# **Pneumatic Toggle Grippers OG 3-Finger**

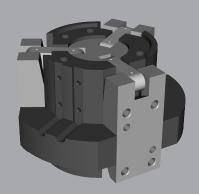
OG3 is a three-finger toggle gripper with a high grip force and non-reversible mechanism, suitable for heavy industrial applications.

Advantages

- High energy density.
  Capability to grip parts in opening and closing mode.
  Driving mechanism guided along the entire stroke.
  Large surface for finger mounting to guarantee extremely safe clamping
- of the workpiece.

   The toggle mechanism provides non-reversible gripping in the opening and closing positions -- even without air pressure

   Air supply via screw connection.



### **SPECIFICATIONS**

Model	Stroke Per Jaw	Air Consumption Per Cycle (Dual Stroke)	Closing Moment Per Jaw @ 6 bar	Total Closing Moment Per Jaw @ 6 bar	Recommended Workpiece Weight*	Weight	Repeatability		
OG 530-3	7.5°	8.5 cm <sup>3</sup> 0.52 in <sup>3</sup>	13 Nm 115.1 in lb	39 Nm 345.2 in lb	0.62 kg 1.40 lb	0.50 kg 1.10 lb	± 0.05 mm ± 0.002 in		
OG 550-3	7.5°	19 cm <sup>3</sup>	30 Nm	90 Nm	1.40 lb	0.90 kg	± 0.002 III		
OG 550-5	7.5	1.16 in <sup>3</sup>	265.5 in lb	796.6 in lb	3.10 lb	1.98 lb	± 0.002 in		
OG 570-3	8.5°	76.5 cm <sup>3</sup> 4.67 in <sup>3</sup>	105 Nm 929.3 in lb	315 Nm 2788.0 in lb	5.00 kg 11.00 lb	3.80 kg 8.36 lb	± 0.05 mm ± 0.002 in		

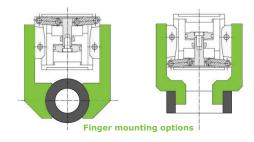
<sup>\*</sup> Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

Operating Pressure 2 - 8 bar (29 - 116 psi)

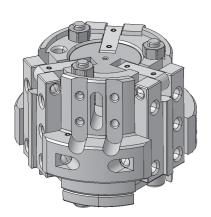
Working Temperature 5 - 60 °C (41 - 140 °F)

Noise Emission (Sound Pressure) 

70 dB(A) in any direction



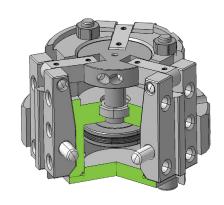
## **SECTIONAL DIAGRAM**



### 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.

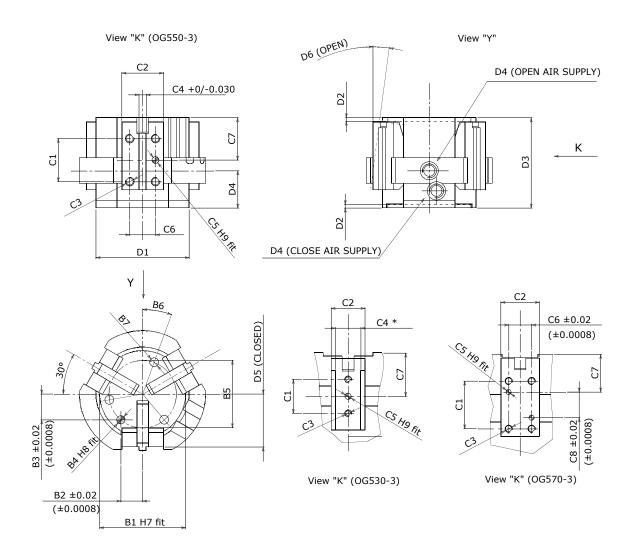




## **PRODUCT INFORMATION**

# **OG 3-Finger**

Dowel hole depth: Body  $\geq 1$  d - Jaws  $\geq 0.5$  d (from OG530-3) -  $\geq 1$  d (OG550-3 - OG570-3) 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



- Mounting brackets for inductive proximity switches
  Magnetic switches

	Mounting - Option # 2					Finger Application							Informational Dimensions								
	B1	В2	В3	В4	В5	В6	В7	C1	C2	С3	C4	C5	C6	<b>C7</b>	C8	D1	D2		D4	D5	D6
OG 530-3	50.00 (1.97)	14.85 (0.58)	14.85 (0.58)	5 (0.20)	27.13 1.07	15°	5.5 (0.22)	20 (0.79)	20 (0.79)	M4	15 (0.59)	4 (0.16)		25.55 (1.01)		60 (2.36)	2 (0.08)	53.4 (2.10)	M5	27 (1.06)	7.5°
OG 550-3	58.00 (2.28)	15.1 (0.59)	18 (0.71)	6 (0.24)	30.95 1.22	20°	6.5 (0.26)	30 (1.18)	29 (1.14)	M6	5 (0.20)	5 (0.20)	18 (0.71)	29.5 (1.16)		65 (2.56)	2.5 (0.10)	63 (2.48)	G1/8	37 (1.46)	7.5°
OG 570-3	85.00 (3.35)	22.5 (0.89)	26.81 (1.06)	8 (0.31)	46.11 (1.82)	20°	8.5 (0.33)	52 (2.05)	42 (1.65)	M8		6 (0.24)	25 (0.98)	41 (1.61)	28 (1.10)	125 (4.92)	3.5 (0.14)	97 (3.82)	G1/8	63 (2.48)	8.5°

<sup>\*</sup> 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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