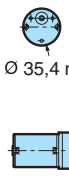
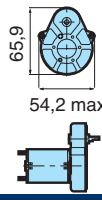
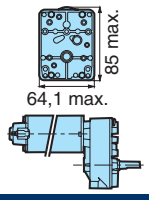
Guide to selecting D. C. motors

Gearbox	Max. torque (Nm)	0.5		1.2
	Type of gearbox	81 012	81 021	81 032
		 Ø 35,4 max.	 65,9 54,2 max.	 85 max. 64,1 max.

Motors direct drive (Nm)

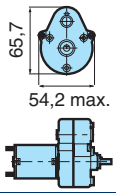
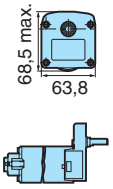
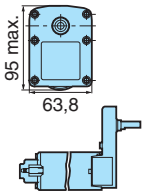
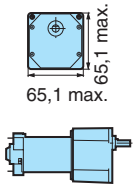
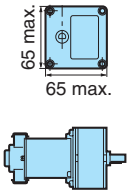
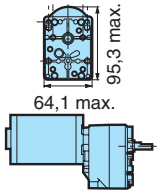
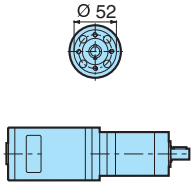
Usable Power (W)	Nominal torque (Nm)	Nominal speed (rpm)	Supply voltage (V)	Motor type dimensions (mm)	81 012	81 021	81 032
3	7.7	3700	12 24	▶p.22 82 860 0 Ø 32 	▶p.34 82 862  1.5 ... 441 rpm	▶p.36 82 861  0.36... 430 rpm	
8.7	41.5	2000	12	▶p.24 82 810 0 Ø 42 			▶p.38 82 812  20... 100 rpm
9.4	45		24				
12	45	2580	12	▶p.26 82 810 5 Ø 42 			
13		2750	24				
15.6	75	2000	12 24	▶p.24 82 800 0 Ø 42 			▶p.38 82 802  20... 100 rpm
15.7							
20	70	2670	12	▶p.26 82 800 5 Ø 42 			
22		3070	24				
20	70	2670	12	▶p.28 82 800 8 Ø 42 			
22		3070	24				
27	172	1500	12 24	▶p.30 82 830 0 Ø 63 			
32.5	100	3100	12	▶p.28 82 850 0 Ø 42 			
33.5		3200	24				
47	170	2630	12	▶p.30 82 830 5 Ø 63 			
50		2770	24				
90	270	3200	24	▶p.32 82 890 0 Ø 63 			
95		3360	48				

Selection of a geared motor

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

$$\underset{(W)}{\text{UsablePower}} = \frac{2\pi}{60} \underset{(Nm)}{C} \cdot \underset{(rpm)}{n}$$

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.

2			5		6	25
81 033	81 043	81 044	81 035	81 037	81 032 6	81 049
						
▶p.40 82 869  0.9 ... 108 rpm	▶p.42 82 863  99... 662 rpm	▶p.44 82 864  2... 66 rpm		▶p.50 82 867  1.72... 344 rpm		
	▶p.46 80 813  60... 400 rpm	▶p.48 80 814  1... 40 rpm	▶p.52 80 815  10.5... 616 rpm	▶p.54 80 817  1.04... 208 rpm	▶p.60 82 812 5  4 / 8 / 12 rpm	
	▶p.46 80 803  60... 400 rpm	▶p.48 80 804  1... 40 rpm	▶p.52 80 805  10.5... 616 rpm	▶p.54 80 807  1.04... 208 rpm	▶p.60 82 802 5  4 / 8 / 12 rpm	
						▶p.64 80 809 2  11... 477 rpm
			▶p.56 80 835  7.4... 426 rpm		▶p.62 82 832 5  5 / 8 / 14 rpm	
			▶p.58 80 855  13.8... 805 rpm			▶p.64 80 859 3  11... 477 rpm
						▶p.66 80 839 4  11... 474 rpm
						▶p.66 80 899 5  11... 474 rpm