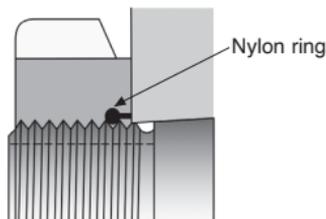


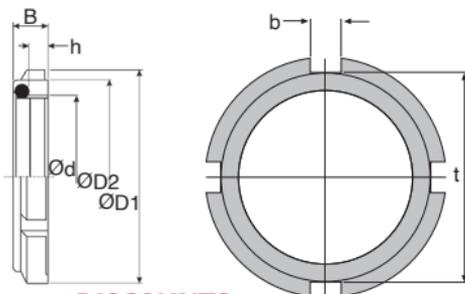
- Self locking nut
- Lock nut with an internal Nylon ring that when in contact with the internal thread produces a restraining force
- Metric thread
- Materials:
 - Steel
 - Integrated Nylon ring

Advantages

- Economical
- Vibration resistant
- Can be re-used



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	Stock*	Price each 1 to 5
EAR10-075	M10x0,75	7,6	4,4	18	14	3	14	✓	2,53 €	
EAR12-100	M12x1	7,6	4,4	21	18	3	18	✓	2,73 €	
EAR15-100	M15x1	8,6	5,2	24	21	4	21	✓	3,15 €	
EAR17-100	M17x1	8,6	5,2	28	24	4	24	✓	3,70 €	
EAR20-100	M20x1	9,6	6,0	32	27	4	27	✓	4,24 €	
EAR25-150	M25x1,5	10,5	6,0	38	33	5	33	✓	5,78 €	
EAR30-150	M30x1,5	10,7	6,6	44	38	5	38	✓	7,63 €	
EAR35-150	M35x1,5	11,3	6,6	50	44	5	44	✓	9,35 €	
EAR40-150	M40x1,5	12,3	7,5	56	50	6	50	✓	12,27 €	
EAR45-150	M45x1,5	12,3	7,5	62	55	6	55	✓	16,55 €	
EAR50-150	M50x1,5	12,9	7,6	68	61	6	61	✓	17,81 €	
EAR55-200	M55x2	13,4	7,6	75	68	7	68	-	26,01 €	
EAR60-200	M60x2	13,4	7,6	80	73	7	73	-	28,37 €	
EAR65-200	M65x2	14,5	8,7	85	78	7	78	-	37,15 €	
EAR70-200	M70x2	14,5	8,7	92	84	8	84	-	39,92 €	
EAR75-200	M75x2	15,5	9,7	98	90	8	90	-	46,53 €	
EAR80-200	M80x2	16,5	10,7	105	97	8	97	-	50,47 €	
EAR85-200	M85x2	17,5	11,7	110	102	8	102	-	58,70 €	
EAR90-200	M90x2	17,7	11,9	120	110	10	110	-	64,92 €	
EAR95-200	M95x2	18,7	12,9	125	116	10	116	-	70,60 €	
EAR100-200	M100x2	19,7	13,9	130	120	10	120	-	76,60 €	

*Depending on availability - Dimensions in mm

Self locking bearing nut



FUss With stainless steel locking washer

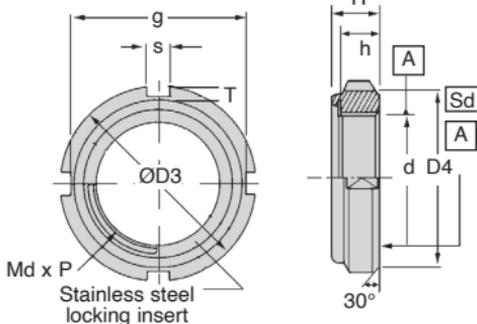
- Specially designed for securing bearings
- Self locking nut
- Thread ISO 965
- Speed 6000 rpm
- Materials:
Nut: low carbon steel
Locking ring: stainless steel

With stainless steel locking insert



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

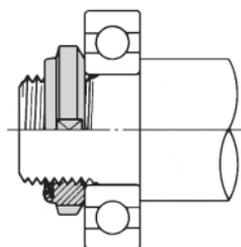
Dimensions in mm

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+
Disc.	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	✓	14,00 €
FU01SS	2,00	3 ± 0,10	4	5,40 ± 0,30	0,05	✓	16,85 €
FU02SS	2,00	4 ± 0,20	5	6,50 ± 0,50	0,05	✓	16,85 €
FU03SS	2,00	4 ± 0,20	5	6,40 ± 0,50	0,05	✓	19,64 €
FU04SS	2,00	4 ± 0,20	6	7,70 ± 0,50	0,05	✓	22,45 €
FU05SS	2,00	5 ± 0,20	7	9,10 ± 0,50	0,05	✓	25,94 €
FU06SS	2,00	5 ± 0,20	7	9,10 ± 0,80	0,05	✓	28,10 €
FU07SS	2,00	5 ± 0,20	8	10,20 ± 0,80	0,05	✓	33,74 €
FU08SS	2,50	6 ± 0,20	9	11,20 ± 0,80	0,05	✓	39,38 €
FU09SS	2,50	6 ± 0,20	10	12,50 ± 1,00	0,05	✓	45,01 €
FU10SS	2,50	6 ± 0,20	11	13,50 ± 1,00	0,05	✓	53,45 €
FU11SS	3,00	7 ± 0,20	11	13,50 ± 1,00	0,07	-	59,12 €
FU12SS	3,00	7 ± 0,20	11	13,50 ± 1,00	0,07	✓	61,97 €
FU13SS	3,00	7 ± 0,20	12	15,00 ± 1,50	0,07	-	92,96 €
FU14SS	3,50	8 ± 0,20	12	15,00 ± 1,50	0,07	-	107,04 €
FU15SS	3,50	8 ± 0,20	13	15,80 ± 1,50	0,07	-	118,33 €
FU16SS	3,50	8 ± 0,20	15	18,60 ± 1,50	0,07	-	140,86 €
FU17SS	3,50	8 ± 0,20	16	19,20 ± 1,50	0,07	-	169,08 €
FU18SS	4,00	10 ± 0,30	16	20,30 ± 1,50	0,07	-	208,54 €
FU19SS	4,00	10 ± 0,30	17	21,30 ± 1,50	0,07	-	214,21 €
FU20SS	4,00	10 ± 0,30	18	22,30 ± 1,50	0,07	-	242,40 €

*Depending on availability - Dimensions in mm

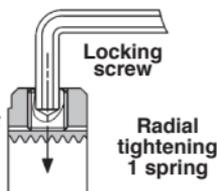
Precision locknut



LR Precise adjustment - Radial locking

- 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

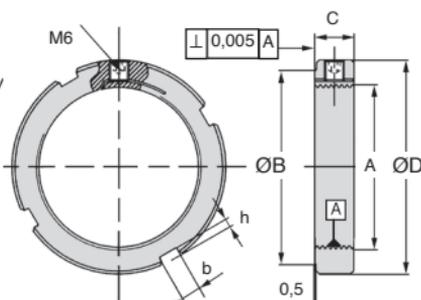
- Ground back face
- Blackened screws



Captive

Uses

- The LR nut can be used anywhere radial locking is possible.
- The radial effort produced by tightening the grub screw 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 grub screws:
 - M6 screw torque 8Nm
 - M8 screw torque 18Nm
 - M10 screw torque 36Nm

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-1	12x100	24	19	12	4 x 2	M6	23	28500	0,030	-	74,32 €
LR-2	14x100	26	21	12	4 x 2	M6	26	33500	0,035	✓	80,40 €
LR-3	15x100	30	25	12	4 x 2	M6	29	40500	0,045	✓	99,57 €
LR-4	17x100	32	27	12	4 x 2	M6	32	46100	0,055	-	100,35 €
LR-5	18x100	32	27	12	4 x 2	M6	37	49000	0,550	✓	95,24 €
LR-6	20x100	35	30	12	4 x 2	M6	42	54600	0,060	✓	101,04 €
LR-7	22x150	35	30	12	4 x 2	M6	47	56600	0,060	-	93,30 €
LR-8	25x150	40	35	12	5 x 2	M6	53	67100	0,070	✓	103,74 €
LR-9	30x150	45	40	12	5 x 2	M6	59	81100	0,085	✓	104,50 €
LR-10	32x150	46	41	12	5 x 2	M6	65	92900	0,090	-	103,18 €
LR-11	35x150	50	45	12	5 x 2	M6	75	101900	0,095	✓	110,00 €
LR-12	38x150	52	47	12	5 x 2	M6	83	98000	0,100	-	111,52 €
LR-13	40x150	55	49	12	6 x 2,5	M6	94	104000	0,100	✓	132,58 €
LR-14	42x150	56	50	12	6 x 2,5	M6	105	109300	0,110	✓	132,30 €
LR-15	45x150	60	54	12	6 x 2,5	M6	118	119200	0,120	-	129,74 €
LR-16	50x150	65	59	12	6 x 2,5	M6	132	134900	0,130	✓	132,03 €
LR-17	52x150	67	61	12	6 x 2,5	M6	147	140400	0,130	-	135,07 €

*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...)

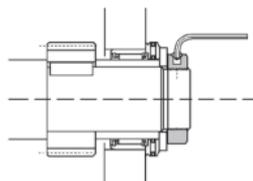
Assembly

- 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

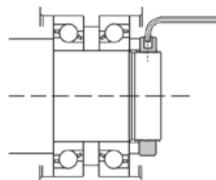
Info.

- 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	-	144,16 €
LR-19	60x200	80	73	15	7x3,0	M8	532	184600	0,25	-	162,20 €
LR-20	65x200	85	78	15	7x3,0	M8	560	203500	0,27	-	153,27 €
LR-21	70x200	90	82	15	8x3,5	M8	587	219500	0,28	-	159,41 €
LR-22	75x200	95	87	15	8x3,5	M8	615	237000	0,30	-	168,50 €
LR-23	80x200	105	97	15	8x3,5	M8	650	255400	0,42	-	173,05 €
LR-24	85x200	110	102	15	8x3,5	M8	675	273300	0,44	-	175,36 €
LR-25	90x200	115	106	15	10x4,0	M8	713	292300	0,46	-	184,49 €
LR-26	95x200	120	111	15	10x4,0	M8	750	308800	0,49	-	185,22 €
LR-27	100x200	125	116	15	10x4,0	M8	790	325300	0,51	-	207,23 €
LR-28	105x200	130	119	15	12x5,0	M8	830	341700	0,52	-	211,04 €
LR-29	110x200	135	124	15	12x5,0	M8	870	358200	0,55	-	216,37 €
LR-30	115x200	140	129	15	12x5,0	M8	930	377000	0,57	-	273,97 €
LR-31	120x200	145	134	15	12x5,0	M8	960	394000	0,59	-	280,91 €
LR-33	130x200	155	144	15	12x5,0	M8	>2000	434400	0,65	-	324,26 €
LR-34	135x200	165	152	20	14x6,0	M10	>2000	677000	1,10	-	391,07 €
LR-35	140x200	170	157	20	14x6,0	M10	>2000	704400	1,13	-	404,04 €
LR-37	150x200	180	167	20	14x6,0	M10	>2000	757400	1,20	-	455,61 €

* Depending of availability - Dimensions in mm

Adjustable clamping nuts

LF Precise adjustment - Front locking

Material : steel (with high elastic limit)

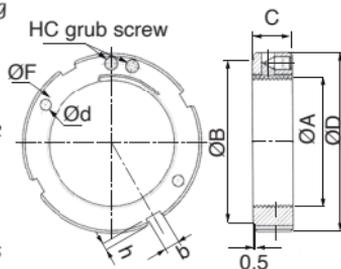
- Notches : 4 at 90° spacing
- Screw(s) : Flat headed Hc (class 14.9)
- Standard finish :
- Right handed threads (class 4H) . Ground working face
- Engraved on reverse face . Blackened finish



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.

Captive



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		ØB	C	b x h	ØF	Ød	Screw HC*	Unlocking torque (Nm)	Max axial load (N)	Weight (kg)	Price each 1 to 5
	ØA	ØD										
LF-1	12 x 1,0	28	22	15	4 x 2,0	20	3,2	1 screw M4	4	36200	0,050	97,56 €
LF-2	14 x 1,0	30	25	15	4 x 2,0	22	3,2		6	42600	0,055	105,77 €
LF-3	15 x 1,0	31	26	15	4 x 2,0	23	3,2	2 screw M4	6	51500	0,060	114,06 €
LF-4	17 x 1,0	33	28	15	4 x 2,0	26	3,2		7	58700	0,065	114,82 €
LF-5	18 x 1,0	34	29	15	4 x 2,0	26	3,2	2 screw M4	9	55400	0,070	124,57 €
LF-6	20 x 1,0	37	32	15	4 x 2,0	29	3,2		10	61800	0,080	115,57 €
LF-7	22 x 1,5	39	34	15	4 x 2,0	30	3,2	2 screw M5	12	64700	0,090	116,33 €
LF-8	25 x 1,5	43	38	15	5 x 2,0	33	4,2		15	80200	0,100	117,04 €
LF-9	30 x 1,5	48	43	15	5 x 2,0	39	4,2	2 screw M5	20	100600	0,120	117,80 €
LF-10	32 x 1,5	50	45	15	5 x 2,0	41	4,2		24	113500	0,125	125,34 €
LF-11	35 x 1,5	53	48	15	5 x 2,0	44	4,2	2 screw M5	29	118500	0,140	132,80 €
LF-12	38 x 1,5	56	51	15	5 x 2,0	47	4,2		35	124500	0,145	134,36 €
LF-13	40 x 1,5	58	52	15	6 x 2,5	50	4,2	2 screw M5	41	127100	0,150	143,39 €
LF-14	42 x 1,5	62	56	15	6 x 2,5	52	4,2		45	131300	0,175	150,85 €
LF-15	45 x 1,5	65	59	15	6 x 2,5	55	4,2	2 screw M5	55	143400	0,185	152,35 €
LF-16	50 x 1,5	69	63	15	6 x 2,5	59	4,2		70	165200	0,190	156,11 €

Dimensions in mm

Advantages

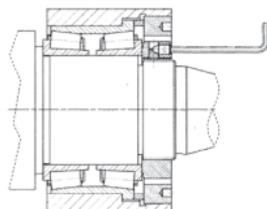
- An accurate and strong solution for securing bearings in their axial position after installation.
- Locking washers are no longer required thus reducing the risk of seal damage.
- The rings can be clamped and locked in place with no loss of axial precision.
- All threading and contact face machining 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 hook 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

DISCOUNTS

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

Part number	Thread		ØD	ØB	C	b x h	ØF	Ød	Screw	HC*	Unlocking torque (Nm)	Max axial load (N)	Weight (kg)	Price each 1 to 5
	ØA	ØE												
LF-18	55 x 2	75	68	15	7 x 3,0	65	4,2	2 screw M5		105	241300	0,23	170,41 €	
LF-19	60 x 2	80	73	20	7 x 3,0	72	4,2			130	263800	0,33	173,41 €	
LF-20	65 x 2	85	78	20	7 x 3,0	76	4,2			160	291000	0,35	181,69 €	
LF-21	70 x 2	90	82	20	8 x 3,5	81	4,2			200	313900	0,36	187,12 €	
LF-22	75 x 2	95	87	20	8 x 3,5	86	4,2			220	347800	0,39	197,60 €	
LF-23	80 x 2	105	97	20	8 x 3,5	93	5,2			240	371300	0,55	204,36 €	
LF-24	85 x 2	110	102	20	8 x 3,5	98	5,2			250	394900	0,57	207,34 €	
LF-25	90 x 2	115	106	20	10 x 4	104	5,2			265	422500	0,60	214,80 €	
LF-26	95 x 2	120	111	20	10 x 4	107	5,2			295	446300	0,63	220,77 €	
LF-27	100 x 2	125	116	20	10 x 4	114	5,2			325	470200	0,65	244,72 €	
LF-28	105 x 2	130	119	20	12 x 5	118	5,2			365	494000	0,68	246,25 €	
LF-29	110 x 2	135	124	20	12 x 5	122	5,2			405	517800	0,72	257,50 €	
LF-30	115 x 2	140	129	20	12 x 5	127	5,2			450	545000	0,75	216,01 €	
LF-31	120 x 2	145	134	20	12 x 5	132	5,2			500	574300	0,78	340,56 €	
LF-33	130 x 2	155	144	20	12 x 5	142	5,2	635	626600	0,85	392,26 €			
LF-35	140 x 2	170	157	22	14 x 6	155	6,2	1065	761900	1,20	532,00 €			
LF-37	150 x 2	180	167	22	14 x 6	165	6,2	1065	821700	1,30	616,19 €			

Dimensions in mm