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 Moment Per Jaw @ 6 bar	Total Closing Moment @ 6 bar	Recommended Workpiece Weight*	Repeat Accuracy	Weight
OG 16-A	90°	5.5 cm³ 0.34 in³	1.4 Nm 12.4 in lb	2.8 Nm 24.8 in lb	0.07 kg 0.15 lb	± 0.05 mm ± 0.002 in	0.20 kg 0.44 lb
OG 20-A	90°	8.3 cm³ 0.51 in³	2 Nm 17.7 in lb	4 Nm 35.4 in lb	0.10 kg 0.21 lb	± 0.05 mm ± 0.002 in	0.24 kg 0.53 lb
OG 25-A	90°	18 cm³ 1.10 in³	7 Nm 62.0 in lb	14 Nm 123.9 in lb	0.33 kg 0.73 lb	± 0.05 mm ± 0.002 in	0.46 kg 1.01 lb
OG 32-A	90°	38.5 cm³ 2.35 in³	25 Nm 221.3 in lb	50 Nm 442.5 in lb	1.19 kg 2.62 lb	± 0.05 mm ± 0.002 in	0.80 kg 1.76 lb
OG 40-A	90°	77 cm³ 4.70 in³	40 Nm 354.0 in lb	80 Nm 708.1 in lb	1.90 kg 4.19 lb	± 0.05 mm ± 0.002 in	1.80 kg 3.96 lb
OG 50-A	90°	151 cm³ 9.21 in³	50 Nm 442.5 in lb	100 Nm 885.1 in lb	2.38 kg 5.24 lb	± 0.05 mm ± 0.002 in	3.00 kg 6.60 lb
OG 63-A	90°	288 cm³ 17.57 in³	150 Nm 1327.6 in lb	300 Nm 2655.2 in lb	7.14 kg 15.71 lb	± 0.05 mm ± 0.002 in	4.50 kg 9.90 lb
OG 80-A	90°	585 cm³ 35.69 in³	225 Nm 1991.4 in lb	450 Nm 3982.8 in lb	10.71 kg 23.57 lb	± 0.05 mm ± 0.002 in	8.00 kg 17.60 lb

* 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.

Operating 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.

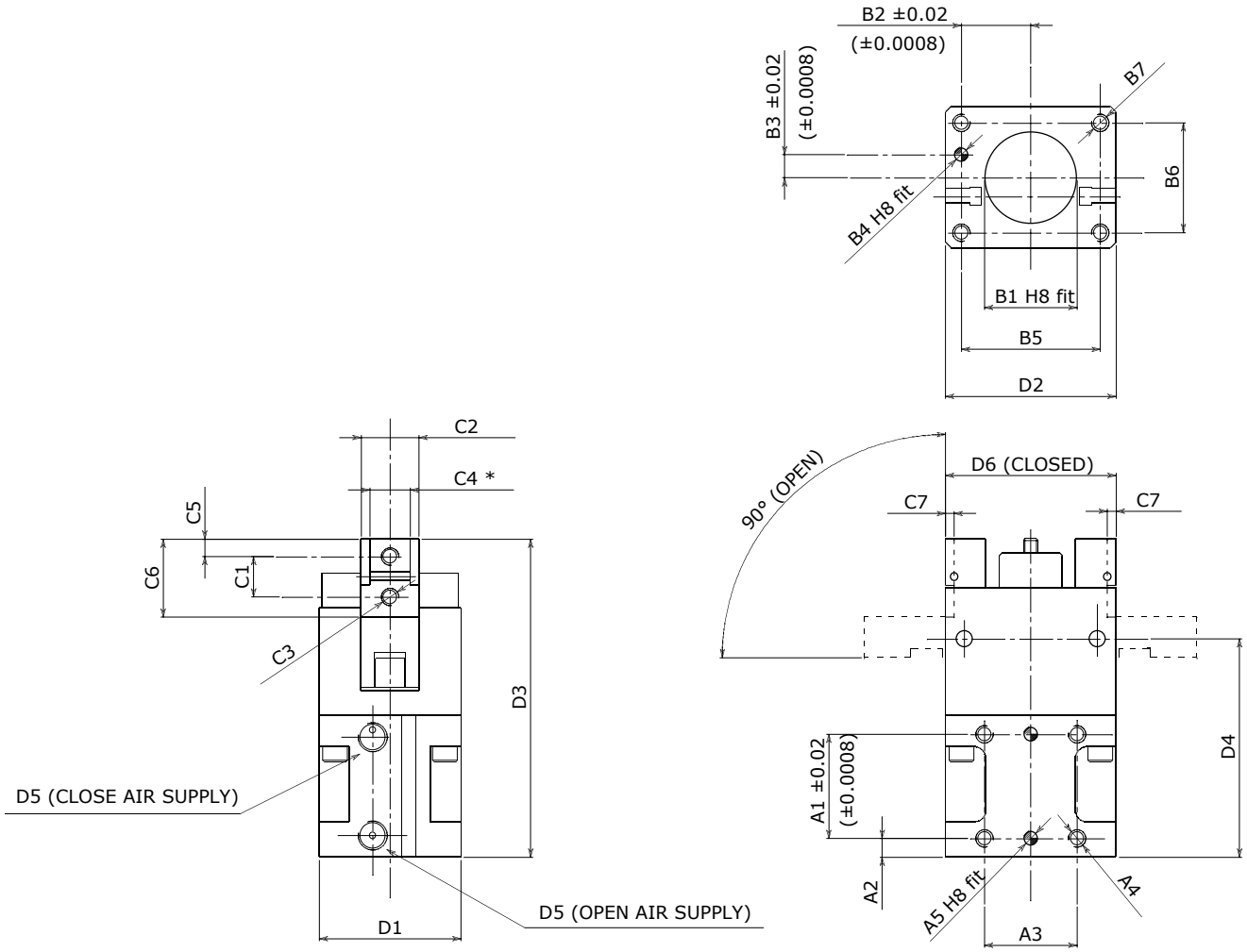


EFFECTO®

PRODUCT INFORMATION

10.26_Rev.08

Body dowel hole depth ≥ 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)	11 (0.43)	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)	12 (0.47)	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)	16 (0.62)	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)	20 (0.78)	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)	25 (0.98)	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)	30 (1.18)	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)	35 (1.37)	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)	40 (1.57)	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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