



MD010010

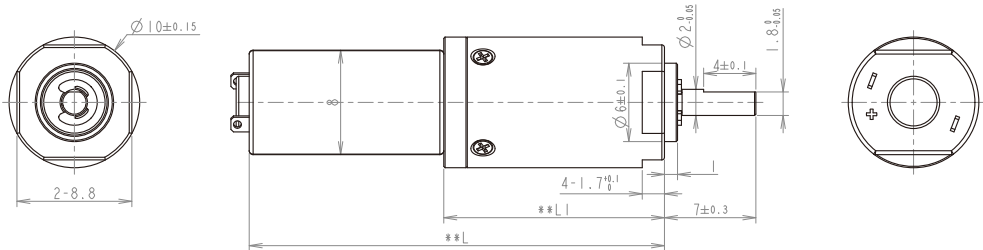
Gearbox Specifications

Outer diameter	10mm	Bearing	Porous bearing	Rolling bearing
Material	Metal	Axial endplay	≤0.3mm	≤0.2mm
Direction of rotation	cw & ccw	Radial loading on output shaft	≤2N	≤7N
Gear backlash	≤3°	Operating temperature range	-20 ~ +85°C	

Gearbox Stages

	1	2	3	4
Reduction ratio	3 / 5	13 / 19 / 28	46 / 69 / 102 / 151	168 / 249 / 368 / 546 / 809
Max rated torque of gearbox (gf.cm)	1000	1000	1000	1000
Instant torque of gearbox (gf.cm)	2000	2000	2000	2000
Gearbox efficiency (%)	87	74	63	56
Gearbox length L1 (mm)	9.7	12.8	15.9	19

Technical Drawing



Motor Specifications

Motor type (optional)	Brushed DC motor, Coreless motor, Stepper motor	Input speed	≤30000rpm
Voltage (optional)	3-12V	Current	150mA max

Model	Rated Speed	Max Speed	Max Rated Torque	Max Instant Torque	Reduction Ratio	Gearbox Length	Overall Length
	rpm	rpm	gf.cm	gf.cm		mm	mm
MD010010-3	3917	7500	1000	2000	3	9.7	24.7
MD010010-5	2645	5000	1000	2000	5		
MD010010-13	1085	2308	1000	2000	13	12.8	27.8
MD010010-19	742	1579	1000	2000	19		
MD010010-28	504	1071	1000	2000	28		
MD010010-46	307	652	1000	2000	46		
MD010010-69	204	435	1000	2000	69	15.9	30.9
MD010010-102	138	294	1000	2000	102		
MD010010-151	93	199	1000	2000	151		
MD010010-168	84	179	1000	2000	168		
MD010010-249	57	120	1000	2000	249	19	34
MD010010-368	38	82	1000	2000	368		
MD010010-546	26	55	1000	2000	546		
MD010010-809	17	37	1000	2000	809		

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