

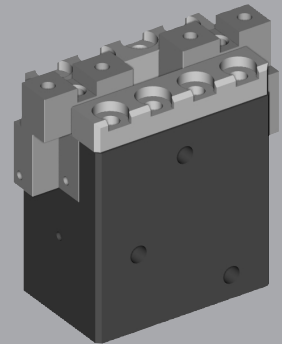
# Pneumatic Parallel Grippers

## LGE 2-Finger

LGE is a small two-finger parallel gripper featuring high reliability and a long service life, suitable for handling low weight components.

### Advantages

- High energy density.
- High stroke per jaw.
- Sturdy T-slot with hardened steel gibs for effective jaw guidance, precise handling and easy maintenance.
- Compact dimensions for minimal impact in space sensitive applications.
- Oval piston maximizes gripping forces.
- Mounting in two screw directions for versatile and flexible integration.
- Air supply via hose-free direct connections or fitting screw connections.



## SPECIFICATIONS

Model	Stroke Per Jaw	Air Consumption Per Cycle (Dual Stroke)	Closing Force Per Jaw @ 6 bar	Opening Force Per Jaw @ 6 bar	Total Closing Force @ 6 bar	Total Opening Force @ 6 bar	Recommended Workpiece Weight*	Weight	Repeatability
<b>LGE 30</b>	3 mm	1.2 cm <sup>3</sup>	38 N	22 N	76 N	44 N	0.38 kg	0.11 kg	± 0.05 mm
	0.12 in	0.07 in <sup>3</sup>	8.5 lb	4.9 lb	17.1 lb	9.9 lb	0.80 lb	0.24 lb	± 0.002 in
<b>LGE 35</b>	4 mm	2.5 cm <sup>3</sup>	57 N	42 N	114 N	84 N	0.57 kg	0.14 kg	± 0.05 mm
	0.16 in	0.15 in <sup>3</sup>	12.8 lb	9.4 lb	25.6 lb	18.9 lb	1.30 lb	0.30 lb	± 0.002 in
<b>LGE 45</b>	6 mm	5 cm <sup>3</sup>	77 N	55 N	154 N	110 N	0.77 kg	0.24 kg	± 0.05 mm
	0.24 in	0.31 in <sup>3</sup>	17.3 lb	12.4 lb	34.6 lb	24.7 lb	1.70 lb	0.53 lb	± 0.002 in

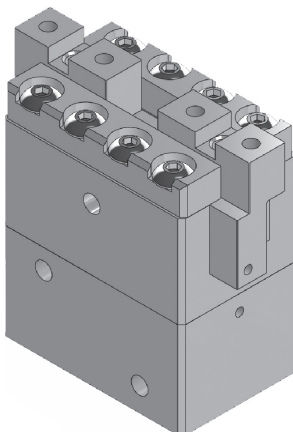
\* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

Operating Pressure **3 - 6 bar (43,5 - 87 psi)**

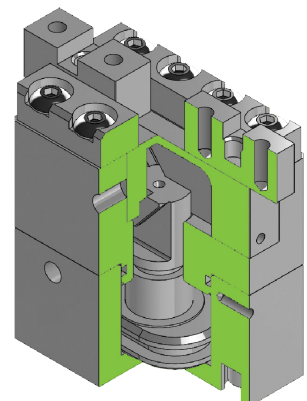
Working Temperature **5 - 60 °C (41 - 140 °F)**

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.

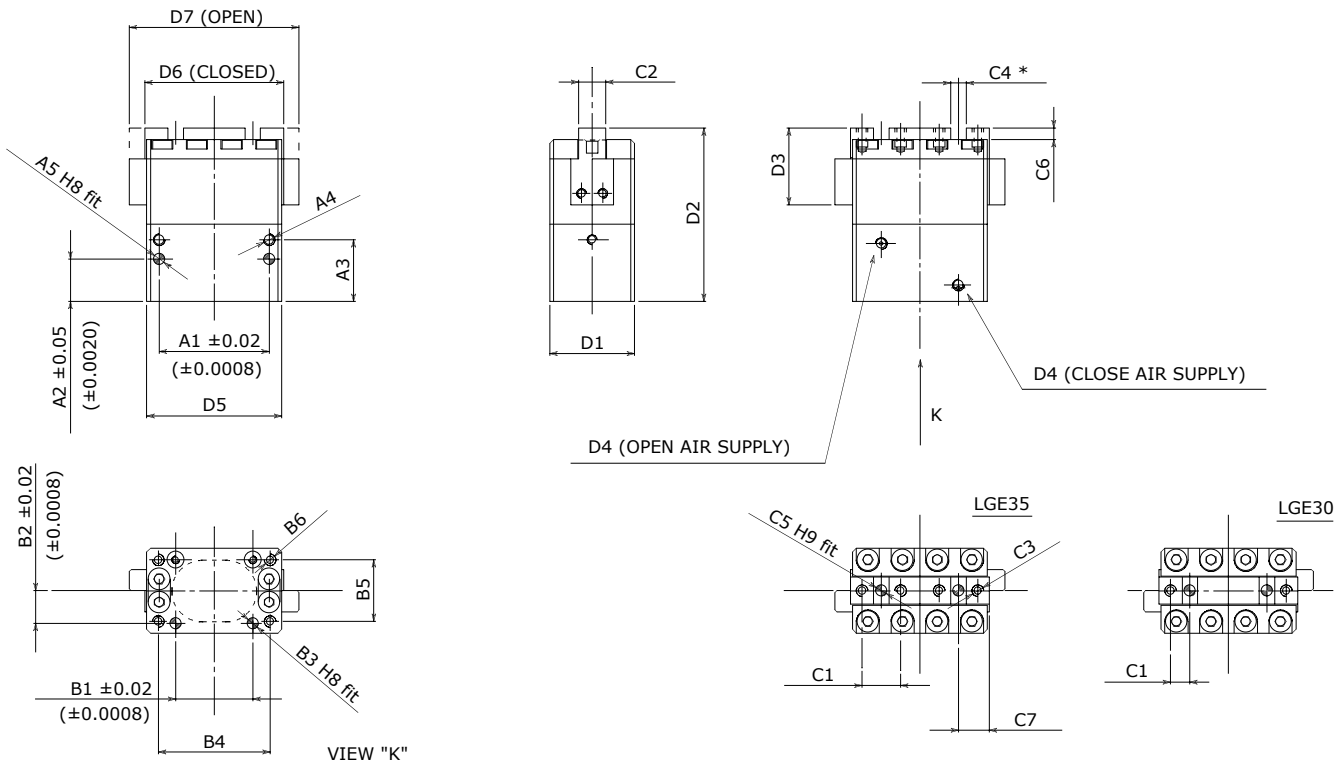


# PRODUCT INFORMATION

# LGE 2-Finger

Dowel hole depth: Body  $\geq 1.2 d$  - Jaws  $\geq 1 d$

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

	Mounting - Option # 1					Mounting - Option # 2						Finger Application							Informational Dimensions						
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6	D7
<b>LGE 30</b>	23.5 (0.93)	10 (0.39)	15 (0.59)	M3	3 (0.12)	15.00 (0.59)	8.5 (0.33)	3 (0.12)	24 (0.94)	16 (0.63)	M3	6 (0.24)	7 (0.28)	M3	4 (0.16)	3 (0.12)	3 (0.12)	10 (0.39)	22 (0.87)	43 (1.69)	19 (0.75)	M3	30 (1.18)	31 (1.22)	37 (1.46)
<b>LGE 35</b>	28.5 (1.12)	11 (0.43)	16 (0.63)	M3	3 (0.12)	20.00 (0.79)	8.5 (0.33)	3 (0.12)	29 (1.14)	16 (0.63)	M3	10 (0.39)	7 (0.28)	M3	4 (0.16)	3 (0.12)	3 (0.12)	8 (0.31)	22 (0.87)	45 (1.77)	20 (0.79)	M3	35 (1.38)	36 (1.42)	44 (1.73)
<b>LGE 45</b>	36.5 (1.44)	12 (0.47)	19 (0.75)	M4	4 (0.16)	24.00 (0.94)	11 (0.43)	4 (0.16)	37 (1.46)	21 (0.83)	M4	14 (0.55)	9 (0.35)	M4	5 (0.20)	4 (0.16)	3.5 (0.14)	11 (0.43)	29 (1.14)	58 (2.28)	26 (1.02)	M3	45 (1.77)	46 (1.81)	58 (2.28)

\* 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



Applied Robotics  
648 Saratoga Road  
Glenville, NY 12302 USA

Tel. +1 518 384 1000 Fax +1.5183841200  
info@appliedrobotics.com  
www.appliedrobotics.com



EFFECTO GROUP S.p.A.  
Via Roma, 141/143

28017 San Maurizio d'Opaglio (NO) - Italy  
Tel. +39 0322 96142 Fax +39 0322 967453  
info@effectogroup.com  
www.effecto.com

