

# GM12-N20VA

PMDC Dc Gear Motor

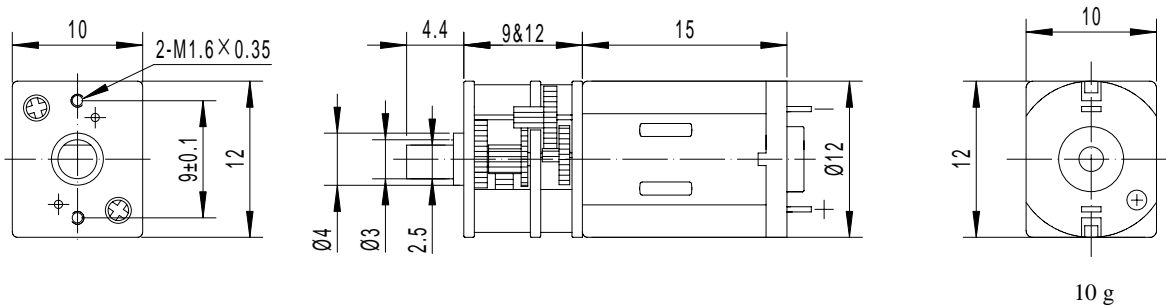
12X10mm gearbox plus N20 & N30 permanent magnet DC motor

## Characters:

1. Small size dc gear motor with low speed and big torque
2. 12mm gear motor provide 0.1Nm torque and more reliable
3. Suitable to small diameter, low noise and big torque application
4. Dc Gear motors can match encoder, 3-16pps
5. Reduction Ratio: 3、5、10、20、30、50、63、100、150、210、250、298、380、1000



## Gear Motor Dimensions (mm)



## Motor Technical Data

Type	Rated voltage	No-load speed	No-load current	Rated speed	Rated torque	Rated current	Output power	Stall torque	Stall current
	VDC	r/min	mA	r/min	g.cm	mA	W	g.cm	A
N20VA-13110	2.4	14800	60	12000	2.5	200	0.31	13	1.20
N20VA-09220	5.0	14800	30	12000	2.5	120	0.35	13	0.52
N20VA-05430	12.0	16000	15	12500	3.0	60	0.35	13	0.25

## Gear motor Technical Data

Gearbox with motor : GM12-N20VA-13110-XXX

Reduction ratio	10	30	50	100	150	210	250	298	380	1000
Length mm	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12
No-load speed rpm	1450	470	285	145	96	69	58	50	38	14.5
Rated speed rpm	1200	400	240	120	80	57	48	40	31	12
Rated torque kg.cm	0.015	0.05	0.07	0.15	0.22	0.31	0.37	0.45	0.5	1.0
Max.momentary tolerance torque kg.cm	0.08	0.23	0.4	0.8	1.1	1.6	1.9	2.1	2.5	3.0

Gearbox with motor : GM12-N20VA-09220-XXX

Reduction ratio	10	30	50	100	150	210	250	298	380	1000
Length mm	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12
No-load speed rpm	1450	470	285	145	96	69	58	50	38	14.5
Rated speed rpm	1200	400	240	120	80	57	48	40	31	12
Rated torque kg.cm	0.015	0.05	0.07	0.15	0.22	0.31	0.37	0.45	0.5	1.0
Max.momentary tolerance torque kg.cm	0.08	0.23	0.4	0.8	1.1	1.6	1.9	2.1	2.5	3.0

Gearbox with motor : GM12-N20VA-05430-XXX

Reduction ratio	10	30	50	100	150	210	250	298	380	1000
Length mm	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12
No-load speed rpm	1550	530	310	160	110	78	60	55	43	16
Rated speed rpm	1100	400	250	125	83	60	50	42	33	13
Rated torque kg.cm	0.02	0.05	0.08	0.18	0.27	0.37	0.45	0.5	0.5	1.0
Max.momentary tolerance torque kg.cm	0.1	0.2	0.4	0.8	1.1	1.6	1.9	2.1	2.5	3.0