 €
KSM326	32	6	60	48	0,790	-	A 20,75 € A 12,44 €
KSM366	36	6	75	54	1,470	-	B 25,67 € B On request
KSM407	40	7	80	60	1,830	✓	B 30,76 € B On request
KSM447	44	7	80	66	1,890	-	B 40,41 € B On request
KSM508	50	8	90	75	2,695	-	B 86,91 € B On request
KSM609	60	9	100	90	3,865	-	B 107,84 € B On request
KSM7010	70	10	110	100	5,115	-	B 133,58 € B On request
KSM8010	80	10	120	110	6,000	-	B 173,83 € B On request
Left-hand thread							
KSM102/LH	10	2	22	15	0,035	-	A 7,53 € A 4,52 €
KSM123/LH	12	3	26	18	0,055	✓	A 6,64 € A 3,98 €
KSM143/LH	14	3	30	21	0,090	✓	A 11,42 € A 6,85 €
KSM164/LH	16	4	36	24	0,155	✓	A 9,20 € A 5,52 €
KSM184/LH	18	4	40	27	0,215	-	A 8,45 € A 5,08 €
KSM204/LH	20	4	45	30	0,305	✓	A 10,32 € A 6,19 €
KSM225/LH	22	5	45	33	0,322	-	A 16,64 € A 9,98 €
KSM245/LH	24	5	50	36	0,440	-	A 15,80 € A 9,48 €
KSM285/LH	28	5	60	42	0,740	✓	A 25,10 € A 15,06 €
KSM306/LH	30	6	60	45	0,765	-	A 24,44 € A 14,67 €
KSM326/LH	32	6	60	48	0,790	-	A 27,36 € A 16,42 €
KSM366/LH	36	6	75	54	1,470	-	B 28,14 € B On request
KSM407/LH	40	7	80	60	1,830	-	B 34,91 € B On request
KSM447/LH	44	7	80	66	1,890	-	B 46,86 € B On request
KSM508/LH	50	8	90	75	2,695	-	B 154,95 € B On request
KSM609/LH	60	9	100	90	3,865	-	B 175,81 € B On request
KSM7010/LH	70	10	110	100	5,115	-	B 201,50 € B On request
KSM8010/LH	80	10	120	100	6,000	-	B 230,23 € B On request

*Depending on availability - Dimensions in mm

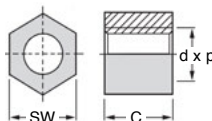
** refer to discounts

1 trapezoidal right or left-hand thread SKM SKMLH

- Right or left-hand thread
- Thread conforms to NFE 03.616
- Material: Steel 115MnPb37
- Machined nut
- Thread tolerance: 7H

Accessories

- LFM steel leadscrew or LSM stainless steel leadscrew



DISCOUNTS A

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

DISCOUNTS B

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Ød	Pitch P	SW	C	Weight (kg)	Stock*	Price each
							1 to 9 40 to 59**
Right-hand thread							
SKM102	10	2	17	15	0,022	✓	A 3,37 € A 2,02 €
SKM123	12	3	19	18	0,032	✓	A 3,80 € A 2,27 €
SKM143	14	3	22	21	0,049	✓	A 5,21 € A 3,13 €
SKM164	16	4	24	24	0,065	✓	A 6,54 € A 3,92 €
SKM184	18	4	27	27	0,091	✓	A 6,95 € A 4,17 €
SKM204	20	4	30	30	0,124	✓	A 8,02 € A 4,81 €
SKM225	22	5	30	33	0,125	✓	A 8,72 € A 5,23 €
SKM245	24	5	36	36	0,219	✓	A 9,98 € A 5,99 €
SKM285	28	5	41	42	0,318	✓	A 12,79 € A 7,67 €
SKM306	30	6	46	45	0,445	✓	A 14,88 € A 8,93 €
SKM326	32	6	50	48	0,567	✓	A 18,22 € A 10,93 €
SKM366	36	6	55	54	0,708	✓	B 15,93 € B On request
SKM407	40	7	60	60	0,893	✓	B 21,05 € B On request
SKM447	44	7	65	66	1,538	-	B 34,36 € B On request
SKM508	50	8	75	75	1,889	✓	B 69,02 € B On request
SKM609	60	9	90	90	3,277	-	B 98,06 € B On request
Left-hand thread							
SKM102/LH	10	2	17	15	0,022	-	A 5,68 € A 3,41 €
SKM123/LH	12	3	19	18	0,032	-	A 6,78 € A 4,07 €
SKM143/LH	14	3	22	21	0,049	-	A 6,78 € A 4,07 €
SKM164/LH	16	4	24	24	0,065	-	A 8,19 € A 4,91 €
SKM184/LH	18	4	27	27	0,091	-	A 8,53 € A 5,12 €
SKM204/LH	20	4	30	30	0,124	-	A 9,77 € A 5,87 €
SKM225/LH	22	5	30	33	0,125	-	A 10,94 € A 6,57 €
SKM245/LH	24	5	36	36	0,219	-	A 12,39 € A 7,44 €
SKM285/LH	28	5	41	42	0,318	-	A 15,02 € A 9,01 €
SKM306/LH	30	6	46	45	0,445	-	A 18,67 € A 11,20 €
SKM326/LH	32	6	50	48	0,567	-	A 21,76 € A 13,05 €
SKM366/LH	36	6	55	54	0,708	-	B 18,16 € B On request
SKM407/LH	40	7	60	60	0,893	-	B 25,43 € B On request
SKM447/LH	44	7	65	66	1,538	-	B 38,09 € B On request
SKM508/LH	50	8	75	75	1,889	-	B 17,50 € B On request
SKM609/LH	60	9	90	90	3,277	-	B 38,00 € B On request

*Depending on availability - Dimensions in mm

** refer to discounts

Trapezoidal bronze nut



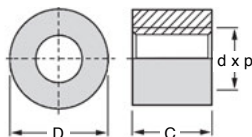
LRM
LRMLH

1 start, right or left hand

- Right or left hand thread
- Thread conforms to NFE 03.616
- Machined nut
- Thread tolerance: 7H
- Material: Bronze CuSn8P

Accessories

- LFM steel lead screw or LSM stainless steel screw



DISCOUNTS A

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

DISCOUNTS B

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Ød	Pitch P	D	C	Weight (kg)	Stock*	Price each	
							1 to 9	20 to 39**
Right-hand thread								
LRM102	10	2	22	20	0,053	✓	A 14,47 €	A 8,69 €
LRM123	12	3	26	24	0,083	✓	A 14,04 €	A 8,42 €
LRM143	14	3	30	28	0,135	✓	A 18,06 €	A 10,83 €
LRM164	16	4	36	32	0,232	✓	A 25,15 €	A 15,09 €
LRM184	18	4	40	36	0,320	✓	A 31,85 €	A 19,11 €
LRM204	20	4	45	40	0,455	✓	A 40,99 €	A 24,59 €
LRM225	22	5	45	44	0,480	✓	A 44,26 €	A 26,56 €
LRM245	24	5	50	48	0,656	✓	A 55,88 €	A 33,53 €
LRM285	28	5	60	56	1,102	✓	A 89,64 €	A 53,78 €
LRM306	30	6	60	60	1,140	✓	A 91,03 €	A 54,62 €
LRM326	32	6	60	64	1,177	✓	A 96,50 €	A 57,90 €
LRM366	36	6	75	72	2,189	✓	B 109,86 €	B On request
LRM407	40	7	80	80	2,725	✓	B 142,29 €	B On request
LRM447	44	7	80	88	2,815	-	B 155,05 €	B On request
LRM508	50	8	90	100	4,014	-	B 208,02 €	B On request
LRM609	60	9	100	120	5,150	-	B 276,00 €	B On request
Left-hand thread								
LRM102/LH	10	2	22	20	0,053	✓	A 17,49 €	A 10,50 €
LRM123/LH	12	3	26	24	0,083	✓	A 15,79 €	A 9,48 €
LRM143/LH	14	3	30	28	0,135	-	A On request	A On request
LRM164/LH	16	4	36	32	0,232	✓	A 27,65 €	A 16,59 €
LRM184/LH	18	4	40	36	0,320	✓	A 43,63 €	A 26,18 €
LRM204/LH	20	4	45	40	0,455	✓	A 44,80 €	A 26,88 €
LRM225/LH	22	5	45	44	0,480	✓	A 61,29 €	A 36,77 €
LRM245/LH	24	5	50	48	0,656	✓	A 58,97 €	A 35,38 €
LRM285/LH	28	5	60	56	1,102	✓	A 108,45 €	A 65,07 €
LRM306/LH	30	6	60	60	1,140	✓	A 104,30 €	A 62,58 €
LRM326/LH	32	6	60	64	1,177	✓	A 115,48 €	A 69,28 €
LRM366/LH	36	6	75	72	2,189	-	B 117,47 €	B On request
LRM407/LH	40	7	80	80	2,725	-	B 146,77 €	B On request
LRM447/LH	44	7	80	88	2,815	-	B 164,57 €	B On request
LRM508/LH	50	8	90	100	4,014	-	B 246,62 €	B On request
LRM609/LH	60	9	100	120	5,150	-	B 319,78 €	B On request

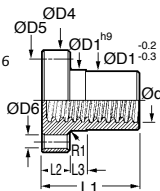
*Depending on availability - Dimensions in mm

** refer to discounts

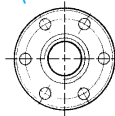
1 start, right or left hand thread

BFM
BFMLH

- Right or left-hand thread
- Toleranced flange
- Thread conforms to NFE 03.616
- Machined nut
- Thread tolerance: 7H
- Material: Bronze CuSn8P



Toleranced
flange



Accessories

- LFM steel leadscrew or
- LSM stainless steel leadscrew

DISCOUNTS A

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

DISCOUNTS B

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Ød	ØD1	ØD4	ØD5	ØD6	L1	L2	L3	Stock*	Price each	
										1 to 9	20 to 39**
Right-hand thread											
BFM102	10 x 2	25	42	34	5	25	10	6	✓	A 30,87 €	A 18,52 €
BFM123	12 x 3	28	48	38	6	35	12	8	✓	A 44,84 €	A 26,91 €
BFM164	16 x 4	28	48	38	6	35	12	8	✓	A 44,96 €	A 26,91 €
BFM184	18 x 4	28	48	38	6	35	12	8	✓	A 44,96 €	A 26,98 €
BFM204	20 x 4	32	55	45	7	44	12	8	✓	A 66,29 €	A 26,98 €
BFM225	22 x 5	32	55	45	7	44	12	8	✓	A 66,83 €	A 39,78 €
BFM245	24 x 5	32	55	45	7	44	12	8	✓	A 62,46 €	A 37,47 €
BFM285	28 x 5	38	62	50	7	46	14	8	✓	A 85,58 €	A 51,35 €
BFM306	30 x 6	38	62	50	7	46	14	8	✓	A 85,92 €	A 51,55 €
BFM326	32 x 6	45	70	58	7	54	16	10	✓	A 129,73 €	A 77,84 €
BFM366	36 x 6	45	70	58	7	54	16	10	✓	B 69,99 €	B On request
BFM407	40 x 7	63	95	78	9	66	16	12	✓	B 131,38 €	B On request
BFM447	44 x 7	63	95	78	9	66	16	12	-	B 144,10 €	B On request
BFM508	50 x 8	72	110	90	11	75	18	14	✓	B 213,72 €	B On request
BFM609	60 x 9	88	130	110	13	90	20	16	-	B 350,81 €	B On request
BFM7010	70 x 10	95	140	120	13	105	22	17	-	B 497,88 €	B On request
Left-hand thread											
BFM102/LH	10 x 2	25	42	34	5	25	10	6	✓	A 34,99 €	A 20,99 €
BFM123/LH	12 x 3	28	48	38	6	35	12	8	✓	A 50,83 €	A 30,50 €
BFM164/LH	16 x 4	28	48	38	6	35	12	8	✓	A 50,93 €	A 30,50 €
BFM184/LH	18 x 4	28	48	38	6	35	12	8	✓	A 51,00 €	A 30,60 €
BFM204/LH	20 x 4	32	55	45	7	44	12	8	✓	A 69,71 €	A 41,83 €
BFM225/LH	22 x 5	32	55	45	7	44	12	8	✓	A 82,32 €	A 49,39 €
BFM245/LH	24 x 5	32	55	45	7	44	12	8	✓	A 67,98 €	A 40,79 €
BFM285/LH	28 x 5	38	62	50	7	46	14	8	✓	A 101,15 €	A 60,70 €
BFM306/LH	30 x 6	38	62	50	7	46	14	8	✓	A 90,89 €	A 54,50 €
BFM326/LH	32 x 6	45	70	58	7	54	16	10	-	A 144,72 €	A 86,83 €
BFM366/LH	36 x 6	45	70	58	7	54	16	10	✓	B 77,55 €	B On request
BFM407/LH	40 x 7	63	95	78	9	66	16	12	✓	B 134,03 €	B On request
BFM447/LH	44 x 7	63	95	78	9	66	16	12	-	B 150,46 €	B On request
BFM508/LH	50 x 8	72	110	90	11	75	18	14	-	B 230,75 €	B On request
BFM609/LH	60 x 9	88	130	110	13	90	20	16	-	B 380,05 €	B On request
BFM7010/LH	70 x 10	95	140	120	13	105	22	17	-	B 535,00 €	B On request

*Depending on availability - Dimensions in mm

** refer to discounts

- Cold rolled (plastic deformation)
- Conforms to DIN 103 (NFE 03-615)
- Capable of transmitting large forces
- Good surface finish
- Material: Half-hard steel XC38
- Thread tolerance: 7e



Uses

- Lathe drive screws
- Other machine tools

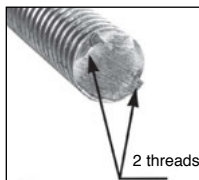
Accessories

- LRM and BFM double thread bronze nuts
- KSM double thread steel nuts

Options

- Available in lengths up to 6000mm (subject to diameter)

2 Start



**40% DISCOUNTS
for 20-39 off**

DISCOUNTS and AVAILABLE LENGTHS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request
Long	1000	2000	3000	6000 mm
Price	Each	x2,12	x3,18	On request

Part number	ØD	Pitch P (mm)	d min.	Price per metre	
				1 to 9	20 to 39**
LFM126	12	6	07,68	15,75 €	9,45 €
LFM146	14	6	09,68	23,07 €	13,84 €
LFM168	16	8	10,47	26,02 €	15,61 €
LFM188	18	8	12,47	31,97 €	19,18 €
LFM208	20	8	14,47	36,43 €	21,85 €
LFM2210	22	10	15,29	44,93 €	26,96 €
LFM2410	24	10	17,27	48,90 €	29,34 €
LFM2610	26	10	19,27	57,19 €	34,31 €
LFM2810	28	10	21,27	66,46 €	39,88 €
LFM3012	30	12	21,56	69,39 €	41,64 €
LFM3212	32	12	23,56	79,78 €	47,87 €
LFM3612	36	12	27,56	100,90 €	60,54 €
LFM4014	40	14	30,38	171,01 €	102,61 €

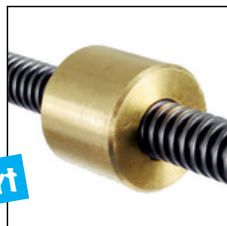
Dimensions in mm

** REFER TO DISCOUNTS

- Thread conforms to NFE 03.616
- Machined nut
- Material: Bronze UE
- Thread tolerance: 7H

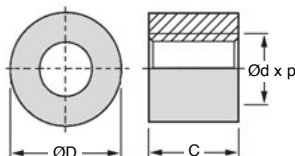
Accessories

- LFM 2 start steel leadscrew



2 Start

**40% DISCOUNTS
for 20-39 off**



DISCOUNTS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

Part number	Ød	Pitch P	D	C	Weight (kg)	Price each 1 to 9	40 to 59**
LRM126	12	6	26	24	0,083	20,22 €	12,13 €
LRM168	16	8	36	32	0,232	32,11 €	19,26 €
LRM188	18	8	40	36	0,320	43,09 €	25,85 €
LRM208	20	8	45	40	0,455	48,13 €	28,88 €
LRM2210	22	10	45	44	0,480	61,29 €	36,77 €
LRM2410	24	10	50	48	0,656	67,93 €	40,76 €
LRM2810	28	10	60	56	1,102	108,45 €	65,07 €
LRM3012	30	12	60	60	1,140	104,30 €	62,58 €
LRM3212	32	12	60	64	1,177	115,48 €	69,28 €
LRM3612	36	12	75	72	2,189	182,57 €	109,54 €
LRM4014	40	14	80	80	2,725	227,60 €	136,56 €

Dimensions in mm

Flanged bronze nut



BFM

2 start, right hand thread

- **Toleranced flange**
- Thread conforms to NFE 03.616
- Machined nut
- Thread tolerance: 7H
- Material: Bronze CuSn8P

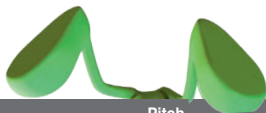
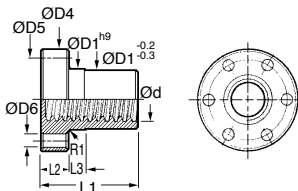
Accessoires

- LFM stainless steel leadscrew



Toleranced flange

2 Start



DISCOUNTS

Qty	1+	10+	20+	40+
Disc.	List	-30%	-40%	On request

Part number	Pitch		$\varnothing D1$	$\varnothing D4$	$\varnothing D5$	$\varnothing D6$	L1	L2	L3	Price each	
	$\varnothing d$	P								1 to 9	20 to 39**
BFM126	12	6	28	48	38	6	35	12	8	50,83 €	30,50 €
BFM168	16	8	28	48	38	6	35	12	8	51,00 €	30,60 €
BFM188	18	8	28	48	38	6	35	12	8	51,00 €	30,60 €
BFM208	20	8	32	55	45	7	44	12	8	69,76 €	41,86 €
BFM2210	22	10	32	55	45	7	44	12	8	82,40 €	49,44 €
BFM2410	24	10	32	55	45	7	44	12	8	67,98 €	40,79 €
BFM2810	28	10	38	62	50	7	46	14	8	101,15 €	60,70 €
BFM3012	30	12	38	62	50	7	46	14	8	90,89 €	54,54 €
BFM3212	32	12	45	70	58	7	54	16	10	144,72 €	86,83 €
BFM3612	36	12	45	70	58	7	54	16	10	144,44 €	86,67 €
BFM4014	40	14	63	95	78	9	66	16	12	228,30 €	136,98 €

Dimensions in mm

** refer to discounts

Lead screw locking ring

Single piece assembly

BAGTR

- Single piece lead screw locking assembly

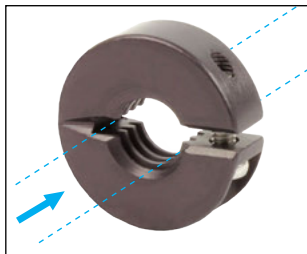
- Material:
Anodised aluminium

Accessory

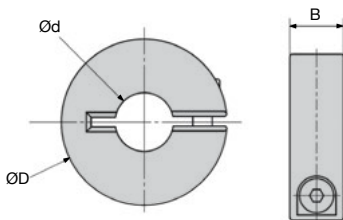
- LFM leadscrew

Info

- Screw head can be larger than diameter ØD
- Overall dimension is ØD + 2 mm



Typical application:
fitted to a LFM lead screw



DISCOUNTS

Qty	1+	10+	25+	50+
Disc.	List	-10%	-18%	On request

Part number	Ød	ØD	B	Static axial load	Price each 1 to 9
Right handed thread					
BAG1-TR10	TR10X2	24	8	1800	13,01 €
BAG1-TR12	TR12X3	28	8	2096	23,91 €
BAG1-TR16	TR16X4	34	11	3840	18,71 €
BAG1-TR18	TR18X4	36	13	5216	18,94 €
BAG1-TR20	TR20X4	45	15	6784	19,77 €
BAG1-TR24	TR24X5	45	15	8096	33,23 €
Left handed thread					
BAG1-TR10/LH	TR10X2	24	8	1800	14,96 €
BAG1-TR12/LH	TR12X3	28	8	2096	27,48 €
BAG1-TR16/LH	TR16X4	34	11	3840	21,52 €
BAG1-TR18/LH	TR18X4	36	13	5216	21,79 €
BAG1-TR20/LH	TR20X4	45	15	6784	22,72 €
BAG1-TR24/LH	TR24X5	45	15	8096	38,21 €

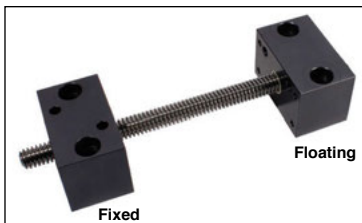
Dimensions in mm

Bearing block for leadscrew

SLS

Machining not required

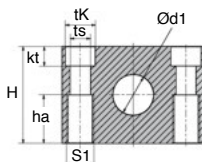
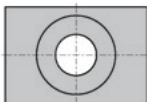
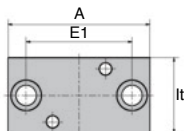
- No machining required on the trapezoidal leadscrew
- Bearing block to support LFM102, LFM184 and LFM245 leadscrews
- No lubrication or maintenance required
- Low friction
- Precise, low backlash
- Materials :
 - Anodised aluminium
 - Drylin® coating
 - Steel locking collar (on fixed bearing)



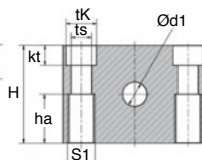
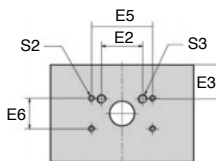
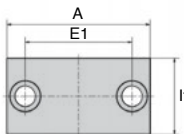
Application

- Linear slide tables

Fixed bearing



Floating bearing



INCREASED STOCK

IN STOCK

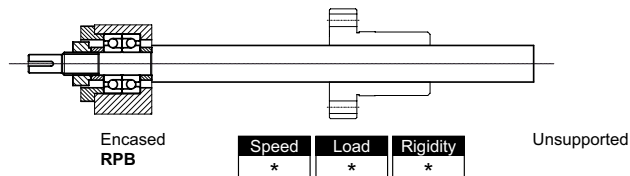
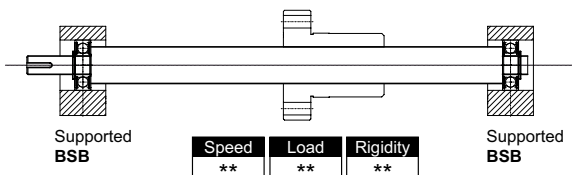
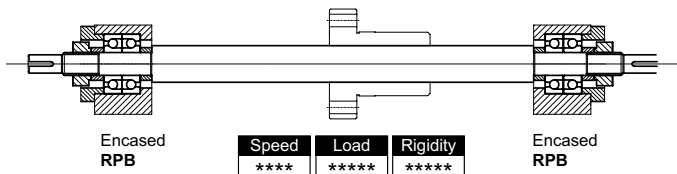
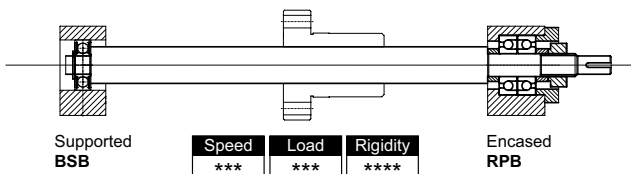
DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	For leadscrew	A	H	E1	E2	E3	E5	E6	It	kt	tk	ts	d1	ha	S1	S2	S3	Weight (g)	Price each 1 to 4
Floating bearing block																			
SLS102-LL	Tr10x2	50	32	36	27	6,5	40	20	30	6,5	11	6,6	10	16	M8	M4	M6	115	57,76 €
SLS184-LL	Tr18x4	72	46	54	27	13,5	40	20	36	8,6	15	9,0	18	23	M10	M4	M6	295	80,26 €
SLS245-LL	Tr24x5	94	64	70	27	22,5	40	20	50	13,0	20	13,5	24	32	M16	M4	M6	725	119,19 €
Fixed bearing block																			
SLS102-FL	Tr10x2	50	32	36	-	-	-	-	30	6,5	11	6,6	10	16	M8	-	-	88	96,63 €
SLS184-FL	Tr18x4	72	46	54	-	-	-	-	36	8,6	15	9,0	18	23	M10	-	-	205	135,64 €
SLS245-FL	Tr24x5	94	64	70	-	-	-	-	50	13,0	20	13,5	24	32	M16	-	-	525	250,04 €

Dimensions in mm

Mounting arrangements



Description

The output efficiency of a ballscrew is due to the balls that maintain the contact between the nut and the thread. Similar to a roller bearing, the nut “slides” on the screw. The balls are circulated inside the nut after one or more turns by a recycling pin (single-thread screw), or by two deflectors and a tubular conduit, found in the shell of the nut (multi-threaded screw).

Vulkolan seals are incorporated to prevent the lubricant from leaking.

The tolerance of the thread is T7, which means that for a pitch of 5mm, the axial backlash is 0.05mm, 0.10mm for a pitch of 10mm, and 0.20mm for multiple-threaded screws.

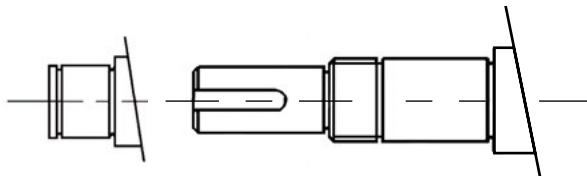
The backlash can be reduced by applying a pre-load, this is applied by placing two nuts one against the other and then turning them in opposite directions. This type of assembly is suitable for machines requiring a high rigidity and accurate positioning.

Guidelines

Ballscrews are only designed to bear axial loads. They should not be used for guidance. Such use will greatly reduce the working life of the ballscrews. A suitable form of linear guide must be integrated into the system to carry radial loads. During assembly, ensure that all the parts are accurately aligned. Any offset between the screws and the guiding parts may cause a malfunction, or even a blockage, which will reduce the working life and the accuracy of the system.

Ends

Ballscrews are supplied by the metre, unfinished and with plain ends. The customer should cut to the length required and carry out any other machining operations before the nut is fitted to the screw.



Lubrication

Flanged ball nuts are provided with grease nipples. The use of a lubricant avoids metallic contact between the moving parts, protects against corrosion and reduces wear. Its role is therefore very important and is similar to that of a ball bearing. A Lithium based grease is perfect for most uses. Use of oil is preferable for higher speeds.

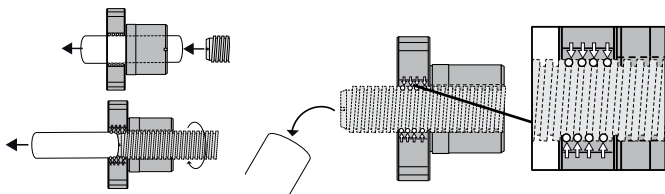
When refilling with lubricant, make sure the same type of lubricant is used as on the previous occasion.

Mounting and removing the nut

- 1) Position the assembly sleeve against the thread of the shaft. If a flange or another type of machined surface is in the way, use an adhesive strip to ensure the sleeve is in place up to the thread.
- 2) Screw on the nut without forcing it.
- 3) Move the nut over the entire length of the thread to ensure that the screw is functioning correctly.



The nut must never be taken off the threaded shaft without the use of an assembly sleeve to keep the balls in place.



Should the balls fall out, do not put them back in the nut. Correctly reassembling the balls in the nut requires extreme conditions of cleanliness and detailed knowledge if the ballscrew is to function correctly. Should this situation arise, please arrange to return the whole set of parts to us so that the ballscrew can be reconditioned in the factory.

Storage

Handle the ballscrews with care. Avoid shocks, and do not damage the threads. The ball screws should remain in their original packaging for as long as possible. It is important that they are clean for them to function correctly. Take care not to apply radial loads that may cause the screw to be bent and become irreparable.

Miniature ballscrew

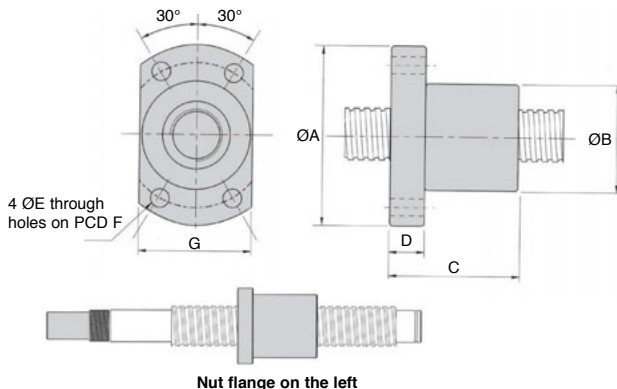
BSPM

Nut-dimensions

- Basic nut, precision class 7
- Nut has no lubrication point

Info

- Not available separately
- Do not disassemble
- Delivered non lubricated, user should apply lubricant before use.



Part number	ØScrew Pitch			A	B	C	D	E	F	G	Load	
											Dyn Ca (kN)	Stat Coa (kN)
BSPM0601R-150	6	1	24	12	15	3,5	3,4	18	16	0,73	1,21	Not available separately
BSPM0801R-200	8	1	27	14	16	4	3,4	21	18	0,93	1,73	
BSPM1002R-300	10	2	35	18	28	5	4,5	27	22	1,85	3,05	
BSPM1202R-600	12	2	37	20	28	5	4,5	29	24	1,73	3,17	
BSPM1402R-700	14	2	40	21	23	6	5,5	31	26	2,87	6,33	

Dimensions in mm

Rolled ballscrew, diameters from 6 to 14mm **BSPM**

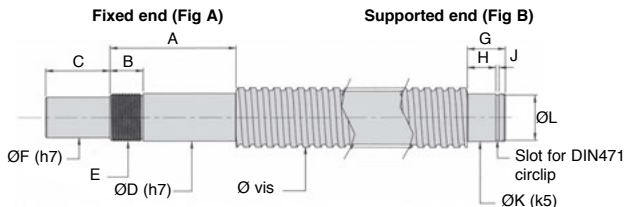
- **Rolled leadscrew, precision class 7**
- Max axial backlash : 0.05mm
- Supplied with the nut flange to the left
- Machined to be compatible with BEK bearings (Fig A) and BEF bearings (Fig B). No keyway.
- Screw manufactured from steel

Options

- Shorter lengths available on request
- Nut with flange on right

Info

-The Part N° comprises 1 leadscrew and 1 nut

**DISCOUNTS**

Qty	1+	2+	5+
Disc.	List	-5%	On request

Part number	A	B	C	D	E	F	G	H	J	K	L
BSPM0601R-150	This size not machined										
BSPM0801R-200	29	9	8	6	M6x0,75	4	9	6	0,8	6	5,7
BSPM1002R-300	34	11	10	8	M8x1	6	9	6	0,8	6	5,7
BSPM1202R-600	38	13	15	10	M10x1	8	10	7	0,9	8	7,6
BSPM1402R-700	38	13	15	12	M12x1	10	10	7	0,9	8	7,6

Part number	Screw Ø	Pitch	Max length	length	Axial rigidity (N/µm)	Price each. 1 screw + 1 nut
BSPM0601R-150	6	1	150	150	55	838,82 €
BSPM0801R-200	8	1	200	200	72	859,08 €
BSPM1002R-300	10	2	300	300	90	977,85 €
BSPM1202R-600	12	2	600	600	110	1 174,32 €
BSPM1402R-700	14	2	700	700	120	1 176,29 €

Dimensions in mm

Bearing housing for miniature ballscrew

BEF

Supported end

- Bearing designed to receive the free end of a miniature ballscrew (refer to BSPM Fig B)
- Fitted with a deep groove ball bearing
- Material :
Blackened steel

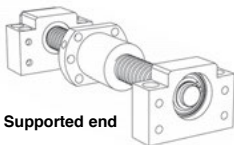
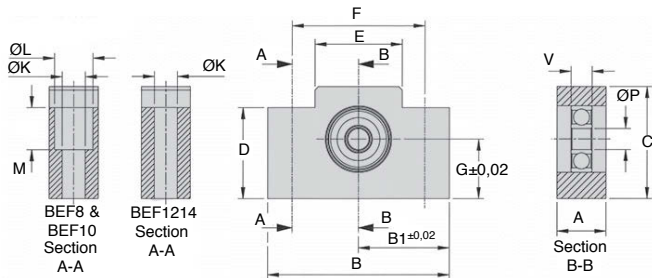


Assembly

- Use the circlip supplied to block the axial position of the ballscrew

Info

- There is no product available for 6mm ballscrew



Supported end

DISCOUNTS

Qty	1+	2+	5+
Disc.	List	-5%	On request

Part number	Screw Ø	A	B	B1	C	D	E	F	G
BEF8	8	14	42	21	25	20	18	30	13
BEF10	10	14	52	26	32	24	25	38	17
BEF1214	12 et 14	20	70	35	43	24	36	52	25

Part number	ØK	ØL	M	ØP	V	Bearing	Price each
BEF8	5,5	9,5	11	6	6	606ZZ	205,86 €
BEF10	6,6	11	12	6	6	606ZZ	205,86 €
BEF1214	9	-	-	8	7	608ZZ	205,86 €

Dimensions in mm

Bearing housing for miniature ballscrew

Fixed end

BEK

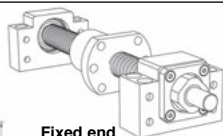
- Bearing designed to receive the fixed end of a miniature ballscrew (refer to BSPM Fig A)
- Fitted with 2 angular contact bearings
- Accurate radial and axial positioning of the ballscrew
- Material :
Blackened steel

Assembly

- Locking nut should be fully tightened and secured with the grub screw

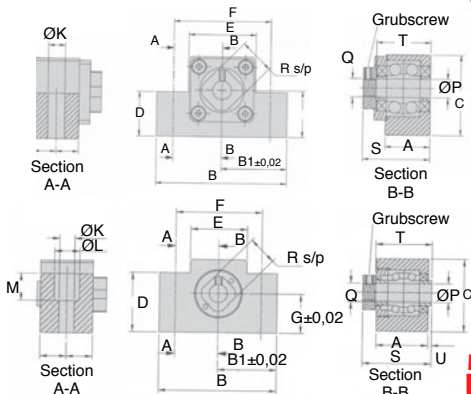
Info

- There is no product available for 6mm ballscrew



Fixed end

BEK12 & BEK14



BEK8 & BEK10

DISCOUNTS

Qty	1+	2+	5+
Disc.	List	-5%	On request

Part number	Ø Screw	A	B	B1	C	D	E	F	G
BEK8	8	20	42	21	25	20	18	30	13
BEK10	10	23	52	26	32	24	25	38	17
BEK12	12	24	70	35	43	24	36	52	25
BEK14	14	24	70	35	43	24	36	52	25

Part number	Ø Screw	ØL	M	ØP	Q	R	S	T	U	Price each
BEK8	5,5	9,5	11	6	M6x0,75	12	27	22	1,5	341,59 €
BEK10	6,6	11	12	8	M8x1	14	31,3	25	1,3	322,12 €
BEK12	9	-	-	10	M10x1	16	35,4	27	-	312,54 €
BEK14	9	-	-	12	M12x1	19	35,3	27	-	322,12 €

Dimensions in mm

- Rolled ballscrew

- Material:

Polished steel, C53 or C60 induction hardened.

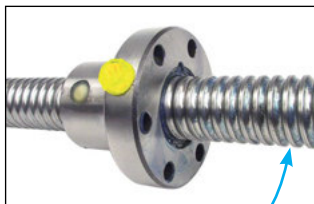
- Hardness: 60±2 HRC

Options

- Ends can be machined to customer requirements
- Cut to length
- Other diameters available (up to 80mm)

Accessories

- See GBS-F, GBS-Z, GBM-F, GBM-Z nuts

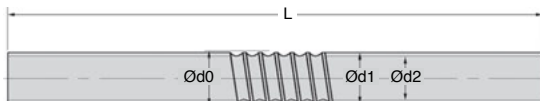


KGS screw

Extended range,
new sizes available



GBS nut



DISCOUNTS

Qty	1+	2+	6+	11+
Disc.	List	-7%	-13%	On request

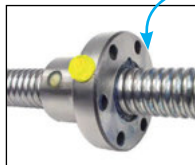
Part number	For Movement		Unmachined screw		L (mm)	L max (mm)	Weight/m (kg)	Stock*	Price each
	Ød0 (mm)	screw per turn	Ød1	Ød2					
KGS1605-1000TR7	16	5	15,5	12,9	1000	3000	1,26	✓	85,76 €
KGS2005-1000TR7	20	5	19,5	16,9	1000	6000	1,26	✓	115,05 €
KGS2020-1000TR7	20	20	19,5	16,9	1000	6000	3,04	-	124,98 €
KGS2050-1000TR7	20	50	19,1	16,5	1000	6000	2,07	-	133,18 €
KGS2505-1000TR7	25	5	24,5	21,9	1000	6000	3,33	✓	154,46 €
KGS3205-1000TR7	32	5	31,5	28,9	1000	6000	5,61	✓	216,36 €
KGS3210-1000TR7	32	10	31,5	28,9	1000	6000	5,61	-	217,26 €
KGS3220-1000TR7	32	20	31,4	28,7	1000	6000	5,61	-	224,73 €
KGS3240-1000TR7	32	40	32,6	28,9	1000	6000	5,61	-	229,04 €
KGS4005-1000TR7	40	5	39,5	36,9	1000	6000	9,03	✓	305,37 €
KGS4010-1000TR7	40	10	39,5	34,1	1000	6000	8,33	-	286,99 €
KGS5010-1000TR7	50	10	49,2	44	1000	6000	13,48	-	387,31 €
KGS5020-1000TR7	50	20	49,4	44	1000	6000	13,48	-	431,55 €
KGS6310-1000TR7	63	10	62,2	57	1000	6000	22,04	-	612,27 €

*Depending on availability - Dimensions in mm

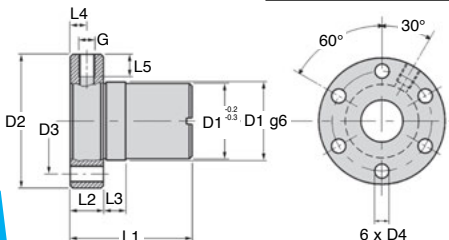
- **Nut for ballscrew**
- Axial backlash:
0.05mm for a 5mm pitch
0.1mm for a 10mm pitch
- Material: Steel MnCr5 or 100Cr6

Accessories

- See KGS screw



Extended range,
new sizes available



DISCOUNTS

Qty	1+	2+	6+	11+
Disc.	List	-7%	-13%	On request

Part number	D1 g6	D2 h13	D3	D4	L1	L2	L3	L4	L5	G
GBS-F-1605-RH	28	48	38	5,5	44	12	8	6	8	M6
GBS-F-2005-RH	32	55	45	7,0	44	12	8	6	8	M6
GBS-F-2505-RH	38	62	50	7,0	46	14	8	7	8	M6
GBS-F-3205-RH	45	70	58	7,0	59	16	10	8	8	M6
GBS-F-3210-RH	53	80	68	7,0	73	16	10	8	8	M8 x 1
GBS-F-4005-RH	53	80	68	7,0	59	16	10	8	8	M6
GBS-F-4010-RH	63	95	78	9,0	73	16	10	8	8	M8 x 1

Part number	For screw Ø	Movement per turn (mm)	dynamic C (kN)	Load static Co (kN)	Weight (kg)	Stock*	Price each
GBS-F-1605-RH	16	5	7,0	12,7	0,20	✓	203,75 €
GBS-F-2005-RH	20	5	7,0	17,0	0,25	✓	207,78 €
GBS-F-2505-RH	25	5	9,5	22,4	0,35	✓	253,43 €
GBS-F-3205-RH	32	5	17,0	49,0	0,55	✓	334,00 €
GBS-F-3210-RH	32	10	25,7	56,0	0,90	✓	348,06 €
GBS-F-4005-RH	40	5	19,0	63,5	0,80	✓	337,41 €
GBS-F-4010-RH	40	10	30,0	70,0	1,20	-	399,02 €

*Depending on availability - Dimensions in mm

Cylindrical ballscrew nut



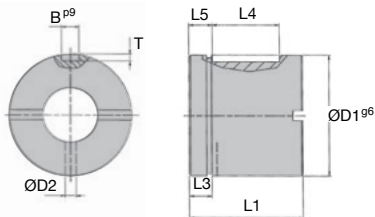
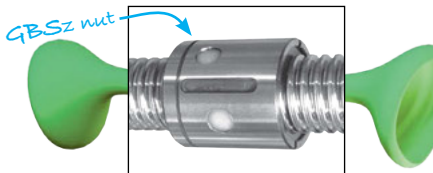
For use with KGS ballscrew

GBSz

- Nut for use with a Ballscrew
- Axial backlash: 0.05 mm for screws with 5mm pitch 0.1 mm for screws with 5mm pitch
- Material:
16 MnCr5 or 100 Cr6

Accessories

- Please see the **KGS** ball screw
The pitch and diameter must be the same as that of the nut)



DISCOUNTS

Qty	1+	2+	6+	11+
Disc.	List	-7%	-13%	On request

Part number	ØD196	ØD2	L1	L3	L4	L5	BxT
GBS-Z-2005-RH	32	3	34	6,75	20	7	5x2
GBS-Z-2505-RH	38	3	34	6,75	20	7	5x2
GBS-Z-3205-RH	45	3	45	7,25	30	7,5	6x2,5
GBS-Z-3210-RH	53	3	60	10	30	15	6x2,5
GBS-Z-4005-RH	53	3	45	7,25	30	7,5	6x2,5
GBS-Z-5010-RH	72	4	82	11	36	23	6x2,5
GBS-Z-6310-RH	85	4	82	11	36	23	6x2,5

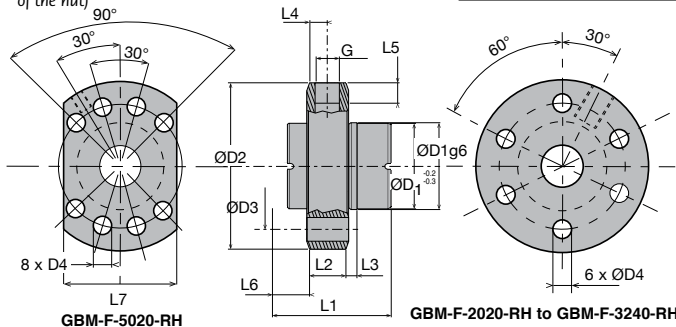
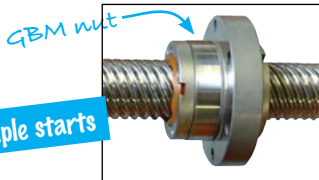
Part number	For screw Ø	Travel per revolution (mm)	Load dynamic C (kN)	Load static Co (kN)	Weight (kg)	Price each
GBS-Z-2005-RH	20	5	8,00	17,00	0,15	170,24 €
GBS-Z-2505-RH	25	5	9,50	22,40	0,20	194,14 €
GBS-Z-3205-RH	32	5	17,00	49,00	0,30	275,75 €
GBS-Z-3210-RH	32	10	25,70	56,00	0,60	324,98 €
GBS-Z-4005-RH	40	5	19,00	63,50	0,50	347,76 €
GBS-Z-5010-RH	50	10	55,00	153,00	1,10	453,87 €
GBS-Z-6310-RH	63	10	60,00	200,00	1,50	766,00 €

Dimensions in mm

- **Nut for ballscrew**
- Multiple starts
- Axial backlash: 0.2mm
- Material:
16 MnCr5 or 100Cr6

Accessories

- See **KGS** ballscrew (the pitch and the diameter must be identical to those of the nut)

Multiple starts

GBM-F-2020-RH to GBM-F-3240-RH

DISCOUNTS

Qty	1+	2+	6+	11+
Disc.	List	-7%	-13%	On request

Part number	ØD1g6	ØD2h13	ØD3	ØD4	L1	L2	L3	L4	L5	L6	L7	G
GBM-F-2020-RH	35	62	50	7	30	10	4	5	8	8	-	M6
GBM-F-2050-RH	35	62	50	7	56	10	30	5	8	8	-	M6
GBM-F-3220-RH	53	80	68	7	55	16	19	8	10	10	-	M6
GBM-F-3240-RH	53	80	68	7	50	16	14	8	10	10	-	M6
GBM-F-5020-RH	85	125	103	11	80	18	38,75	9	10	5	95	M8x1

Part number	For leadscrew Ø	Movement per rev (mm)	Load dynamic C (kN)	Load static Co (kN)	Weight (kg)	Price each
GBM-F-2020-RH	20	20	9,00	19,10	0,25	538,30 €
GBM-F-2050-RH	20	50	7,90	19,00	0,40	643,48 €
GBM-F-3220-RH	32	20	19,50	65,00	0,50	680,84 €
GBM-F-3240-RH	32	40	11,50	33,50	0,50	689,85 €
GBM-F-5020-RH	50	20	61,70	178,40	2,00	1 128,95 €

* Subject to available stock - Dimensions in mm

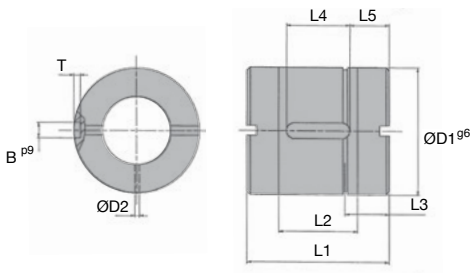
- Nut for ballscrew
- Multiple starts
- Axial backlash: 0.2mm
- Material:
16 MnCr5 or 100Cr6

Accessory

- See KGS ballscrew (the pitch and the diameter must be identical to those of the nut)

GBM nut

Multiple starts



DISCOUNTS

Qty	1+	2+	6+	11+
Disc.	List	-7%	-13%	On request

Part number	ØD1g6	ØD2	L1	L2	L3	L4	L5	BxT
GBM-Z-2020-RH	35	1,5	30	14	11,50	12	9	5x3
GBM-Z-2050-RH	35	1,5	56	40	14	20	18	5x2
GBM-Z-3220-RH	53	1,5	55	35	16	20	17,5	6x4
GBM-Z-3240-RH	53	1,5	50	30	16	25	12,5	6x4
GBM-Z-5020-RH	85	1,5	73,50	50	16,75	30	22	6x2,5

Part number	For screw Ø	Movement per rev (mm)	Load dynamic C (kN)	Load static Co (kN)	Weight (kg)	Price each
GBM-Z-2020-RH	20	20	9,00	19,10	0,15	445,63 €
GBM-Z-2050-RH	20	50	7,90	19,00	0,30	487,14 €
GBM-Z-3220-RH	32	20	19,50	65,00	0,50	595,84 €
GBM-Z-3240-RH	32	40	11,50	33,50	0,45	598,93 €
GBM-Z-5020-RH	50	20	61,70	178,40	1,40	1060,26 €

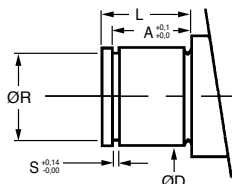
*Subject to available stock - Dimensions in mm

Housing block for ballscrew

Possible machining options

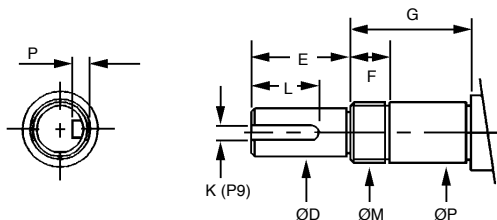
BSB
RPB

The ballscrews will require machining (by you) before they can be used with the BSB and RPB housings



Recommended dimensions for the ends of the ballscrew

For housing block Part number	ØD (g6)	A	ØR	S	L
BSB10	8	7,90	7,6	0,90	11
BSB12	10	9,15	9,6	1,15	12
BSB15	15	10,15	14,3	1,15	12
BSB17	17	13,15	16,2	1,15	16
BSB20	20	13,35	19,0	1,35	16
BSB25	25	16,35	23,9	1,35	20
BSB30	30	17,75	28,6	1,75	20
BSB40	40	19,75	38,0	1,75	25



For housing block Part number	ØP (g6)	ØM	ØD (h6)	K	P	E	F	G	L
RPB10	10	M10x1,0	8	2	1,25	15	16	39	11
RPB12	12	M12x1,0	10	3	1,85	15	16	39	30
RPB15	15	M15x1,0	12	4	2,55	20	16	41	21
RPB17	17	M17x1,0	15	5	3,05	27	17	53	21
RPB20	20	M20x1,0	17	5	3,05	27	17	53	30
RPB25	25	M25x1,5	20	6	3,55	36	18	65	34
RPB30	30	M30x1,5	25	8	4,10	42	18	72	40
RPB40	40	M40x1,5	35	10	5,10	70	35	98	49

Dimensions in mm

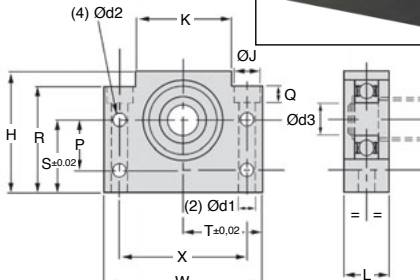
- Flexible (non-rigid) housing
- Supplied with a radial contact ball bearing
- Material: steel

Assembly

- See end of section for recommended machining options

Accessories

- KGS ballscrews
- Circlips **CX**
- Socket-head screw **CHC**



DISCOUNTS

Qty	1+	5+	10+	15+	20+	25+
Disc.	List	-10%	-15%	-20%	-25%	On request

Part number	Bearing For ball screw Ø	Shaft Ød3 (h7)	W	H	S	R	X	K
BSB10	16	8	60	39	22	32,5	46	34
BSB12	16 / 20	10	60	43	25	35,0	46	35
BSB15	20	15	70	48	28	38,0	54	40
BSB17	20 / 25	17	86	64	39	55,0	68	50
BSB20	25	20	88	60	34	50,0	70	52
BSB25	32	25	106	80	48	70,0	85	64
BSB30	40	30	128	89	51	78,0	102	76
BSB40	50	40	160	110	60	90,0	130	100

Part number	Ød1	ØJ	Q	Ød2	P	L	Stock*	Price each 1 to 4
BSB10	6,6	11,0	5,0	5,5	15	20	-	84,91 €
BSB12	6,6	11,0	6,5	5,5	18	20	✓	96,20 €
BSB15	6,6	11,0	6,5	5,5	18	20	✓	106,73 €
BSB17	9,0	14,0	8,5	6,6	28	23	✓	125,53 €
BSB20	9,0	14,0	8,5	6,6	22	26	✓	141,33 €
BSB25	11,0	17,5	11,0	9,0	33	30	-	179,49 €
BSB30	14,0	20,0	13,0	11,0	33	32	✓	211,47 €
BSB40	18,0	26,0	17,5	14,0	37	37	-	287,23 €

*Depending on availability - Dimensions in mm

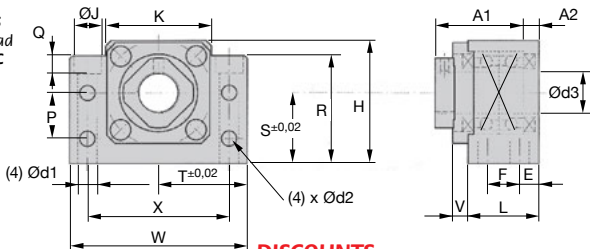
- **Fixed bearing**
- Fitted with an angular contact bearing
- Material: steel

Assembly

- See end of section for recommended machining options

Accessories

- **KGS** ballscrews
- Joint
- Nut **FU-SS**
- Socket-head screw **CHC**



DISCOUNTS

Qty	1+	5+	10+	15+	20+	25+
Disc.	List	-10%	-15%	-20%	-25%	On request

Part number	Bearing	For ball screw Ø	Shaft Ød3 (h7)	W	H	S	R	T	X	K	L	E
RPB10	16	10	60	39	22	32,5	30	46	34	25	6	
RPB12	16 / 20	12	60	43	25	32,5	30	46	35	25	6	
RPB15	20	15	70	48	28	38,0	35	54	40	27	6	
RPB17	20 / 25	17	86	64	39	55,0	43	68	50	35	8	
RPB20	25	20	88	60	34	50,0	44	70	52	35	8	
RPB25	32	25	106	80	48	70,0	53	85	64	42	10	
RPB30	40	30	128	89	51	78,0	64	102	76	45	11	
RPB40	50	40	160	110	60	90,0	80	130	100	61	14	

Part number	F	V	A	N	Ød1	ØJ	Q	Ød2	P	ØM	Stock*	Price each 1 to 4
RPB10	13	5	29	5	6,6	11,0	5,0	5,5	15	M10 x 1,0	✓	274,84 €
RPB12	13	5	29	5	6,6	11,0	6,5	5,5	18	M12 x 1,0	✓	277,82 €
RPB15	15	6	32	6	6,6	11,0	6,5	5,5	18	M15 x 1,0	✓	314,70 €
RPB17	19	9	44	7	9,0	14,0	8,5	6,6	28	M17 x 1,0	✓	384,45 €
RPB20	19	8	43	8	9,0	14,0	8,5	6,6	22	M20 x 1,0	✓	420,00 €
RPB25	22	12	54	9	11,0	17,5	11,0	9,0	33	M25 x 1,5	-	547,85 €
RPB30	23	14	61	9	14,0	20,0	13,0	11,0	33	M30 x 1,5	✓	586,21 €
RPB40	33	18	76	15	18,0	26,0	17,5	14,0	37	M40 x 1,5	-	809,23 €

*Depending on availability - Dimensions in mm

MOTORISED LINEAR ACTUATOR



p.328

SCREWJACK WITH MOVING NUT



p.345

DRYLIN® LINEAR TABLE



p.354

LINEAR POSITIONER



p.362

MINI LEADSCREW



p.364

MANUAL LIFTING TABLES



p.370

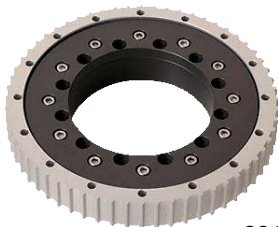
**DOMINO 30
ADJUSTABLE SLIDE**



p.374

**DRIVING
MODULES**
p.328 - 423

SLEWING RING



p.394

ACTUATOR GUIDE KIT



p.396

**ARTICULATED COUPLING
FOR ACTUATOR ROD**



p.401

H TYPE GUIDE UNIT



p.404

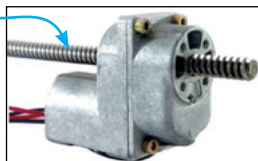
1A motorised linear actuator

LAT1

1 amp

- 1 Amp motor, Supply 12-24V dc
- Accuracy: $\pm 0.2\text{mm}$
- Material:
Trapezoidal threaded screw: stainless steel AISI430F
- Flexible leadscrew is sold by the metre with un-finished ends

Moving screw

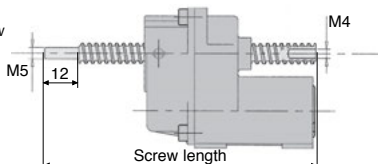


Advantages

- Screws have M4/M5 threaded ends for easy connection
- Protected by sheaths, flexible shafts allow valves, doors or flaps to be operated at a distance
E.g. electric car windows

Options

- Available in lengths up to 1000mm



DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

Part number	Ratio	Pitch (mm)	Ext. screw Ø (mm)	Screw length (mm)	Stroke (mm)	Curve radius (mm)	Price each 1 to 5
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Stainless steel leadscrew 3mm pitch

LAT1-12-3-200	1/12	3,0	8,8	200	141	-	✓ 124,82 €
LAT1-12-3-300	1/12	3,0	8,8	300	241	-	- 124,82 €
LAT1-12-3-400	1/12	3,0	8,8	400	341	-	- 124,82 €
LAT1-48-3-200	1/48	3,0	8,8	200	141	-	- 124,82 €
LAT1-48-3-300	1/48	3,0	8,8	300	241	-	- 124,82 €
LAT1-48-3-400	1/48	3,0	8,8	400	341	-	- 124,82 €
LAT1-108-3-200	1/108	3,0	8,8	200	141	-	✓ 124,82 €
LAT1-108-3-300	1/108	3,0	8,8	300	241	-	✓ 124,82 €
LAT1-108-3-400	1/108	3,0	8,8	400	341	-	✓ 124,82 €

Stainless steel leadscrew 10mm pitch

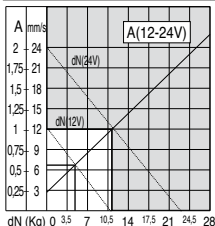
LAT1-12-10-200	1/12	10,0	7,9	200	141	-	✓ 124,82 €
LAT1-12-10-300	1/12	10,0	7,9	300	241	-	- 124,82 €
LAT1-12-10-400	1/12	10,0	7,9	400	341	-	✓ 124,82 €
LAT1-48-10-200	1/48	10,0	7,9	200	141	-	- 124,82 €
LAT1-48-10-300	1/48	10,0	7,9	300	241	-	- 124,82 €
LAT1-48-10-400	1/48	10,0	7,9	400	341	-	- 124,82 €
LAT1-108-10-200	1/108	10,0	7,9	200	141	-	- 124,82 €
LAT1-108-10-300	1/108	10,0	7,9	300	241	-	- 124,82 €
LAT1-108-10-400	1/108	10,0	7,9	400	341	-	- 124,82 €

Steel flexible leadscrew 3.5mm pitch

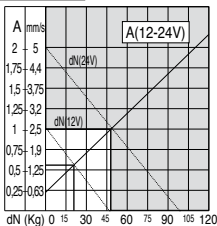
LAT1-12-FLX	1/12	3,5	6,2	1000	941	60	- 124,82 €
LAT1-48-FLX	1/48	3,5	6,2	1000	941	60	- 124,82 €
LAT1-108-FLX	1/108	3,5	6,2	1000	941	60	- 124,95 €

*Depending on availability - Dimensions in mm

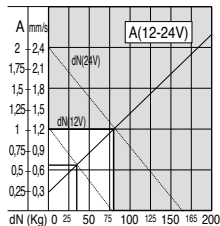
Performance characteristics



LAT1-12



LAT1-48



LAT1-108

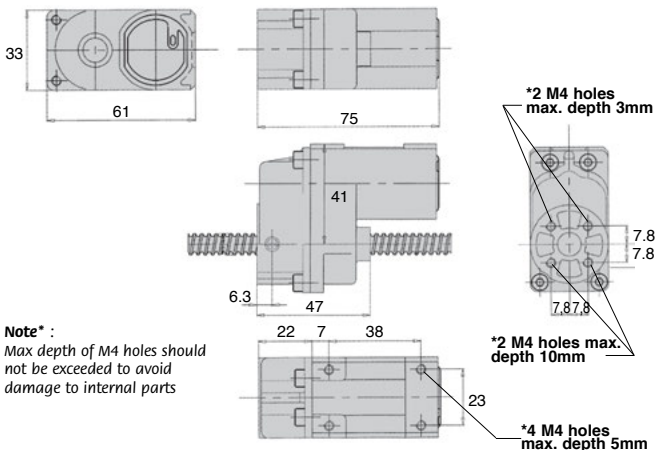
1A Duty cycle (12V) : 80% On 20% Off

1A Duty cycle (24V) : 50% On 50% Off

Note:

- Optimum power obtained at 50% of max current (see light area of graph)
- Max working temperature: 70°C
- Thermal protection available, contact us for details

Note, these tables are for trapezoidal screws with a pitch of 3mm. For a pitch of 10mm, simply divide the loads by 10/3 and multiply the speeds by 10/3 (Similarly for screws with a pitch of 3.5mm, use a factor of 3.5/3.).

**Note* :**

Max depth of M4 holes should not be exceeded to avoid damage to internal parts

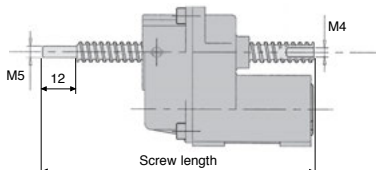
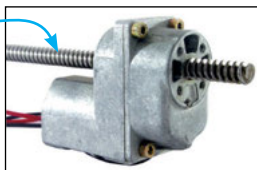
2A motorised linear actuator

LAT2

2 amp

- 2 Amp motor, supply 12-24V dc
- Accuracy: $\pm 0.2\text{mm}$
- Material:
Trapezoidal threaded screw:
stainless steel AISI430F
- Flexible leadscrew is sold by the metre with un-finished ends

moving screw



Advantages

- Screws have M4/M5 threaded ends for easy connection
- Protected by sheaths, flexible shafts allow valves, doors or traps to be operated at a distance
E.g. electric car windows

Options

- Available in lengths up to 1000mm

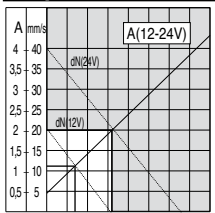
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

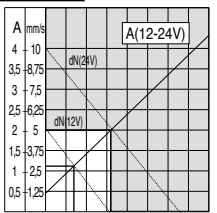
Part number	Ratio	Pitch (mm)	Ext. screw Ø (mm)	Screw length (mm)	Stroke (mm)	Curve radius (mm)	Stock*	Price each 1 to 5
Stainless steel leadscrew 3mm pitch								
LAT2-12-3-200	1/12	3,0	8,8	200	141	-	✓	124,82 €
LAT2-12-3-300	1/12	3,0	8,8	300	241	-	✓	124,82 €
LAT2-12-3-400	1/12	3,0	8,8	400	341	-	✓	124,82 €
LAT2-48-3-200	1/48	3,0	8,8	200	141	-	✓	124,82 €
LAT2-48-3-300	1/48	3,0	8,8	300	241	-	✓	124,82 €
LAT2-48-3-400	1/48	3,0	8,8	400	341	-	✓	124,82 €
LAT2-108-3-200	1/108	3,0	8,8	200	141	-	✓	124,82 €
LAT2-108-3-300	1/108	3,0	8,8	300	241	-	✓	124,82 €
LAT2-108-3-400	1/108	3,0	8,8	400	341	-	✓	124,82 €
Stainless steel leadscrew 10mm pitch								
LAT2-12-10-200	1/12	10,0	7,9	200	141	-	✓	124,82 €
LAT2-12-10-300	1/12	10,0	7,9	300	241	-	✓	124,82 €
LAT2-12-10-400	1/12	10,0	7,9	400	341	-	✓	124,82 €
LAT2-48-10-200	1/48	10,0	7,9	200	141	-	✓	124,82 €
LAT2-48-10-300	1/48	10,0	7,9	300	241	-	✓	124,82 €
LAT2-48-10-400	1/48	10,0	7,9	400	341	-	✓	124,82 €
LAT2-108-10-200	1/108	10,0	7,9	200	141	-	✓	124,82 €
LAT2-108-10-300	1/108	10,0	7,9	300	241	-	✓	124,82 €
LAT2-108-10-400	1/108	10,0	7,9	400	341	-	✓	124,82 €
Steel flexible leadscrew 3.5mm pitch								
LAT2-12-FLX	1/12	3,5	6,2	1000	941	60	-	124,82 €
LAT2-48-FLX	1/48	3,5	6,2	1000	941	60	-	124,82 €
LAT2-108-FLX	1/108	3,5	6,2	1000	941	60	-	124,82 €

*Depending on availability - Dimensions in mm

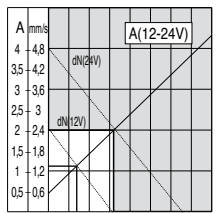
Performance characteristics



LAT2-12



LAT2-48



LAT2-108

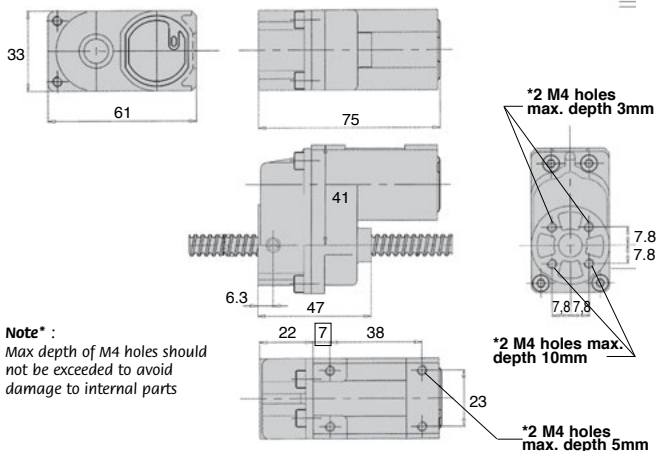
1A Duty cycle (12V) : 50% On 50% Off

1A Duty cycle (24V) : 20% On 80% Off

Note:

- Optimum power obtained at 50% of max current (see light area of graph)
- Max working temperature: 70°C
- Thermal protection available, contact us for details

Note, these tables are for trapezoidal screws with a pitch of 3mm. For a pitch of 10mm, simply divide the loads by 10/3 and multiply the speeds by 10/3 (Similarly for screws with a pitch of 3.5mm, use a factor of 3.5/3.).



Note* :

Max depth of M4 holes should not be exceeded to avoid damage to internal parts

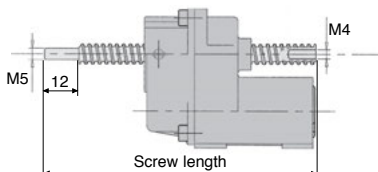
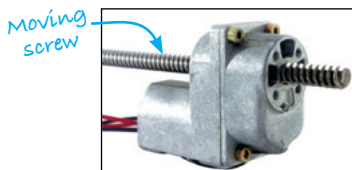
4A motorised linear actuator



LAT4

4 amp

- 4 Amp motor, Supply 12V dc
- Accuracy: $\pm 0.2\text{mm}$
- Material:
Trapezoidal threaded screw:
stainless steel AISI430F
- Flexible leadscrew is sold by the metre with un-finished ends



Advantages

- Screws have M4/M5 threaded ends for easy connection
- Protected by sheaths, flexible shafts allow valves, doors or traps to be operated at a distance
E.g. electric car windows

Options

- Available in lengths up to 1000mm

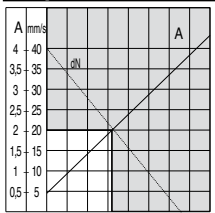
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

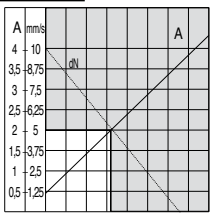
Part number	Ratio	Pitch (mm)	Ext. screw Ø (mm)	Screw length (mm)	Stroke (mm)	Curve radius (mm)	Price each 1 to 5
Stainless steel leadscrew 3mm pitch							
LAT4-12-3-200	1/12	3,0	8,8	200	141	-	124,82 €
LAT4-12-3-300	1/12	3,0	8,8	300	241	-	124,82 €
LAT4-12-3-400	1/12	3,0	8,8	400	341	-	124,82 €
LAT4-48-3-200	1/48	3,0	8,8	200	141	-	124,82 €
LAT4-48-3-300	1/48	3,0	8,8	300	241	-	124,82 €
LAT4-48-3-400	1/48	3,0	8,8	400	341	-	124,82 €
LAT4-108-3-200	1/108	3,0	8,8	200	141	-	124,82 €
LAT4-108-3-300	1/108	3,0	8,8	300	241	-	124,82 €
LAT4-108-3-400	1/108	3,0	8,8	400	341	-	124,82 €
Stainless steel leadscrew 10mm pitch							
LAT4-12-10-200	1/12	10,0	7,9	200	141	-	124,82 €
LAT4-12-10-300	1/12	10,0	7,9	300	241	-	124,82 €
LAT4-12-10-400	1/12	10,0	7,9	400	341	-	124,82 €
LAT4-48-10-200	1/48	10,0	7,9	200	141	-	124,82 €
LAT4-48-10-300	1/48	10,0	7,9	300	241	-	124,82 €
LAT4-48-10-400	1/48	10,0	7,9	400	341	-	124,82 €
LAT4-108-10-200	1/108	10,0	7,9	200	141	-	124,82 €
LAT4-108-10-300	1/108	10,0	7,9	300	241	-	124,82 €
LAT4-108-10-400	1/108	10,0	7,9	400	341	-	124,82 €
Steel flexible leadscrew 3.5mm pitch							
LAT4-12-FLX	1/12	3,5	6,2	1000	941	60	124,82 €
LAT4-48-FLX	1/48	3,5	6,2	1000	941	60	124,82 €
LAT4-108-FLX	1/108	3,5	6,2	1000	941	60	124,82 €

*Depending on availability - Dimensions in mm

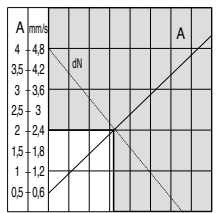
Performance characteristics



LAT4-12



LAT4-48



LAT4-108

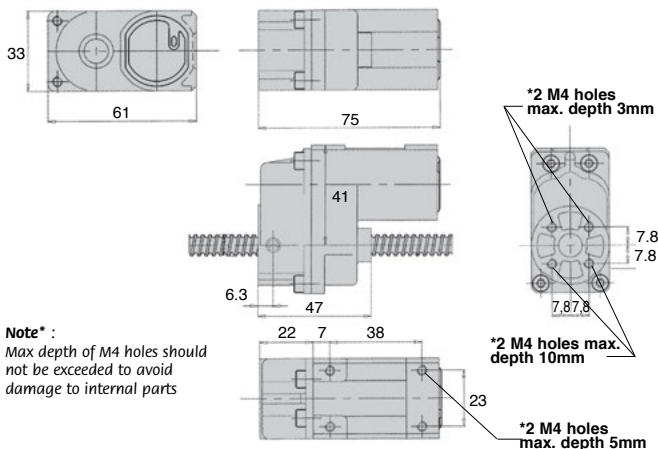
4A Duty cycle (12V) : 20% On 80% Off

Important : motor only available in 12 V DC version.

Note :

- Optimum power obtained at 50% of max current (see light area of graph)
- Max working temperature: 70°C
- Thermal protection available, contact us for details

Note, these tables are for trapezoidal screws with a pitch of 3mm. For a pitch of 10mm, simply divide the loads by 10/3 and multiply the speeds by 10/3 (ditto for screws with a pitch of 3.5mm with the factor 3.5/3).



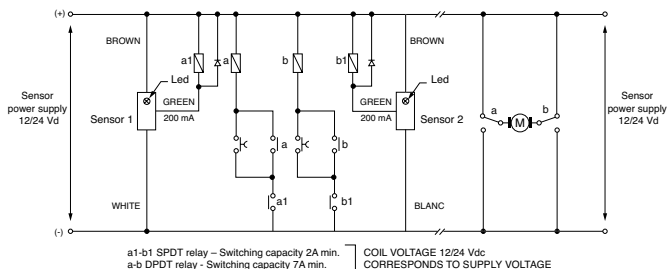
Miniature motorised actuator

LVT

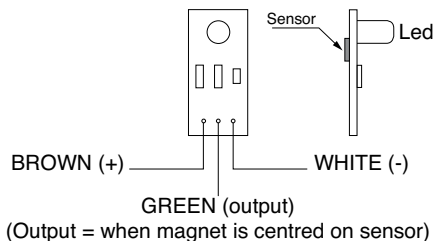
Wiring diagram

Application showing how to use electro-mechanical limit switches

Fleeting contact

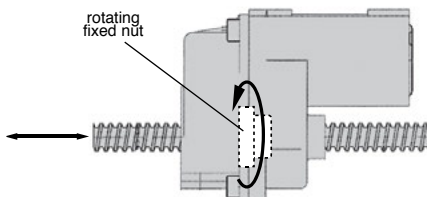


Limit switch wiring



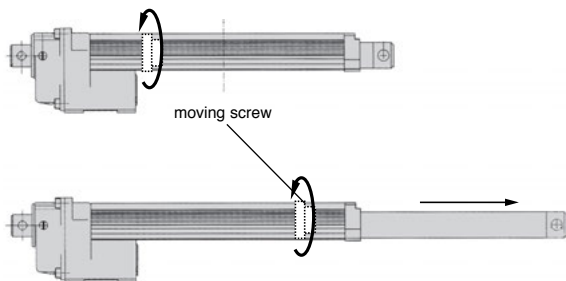
NOTE : Power supply 12/24 Vdc,
Max current 300mA

Principal of operation



LAT

Fixed nut, screw is free



LVT

Fixed rotating screw:
the nut moves and moves the piston

Miniature motorised actuator, 1A

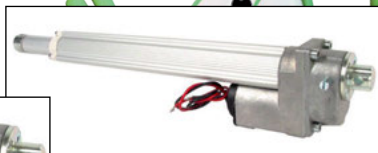
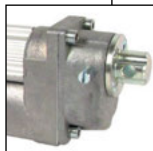
LVT1

1 amp

- 1Amp 12-24 Vdc motor
- Linear accuracy: +/- 0.2mm
- Leadscrew: Stainless steel AISI430F

Option

- Magnetic limit switch (Recommended)



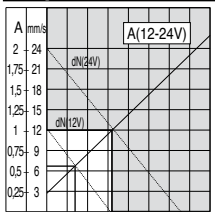
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

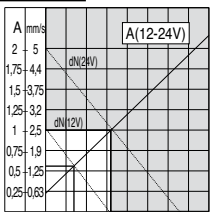
Part number			Pitch (mm)	Screw Ø (mm)	Stroke (mm)	Price each 1 to 5	
Without switch	With switch	Ratio				Without switch	With switch
Stainless steel leadscrew, 3mm pitch							
LVT1-12-3-100	LVT1-12-3-100/CFC	1/12	3	8,8	100	230,42 €	312,45 €
LVT1-12-3-150	LVT1-12-3-150/CFC	1/12	3	8,8	150	230,42 €	312,45 €
LVT1-12-3-200	LVT1-12-3-200/CFC	1/12	3	8,8	200	230,42 €	312,45 €
LVT1-12-3-250	LVT1-12-3-250/CFC	1/12	3	8,8	250	230,42 €	312,45 €
LVT1-12-3-300	LVT1-12-3-300/CFC	1/12	3	8,8	300	230,42 €	312,45 €
LVT1-48-3-100	LVT1-48-3-100/CFC	1/48	3	8,8	100	230,42 €	312,45 €
LVT1-48-3-150	LVT1-48-3-150/CFC	1/48	3	8,8	150	230,42 €	312,45 €
LVT1-48-3-200	LVT1-48-3-200/CFC	1/48	3	8,8	200	230,42 €	312,45 €
LVT1-48-3-250	LVT1-48-3-250/CFC	1/48	3	8,8	250	230,42 €	312,45 €
LVT1-48-3-300	LVT1-48-3-300/CFC	1/48	3	8,8	300	230,42 €	312,45 €
LVT1-108-3-100	LVT1-108-3-100/CFC	1/108	3	8,8	100	230,42 €	312,45 €
LVT1-108-3-150	LVT1-108-3-150/CFC	1/108	3	8,8	150	230,42 €	312,45 €
LVT1-108-3-200	LVT1-108-3-200/CFC	1/108	3	8,8	200	230,42 €	312,45 €
LVT1-108-3-250	LVT1-108-3-250/CFC	1/108	3	8,8	250	230,42 €	312,45 €
LVT1-108-3-300	LVT1-108-3-300/CFC	1/108	3	8,8	300	230,42 €	312,45 €
Stainless steel leadscrew, 10mm pitch							
LVT1-12-10-100	LVT1-12-10-100/CFC	1/12	10	7,9	100	230,42 €	312,45 €
LVT1-12-10-150	LVT1-12-10-150/CFC	1/12	10	7,9	150	230,42 €	312,45 €
LVT1-12-10-200	LVT1-12-10-200/CFC	1/12	10	7,9	200	230,42 €	312,45 €
LVT1-12-10-250	LVT1-12-10-250/CFC	1/12	10	7,9	250	230,42 €	312,45 €
LVT1-12-10-300	LVT1-12-10-300/CFC	1/12	10	7,9	300	230,42 €	312,45 €
LVT1-48-10-100	LVT1-48-10-100/CFC	1/48	10	7,9	100	230,42 €	312,45 €
LVT1-48-10-150	LVT1-48-10-150/CFC	1/48	10	7,9	150	230,42 €	312,45 €
LVT1-48-10-200	LVT1-48-10-200/CFC	1/48	10	7,9	200	230,42 €	312,45 €
LVT1-48-10-250	LVT1-48-10-250/CFC	1/48	10	7,9	250	230,42 €	312,45 €
LVT1-48-10-300	LVT1-48-10-300/CFC	1/48	10	7,9	300	230,42 €	312,45 €
LVT1-108-10-100	LVT1-108-10-100/CFC	1/108	10	7,9	100	230,42 €	312,45 €
LVT1-108-10-150	LVT1-108-10-150/CFC	1/108	10	7,9	150	230,42 €	312,45 €
LVT1-108-10-200	LVT1-108-10-200/CFC	1/108	10	7,9	200	230,42 €	312,45 €
LVT1-108-10-250	LVT1-108-10-250/CFC	1/108	10	7,9	250	230,42 €	312,45 €
LVT1-108-10-300	LVT1-108-10-300/CFC	1/108	10	7,9	300	230,42 €	312,45 €

Dimensions in mm

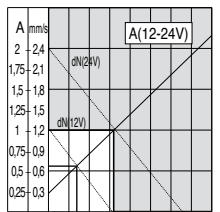
Performance characteristics



LVT1-12



LVT1-48



LVT1-108

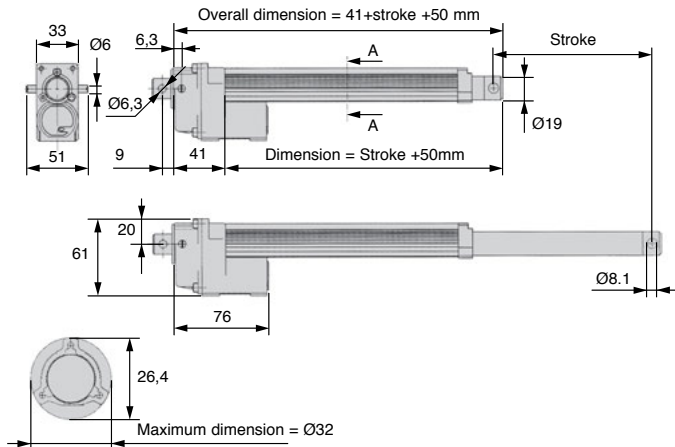
1A Operating cycle (12V): 80% On 20% Off

1A Operating cycle (24V): 50% On 50% Off

Note:

- Optimum power is obtained at 50% of max current (see light area on graph)
- Max operating temperature: 70°C
- Over-temperature protection available on request

Attention: The above tables refer to a 3mm pitch actuator. For an actuator with a 10mm pitch, just divide the load by 10/3 and multiply the speeds by 10/3 (Same principle for 3.5mm pitch, use a factor of 3.5/3)



Miniature motorised actuator, 2A

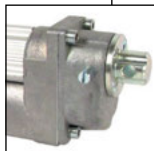
LVT2

2 amp

- 2Amp 12-24 Vdc motor
- Linear accuracy: +/- 0.2mm
- Leadscrew: Stainless steel AISI430F

Option

- Magnetic limit switch (Recommended)



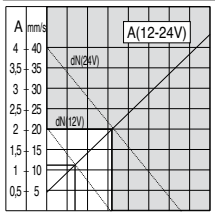
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

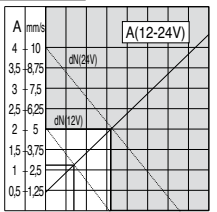
Part number			Pitch (mm)	Screw Ø (mm)	Stroke (mm)	Price each 1 to 5	
Without switch	With switch	Ratio				Without switch	With switch
Stainless steel leadscrew, 3mm pitch							
LVT2-12-3-100	LVT2-12-3-100/CFC	1/12	3	8,8	100	230,42 €	312,45 €
LVT2-12-3-150	LVT2-12-3-150/CFC	1/12	3	8,8	150	230,42 €	312,45 €
LVT2-12-3-200	LVT2-12-3-200/CFC	1/12	3	8,8	200	230,42 €	312,45 €
LVT2-12-3-250	LVT2-12-3-250/CFC	1/12	3	8,8	250	230,42 €	312,45 €
LVT2-12-3-300	LVT2-12-3-300/CFC	1/12	3	8,8	300	230,42 €	312,45 €
LVT2-48-3-100	LVT2-48-3-100/CFC	1/48	3	8,8	100	230,42 €	312,45 €
LVT2-48-3-150	LVT2-48-3-150/CFC	1/48	3	8,8	150	230,42 €	312,45 €
LVT2-48-3-200	LVT2-48-3-200/CFC	1/48	3	8,8	200	230,42 €	312,45 €
LVT2-48-3-250	LVT2-48-3-250/CFC	1/48	3	8,8	250	230,42 €	312,45 €
LVT2-48-3-300	LVT2-48-3-300/CFC	1/48	3	8,8	300	230,42 €	312,45 €
LVT2-108-3-100	LVT2-108-3-100/CFC	1/108	3	8,8	100	230,42 €	312,45 €
LVT2-108-3-150	LVT2-108-3-150/CFC	1/108	3	8,8	150	230,42 €	312,45 €
LVT2-108-3-200	LVT2-108-3-200/CFC	1/108	3	8,8	200	230,42 €	312,45 €
LVT2-108-3-250	LVT2-108-3-250/CFC	1/108	3	8,8	250	230,42 €	312,45 €
LVT2-108-3-300	LVT2-108-3-300/CFC	1/108	3	8,8	300	230,42 €	312,45 €
Stainless steel leadscrew, 10mm pitch							
LVT2-12-10-100	LVT2-12-10-100/CFC	1/12	10	7,9	100	230,42 €	312,45 €
LVT2-12-10-150	LVT2-12-10-150/CFC	1/12	10	7,9	150	230,42 €	312,45 €
LVT2-12-10-200	LVT2-12-10-200/CFC	1/12	10	7,9	200	230,42 €	312,45 €
LVT2-12-10-250	LVT2-12-10-250/CFC	1/12	10	7,9	250	230,42 €	312,45 €
LVT2-12-10-300	LVT2-12-10-300/CFC	1/12	10	7,9	300	230,42 €	312,45 €
LVT2-48-10-100	LVT2-48-10-100/CFC	1/48	10	7,9	100	230,42 €	312,45 €
LVT2-48-10-150	LVT2-48-10-150/CFC	1/48	10	7,9	150	230,42 €	312,45 €
LVT2-48-10-200	LVT2-48-10-200/CFC	1/48	10	7,9	200	230,42 €	312,45 €
LVT2-48-10-250	LVT2-48-10-250/CFC	1/48	10	7,9	250	230,42 €	312,45 €
LVT2-48-10-300	LVT2-48-10-300/CFC	1/48	10	7,9	300	230,42 €	312,45 €
LVT2-108-10-100	LVT2-108-10-100/CFC	1/108	10	7,9	100	230,42 €	312,45 €
LVT2-108-10-150	LVT2-108-10-150/CFC	1/108	10	7,9	150	230,42 €	312,45 €
LVT2-108-10-200	LVT2-108-10-200/CFC	1/108	10	7,9	200	230,42 €	312,45 €
LVT2-108-10-250	LVT2-108-10-250/CFC	1/108	10	7,9	250	230,42 €	312,45 €
LVT2-108-10-300	LVT2-108-10-300/CFC	1/108	10	7,9	300	230,42 €	312,45 €

Dimensions in mm

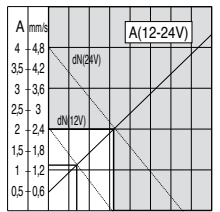
Performance characteristics



LVT2-12



LVT2-48



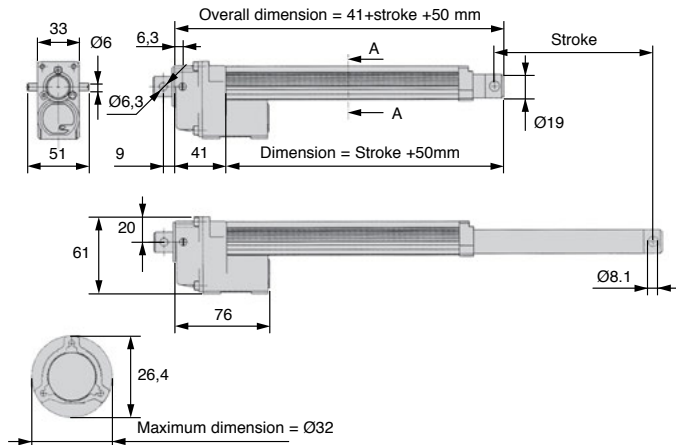
LVT2-108

2A Operating cycle (12V): 50% On 50% Off
2A Operating cycle (24V): 20% On 80% Off

Note :

- Optimum power is obtained at 50% of max current (see light area on graph)
- Max operating temperature: 70°C
- Over-temperature protection available on request

Attention: The above tables refer to a 3mm pitch actuator. For an actuator with a 10mm pitch, just divide the load by 10/3 and multiply the speeds by 10/3 (Same principle for 3.5mm pitch, use a factor of 3.5/3)



Miniature motorised actuator, 4A

LVT4

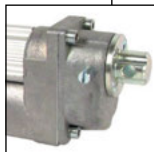
4 amp

- 4 Amp 12Vdc motor
- Linear accuracy: +/- 0.2mm
- Leadscrew: Stainless steel
AISI430F



Option

- Magnetic limit switch
(Recommended)



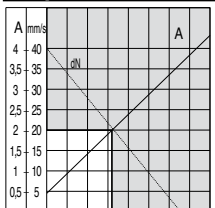
DISCOUNTS

Qty	1+	6+	20+
Disc.	List	-7%	On request

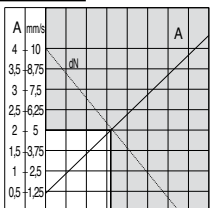
Part number			Pitch (mm)	Screw Ø (mm)	Stroke (mm)	Price each 1 to 5	
Without switch	With switch	Ratio				Without switch	With switch
Stainless steel leadscrew, 3mm pitch							
LVT4-12-3-100	LVT4-12-3-100/CFC	1/12	3	8,8	100	230,42 €	312,45 €
LVT4-12-3-150	LVT4-12-3-150/CFC	1/12	3	8,8	150	230,42 €	312,45 €
LVT4-12-3-200	LVT4-12-3-200/CFC	1/12	3	8,8	200	230,42 €	312,45 €
LVT4-12-3-250	LVT4-12-3-250/CFC	1/12	3	8,8	250	230,42 €	312,45 €
LVT4-12-3-300	LVT4-12-3-300/CFC	1/12	3	8,8	300	230,42 €	312,45 €
LVT4-48-3-100	LVT4-48-3-100/CFC	1/48	3	8,8	100	230,42 €	312,45 €
LVT4-48-3-150	LVT4-48-3-150/CFC	1/48	3	8,8	150	230,42 €	312,45 €
LVT4-48-3-200	LVT4-48-3-200/CFC	1/48	3	8,8	200	230,42 €	312,45 €
LVT4-48-3-250	LVT4-48-3-250/CFC	1/48	3	8,8	250	230,42 €	312,45 €
LVT4-48-3-300	LVT4-48-3-300/CFC	1/48	3	8,8	300	230,42 €	312,45 €
LVT4-108-3-100	LVT4-108-3-100/CFC	1/108	3	8,8	100	230,42 €	312,45 €
LVT4-108-3-150	LVT4-108-3-150/CFC	1/108	3	8,8	150	230,42 €	312,45 €
LVT4-108-3-200	LVT4-108-3-200/CFC	1/108	3	8,8	200	230,42 €	312,45 €
LVT4-108-3-250	LVT4-108-3-250/CFC	1/108	3	8,8	250	230,42 €	312,45 €
LVT4-108-3-300	LVT4-108-3-300/CFC	1/108	3	8,8	300	230,42 €	312,45 €
Stainless steel leadscrew, 10mm pitch							
LVT4-12-10-100	LVT4-12-10-100/CFC	1/12	10	7,9	100	230,42 €	312,45 €
LVT4-12-10-150	LVT4-12-10-150/CFC	1/12	10	7,9	150	230,42 €	312,45 €
LVT4-12-10-200	LVT4-12-10-200/CFC	1/12	10	7,9	200	230,42 €	312,45 €
LVT4-12-10-250	LVT4-12-10-250/CFC	1/12	10	7,9	250	230,42 €	312,45 €
LVT4-12-10-300	LVT4-12-10-300/CFC	1/12	10	7,9	300	230,42 €	312,45 €
LVT4-48-10-100	LVT4-48-10-100/CFC	1/48	10	7,9	100	230,42 €	312,45 €
LVT4-48-10-150	LVT4-48-10-150/CFC	1/48	10	7,9	150	230,42 €	312,45 €
LVT4-48-10-200	LVT4-48-10-200/CFC	1/48	10	7,9	200	230,42 €	312,45 €
LVT4-48-10-250	LVT4-48-10-250/CFC	1/48	10	7,9	250	230,42 €	312,45 €
LVT4-48-10-300	LVT4-48-10-300/CFC	1/48	10	7,9	300	230,42 €	312,45 €
LVT4-108-10-100	LVT4-108-10-100/CFC	1/108	10	7,9	100	230,42 €	312,45 €
LVT4-108-10-150	LVT4-108-10-150/CFC	1/108	10	7,9	150	230,42 €	312,45 €
LVT4-108-10-200	LVT4-108-10-200/CFC	1/108	10	7,9	200	230,42 €	312,45 €
LVT4-108-10-250	LVT4-108-10-250/CFC	1/108	10	7,9	250	230,42 €	312,45 €
LVT4-108-10-300	LVT4-108-10-300/CFC	1/108	10	7,9	300	230,42 €	312,45 €

Dimensions in mm

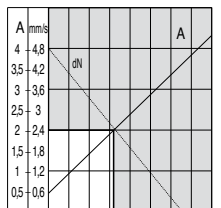
Performance characteristics



LVT4-12



LVT4-48



LVT4-108

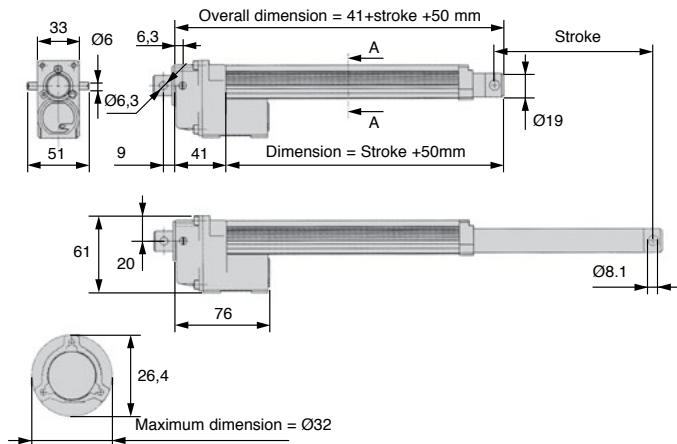
4A Operating cycle (14V): 20% On 80% Off

There is only a 12Vdc motor available

Note:

- Optimum power is obtained at 50% of max current (see light area on graph)
- Max operating temperature: 70°C
- Over-temperature protection available on request

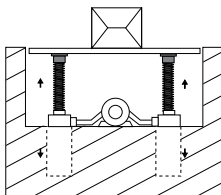
Attention: The above tables refer to a 3mm pitch actuator. For an actuator with a 10mm pitch, just divide the load by 10/3 and multiply the speeds by 10/3 (Same principle for 3.5mm pitch, use a factor of 3.5/3)



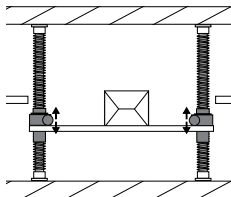
Screwjack

SVT

Screw moves, nut is fixed

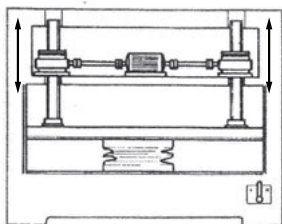


Screw uppermost

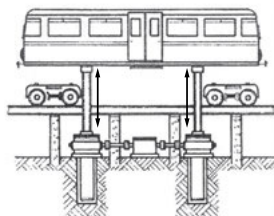


Box will travel
full length of
the thread

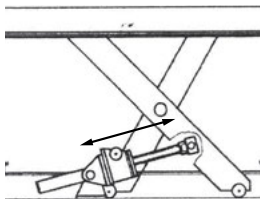
Without protective cover



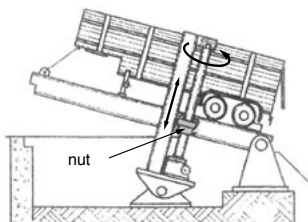
Suspended load
Screw underneath: NO BUCKLING



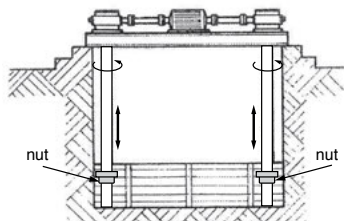
Screw uppermost



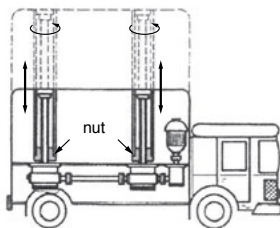
Can be used in any position



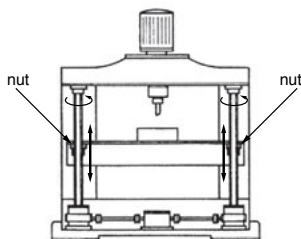
Screw uppermost



Screw uppermost



Screw uppermost



**Screw suspended downwards :
NO BUCKLING**

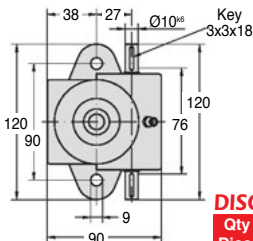
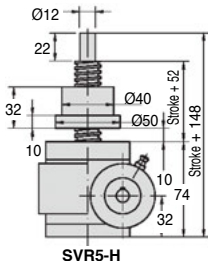
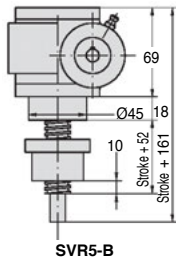


Screwjack - with moving nut

Nominal force: 5000N

SVR5

- **Basic stroke: 100mm**
- Material: Aluminium (case)
- Weight (without screw): 1.5kg
- Weight of screw: 0.2kg / 100mm
- Lubrication: Grease (50g required)



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)		rpm max.	Max. speed (m/min)	Max. power (kW)	
		Output	force (Nm)			at 20% ED	at 10% ED
SVR5-10	10:1	1,54	31%	2800	1,68	0,18	0,23
SVR5-20	20:1	1,04	23%	2800	0,84	0,18	0,23

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards						
SVR5-10-100H	10:1	100	TR20 x 6	0,6	5000	781,98 €
SVR5-20-100H	20:1	100	TR20 x 6	0,3	5000	781,98 €
SVR5-COURSE	per additional 100mm of stroke length					13,98 €
Downwards						
SVR5-10-100B	10:1	100	TR20 x 6	0,6	5000	781,98 €
SVR5-20-100B	20:1	100	TR20 x 6	0,3	5000	781,98 €
SVR5-COURSE	per additional 100mm of stroke length					13,98 €

Dimensions in mm

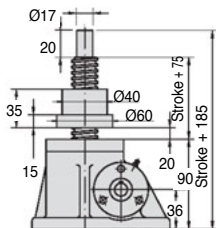
Screwjack with travelling nut



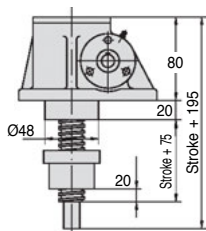
SVR15

Nominal load 15000N

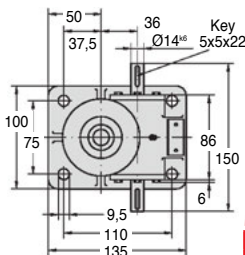
- **Standard stroke length: 100mm**
- **Material:**
Body: Iron GGG50
- **Weight (without screw):**
3.2 kg
- **Weight of screw:**
0.3 kg /100mm
- **Lubrication: Grease**
(100g required)



SVR15-H



SVR15-B



DISCOUNTS

Qty	1+	2+	5+	10+
Disc. List	-4%	-7%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)		rpm max.	Max. speed (m/min)	Max. power (kW)	
		Output				at 20% ED	at 10% ED
SVR15-6	6:1	7,23	33%	2800	2,80	0,35	0,46
SVR15-25	25:1	2,86	20%	2800	0,67	0,35	0,46

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards direction						
SVR15-6-100H	6:1	100	TR24 x 6	1,00	15000	1 066,85 €
SVR15-25-100H	25:1	100	TR24 x 6	0,24	15000	1 066,85 €
SVR15-COURSE		per additional 100mm of stroke length				14,36 €
Downwards direction						
SVR15-6-100B	6:1	100	TR24 x 6	1,00	15000	1 066,85 €
SVR15-25-100B	25:1	100	TR24 x 6	0,24	15000	1 066,85 €
SVR15-COURSE		per additional 100mm of stroke length				14,36 €

Dimensions in mm



Screwjack with travelling nut

Nominal load 20000N

SVR20

- **Standard stroke length: 100mm**

- **Material:**

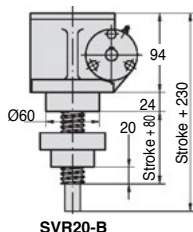
Body: Iron GGG50

- Weight (without screw): 7.8 kg

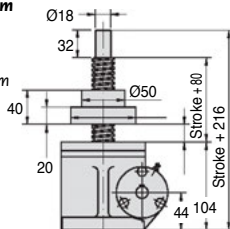
- Weight of screw: 0.34 kg /100mm

- Lubrication: Grease

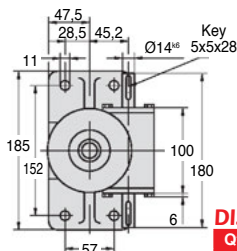
(150g required)



SVR20-B



SVR20-H



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)	Output	rpm max.	Max. speed (m/min)	Max. power (kW) at 20% ED	Max. power (kW) at 10% ED
SVR20-6	6:1	9,8	32%	2800	2,8	0,5	0,7
SVR20-24	24:1	4,1	19%	2800	0,7	0,5	0,7

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards direction						
SVR20-6-100H	6:1	100	TR26 x 6	1,00	20000	1 331,46 €
SVR20-24-100H	24:1	100	TR26 x 6	0,25	20000	1 331,46 €
SVR20-COURSE	per additional 100mm of stroke length					14,48 €
Downwards direction						
SVR20-6-100B	6:1	100	TR26 x 6	1,00	20000	1 331,46 €
SVR20-24-100B	24:1	100	TR26 x 6	0,25	20000	1 331,46 €
SVR20-COURSE	per additional 100mm of stroke length					14,48 €

Dimensions in mm

Screwjack with travelling nut



SVR30

Nominal load 30000N

- **Standard stroke length: 100mm**

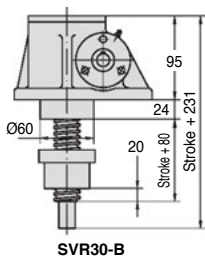
- **Material:**

Body: Iron GGG50

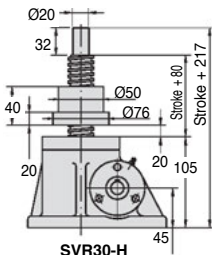
- Weight (without screw): 8.2 kg

- Weight of screw 0.43 kg /100mm

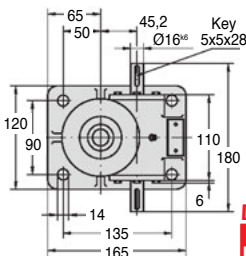
- Lubrication: Grease
(200g required)



SVR30-B



SVR30-H



DISCOUNTS

Qty	1+	2+	5+	10+
Disc. List	-4%	-7%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)	Output	rpm max.	Max. speed (m/min)	Max. power (kW) at 20% ED	Max. power (kW) at 10% ED
SVR30-6	6:1	16,5	29%	2800	2,8	0,6	0,8
SVR30-24	24:1	07,0	17%	2800	0,7	0,6	0,8

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards direction						
SVR30-6-100H	6:1	100	TR30 x 6	1,00	30000	1 334,58 €
SVR30-24-100H	24:1	100	TR30 x 6	0,25	30000	1 334,58 €
SVR30-COURSE		per additional 100mm of stroke length				15,30 €
Downwards direction						
SVR30-6-100B	6:1	100	TR30 x 6	1,00	30000	1 334,58 €
SVR30-24-100B	24:1	100	TR30 x 6	0,25	30000	1 334,58 €
SVR30-COURSE		per additional 100mm of stroke length				15,30 €

Dimensions in mm



Screwjack with travelling screw

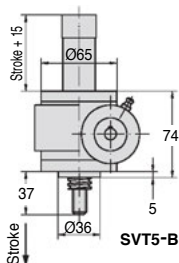
Nominal load 5000N

SVT5

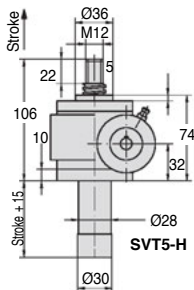
- **Standard stroke length: 100mm**
- **Material:**
 - Body: Aluminium
- Weight (without screw): 1.5 kg
- Weight of screw: 0.2 kg /100mm
- Lubrication: Grease (50g required)

Accessories

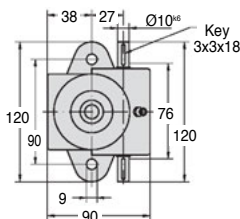
- Plate **SVT5-PLATEAU**
- Clevis **SVT5-CHAPE**



SVT5-B



SVT5-H



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)		rpm max.	Max. speed (m/min)	Max. power (kW)	
		Output				at 20% ED	at 10% ED
SVT5-10	10:1	1,54	31%	2800	1,68	0,18	0,23
SVT5-20	20:1	1,04	23%	2800	0,84	0,18	0,23

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each

Upwards direction

SVT5-10-100H	10:1	100	TR20 x 6	0,6	5000	591,42 €
SVT5-20-100H	20:1	100	TR20 x 6	0,3	5000	591,42 €
SVT5-COURSE		per additional 100mm of stroke length				18,86 €

Downwards direction

SVT5-10-100B	10:1	100	TR20 x 6	0,6	5000	591,42 €
SVT5-20-100B	20:1	100	TR20 x 6	0,3	5000	591,42 €
SVT5-COURSE		per additional 100mm of stroke length				18,86 €

Dimensions in mm

Screwjack with travelling screw

SVT15 Nominal load 15000N

- **Standard stroke length: 100mm**

- **Material:**

Body: Iron GGG50

- Weight (without screw): 3.2 kg

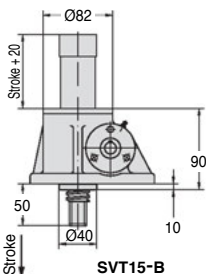
- Weight of screw: 0.3 kg /100mm

- Lubrication: Grease
(100g required)

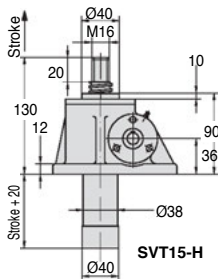
Accessories

- Plate **SVT15-PLATEAU**

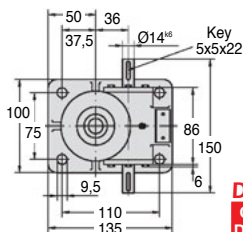
- Clevis **SVT15-CHAPE**



SVT15-B



SVT15-H



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)	Output	rpm max.	Max. speed (m/min)	Max. power (kW) at 20% ED	Max. power (kW) at 10% ED
SVT15-6	6:1	7,23	33%	2800	2,80	0,35	0,46
SVT15-25	25:1	2,86	20%	2800	0,67	0,35	0,46

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
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Upwards direction

SVT15-6-100H	6:1	100	TR24 x 6	1,00	15000	826,17 €
SVT15-25-100H	25:1	100	TR24 x 6	0,24	15000	826,17 €
SVT15-COURSE		per additional 100mm of stroke length				19,21 €

Downwards direction

SVT15-6-100B	6:1	100	TR24 x 6	1,00	15000	826,17 €
SVT15-25-100B	25:1	100	TR24 x 6	0,24	15000	826,17 €
SVT15-COURSE		per additional 100mm of stroke length				19,21 €

Dimensions in mm



Screwjack with travelling screw

Nominal load 20000N

SVT20

- **Standard stroke length: 100mm**

- **Material:**

Body: Iron GGG50

- Weight (without screw): 7.8 kg

- Weight of screw: 0.34 kg /100mm

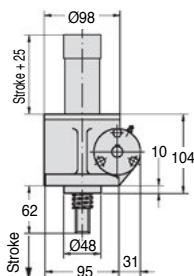
- Lubrication: Grease

(150g required)

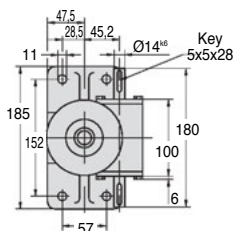
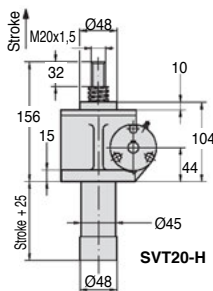
Accessories

- Plate **SVT20-PLATEAU**

- Clevis **SVT20-CHAPE**



SVT20-B



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)		rpm max.	Max. speed (m/min)	Max. power (kW)	
		Output				at 20% ED	at 10% ED
SVT20-6	6:1	9,8	32%	2800	2,8	0,5	0,7
SVT20-24	24:1	4,1	19%	2800	0,7	0,5	0,7

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards direction						
SVT20-6-100H	6:1	100	TR26 x 6	1,00	20000	1 035,05 €
SVT20-24-100H	24:1	100	TR26 x 6	0,25	20000	1 035,05 €
SVT20-COURSE		per additional 100mm of stroke length				19,36 €
Downwards direction						
SVT20-6-100B	6:1	100	TR26 x 6	1,00	20000	1 035,05 €
SVT20-24-100B	24:1	100	TR26 x 6	0,25	20000	1 035,05 €
SVT20-COURSE		per additional 100mm of stroke length				19,36 €

Dimensions in mm

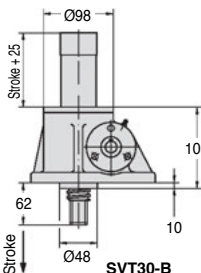
Screwjack with travelling screw

SVT30 Nominal load 30000N

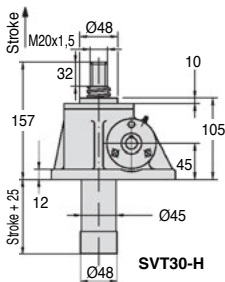
- **Standard stroke length: 100mm**
- **Material:**
Body: Iron GGG50
- **Weight (without screw): 8.2 kg**
- **Weight of screw: 0.43 kg /100mm**
- **Lubrication: Grease (200g required)**

Accessories

- Plate **SVT30-PLATEAU**
- Clevis **SVT30-CHAPE**



SVT30-B



SVT30-H



DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List -4%	-7%	-7%	On request

Part number	Reduction ratio	Torque at nominal force (Nm)	Output	rpm max.	Max. speed (m/min)	Max. power (kW) at 20% ED	Max. power (kW) at 10% ED
SVT30-6	6:1	16,5	29%	2800	2,8	0,6	0,8
SVT30-24	24:1	7,0	17%	2800	0,7	0,6	0,8

Part number	Reduction ratio	Stroke (H)	Screw Ø	Stroke per rev (mm)	Nominal force (N)	Price each
Upwards direction						
SVT30-6-100H	6:1	100	TR30 x 6	1,00	30000	1 037,63 €
SVT30-24-100H	24:1	100	TR30 x 6	0,25	30000	1 037,63 €
SVT30-COURSE	per additional 100mm of stroke length					20,18 €
Downwards direction						
SVT30-6-100B	6:1	100	TR30 x 6	1,00	30000	1 037,63 €
SVT30-24-100B	24:1	100	TR30 x 6	0,25	30000	1 037,63 €
SVT30-COURSE	per additional 100mm of stroke length					20,18 €

Dimensions in mm

Screwjack – pivot mounting

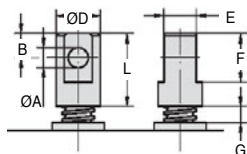
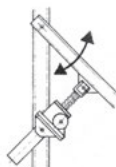
Pivoting console and clevis

SVT_{CH}
SVT_{SK}

Pivoting assemblies are often used to avoid radial loads on the screw. A pivoting console is placed under the casing, whereas a clevis is placed at the end of the screw.

Important

As the yoke has a dedicated thread, it must be ordered at the same time as the screwjack. They cannot be supplied separately.

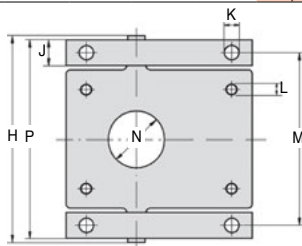
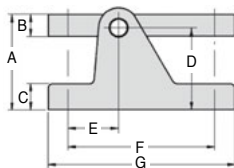


DISCOUNTS

Qty	1+	2+	5+	10+
Disc.	List	-4%	-7%	On request

Clevis

Part number	For screwjack	ØA	B	ØD	L	E	F	G	Price each
SVT5-CH	SVT5	15	15	30	50	20	30	10	63,47 €
SVT15-CH	SVT15	15	15	35	50	25	35	20	66,83 €
SVT20-CH	SVT20	15	23	40	65	30	46	20	71,87 €
SVT30-CH	SVT30	15	23	40	65	30	46	20	71,87 €



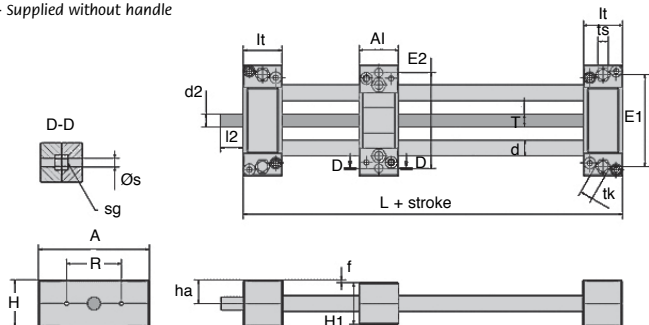
Pivoting console

Part number	For screwjack	A	B	C	D	E	F	G
SVT5-SK	SVT5	50,0	10	8	45,0	30,0	060	070
SVT15-SK	SVT15	67,5	15	15	60,0	37,5	110	135
SVT20-SK	SVT20	90,0	25	20	77,5	50,0	135	165
SVT30-SK	SVT30	110,0	30	30	95,0	58,0	168	215

Part number	H	P	J	K	L	M	N	Price each
SVT5-SK	150	144	10	6	M8	134	45,2	221,71 €
SVT15-SK	150	140	15	9	M8	125	48,2	284,28 €
SVT20-SK	190	180	25	13	M12	155	60,2	400,82 €
SVT30-SK	240	230	30	18	M16	200	83,2	400,82 €

Dimensions in mm

- **Plastic construction**
- Light weight
- Low cost version
- Corrosion resistant
- Available in 2 sizes
- Supplied without handle



Part number	Max stroke [mm]	Aluminium profile Weight [kg]	Add weight (/0.1m stroke)	Notes
SHTP-01-06	300	0,11	0,06	Square carriage with 4 symmetrical mounting holes
SHTP-01-12	750	0,35	0,11	Smooth guides and nuts in iglidur®J
SHTP-02-12	750	0,35	0,11	-

Part number	A	Al	H	E1	E2	L	R	f	lt	tk	ts
SHTP-01-06	45	45	19	38	36,5	67	25	1	11	8	4,2
SHTP-01-12	85	30	36	70	73,0	90	42	2	30	10	6,6
SHTP-02-12	85	30	36	70	73,0	90	42	2	30	10	6,6

Part number	s	sg	d	T	l2	d2* standard	ha	H1
SHTP-01-06	5,0	-	6	M8	15	M8	9	18
SHTP-01-12	6,3	M6	12	TR10x2	17	TR10x2	16	32
SHTP-02-12	6,3	M6	12	TR10x2	17	TR10x2	16	32

Dimensions in mm

Economical



Until
-19%**

✓ INCREASED STOCK

DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Stroke (mm)	Stock*	Price each 1 to 4
SHTP-01-06-100	100	✓	97,27 €
SHTP-01-06-250	250	✓	122,45 €
SHTP-01-12-100	100	✓	135,12 €
SHTP-01-12-250	250	✓	168,91 €
SHTP-01-12-500	500	✓	202,25 €
SHTP-02-12-100	100	✓	102,67 €
SHTP-02-12-250	250	✓	127,86 €
SHTP-02-12-500	500	✓	169,80 €

*Depending on availability - **On 2015 prices - Dimensions in mm

Maintenance free

Materials:

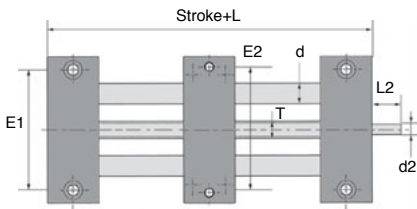
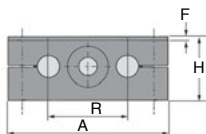
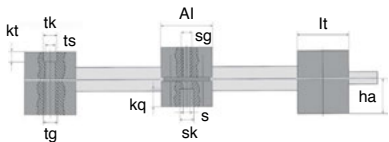
Shaft: hard anodised aluminium
Trapezoidal screw: Steel C15
Smooth bearings and films: Iglidur® J
Nut: Iglidur® W300

Advantages

- Requires absolutely no maintenance
- No corrosion
- Very light
- Nut for trapezoidal screw manufactured from high performance polymers
- Cross pieces and slides manufactured from anodised aluminium

Options

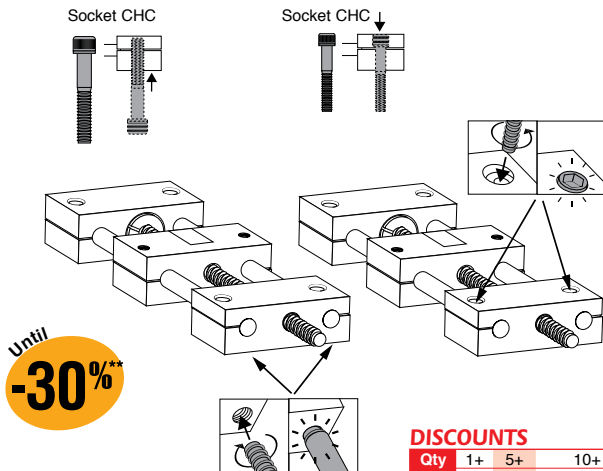
- SHTC12 max. stroke 1000mm
- SHTC20 and SHTC30 max. stroke 2000mm



Part number	A -0,3	Al -0,3	H	E1 ±0,15	E2 ±0,15	L	R	F	It	tk	ts	tg
SHTC-12	85	30	34	70	73	90	42	2	30	11	6,6	M8
SHTC-20	130	36	48	108	115	108	72	2	36	15	9,0	M10
SHTC-30	180	50	68	150	158	150	96	4	50	20	13,5	M16

Part number	kt	S	sk	sg	kq	d	T	L2	d2 (h9)	ha
SHTC-12	6,4	6,3	10	M6	6,0	12	TR10x2	17	TR10x2*	18
SHTC-20	8,6	6,4	11	M8	7,0	20	TR18x4	26	12	23
SHTC-30	12,6	11,0	18	M12	10,6	30	TR24x5	38	14	36

*TR10x2 supplied with a non machined spindle end



Part number	Max. axial load			Radial load	
	Static (N)	Dynamic (MPaxm/s) axial bearing	Dynamic (MPaxm/s) trapezoidal nut	Static (N)	Dynamic (N)
SHTC-12	700	0,23	0,08	1400	1000
SHTC-20	1600	0,23	0,08	3200	3000
SHTC-30	2500	0,23	0,08	5000	5000

Part number	Max. speed		Stroke length (mm)	Price each 1 to 4
	Of screw (rpm)	Of feed (m/min)		
SHTC-12-100	500	1,0	100	267,03 €
SHTC-12-250	500	1,0	250	292,20 €
SHTC-12-500	500	1,0	500	334,17 €
SHTC-20-100	300	1,2	100	381,48 €
SHTC-20-250	300	1,2	250	412,93 €
SHTC-20-500	300	1,2	500	465,40 €
SHTC-20-1000	300	1,2	1000	570,31 €
SHTC-30-100	220	1,1	100	610,36 €
SHTC-30-250	220	1,1	250	654,49 €
SHTC-30-500	220	1,1	500	728,03 €
SHTC-30-1000	220	1,1	1000	875,11 €

DryLin® linear table

Construction and characteristics

DryLin® linear tables are suitable for many different positioning applications. The linear positioning is achieved by means of a trapezoidal lead screw that can be operated manually or by motor.

The maximum linear speed is 1 m/min.

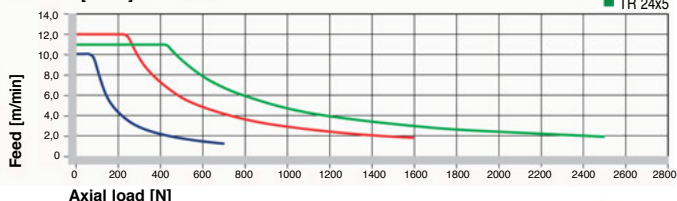
The suitability of a linear slide unit for an application can be checked using the graphs below.

The following trapezoidal lead screw drive sizes are used in this range of linear tables:

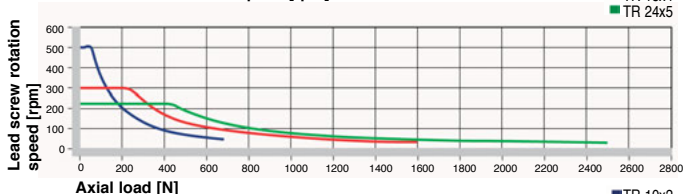
- TR 10x2: SHT-12, SHTC-12, SHTP-12, SLW-1040
- TR 18x4: SHT-20, SHTC-20, SLW-2080
- TR 24x5: SHT-30, SHTC-30

Please note that the loads given are axial loads. Radial loads are not given for trapezoidal lead screws. For horizontal mounting with symmetrical loads, the following equation can be used:
 $F_{axial} = F_{radial} \times 0.25$ (for horizontal mounting)

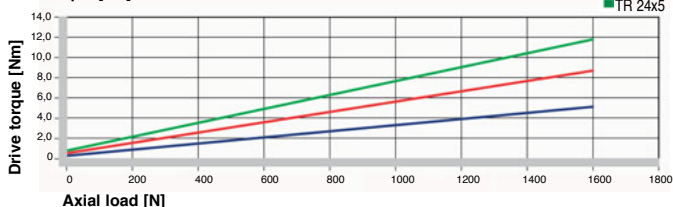
Max. feed [m/min]



Maximum lead screw rotation speed [rpm]



Drive torque [Nm]



Mini profile-mounted adjusting unit

On 19x32mm
support profile

MiniTec MURP1932

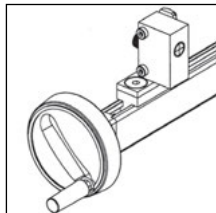
- Mini adjusting unit mounted on PRF1932 support profile
- Spindle VA M8 x 1.25
- Brass carriage
- Anodised aluminium support profile
- Maximum load 1-2 kg
- Maximum stroke 890mm

Application

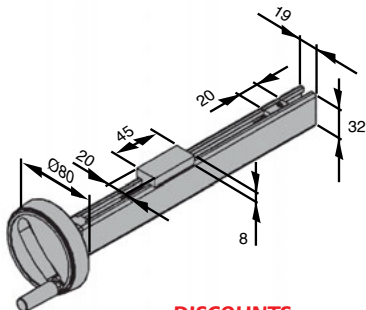
- Positioning of lateral guides on conveyors
- Positioning of sensors or lighting bars
- For simple elements

Assembly

- Totally compatible with MINITEC PRF profiles (See PRF aluminium profiles in Volume 5)
- Can be installed using a standard mounting bracket



Typical application



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Stroke (mm)	Overall length (mm)	Price each 1 to 4
MURP1932-100	100	205	460,08 €
MURP1932-200	200	305	468,79 €
MURP1932-300	300	405	477,46 €
MURP1932-400	400	505	486,10 €
MURP1932-500	500	605	494,75 €
MURP1932-600	600	705	503,46 €
MURP1932-700	700	805	512,11 €
MURP1932-800	800	905	520,79 €
MURP1932-890	890	995	529,47 €

Dimensions in mm

Mini profile-mounted adjusting unit

MURP1945 **MiniTec** On 19x45mm support profile

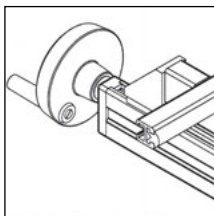
- Mini adjusting unit mounted on PRF1945 support profile
- Spindle VA M8 x 1.25
- Brass carriage
- Anodised aluminium support profile
- Maximum load 1-2 kg
- Maximum stroke 890mm

Application

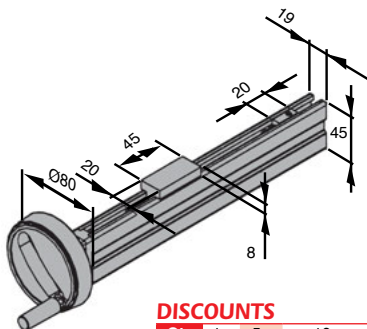
- Positioning of lateral guides on conveyors
- Positioning of sensors or lighting bars
- For simple elements

Assembly

- Totally compatible with MINITEC PRF profiles (See PRF aluminium profiles in Volume 5)
- Can be installed using a standard mounting bracket



Typical application



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Stroke (mm)	Overall length (mm)	Price each 1 to 4
MURP1945-100	100	205	460,08 €
MURP1945-200	200	305	468,79 €
MURP1945-300	300	405	477,46 €
MURP1945-400	400	505	486,10 €
MURP1945-500	500	605	494,75 €
MURP1945-600	600	705	503,46 €
MURP1945-700	700	805	512,11 €
MURP1945-800	800	905	520,79 €
MURP1945-890	890	995	529,47 €

Dimensions in mm

Mini profile-mounted adjusting unit

On 45x45mm
support profile

MiniTec MURP4545

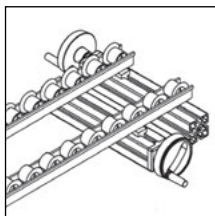
- Mini adjusting unit mounted on PRF4545 support profile
- Spindle VA M8 x 1.25
- Brass carriage
- Anodised aluminium support profile
- Maximum load 1-2 kg
- Maximum stroke 890mm

Application

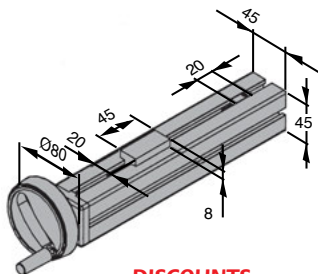
- Positioning of lateral guides on conveyors
- Positioning of sensors or lighting bars
- For simple elements

Assembly

- Totally compatible with MINITEC PRF profiles (See PRF aluminium profiles in Volume 5)
- Can be installed using a standard mounting bracket



Typical application



DISCOUNTS

Qty	1+	5+	10+
Disc. List	-5%		On request

Part number	Stroke (mm)	Overall length (mm)	Price each 1 to 4
MURP4545-100	100	205	486,10 €
MURP4545-200	200	305	497,67 €
MURP4545-300	300	405	509,22 €
MURP4545-400	400	505	520,79 €
MURP4545-500	500	605	532,36 €
MURP4545-600	600	705	543,89 €
MURP4545-700	700	805	555,44 €
MURP4545-800	800	905	566,99 €
MURP4545-890	890	995	578,55 €

Dimensions in mm

Linear positioner



CRG

For conveyor systems

- Allows the positioning and adjustment of elements of a conveyor system
- Millimetre scale
- Materials:
 - Steel and duralumin AL5083
 - Chromed exterior finish
 - Machined elements
 - Operating handle, upper and lower caps: thermoplastics
 - Steel (F114) main screw guided by bearings



CRG-500-TL



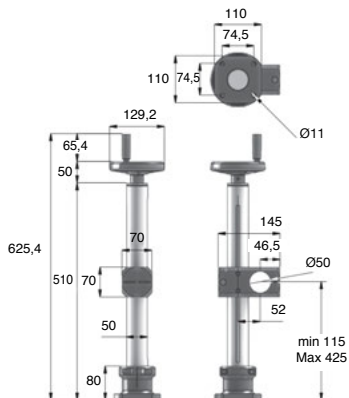
CRG-500-NC

Applications

- Machine heads, labelling machines, thermal printers, dosing and bottling machines, artificial vision, quality control...
- On the same conveyor system, it allows adjustments to be made when the dimensions of products or packages change.



Typical application: Adjustment of a labelling machine



DISCOUNTS

Qty	1+	2+	5+
Disc.	List -5%	List -5%	On request

Part number	Standard length	Component finish	Weight (kg)	Price each
CRG-500-NC	500	Nickel chrome	5,96	576,37 €
CRG-500-TL	500	Powder coated	5,96	535,63 €

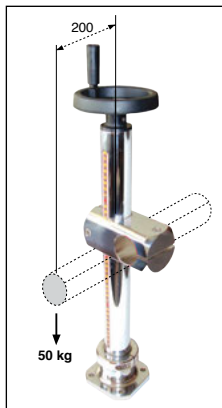
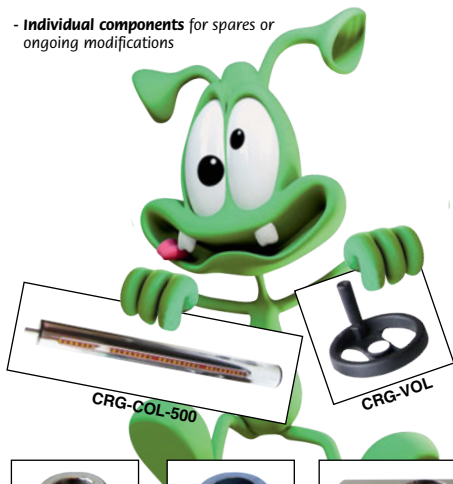
Dimensions in mm

Adjustable column - components

For conveyor systems

CRG

- Individual components for spares or ongoing modifications



CRG-EMB-NC



CRG-EMB-TL



CRG-NR-NC



CRG-NR-TL

DISCOUNTS

Qty	1+	2+	5+
Disc.	List	-5%	On request

Part number	Type	Component finish	Weight (kg)	Price each
CRG-COL-500	500 mm column	Nickel chrome	3,72	362,50 €
CRG-VOL	Operating wheel	Thermoplastic	0,27	44,54 €
CRG-EMB-NC	Base	Nickel chrome	0,84	128,49 €
CRG-EMB-TL	Base	Powder coated	0,84	108,70 €
CRG-NR-NC	Clamp	Nickel chrome	1,13	123,25 €
CRG-NR-TL	Clamp	Powder coated	1,13	102,29 €

Dimensions in mm

Mini leadscrew table with metric thread



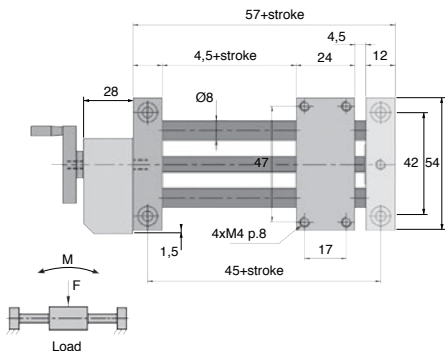
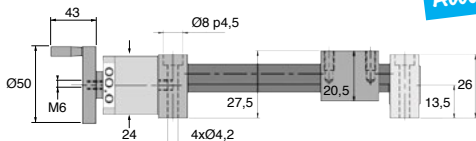
TBL

Allows X-Y-Z movements

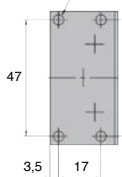
- Mini table with metric leadscrew for manual position adjustment
- Guided by 2 steel rods on 4 brass bearings (no wiper joints)
- Axial precision (in locked position) <0.05 mm
- With position indicator and hand wheel
- Material:
Aluminium, steel
- Working temperature range: +5° to +80 °C



Accurate to 0.1 mm



With Z Option :
fixed via front plate
4xØ4,2



DISCOUNTS

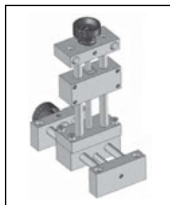
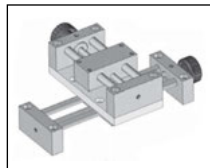
Qty	1+	6+
Disc. List	On request	

Part number	Stroke	Max supported load (kg)	Admissible torque (Nm)	Static force F (daN)	Weight (kg)	Price each 1 to 5
Table horizontal X + Y axes						
TBL-50-CV	50	1	0,50	6,00	0,25	272,14 €
TBL-100-CV	100	1	0,50	6,00	0,30	273,72 €
Table vertical Z axis						
TBL-50Z-CV	50	0,5	0,50	6,00	0,25	276,58 €
TBL-100Z-CV	100	0,5	0,50	6,00	0,30	278,15 €

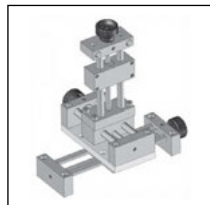
Dimensions in mm

- **Connection plate**
- To be screwed to end plates
- Counter bored mounting holes
- Materials:
Anodised aluminium
with plated steel screws

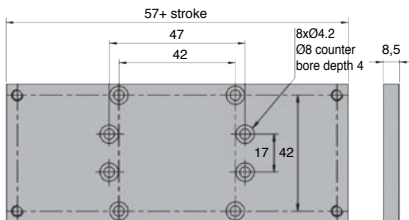
XY configuration;
8xØ4.2
Ø8 counter bore
depth 4
2 standard tables
1 base plate



YZ configuration:
1 standard table
1 Z axis table
4 CHC screws (M4 x 20)



XYZ configuration:
2 standard tables
1 Z axis table
1 base plate
4 CHC screws (M4 x 20)



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	For stroke (mm)	Price each 1 to 5
TBL-XY50	50	31,11 €
TBL-XY100	100	33,68 €

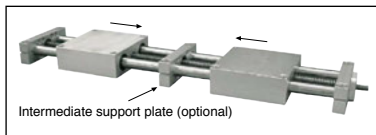
Dimensions in mm

Leadscrew table with opposing threads

TBD1 Allows position to be quickly adjusted

- Table with right and left handed leadscrews that allow manual position adjustment

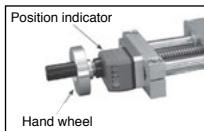
- Right handed leadscrew TR10x2
- 12mm guide rods
- Guided by 2 steel rods on 4 brass bearings (no sealing joints) xxx
- With position indicator and hand wheel
- Axial precision: <0.1 mm
- Material:
Aluminium, steel
- Working temperature range:
+5 to +80 °C



Accurate to 0.1 mm

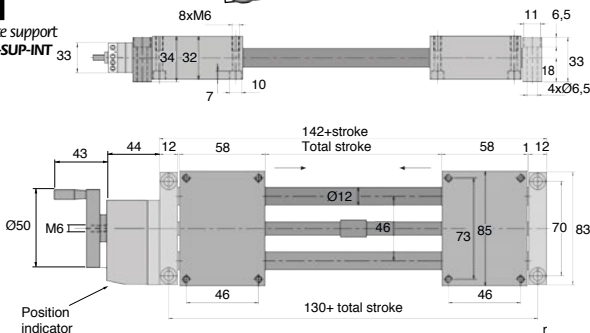


QUICK DELIVERY



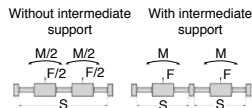
Option

- Intermediate support plate TBD1-SUP-INT



	Static	Dynamic
Fmax (daN)	20	5
Cmax (Nm)	8	2
Mmax (Nm)	10	2

(50mm < r < 200mm)



$$C = P (N) \times r (m) \quad \downarrow P$$

DISCOUNTS

Qty	1+	6+
Disc. List		On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication r 1 rev	Weight* (kg)	Price each 1 to 5
TBD1-100-CV	100	TR10x2	2	0,30	002,0	1,62	576,83 €
TBD1-200-CV	200	TR10x2	2	0,30	002,0	1,84	580,15 €
TBD1-300-CV	300	TR10x2	2	0,30	002,0	2,06	583,50 €
TBD1-400-CV	400	TR10x2	2	0,30	002,0	2,28	586,80 €

*Weight without hand wheel or indicator - Dimensions in mm



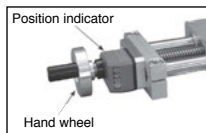
Allows position to be quickly adjusted **TBD2**

-
- Intermediate support plate (optional)

Accurate to 0.1 mm

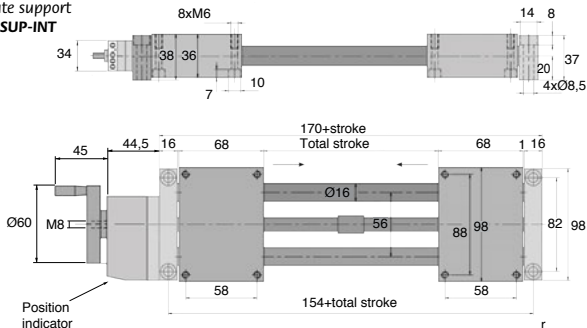


**QUICK
DELIVERY**



Option

- Intermediate support plate **TBD-SUP-INT**

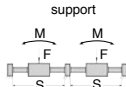


	Static	Dynamic
F_{max} (daN)	40	12
C_{max} (Nm)	17	4
M_{max} (Nm)	20	5

(60mm < r < 250mm)

Without intermediate

With intermediate



$$\mathbf{C} = \mathbf{P}(\mathbf{N}) \times \mathbf{r}(\mathbf{m}) \quad \nabla \mathbf{P}$$

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication r 1 rev	Weight* (kg)	Price each 1 to 5
TBD2-100-CV	100	TR12x3	5	0,45	003,0	2,86	643,89 €
TBD2-200-CV	200	TR12x3	5	0,45	003,0	3,22	649,35 €
TBD2-300-CV	300	TR12x3	5	0,45	003,0	3,58	654,81 €
TBD2-400-CV	400	TR12x3	5	0,45	003,0	3,94	660,26 €

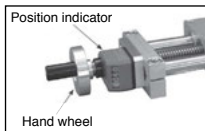
* Weight without hand wheel or indicator - Dimensions in mm

TBD3 Allows position to be quickly adjusted

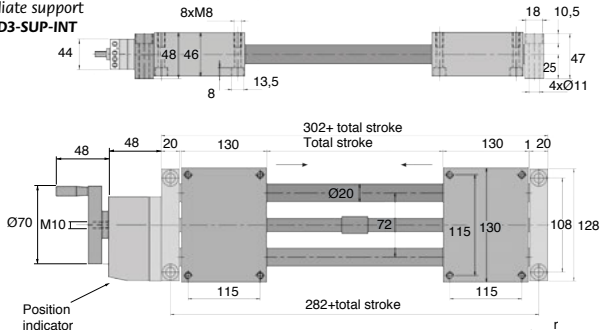
-
- Intermediate support plate (optional)



**QUICK
DELIVERY**



- Intermediate support plate **TBD3-SUP-INT**



$$\mathbf{C} = \mathbf{P}(\mathbf{N}) \times \mathbf{r}(\mathbf{m}) \quad \nabla \mathbf{P}$$

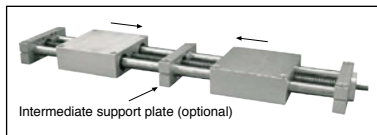
Qty	1+	6+
Disc.	List	On request

* Weight without hand wheel or indicator - Dimensions in mm

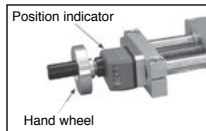


- Table with right and left handed leadscrews that allow manual position adjustment

- Right handed leadscrew TR12x3
- 16 mm guide rods
- Guided by 2 steel rods on 4 brass bearings (no sealing joints)
- With position indicator and hand wheel
- Axial precision: <0.1 mm
- Material: Aluminium, steel
- Working temperature range: $+5$ to $+80$ °C

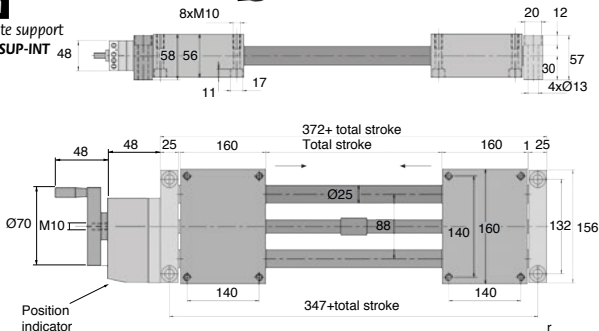


Accurate to 0.1 mm



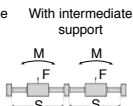
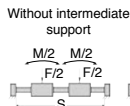
Option

- Intermediate support plate **TBD-SUP-INT** 4



	Static	Dynamic
F_{max} (daN)	160	50
C_{max} (Nm)	52	12
M_{max} (Nm)	140	35

(100mm < r < 350mm)



$$\mathbf{C} = \mathbf{P}(\mathbf{N}) \times \mathbf{r}(\mathbf{m}) \quad \nabla \mathbf{P}$$

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication r 1 rev	Weight* (kg)	Price each 1 to 5
TBD4-100-CV	100	TR16x4	40	0,60	004,0	11,30	1 021,71 €
TBD4-200-CV	200	TR16x4	40	0,60	004,0	12,20	1 031,14 €
TBD4-300-CV	300	TR16x4	40	0,60	004,0	13,10	1 040,55 €
TBD4-400-CV	400	TR16x4	40	0,60	004,0	14,00	1 049,99 €

*Weight without hand wheel or indicator - Dimensions in mm

Manual lifting tables

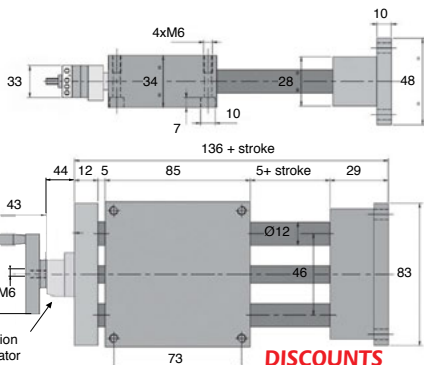
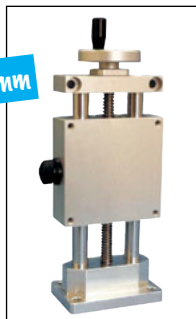
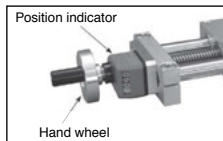


TBV1 For vertical strokes - Ø 12 mm column

Manually operated leadscrew table

- Right handed leadscrew TR10x2
- 12 mm diameter guide rods
- Fixed by the extremities for vertical or off-centred applications
- Guided by 2 steel rods on 4 brass bearings (no wiper joints)
- Axial precision (in locked position) <0.05 mm
- With position indicator and hand wheel
- Axial precision <0.15 mm
- Material:
Aluminium, steel
- Working temperature range:
+5° to +80 °C

Accurate to 0.1 mm



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication for 1 rev	Weight* (kg)	Price each 1 to 5
TBV1-50-CV	50	TR10x2	3	0,30	002,0	1,20	459,63 €
TBV1-100-CV	100	TR10x2	3	0,30	002,0	1,31	459,63 €
TBV1-150-CV	150	TR10x2	3	0,30	002,0	1,42	462,96 €
TBV1-200-CV	200	TR10x2	3	0,30	002,0	1,53	462,96 €
TBV1-300-CV	300	TR10x2	3	0,30	002,0	1,75	466,31 €

*Weight without hand wheel or indicator - Dimensions in mm

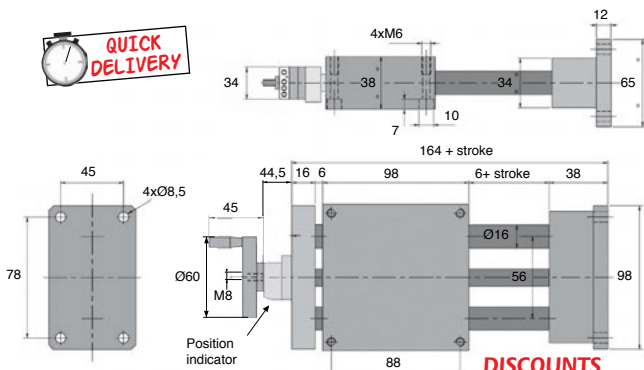
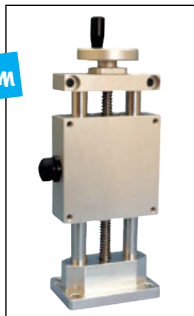
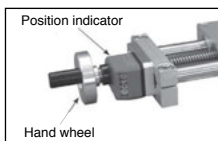


Manual lifting tables

For vertical strokes – Ø16 mm column TBV2

- **Manually operated leadscrew table**
- Right handed leadscrew TR12x3
- 16mm diameter guide rods
- Fixed by the extremities for vertical or off-centred applications
- Guided by 2 steel rods on 4 brass bearings (no wiper joints)
- Axial precision (in locked position) <0.05 mm
- With position indicator and hand wheel
- Axial precision <0.15 mm
- Material: Aluminium, steel
- Working temperature range: +5° to +80°C

Accurate to 0.1 mm



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication for 1 rev	Weight* (kg)	Price each 1 to 5
TBV2-50-CV	50	TR12x3	7	0,45	003,0	2,11	502,10 €
TBV2-100-CV	100	TR12x3	7	0,45	003,0	2,29	502,10 €
TBV2-150-CV	150	TR12x3	7	0,45	003,0	2,47	507,56 €
TBV2-200-CV	200	TR12x3	7	0,45	003,0	2,65	507,56 €
TBV2-300-CV	300	TR12x3	7	0,45	003,0	3,01	513,00 €

*Weight without hand wheel or indicator - Dimensions in mm

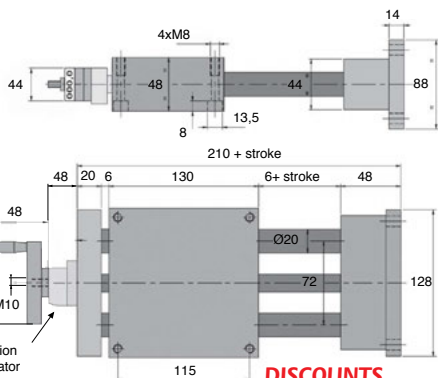
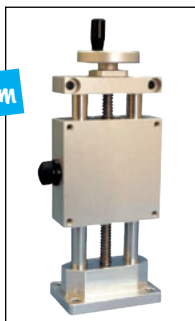
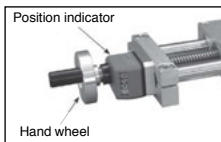
Manual lifting tables



TBV3 For vertical strokes – Ø20 mm column

- **Manually operated leadscrew table**
- Right handed leadscrew TR16x4
- 20 mm diameter guide rods
- Fixed by the extremities for vertical or off-centred applications
- Guided by 2 steel rods on 4 brass bearings (no wiper joints)
- Axial precision (in locked position) <0.05 mm
- With position indicator and hand wheel
- Axial precision <0.15 mm
- Material:
Aluminium, steel
- Working temperature range:
+5 to +80 °C

Accurate to 0.1 mm



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel (Nm)	Indication for 1 rev	Weight* (kg)	Price each 1 to 5
TBV3-50-CV	50	TR16x4	12	0,60	004,0	4,12	608,83 €
TBV3-100-CV	100	TR16x4	12	0,60	004,0	4,43	608,83 €
TBV3-150-CV	150	TR16x4	12	0,60	004,0	4,74	616,09 €
TBV3-200-CV	200	TR16x4	12	0,60	004,0	5,05	616,09 €
TBV3-300-CV	300	TR16x4	12	0,60	004,0	5,67	623,35 €

*Weight without hand wheel or indicator - Dimensions in mm

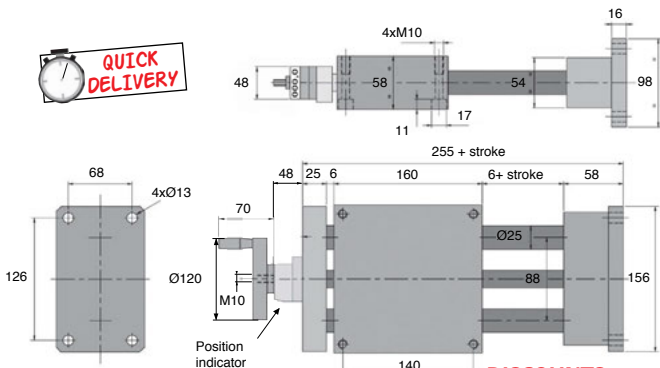
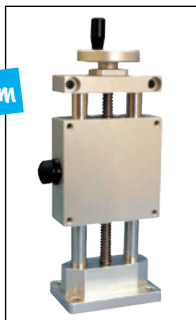
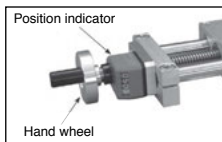


Manual lifting tables

For vertical strokes - Ø25 mm column **TBV4**

- **Manually operated leadscrew table**
- Right handed leadscrew TR16x4
- 25 mm diameter guide rods
- Fixed by the extremities for vertical or off-centred applications
- Guided by 2 steel rods on 4 brass bearings (no wiper joints)
- Axial precision (in locked position) <0.05 mm
- With position indicator and hand wheel
- Axial precision <0.15 mm
- Material:
Aluminium, steel
- Working temperature range:
+5 to + 80°C

Accurate to 0.1 mm



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Guide rod	Max supported load (kg)	Moving torque on hand wheel(Nm)	Indication for 1 rev	Weight* (kg)	Price each 1 to 5
TBV4-50-CV	50	TR16x4	20	1,25	004,0	7,28	757,32 €
TBV4-100-CV	100	TR16x4	20	1,25	004,0	7,73	757,32 €
TBV4-150-CV	150	TR16x4	20	1,25	004,0	8,18	766,75 €
TBV4-200-CV	200	TR16x4	20	1,25	004,0	8,63	766,75 €
TBV4-300-CV	300	TR16x4	20	1,25	004,0	9,53	776,16 €

*Weight without hand wheel or indicator - Dimensions in mm



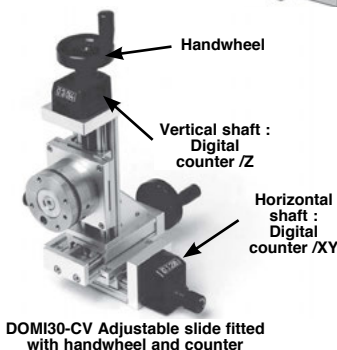
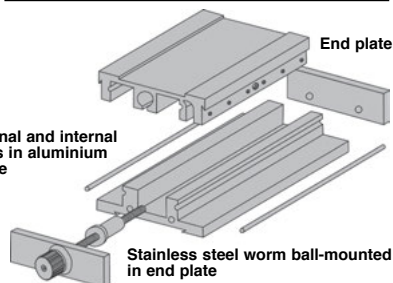
- Suitable for heavy loads
- Low coefficient of friction
- High quality slideways
- Low backlash system
- Very fine adjustment (0.05mm)
- Standard axis lengths
- Easy drive assembly

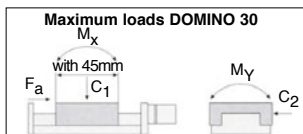
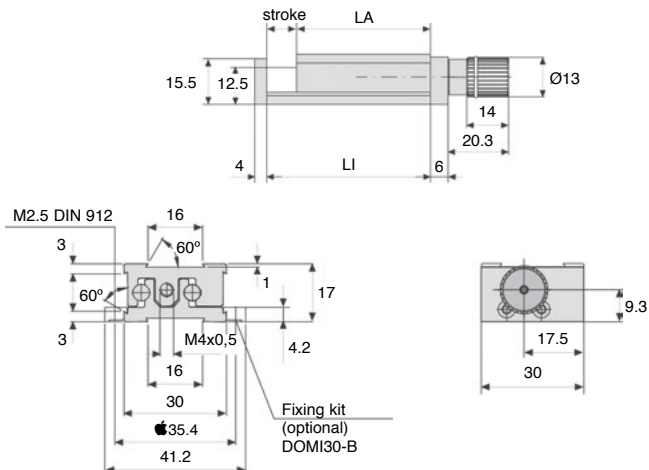
Applications

- Fine adjustment of brazing/welding heads or plasma cutting heads
- Inkjet printer head positioning
- Camera positioning
- Machine parts positioning (milling head, milling spindles,...)
- Burner focusing
- Laser head positioning
- Moving stops
- Centred movement for lateral guidance (slide with left-right pin)

Options

- Other stroke lengths available, please contact us for details
- If a digital counter is required to be fitted to the linear slide, replace /XY by Z in the part number





DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	LA	LI	Stroke	Pitch (mm)	C1 (N)	C2 (N)	Maximum loads				Price each
							FA (N)	Mx (Nm)	My (Nm)	Mz (Nm)	
Slide only											
DOMI30-5	45	50	5	0,5	150	65	40	2	2	1	433,41 €
DOMI30-10	45	55	10	0,5	150	65	40	2	2	1	442,83 €
DOMI30-15	45	60	15	0,5	150	65	40	2	2	1	456,95 €
DOMI30-20	45	65	20	0,5	150	65	40	2	2	1	466,37 €
Slide with counter and handwheel											
DOMI30-5-CV/XY	45	50	5	0,5	150	65	40	2	2	1	751,42 €
DOMI30-10-CV/XY	45	55	10	0,5	150	65	40	2	2	1	760,84 €
DOMI30-15-CV/XY	45	60	15	0,5	150	65	40	2	2	1	774,99 €
DOMI30-20-CV/XY	45	65	20	0,5	150	65	40	2	2	1	784,42 €

Dimensions in mm



DOMI30 For Domino 30 adjustable slides

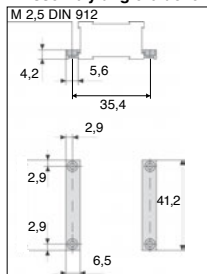
- **The fastening kit** is used to attach the DOMINO adjustable slide to its mounting surface.
- **The machineable mounting plate** allows you to attach other equipment to the adjustable slide.



Tool plate support



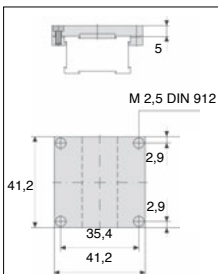
Assembly angle bracket



DOMI30-B fastening set



Typical application



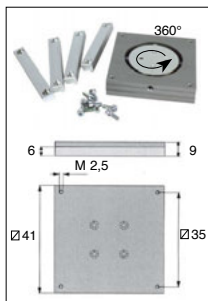
DOMI30-M mounting plate



Fastening set
DOMI30-B



Mounting plate
DOMI30-M



Turntable
DOMI30-PT

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

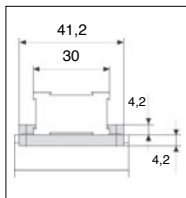
Part number	Type	Price each
DOMI30-B	Fastening set	23,50 €
DOMI30-M	Mounting plate	68,26 €
DOMI30-PT	Rotary turntable	369,79 €

Dimensions in mm



For Domino 30 adjustable slides **DOMI30**

- **Connecting kits** are used to join two DOMINO adjustable slides.



**Connecting kit
DOMI30-XY**



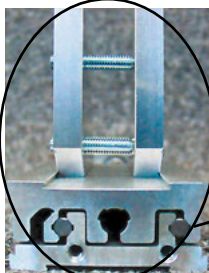
Connecting kit DOMI30-XY



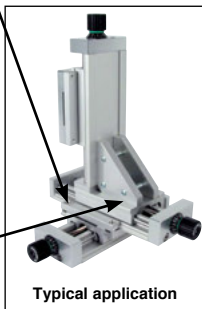
X-Y connecting kit



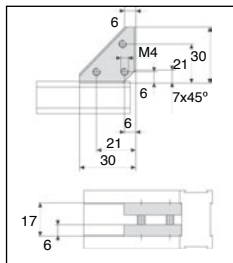
**Connecting kit
DOMI 30-XZ**



X-Z connecting kit



Typical application



**Connecting kit
DOMI30-XZ**

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Price each
DOMI30-XY	X-Y connecting kit	61,18 €
DOMI30-XZ	X-Y connecting kit	70,60 €

Dimensions in mm

- Suitable for heavy loads
- Low coefficient of friction
- High quality slideways
- Low backlash system
- Very fine adjustment (0.05mm)
- Standard axis lengths
- Easy drive assembly

Applications

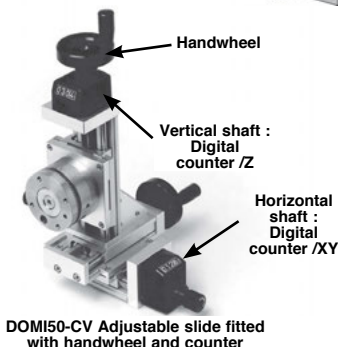
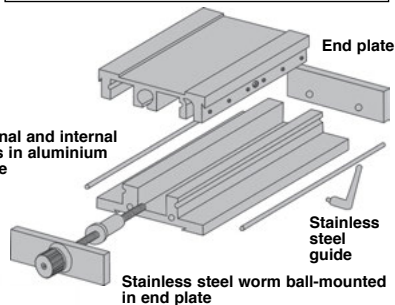
- Fine adjustment of brazing/welding heads or plasma cutting heads
- Inkjet printer head positioning
- Camera positioning
- Machine parts positioning (milling head, milling spindles,...)
- Burner focusing
- Laser head positioning
- Moving stops
- Centred movement for lateral guidance (slide with left-right pin)

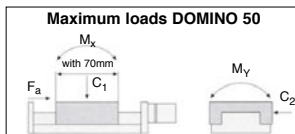
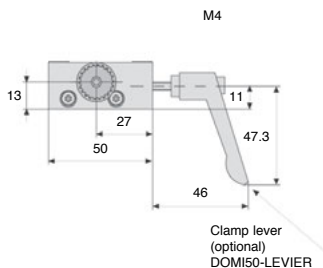
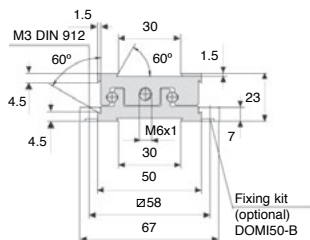
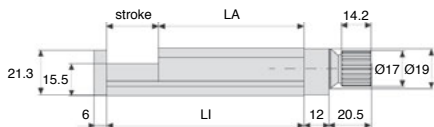
Options

- Other stroke lengths available, please contact us for details
- If a digital counter is required to be fitted to the linear slide, replace /XY by Z in the part number



Slide only DOMI50





DISCOUNTS

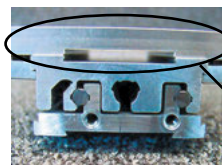
Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	LA	LI	Stroke	Pitch (mm)	C1 (N)	C2 (N)	Maximum loads					Stock*	Price each
							FA (N)	Mx (Nm)	My (Nm)	Mz (Nm)			
Slide only													
DOMI50-25	70	95	25	1	300	215	120	4	5	3	✓	452,26 €	
DOMI50-50	70	120	50	1	300	215	120	4	5	3	✓	461,66 €	
DOMI50-75	70	145	75	1	300	215	120	4	5	3	-	471,08 €	
DOMI50-100	70	170	100	1	300	215	120	4	5	3	✓	482,87 €	
Slide with counter and handwheel													
DOMI50-25-CV/XY	70	95	25	1	300	215	120	4	5	3	-	770,25 €	
DOMI50-50-CV/XY	70	120	50	1	300	215	120	4	5	3	-	779,68 €	
DOMI50-75-CV/XY	70	145	75	1	300	215	120	4	5	3	-	789,11 €	
DOMI50-100-CV/XY	70	170	100	1	300	215	120	4	5	3	-	800,91 €	

*Depending on availability - Dimensions in mm

DOMI50 For Domino 50 adjustable slides

- **The fastening kit** is used to attach the DOMINO adjustable slide to its mounting surface.
- **The machineable mounting plate** allows you to attach other equipment to the adjustable slide.



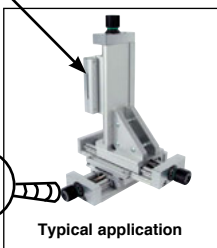
Tool plate support



Clamp lever
DOMI50-LEVIER



Fastening set
DOMI50-B



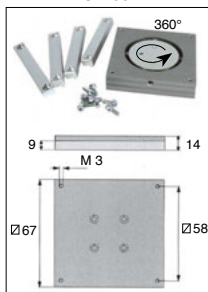
Typical application



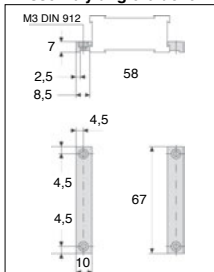
Mounting plate
DOMI50-M



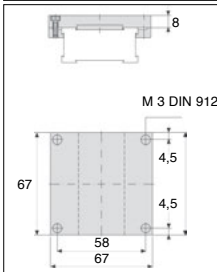
Assembly angle bracket



Turntable DOMI50-PT



DOMI50-B fastening set



DOMI50-M mounting plate

DISCOUNTS

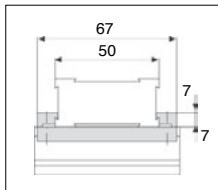
Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Stock*	Price each
DOMI50-B	Fastening set	✓	23,50 €
DOMI50-M	Mounting plate	✓	68,26 €
DOMI50-LEVIER	Clamp lever	✓	32,92 €
DOMI50-PT	Rotary turntable	-	369,79 €

*Depending on availability - Dimensions in mm

For Domino 50 adjustable slides **DOMI50**

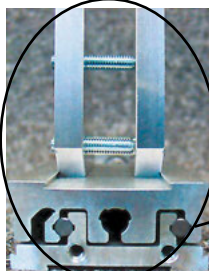
- **Connecting kits** are used to join two DOMINO adjustable slides.



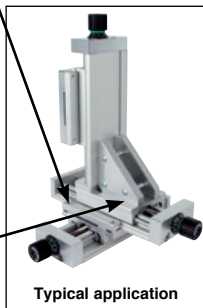
**Connecting kit
DOMI50-XY**



X-Y connecting kit



X-Z connecting kit



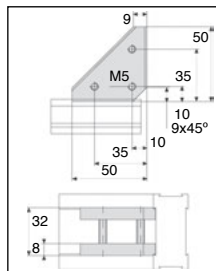
Typical application



**Connecting kit
DOMI 50-XZ**



**Connecting kit
DOMI 50-XZ**



**Connecting kit
DOMI 50-XZ**

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Stock*	Price each
DOMI50-XY	Connecting kit X-Y	✓	61,18 €
DOMI50-XZ	Connecting kit X-Y	✓	70,60 €

*Depending on availability - Dimensions in mm



DOMI80

For C1 loads up to 500Nm

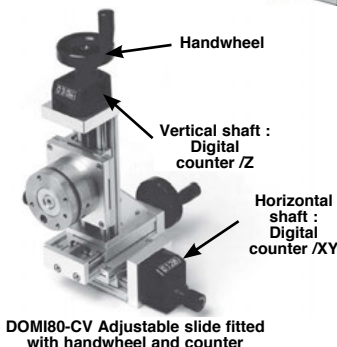
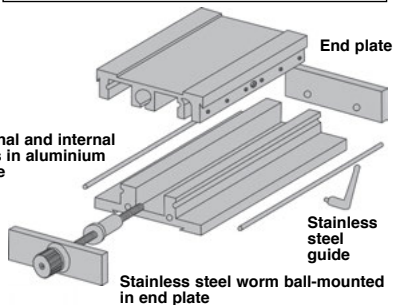
- Suitable for heavy loads
- Low coefficient of friction
- High quality slideways
- Low backlash system
- Very fine adjustment (0.05mm)
- Standard axis lengths
- Easy drive assembly

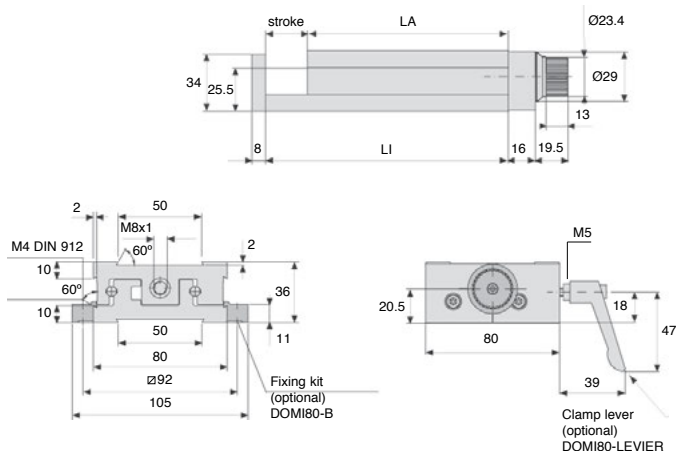
Applications

- Fine adjustment of brazing/welding heads or plasma cutting heads
- Inkjet printer head positioning
- Camera positioning
- Machine parts positioning (milling head, milling spindles,...)
- Burner focusing
- Laser head positioning
- Moving stops
- Centred movement for lateral guidance (slide with left-right pin)

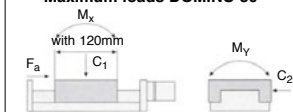
Options

- Other stroke lengths available, please contact us for details
- If a digital counter is required to be fitted to the linear slide, replace /XY by Z in the part number





Maximum loads DOMINO 80



DISCOUNTS

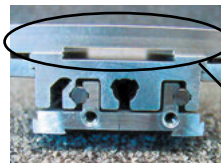
Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	LA	LI	Stroke	Pitch (mm)	C1 (N)	C2 (N)	Maximum loads				Mz (Nm)	Stock*	Price each
							FA (N)	Mx (Nm)	My (Nm)				
Slide only													
DOMI80-25	120	145	25	1	500	365	150	8	10	6	✓	572,37 €	
DOMI80-50	120	170	50	1	500	365	150	8	10	6	✓	584,16 €	
DOMI80-75	120	195	75	1	500	365	150	8	10	6	-	595,97 €	
DOMI80-100	120	220	100	1	500	365	150	8	10	6	✓	607,73 €	
Slide with counter and handwheel													
DOMI80-25-CV/XY	120	145	25	1	500	365	150	8	10	6	-	890,43 €	
DOMI80-50-CV/XY	120	170	50	1	500	365	150	8	10	6	-	902,18 €	
DOMI80-75-CV/XY	120	195	75	1	500	365	150	8	10	6	-	913,98 €	
DOMI80-100-CV/XY	120	220	100	1	500	365	150	8	10	6	-	925,74 €	

*Depending on availability - Dimensions in mm

DOMI80 For Domino 80 adjustable slides

- **The fastening kit** is used to attach the DOMINO adjustable slide to its mounting surface.
- **The machineable mounting plate** allows you to attach other equipment to the adjustable slide.



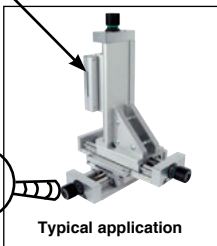
Tool plate support



Clamp lever
DOMI80-LEVIER



Fastening set
DOMI80-B



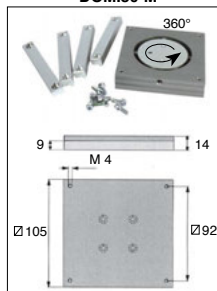
Typical application



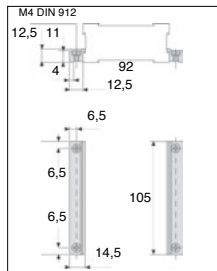
Mounting plate
DOMI80-M



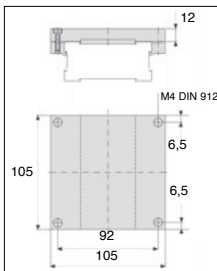
Assembly angle bracket



Turntable DOMI80-PT



DOMI80-B fastening set



DOMI80-M mounting plate

DISCOUNTS

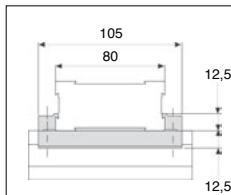
Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Stock*	Price each
DOMI80-B	Fastening set	✓	30,57 €
DOMI80-M	Mounting plate	✓	94,16 €
DOMI80-LEVIER	Clamp lever	✓	32,92 €
DOMI80-PT	Rotary turntable	-	438,09 €

*Depending on availability - Dimensions in mm

For Domino 80 adjustable slides **DOMI80**

- **Connecting kits** are used to join two DOMINO adjustable slides.



**Connecting kit
DOMI 80-XY**



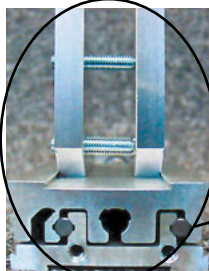
Connecting kit DOMI80-XY



X-Y connecting kit



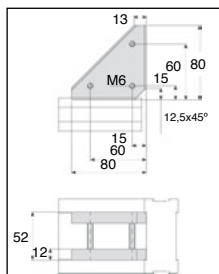
**Connecting kit
DOMI 80-XZ**



X-Z connecting kit



Typical application



**Connecting kit
DOMI 80-XZ**

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Stock*	Price each
DOMI80-XY	Connecting kit X-Y	✓	75,32 €
DOMI80-XZ	Connecting kit X-Y	-	91,80 €

*Depending on availability - Dimensions in mm



- Suitable for heavy loads
- Low coefficient of friction
- High quality slideways
- Low backlash system
- Very fine adjustment (0.05mm)
- Standard axis lengths
- Easy drive assembly

Applications

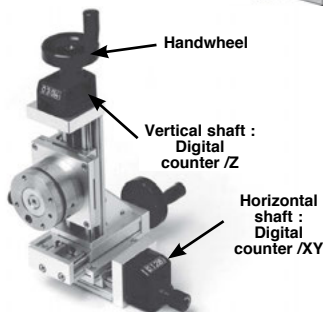
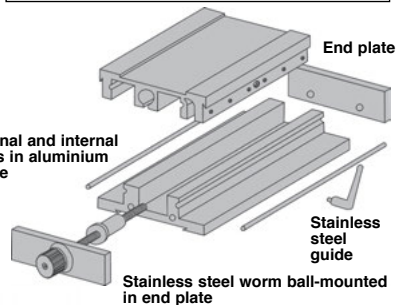
- Fine adjustment of brazing/welding heads or plasma cutting heads
- Inkjet printer head positioning
- Camera positioning
- Machine parts positioning (milling head, milling spindles,...)
- Burner focusing
- Laser head positioning
- Moving stops
- Centred movement for lateral guidance (slide with left-right pin)

Options

- Other stroke lengths available, please contact us for details
- If a digital counter is required to be fitted to the linear slide, replace /XY by Z in the part number

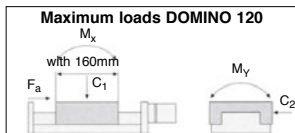
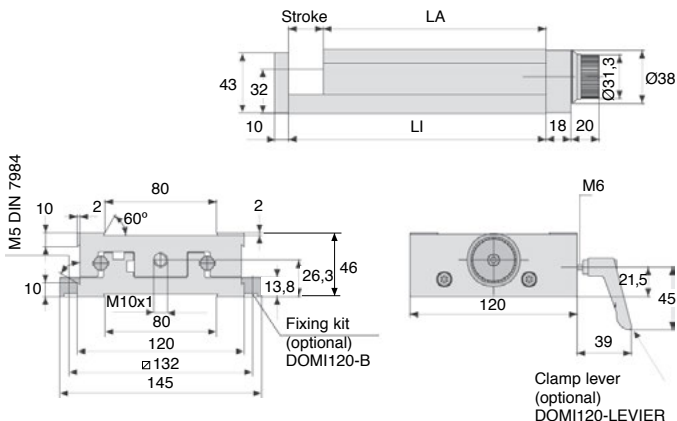


Slide only DOMI120



DOMI120-CV Adjustable slide fitted with handwheel and counter





DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

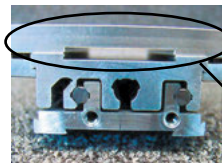
Part number	LA	LI	Stroke	Pitch (mm)	C1 (N)	C2 (N)	Maximum loads					Price each
							FA (N)	Mx (Nm)	My (Nm)	Mz (Nm)		
Slide only												
DOMI120-25	160	185	25	1	1000	700	300	15	20	12	807,97	€
DOMI120-50	160	210	50	1	1000	700	300	15	20	12	822,09	€
DOMI120-75	160	235	75	1	1000	700	300	15	20	12	836,23	€
DOMI120-100	160	260	100	1	1000	700	300	15	20	12	845,66	€
Slide with counter and handwheel												
DOMI120-25-CV/XY	160	185	25	1	1000	700	300	15	20	12	1 126,01	€
DOMI120-50-CV/XY	160	210	50	1	1000	700	300	15	20	12	1 140,41	€
DOMI120-75-CV/XY	160	235	75	1	1000	700	300	15	20	12	1 154,25	€
DOMI120-100-CV/XY	160	260	100	1	1000	700	300	15	20	12	1 163,68	€

Dimensions in mm



DOMI120 For Domino 120 adjustable slides

- **The fastening kit** is used to attach the DOMINO adjustable slide to its mounting surface.
- **The machineable mounting plate** allows you to attach other equipment to the adjustable slide.



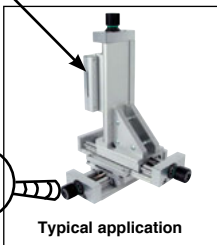
Tool plate support



Clamp lever
DOMI120-LEVIER



Fastening set
DOMI120-B



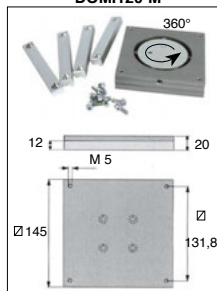
Typical application



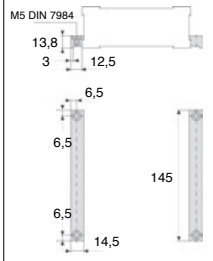
Mounting plate
DOMI120-M



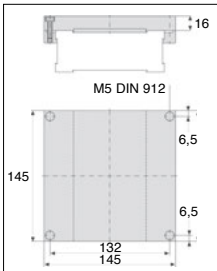
Assembly angle bracket



Turntable DOMI 120-PT



DOMI120-B fastening set



DOMI120-M mounting plate

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Price each
DOMI120-B	Fastening set	37,62 €
DOMI120-M	Mounting plate	136,56 €
DOMI120-LEVIER	Clamp lever	32,92 €
DOMI120-PT	Rotary turntable	588,88 €

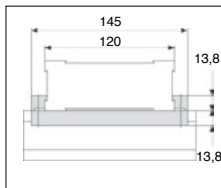
Dimensions in mm



Connecting kits

For Domino 120 adjustable slides **DOMI120**

- **Connecting kits** are used to join two DOMINO adjustable slides.



**Connecting kit
DOMI120-XY**



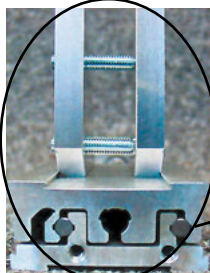
Connecting kit DOMI120-XY



**Connecting kit
DOMI 120-XZ**



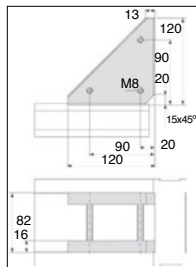
X-Y connecting kit



X-Z connecting kit



Typical application



**Connecting kit
DOMI120-XZ**

DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Type	Price each
DOMI120-XY	Connecting kit X-Y	105,97 €
DOMI120-XZ	Connecting kit X-Y	134,20 €

Dimensions in mm

DOMINO rotary table, Ø55



DOMIMD

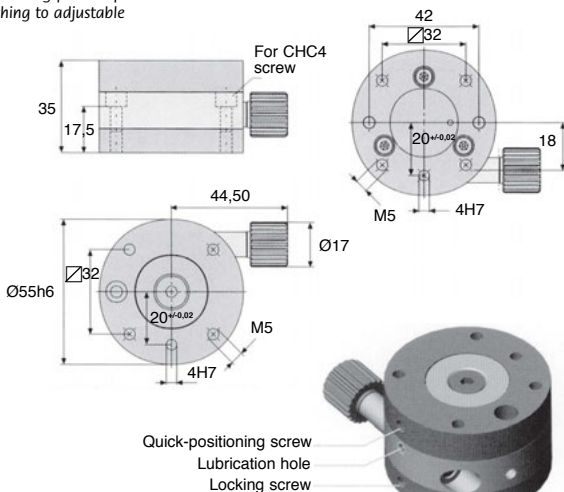
For precise rotary positioning

- **Manual operated rotary table**
- Fast and accurate adjustment
- High position repeatability
- Principle: High-precision worm and wheel
- Fix using CHC4 screws
- Locking torque 10Nm
- Ratio: 55/1

Precise and rapid adjustment

Accessories

- **DOMI-M** mounting plate required when attaching to adjustable slides



DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Rotation range	Max. torque input (Nm)	Max. torque on table (Nm)	Tolerance Concentricity (mm)	Tolerance Flatness (mm)	Weight (kg)	Price each
DOMI-MDV55	0 to + ∞	1,5	5	+/- 0,02	+/- 0,02	0,61	659,55 €

Dimensions in mm



DOMINO rotary table, Ø80

For fine rotary positioning

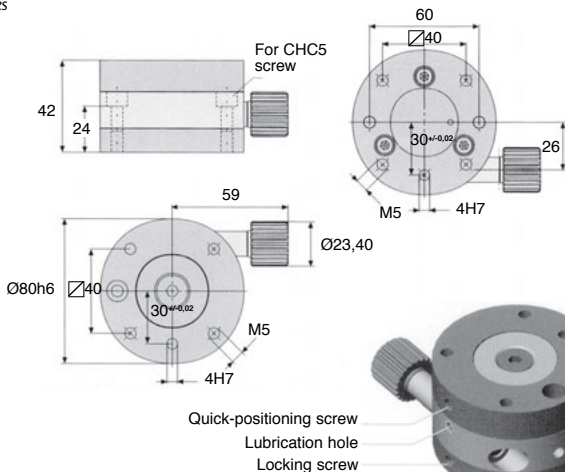
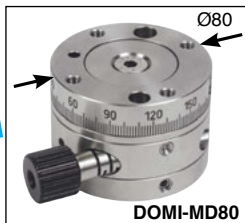
DOMIMD

- Manual operated rotary table
- Fast and accurate adjustment
- High position repeatability
- Principle: High-precision worm and wheel
- Fix using CHC4 screws
- Locking torque 10Nm
- Ratio: 40/1

Precise and rapid adjustment

Accessories

- DOMI-M mounting plate required when attaching to adjustable slides



DISCOUNTS

Qty	1+	2+	6+
Disc.	List	-7%	On request

Part number	Rotation range	Max. torque input (Nm)	Max. torque on table (Nm)	Tolerance Concentricity (mm)	Tolerance Flatness (mm)	Weight (kg)	Price each
DOMI-MDV80	0 to +∞	2,5	5	+/- 0,03	+/- 0,03	1,60	1 566,53 €

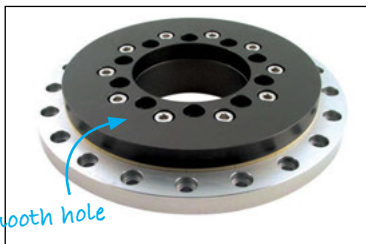
Dimensions in mm



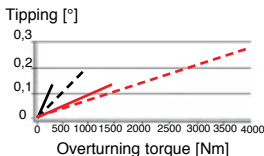
PRT

Advantages

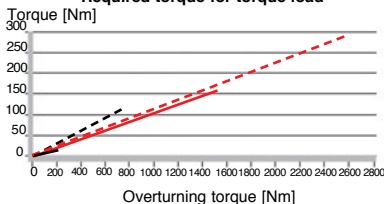
- No maintenance required
- Low coefficient of friction
- Cost effective
- Robust
- Rigid
- Easily installed
- Wear resistant
- Materials:
 Sliding mechanism: iglidur®
 Ring: hard anodised aluminium
 Screws: stainless steel



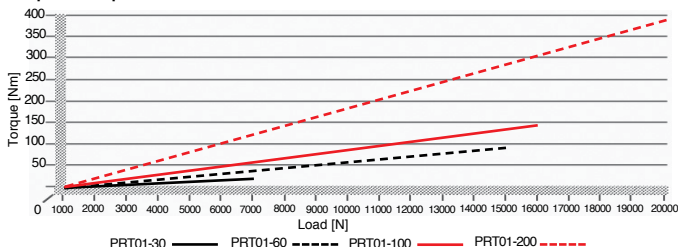
Tipping dependent on overturning torque



Required torque for torque load

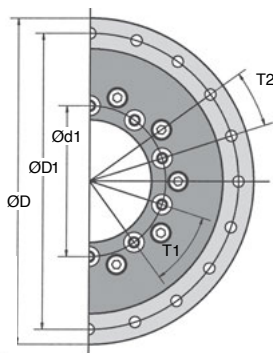
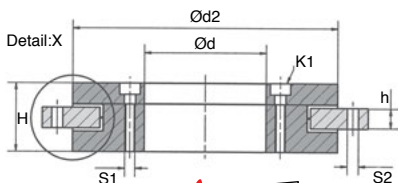
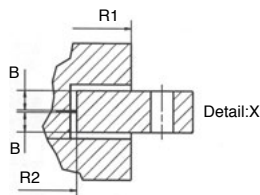
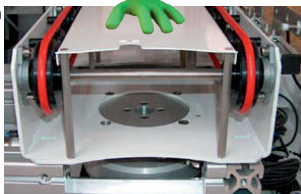
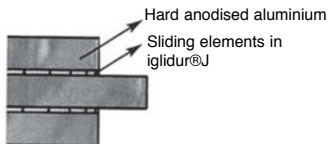


Required torque for eccentric loads



Part number	Weight (kg)	Axial load rating, static (N)	Axial load rating, dynamic (N)	Axial load rating, dynamic (N)	Radial load rating, dynamic (N)	Rotary speed limit, dry (1/min)	Rigidity, axial (N/μm)	Rigidity, radial (N/μm)	Max. permitted Overturning torque (Nm)	R1	R2	B
PRT01-30	0,4	27 000	7 000	5 000	1 500	250	-	-	200	41	29,0	4,5
PRT01-60	1,1	50 000	15 000	10 000	3 000	200	300	65	800	65	51,5	4,5
PRT01-100	1,3	55 000	16 000	16 000	5 000	150	400	65	1 500	80	69,0	5,5
PRT01-200	3,2	100 000	30 000	35 000	10 000	80	500	65	3 800	137	123,0	7,0

Dimensions in mm



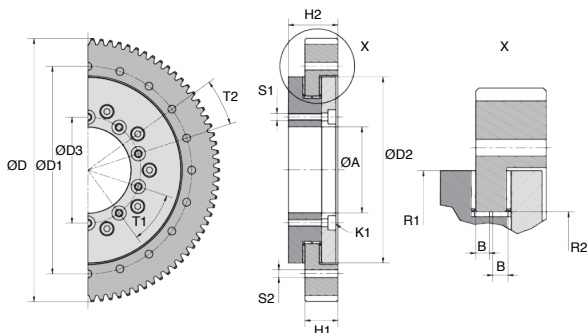
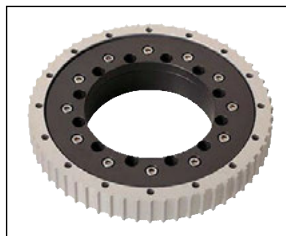
DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	ØD	ØD1	Ød1	Ød	Ød2	H	h	T1	T2	S1	S2	K1 for screw	Price each 1 to 4
PRT01-20	80	70	31	20	60	24	8	3 x 120°	6 x 60°	M4	4,5	DIN 7984 M4	166,83 €
PRT01-30	100	91	42,5	30	82	29	10	8 x 45°	8 x 45,0°	M4	4,5	DIN 7984 M4	184,79 €
PRT01-50	150	135	65	50	120	33	10	8 x 45°	16 x 22,5°	M6	6,6	ISO 4762 M6	255,35 €
PRT01-60	160	145	74,0	60	130	33	10	10 x 36°	20 x 18,0°	M5	5,5	DIN 912 M5	278,61 €
PRT01-100	185	170	112,0	100	160	34	12	12 x 30°	16 x 22,5°	M5	5,5	DIN 912 M5	514,11 €
PRT01-150	250	235	165	150	220	35	12	12 x 30°	16 x 22,5°	M6	5,5	ISO 4762 M5	711,70 €
PRT01-200	300	285	215,0	200	274	38	15	12 x 30°	16 x 22,5°	M6	7,0	DIN 912 M6	917,38 €

Dimensions in mm

- **iglidur® PRT geared slewing ring bearing**
- The interior ring is fixed, the larger external ring supports the load.
- General characteristics:
See **PRT** tables
- Material:
Moving part iglidur® J
Aluminium ring EN AW6061/6060,
hard anodised
Screws: Stainless steel
- 4 gear styles available: Spur gear DIN3967
or belt pulleys; T10, AT10 or HTD8M

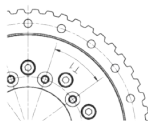


Part number	ØD1	ØD3	ØA	ØD2	H1	T1	T2	S1	S2	K1 for DIN screw 912	R1	R2	B	H2
PRT-01-30-TO	91	42.5	30	82	21	8x45°	8x45°	M4	4.5	M4	41	29.0	4.5	30.4
PRT-01-60-TO	145	74.0	60	130	23	10x36°	20x18°	M5	5.5	M5	65	51.5	4.5	34.5
PRT-01-100-TO	170	112.0	100	160	25	12x30°	16x22.5°	M5	5.5	M5	80	69.0	5.5	36.0
PRT-01-150-TO	235	165.0	150	220	25	12x30°	16x22.5°	M5	5.5	M5	110	96.5	5.5	37.5
PRT-01-200-TO	285	215.0	200	274	30	12x30°	16x22.5°	M6	7.0	M6	137	124.0	7.0	41.5
PRT-01-300-TO	430	320.0	300	410	30	12x30°	16x22.5°	M8	9.0	M8	205	186.5	8.5	46.5

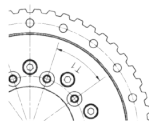
Dimensions in mm



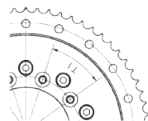
**Spur gear
DIN 3967**



**AT10
pulley**



**T10
pulley**



**HTD8M
pulley**

DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-5%	On request

Part number	Pitch/module	N° of teeth Z	PCD ØP	External diameter ØD	Price each 1 to 4
Tooth profile for Spur gear DIN 3967					
PRT01-30-TO-ST	2	54	108	112	344,37 €
PRT01-60-TO-ST	2	90	180	184	414,66 €
PRT01-100-TO-ST	2	96	192	196	606,60 €
PRT01-150-TO-ST	2	126	252	256	843,05 €
PRT01-200-TO-ST	2	152	304	308	1 060,39 €
PRT01-300-TO-ST	3	152	456	462	2 181,62 €
Tooth profile for AT10 pulley					
PRT01-30-TO-AT10	AT10	34	108,23	108,23	344,37 €
PRT01-60-TO-AT10	AT10	52	165,52	165,52	414,66 €
PRT01-100-TO-AT10	AT10	60	187,30	187,30	606,60 €
PRT01-150-TO-AT10	AT10	80	250,90	250,90	843,05 €
PRT01-200-TO-AT10	AT10	96	301,90	301,90	1 060,39 €
PRT01-300-TO-AT10	AT10	144	352,85	352,85	2 181,62 €
Tooth profile for T10 pulley					
PRT01-30-TO-T10	T10	34	108,23	106,40	344,37 €
PRT01-60-TO-T10	T10	52	165,52	163,80	414,66 €
PRT01-100-TO-T10	T10	60	187,30	189,20	606,60 €
PRT01-150-TO-T10	T10	80	250,90	252,90	843,05 €
PRT01-200-TO-T10	T10	96	301,90	303,90	1 060,39 €
PRT01-300-TO-T10	T10	144	352,85	456,70	2 181,62 €
Tooth profile for HTD8M pulley					
PRT01-30-TO-HTD8M	HTD8M	44	112,05	110,70	344,37 €
PRT01-60-TO-HTD8M	HTD8M	66	168,07	166,70	414,66 €
PRT01-100-TO-HTD8M	HTD8M	74	188,45	187,10	606,60 €
PRT01-150-TO-HTD8M	HTD8M	100	254,65	253,30	843,05 €
PRT01-200-TO-HTD8M	HTD8M	120	305,60	304,30	1 060,39 €
PRT01-300-TO-HTD8M	HTD8M	180	458,36	457,10	2 181,62 €

Dimensions in mm

Actuator guide kit



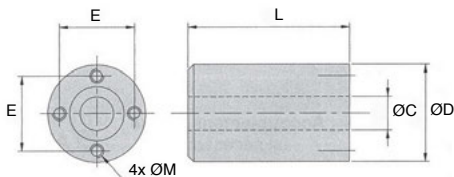
UGPC

Short housing, ball bearings

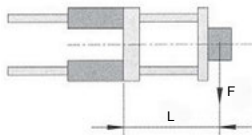
- Allows the assembly of short stroke actuator guides with 1-4 guide shafts
- Equipped with 2 ball bearings with wiper joints
- Material:
 - Body: anodised aluminium
 - Bearing housing: Plastic
 - Joint: Nitrile rubber
- Working temperature: +5°C to +80°C
- Maximum speed 2 m/s



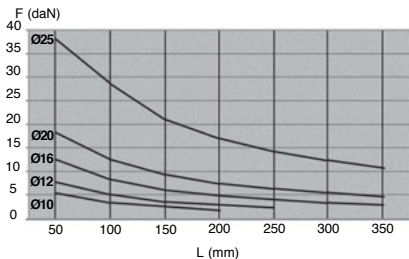
**Excellent price
Quality/ratio**



Load calculations



**Loads given for a system
with 2 guide rods**



**QUICK
DELIVERY**

Dynamic or static load

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	ØC (Ø rod)	ØD	L	E	ØM	Weight (kg)	Price each 1 to 5
UGPC-10A	10	30	59	23	M4	0,10	72,53 €
UGPC-12A	12	35	63	27	M5	0,14	76,51 €
UGPC-16A	16	40	67	32	M5	0,18	87,27 €
UGPC-20A	20	50	75	39	M6	0,31	100,58 €
UGPC-25A	25	55	90	45	M6	0,44	122,36 €

Dimensions in mm



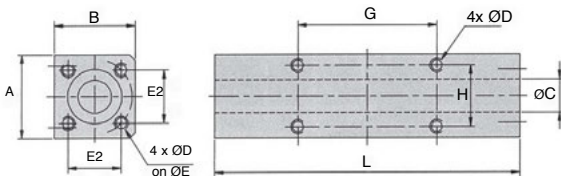
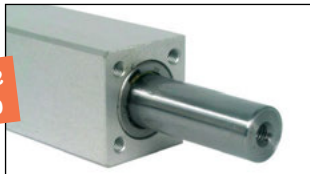
Actuator guide kit

Long housing, ball bearings

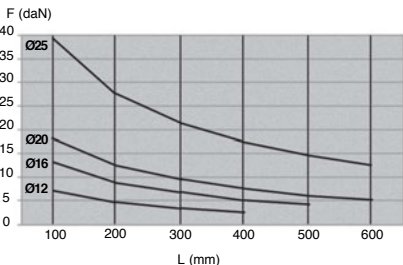
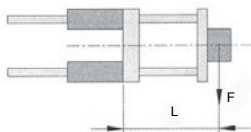
UGPL

- Allows the assembly of short stroke actuator guides with 1-4 guide shafts
- Equipped with 2 ball bearings with wiper joints
- Material:
 - Body: anodised aluminium
 - Bearing housing: Plastic
 - Joint: Nitrile rubber
- Working temperature: +5°C to +80°C
- Maximum speed 2 m/s

**Excellent price
Quality/ratio**



Load calculations



Loads given for a system with 2 guide rods

Dynamic or static load



DISCOUNTS

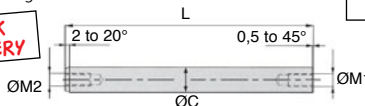
Qty	1+	6+
Disc.	List	On request

Part number	ØC (Ø rod)	L	A	B	ØD	E	E2	G	H	Weight (kg)	Price each 1 to 5
UGPL-12A	12	110	30	29	M5	27	19,1	50	22	0,21	97,90 €
UGPL-16A	16	125	35	34	M5	32	22,6	60	27	0,30	110,55 €
UGPL-20A	20	140	40	39	M6	39	27,6	70	30	0,42	123,96 €
UGPL-25A	25	160	50	49	M6	45	31,8	80	38	0,78	151,21 €

Dimensions in mm

- Allows the assembly of customised length actuator guides with 1-4 guide shafts
- For short or long housings
- Material: Hardened ground steel XC55

**Excellent price
Quality/ratio**



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	ØC (h6)	L (mm)	ØM1	ØM2	Weight (kg)	Price each 1 to 5
UGCG10-127	10	127	M5	M5	0,08	26,18 €
UGCG10-152	10	152	M5	M5	0,09	27,02 €
UGCG10-177	10	177	M5	M5	0,11	27,80 €
UGCG10-227	10	227	M5	M5	0,14	29,41 €
UGCG10-277	10	277	M5	M5	0,17	31,03 €
UGCG10-327	10	327	M5	M5	0,20	32,63 €
UGCG12-164	12	164	M5	M6	0,15	28,80 €
UGCG12-189	12	189	M5	M6	0,17	29,81 €
UGCG12-239	12	239	M5	M6	0,21	31,85 €
UGCG12-299	12	299	M5	M6	0,27	34,31 €
UGCG12-339	12	339	M5	M6	0,30	35,96 €
UGCG12-389	12	389	M5	M6	0,35	38,02 €
UGCG12-459	12	459	M5	M6	0,41	40,86 €
UGCG16-182	16	182	M6	M6	0,29	35,44 €
UGCG16-207	16	207	M6	M6	0,32	36,72 €
UGCG16-257	16	257	M6	M6	0,40	39,27 €
UGCG16-317	16	317	M6	M6	0,50	42,39 €
UGCG16-357	16	357	M6	M6	0,56	44,42 €
UGCG16-407	16	407	M6	M6	0,64	46,98 €
UGCG16-477	16	477	M6	M6	0,75	50,61 €
UGCG16-557	16	557	M6	M6	0,87	54,70 €
UGCG20-232	20	232	M8	M8	0,57	40,71 €
UGCG20-282	20	282	M8	M8	0,69	43,65 €
UGCG20-342	20	342	M8	M8	0,84	47,19 €
UGCG20-382	20	382	M8	M8	0,94	49,56 €
UGCG20-432	20	432	M8	M8	1,06	52,49 €
UGCG20-502	20	502	M8	M8	1,23	56,63 €
UGCG20-582	20	582	M8	M8	1,43	61,31 €
UGCG20-682	20	682	M8	M8	1,67	67,19 €
UGCG25-286	25	286	M10	M10	1,10	53,76 €
UGCG25-336	25	336	M10	M10	1,29	57,27 €
UGCG25-396	25	396	M10	M10	1,52	61,51 €
UGCG25-436	25	436	M10	M10	1,67	64,32 €
UGCG25-486	25	486	M10	M10	1,86	67,81 €
UGCG25-556	25	556	M10	M10	2,13	72,73 €
UGCG25-636	25	636	M10	M10	2,44	78,37 €
UGCG25-736	25	736	M10	M10	2,82	85,39 €

Dimensions in mm



Actuator guide kit

Coupling for threaded cylinder end UGAC

UGAC: Connects the threaded end of the actuator to the piece to be moved

- In line flexible coupling, allows radial movement (E) of the cylinder end
- Material: Zinc plated steel

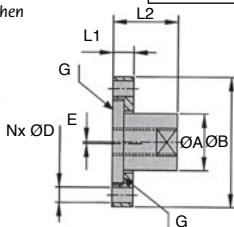
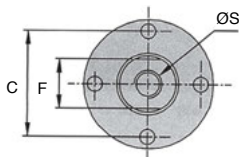
Info.

- Grease the 2 surfaces (marked G) when assembling

Excellent price
Quality/ratio



**QUICK
DELIVERY**



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	ØS	ØA	ØB	C	ØD	L1	L2	E	F	N	Weight (kg)	Price each 1 to 5
UGAC-6	M6	9	26	19	4,5	8	14	0,5	8	2	0,02	20,70 €
UGAC-8	M8	16	38	31	5,5	8	22	1,0	13	2	0,08	24,10 €
UGAC-10F	M10x1,25	16	38	31	5,5	8	22	1,0	13	2	0,08	24,10 €
UGAC-12F	M12x1,25	24	55	45	6,5	9	28	1,0	21	4	0,19	30,33 €
UGAC-16F	M16x1,5	24	55	45	6,5	9	28	1,0	21	4	0,19	30,33 €
UGAC-20F	M20x1,5	29	70	56	8,5	10	35	1,5	24	4	0,31	38,58 €
UGAC-27F	M27x2	39	100	76	13,0	16	43	1,5	32	4	0,90	70,86 €

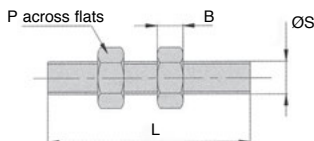
Connection for threaded actuator rod UGET

UGET: For connecting the threaded end of a short stroke actuator to the UGAC coupling

- Material: Blackened steel, zinc plated steel

Info.

- If the actuator does not complete the stroke, check the tightness of the threads



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

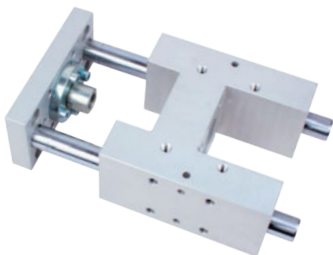
Part number	ØS	L	B	P	Price each 1 to 5
UGET-6	M6	40	4,8	10	3,87 €
UGET-8	M8	60	6,4	13	4,28 €

Dimensions in mm

Articulated coupling for actuator rod

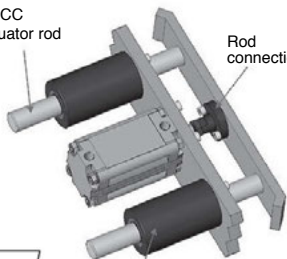
Principal of operation

Axial articulated couplings are used to connect linear actuators to the element to be pulled or pushed without introducing any harmful radial loads that could damage the actuator. Whilst referred to as couplings, they cannot be used to transmit any rotary movement.

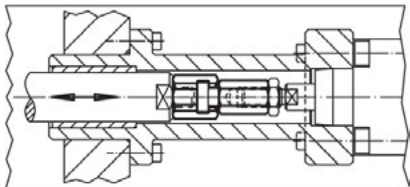


UGCC
actuator rod

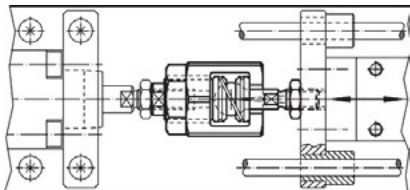
Rod
connection



UGPC and
UGPL bearing



Typical application with CAR-E



Typical application with CAR-R

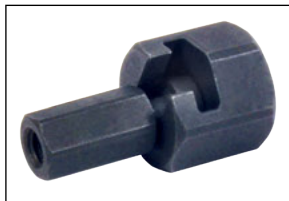
Articulated coupling for actuator rod

With connecting internal thread

CARE

- Coupling with radial offset compensation for multiple applications

- Link between an actuator rod and a linear movement system
- Simple and solid two part coupling using a T shaped slot
- No manual adjustment required
- Materials:
Claw: Steel, tempered and phosphated
Connector: Steel, tempered and phosphated
Counter screw: Black steel (ISO 4035/8675)

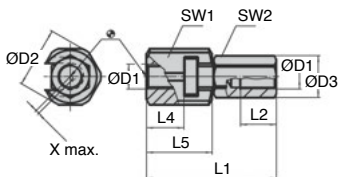


Application

- A quick-fit coupling that can be linked to all commonly used pneumatic and hydraulic actuators via the connecting thread.

Info

- The coupling is not capable of transmitting any torque



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	ØD1	ØD2	ØD3	L1	L2	L4	L5	SW1	SW2	Max radial shift	Max load* (kN)	Weight (g)	Price each 1 to 4
CAR-M6-E	M6	21,0	11,0	37,5	11,0	9,0	18,0	19	10	0,6	2,5	47	39,15 €
CAR-M8-E	M8	26,0	14,4	45,0	13,5	11,5	22,5	24	13	0,7	4,5	91	41,22 €
CAR-M10-E	M10	30,0	19,0	56,2	15,0	16,0	29,0	27	17	0,7	6,5	160	48,56 €
CAR-M12-E	M12	32,5	21,2	66,7	17,5	17,0	34,0	30	19	0,8	10,0	223	54,88 €
CAR-M16-E	M16	39,0	27,0	83,0	22,0	23,0	42,0	36	24	1,0	18,0	401	66,70 €
CAR-M20-E	M20	44,0	34,0	93,5	25,0	23,5	45,5	41	30	1,0	30,0	606	80,75 €
CAR-M10F-E	M10x1,25	30,0	19,0	56,2	15,0	16,0	29,0	27	17	0,7	6,5	159	48,56 €
CAR-M12F-E	M12x1,25	32,5	21,2	66,7	17,5	17,0	34,0	30	19	0,8	10,0	221	54,88 €
CAR-M16F-E	M16x1,5	39,0	27,0	83,0	22,0	23,0	42,0	36	24	1,0	18,0	400	66,70 €
CAR-M20F-E	M20x1,5	44,0	34,0	93,5	25,0	23,5	45,5	41	30	1,0	30,0	601	80,75 €

*Permissible tensile and compression stress - Dimensions in mm

Articulated coupling for actuator rod

CARv

With external connection thread

- Coupling with radial offset compensation for multiple applications
- Link between an actuator rod and a linear movement system
- Simple and solid two part coupling using a T shaped slot
- No manual adjustment required
- Materials:
 - Claw: Steel, tempered and phosphated
 - Connector: Steel, tempered and phosphated
 - Counter screw: Black steel (ISO 4035/8675)

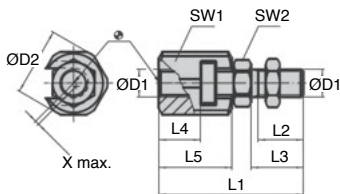


Application

- A quick-fit coupling that can be linked to all commonly used pneumatic and hydraulic actuators via the connecting thread.

Info

- The coupling is not capable of transmitting any torque



DISCOUNTS

Qty	1+	5+	10+
Disc.	List -6%	On request	

Part number	ØD1	ØD2	L1	L2	L3	L4	L5	SW1	SW2	Max radial shift	Max load* (kN)	Weight (g)	Price each 1 to 4
CAR-M6-V	M6	21,0	37,5	11,0	14	9,0	18,0	19	10	0,6	2,5	44	39,15 €
CAR-M8-V	M8	26,0	45,0	13,5	17	11,5	22,5	24	13	0,7	4,5	86	41,22 €
CAR-M10-V	M10	30,0	56,2	16,0	20	16,0	29,0	27	17	0,7	6,5	147	48,56 €
CAR-M12-V	M12	32,5	66,7	21,0	25	17,0	34,0	30	19	0,8	10,0	208	54,88 €
CAR-M16-V	M16	39,0	83,0	25,0	30	23,0	42,0	36	24	1,0	18,0	383	66,70 €
CAR-M20-V	M20	44,0	93,5	29,0	35	23,5	45,5	41	30	1,0	30,0	571	80,75 €
CAR-M10F-V	M10x1,25	30,0	56,2	16,0	20	16,0	29,0	27	17	0,7	6,5	147	48,56 €
CAR-M12F-V	M12x1,25	32,5	66,7	21,0	25	17,0	34,0	30	19	0,8	10,0	207	54,88 €
CAR-M16F-V	M16x1,5	39,0	83,0	25,0	30	23,0	42,0	36	24	1,0	18,0	384	66,70 €
CAR-M20F-V	M20x1,5	44,0	93,5	29,0	35	23,5	45,5	41	30	1,0	30,0	576	80,75 €

*Permissible tensile and compression stress - Dimensions in mm

Articulated coupling for actuator rod, backlash free

With angular and radial compensation **CARR**

- Quick fitting, backlash free coupling with radial offset compensation for multiple applications

- Link between an actuator rod and a linear movement system
- Simple and solid two part coupling using a T shaped slot
- No manual adjustment required
- Materials:

Claw: Steel, tempered and phosphated

Connector: Steel, tempered and phosphated

Counter screw: Black steel (ISO 4035/8675)

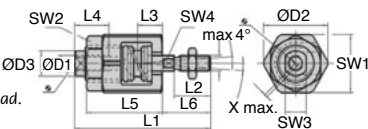


Application

- A quick-fit coupling that can be linked to all commonly used pneumatic and hydraulic actuators via the connecting thread.

Info

- The coupling is not capable of transmitting any torque



DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	ØD1	ØD2	ØD3	L1	L2	L3	L4	L5	L6
CAR-M6-R	M6	24,5	9,6	52	14	9,5	13	29	18,5
CAR-M8-R	M8	30,0	15,0	63	18	11,5	16	33	23,5
CAR-M10-R	M10	44,0	21,0	81	22	16,0	24	43	30,5
CAR-M12-R	M12	44,0	21,0	85	26	16,0	24	43	34,5
CAR-M16-R	M16	60,0	32,0	121	34	26,0	34	62	45,0
CAR-M20-R	M20	60,0	32,0	129	42	26,0	34	62	53,0
CAR-M10F-R	M10x1,25	44,0	21,0	81	22	16,0	24	43	30,5
CAR-M12F-R	M12x1,25	44,0	21,0	85	26	16,0	24	43	34,5
CAR-M16F-R	M16x1,5	60,0	32,0	121	34	26,0	34	62	45,0
CAR-M20F-R	M20x1,5	60,0	32,0	129	42	26,0	34	62	53,0

Part number	SW1	SW2	SW3	SW4	Max radial shift	Max load* (kN)	Weight (g)	Price each 1 to 4
CAR-M6-R	22	19	8	5	0,6	2,5	75	83,15 €
CAR-M8-R	27	24	13	7	0,6	4,5	137	89,69 €
CAR-M10-R	41	36	18	12	0,7	6,5	401	120,70 €
CAR-M12-R	41	36	18	12	0,7	10,0	405	122,18 €
CAR-M16-R	55	46	27	18	1,0	18,0	1127	171,13 €
CAR-M20-R	55	46	27	18	1,0	30,0	1152	172,33 €
CAR-M10F-R	41	36	18	12	0,7	6,5	403	120,70 €
CAR-M12F-R	41	36	18	12	0,7	10,0	406	122,18 €
CAR-M16F-R	55	46	27	18	1,0	18,0	1128	171,13 €
CAR-M20F-R	55	46	27	18	1,0	30,0	1155	172,33 €

* Permissible tensile and compression stress - Dimensions in mm

H Type guide unit



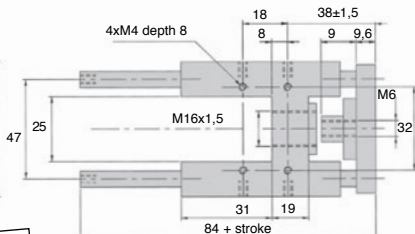
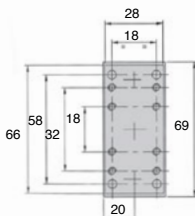
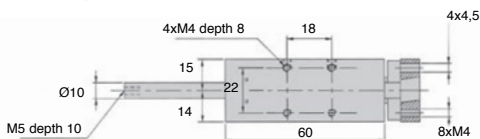
UGH16 For **Ø12 + Ø16** actuators (ISO 6432)

- Guide system for actuator
- Fitted with 4 smooth bronze bearings
- Slides protected by wiper joints
- Actuator coupling available on front face
- Supplied with fixing screw for actuator
- Maintenance free
- Working temperature: +5 to +80 °C
- Maximum speed: 1 m/s
- Maximum loads: See end of section
- Material:

Body + face plate:
anodised aluminium
Couplings + screws:
Zinc plated steel
Guide shafts:
Chromed steel

**Excellent price/
Quality ratio**

**Accurate even over
long strokes**



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Ø Actuator	Ø Guide rod	Weight (kg)	Price each 1 to 5
UGH16-25	25	12 et 16	10	0,43	216,04 €
UGH16-50	50	12 et 16	10	0,46	217,17 €
UGH16-100	100	12 et 16	10	0,52	219,43 €
UGH16-160	160	12 et 16	10	0,59	222,10 €
UGH16-200	200	12 et 16	10	0,64	223,91 €
UGH16-250	250	12 et 16	10	0,70	226,20 €

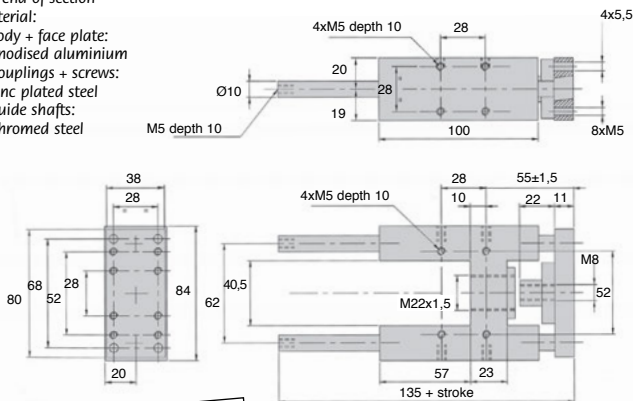
Dimensions in mm

- Guide system for actuator
- Fitted with 4 smooth bronze bearings
- Slides protected by wiper joints
- Actuator coupling available on front face
- Supplied with fixing screw for actuator
- Maintenance free
- Working temperature: +5 to +80 °C
- Maximum speed: 1 m/s
- Maximum loads: See end of section
- Material:

Body + face plate:
anodised aluminium
Couplings + screws:
Zinc plated steel
Guide shafts:
Chromed steel

Excellent price/
Quality ratio

Accurate even over
long strokes



QUICK
DELIVERY

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke	Ø Actuator	Ø Guide rod	Weight (kg)	Price each 1 to 5
UGH20-25	25	20	10	0,93	238,40 €
UGH20-50	50	20	10	0,96	239,54 €
UGH20-100	100	20	10	1,02	241,75 €
UGH20-160	160	20	10	1,09	244,42 €
UGH20-200	200	20	10	1,14	246,30 €
UGH20-250	250	20	10	1,20	248,54 €

Dimensions in mm

H Type guide units



UGH25

For **Ø25** actuators ISO 6432

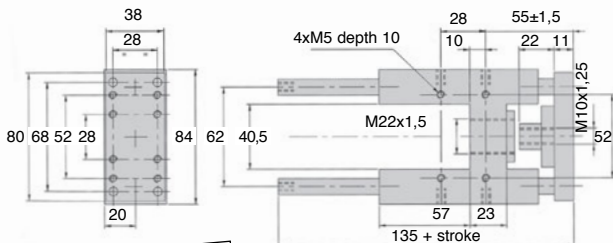
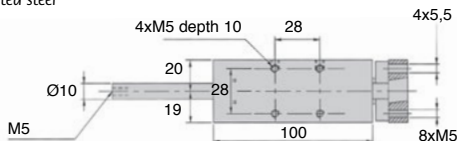
- Guide accessory for standard pneumatic actuators
- Fitted with 4 sintered bronze bearings
- Slides protected by wiper seals
- Actuator coupling supplied
- Maintenance free
- Working temperature: +5°C to +80°C
- Maximum speed: 1 m/s
- Maximum loads : See end of section



Material

- Slide + face plate: anodised aluminium
- Couplings + screws: Zinc plated steel
- Shafts: Chromed steel

Accurate even
for long strokes



DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke (mm)	Actuator Ø (mm)	Guide rod Ø (mm)	Weight (kg)	Price each 1 to 5
UGH25-25	25	25	10	0,93	255,26 €
UGH25-50	50	25	10	0,96	256,40 €
UGH25-100	100	25	10	1,02	258,66 €
UGH25-160	160	25	10	1,09	261,34 €
UGH25-200	200	25	10	1,14	263,17 €
UGH25-250	250	25	10	1,20	265,43 €

Dimensions in mm

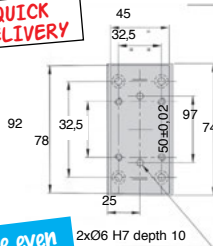
Guide accessory for standard pneumatic actuators

- Fitted with 4 sintered bronze bearings
- Slides protected by wiper joints
- Actuator coupling supplied
- Fixing holes conform to CNOMO standards
- Supplied with 4 fixing screws for cylinder
- Maintenance free
- Working temperature: +5°C to +80°C
- Maximum speed: 1 m/s
- Maximum loads : See end of section

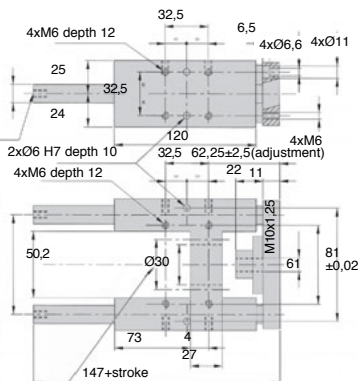


Material

- Body + face plate: anodised aluminium
- Couplings + screws: Zinc plated steel Ø12
- Guide shafts: Chromed steel



Accurate even for long strokes



Attach cylinder using 4 off M6 screws on □32.5

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke (mm)	Actuator Ø (mm)	Guide rod Ø (mm)	Weight (kg)	Price each 1 to 5
UGH32-25	25	32	12	1,34	265,05 €
UGH32-50	50	32	12	1,38	266,26 €
UGH32-100	100	32	12	1,47	268,71 €
UGH32-160	160	32	12	1,57	271,64 €
UGH32-200	200	32	12	1,64	273,61 €
UGH32-250	250	32	12	1,72	276,04 €
UGH32-320	320	32	12	1,84	279,45 €
UGH32-400	400	32	12	1,98	283,38 €
UGH32-500	500	32	12	2,15	288,25 €
UGH32-600	600	32	12	2,32	293,11 €

Dimensions in mm

H Type guide units



UGH40

For **Ø32** actuators
(ISO 15552 VDMA 24562)

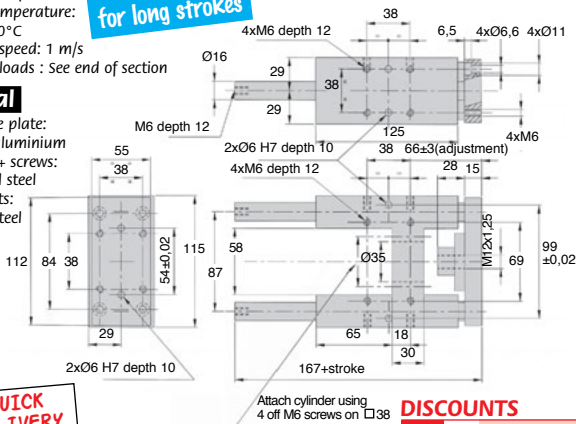
- Guide accessory for standard pneumatic actuators
- Fitted with 4 sintered bronze bearings
- Slides protected by wiper joints
- Actuator coupling supplied
- Fixing holes conform to CNOMO standards
- Supplied with 4 fixing screws for cylinder
- Maintenance free
- Working temperature: +5°C to +80°C
- Maximum speed: 1 m/s
- Maximum loads : See end of section

Accurate even for long strokes



Material

- Body + face plate: anodised aluminium
- Couplings + screws: Zinc plated steel
- Guide shafts: Chromed steel



QUICK DELIVERY

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

Part number	Stroke (mm)	Actuator Ø (mm)	Guide rod Ø (mm)	Weight (kg)	Price each 1 to 5
UGH40-25	25	40	16	2,38	335,67 €
UGH40-50	50	40	16	2,46	337,65 €
UGH40-100	100	40	16	2,61	341,65 €
UGH40-160	160	40	16	2,80	346,44 €
UGH40-200	200	40	16	2,92	349,65 €
UGH40-250	250	40	16	3,08	353,67 €
UGH40-320	320	40	16	3,29	359,26 €
UGH40-400	400	40	16	3,54	365,64 €
UGH40-500	500	40	16	3,85	373,66 €
UGH40-600	600	40	16	4,16	381,67 €

Dimensions in mm

For **Ø32** actuators
(ISO 15552 VDMA 24562)

UGH50

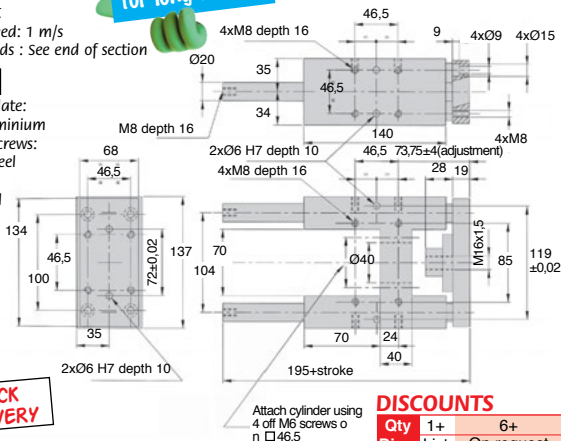
- Guide accessory for standard pneumatic actuators
- Fitted with 4 sintered bronze bearings
- Slides protected by wiper joints
- Actuator coupling supplied
- Fixing holes conform to CNOMO standards
- Supplied with 4 fixing screws for cylinder
- Maintenance free
- Working temperature: +5°C to +80°C
- Maximum speed: 1 m/s
- Maximum loads : See end of section

Accurate even for long strokes



Material

- Body + face plate: anodised aluminium
- Couplings + screws: Zinc plated steel
- Guide shafts: Chromed steel



QUICK DELIVERY

DISCOUNTS

Qty	1+	6+
Disc.	List	On request

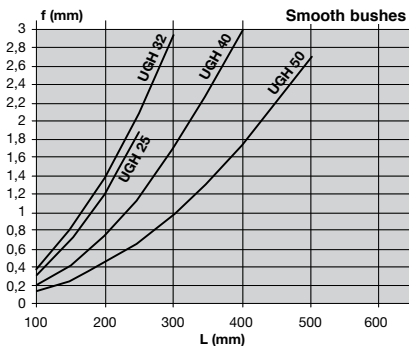
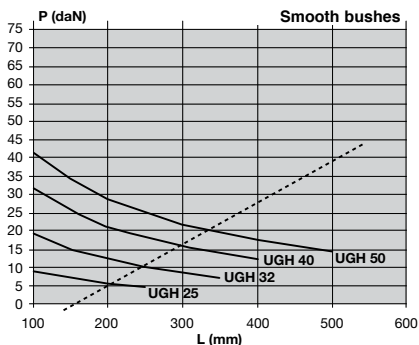
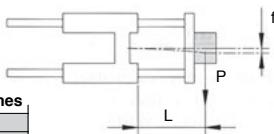
Part number	Stroke (mm)	Actuator Ø (mm)	Guide rod Ø (mm)	Weight (kg)	Price each 1 to 5
UGH50-25	25	50	20	3,82	391,47 €
UGH50-50	50	50	20	3,94	394,15 €
UGH50-100	100	50	20	4,18	399,49 €
UGH50-160	160	50	20	4,47	405,83 €
UGH50-200	200	50	20	4,66	410,09 €
UGH50-250	250	50	20	4,90	415,46 €
UGH50-320	320	50	20	5,24	422,88 €
UGH50-400	400	50	20	5,62	431,39 €
UGH50-500	500	50	20	6,10	442,04 €
UGH50-600	600	50	20	6,58	452,68 €

Dimensions in mm

H Type guide units

Load calculations

For offset dynamic loads or for long stroke applications (above the dotted line in the graph below, if possible use a guide with recirculating ball bearings. If not, divide the maximum load by 4. (Details of guides with ball bearings will be supplied on request)

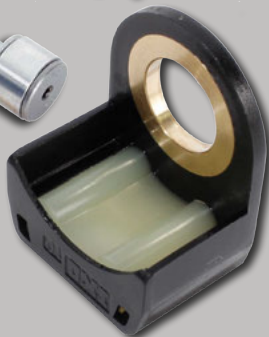
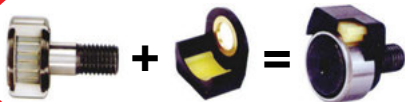


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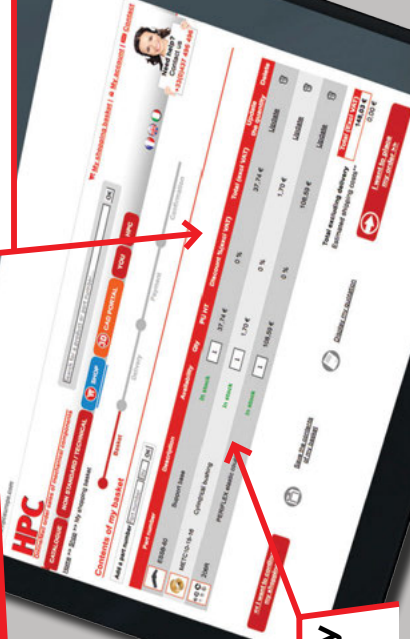
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FOR STANDARD TECHNICAL

CAPTION

FOR STANDARD TECHNICAL

Quotation**HPC**

Please give your quotation a reference:

Quotation sent packages

Reference no:

Date: 24/03/2016
Name client: HPC
VAT no: FR123
Company HPC
Address: 123
Email: hpc@hpc.com
Phone: 0033 2000 000000

Invoice address
HPC CHIMES DE LA SAVOIRE
FR123 00000000
FRANCE

Delivery address
HPC CHIMES DE LA SAVOIRE
FR123 00000000
FRANCE

Company: HPC		89702 SANDOZ LP		FRANCE	
Telephone: 1					
Email: 1					
Address: 1000 BROADWAY					
	Apple ID	Support team	3774.4	0.00%	3774.4
	Hand icon	Cybernetic training	1.00%	0.00%	1.00%
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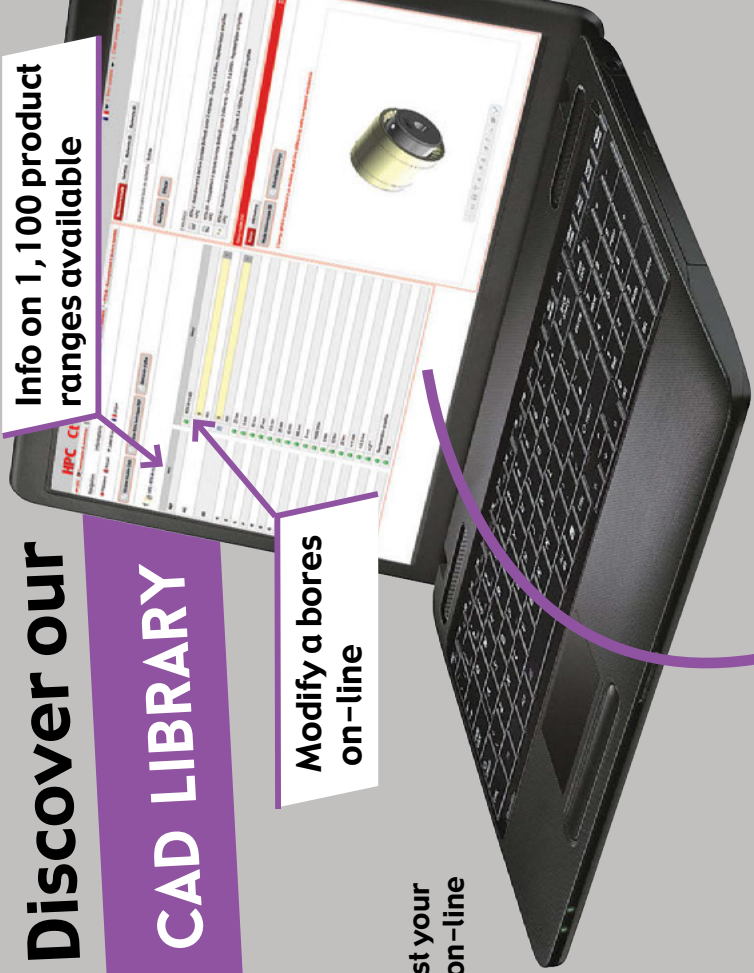
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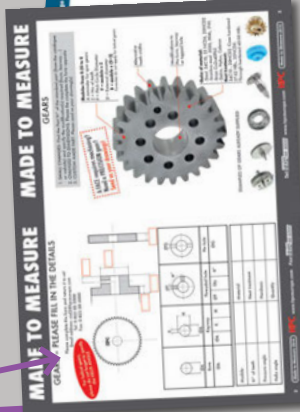
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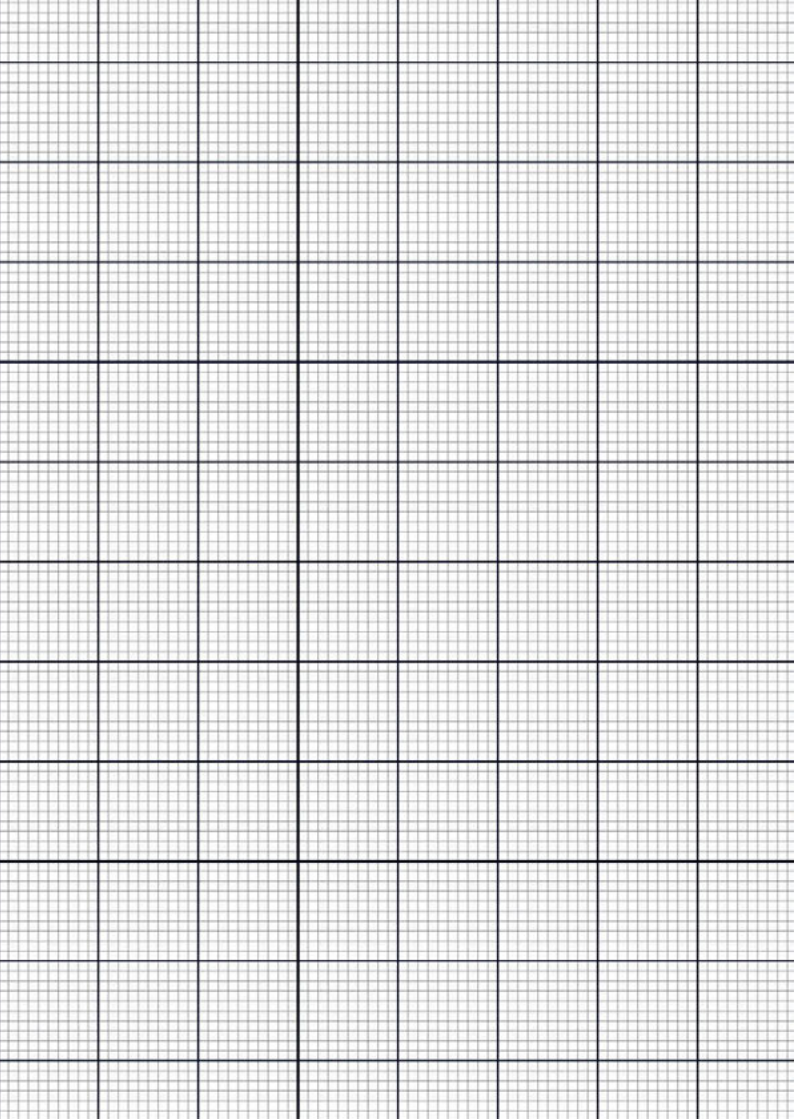
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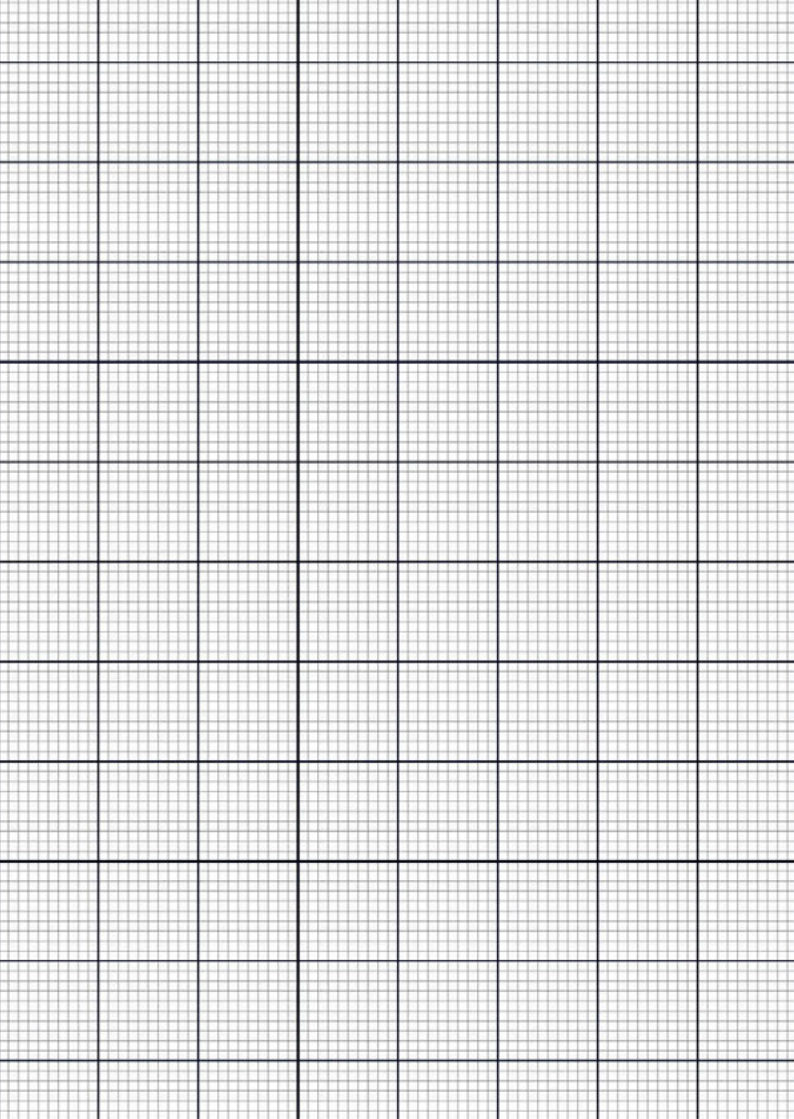
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General terms and conditions of sale

For professional Clients

Note. This translation of the original Engrenages HPC French Terms and Conditions is offered as a guide only. In the case of any dispute, the terms and conditions in the original French document will apply.

1 - APPLICATION AND ENFORCEMENT OF THESE TERMS AND CONDITIONS OF SALE.

The act of a professional Client ("The client") placing an order with Engrenages HPC ("HPC") implies the complete and unreserved agreement by the Client to these general terms and conditions of sale, to the exclusion of any other documents such as catalogues produced by HPC, which are provided for information only and are merely intended as an indication, and regardless of any other information that may be included on the Client's order documents, the Client's terms and conditions of purchase or in any other document transmitted by the Client to HPC.

Any conditions applied by the Client will therefore by default be not accepted by HPC, regardless of when they may be brought to their attention unless they have been explicitly confirmed in writing by HPC.

Only specifications relating to custom-made parts can modify these general terms and conditions but should there be a conflict between these T+Cs and the specifications of the pieces to be manufactured, these T+Cs shall take precedence

The fact that HPC does not immediately apply any of the clauses in these terms and conditions should not be interpreted as meaning that they may not do so at a later date.

2 - ORDERS.

Orders must be placed in writing to HPC by the Client. Any order placed by telephone must be confirmed in writing by the Client within 24 hours. Without such confirmation the order will be cancelled. An order will only become definitive and the sales contract confirmed when it is accepted by HPC, this acceptance taking the form of an order confirmation sent to the Client or the delivery of the products ordered.

In case of any modification HPC may deem necessary to be made to the Client's order and confirmed in the order acknowledgment sent to the Client, the latter is assumed to have accepted the modification unless HPC is advised in writing within 24 hours of receipt.

No order with a value lower than 20 Euros (before tax) will be accepted, this includes orders passed at the trade counter at HPC's offices.

No order with a value lower than 150 Euros (before tax) will be accepted from customers outside of France (EU countries included)

3 - ORDER MODIFICATIONS

Any modification to, or cancellation of an order requested by the Client will not be taken into consideration unless it is received in writing before the goods (for standard products) are despatched or manufacture is started (of custom-made products) and acceptance of the modification has been expressly confirmed by HPC in a fax addressed to the Client within 24 hours of the request. If either of these conditions is not fulfilled, the products ordered initially will be sent and full payment will become due.

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4 - PRICES

All prices mentioned in the catalogue are given excluding any taxes. Value Added Tax (VAT) at the current rate, delivery and packing charges as marked in the catalogue and any insurance to which the Client wishes to subscribe, will be added to these prices. Choice of packaging material will be made by HPC unless the Client has made a prior request.

Unless stated to the contrary, products are sold at the price applicable the day the order is placed. Prices quoted in the catalogue are those applicable on the date of publication marked on the cover of said catalogue. HPC reserves the right to modify these prices at any time.

5 - DELIVERY METHODS AND TIMES.

A - DESPATCH DATES

Items in stock on the date an order is accepted can be made available for collection or despatched within a maximum of 72 hours. For catalogue items not in stock at the time the order is accepted or for special items, an estimated despatch time will be given when the order is accepted.

Should the estimated delivery date given by HPC be exceeded by more than thirty (30) working days and except in the case of force majeure, the Client has the right to cancel the order within thirty (30) working days from the estimated delivery date by sending a registered letter.

For the purposes of the Terms and Conditions, force majeure is considered to cover, but not limited to such events as: war, riot, fire, industrial disputes, natural disasters or failure of their suppliers to deliver.

B - DELIVERY

Unless stated otherwise, delivery is carried out by the collection of the goods by Client from HPC's premises in Dardilly 69570 (France) or by delivery by means of transport chosen by HPC or the Client. Products are sold from Dardilly 69570 France (HPC premises) and are transported at the risk of the Client, the goods remaining the property of HPC until full payment is received as explained in Clause 10.

Unless otherwise agreed, goods are sold "ex-works" and transport is carried out at the Client's cost by a transport method chosen by HPC unless one has been specified by the Client.

In case of loss or damage during transit, it is the Client's responsibility to make any claims or remarks to the transporter in writing by recommended letter or other legally accepted means within 3 days of reception of the products (article L133-3 of the French Commercial Code)

HPC reserves the right to make partial deliveries from an order where necessary.

C - RECEPTION

Without prejudice to any claims for damaged goods made direct to the transport company concerned, any complaints regarding differences between the products delivered and those products ordered or identified on the delivery document, should be sent in writing to HPC within 30 days of receipt of the goods. Claims received outside of this period will not be accepted

It is the Client's responsibility to provide full proof of the existence of problems or faults with the goods supplied. He must give HPC access and means to evaluate and rectify any problems. He will not however attempt to repair any faults either directly or by intervention of a third party.

HPC's guarantee is limited to the free replacement or repair of products or components that they have agreed are faulty.

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For professional Clients

Any product for which the Client required repair or replacement under guarantee must be returned to HPC's service department whose authorisation is required before any replacement can be made. Transport costs will be charged to the Client if a claim for replacement under guarantee is found not to be applicable.

6 - METHODS OF PAYMENT.

Invoices which will be sent at the same time as goods are despatched, are payable as follows:

- On receipt
- 30 days from the end of the month of the date of the invoice or summary invoice. This method of payment is subject to acceptance by HPC and may be withdrawn at any moment without the Client's approval.
- in Euros
- by cheque, credit card, bank transfer, or promissory note, the choice of method of payment cannot change the payment due date. No discounts are made for advance payments.

7 - LATE OR NON PAYMENT

If payment is not made within the period quoted above and after receipt of a formal notice of non payment with payment not being received within 8 days, the Client will be liable for charges equivalent to an interest rate of one and a half times the prevailing legal interest rate on the sum owed as well as any costs associated with the final collection of the unpaid sum. Any claims by the Client do not exempt him from paying an invoice on or before the due date. Non or partial payments will lead to the immediate requirement for the Client to pay all sums outstanding to HPC, even if they are not yet due and whatever the intended method of payment might be.

8 - GARANTEE.

HPC guarantees the Client against faults or hidden defects that appear in the products sold under the conditions stipulated in article 1641 of the French Civil Code.

For products made to a Client's specification, HPC's responsibility is limited to manufacturing items that conform to the specifications supplied but does not guarantee their functionality or suitability for any application the Client may use them for. The Client is solely responsible for the information transmitted to HPC.

For standard products, HPC guarantees their conformity to the specifications quoted in the catalogue except where the original manufacturer has changed the technical specification. Any action to invoke HPC's responsibility and/or the implementation of the guarantee offered by HPC must be made within 30 days of receipt of the goods by the Client. Any claim under the guarantee will be limited to an amount equal to the price paid for the product. In no case can damage caused by a product marketed by HPC be a reason to any claim for damages or repair.

In the event that a product manufactured to a Client's specification infringes the rights of a third party, the Client accepts responsibility for refunding all the costs (procedure, claims, damages, lawyers' expenses, other advisors...) suffered by HPC and will actively cooperate at his own expense in the defence of the latter.

The guarantee will be considered void if products have been modified or interfered with in any way by the Client without prior written agreement from HPC or if the products have been used in any abnormal way or under unsuitable conditions taking into account their characteristics and normal

General terms and conditions of sale

For professional Clients

applicable uses and standards (in particular in the event of use or installation in any aerial or space going craft for which the products are completely unsuited)

9 - RETURNED MATERIAL.

Every returned product must be the subject of a formal written agreement between the HPC and the Client by fax, email or letter.

The choice of transport method will be made by HPC. Any product returned without this prior agreement will be stored on behalf of the Client but will not oblige HPC to provide a refund or replacement.

In any event, no product returned more than 30 days after receipt of the product by the Client will be accepted. The cost of returning a product is always the responsibility of the purchaser and the risk in the product remains with him. Any returned product must be addressed to HPC's registered office.

Once the material has been accepted by HPC for return, a Credit Note for the value of the products, valid for duration of six months will be issued. The condition and quantity of all products returned will be subject to inspection.

In the case of an obvious problem or the non-conformity of the product has been confirmed by HPC, the Client will either receive at the discretion of HPC, either replacement products or a refund, no other charges or penalties will be accepted.

10 - RETENTION OF PROPERTY

The transfer of property in any standard or custom-made part is subject to the full payment of the invoice, payment is understood to take place the day funds reach HPC's bank account.

The above provision does not stop the risk in the product passing to the Client (in particular risk of loss, deterioration, and damage caused by the shipped parts) once the parts have been handed over or dispatched by HPC.

If a Client supplies a product for modification, repair or to be used as a sample, the Client remains the owner of the original product and is responsible for the cost of their transport to and from HPC. The Client also accepts all risks related to their transport, any possible modification by HPC, and any damage that might be caused.

11 - APPLICABLE LAW - COURT OF JURISDICTION.

Sales concluded with HPC are subject to French law.

Any dispute which may arise between the two parties relating to the interpretation and/or execution and/or termination of the contract will be brought before the competent commercial courts of the jurisdiction for the registered office of HPC, even in the event of case of appeal or plurality of defendants.

Photos are non-contractual

All product information is subject to technical modifications where necessary

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ABL	antistatic brush	5 184 → 187
ABM	anti-backlash gear	4 176 → 177
ABS	anti-backlash wormwheel	4 184
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ACLFPA	panel mounting block	5 346
ACM	bonnet fastener	① 155 → 157
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ADSR	backlash free coupling	2 44 → 45
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AHEX	hexagonal shaft	2 230
AK, AKD, AKN	coupling Gerwah	2 54 → 57
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ARTE	NEW ① 268 → 269	
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AT	toothed bar	4 62 → 63
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BAG	locking assembly	2 118 → 119
BAGO NEW	locking ring	2 115
BAG1-TR	leadscrew locking ring	4 309

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BAN	angular clamp	5 22
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BSM	spring plunger	① 60 → 61
BSP	compact precision slide	4 162 → 163
BSPM	miniature leadscrew	4 314 → 315
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Part number	Volume	1	2	3	4	5	Page
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CRM	imperial section rack						200
CRR NEW	rack for tubular structure						262
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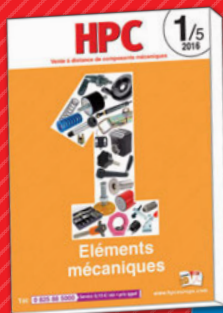
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