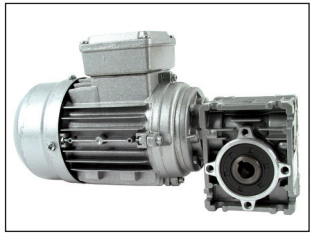
Torque up to 22Nm

CHM30 -MOT

- ***Three phase electric motor gearbox assembly***
- *Comprises 1* ***CHM30*** *gearbox and 1* ***CHT*** *motor (see motor section)*
- *4 pole motor*
- *B14 mounting flange*
- *Motor speed 1,400 rpm*
- *Material:*
  Gearbox housing: aluminium

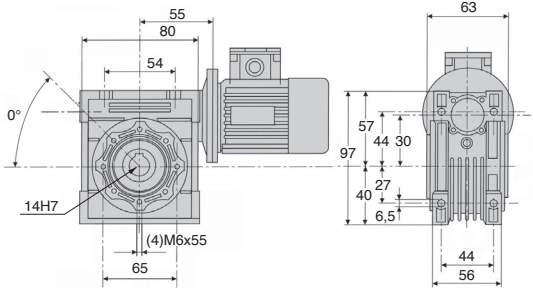


Wiring

- *Wiring diagrams N°3 and N°5 on technical information pages* ***(tome 2 p.314)***

Accessories

- *Output shaft*
  CHM30-X,
  CHM30-DX
  (tome 2 p.313)
- *Reaction arm*
  CHM30-BR
  (tome 2 p.312)



DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-15%	On request

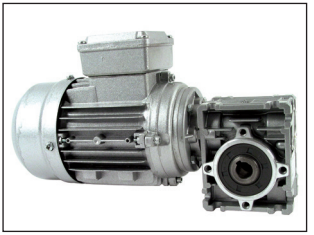
Part number	Ratio	Motor	Motor power (kW)	Speed under load (rpm)	Nominal Torque (Nm)	Service factor	Stock*	Price each
CHM30-7-63C4	7,5:1	63C4	0,22	186,7	9	2,1	✔	255,00 €
CHM30-10-63C4	10:1	63C4	0,22	140,0	11	1,6	✔	255,00 €
CHM30-15-63C4	15:1	63C4	0,22	93,3	16	1,0	✔	254,45 €
CHM30-20-63C4	20:1	63C4	0,22	70,0	20	0,9	✔	254,45 €
CHM30-25-63B4	25:1	63B4	0,18	56,0	20	1,0	✔	249,04 €
CHM30-30-63B4	30:1	63B4	0,18	46,7	22	0,9	✔	249,04 €
CHM30-40-63B4	40:1	63B4	0,18	35,0	21	0,8	✔	249,04 €
CHM30-50-63B4	50:1	63B4	0,18	28,0	19	0,8	✔	249,04 €
CHM30-60-56B4	60:1	56B4	0,09	23,3	18	0,9	✔	239,72 €
CHM30-80-56B4	80:1	56B4	0,09	17,5	13	0,9	✔	239,72 €

**Depending on availability - Dimensions in mm*

CHM40 -MOT

Torque up to 52Nm

- ***Three phase electric motor gearbox assembly***
- *Comprises 1* ***CHM40*** *gearbox and* ***1 CHT*** *motor (see motor section)*
- *4 pole motor*
- *B14 mounting flange*
- *Motor speed 1,400 rpm*
- *Material:*
  Gearbox housing: aluminium

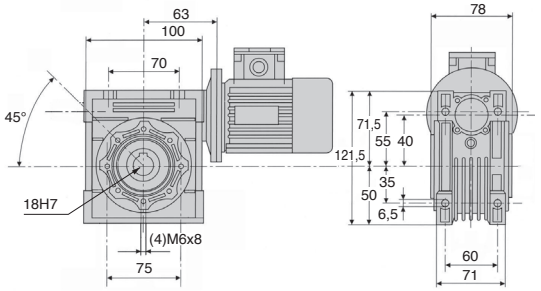


Wiring

- *Wiring diagrams N°3 and N°5 on technical* ***(tome 2 p.314)***

Accessories

- *Output shaft* ***CHM40-X, CHM40-DX (tome 2 p.313)***
- *Reaction arm* ***CHM40-BR (tome 2 p.312)***



DISCOUNTS

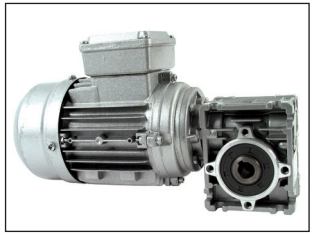
Qty	1+	2+	4+
Disc.	List	-15%	On request

Part number	Ratio	Motor	Motor power (kW)	Speed under load (rpm)	Nominal Torque (Nm)	Service factor	Stock*	Price each
CHM40-7-71C4	7,5:1	71C4	0,55	186,7	22	1,6	✔	319,39 €
CHM40-10-71C4	10:1	71C4	0,55	140,0	30	1,4	✔	319,39 €
CHM40-15-71C4	15:1	71C4	0,55	93,3	44	0,9	✔	319,39 €
CHM40-20-71C4	20:1	71C4	0,55	70,0	38	1,0	-	319,39 €
CHM40-25-71B4	25:1	71B4	0,37	56,0	45	0,9	✔	300,26 €
CHM40-30-71B4	30:1	71B4	0,37	46,7	52	0,8	✔	300,26 €
CHM40-40-71A4	40:1	71A4	0,25	35,0	43	0,9	✔	285,70 €
CHM40-50-63C4	50:1	63C4	0,22	28,0	44	0,9	✔	282,01 €
CHM40-60-63B4	60:1	63B4	0,18	23,3	42	0,8	-	276,07 €
CHM40-80-63B4	80:1	63B4	0,18	17,5	36	0,8	✔	276,07 €
CHM40-100-63B4	100:1	63B4	0,18	14,0	35	0,8	✔	276,07 €

**Depending on availability - Dimensions in mm*

Torque up to 87Nm CHM50 -MOT

- ***Three phase electric motor gearbox assembly***
- *Comprises 1* ***CHM50*** *gearbox and 1* ***CHT*** *motor (see motor section)*
- *4 pole motor*
- *B14 mounting flange*
- *Motor speed: 1,400 rpm*
- *Material:*
  Gearbox housing: aluminium

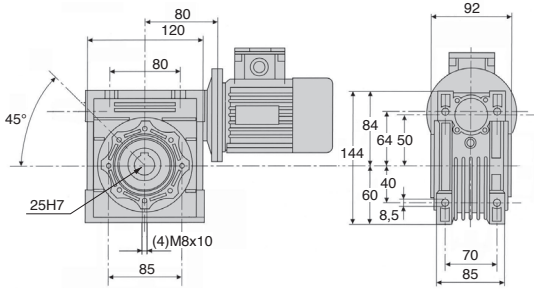


Wiring

- *Wiring diagrams N°3 and N°5 on technical information pages* ***(tome 2 p.314)***

Accessories

- *Output shaft*
  CHM50-X,
  CHM50-DX
  (tome 2 p.313)
- *Reaction arm*
  CHM50-BR
  (tome 2 p.312)



DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-15%	On request

* without CHM50-100-63B4 mounting flange B5

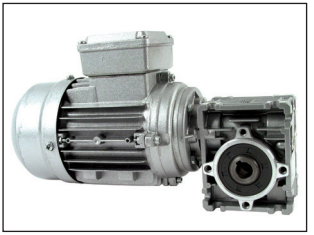
Part number	Ratio	Motor	Motor power (kW)	Speed under load (rpm)	Nominal Torque (Nm)	Service factor	Price each
CHM50-7-80B4	7,5:1	80B4	0,75	186,7	33,3	2,0	389,74 €
CHM50-10-80B4	10:1	80B4	0,75	140,0	43,9	1,6	389,74 €
CHM50-15-80B4	15:1	80B4	0,75	93,3	62,6	1,2	389,74 €
CHM50-20-80B4	20:1	80B4	0,75	70,0	80,0	0,9	389,74 €
CHM50-25-80A4	25:1	80A4	0,55	56,0	70,0	1,0	372,70 €
CHM50-30-80A4	30:1	80A4	0,55	46,7	80,0	1,0	372,70 €
CHM50-40-71B4	40:1	71B4	0,37	35,0	67,0	1,1	345,86 €
CHM50-50-71B4	50:1	71B4	0,37	28,0	78,0	0,9	345,86 €
CHM50-60-71B4	60:1	71B4	0,37	23,3	87,0	0,8	345,86 €
CHM50-80-71A4	80:1	71A4	0,25	17,5	70,0	0,9	331,28 €
CHM50-100-63B4*	100:1	63B4	0,18	14,0	59,0	0,9	321,66 €

Dimensions in mm

CHM63-MOT

Torque up to 165Nm

- ***Three phase electric motor gearbox assembly***
- *Comprises 1* ***CHM63*** *gearbox and 1* ***CHT*** *motor (see motor section)*
- *4 pole motor*
- *B14 mounting flange*
- *Motor speed 1,400 rpm*
- *Material:*
  Gearbox housing: aluminium

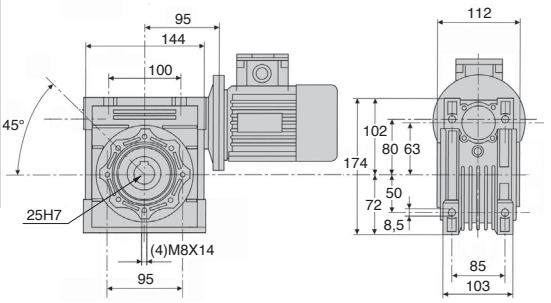


Wiring

- *Wiring diagrams N°3 and N°5 on technical information pages* ***(tome 2 p.314)***

Accessories

- *Servo amplifier* ***TEL-ATV11/370***
- *Output shaft* ***CHM63-X, CHM63-DX (tome 2 p.313)***
- *Reaction arm* ***CHM63-BR (tome 2 p.312- p.314)***



DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-15%	On request

Part number	Ratio	Motor	Motor power (kW)	Speed under load (rpm)	Nominal Torque (Nm)	Service factor	Price each
CHM63-7-90L4	7,5:1	90L4	1,50	186,7	67,4	1,8	538,97 €
CHM63-10-90L4	10:1	90L4	1,50	140,0	88,6	1,4	538,97 €
CHM63-15-90L4	15:1	90L4	1,50	93,3	126,0	1,1	538,97 €
CHM63-20-90L4	20:1	90L4	1,50	70,0	164,0	0,8	538,97 €
CHM63-25-90S4	25:1	90S4	1,10	56,0	145,0	0,9	509,35 €
CHM63-30-90S4	30:1	90S4	1,10	46,7	165,0	1,0	509,35 €
CHM63-40-80B4	40:1	80B4	0,75	35,0	143,0	1,0	474,43 €
CHM63-50-80A4	50:1	80A4	0,55	28,0	122,0	1,1	457,42 €
CHM63-60-80A4	60:1	80A4	0,55	23,3	138,0	0,9	457,42 €
CHM63-80-71B4	80:1	71B4	0,37	17,5	114,0	1,1	430,60 €
CHM63-100-71B4	100:1	71B4	0,37	14,0	127,0	0,9	430,60 €

Dimensions in mm

Comparison of the two technologies (AC)

Synchronous and Asynchronous

The range of AC motors uses permanent magnet **synchronous** and **asynchronous** single-phase or three-phase technologies.
AC motors are often used in fixed-speed, fixed-torque drives powered directly from the network tension. They offer the long life required for most applications.

Synchronous motors

Synchronous motors enable rotate at a fixed and precise speed, independent of load and voltage variations.

General characteristics

- The rotor consists of a magnet or electromagnet.
- The motor rotates at the same speed as the magnetic field. The rotor is said to rotate at synchronous speed.

Benefits

- Better efficiency than asynchronous motors.
- Fixed speed, whatever the load.

Disadvantage

- Stalls when maximum torque is exceeded

Asynchronous motors

Asynchronous motors are characterised by a rotation speed that depends on the load applied to the shaft. The speed is linked to the frequency of the singlephase or three-phase supply network (230/400V-50Hz).

General characteristics

- The rotor is made up of rings that form a squirrel cage.
- The shaft speed and the magnetic field are out of phase. The rotor rotates more slowly and never reaches synchronous speed.

Benefits

- Highly resistant.
- Easy to maintain.
- Cheaper and smaller than synchronous motors.
- These are the motors most commonly used in industry.

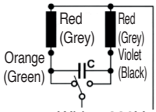
Disadvantage

- Lower efficiency than synchronous motors.

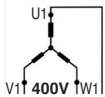
Service life

- It depends on the application and is limited by the life of the motor bearings

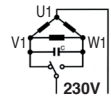
Wiring diagram



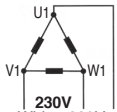
Wiring 230V
1 phase
Diagram 2



Wiring 400V
3 phases
Diagram 3



Wiring 230V
1 phase
Diagram 4



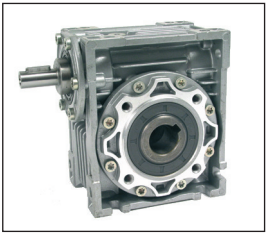
Wiring 230V
3 phases
Diagram 5

Worm and wheel gearbox

CHMR30

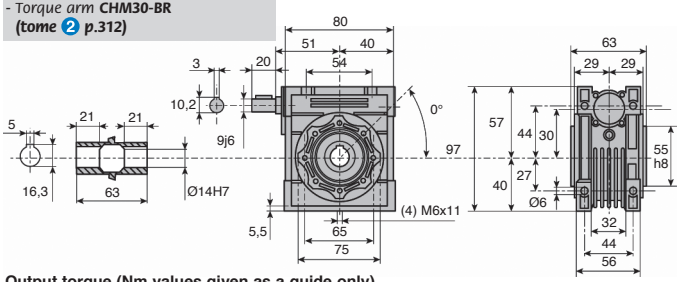
Torque up to 28 Nm

- ***Ratios from 7.5:1 to 80:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR30*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: hardened steel*
  - *Wheel: bronze (cast iron hub)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 1.2 kg*



Accessories

- *Output shaft* ***CHM30-X*** *or* ***CHM30-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM30-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1
INPUT SPEED (rpm)	2800	12	12	12	11	15	14	13	12	11	10
	1400	17	17	17	17	20	19	17	16	15	12
	900	19	19	19	19	22	20	19	17	16	14
	500	23	23	23	22	28	25	22	20	18	16

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

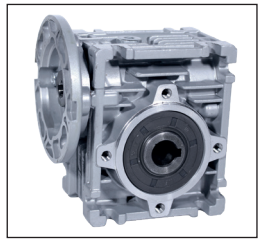
Part number	Ratio	Max. input speed (rpm)	Max. output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each 1 to 2
CHMR30-7	7,5:1	2800	373,33	NC	no	✔	143,28 €
CHMR30-10	10:1	2800	280,00	NC	no	✔	143,28 €
CHMR30-15	15:1	2800	186,66	NC	no	✔	143,28 €
CHMR30-20	20:1	2800	140,00	NC	no	-	143,28 €
CHMR30-25	25:1	2800	112,00	NC	no	✔	143,28 €
CHMR30-30	30:1	2800	93,33	NC	not defined	-	143,28 €
CHMR30-40	40:1	2800	70,00	NC	not defined	✔	143,28 €
CHMR30-50	50:1	2800	56,00	NC	not defined	✔	143,28 €
CHMR30-60	60:1	2800	46,66	NC	yes	✔	143,28 €
CHMR30-80	80:1	2800	35,00	NC	yes	✔	143,28 €

**Depending on availability - Dimensions in mm*

Torque up to 28 Nm

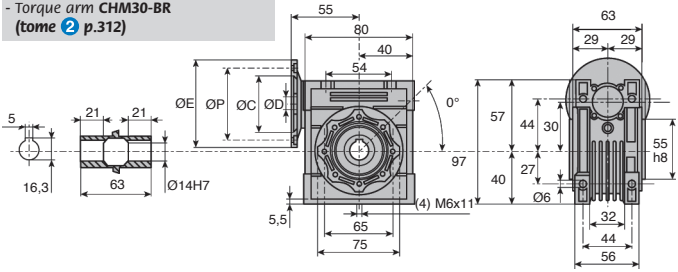
CHM30

- ***Ratios from 7,5:1 to 80:1***
- *With mounting flange B14 for IEC56*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Material:*
  - *Casing: aluminium*
  - *Worm: hardened steel*
  - *Wheel: bronze (cast iron hub)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 1,2 kg*



Accessories

- *Output shaft* ***CHM30-X*** *or* ***CHM30-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM30-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1
	2800	12	12	12	11	15	14	13	12	11	10
INPUT	1400	17	17	17	17	20	19	17	16	15	12
SPEED	900	19	19	19	19	22	20	19	17	16	14
(rpm)	500	23	23	23	22	28	25	22	20	18	16

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each 1 to 2
CHM30-7	7,5:1	56B14	9	50	65	80	no	-	143,28 €
CHM30-10	10:1	56B14	9	50	65	80	no	✔	143,28 €
CHM30-15	15:1	56B14	9	50	65	80	no	✔	143,28 €
CHM30-20	20:1	56B14	9	50	65	80	no	✔	143,28 €
CHM30-25	25:1	56B14	9	50	65	80	no	✔	143,28 €
CHM30-30	30:1	56B14	9	50	65	80	not defined	-	143,28 €
CHM30-40	40:1	56B14	9	50	65	80	not defined	-	143,28 €
CHM30-50	50:1	56B14	9	50	65	80	not defined	✔	143,28 €
CHM30-60	60:1	56B14	9	50	65	80	yes	✔	143,28 €
CHM30-80	80:1	56B14	9	50	65	80	yes	✔	143,28 €

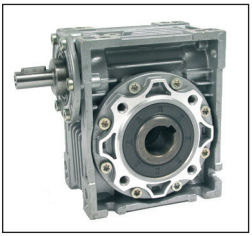
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR40

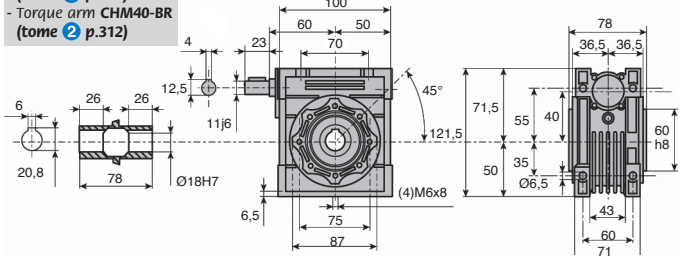
Torque up to 57 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 2.3 kg*



Accessories

- *Output shaft **CHM40-X** or **CHM40-DX** **(tome 2 p.313)***
- *Torque arm **CHM40-BR** **(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
INPUT SPEED (rpm)	2800	27	26	30	28	27	33	30	30	27	24	22
	1400	39	39	39	38	39	44	40	38	35	32	28
	900	43	43	44	43	43	48	44	41	38	35	31
	500	52	52	54	53	51	57	52	48	45	40	35

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

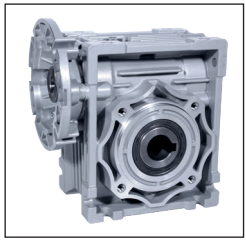
Part number	Ratio	Max. input speed (rpm)	Max. output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each 1 to 2
CHMR40-7	7,5:1	800	373,33	NC	no	✔	172,96 €
CHMR40-10	10:1	2800	280,00	NC	no	✔	172,96 €
CHMR40-15	15:1	2800	186,66	NC	no	-	172,96 €
CHMR40-20	20:1	2800	140,00	NC	no	✔	172,96 €
CHMR40-25	25:1	2800	112,00	NC	no	-	172,96 €
CHMR40-30	30:1	2800	93,33	NC	no	✔	172,96 €
CHMR40-40	40:1	2800	70,00	NC	no	✔	172,96 €
CHMR40-50	50:1	2800	56,00	NC	not defined	-	172,96 €
CHMR40-60	60:1	2800	46,66	NC	not defined	✔	172,96 €
CHMR40-80	80:1	2800	35,00	NC	yes	✔	172,96 €
CHMR40-100	100:1	2800	28,00	NC	yes	✔	172,96 €

**Depending on availability - Dimensions in mm*

Torque up to 57 Nm

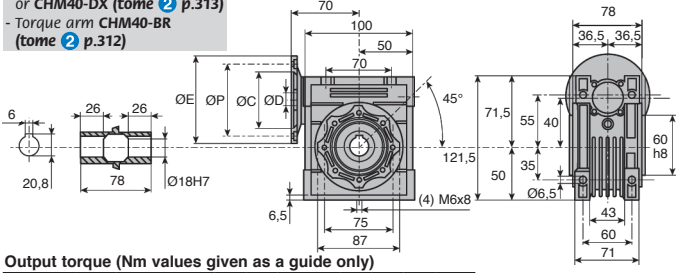
CHM40

- ***Ratios from 7.5:1 to 100:1***
- *With B14 (IEC56) flange*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR40*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 2.3 kg*



Accessories

- *Output shaft* ***CHM40-X*** *or* ***CHM40-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM40-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7.5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	27	26	30	28	27	33	30	30	27	24	22
INPUT	1400	39	39	39	38	39	44	40	38	35	32	28
SPEED	900	43	43	44	43	43	48	44	41	38	35	31
(rpm)	500	52	52	54	53	51	57	52	48	45	40	35

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each 1 to 2
CHM40-7	7,5:1	63B14	11	60	75	90	no	✔	172,96 €
CHM40-10	10:1	63B14	11	60	75	90	no	✔	172,96 €
CHM40-15	15:1	63B14	11	60	75	90	no	-	172,96 €
CHM40-20	20:1	63B14	11	60	75	90	no	✔	172,96 €
CHM40-25	25:1	63B14	11	60	75	90	no	-	172,96 €
CHM40-30	30:1	63B14	11	60	75	90	no	✔	172,96 €
CHM40-40	40:1	63B14	11	60	75	90	no	✔	172,96 €
CHM40-50	50:1	63B14	11	60	75	90	not defined	✔	172,96 €
CHM40-60	60:1	63B14	11	60	75	90	not defined	✔	172,96 €
CHM40-80	80:1	63B14	11	60	75	90	yes	✔	172,96 €
CHM40-100	100:1	63B14	11	60	75	90	yes	✔	172,96 €

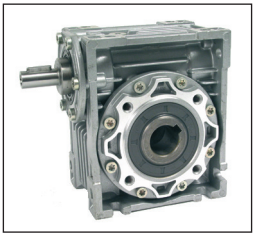
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR50

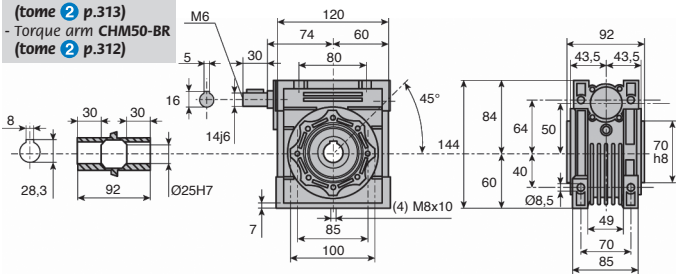
Torque up to 107 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 3.5 kg*



Accessories

- *Output shaft* ***CHM50-X*** *or* ***CHM50-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM50-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
INPUT SPEED (rpm)	2800	51	53	56	52	51	63	58	52	49	44	39
	1400	70	71	73	72	69	83	75	72	67	64	54
	900	83	83	83	76	74	89	81	76	71	67	55
	500	102	102	102	92	90	107	97	90	82	74	64

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Max. input speed (rpm)	Max. output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each 1 to 2
CHMR50-7	7,5:1	2800	373,33	NC	no	✔	223,01 €
CHMR50-10	10:1	2800	280,00	NC	no	✔	223,01 €
CHMR50-15	15:1	2800	186,66	NC	no	✔	223,01 €
CHMR50-20	20:1	2800	140,00	NC	no	✔	223,01 €
CHMR50-25	25:1	2800	112,00	NC	no	-	223,01 €
CHMR50-30	30:1	2800	93,33	NC	no	✔	223,01 €
CHMR50-40	40:1	2800	70,00	NC	no	✔	223,01 €
CHMR50-50	50:1	2800	56,00	NC	not defined	✔	223,01 €
CHMR50-60	60:1	2800	46,66	NC	not defined	✔	223,01 €
CHMR50-80	80:1	2800	35,00	NC	yes	✔	223,01 €
CHMR50-100	100:1	2800	28,00	NC	yes	✔	223,01 €

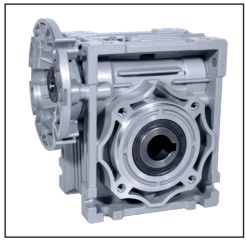
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

Torque up to 107 Nm

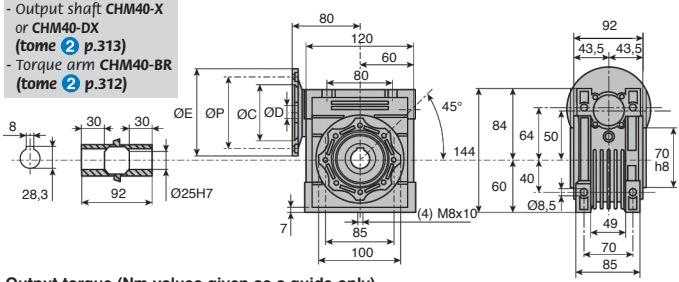
CHM50

- ***Ratios from 7.5:1 to 100:1***
- *With B14 (IEC71) flange*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR50*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 3.5 kg*



Accessories

- *Output shaft* ***CHM40-X*** *or* ***CHM40-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM40-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
INPUT SPEED (rpm)	2800	51	53	56	52	51	63	58	52	49	44	39
	1400	70	71	73	72	69	83	75	72	67	64	54
	900	83	83	83	76	74	89	81	76	71	67	55
	500	102	102	102	92	90	107	97	90	82	74	64

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each 1 to 2
CHM50-7	7,5:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-10	10:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-15	15:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-20	20:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-25	25:1	71B14	14	70	85	105	no	-	223,01 €
CHM50-30	30:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-40	40:1	71B14	14	70	85	105	no	✔	223,01 €
CHM50-50	50:1	71B14	14	70	85	105	not defined	✔	223,01 €
CHM50-60	60:1	71B14	14	70	85	105	not defined	-	223,01 €
CHM50-80	80:1	71B14	14	70	85	105	yes	✔	223,01 €
CHM50-100	100:1	71B14	14	70	85	105	yes	✔	223,01 €

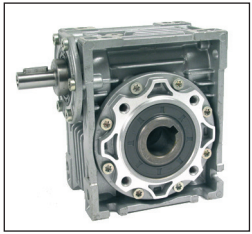
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR63

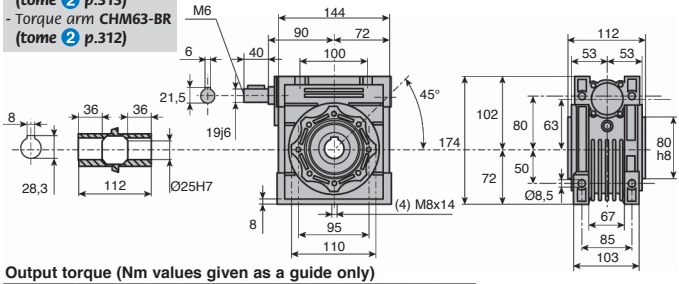
Torque up to 196 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 6.2 kg*



Accessories

- *Output shaft* ***CHM63-X*** *or* ***CHM63-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM63-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
INPUT SPEED (rpm)	2800	92	96	102	99	91	119	107	99	94	84	73
	1400	127	129	139	134	129	159	144	134	129	121	117
	900	150	152	154	147	136	174	159	144	137	127	123
	500	183	184	186	177	163	198	184	172	159	136	127

DISCOUNTS

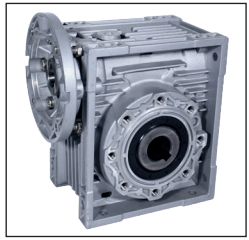
Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Max. input speed (rpm)	Max. output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each 1 to 2
CHMR63-7	7,5:1	2800	373,33	NC	no	✔	315,95 €
CHMR63-10	10:1	2800	280,00	NC	no	✔	315,95 €
CHMR63-15	15:1	2800	186,66	NC	no	-	315,95 €
CHMR63-20	20:1	2800	140,00	NC	no	✔	315,95 €
CHMR63-25	25:1	2800	112,00	NC	no	✔	315,95 €
CHMR63-30	30:1	2800	93,33	NC	no	✔	315,95 €
CHMR63-40	40:1	2800	70,00	NC	no	✔	315,95 €
CHMR63-50	50:1	2800	56,00	NC	not defined	-	315,95 €
CHMR63-60	60:1	2800	46,66	NC	not defined	✔	315,95 €
CHMR63-80	80:1	2800	35,00	NC	yes	✔	315,95 €
CHMR63-100	100:1	2800	28,00	NC	yes	✔	315,95 €

**Depending on availability - Dimensions in mm*

Torque up to 196 Nm

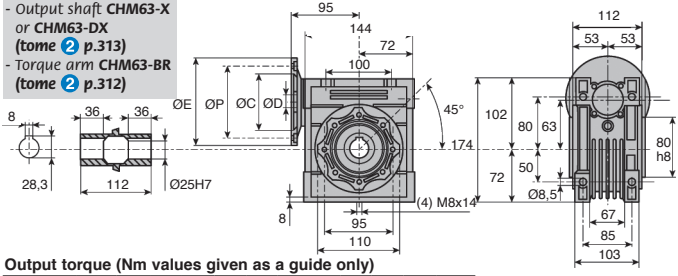
CHM63



- ***Ratios from 7.5:1 to 100:1***
- *With B14 flange acc IEC80 for ratios 7.5:1 to 30:1*
- *With B14 mounting flange acc IEC71 for ratios 7.5:1 to 30:1*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR63*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 3.5 kg*

Accessories

- *Output shaft* ***CHM63-X*** *or* ***CHM63-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM63-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratios		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	92	96	102	99	91	119	107	99	94	84	73
INPUT	1400	127	129	139	134	129	159	144	134	129	121	117
SPEED	900	150	152	154	147	136	174	159	144	137	127	123
(rpm)	500	183	184	186	177	163	198	184	172	159	136	127

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each 1 to 2
CHM63-7	7,5:1	80B14	19	80	100	120	no	-	315,95 €
CHM63-10	10:1	80B14	19	80	100	120	no	-	315,95 €
CHM63-15	15:1	80B14	19	80	100	120	no	✔	315,95 €
CHM63-20	20:1	80B14	19	80	100	120	no	-	315,95 €
CHM63-25	25:1	80B14	19	80	100	120	no	-	315,95 €
CHM63-30	30:1	80B14	19	80	100	120	no	✔	315,95 €
CHM63-40	40:1	71B14	14	70	85	105	no	✔	315,95 €
CHM63-50	50:1	71B14	14	70	85	105	not defined	✔	315,95 €
CHM63-60	60:1	71B14	14	70	85	105	not defined	✔	315,95 €
CHM63-80	80:1	71B14	14	70	85	105	oui	✔	315,95 €
CHM63-100	100:1	71B14	14	70	85	105	oui	✔	315,95 €

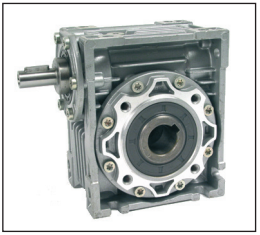
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR75

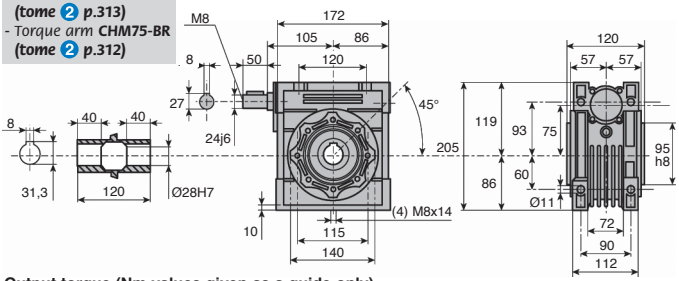
Torque up to 298 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 8.5 kg*



Accessories

- *Output shaft* ***CHM75-X*** *or* ***CHM75-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM75-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	129	144	148	158	148	119	168	146	144	129	118
INPUT	1400	184	194	198	209	198	159	228	209	198	188	178
SPEED	900	214	228	234	234	214	174	258	218	209	198	186
(rpm)	500	258	268	278	284	254	198	298	248	238	214	208

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-20%	On request

Part number	Ratio	Max. input speed (rpm)	Max output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each
CHMR75-7	7,5:1	2800	373,33	NC	no	✔	422,02 €
CHMR75-10	10:1	2800	280,00	NC	no	✔	422,02 €
CHMR75-15	15:1	2800	186,66	NC	no	-	422,02 €
CHMR75-20	20:1	2800	140,00	NC	no	✔	422,02 €
CHMR75-25	25:1	2800	112,00	NC	no	-	422,02 €
CHMR75-30	30:1	2800	93,33	NC	no	✔	422,02 €
CHMR75-40	40:1	2800	70,00	NC	no	✔	422,02 €
CHMR75-50	50:1	2800	56,00	NC	not defined	-	422,02 €
CHMR75-60	60:1	2800	46,66	NC	not defined	✔	422,02 €
CHMR75-80	80:1	2800	35,00	NC	not defined	✔	422,02 €
CHMR75-100	100:1	2800	28,00	NC	yes	✔	422,02 €

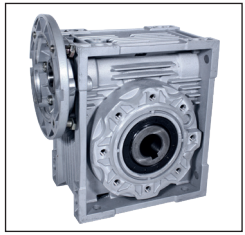
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

Torque up to 298 Nm

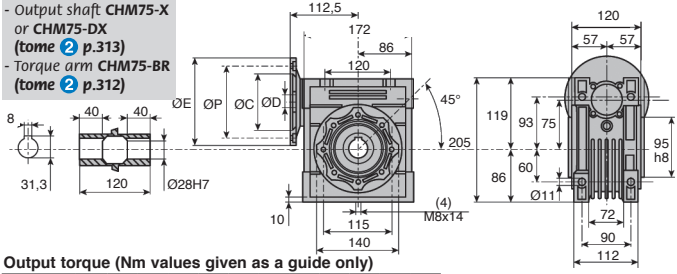
CHM75

- ***Ratios from 7.5:1 to 100:1***
- *With B14 flange acc IEC80 for ratios 7.5:1 to 15:1*
- *With B14 mounting flange acc IEC71 for ratios 20:1 to 30:1*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR75*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 8.5 kg*



Accessories

- *Output shaft* ***CHM75-X*** *or* ***CHM75-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM75-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	129	144	148	158	148	119	168	146	144	129	118
INPUT	1400	184	194	198	209	198	159	228	209	198	188	178
SPEED	900	214	228	234	234	214	174	258	218	209	198	186
(rpm)	500	258	268	278	284	254	198	298	248	238	214	208

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each
CHM75-7	7,5:1	90B14	24	95	115	140	no	-	422,02 €
CHM75-10	10:1	90B14	24	95	115	140	no	-	422,02 €
CHM75-15	15:1	90B14	24	95	115	140	no	-	422,02 €
CHM75-20	20:1	80B14	19	80	100	120	no	-	422,02 €
CHM75-25	25:1	80B14	19	80	100	120	no	✔	422,02 €
CHM75-30	30:1	80B14	19	80	100	120	no	-	422,02 €
CHM75-40	40:1	80B14	19	80	100	120	no	-	422,02 €
CHM75-50	50:1	80B14	19	80	100	120	not defined	✔	422,02 €
CHM75-60	60:1	80B14	19	80	100	120	not defined	-	422,02 €
CHM75-80	80:1	80B14	19	80	100	120	not defined	-	422,02 €
CHM75-100	100:1	80B14	19	80	100	120	yes	✔	422,02 €

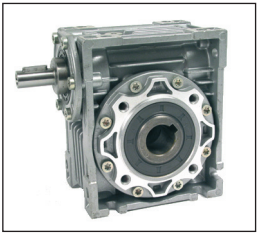
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR90

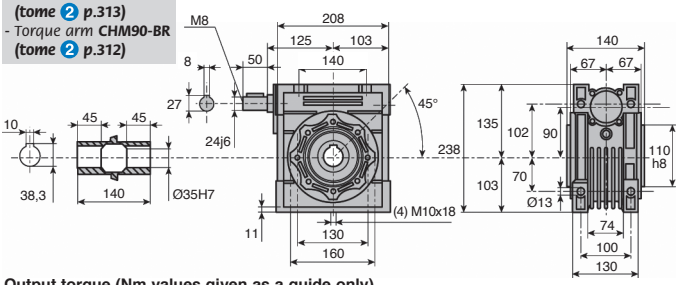
Torque up to 540 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 12 kg*



Accessories

- *Output shaft* ***CHM90-X*** *or* ***CHM90-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM90-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	208	234	258	258	248	308	274	264	244	224	198
INPUT	1400	288	308	358	354	338	408	358	338	318	284	268
SPEED	900	338	368	418	388	368	458	408	388	346	314	278
(rpm)	500	408	434	438	468	438	540	478	448	398	364	328

DISCOUNTS

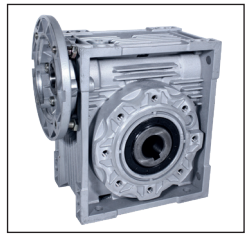
Qty	1+	2+	4+
Disc.	List	-20%	On request

Part number	Ratio	Max. input speed (rpm)	Max output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Stock*	Price each
CHMR90-7	7,5:1	2800	373,33	NC	No	-	550,77 €
CHMR90-10	10:1	2800	280,00	NC	No	✔	550,77 €
CHMR90-15	15:1	2800	186,66	NC	No	-	550,77 €
CHMR90-20	20:1	2800	140,00	NC	No	-	550,77 €
CHMR90-25	25:1	2800	112,00	NC	No	-	550,77 €
CHMR90-30	30:1	2800	93,33	NC	No	✔	550,77 €
CHMR90-40	40:1	2800	70,00	NC	No	✔	550,77 €
CHMR90-50	50:1	2800	56,00	NC	No	✔	550,77 €
CHMR90-60	60:1	2800	46,66	NC	not defined	✔	550,77 €
CHMR90-80	80:1	2800	35,00	NC	not defined	✔	550,77 €
CHMR90-100	100:1	2800	28,00	NC	Yes	✔	550,77 €

**Depending on availability - Dimensions in mm*

Torque up to 540 Nm

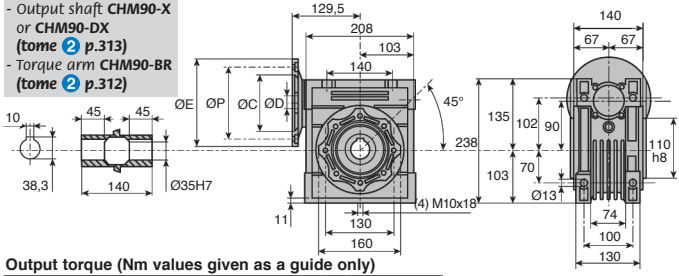
CHM90



- ***Ratios from 7.5:1 to 100:1***
- *With B14 flange acc IEC90 for ratios 7.5:1 to 60:1*
- *With B14 mounting flange acc IEC71 for ratios 80:1 to 100:1*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR90*
- *Materials:*
  - *Casing: aluminium*
  - *Screws: treated steel 20CR*
  - *Wheel: bronze CuSn12 (cast iron hub G500)*
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 3.5 kg*

Accessories

- *Output shaft* ***CHM90-X*** *or* ***CHM90-DX*** ***(tome 2 p.313)***
- *Torque arm* ***CHM90-BR*** ***(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7.5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	208	234	258	258	248	308	274	264	244	224	198
INPUT	1400	288	308	358	354	338	408	358	338	318	284	268
SPEED	900	338	368	418	388	368	458	408	388	346	314	278
(rpm)	500	408	434	438	468	438	540	478	448	398	364	328

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-20%	On request

Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Stock*	Price each
CHM90-7	7,5:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-10	10:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-15	15:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-20	20:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-25	25:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-30	30:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-40	40:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-50	50:1	90B5	24	130	165	200	No	-	550,77 €
CHM90-60	60:1	90B5	24	130	165	200	not defined	-	550,77 €
CHM90-80	80:1	80B5	19	130	165	200	not defined	-	550,77 €
CHM90-100	100:1	80B5	19	130	165	200	Yes	✔	550,77 €

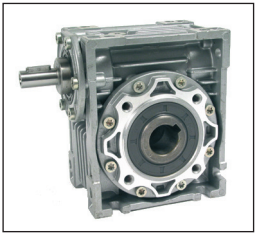
**Depending on availability - Dimensions in mm*

Worm and wheel gearbox

CHMR110

Torque up to 980 Nm

- ***Ratios from 7.5:1 to 100:1***
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Materials:*
  Casing: cast iron
  Screws: treated steel 20CR
  Wheel: bronze CuSn12 (cast iron hub G500)
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 35 kg*

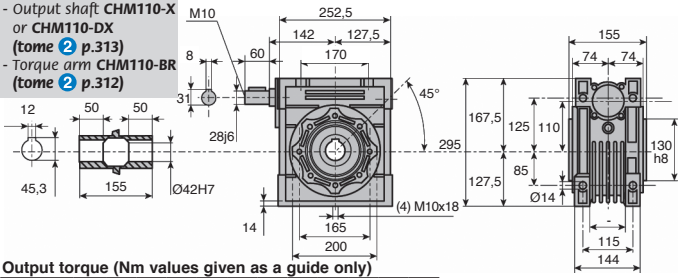


Info.

- *See **technical pages***

Accessories

- *Output shaft **CHM110-X** or **CHM110-DX** **(tome 2 p.313)***
- *Torque arm **CHM110-BR** **(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7,5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	380	430	480	475	490	540	520	490	465	380	350
INPUT	1400	540	580	650	635	660	715	690	650	610	505	480
SPEED	900	640	705	740	720	740	830	780	740	675	550	500
(rpm)	500	780	840	890	850	890	980	920	870	770	645	570

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-20%	On request

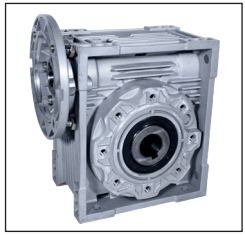
Part number	Ratio	Max. input speed (rpm)	Max output speed (rpm)	Efficiency at 900 rpm (%)	Static self-locking output	Price each
CHMR110-7	7,5:1	2800	373,33	NC	no	848,71 €
CHMR110-10	10:1	2800	280,00	NC	no	848,71 €
CHMR110-15	15:1	2800	186,66	NC	no	848,71 €
CHMR110-20	20:1	2800	140,00	NC	no	848,71 €
CHMR110-25	25:1	2800	112,00	NC	no	848,71 €
CHMR110-30	30:1	2800	93,33	NC	no	848,71 €
CHMR110-40	40:1	2800	70,00	NC	no	848,71 €
CHMR110-50	50:1	2800	56,00	NC	no	848,71 €
CHMR110-60	60:1	2800	46,66	NC	no	848,71 €
CHMR110-80	80:1	2800	35,00	NC	not defined	848,71 €
CHMR110-100	100:1	2800	28,00	NC	not defined	848,71 €

Dimensions in mm

Torque up to 980 Nm

CHM110

- ***Ratios from 7.5:1 to 100:1***
- *With B14 flange acc IEC100/112 for ratios 7.5:1 to 60:1*
- *With B14 mounting flange acc IEC90 for ratios 80:1 to 100:1*
- *Output backlash: N/A*
- *Max. input speed: 2,800 rpm*
- *Max. output speed: see CHMR110*
- *Materials:*
  Casing: cast iron
  Screws: treated steel 20CR
  Wheel: bronze CuSn12 (cast iron hub G500)
- *Lubrication: synthetic oil ISO VG320*
- *Weight: 35 kg*

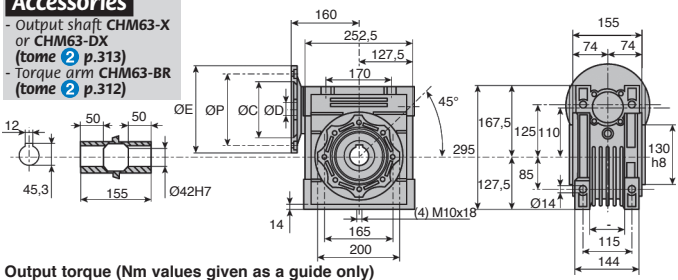


Info.

- *See **technical pages***

Accessories

- *Output shaft **CHM63-X** or **CHM63-DX** **(tome 2 p.313)***
- *Torque arm **CHM63-BR** **(tome 2 p.312)***



Output torque (Nm values given as a guide only)

Ratio		7.5:1	10:1	15:1	20:1	25:1	30:1	40:1	50:1	60:1	80:1	100:1
	2800	380	430	480	475	490	540	520	490	465	380	350
INPUT	1400	540	580	650	635	660	715	690	650	610	505	480
SPEED	900	640	705	740	720	740	830	780	740	675	550	500
(rpm)	500	780	840	890	850	890	980	920	870	770	645	570

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-20%	On request

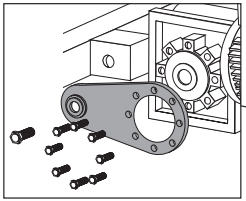
Part number	Ratio	Input flange	ØD	ØC	ØP	ØE	Static self-locking output	Price each
CHM110-7	7,5:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-10	10:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-15	15:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-20	20:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-25	25:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-30	30:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-40	40:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-50	50:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-60	60:1	100/112B5	28	180	215	250	no	848,71 €
CHM110-80	80:1	90B5	24	130	165	200	not defined	848,71 €
CHM110-100	100:1	90B5	24	130	165	200	not defined	848,71 €

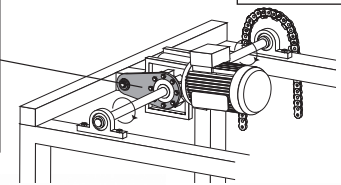
Dimensions in mm

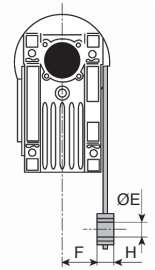
CHMBR Reaction arm

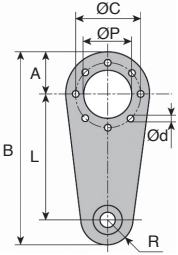
- ***Mounts directly on the output side of CHM and CHMR gearboxes***
- *The mounting point of the reaction arm is equipped with a vibration proof bearing*
- *Material:*
  Galvanised steel

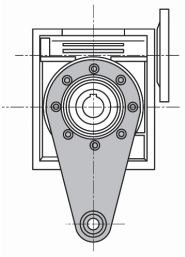












DISCOUNTS Ⓐ

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

DISCOUNTS Ⓑ

Qty	1+	2+	6+	15+
Disc.	List	-5%	-15%	On request

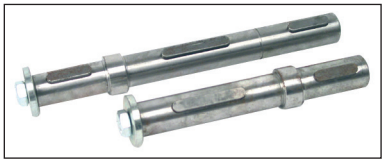
Part number	L	R	F	H	ØE	A	B	ØC	ØD	ØP	Weight (kg)	Stock*	Price each
CHM30-BR	85	15	24,0	14	8	38	138	65	7	55	0,18	✔	Ⓐ 11,32 €
CHM40-BR	100	18	31,5	14	10	44	162	75	7	60	0,24	✔	Ⓐ 13,29 €
CHM50-BR	100	18	38,5	14	10	50	168	85	9	70	0,27	✔	Ⓐ 15,06 €
CHM63-BR	150	18	49,0	14	10	55	223	95	9	80	0,57	✔	Ⓐ 20,73 €
CHM75-BR	200	30	47,5	25	20	70	300	115	9	95	1,10	✔	Ⓑ 33,85 €
CHM90-BR	200	30	57,5	25	20	80	310	130	11	110	1,26	✔	Ⓑ 49,09 €
CHM110-BR	250	35	62,0	30	25	100	385	165	11	130	1,92	-	Ⓑ 65,92 €

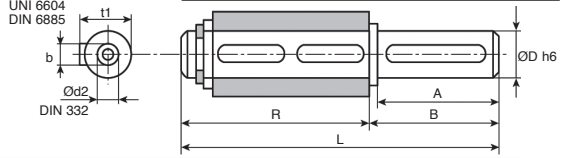
**Depending on availability - Dimensions in mm*

Single and double output shaft

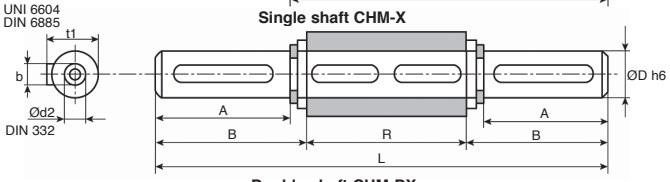
CHMX
CHMDX

- **Mounts into the bores of the CHM and CHMR gear gearboxes**
- Shaft steel C40





Single shaft CHM-X



Double shaft CHM-DX

DISCOUNTS A

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

DISCOUNTS B

Qty	1+	2+	6+	15+
Disc.	List	-5%	-15%	On request

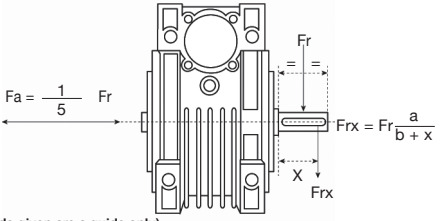
Part number	ØD h6	A	B	b	t1	R	L	Ød2	Weight (kg)	Stock*	Price each
Single shaft											
CHM30-X	14	30	32,5	5	16,0	69,5	102	M6x16	0,14	✔	A 16,67 €
CHM40-X	18	40	43,0	6	20,5	85,0	128	M6x16	0,27	✔	A 19,63 €
CHM50-X	25	50	53,5	8	28,0	99,5	153	M10x22	0,60	✔	A 22,61 €
CHM63-X	25	50	53,5	8	28,0	119,5	173	M10x22	0,67	✔	A 25,16 €
CHM75-X	28	60	63,5	8	31,0	128,5	192	M10x22	0,94	✔	B 29,41 €
CHM90-X	35	80	84,5	10	38,0	149,5	234	M12x28	1,79	✔	B 41,83 €
CHM110-X	42	80	84,5	12	45,0	164,5	249	M16x35	2,70	-	B 47,34 €
Double shaft											
CHM30-DX	14	30	32,5	5	16,0	63,0	128	M6x16	0,16	✔	A 22,61 €
CHM40-DX	18	40	43,0	6	20,5	78,0	164	M6x16	0,34	✔	A 25,16 €
CHM50-DX	25	50	53,5	8	28,0	92,0	199	M10x22	0,75	✔	A 28,08 €
CHM63-DX	25	50	53,5	8	28,0	112,0	219	M10x22	0,84	✔	A 35,03 €
CHM75-DX	28	60	63,5	8	31,0	120,0	247	M10x22	1,20	-	B 36,55 €
CHM90-DX	35	80	84,5	10	38,0	140,0	309	M12x28	2,50	-	B 51,63 €
CHM110-DX	42	80	84,5	12	45,0	155,0	324	M16x35	3,44	-	B 69,77 €

**Depending on availability - Dimensions in mm*

Maximum output load

When used with a double output shaft, the total of the combined loads should not exceed the values given in the table below
Loads are given for a speed of 10 rpm are the maximum loads that the gear reducers can accept.

a : Gear constant
b : Gear constant
x : Load distance from shaft shoulder (mm)
Frx : Radial load in position X (N)
Fr : Radial load (N)
Fa : Axial load (N)



Maximum output load (NB Speeds given are a guide only)

Sizes		CHM30	CHM40	CHM50	CHM63	CHM75	CHM90	CHM110
	400	530	1020	1400	1830	2160	2390	3530
	250	620	1200	1650	2150	2520	2800	4130
	150	740	1420	1960	2540	2990	3310	4890
OUTPUT	100	850	1620	2250	2910	3430	3800	5600
SPEED	60	1000	1920	2660	3450	4060	4500	6640
(rpm)	40	1150	2200	3050	3950	4650	5150	7600
	25	1350	2570	3570	4620	5440	6020	8890
	10	1830	3490	4840	6270	7380	8180	12000

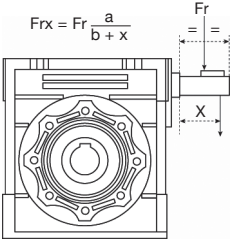
Values of gear constants

Sizes	CHM30	CHM40	CHM50	CHM63	CHM75	CHM90	CHM110
a	65	84	101	120	131	162	176
b	50	64	76	95	101	122	136

Maximum radial input loads

Values of gear constants

Sizes	CHM30	CHM40	CHM50	CHM63	CHM75	CHM90	CHM110
a	86	106	129	159	192	227	266
b	76	94	114	139	167	202	236
Fr maxi.	210	350	490	700	980	1270	1700



For the CHM110 and CHMR110

- *It is the user's responsibility to fill the housing with oil before use (approx 3l).*
- *The oil should be changed after 300 hours of use.*