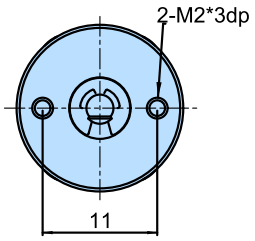
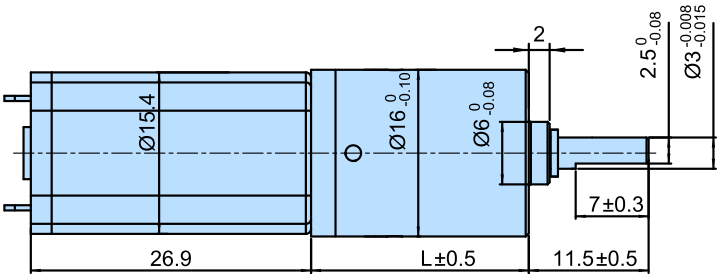
PG16050

PG16 + DC050 | 3 windings | 12 reduction ratios







Dimensions in mm. Housing length L is listed in the ratio table.

MOTOR SELECTION | DC050

Winding	129000	1212000	2413000
Voltage (V)	12	12	24
No-load speed (rpm)	9000	12000	13000
Rated speed (rpm)	7000	9600	10000
No-load current (mA)	45	55	45
Rated current (mA)	140	180	110
Rated torque (gf.cm)	8	10	12
Rated power (W)	0.5	0.9	1.2

Motor parameters measured at 20 °C ambient.

RATIO SELECTION & PERFORMANCE | PG16

Ratio :1	Gear stages	Length L mm	Max. cont. torque kgf.cm	Breaking torque kgf.cm	Efficiency %	Assembly ref. weight g
4	1	13.7	1	3	90	30.1
4.75	1	13.7	1	3	90	30.1
12.3	2	17.3	1.5	4.5	81	33.4
16	2	17.3	1.5	4.5	81	33.4
19	2	17.3	1.5	4.5	81	33.4
42.8	3	20.9	4	12	72	36.9
64	3	20.9	4	12	72	36.9
76	3	20.9	4	12	72	36.9
150	4	24.5	4	12	65	41
256	4	24.5	4	12	65	41
712	5	28.1	4	12	50	43
1024	5	28.1	4	12	50	43

Reference assembly weight includes the gearbox and DC050 motor (16 g).

PG16050 | MECHANICAL DATA & MATERIALS

MOTOR | MECHANICAL DATA & MATERIALS	
Motor diameter / body length	15.5 mm / 26.9 mm
Motor reference weight	16 g
Housing material	Zinc-plated steel
Winding material	Enameled copper wire
Magnet material	Ferrite
Brush material	Metal graphite
Insulation class / pole pairs	UEW / 2
Working lifespan	150 hours

GEARBOX | MECHANICAL DATA & MATERIALS	
Gearbox diameter	16 mm
Output shaft diameter / extension	3 mm / 11.5 mm
Housing material	Powder Metallurgy (Fe)
Gear material	Powder Metallurgy (Fe) / Plastics
Gear design	Spur Gear
Output shaft bearing	Dual Ball bearing
Lubricant	Graphene oil
Gear module	0.3
Axial play	≤ 0.2 mm
Radial play	≤ 0.1 mm
Backlash	≤ 1.5°
Operating temperature	-30 ~ 65 °C