

G series



Bevel helical gearmotor

G MR ICI 200 UO3A - 55 x 400 - 33,1 B6

HE3 200L 4 400-50 B5 ,PP



Configured product

Designation

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Input speed n_1 1 470 min⁻¹

Coupled with motor

Mounting position B6

Accessories

Backstop device free rotation black arrow [DA2]

Expansion tank [SB]

Bevel helical gearmotor - Technical data

Designation ratio	33.1
Effective ratio i_{EFF}	33.07
Output speed n_2	[min ⁻¹] 44.46
Input speed n_1	[min ⁻¹] 1 470
Applied power P_1	[hp] 0
Output torque M_2	[Lb-in] 53 617.93
Service factor s_f (installed power)	1.937
Nominal efficiency η	0.94
Gearmotor mass (without motor)	[lb] 753.98
Moment of inertia (of mass) J_I	[lb ft ²] 0.0759
Sound levels (to ISO/CD 8579, tolerance +3 dB(A))	
sound power level L_{WA}	[dB(A)] 87
sound pressure level L_{pA}	[dB(A)] 76
Angular backlash at a distance of 3.28 [ft] from the low speed shaft centre	
min	[rad] 0.0015
max	[rad] 0.0030
min	[arcmin] 5.2
max	[arcmin] 10
Torsional stiffness in condition of nominal load	[lb in / arcmin] 2 787.98

Lubrication

Gearmotor supplied without oil

Approximate lubricant quantity

[gal] 10.57

ISO viscosity grade

mineral oil - Environment temperature 32 ÷ 68 [° F]

[cSt] 150

mineral oil - Environment temperature 50 ÷ 104 [° F]

220

synthetic oil - Environment temperature 32 ÷ 104 [° F]

220

Overall guide to oil-change interval (not according ATEX directive)

Oil temperature[° F]	Oil change interval [h]	
	mineral oil	synthetic oil
≤ 149	8 000	25 000
149 ÷ 176	4 000	18 000
176 ÷ 203	2 000	12 500
203 ÷ 230	-	9 000

Nominal data

Nominal input power P_{N1}

[hp] 77.85

Nominal output power P_{N2}

[hp] 73.18

Nominal thermal power P_{TN} @68°

[hp] 67.05

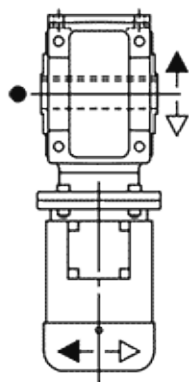
Nominal output torque M_{N2}

[Lb-in] 103 854.65

Maximum output torque $M_{2 MAX}$

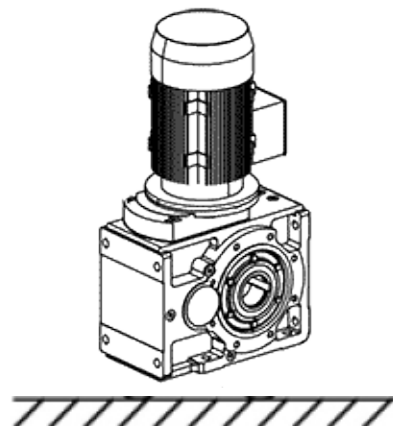
[Lb-in] 166 163.9

Design: UO3A

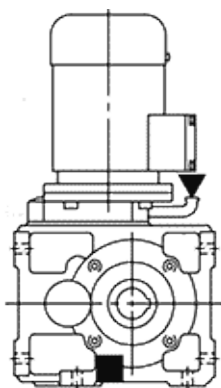


● groove side

Mounting position: B6



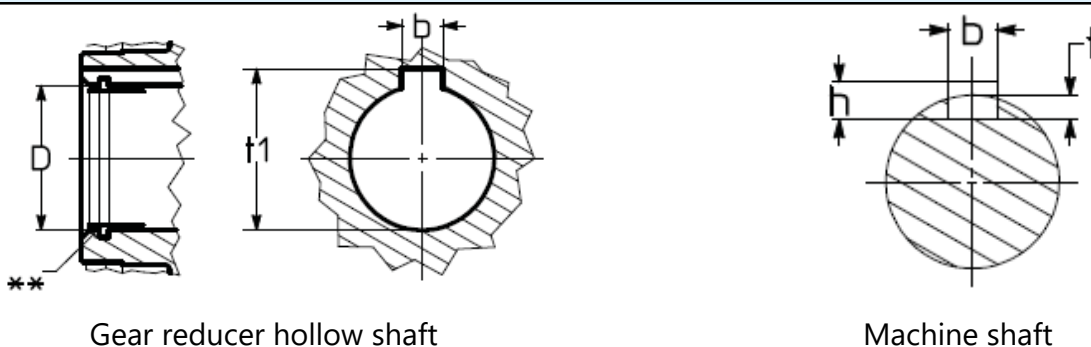
Plugs position (supplied without oil as standard)


▼ Oil filler plug
● Oil level plug
■ Oil drain plug

Terminal box position: TB0



Hollow low speed shaft



Gear reducer hollow shaft

Machine shaft

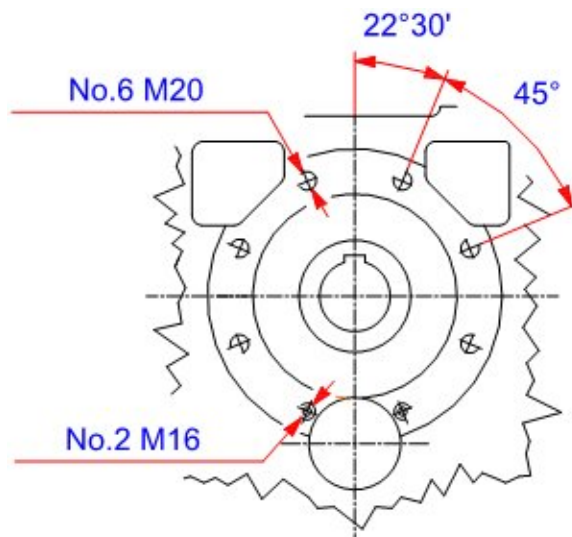
Hole	Parallel Key	Keyway		
D Ø H7**	b x h x l* h9 h11	b H9 hub N9 shaft	t shaft	t ₁ hub
100	28 x 16 x 250	28	10	106,4

* Recommended length.

** Each hollow shaft type (standard, stepped, with shrink disc) has a slightly oversized diameter D (at the input) to facilitate the assembly of gear reducer on machine shaft end: this, however, does not affect the connection reliability.

Fastening tapped holes (size 200)

The relevant through holes to be realized on the driven machine must be all of equal diameter for sizes 140, 200 and 250 (Ø 15, Ø 21 and Ø 25, respectively) as the 2 holes of smaller diameter are not in the position of 22° 30'



Configured motor

Designation

HE3 200L 4 400-50 B5 ,PP



Motor catalog TX - Erp

Pn 30 kW (40 hp)

The following accessories will be supplied as standard:

- Cable glands already assembled oriented on nameplate side (accessory no# 475)
- Axial fastening on drive end (accessory no# 402)
- Hand lever for manual release with automatic return (accessory no# 425)
- Thermistor type thermal probes (PTC) 150 °C (accessory no# 419)
- Standard condensate drain hole suitable for mounting position B3 and B5 (accessory no# 408)
- Voltage value stated on nameplate:
- Δ-prearranged terminal box connection
- NEMA MG 112 references stated on nameplate

Motor mounting position (IM) B5

Drip-proof cover [,PP]

Electric motor technical data TX catalog

Type	HE3 200 L 4
Size	200
Poles	4
Coupling dimensions Ø D x E - Ø P	Ø55 x 110 Ø400
Power supply	[V - Hz] 400 - 50
Nominal input power P_{NI}	[hp] 40
Nominal speed n_N	[min ⁻¹] 1 470
Motor mass	[lb] 518
Directive	Motor ErP
Efficiency class	IE3
Power factor cosφ	0.85
Moment of inertia J_0	[lb ft ²] 1 093.49501
Overtemperature class	F
Insulation class	F
Protection	IP 55
Type of duty	S1
Synchronous speed	[min ⁻¹] 1 500

Efficiency

100 %	93.60
75 %	94.00
50 %	93.40

Nominal data

Nominal torque M_N	[Lb-in] 1 725.01
Nominal starting torque M_s / M_n	1.90
Maximum torque M_{MAX} / M_n	2.75
Starting current ratio i_s / i_n	6.60
Rated current I_n @400 [V]	[A] 54.60

Construction features

Motor size	Bearing D-E (1)	Bearing N-D-E (1)	Housing	Flange B5	End-shield N-D-E	Terminal box cover (3)	Seal rings D-E	Terminal block (4)	Cable glands	Fan cover	Cooling fan
200 L	6312-2Z-C3	6312-2Z-C3	G	G	G	G	G	60 × 75 × 8	M6	Painted sheet	Plastic

G = Cast iron

(1) Lubricated for life assuming pollution free surrounding

(3) Terminal box cover on housing with cable glands mounted on one side only, where one power cable gland and one for auxiliary devices with position 90° apart

(4) Terminal block with 6 terminals for cable terminal connection

Motor main dimensions [mm]

