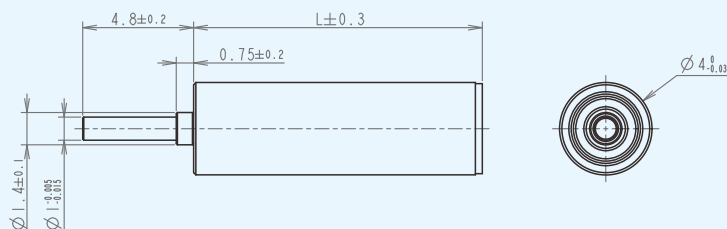


ZWSMD004004

Φ4mm Planetary Gearbox



Gearbox Technical Data

Number of stages	1	2	3	4
Max. continuous torque (Nm)	0.001	0.002	0.006	0.015
Max. intermittent torque (Nm)	0.002	0.003	0.008	0.02
Reduction Ratio	4.8	23.0	110.6	531.0
Outer Diameter (mm)	4	4	4	4
Gearbox Length L1(mm)	7.7	9.3	10.9	12.5
Max. efficiency (%)	87	76	70	65
Recommended temperature range (°C)	-40~+80	-40~+80	-40~+80	-40~+80
Max. Weight (G)	1	1.2	1.3	1.5
Max. continuous transmittable power (W)	0.15	0.17	0.12	0.08
Max. intermittent transmittable power (W)	0.2	0.21	0.15	0.10
Average backlash no load (°)	5	5	5	5
Max. axial load (dynamic) (N)	5	5	5	5
Max. radial load (4mm from flange) (N)	3	3	4	4
Bearing at output	ball bearing	ball bearing	ball bearing	ball bearing
Axial play (mm)	0~0.1	0~0.1	0~0.1	0~0.1

* Note: Data above does not include the motor. Specifications can be customized per customer requirements.

Modular assembly

Integrated Product	Part No.	Number of stages			
		1	2	3	4
		Length(mm)			
DC Motor	0408 Φ4mm graphite brush	15.8	17.4	19.0	20.6
	04012 Φ4mm graphite brush	20.0	21.6	23.2	24.8
Brushless Motor	MC0409 Φ4mm brushless coreless motor	16.2	17.8	19.4	21.0
Encoder	/				

Product Specifications

PART NO.	Rated Voltage (V)	No-Load Data		Load Data			Overall Length (mm)	Gearbox Rated Allowable Torque (NM)	Gearbox Intermittent Allowable Torque (NM)	Reduction Ratio	Gearbox Length L1(mm)
		No-Load Speed (rpm)	No-Load Current (mA max)	Load Speed (rpm)	Load Current (mA Max)	Torque (N.m)					
ZWSMD004004-4.8-X	5	9375	140	6250	180	0.0002	16.2	0.001	0.002	4.8	7.7
ZWSMD004004-23-X	5	1957	140	1304	180	0.0003	17.8	0.002	0.003	23.0	9.3
ZWSMD004004-111-X	5	407	140	271	180	0.0015	19.4	0.006	0.008	110.6	10.9
ZWSMD004004-531-X	5	85	140	57	180	0.0069	21.0	0.015	0.02	530.8	12.5