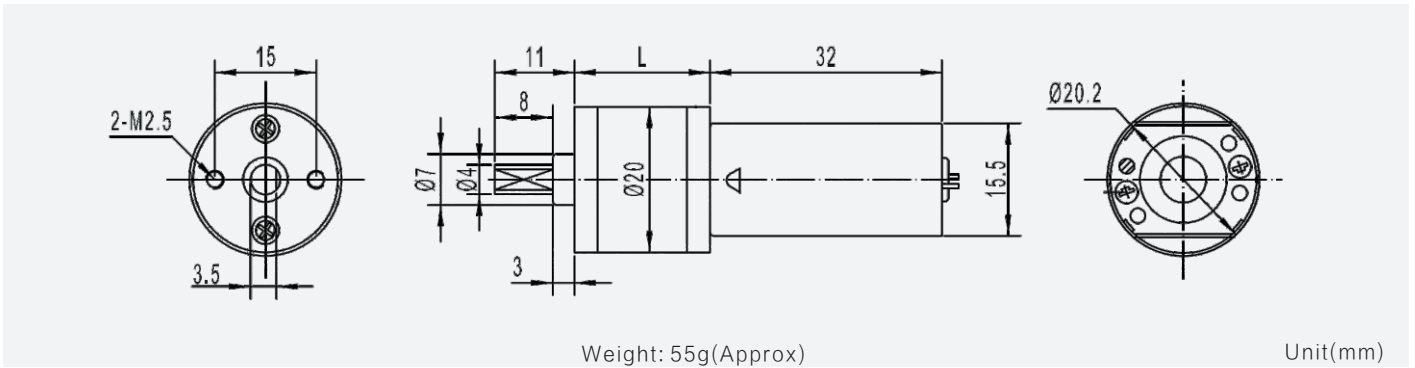


# GM20-180SH

20mm gearbox plus 180 permanent magnet DC motor

Module	0.25/0.3/0.35			
Rated torque (kg.cm)	2.5 kg.cm max			
Max momentary tolerance torque (kg.cm)	5.0 kg.cm max			
Reduction ratio	1/29, 1/31	1/56, 1/60 1/73, 1/78	1/107, 1/115 1/140, 1/150 1/182, 1/195	1/268, 1/287 1/349, 1/374 1/456, 1/488
Number of gear stages	4	5	6	7
Gearbox length L (mm)	15.9	17.4	18.9	20.4



## Gear Motor Technical Data

Reduction ratio		29	31	56	73	107	182	268	349	456	488
6.0V	No-load speed(rpm)	230	215	120	90	62	37	25	19	15	14
	Rated speed(rpm)	200	190	105	80	55	32	22	17	14	14
	Rated torque(kg.cm)	0.4	0.4	0.7	0.9	1.3	2.2	2.5	2.5	2.5	2.5
12.0V	No-load speed(rpm)	170	155	88	67	48	28	19	15	11	10
	Rated speed(rpm)	150	140	77	60	40	24	16	13	10	9
	Rated torque(kg.cm)	0.2	0.2	0.3	0.4	0.6	1.1	1.5	1.7	2.2	2.4

## Motor Technical Data

Motor model	Rated voltage	No-load		Rated			Stall		
		Speed	Current	Speed	Torque	Current	Power	Torque	Current
		r/min	mA	r/min	g.cm	mA	W	g.cm	A
TFF-180SH-18140	6.0	7000	90	5900	20	350	1.21	127	1.80
TFF-180SH-10400	12.0	5000	20	4300	10	70	0.44	71	0.42

