

REDUCTION GEARBOX

Product Selection Guide

Reduction Gearboxes

Gearbox Selection

5.2.1 Helical Worm Reduction Gearboxes

Calculate the power capacity required for the gearbox:

$$P \text{ (kW)} = P_d \text{ (kW)} \times F_L$$

Where

P_d = Power required to drive the machine

F_L = Load factor (refer to table 5.2.2)

Select a gearbox type to the closest above the required power (P_d), refer 4.3.1.2

Find the closest matching output speed hence gear ratio for that gearbox type for the application (refer 4.3.1.2).

Check that the gearbox power rating is suitable for the actual output speed.

5.3.1 In-Line Helical Worm Reduction Gearboxes

Calculate the power capacity required for the gearbox:

$$P \text{ (kW)} = P_d \text{ (kW)} \times F_L$$

Where

P_d = Power required to drive the machine

F_L = Load factor (refer to table 5.2.2)

Select a gearbox type to the closest above the required power (P_d) and to the nearest output speed (hence gear ratio) for the gearbox type.

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5.2.2 Helical Worm Reduction Gearbox Performance

Power [kW]	C0320	C0420	C0520	C0620	C0720	C0820	C0920	C1020
0.12	M	R	F					
0.18	M	R	F	F				
0.25	M	M	R	F				
0.37	M	M	R	R				
0.55	M	M	M	R	F			
0.75	R	M	M	M	R	F		
1.1	F	M	M	M	M	F	F	
1.5	F	R	M	M	M	R	F	
2.2		F	R	M	M	M	R	F
3			R	M	M	M	R	F
4			F	R	M	M	R	R
5.5				R	R	M	R	R
7.5				F	R	M	R	R
11					F	R	M	M
15						F	M	M
18.5							M	M
22							R	M
30							F	R
37							F	R
45							F	F

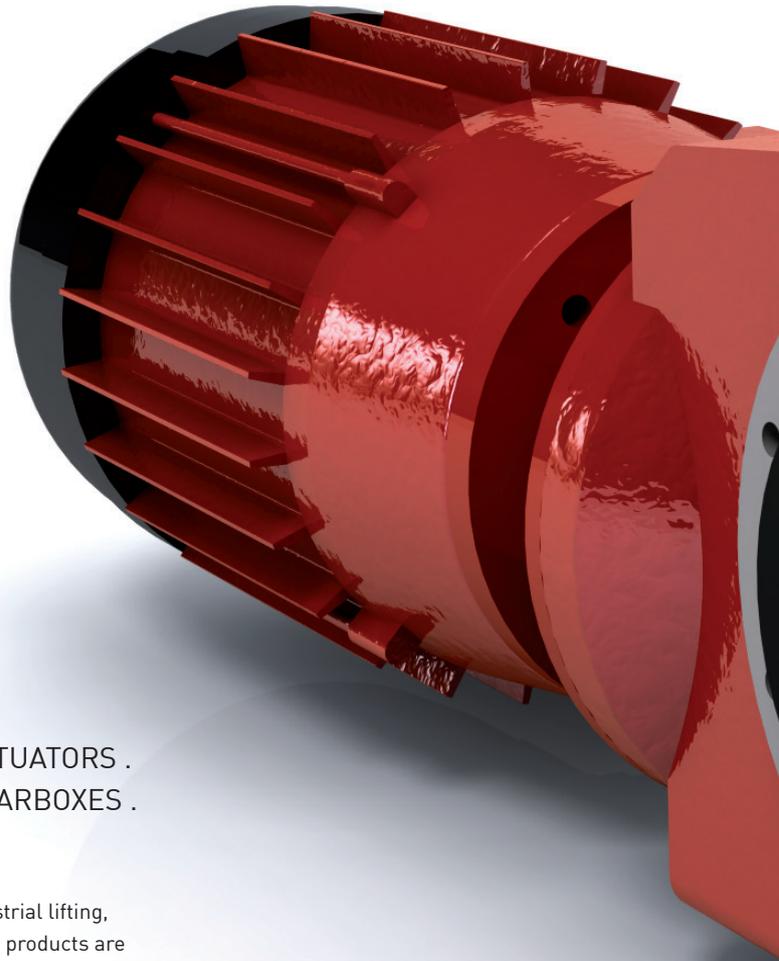
M - Most/All gear ratios available

R - Reduced range of gear ratios available

F - Few gear ratios available

For exact availability of gear ratios in power ranges and full gearbox details consult Power Jacks.

Load Factors (F_L)				
Duration of Service (hours per day)	Uniform Load	Moderate Shock Load	Heavy Shock Load	
Under 3	0.8	1	1.5	
3 to 10	1	1.25	1.75	
Above 10	1.25	1.5	2	



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