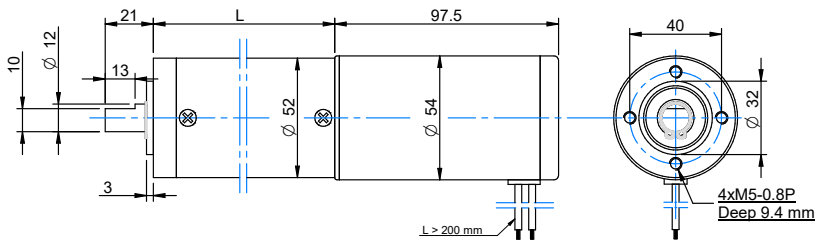


PD52103 / Ø 52mm / 97.5W / 97.5W

DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

PD52103 - VOLTAGE - REDUCTION - ME / OE / B

Example: PD52103-12-4

ME = Magnetic encoder
OE = Optical encoder
B = Brake

ADDITIONAL



Encoder



Brake

GEAR MOTOR DATA

Reduction	4.5:1	6:1	8:1	20:1	28:1	39:1	50:1	91:1	127:1	162:1	225:1	244:1	276:1	313:1
Nominal torque 12 V (Nm) *	0.3	0.4	0.6	1.1	1.5	2.1	2.8	4.0	5.5	7.0	9.8	10.6	12.0	13.6
Nominal speed 12 V (rpm) *	689	517	388	155	111	80	62	34	24	19	14	13	11	10
Nominal torque 24 V (Nm) *	0.3	0.4	0.6	1.1	1.5	2.1	2.8	4.0	5.5	7.0	9.8	10.6	12.0	13.6
Nominal speed 24 V (rpm) *	689	517	388	155	111	80	62	34	24	19	14	13	11	10
Length (mm)	146.5	146.5	143.5	161.5	161.5	161.5	161.5	176.5	176.5	176.5	176.5	176.5	176.5	176.5
Weight (kg)	1.40	1.40	1.40	1.55	1.55	1.55	1.55	1.70	1.70	1.70	1.70	1.70	1.70	1.70

* Nominal speed and nominal torque have a tolerance of $\pm 15\%$

GEAR HEAD DATA

Reduction	4.5:1	6:1	8:1	20:1	28:1	39:1	50:1	91:1	127:1	162:1	225:1	244:1	276:1	313:1
Max. continuous torque (Nm)	2.94	2.94	2.94	14.7	14.7	14.7	14.7	24.5	24.5	24.5	24.5	24.5	24.5	24.5
Intermittently permissible torque (Nm)	3.92	3.92	3.92	17.64	17.64	17.64	17.64	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Efficiency (%)	79	79	79	62	62	62	62	49	49	49	49	49	49	49
Length (mm)	49	49	46	64	64	64	64	79	79	79	79	79	79	79
Weight (kg)	0.6	0.6	0.6	0.75	0.75	0.75	0.75	0.9	0.9	0.9	0.9	0.9	0.9	0.9

GEAR MOTOR FEATURES AND STANDARD DATA

	STANDARD	CUSTOMIZATION OPTIONS
Type	Planetary gear brush dc gear motor	
Motor type	Iron core. brush commutation	Winding parameters
Motor brush type	Carbon brushes	
Motor terminals	Soldering terminals	Wiring harnesses. cables. connectors
EMC filter	No	Yes
Gear material	Metal	
Motor pinion material	Plastic	Metal
Bearing	Sleeve bearing	
Shaft	Hardened stainless steel	Dimensions
Encoder option	Magnetic/Optical (to order as option)	Through shaft dim. and screw holes
Environmental protection	IP55 (with encoder or brake IP50)	
Operating temperature	-10...+60 °C	-40...+60 °C
RoHS compliance	Yes	
CE label	Yes	Yes

MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3600	3600
No load current (A)	0.6	0.4
Nominal speed (rpm)	3100	3100
Nominal torque (mNm)	88	88
Nominal current (A)	3.3	1.6
Stall torque (Nm)	0.7	0.7
Starting current (A)	22	11
Output (W)	29	29
Length (mm)	97.5	97.5
Weight (kg)	0.8	0.8