

Guide to selecting synchronous motors

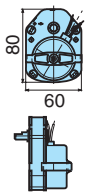
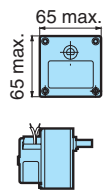








Gearbox		Max. torque (Nm)		0.5		2	
		Type of gearbox		81 021		81 033	
Motors direct drive (Nm)							
Usable Power (W)	Nominal torque (Nm)	Nominal speed (rpm)	Supply voltage (V)	Motor type dimensions (mm)			
Single direction							
0.16	2.5	600	230	▶ p.100 82 340 Ø 47	▶ p.112 82 344 0.001 ... 60 rpm	▶ p.114 82 304 0.003... 32 rpm	
0.42	8	600	230	▶ p.101 82 330 Ø 47	▶ p.110 82 334 0.001 ... 60 rpm	▶ p.114 82 305 0.003... 32 rpm	
Reversible: 2 directions							
0.31	12	250	230	▶ p.102 82 510 Ø 36/50	▶ p.120 82 514 0.5... 50 rpm	▶ p.124 82 519 0.16... 20 rpm	
0.52	10	500					
0.98	37.5	250	230	▶ p.104 82 520 Ø 51/75	▶ p.122 82 524 0.8... 60 rpm	▶ p.126 82 529 0.33... 15 rpm	
1.12	30	375					
1.37	55	250	230	▶ p.106 82 530 Ø 58/79			
2.65	106	250	230	▶ p.108 82 540 65x65			

Selection of a geared motor

A geared motor is selected according to the required usable power output.

$$\text{Usable Power (W)} = \frac{2\pi}{60} C \cdot n \quad (\text{Nm}) \quad (\text{rpm})$$

A geared motor must have usable power equal to or greater than the power required to rotate the load. It is selected by checking that the point corresponding to the required operating conditions (torque and speed output) is higher than the nominal torque versus speed curve of the geared motor. The required torque output of a geared motor must be within its maximum recommended torque for continuous duty.

3		5	
81 023		81 037	
			
▶ p.116 80 333		▶ p.118 80 337	
			
0.167... 29 rpm		0.24... 24 rpm	
▶ p.128 80 513		▶ p.132 80 517	
			
0.069... 24 rpm		0.1... 20 rpm	
▶ p.130 80 523		▶ p.132/134 80 527	
			
0.069... 12 rpm		0.1... 30 rpm	
▶ p.130 80 533			
			
0.069... 12 rpm		▶ p.134 80 547	
			
		0.1... 20 rpm	