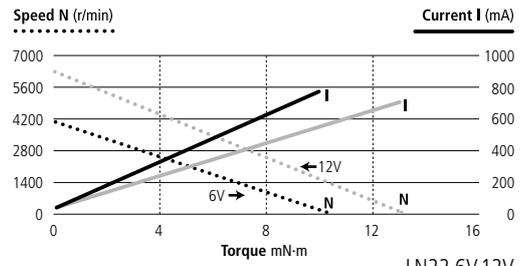
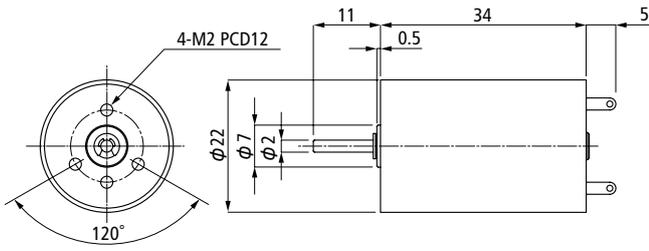


Main Unit Spec

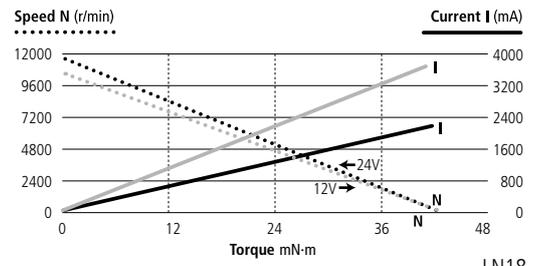
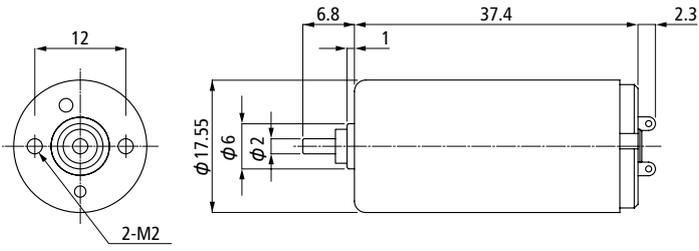
Model	Outside diameter mm	Length mm	Rated power output w	Rated voltage v	Detail
LN22 series	22	34	0.7/1.38	6/12	See page
LN18 series	17.55	37.4	4.72	12	See page
LN18+Gear Head (Planetary Gear)	22	54.4-61.8	-	12	See page
LN15 series	15	v35.3	2.22	12	See page
LN15+Gear Head (Planetary Gear)	16	51.3-58.7	-	12	See page
LN14 series	14	35.8	1.51	12	See page
LN14+Gear Head (Planetary Gear)	16	53.1-60.5	-	12	See page
LN12 series	12.5	31	1.25/1.32	6	See page
LN12+Gear Head (Planetary Gear)	16	49.1-56.5	-	6	See page

LN22 Series



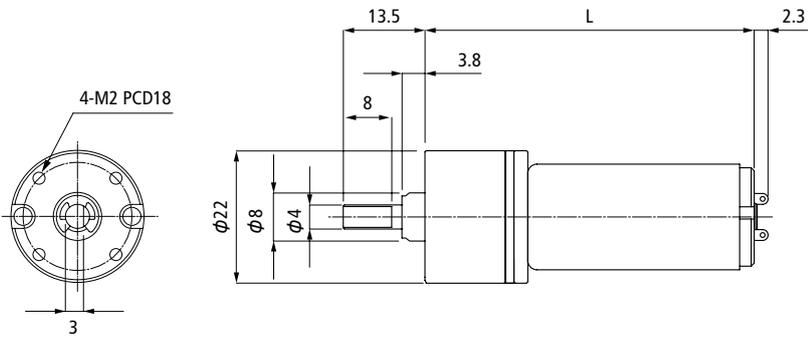
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Starting Current	Torque Constant	Rotation	Moment of Inertia	Weight
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mA	mN · m/A(gf · cm/A)		g · cm ²	g
LN22	6	0.70	1.96 (20)	3400	180	4300	25	9.8 (100)	790	12.8 (131)	CW/CCW	3.0	70
	12	1.38	2.94 (30)	4500	175	5900	20	12.3 (125)	670	18.8 (192)	CW/CCW	3.0	70

LN18 Series



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Starting Current	Torque Constant	Rotation	Moment of Inertia	Weight
	V	W	mN · m (gf · cm)	r/min	mA	r/min	mA	mN · m (gf · cm)	mA	mN · mA (gf · cm/A)		g · cm ²	g
LN18	12	4.72	4.90 (50)	9200	500	10500	25	37.3 (380)	3800	10.3 (105)	CW/CCW	1.9	45

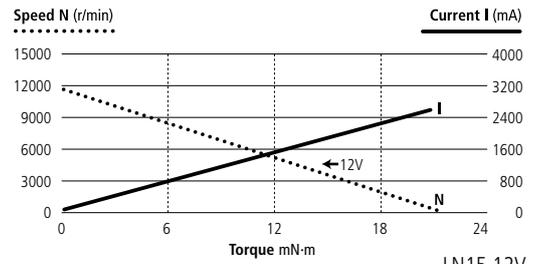
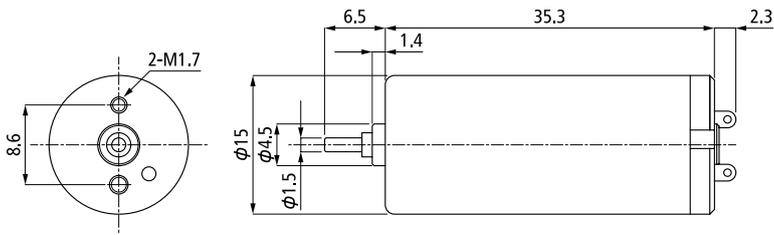
■ LN18 + Gear Head (Planetary Gear)



MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN · m(gf · cm)	r/min	mA	r/min	mA	mm
LG18 (1/ 20)	12	29.4 (300)	355	170	375	45	54.4
LG18 (1/ 62)	12	78.5 (800)	115	165	120	45	58.1
LG18 (1/ 107)	12	98.1 (1000)	68	130	70	45	58.1
LG18 (1/ 242)	12	147.0 (1500)	30	110	31	50	61.8
LG18 (1/ 410)	12	196.0 (2000)	18	100	19	50	61.8

LG18: LN18+Gear Head

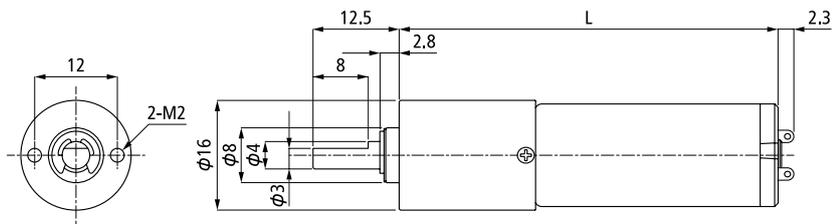
LN15 Series



LN15 12V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Starting Current	Torque Constant	Rotation	Moment of Inertia	Weight
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mA	mN · m/(gf · cm/A)		g · cm ²	g
LN15	12	2.22	1.96 (20)	10800	240	11800	35	23.5 (240)	2430	8.71(88.8)	CW/CCW	0.75	30

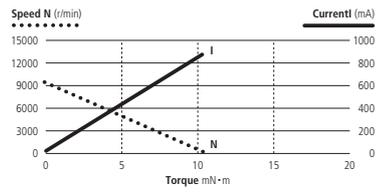
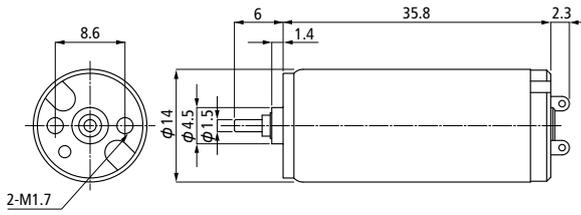
■ LN15 + Gear Head (Planetary Gear)



MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN·m (gf·cm)	r/min	mA	r/min	mA	mm
LG15 (1/ 20)	12	19.6 (200)	550	180	580	50	51.3
LG15 (1/ 62)	12	49.1 (500)	180	180	190	55	55.0
LG15 (1/ 107)	12	98.1 (1000)	103	200	109	55	55.0
LG15 (1/ 242)	12	147.0 (1500)	46	170	48	60	58.7
LG15 (1/ 410)	12	196.0 (2000)	28	150	29	60	58.7

LG15: LN15+Gear Head

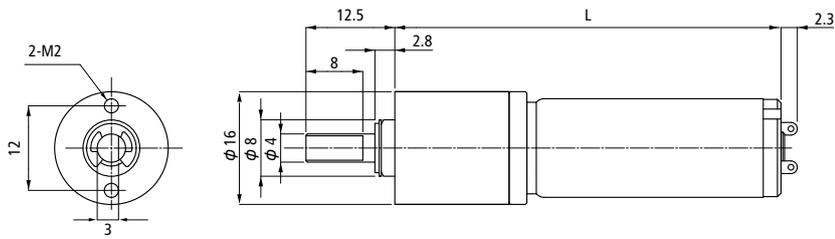
LN14 Series



LN14 12V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Starting Current	Torque Constant	Rotation	Moment of Inertia	Weight
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mA	mN·mA/(gf·cm/A)		g·cm ²	g
LN14	12	1.51	1.96 (20)	7350	190	9050	30	10.5 (107)	880	12.4 (126)	CW/CCW	0.71	24

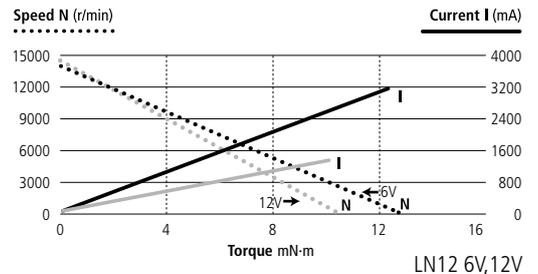
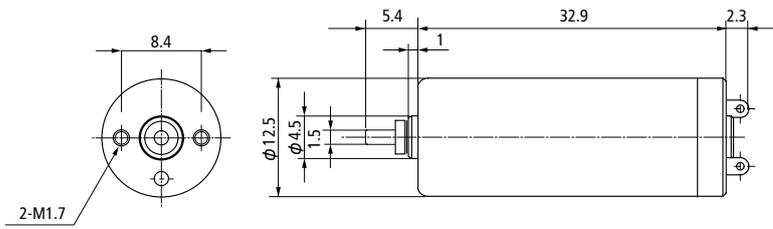
■ LN14 + Gear Head (Planetary Gear)



MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN·m(gf·cm)	r/min	mA	r/min	mA	mm
LG14 (1/ 20)	12	19.6 (200)	400	130	450	30	53.1
LG14 (1/ 62)	12	49.1 (500)	130	120	145	35	56.8
LG14 (1/ 107)	12	98.1 (1000)	75	135	85	35	56.8
LG14 (1/ 242)	12	147.0 (1500)	34	110	37	40	60.5
LG14 (1/ 410)	12	196.0 (2000)	20	95	22	40	60.5

LG14 : LN14+Gear Head

LN12 Series



LN12 6V,12V

MODEL	Rated Voltage V	Rated Power Output W	Rated Torque mN · m(gf · cm)	Rated Speed r/min	Rated Current mA	No Load Speed r/min	No Load Current mA	Starting Torque mN · m(gf · cm)	Starting Current mA	Torque Constant mN · mA/(gf · cm/A)	Winding Resistance Ω	Winding Inductance mH	Moment of Inertia g · cm ²	Mechanical Time Constant ms
LN12	6	1.32	0.98 (10)	12850	280	14000	32	11.93 (121.7)	3051	3.95(40.3)	1.9	0.03	0.34	4.1
LN12	12	1.32	0.98 (10)	12900	170	14300	36	10.01 (102.1)	1405	7.31(74.6)	8.6	0.076	0.34	5.6

LN12 S type

小型・ハイパワー
Small in Size , High Power

特長 - Feature -

▶ **低消費電流**

Low Current Consumption

▶ **低振動・低騒音**

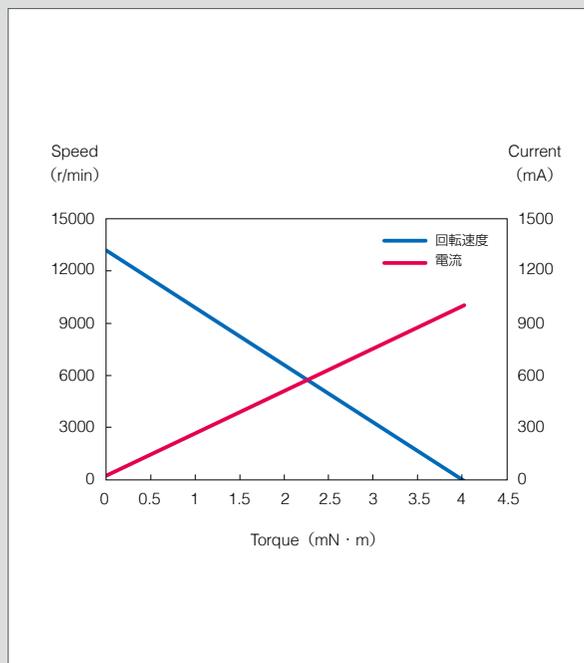
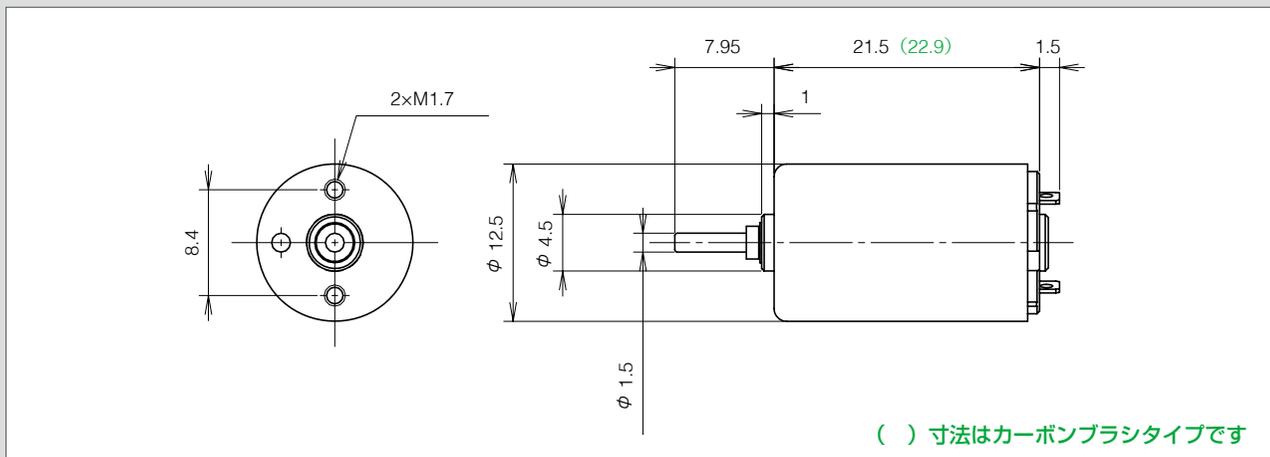
Very Low Vibration , Low Mechanical Noise

▶ **金属ブラシ・カーボンブラシ対応可**

Choice of Metal Brush or Carbon Brush Possible

用途例 - Example of applications -

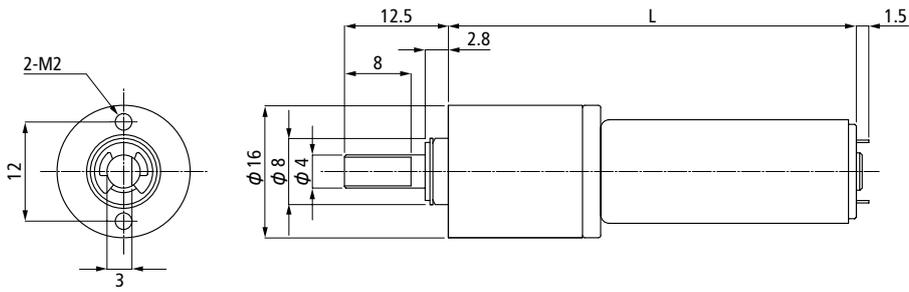
光学機器 Optical equipments 産業機器 Industrial equipments



定格電圧 RATED VOLTAGE	6 V	起動トルク STARTING TORQUE	4.0 (40.8) mN·m (gf·cm)
定格出力 RATED OUTPUT	1 W	トルク定数 TORQUE CONSTANT	4.11 (42) mN·m/A (gf·cm/A)
定格トルク RATED LOAD	0.98 (10) mN·m (gf·cm)	起動電流 STARTING CURRENT	1000 mA
定格回転速度 RATED SPEED	9900 r/min	端子間抵抗 TERMINAL RESISTANCE	6.0 Ω
定格電流 RATED CURRENT	270 mA	インダクタンス INDUCTANCE	0.041 mH
無負荷回転速度 NO LOAD SPEED	13000 r/min	イナーシャ INERTIA	0.16 g·cm ²
無負荷電流 NO LOAD CURRENT	25 mA	時定数 TIME CONSTANT	5.7 ms

⇒ 各種の巻線変更、軸長変更等 専用設計承ります。Changes on winding configuration, shaft length or other customizing available.

■ LN12 + Gear Head (Planetary Gear)



MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN·m(gf·cm)	r/min	mA	r/min	mA	mm
LG12 (1/ 20)	6	11.8 (120)	415	180	455	55	49.1
LG12 (1/ 62)	6	29.4 (300)	135	170	145	65	52.8
LG12 (1/ 107)	6	49.1 (500)	80	170	85	65	52.8
LG12 (1/ 242)	6	98.1 (1000)	35	170	37	75	56.5
LG12 (1/ 410)	6	147.0 (1500)	20	160	22	75	56.5

LG12: LN12+Gear Head