

Pneumatic Toggle Grippers

OG-A 2-Finger



OG-A is a two-finger toggle gripper with a high grip force and non-reversible mechanism, suitable for heavy industrial applications.

Advantages

- High energy density.
- 180° jaw opening allows for part clearance without having to back the gripper out of the workspace
- Driving mechanism guided along the entire stroke
- The toggle mechanism provides non-reversible gripping in the opening and closing positions, even without air pressure
- The opening stroke is adjustable.
- A special finger mounting system allows fine adjustment of the gripping point.
- Mounting from two sides in two screw directions for versatile and flexible integration.
- Integrated permanent magnets for direct monitoring of piston movement.
- Slots for mounting and positioning of magnetic-field sensors.
- Air supply via screw connection or hose-free direct connection.

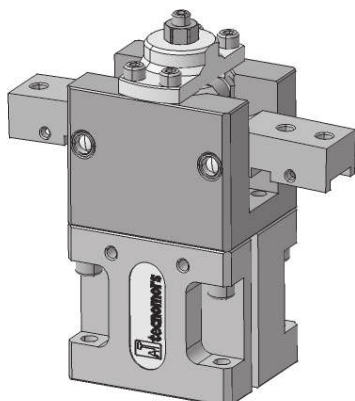


SPECIFICATIONS

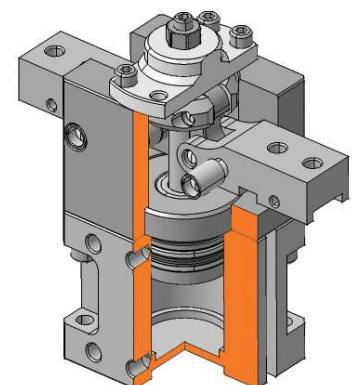
Model	Stroke Per Jaw	Air Consumption Per Cycle (Dual Stroke)	Closing Force Per Jaw @ 6 bar	Total Closing Force @ 6 bar	Recommended Workpiece Weight*	Weight	Repeatability
OG 16-A	90°	5.5 cm ³ 0.34 in ³	1.4 Nm 12.4 in lb	2.8 Nm 24.8 in lb	0.07 Kg 0.15 lb	0.2 Kg 0.44 lb	± 0.05 mm ±0.0020 in)
OG 20-A	90°	8.3 cm ³ 0.51 in ³	2 Nm 17.7 in lb	4 Nm 35.4 in lb	0.10 Kg 0.21 lb	0.24 Kg 0.53 lb	± 0.05 mm ±0.0020 in
OG 25-A	90°	18 cm ³ 1.10 in ³	7 Nm 62.0 in lb	14 Nm 123.9 in lb	0.33 Kg 0.73 lb	0.46 Kg 1.01 lb	± 0.05 mm ±0.0020 in
OG 32-A	90°	38.5 cm ³ 2.35 in ³	25 Nm 221.3 in lb	50 Nm 442.5 in lb	1.19 Kg 2.62 lb	0.8 Kg 1.76 lb	± 0.05 mm ±0.0020 in
OG 40-A	90°	77 cm ³ 4.70 in ³	40 Nm 354.0 in lb	80 Nm 708.1 in lb	1.90 Kg 4.19 lb	1.8 Kg 3.96 lb	± 0.05 mm ±0.0020 in
OG 50-A	90°	151 cm ³ 9.21 in ³	50 Nm 442.5 in lb	100 Nm 885.1 in lb	2.38 Kg 5.24 lb	3 Kg 6.60 lb	± 0.05 mm ±0.0020 in
OG 63-A	90°	288 cm ³ 17.57 in ³	150 Nm 1327.6 in lb	300 Nm 2655.2 in lb	7.14 Kg 15.71 lb	4.5 Kg 9.90 lb	± 0.05 mm ±0.0020 in
OG 80-A	90°	585 cm ³ 35.69 in ³	225 Nm 1991.4 in lb	450 Nm 3982.8 in lb	10.71 Kg 23.57 lb	8 Kg 17.60 lb	± 0.05 mm ±0.0020 in

* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.
 Opening Pressure 2 - 8 bar (29 - 116 psi)
 Working Temperature: 5 - 60 °C (41 - 140 °F)
 Noise Emission (Sound Pressure): <= 70 db(A) in any direction

SECTIONAL DIAGRAM



Guidelines for the selection of a gripper model
 Selection of the correct gripper model depends on the workpiece's weight, the friction coefficient between the fingers and the workpiece and the required motion of the application. Due to inertial forces associated with motion, we recommend that the holding force of the gripper model should be from 10 to 20 times the workpiece's weight. If the application presents high acceleration/deceleration or impacts during the motion, then a further safety margin should be considered.



PRODUCT INFORMATION

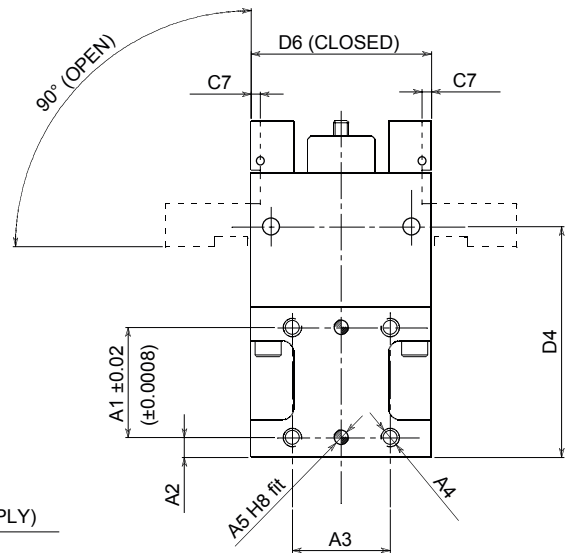
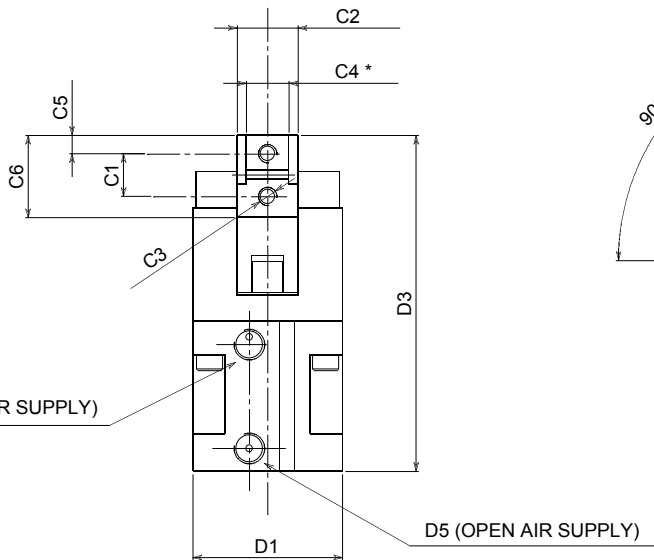
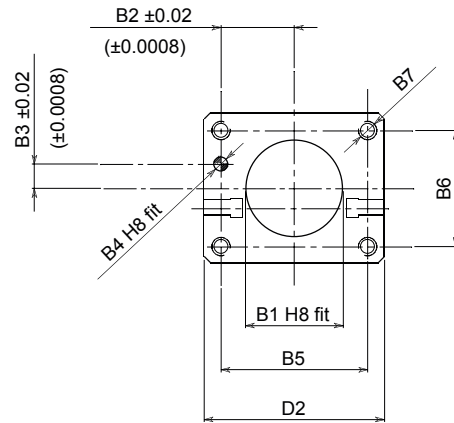
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Body dowel hole depth $\geq 1 d$

C4* Up to 6 mm = $0/+0.025$ mm - From 6 mm to 10 mm = $0/+0.030$ mm - Over 10 mm = $0/+0.040$ mm

Options

- Mounting brackets for inductive proximity switches (with longer dowel)



	Mounting - Option # 1					Mounting - Option # 2					Finger Application							Informational Dimensions							
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
OG 16-A	28.0 (1.10)	4.5 (0.18)	15 (0.59)	M4	4 (0.16)	16.00 (0.63)	12.5 (0.49)	3 (0.12)	4 (0.16)	25 (0.98)	20 (0.79)	M5	6 (0.24)	15 (0.59)	M3	7 (0.28)	3 (0.12)	13 (0.51)	2 (0.08)	30 (1.18)	34 (1.34)	70 (2.76)	52 (2.05)	M5	34 (1.34)
OG 20-A	28.0 (1.10)	4.5 (0.18)	18 (0.71)	M4	4 (0.16)	20.00 (0.79)	14 (0.55)	4 (0.16)	4 (0.16)	28 (1.10)	22 (0.87)	M5	8 (0.31)	16 (0.63)	M4	8 (0.31)	4 (0.16)	17 (0.67)	3 (0.12)	32 (1.26)	38 (1.50)	75 (2.95)	52 (2.05)	M5	38 (1.50)
OG 25-A	32.0 (1.26)	5.5 (0.22)	20 (0.79)	M5	4 (0.16)	25.00 (0.98)	18 (0.71)	5 (0.20)	5 (0.20)	36 (1.42)	30 (1.18)	M6	10 (0.39)	20 (0.79)	M5	10 (0.39)	5 (0.20)	21 (0.83)	3 (0.12)	41 (1.61)	47 (1.85)	90 (3.54)	62.5 (2.46)	M5	47 (1.85)
OG 32-A	36.0 (1.42)	6.5 (0.26)	32 (1.26)	M6	5 (0.20)	32.00 (1.26)	24 (0.94)	8 (0.31)	5 (0.20)	48 (1.89)	38 (1.50)	M6	14 (0.55)	22 (0.87)	M6	14 (0.55)	6 (0.24)	27 (1.06)	3 (0.12)	49 (1.93)	59 (2.32)	110 (4.33)	75.5 (2.97)	G1/8	59 (2.32)
OG 40-A	43.0 (1.69)	8.5 (0.33)	40 (1.57)	M8	5 (0.20)	40.00 (1.57)	29.5 (1.16)	8 (0.31)	6 (0.24)	59 (2.32)	43 (1.69)	M8	18 (0.71)	36 (1.42)	M8	16 (0.63)	8 (0.31)	35 (1.38)	3.5 (0.14)	57 (2.24)	73 (2.87)	135 (5.31)	91 (3.58)	G1/8	73 (2.87)
OG 50-A	52.0 (2.05)	8.5 (0.33)	50 (1.97)	M8	5 (0.20)	50.00 (1.97)	37.5 (1.48)	12 (0.47)	6 (0.24)	75 (2.95)	54 (2.13)	M8	22 (0.87)	36 (1.42)	M10	20 (0.79)	10 (0.39)	42 (1.65)	5 (0.20)	68 (2.68)	89 (3.50)	160 (6.30)	108 (4.25)	G1/4	89 (3.50)
OG 63-A	57.0 (2.24)	10 (0.39)	60 (2.36)	M10	5 (0.20)	63.00 (2.48)	45.5 (1.79)	15 (0.59)	8 (0.31)	91 (3.58)	67 (2.64)	M8	25 (0.98)	48 (1.89)	M10	25 (0.98)	12 (0.47)	50 (1.97)	5 (0.20)	84 (3.31)	108 (4.25)	190 (7.48)	126 (4.96)	G1/4	108 (4.25)
OG 80-A	70.0 (2.76)	12 (0.47)	80 (3.15)	M10	8 (0.31)	80.00 (3.15)	58 (2.28)	20 (0.79)	8 (0.31)	116 (4.57)	88 (3.46)	M10	30 (1.18)	48 (1.89)	M12	25 (0.98)	14 (0.55)	60 (2.36)	5 (0.20)	106 (4.17)	134 (5.28)	225 (8.86)	150 (5.91)	G1/4	134 (5.28)

* Dimensions are in millimeters (inches).

** All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification



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