

DINGS'
Precision Motion Specialist

GRIPPER PRODUCT CATALOG



Based on our own design and development of through motor foundation, the stroke of 6mm and 12mm Gripper can be selected.

The structure is compact and simple, which can replace the pneumatic clamping claw, reduce the operation noise, and effectively improve the accuracy.

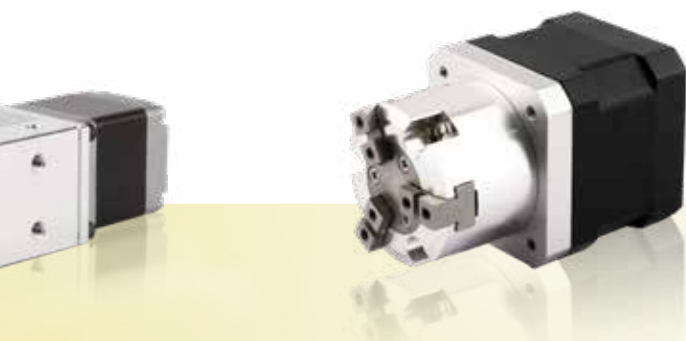
High resolution of encoder based closed loop torque control Motion Controller is optional.



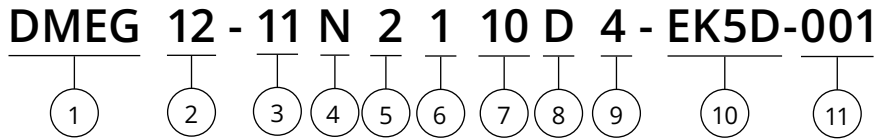
GRIPPER

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Part Number Construction



① Product Name
Electric Gripper

② Stroke (mm)
12 = 12 mm

③ Motor Size

Motor Size (mm)	20	28	35	42
Motor Size (NEMA)	8	11	14	17

④ Motor Type
N = Non-Captive type

⑤ Motor Step Angle
2 = 2 Phase with 1.8°

⑥ Motor Length
1 = Single stack
2 = Double stack

⑦ Rated Current / Phase
XX = X.X (A) / Phase

⑦ Lead Screw Code

Please refer to lead screw code selection table

⑧ Number of Lead Wires
4 = 4 Flying leads
6 = 6 Flying leads

⑨ Option
EKX = Encoder [X = Encoder Resolution]
ER = Encoder Ready

⑩ Customer Sequence Number

Example

Part Number	DMEG12-11N2110D4-EK5D-001
Description	Electric Gripper 12mm Stroke NEMA 11 Non-Captive Linear Actuator 2 Phase / 1.8° Stepper Single Stack 1.0A / Phase D Lead (0.05" or 1.27mm) 4 Flying Wires EK5 Encoder with differential output 1,000 lines Serial Number 001

20mm Gripper (6mm Stroke)

Motor Characteristics

Motor	Voltage (V)	Current (A _{RMS})	Resistance (Ω)	Inductance (mH)	Lead wire No.	Motor length (mm)
8N2105	2.5	0.5	5.1	1.5	4	27.2
8N2205	4.4	0.5	8.8	2.7	4	38.1

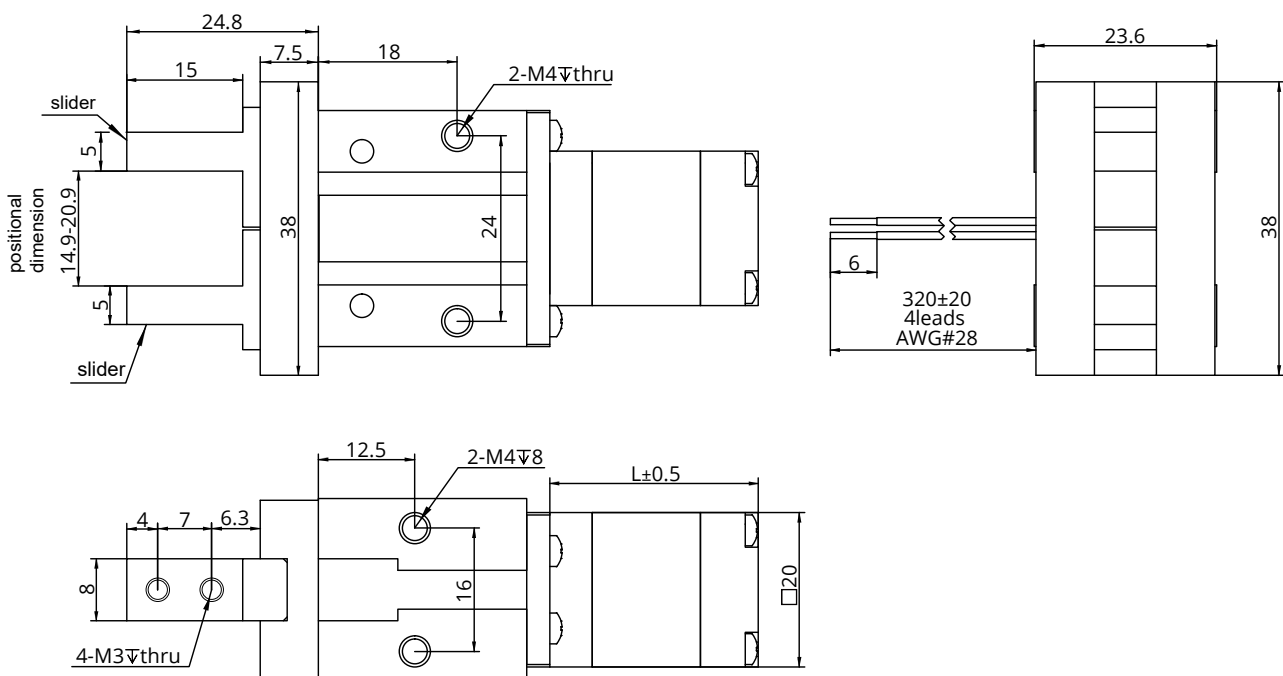
Available Lead Screw and Travel per Step

Screw Dia. (inch)	Screw Dia. (mm)	Lead (inch)	Lead (mm)	Lead Code	Travel Per Step @1.8° (mm)*
0.138	3.24	0.0394	1	AB	0.005
0.138	3.5	0.0787	2	G	0.01
0.138	3.5	0.1575	4	M	0.02

Gripping Force Recommendation

Motor Size	Body Length (mm)	Part Code	Stroke	Screw Code	Lead (mm)	Max. Gripping Force (N)	Recommended Gripping Force (N)
20mm	27.2	8N2105	6mm	AB	1	25	13
				G	2	21	11
				M	4	11	6
	38.1	8N2205	6mm	AB	1	50	25
				G	2	36	18
				M	4	32	16

Dimensional Drawings



Note : All drawings are 1st Angle Projection - ISO Compliant (3D models available)

28mm Gripper (6 / 12mm Stroke)

Motor Characteristics

Motor	Voltage (V)	Current (A _{RMS})	Resistance (Ω)	Inductance (mH)	Lead wire No.	Motor length (mm)
11N2105	4.5	0.5	9.1	6	4	33.5
11N2110	2.2	1	2.1	1.5	4	33.5
11N2210	4.1	1	4.1	4	4	45
11N2216	2.4	1.6	1.5	1.3	4	45

Available Lead Screw and Travel per Step

Screw Dia. (inch)	Screw Dia. (mm)	Lead (inch)	Lead (mm)	Lead Code	Travel Per Step @1.8° (mm)*
0.188	4.77	0.025	0.635	A	0.003175
0.188	4.77	0.05	1.27	D	0.00635
0.188	4.77	0.1	2.54	K	0.0127
0.188	4.77	0.2	5.08	R	0.0254

Gripping Force Recommendation

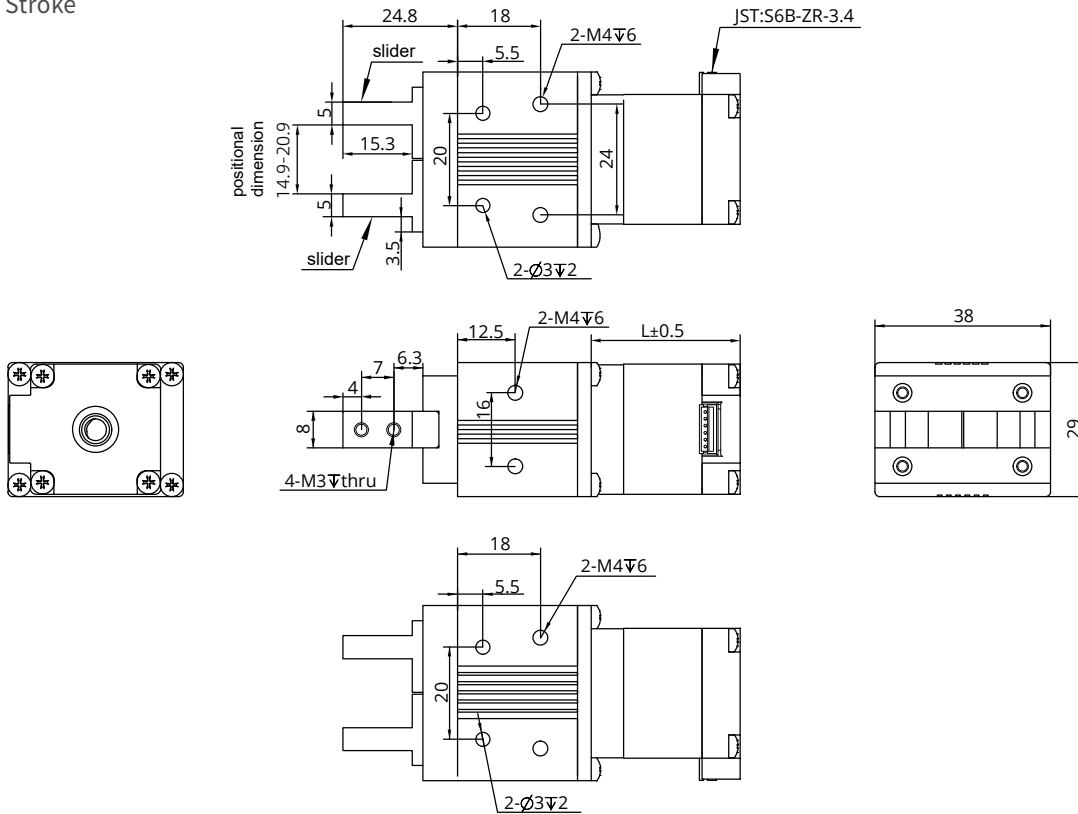
Motor Size	Body Length (mm)	Part Code	Stroke	Screw Code	Lead (mm)	Max. Gripping Force (N)	Recommended Gripping Force (N)
28mm	33.5	11N2105 / 2110	6 / 12 mm	A	0.635	110	55
				D	1.27	84	42
				K	2.54	56	28
				R	5.08	36	18
	45	11N2210 / 2216	6 / 12 mm	A	0.635	140	70
				D	1.27	120	60
				K	2.54	100	50
				R	5.08	60	30

For stroke customization, please contact DINGS' or local representative.

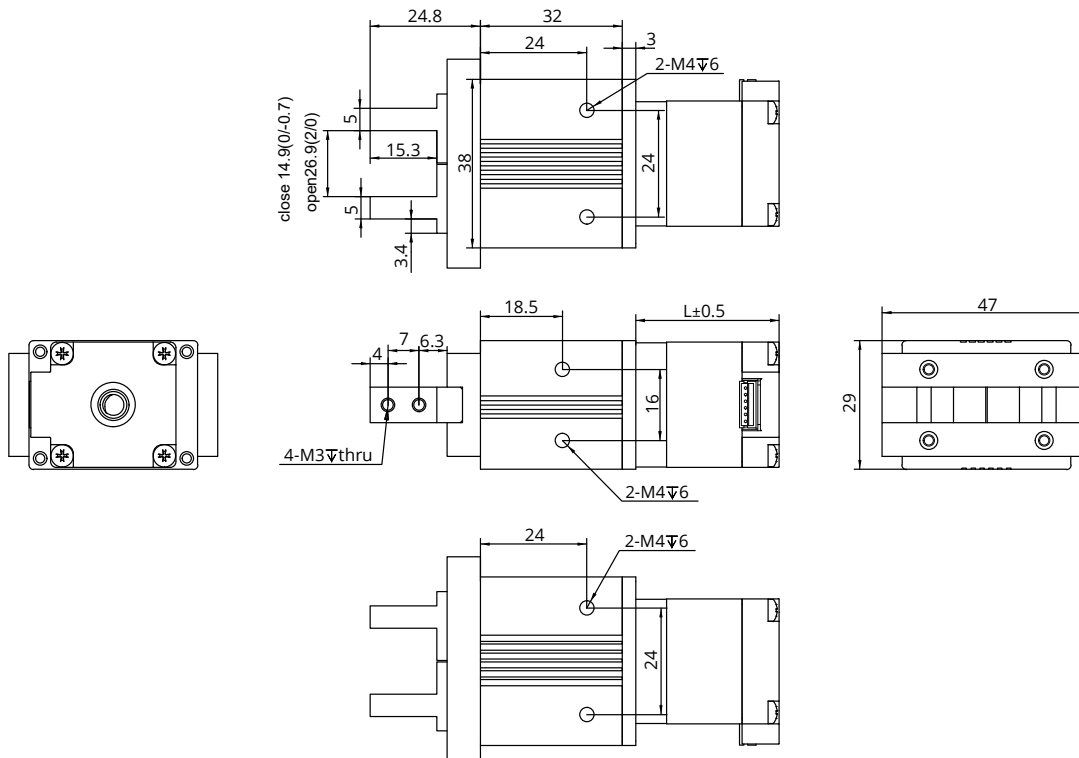
28mm Gripper (6 / 12 mm Stroke)

Dimensional Drawings

6mm Stroke



12mm Stroke



Note : All drawings are 1st Angle Projection - ISO Compliant (3D models available)

38mm 3-Finger Gripper

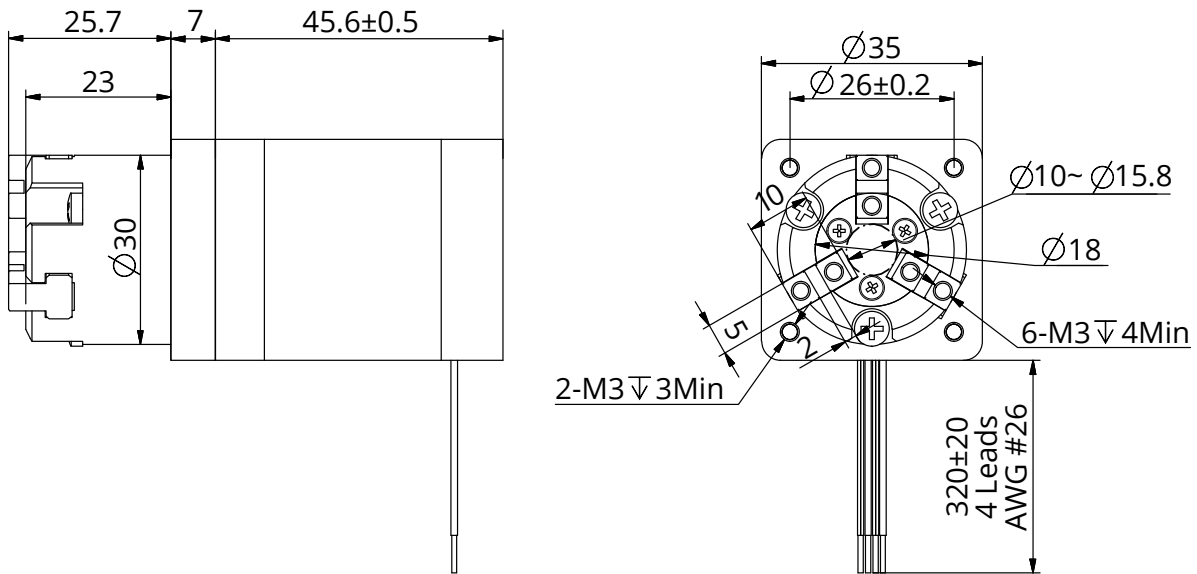
Motor Characteristics

Motor	Voltage (V)	Current (A _{RMS})	Resistance (Ω)	Inductance (mH)	Weight (g)	Lead wire No.	Motor length (mm)
14N2105	6.6	0.5	13.2	14	189	4	33.6
14N2110	3.5	1	3.5	3.6	189	4	33.6
14N2115	2.7	1.5	1.8	1.9	189	4	33.6
14N2205	12	0.5	24	29	210	4	45.6
14N2210	6	1	6	7.2	210	4	45.6
14N2215	4	1.5	2.7	3.2	210	4	45.6

Available Lead Screw and Travel per Step

Screw Dia. (inch)	Screw Dia. (mm)	Lead (inch)	Lead (mm)	Lead Code	Travel Per Step @1.8° (mm)*
0.25	6.35	0.024	0.6096	AA	0.003
0.25	6.35	0.05	1.27	D	0.0064
0.25	6.35	0.1	2.54	K	0.0127
0.25	6.35	0.2	5.08	R	0.0254

Dimensional Drawings



Note : All drawings are 1st Angle Projection - ISO Compliant (3D models available)

42mm 3-Finger Gripper

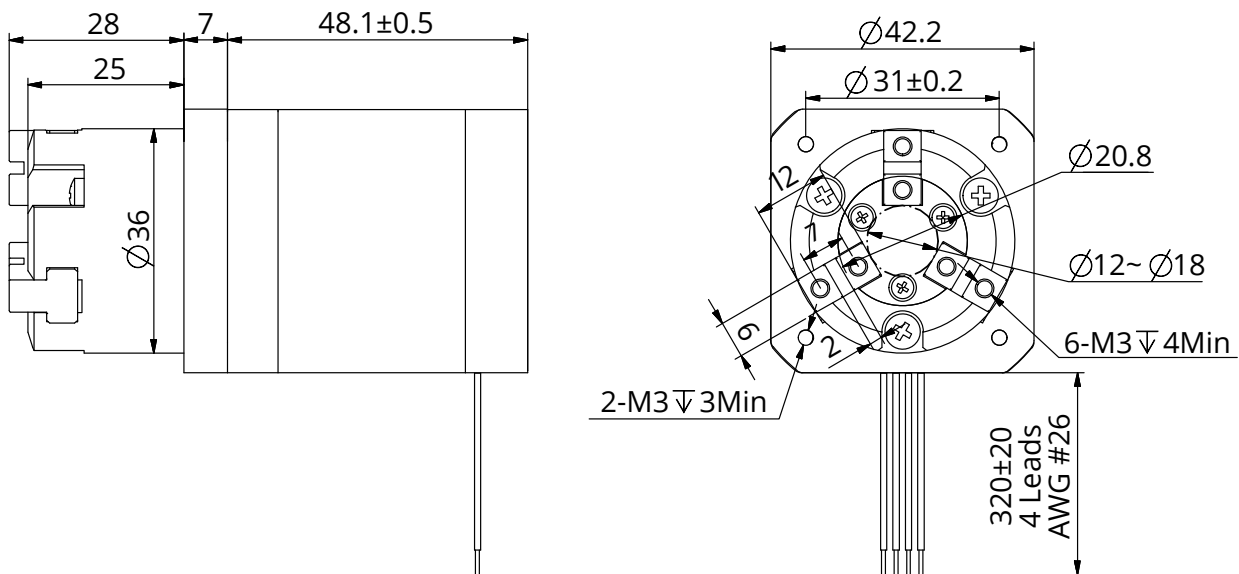
Motor Characteristics

Motor	Voltage (V)	Current (A _{RMS})	Resistance (Ω)	Inductance (mH)	Weight (g)	Lead wire No.	Motor length (mm)
17N2105	7.2	0.5	14.4	19.8	254	4	34.1
17N2110	3.8	1	3.8	5	254	4	34.1
17N2115	2.85	1.5	1.9	2.2	254	4	34.1
17N2205	11	0.5	22	46	386	4	48.1
17N2212	4.5	1.2	3.8	8	386	4	48.1
17N2225	2.5	2.5	1	1.8	386	4	48.1

Available Lead Screw and Travel per Step

Screw Dia. (inch)	Screw Dia. (mm)	Lead (inch)	Lead (mm)	Lead Code	Travel Per Step @1.8° (mm)*
0.25	6.35	0.024	0.6096	AA	0.003
0.25	6.35	0.05	1.27	D	0.0064
0.25	6.35	0.1	2.54	K	0.0127
0.25	6.35	0.2	5.08	R	0.0254

Dimensional Drawings



Note : All drawings are 1st Angle Projection - ISO Compliant (3D models available)

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