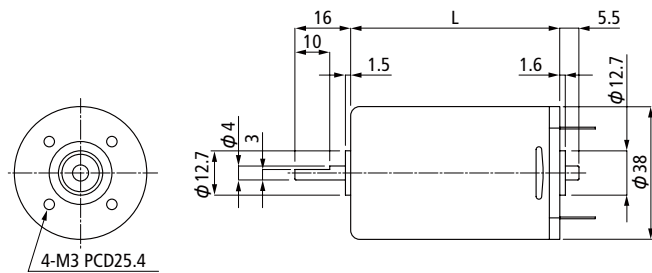


Main Unit Spec

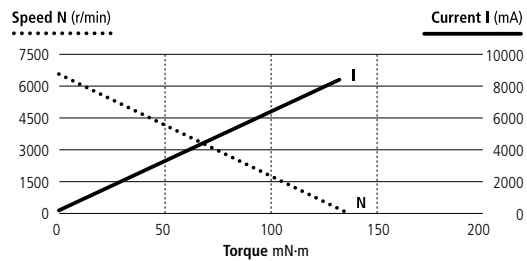
Model/Diagram	Outside diameter mm	Length mm	Rated power output w	Rated voltage v	Detail
FN38 series	38	55/60/70	13/14/26	12/24	See page
FN38+Gear Head (Spur Gear)	60	84.5-99.5	-	24	See page
FN38+Encoder	38	71-91	13/14/26	12/24	See page
FN30 series	30	41/46/55	3.2-5.8	12/24	See page
FN30+Gear Head (Spur Gear)	37	68.1-73.1	-	12/24	See page
FN30+Encoder	32	52-68.5	3.2-5.8	12/24	See page
EN42 series	42	64/74	25/29	24	See page
EN35 series	34.4	31.6/38.2	2.3/2.5/4.5	12/24	See page
EN22 series	22	32.8	1.4	12/24	See page
DN35 series	34.4	31.6/38.2	2.3/4.5	12/24	See page
DN35+Gear Head (Spur Gear)	37	53.7-67.8	-	12/24	See page
DN35+Encoder	34.4	42.6/49.2	2.3/4.5	12/24	See page
DN26 series	25.5	25.5/31/36.5	0.8-3.0	6/12/22/24	See page
DN26+Encoder	25.5	37.7/43.2/48.7	0.8-3.0	6/12/22/24	See page
DN22 series	22	23/32.8	1.3-2.2	6/12/24	See page
DN22S+Gear Head (Planetary Gear)	22	37.7-45.1	-	6/12	See page
DN22+Gear Head (Planetary Gear)	22	50.7-58.1	-	12/24	See page
DN22+Encoder	22/24	30/43.8	1.3-2.2	6/12/24	See page
DN16 series	16	20/31.9	0.8-2.4	12/24	See page
DN16+Gear Head (Spur Gear)	16	35.5-48.9	-	12/24	See page
DN16+Gear Head (Planetary Gear)	16	36-55.3	-	12/24	See page
DN16+Encoder	16	31.7	0.8-2.4	12/24	See page
DN12 series	12	20/30	0.28/0.89	5	See page
DN12+Gear Head (Spur Gear)	12	30.2/40.2	-	5	See page

■ FN38 Series

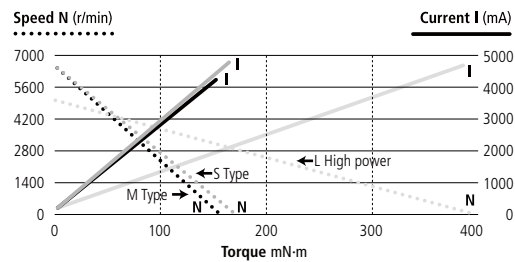
Changes on winding configuration, shaft length or other customizing available.



Type	L (mm)
S	55.0
M	60.0
L	70.0



FN38 S 12V

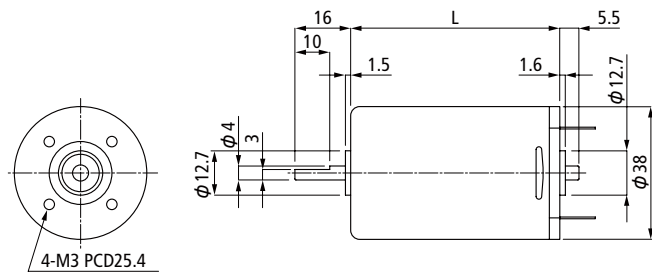


FN38 S/M/L 24V

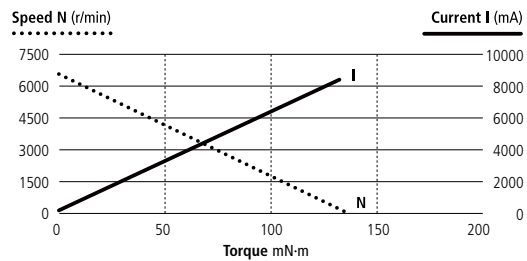
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m(A/gf·cm)/A	Ω	mH	g·cm²	ms	°C/W
FN38 S	12	13	24.5 (250)	5100	1700	6200	230	137 (1400)	16.7 (170)	1.5	0.7	32	17	20
	24	13	24.5 (250)	5200	840	6100	115	158 (1610)	33.8 (345)	5.0	2.9	32	14	20
FN38 M	12	14	24.5 (250)	5400	1660	6600	205	137 (1400)	16.9 (172)	1.7	0.9	39	23	17
	24	13	24.5 (250)	5150	850	6300	110	132 (1350)	33.1 (338)	5.9	3.7	39	21	17
FN38 L	24	26	58.8 (600)	4200	1600	5000	130	373 (3800)	40.2 (410)	2.7	2.7	117	20	14

■ FN38 Series

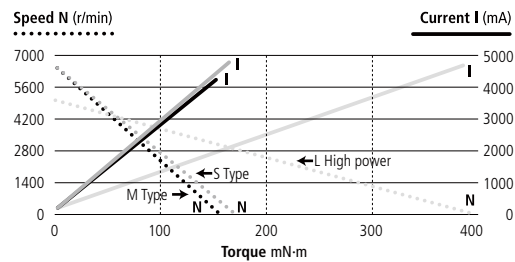
Changes on winding configuration, shaft length or other customizing available.



Type	L (mm)
S	55.0
M	60.0
L	70.0



FN38 S 12V

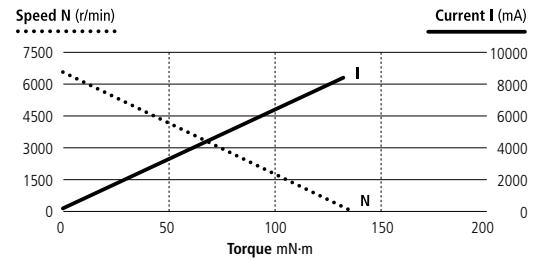
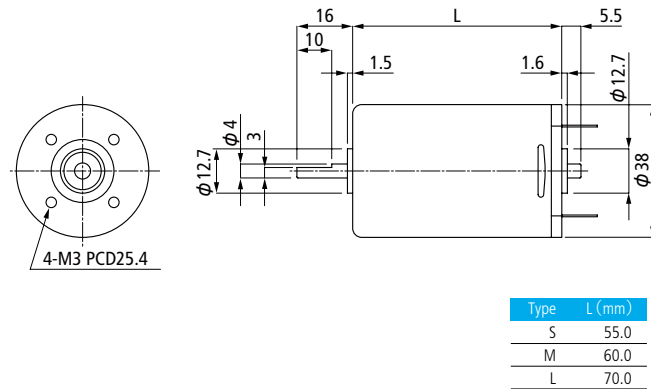


FN38 S/M/L 24V

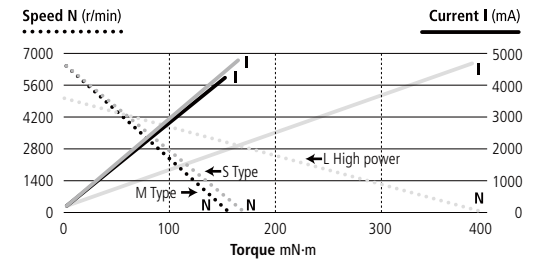
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m(A/gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN38 S	12	13	24.5 (250)	5100	1700	6200	230	137 (1400)	16.7 (170)	1.5	0.7	32	17	20
	24	13	24.5 (250)	5200	840	6100	115	158 (1610)	33.8 (345)	5.0	2.9	32	14	20
FN38 M	12	14	24.5 (250)	5400	1660	6600	205	137 (1400)	16.9 (172)	1.7	0.9	39	23	17
	24	13	24.5 (250)	5150	850	6300	110	132 (1350)	33.1 (338)	5.9	3.7	39	21	17
FN38 L	24	26	58.8 (600)	4200	1600	5000	130	373 (3800)	40.2 (410)	2.7	2.7	117	20	14

■ FN38 Series

Changes on winding configuration, shaft length or other customizing available.



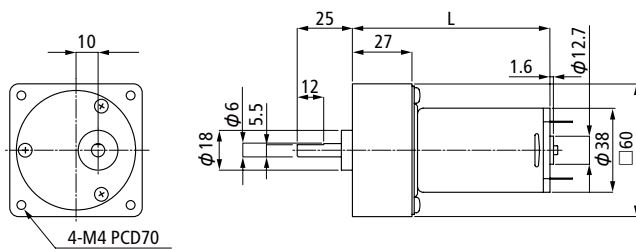
FN38 S 12V



FN38 S/M/L 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN38 S	12	13	24.5 (250)	5100	1700	6200	230	137 (1400)	16.7 (170)	1.5	0.7	32	17	20
	24	13	24.5 (250)	5200	840	6100	115	158 (1610)	33.8 (345)	5.0	2.9	32	14	20
FN38 M	12	14	24.5 (250)	5400	1660	6600	205	137 (1400)	16.9 (172)	1.7	0.9	39	23	17
	24	13	24.5 (250)	5150	850	6300	110	132 (1350)	33.1 (338)	5.9	3.7	39	21	17
FN38 L	24	26	58.8 (600)	4200	1600	5000	130	373 (3800)	40.2 (410)	2.7	2.7	117	20	14

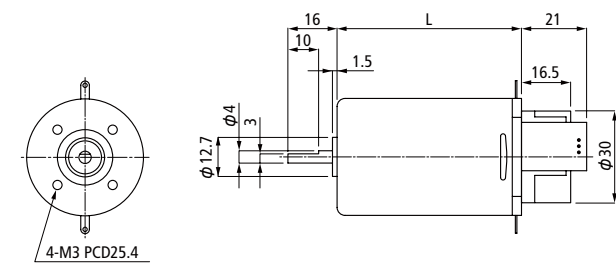
■ FN38 + Gear Head (Spur Gear)



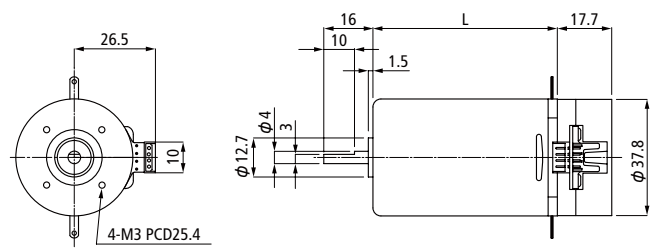
MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN · m(gf · cm)	r/min	mA	r/min	mA	mm
FG38 S (1/12.5)	24	490 (5000)	342	1600	485	170	84.5
FG38 M (1/12.5)	24	490 (5000)	400	1000	500	170	89.5
FG38 L (1/12.5)	24	490 (5000)	345	1400	395	180	99.5

FG38: FN38+Gear Head

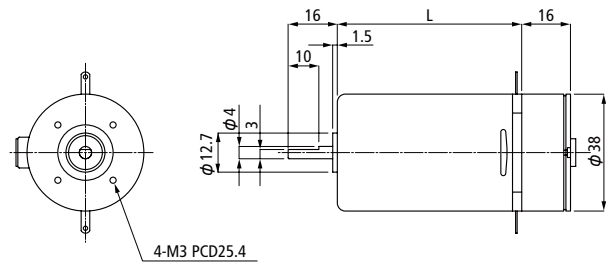
■ FN38 + Encoder



FN38+Encoder 60P/R



FN38+Encoder 200/512 P/R



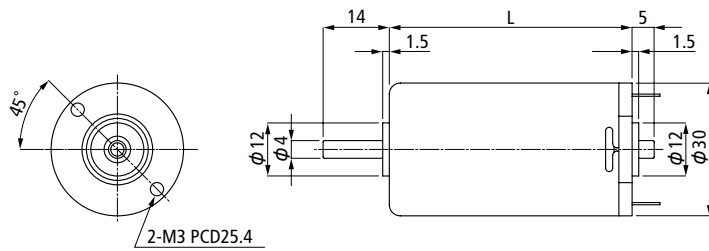
FN38+Encoder 1000P/R

MODEL(Phases)	Input Voltage	Number of Pulses	Response Frequency	Encoder Type	Output Level	Index Pulse Width	Logic Width	Duty Ratio	Output Signal Form
	V	P/R	KHz(MAX)						
FP38 (1)	5	60	20	Optical	TTL	---	---	30%~70%	Square Wave
FP38 (2)	5	200	20	Optical	TTL	---	S=90°e ± 10°e	35%~65%	Square Wave
FP38 (2)	5	512	40	Optical	TTL	---	S=90°e ± 30°e	30%~70%	Square Wave
FP38 (3)	5	1000	50	Optical	TTL	180°e × 4	S=90°e ± 15°e	40%~60%	Square Wave

FP38: FN38+Encoder

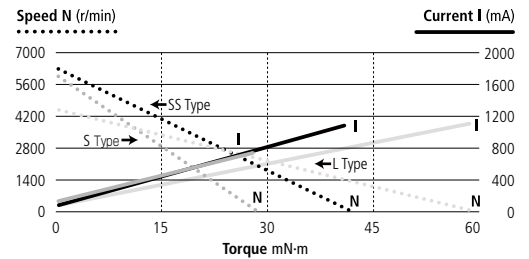
■ FN30 Series

Changes on winding configuration, shaft length or other customizing available.



FN30 S / FN30 L

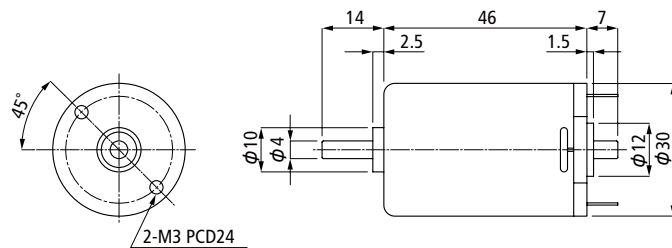
Type	L (mm)
S	41.0
L	55.0



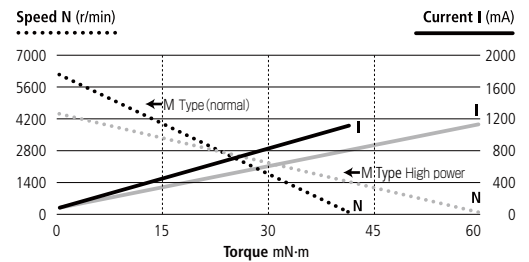
FN30 S/L 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 S	12	3.6	7.35 (75)	4650	550	6300	110	26.5 (270)	17.1 (174)	6.7	3.6	14	33	28
	24	3.4	7.35 (75)	4400	300	6300	50	25.5 (260)	29.7 (303)	27.3	14.7	14	44	27
FN30 L	12	5.0	14.70 (150)	3200	700	4500	75	53.9 (550)	24.8 (253)	5.0	3.1	32	26	21
	24	5.8	14.70 (150)	3300	350	4600	40	53.0 (540)	45.1 (460)	20.0	17.7	32	31	20

Changes on winding configuration, shaft length or other customizing available.



FN30 M

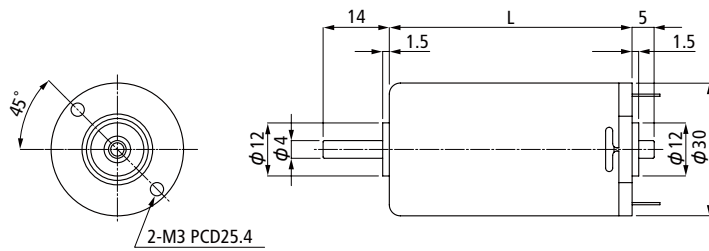


FN30 M 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 M	12	3.3	9.81 (100)	3200	440	4500	60	34.3 (350)	23.5 (240)	8.0	4.1	22	32	24
	24	3.2	9.81 (100)	3100	230	4400	30	32.4 (330)	47.0 (480)	33.0	17.3	22	33	24

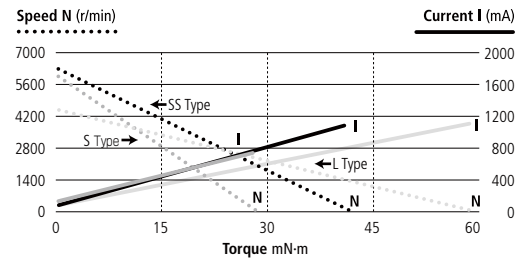
■ FN30 Series

Changes on winding configuration, shaft length or other customizing available.



FN30 S / FN30 L

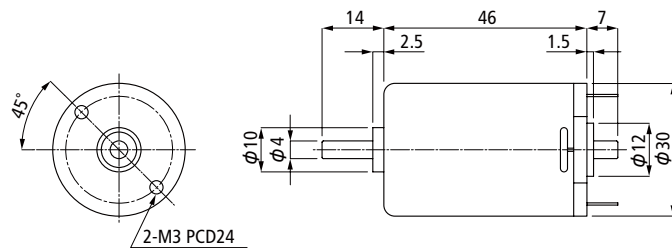
Type	L (mm)
S	41.0
L	55.0



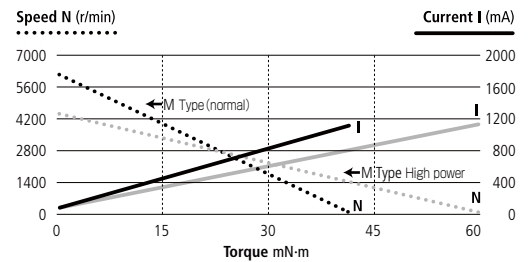
FN30 S/L 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 S	12	3.6	7.35 (75)	4650	550	6300	110	26.5 (270)	17.1 (174)	6.7	3.6	14	33	28
	24	3.4	7.35 (75)	4400	300	6300	50	25.5 (260)	29.7 (303)	27.3	14.7	14	44	27
FN30 L	12	5.0	14.70 (150)	3200	700	4500	75	53.9 (550)	24.8 (253)	5.0	3.1	32	26	21
	24	5.8	14.70 (150)	3300	350	4600	40	53.0 (540)	45.1 (460)	20.0	17.7	32	31	20

Changes on winding configuration, shaft length or other customizing available.



FN30 M

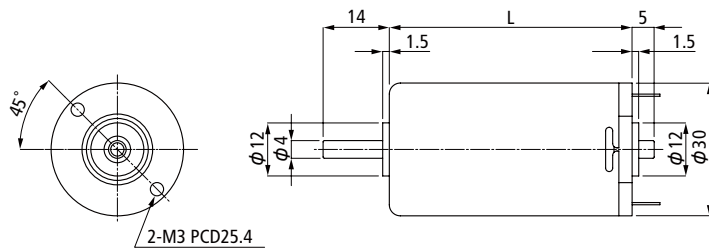


FN30 M 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 M	12	3.3	9.81 (100)	3200	440	4500	60	34.3 (350)	23.5 (240)	8.0	4.1	22	32	24
	24	3.2	9.81 (100)	3100	230	4400	30	32.4 (330)	47.0 (480)	33.0	17.3	22	33	24

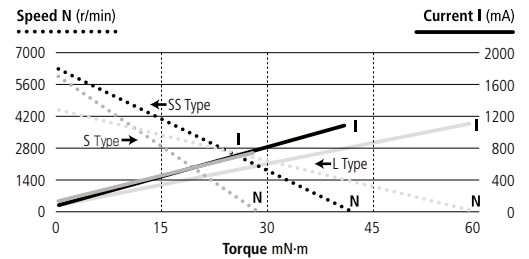
■ FN30 Series

Changes on winding configuration, shaft length or other customizing available.



FN30 S / FN30 L

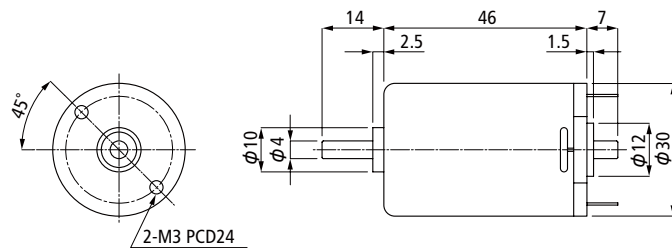
Type	L (mm)
S	41.0
L	55.0



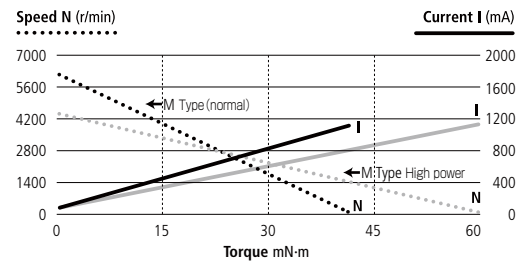
FN30 S/L 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 S	12	3.6	7.35 (75)	4650	550	6300	110	26.5 (270)	17.1 (174)	6.7	3.6	14	33	28
	24	3.4	7.35 (75)	4400	300	6300	50	25.5 (260)	29.7 (303)	27.3	14.7	14	44	27
FN30 L	12	5.0	14.70 (150)	3200	700	4500	75	53.9 (550)	24.8 (253)	5.0	3.1	32	26	21
	24	5.8	14.70 (150)	3300	350	4600	40	53.0 (540)	45.1 (460)	20.0	17.7	32	31	20

Changes on winding configuration, shaft length or other customizing available.



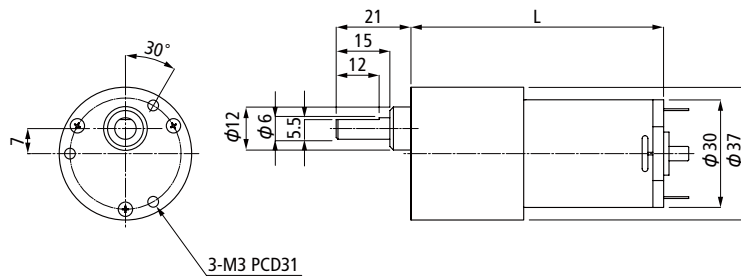
FN30 M



FN30 M 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
FN30 M	12	3.3	9.81 (100)	3200	440	4500	60	34.3 (350)	23.5 (240)	8.0	4.1	22	32	24
	24	3.2	9.81 (100)	3100	230	4400	30	32.4 (330)	47.0 (480)	33.0	17.3	22	33	24

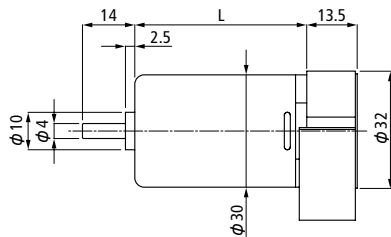
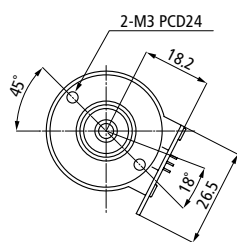
■ FN30 + Gear Head (Spur Gear)



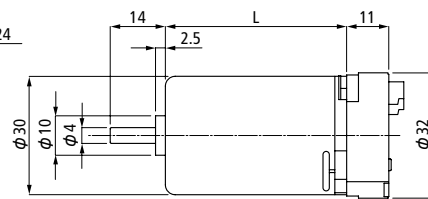
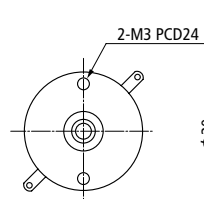
MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN·m(gf·cm)	r/min	mA	r/min	mA	mm
FG30 (1/ 30)	12	196 (2000)	110	420	150	70	68.1
	24	196 (2000)	105	220	145	35	68.1
FG30 (1/ 100)	12	294 (3000)	40	220	45	70	70.6
	24	294 (3000)	40	120	45	35	70.6
FG30 (1/ 150)	12	588 (6000)	25	300	30	70	73.1
	24	588 (6000)	24	160	30	35	73.1

FG30: FN30+Gear Head

■ FN30 + Encoder



FN30+Encoder 120P/R

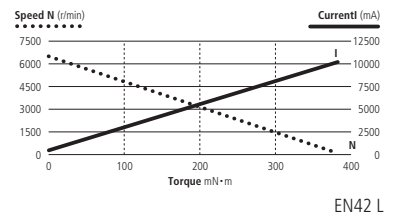
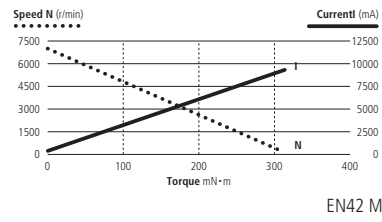
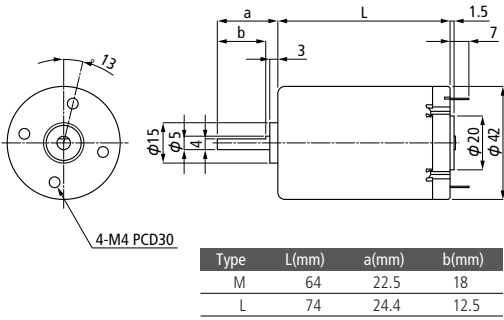


FN30+Encoder 200P/R

MODEL(Phases)	Input Voltage	Number of Pulses	Response Frequency	Encoder Type	Output Level	Index Pulse Width	Logic Width	Duty Ratio	Output Signal Form
	V	P/R	KHz(MAX)						
FP30 (1)	5	120	10	Optical	TTL	---	---	30%~70%	Square Wave
FP30 (3)	5	200	30	Optical	TTL	180°e×2	S=90°e±30°e	30%~70%	Square Wave

FP30: FN30+Encoder

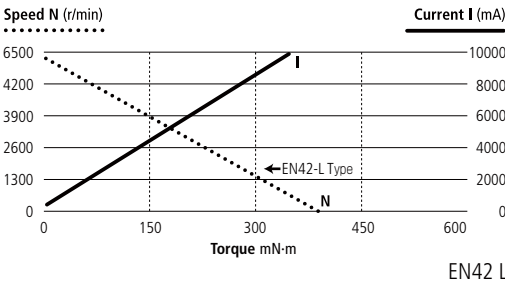
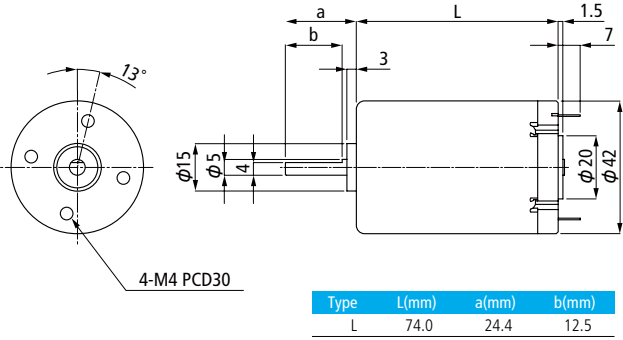
■ EN42 Series



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
EN42 M	24	25.0	39.2 (400)	6100	1400	7000	230	314 (3200)	32.6 (332)	2.4	2.2	136.0	31	14
EN42 L	24	29.0	49.0 (500)	5600	1700	6500	250	383 (3900)	33.9 (346)	2.1	1.9	150.0	27	9

■ EN42 Series

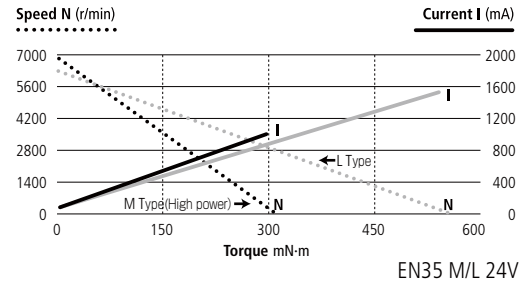
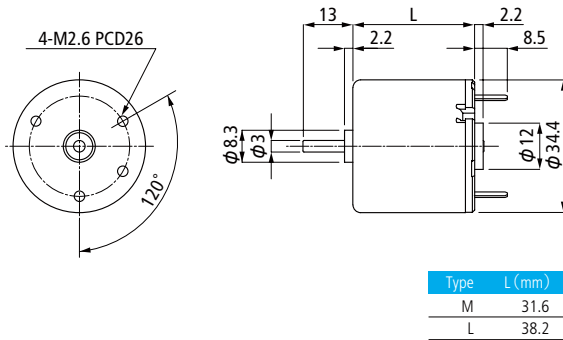
Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
EN42 L	24	29.0	49.0 (500)	5600	1700	6500	250	383 (3900)	33.9 (346)	2.1	1.9	150.0	27	9

■ EN35 Series

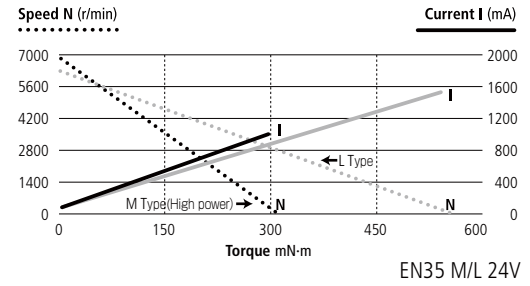
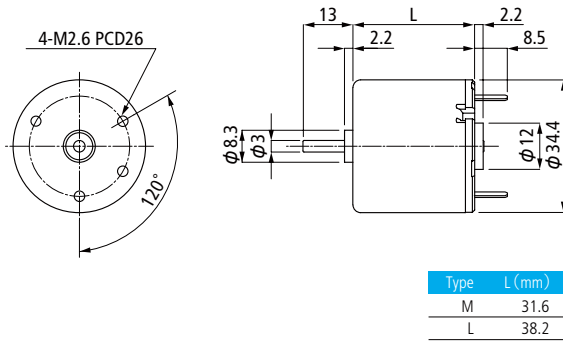
Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
EN35 M	12	2.3	3.92 (40)	5700	340	6500	95	28.4 (290)	16.1 (164)	6.0	3.5	21.0	49	27
	24	2.5	3.92 (40)	6000	175	6900	50	29.4 (300)	30.8 (314)	23.7	12.8	21.0	52	26
EN35 L	12	4.5	7.85 (80)	5500	550	6400	100	49.0 (500)	17.1 (174)	3.9	2.6	35.0	47	24
	24	4.5	7.85 (80)	5500	280	6400	50	49.0 (500)	33.7 (344)	15.0	10.7	35.0	46	23

■ EN35 Series

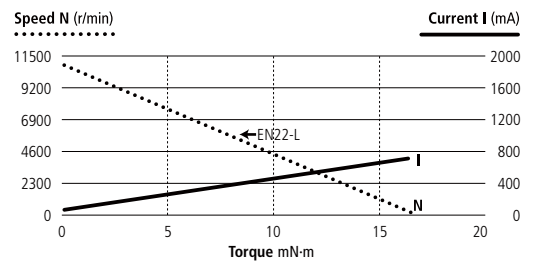
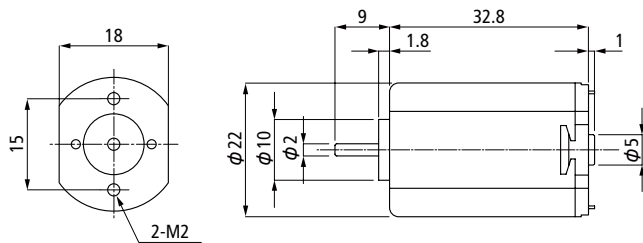
Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
EN35 M	12	2.3	3.92 (40)	5700	340	6500	95	28.4 (290)	16.1 (164)	6.0	3.5	21.0	49	27
	24	2.5	3.92 (40)	6000	175	6900	50	29.4 (300)	30.8 (314)	23.7	12.8	21.0	52	26
EN35 L	12	4.5	7.85 (80)	5500	550	6400	100	49.0 (500)	17.1 (174)	3.9	2.6	35.0	47	24
	24	4.5	7.85 (80)	5500	280	6400	50	49.0 (500)	33.7 (344)	15.0	10.7	35.0	46	23

■ EN22 Series

Changes on winding configuration, shaft length or other customizing available.

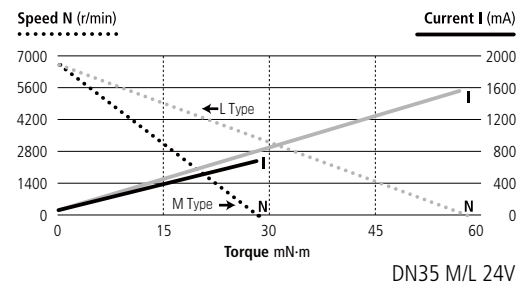
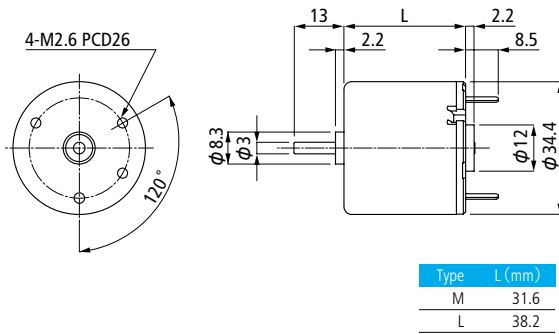


EN22 24V

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm²	ms	°C/W
EN22	12	1.4	2.45 (25)	5400	180	7000	30	10.3 (105)	16.1 (164)	17.9	6.6	4.3	30	38
	24	1.4	2.45 (25)	5400	90	6900	15	10.8 (110)	32.7 (333)	71.9	20.0	4.3	29	38

■ DN35 Series

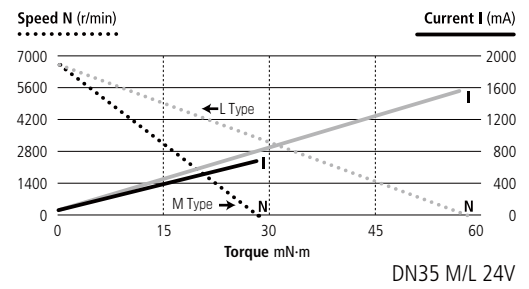
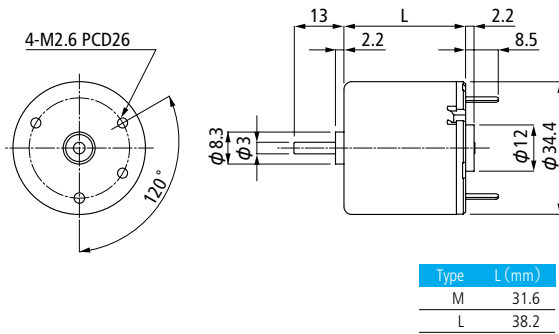
Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN35 M	12	2.3	3.92 (40)	5600	330	6500	90	28.4 (290)	16.0 (163)	6.5	6.7	19	48	27
	24	2.3	3.92 (40)	5500	165	6500	45	25.5 (260)	35.8 (365)	32.0	30.0	19	47	26
DN35 L	12	4.5	7.85 (80)	5500	560	6550	90	49.0 (500)	17.0 (173)	4.2	4.0	33	48	24
	24	4.5	7.85 (80)	5500	300	6500	60	49.0 (500)	33.1 (338)	15.2	17.0	33	46	23

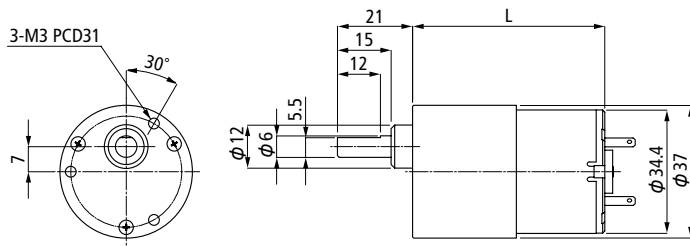
■ DN35 Series

Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN35 M	12	2.3	3.92 (40)	5600	330	6500	90	28.4 (290)	16.0 (163)	6.5	6.7	19	48	27
	24	2.3	3.92 (40)	5500	165	6500	45	25.5 (260)	35.8 (365)	32.0	30.0	19	47	26
DN35 L	12	4.5	7.85 (80)	5500	560	6550	90	49.0 (500)	17.0 (173)	4.2	4.0	33	48	24
	24	4.5	7.85 (80)	5500	300	6500	60	49.0 (500)	33.1 (338)	15.2	17.0	33	46	23

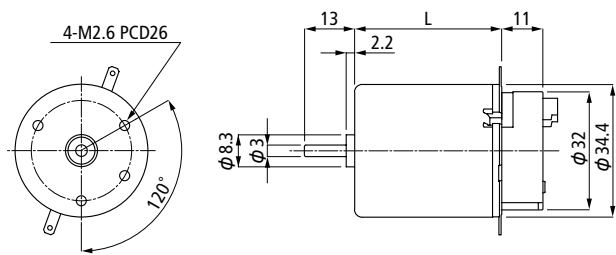
■ DN35 + Gear Head (Spur Gear)



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
DG35 M (1/ 30)	12	78.5 (800)	200	320	225	100	53.7
	24	78.5 (800)	180	160	210	50	53.7
DG35 M (1/ 60)	12	147.0 (1500)	100	325	110	100	56.2
	24	147.0 (1500)	90	160	110	50	56.2
DG35 M (1/ 100)	12	245.0 (2500)	60	325	70	100	56.2
	24	245.0 (2500)	52	170	62	50	56.2
DG35 M (1/ 150)	12	343.0 (3500)	40	325	45	100	58.7
	24	343.0 (3500)	37	130	42	50	58.7
DG35 M (1/ 300)	12	588.0 (6000)	20	300	23	100	58.7
	24	588.0 (6000)	19	130	22	50	58.7
DG35 M (1/ 500)	12	588.0 (6000)	12	230	14	100	61.2
	24	588.0 (6000)	12	120	13	50	61.2
DG35 L (1/ 30)	12	147.0 (1500)	185	500	215	100	60.3
	24	147.0 (1500)	185	265	210	60	60.3
DG35 L (1/ 60)	12	294.0 (3000)	90	540	110	100	62.8
	24	294.0 (3000)	90	270	105	60	62.8
DG35 L (1/ 100)	12	441.0 (4500)	55	500	65	100	62.8
	24	441.0 (4500)	55	260	62	60	62.8
DG35 L (1/ 150)	12	588.0 (6000)	37	490	45	100	65.3
	24	588.0 (6000)	36	260	42	60	65.3
DG35 L (1/ 300)	12	588.0 (6000)	20	300	22	100	65.3
	24	588.0 (6000)	20	160	21	60	65.3
DG35 L (1/ 500)	12	588.0 (6000)	12	230	13	100	67.8
	24	588.0 (6000)	12	130	13	60	67.8

DG35: DN35+Gear Head

■ DN35 + Encoder



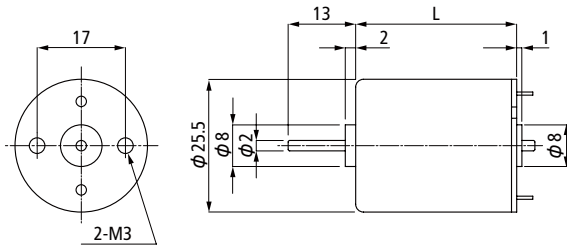
DN35+Encoder 200P/R

MODEL(Phases)	Input Voltage	Number of Pulses	Response Frequency	Encoder Type	Output Level	Index Pulse Width	Logic Width	Duty Ratio	Output Signal Form
DP35 (3)	V	P/R	KHz(MAX)	Optical	TTL	180°e×2	S=90°e±30°e	30%~70%	Square Wave

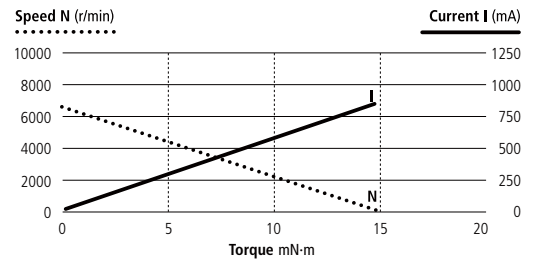
DP35: DN35+Encoder

■ DN26 Series

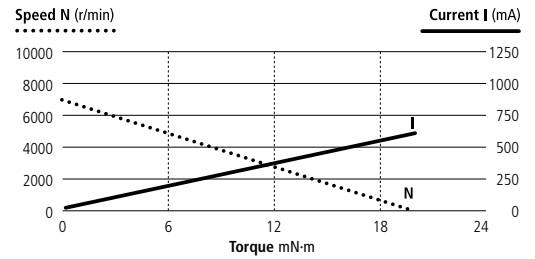
Changes on winding configuration, shaft length or other customizing available.



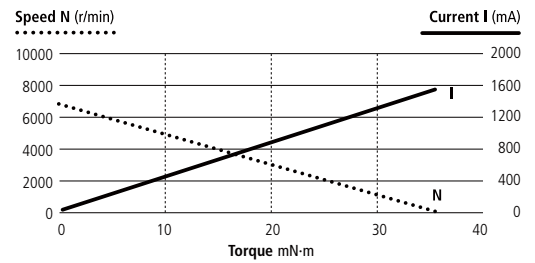
Type	L (mm)
M	31.0
L	36.5



DN26 M 12V



DN26 L 24V

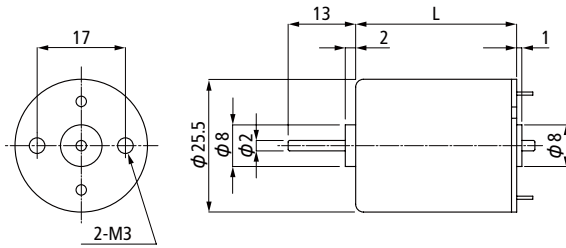


DN26 L 22V High Power

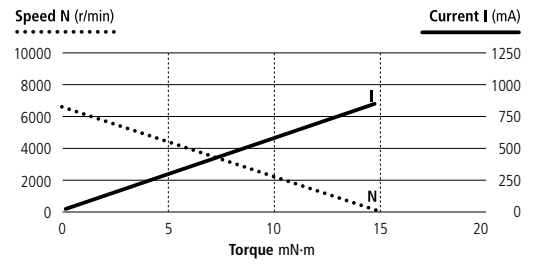
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN26 M	12	2.1	4.90 (50)	4100	320	6150	30	14.7 (150)	16.7 (170)	13.0	12.2	8.7	40.7	40
	24	2.0	4.90 (50)	4000	170	5900	30	14.7 (150)	33.3 (340)	51.8	50.1	8.7	40.5	40
DN26 L	12	2.6	4.90 (50)	5000	340	6650	45	20.6 (210)	16.9 (172)	9.5	7.5	11.0	37.0	33
	24	2.6	4.90 (50)	5100	180	6900	25	19.6 (200)	31.4 (320)	38.2	31.0	11.0	43.0	33
DN26 L High Power	22	3.9	6.86 (70)	5400	270	6750	40	36.3 (370)	30.4 (310)	16.4	13.8	11.0	19.5	33

■ DN26 Series

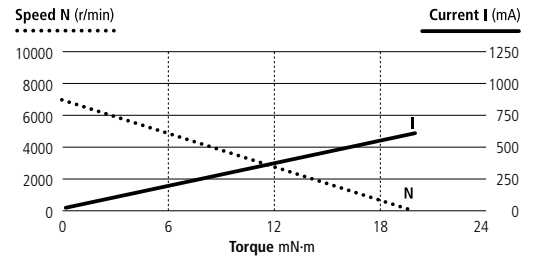
Changes on winding configuration, shaft length or other customizing available.



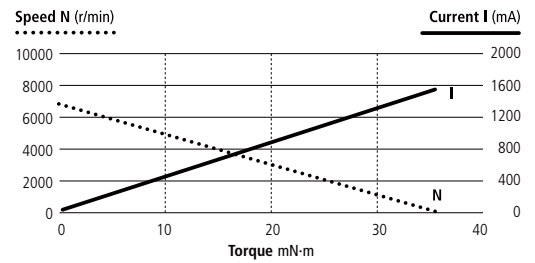
Type	L (mm)
M	31.0
L	36.5



DN26 M 12V



DN26 L 24V

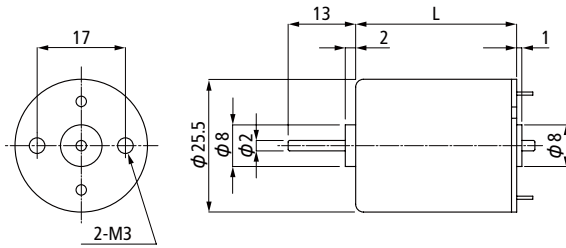


DN26 L 22V High Power

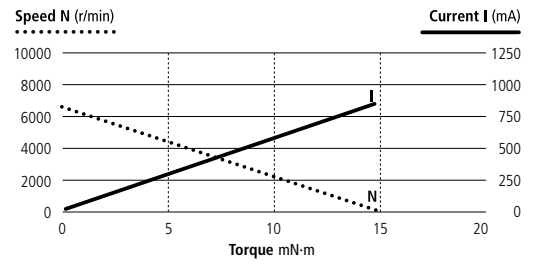
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN26 M	12	2.1	4.90 (50)	4100	320	6150	30	14.7 (150)	16.7 (170)	13.0	12.2	8.7	40.7	40
	24	2.0	4.90 (50)	4000	170	5900	30	14.7 (150)	33.3 (340)	51.8	50.1	8.7	40.5	40
DN26 L	12	2.6	4.90 (50)	5000	340	6650	45	20.6 (210)	16.9 (172)	9.5	7.5	11.0	37.0	33
	24	2.6	4.90 (50)	5100	180	6900	25	19.6 (200)	31.4 (320)	38.2	31.0	11.0	43.0	33
DN26 L High Power	22	3.9	6.86 (70)	5400	270	6750	40	36.3 (370)	30.4 (310)	16.4	13.8	11.0	19.5	33

■ DN26 Series

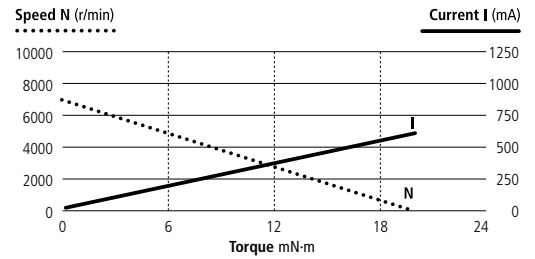
Changes on winding configuration, shaft length or other customizing available.



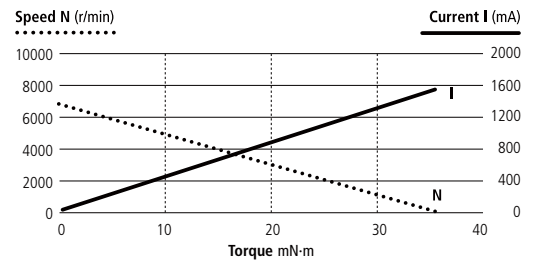
Type	L (mm)
M	31.0
L	36.5



DN26 M 12V



DN26 L 24V

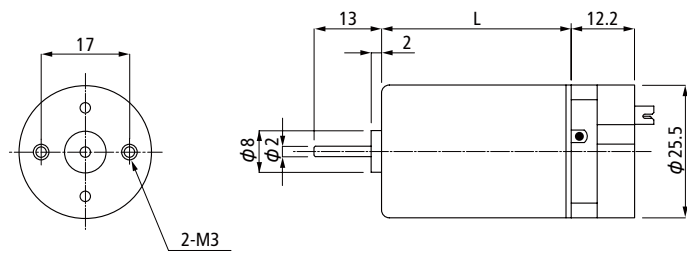


DN26 L 22V High Power

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN26 M	12	2.1	4.90 (50)	4100	320	6150	30	14.7 (150)	16.7 (170)	13.0	12.2	8.7	40.7	40
	24	2.0	4.90 (50)	4000	170	5900	30	14.7 (150)	33.3 (340)	51.8	50.1	8.7	40.5	40
DN26 L	12	2.6	4.90 (50)	5000	340	6650	45	20.6 (210)	16.9 (172)	9.5	7.5	11.0	37.0	33
	24	2.6	4.90 (50)	5100	180	6900	25	19.6 (200)	31.4 (320)	38.2	31.0	11.0	43.0	33
DN26 L High Power	22	3.9	6.86 (70)	5400	270	6750	40	36.3 (370)	30.4 (310)	16.4	13.8	11.0	19.5	33

■ DN26 + Encoder

Changes on winding configuration, shaft length or other customizing available.



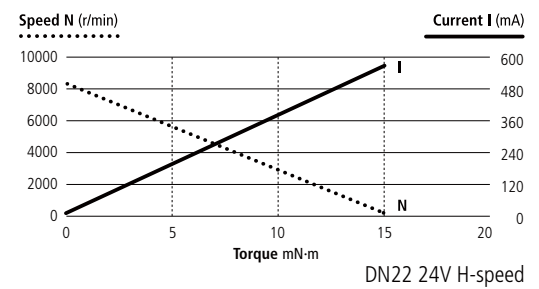
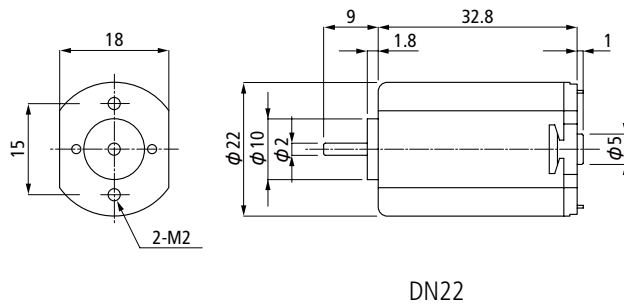
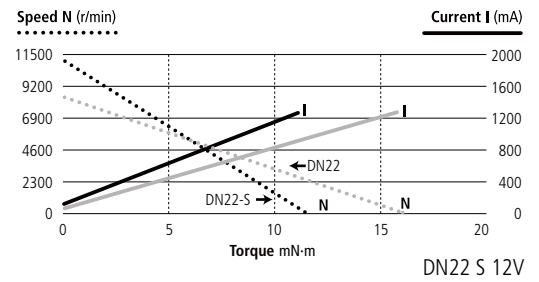
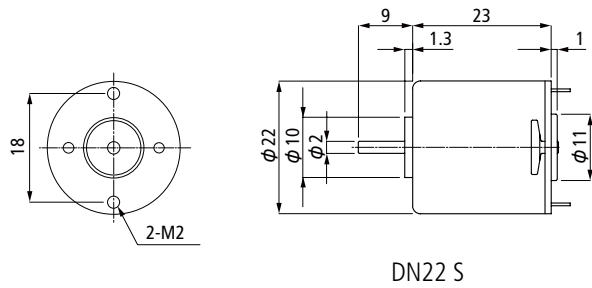
DN26+Encoder 144P/R

MODEL(Phases)	Input Voltage	Number of Pulses	Response Frequency	Encoder Type	Output Level	Index Pulse Width	Logic Width	Duty Ratio	Output Signal Form
DP26 (3)	V	P/R	KHz(MAX)						
DP26 (3)	5	144	30	Optical	TTL	180°e×2	S=90°e±30°e	30%~70%	Square Wave

DP26: DN26+Encoder

■ DN22 Series

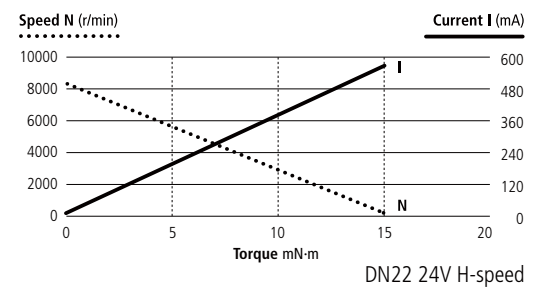
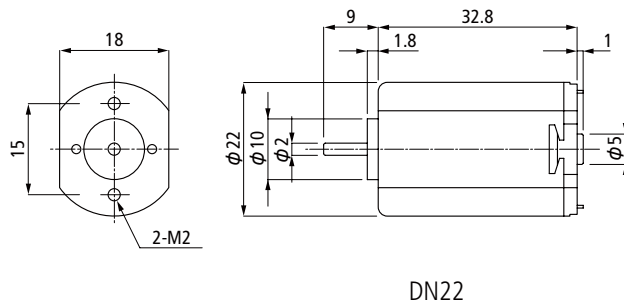
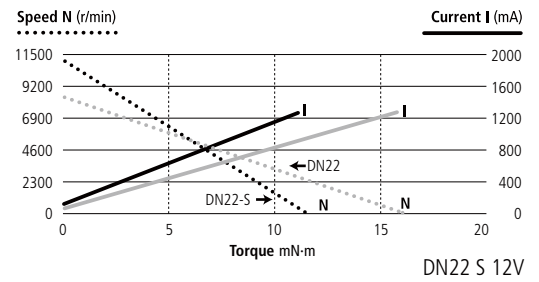
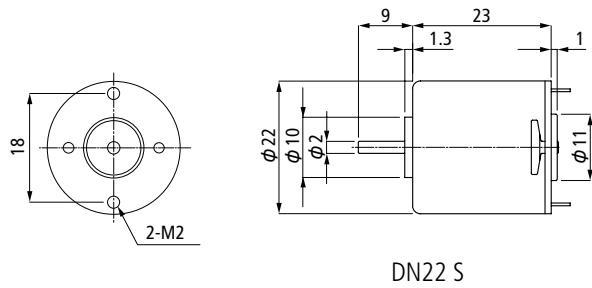
Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/(A(gf·cm/A))	Ω	mH	g·cm ²	ms	°C/W
DN22 S	6	2.0	2.45 (25)	7900	550	10500	80	9.8 (100)	5.2 (53)	3.0	1.3	1.6	17.8	45
	12	2.2	2.45 (25)	8600	340	11000	85	11.3 (115)	9.6 (98)	9.4	4.4	1.6	16.3	45
DN22 M-speed	12	1.3	2.45 (25)	5200	190	6800	35	10.8 (110)	15.7 (160)	16.4	7.6	3.7	25.0	42
	24	1.4	2.45 (25)	5300	100	6600	20	11.8 (120)	31.1 (317)	60.9	28.4	3.7	23.0	42
DN22 H-speed	12	1.8	2.45 (25)	7000	230	8200	45	15.7 (160)	12.5 (127)	9.4	4.4	3.7	23.0	42
	24	1.8	2.45 (25)	7000	120	8300	25	15.2 (155)	25.2 (257)	38.2	21.0	3.7	22.0	42

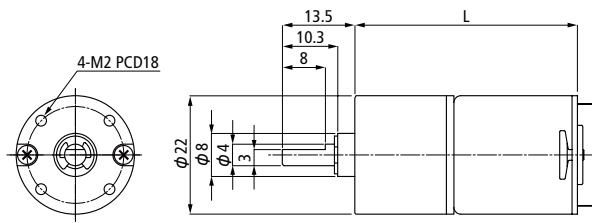
■ DN22 Series

Changes on winding configuration, shaft length or other customizing available.

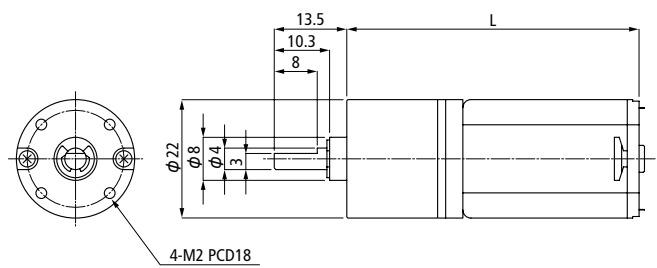


MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN22 S	6	2.0	2.45 (25)	7900	550	10500	80	9.8 (100)	5.2 (53)	3.0	1.3	1.6	17.8	45
	12	2.2	2.45 (25)	8600	340	11000	85	11.3 (115)	9.6 (98)	9.4	4.4	1.6	16.3	45
DN22 M-speed	12	1.3	2.45 (25)	5200	190	6800	35	10.8 (110)	15.7 (160)	16.4	7.6	3.7	25.0	42
	24	1.4	2.45 (25)	5300	100	6600	20	11.8 (120)	31.1 (317)	60.9	28.4	3.7	23.0	42
DN22 H-speed	12	1.8	2.45 (25)	7000	230	8200	45	15.7 (160)	12.5 (127)	9.4	4.4	3.7	23.0	42
	24	1.8	2.45 (25)	7000	120	8300	25	15.2 (155)	25.2 (257)	38.2	21.0	3.7	22.0	42

■ DN22 S+Gear Head (Planetary Gear)



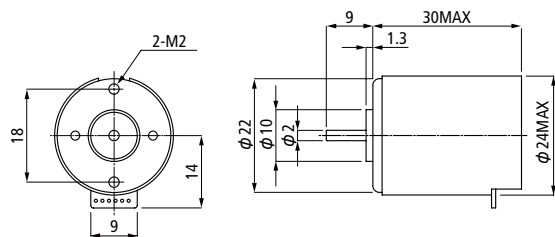
■ DN22+Gear Head (Planetary Gear)



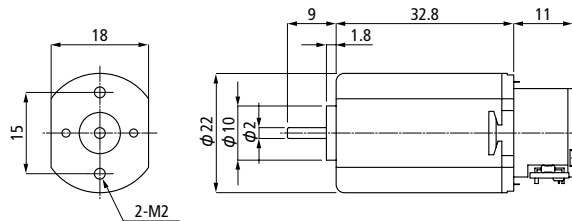
MODEL(Gear Ratio)	Rated Voltage	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Total Length
	V	mN · m(gf · cm)	r/min	mA	r/min	mA	mm
DG22 S (1/ 20)	6	29.4 (300)	410	520	510	160	37.7
	12	29.4 (300)	450	330	540	120	37.7
DG22 S (1/ 62)	6	78.5 (800)	135	510	165	160	41.4
	12	78.5 (800)	145	320	170	120	41.4
DG22 S (1/107)	6	98.1 (1000)	85	410	95	160	41.4
	12	98.1 (1000)	90	270	100	120	41.4
DG22 S (1/242)	6	147.0 (1500)	38	340	43	160	45.1
	12	147.0 (1500)	40	230	45	120	45.1
DG22 S (1/410)	6	196.0 (2000)	23	300	25	160	45.1
	12	196.0 (2000)	25	210	27	120	45.1
DG22 (1/ 20)	12	29.4 (300)	355	230	405	80	50.7
	24	29.4 (300)	350	110	400	40	50.7
DG22 (1/ 62)	12	78.5 (800)	115	230	140	80	54.4
	24	78.5 (800)	115	130	135	40	54.4
DG22 (1/107)	12	98.1 (1000)	70	170	76	80	54.4
	24	98.1 (1000)	80	100	75	40	54.4
DG22 (1/242)	12	147.0 (1500)	31	160	33	80	58.1
	24	147.0 (1500)	30	90	33	40	58.1
DG22 (1/410)	12	196.0 (2000)	19	130	20	80	58.1
	24	196.0 (2000)	19	65	20	40	58.1

DG22: DN22+Gear Head

■ DN22 + Encoder



DN22 S+Encoder 3P/R



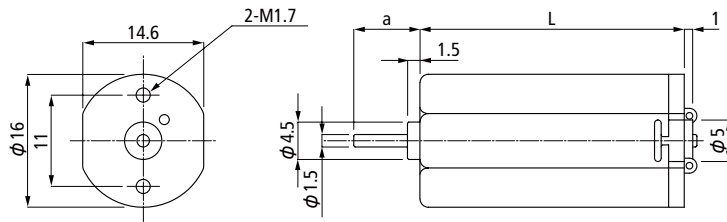
DN22+Encoder 62P/R

MODEL(Phases)	Input Voltage	Number of Pulses	Response Frequency	Encoder Type	Output Level	Logic Width	Duty Ratio	Output Signal Form
	V	P/R	KHz(MAX)					
DP22 (1)	5	62	20	Optical	Simulated Sine Wave	---	Simulated Sine Wave	Sine Wave
DP22 S (2)	5	3	---	Magnetic	TTL	S=90°e±45°e	35%~65%	Square Wave

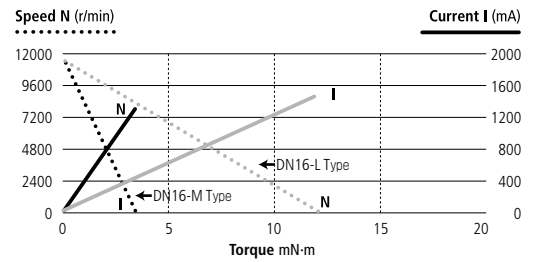
DP22: DN22+Encoder

■ DN16 Series

Changes on winding configuration, shaft length or other customizing available.



Type	L(mm)	a(mm)
M	20.0	9.4
L	31.9	8.0

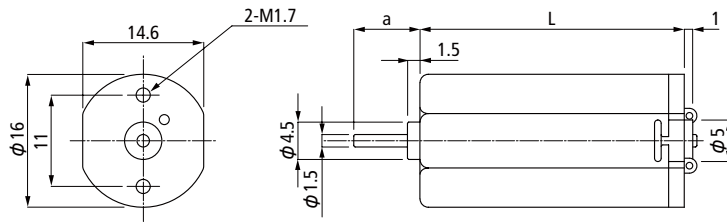


DN16 M/L 12V M-speed

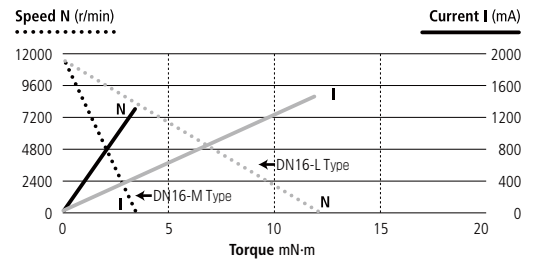
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
DN16 M M-speed	12	0.8	0.98 (10)	8000	170	13000	40	2.55 (26)	7.40 (75)	31.1	8.3	0.67	39	57
DN16 M H-speed	12	1.2	0.98 (10)	11500	230	16000	60	3.24 (33)	5.60 (57)	19.4	4.9	0.67	42	57
DN16 L M-speed	12	1.5	1.96 (20)	7500	230	10000	40	7.85 (80)	10.40 (106)	15.0	4.4	0.80	11	42
	24	1.8	1.96 (20)	8800	140	11500	20	8.24 (84)	17.70 (180)	48.7	14.0	0.80	13	42
DN16 L H-speed	12	2.3	1.96 (20)	11000	300	13500	55	11.80 (120)	7.85 (80)	8.0	2.5	0.80	11	42
	24	2.4	1.96 (20)	11500	160	14000	25	10.80 (110)	14.50 (148)	33.0	9.0	0.80	13	42

■ DN16 Series

Changes on winding configuration, shaft length or other customizing available.



Type	L(mm)	a(mm)
M	20.0	9.4
L	31.9	8.0

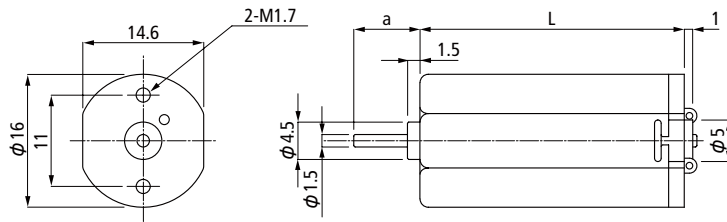


DN16 M/L 12V M-speed

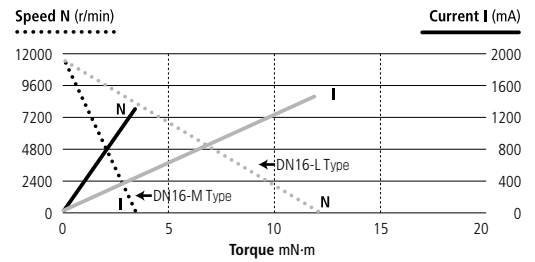
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
DN16 M M-speed	12	0.8	0.98 (10)	8000	170	13000	40	2.55 (26)	7.40 (75)	31.1	8.3	0.67	39	57
DN16 M H-speed	12	1.2	0.98 (10)	11500	230	16000	60	3.24 (33)	5.60 (57)	19.4	4.9	0.67	42	57
DN16 L M-speed	12	1.5	1.96 (20)	7500	230	10000	40	7.85 (80)	10.40 (106)	15.0	4.4	0.80	11	42
	24	1.8	1.96 (20)	8800	140	11500	20	8.24 (84)	17.70 (180)	48.7	14.0	0.80	13	42
DN16 L H-speed	12	2.3	1.96 (20)	11000	300	13500	55	11.80 (120)	7.85 (80)	8.0	2.5	0.80	11	42
	24	2.4	1.96 (20)	11500	160	14000	25	10.80 (110)	14.50 (148)	33.0	9.0	0.80	13	42

■ DN16 Series

Changes on winding configuration, shaft length or other customizing available.



Type	L(mm)	a(mm)
M	20.0	9.4
L	31.9	8.0

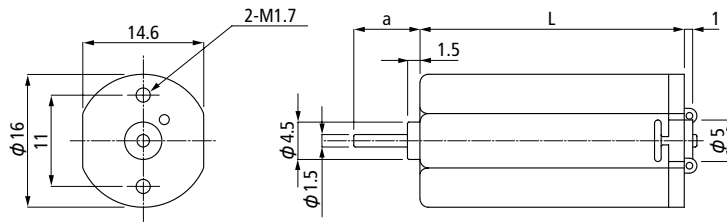


DN16 M/L 12V M-speed

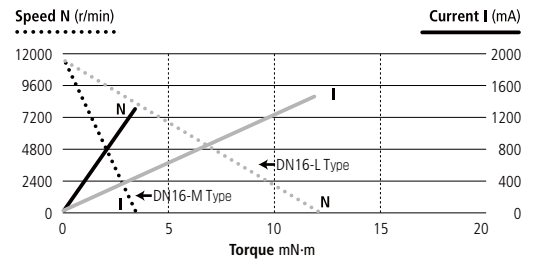
MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
DN16 M M-speed	12	0.8	0.98 (10)	8000	170	13000	40	2.55 (26)	7.40 (75)	31.1	8.3	0.67	39	57
DN16 M H-speed	12	1.2	0.98 (10)	11500	230	16000	60	3.24 (33)	5.60 (57)	19.4	4.9	0.67	42	57
DN16 L M-speed	12	1.5	1.96 (20)	7500	230	10000	40	7.85 (80)	10.40 (106)	15.0	4.4	0.80	11	42
	24	1.8	1.96 (20)	8800	140	11500	20	8.24 (84)	17.70 (180)	48.7	14.0	0.80	13	42
DN16 L H-speed	12	2.3	1.96 (20)	11000	300	13500	55	11.80 (120)	7.85 (80)	8.0	2.5	0.80	11	42
	24	2.4	1.96 (20)	11500	160	14000	25	10.80 (110)	14.50 (148)	33.0	9.0	0.80	13	42

■ DN16 Series

Changes on winding configuration, shaft length or other customizing available.



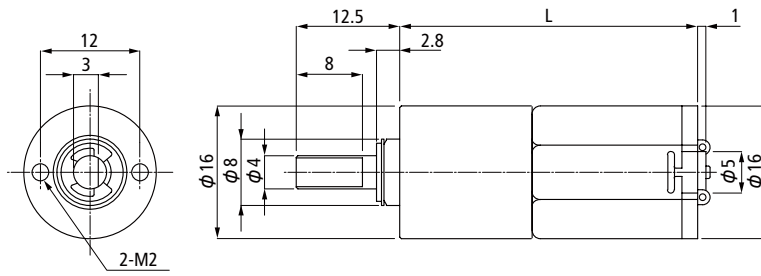
Type	L(mm)	a(mm)
M	20.0	9.4
L	31.9	8.0



DN16 M/L 12V M-speed

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN · m(gf · cm)	r/min	mA	r/min	mA	mN · m(gf · cm)	mN · m/A(gf · cm/A)	Ω	mH	g · cm ²	ms	°C/W
DN16 M M-speed	12	0.8	0.98 (10)	8000	170	13000	40	2.55 (26)	7.40 (75)	31.1	8.3	0.67	39	57
DN16 M H-speed	12	1.2	0.98 (10)	11500	230	16000	60	3.24 (33)	5.60 (57)	19.4	4.9	0.67	42	57
DN16 L M-speed	12	1.5	1.96 (20)	7500	230	10000	40	7.85 (80)	10.40 (106)	15.0	4.4	0.80	11	42
	24	1.8	1.96 (20)	8800	140	11500	20	8.24 (84)	17.70 (180)	48.7	14.0	0.80	13	42
DN16 L H-speed	12	2.3	1.96 (20)	11000	300	13500	55	11.80 (120)	7.85 (80)	8.0	2.5	0.80	11	42
	24	2.4	1.96 (20)	11500	160	14000	25	10.80 (110)	14.50 (148)	33.0	9.0	0.80	13	42

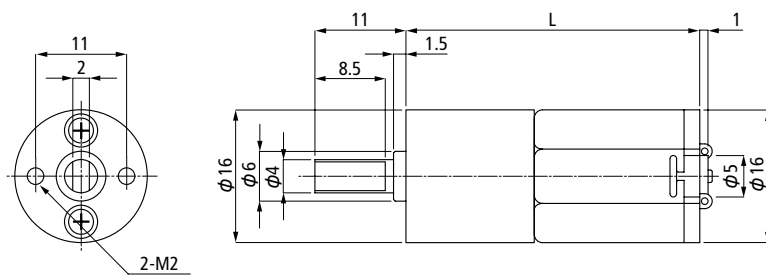
■ DN16 + Gear Head (Planetary Gear)



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
DG16 M (1/ 20)	12	11.8 (120)	375	180	570	80	36.0
DG16 M (1/ 62)	12	29.4 (300)	130	160	185	80	39.7
DG16 M (1/107)	12	49.0 (500)	80	150	110	80	39.7
DG16 M (1/242)	12	98.1 (1000)	35	150	45	80	43.4
DG16 M (1/410)	12	147.0 (1500)	20	135	27	70	43.4
DG16 L (1/ 20)	12	19.6 (200)	400	200	480	70	47.9
	24	19.6 (200)	430	130	530	45	47.9
DG16 L (1/ 62)	12	49.0 (500)	130	185	155	70	51.6
	24	49.0 (500)	155	110	180	40	51.6
DG16 L (1/107)	12	98.1 (1000)	75	180	90	60	51.6
	24	98.1 (1000)	90	110	105	30	51.6
DG16 L (1/242)	12	147.0 (1500)	35	160	40	70	55.3
	24	147.0 (1500)	40	90	46	40	55.3
DG16 L (1/410)	12	196.0 (2000)	21	140	24	70	55.3
	24	196.0 (2000)	26	70	28	35	55.3

DG16: DN16+Gear Head

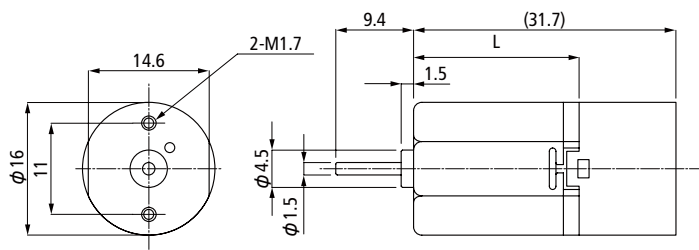
■ DN16 + Gear Head (Spur Gear)



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
DG16 M (1/ 34)	12	19.6 (200)	360	180	460	60	35.5
DG16 M (1/ 53)	12	29.4 (300)	235	180	300	60	35.5
DG16 M (1/ 97)	12	49.0 (500)	130	170	160	65	37.0
DG16 M (1/150)	12	49.0 (500)	95	130	105	65	37.0
DG16 L (1/ 34)	12	49.0 (500)	320	310	390	60	47.4
	24	49.0 (500)	330	165	400	30	47.4
DG16 L (1/ 53)	12	49.0 (500)	225	200	250	60	47.4
	24	49.0 (500)	235	110	260	30	47.4
DG16 L (1/ 97)	12	49.0 (500)	130	140	135	60	48.9
	24	49.0 (500)	135	80	145	30	48.9
DG16 L (1/150)	12	49.0 (500)	85	110	90	60	48.9
	24	49.0 (500)	90	60	95	30	48.9

DG16: DN16+Gear Head

■ DN16 + Encoder

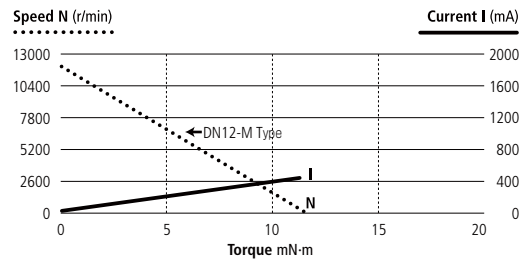
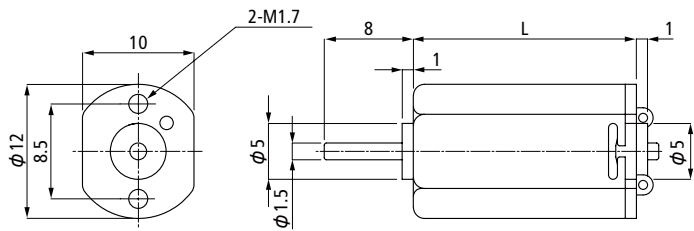


MODEL(Phases)	Input Voltage	Number of Pulses	Encoder Type	Output Level	Duty Ratio	Output Signal Form
DP16 (1)	5	4	Magnetic	TTL	45%~75%	Square Wave

DP16: DN16+Encoder

■ DN12 Series

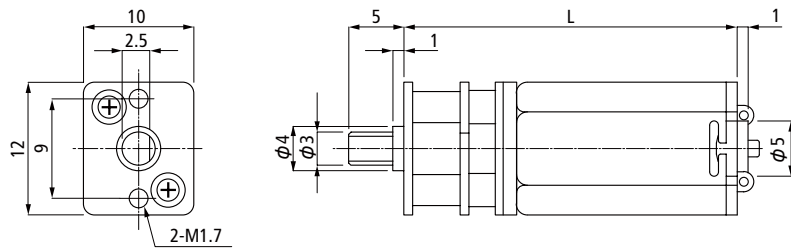
Changes on winding configuration, shaft length or other customizing available.



DN12 M

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN12 M	5	0.28	0.29 (3)	9150	145	12300	55	1.15 (11.7)	3.33 (34.0)	12.50	2.4	0.24	27	90

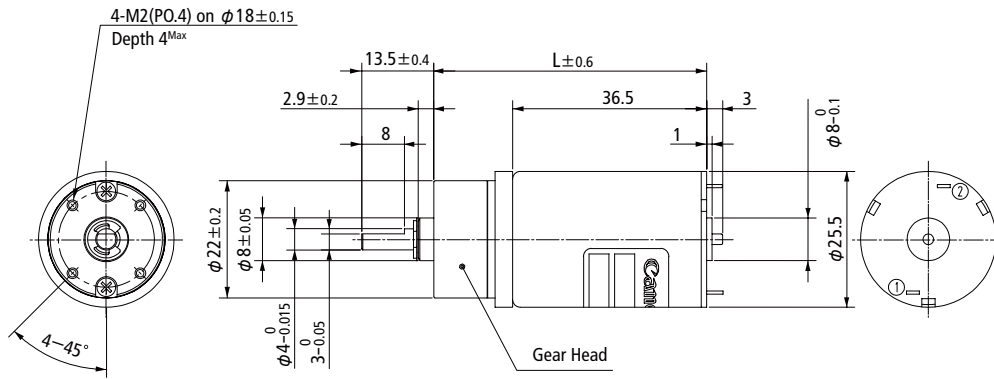
■ DN12 + Gear Head (Spur Gear)



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
DG12 M (1/ 75)	5	14.7 (150)	120	150	160	65	30.2
DG12 M (1/ 134)	5	24.5 (250)	65	150	90	60	30.2
DG12 M (1/ 196)	5	39.2 (400)	43	160	60	60	30.2

DG12: DN12+Gear Head

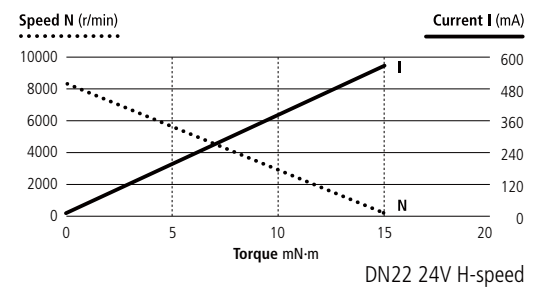
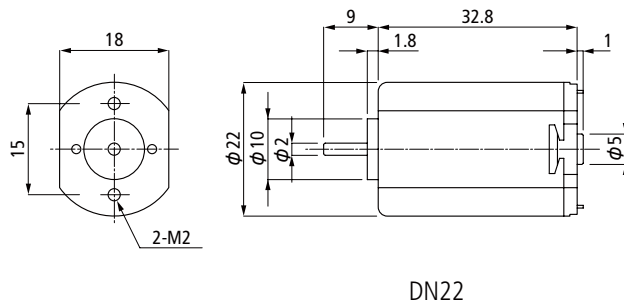
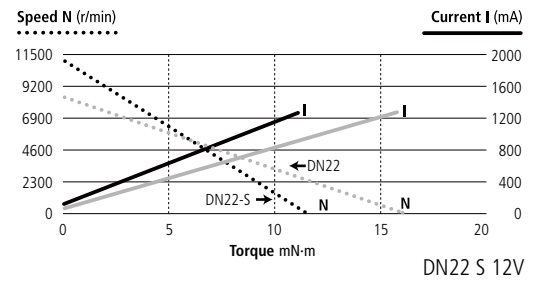
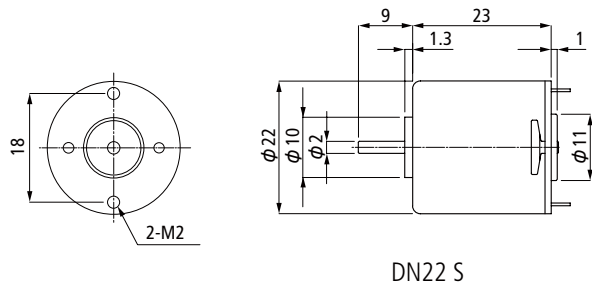
■ DG26 Series



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
DG26 (1/ 20)	12	58.8 (600)	245	335	325	70	55.1
DG26 (1/ 62)	12	147.0 (1500)	80	342	110	70	58.8
DG26 (1/ 107)	12	196.0 (2000)	50	277	60	70	58.8
DG26 (1/ 245)	12	294.0 (3000)	23	240	27	70	62.5
DG26 (1/ 410)	12	294.0 (3000)	15	170	16	70	62.5

■ DN22 Series

Changes on winding configuration, shaft length or other customizing available.



MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Torque Constant	Winding Resistance	Winding Inductance	Moment of Inertia	Mechanical Time Constant	Thermal Resistance
	V	W	mN·m(gf·cm)	r/min	mA	r/min	mA	mN·m(gf·cm)	mN·m/A(gf·cm/A)	Ω	mH	g·cm ²	ms	°C/W
DN22 S	6	2.0	2.45 (25)	7900	550	10500	80	9.8 (100)	5.2 (53)	3.0	1.3	1.6	17.8	45
	12	2.2	2.45 (25)	8600	340	11000	85	11.3 (115)	9.6 (98)	9.4	4.4	1.6	16.3	45
DN22 M-speed	12	1.3	2.45 (25)	5200	190	6800	35	10.8 (110)	15.7 (160)	16.4	7.6	3.7	25.0	42
	24	1.4	2.45 (25)	5300	100	6600	20	11.8 (120)	31.1 (317)	60.9	28.4	3.7	23.0	42
DN22 H-speed	12	1.8	2.45 (25)	7000	230	8200	45	15.7 (160)	12.5 (127)	9.4	4.4	3.7	23.0	42
	24	1.8	2.45 (25)	7000	120	8300	25	15.2 (155)	25.2 (257)	38.2	21.0	3.7	22.0	42

HN32

体積 40%削減（当社製品比）

40% reduction in volume of motor compared to our comparable motor in performance

特長 - Feature -

▶ 小型・軽量・高出力

Small in Size , Light Weight , High Power

▶ レアアース系マグネット不使用

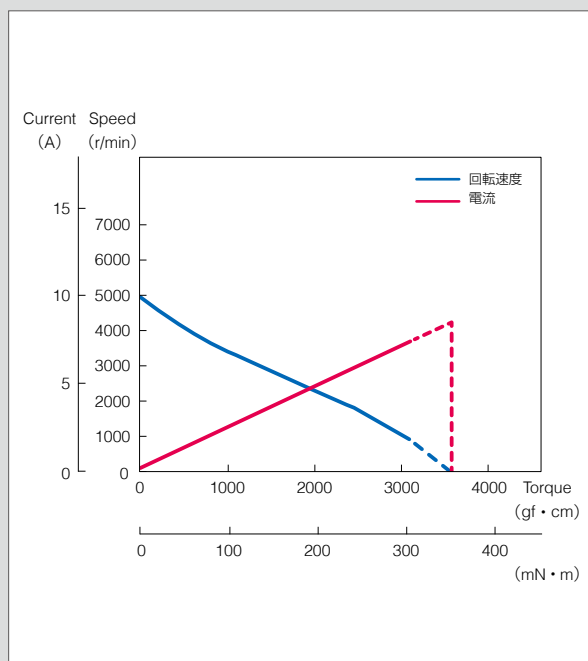
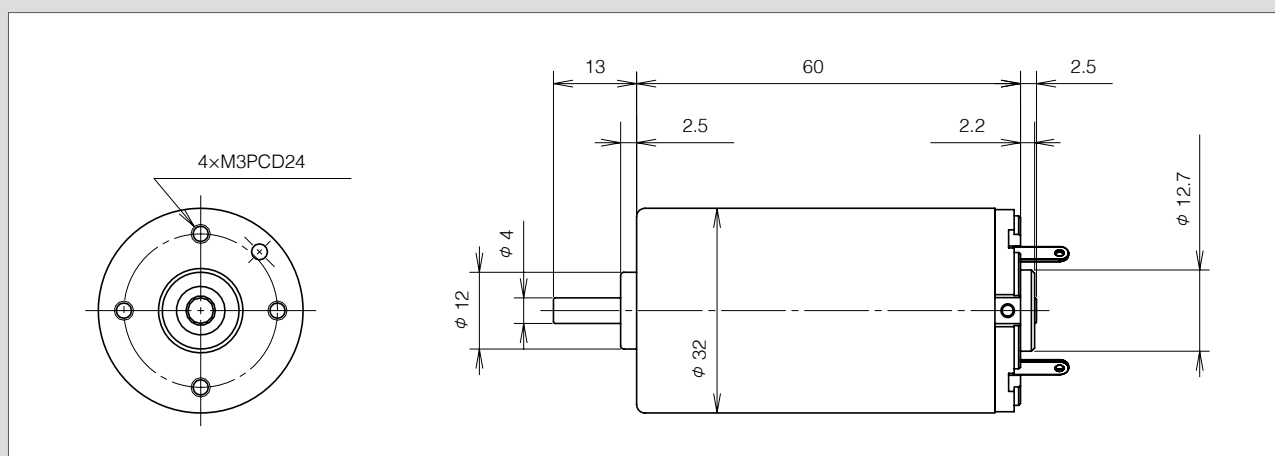
No Rare Earth Magnets Used

▶ 静音・低振動・高効率

Low Mechanical Noise , Very Low Vibration , High Efficiency

用途例 - Example of applications -

金銭機器 Cash Handling Machines 産業機器 Industrial equipments 事務機 Office equipments



定格電圧 RATED VOLTAGE	24 V DC	起動トルク STARTING TORQUE	343 mN・m (3500gf・cm)
定格出力 RATED OUTPUT	19.4 W	トルク定数 TORQUE CONSTANT	42.2 mN・m/A (430gf・cm/A)
定格トルク RATED LOAD	44.1 mN・m (450gf・cm)	熱抵抗 THERMAL CONSTANT	14 °C/W
定格回転速度 RATED SPEED	4200 r/min	端子間抵抗 TERMINAL RESISTANCE	2.9 Ω
定格電流 RATED CURRENT	1200 mA	インダクタンス INDUCTANCE	3.1 mH
無負荷回転速度 NO LOAD SPEED	5000 r/min	イナーシャ INERTIA	60 g・cm ²
無負荷電流 NO LOAD CURRENT	140 mA	時定数 TIME CONSTANT	9.8 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.

■ HN54 Series (L=75mm)

Changes on winding configuration, shaft length or other customizing available.

Features ● 7 Slots High Power Motor

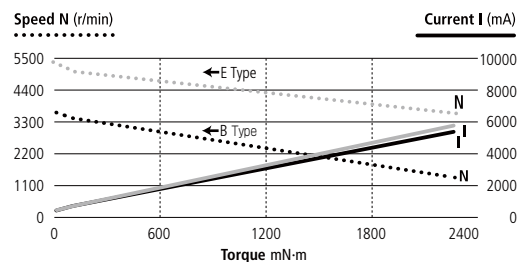
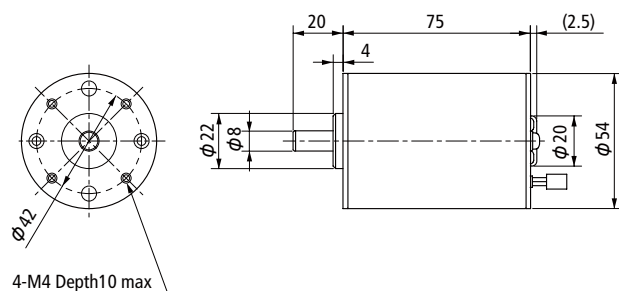
● 2-Pole Magnet

● Low Electric Noise, Low Mechanical Noise

Application ● Industrial Machines

● Office Machines

● Cash Handling Machines



HN54, 75mm

MODEL	Rated Voltage	Rated Power Output	Rated Torque	Rated Speed	Rated Current	No Load Speed	No Load Current	Starting Torque	Starting Current	Torque Constant	Weight
	V	W	mN·m(gf·cm)	r/min	A	r/min	A	mN·m(gf·cm)	A	mN·m/A(gf·cm/A)	g
HN54(B type)	24	35.4	147.1 (1500)	2300	2.5	3200	0.33	392.3 (4000)	9.0	72.4 (739)	700
HN54(E type)	24	46.2	98.1 (1000)	4500	3.0	5400	0.45	392.3 (4000)	16.0	40 (408)	700

※HN54 Series are the products of Nisca Corporation.