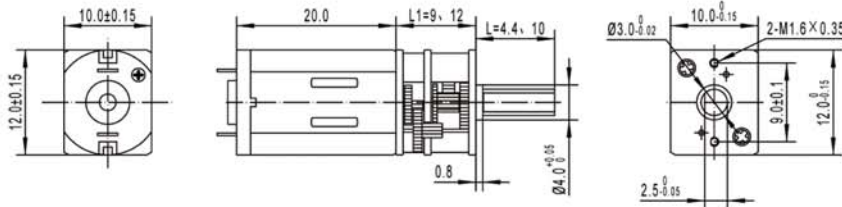


KLS23-GM12-N30VA 12X10mm gearbox plus N20 & N30 permanent magnet DC motor

- Small size dc gear motor with low speed and big torque
- 12mm gear motor provide 0.01Nm torque and more reliable
- Suitable to small diameter, low noise and big torque application
- Dc Gear motors can match encoder,3ppr
- Reduction Ratio: 3、5、10、20、30、50、63、100、150、210、250、298、380、1000



Gear Motor Dimensions (mm)



Motor Technical Data

Motor model No.	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
TFF-N30VA-09210	2.5	5200	20	4050	2	60	0.1	8.5	0.25
TFF-N30VA-09190	6.0	12500	25	10700	3	95	0.35	18	0.50

Gear motor Technical Data Gearbox with motor: GM12-N30VA-09210-XXX

	10	30	50	100	150	210	250	298	380	1000
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	500	165	100	50	33	23	20	17	13	5
Rated speed rpm	405	135	80	40	27	19	16	13	10	4
Rated torque kg.cm	0.012	0.035	0.06	0.12	0.18	0.25	0.3	0.35	0.45	0.8
Max.momentary tolerance torque kg.cm	0.05	0.16	0.25	0.5	0.8	1.0	1.1	1.3	1.6	3.0

Gearbox with motor GM12-N30VA-09190-XXX

	10	30	50	100	150	210	250	298	380	1000
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	1200	410	245	120	82	60	50	42	33	12.5
Rated speed rpm	1070	355	210	105	70	50	42	36	28	11
Rated torque kg.cm	0.024	0.06	0.09	0.18	0.25	0.35	0.38	0.45	0.5	1.0
Max.momentary tolerance torque kg.cm	0.14	0.38	0.5	1.1	1.5	2.1	2.2	2.5	2.5	3.0

Gearbox with motor

	10	30	50	100	150	210	250	298	380	1000
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										
Rated speed rpm										
Rated torque kg.cm										
Max.momentary tolerance torque kg.cm										