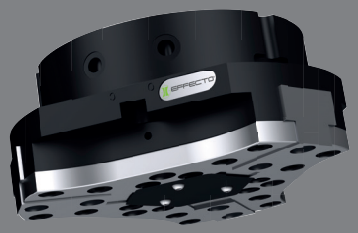
Pneumatic Parallel Grippers
HPG 3-Finger

HPG is a universal three-finger parallel gripper featuring high repeatability and long service life, suitable for a wide range of industrial applications.



Advantages
- Robust and lightweight housing made of hard coated aluminum alloy.
- Sturdy T-slot with hardened steel gibs for effective jaw guidance, precise handling and easy maintenance.
- Wedge-hook design for high-force transmission and jaw synchronization.
- Compact dimensions for minimal impact in space sensitive applications.
- Mounting from two sides in three 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 hose-free direct connections or fitting screw connections.

SPECIFICATIONS

Model	Stroke per jaw	Fluid consumption double 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*	Repeat accuracy	Weight
HPG 306	4 mm 0.16 in	9 cm³ 0.55 in³	110 N 24.7 lb	120 N 27.0 lb	330 N 49.5 lb	360 N 54 lb	1.65 Kg 3.6 lb	± 0.01 mm ±0.0004 in	0.3 Kg 0.66 lb
HPG 306 S	2 mm 0.08 in	9 cm³ 0.55 in³	220 N 49.5 lb	240 N 54.0 lb	660 N 98.9 lb	720 N 107.9 lb	3.30 Kg 7.27 lb	± 0.01 mm ±0.0004 in	0.31 Kg 0.68 lb
HPG 307	6 mm 0.24 in	25 cm³ 1.53 in³	225 N 50.6 lb	245 N 55.1 lb	675 N 151.7 lb	735 N 165.2 lb	3.37 Kg 7.42 lb	± 0.01 mm ±0.0004 in	0.5 Kg 1.10 lb
HPG 307 S	3 mm 0.12 in	25 cm³ 1.53 in³	450 N 101.2 lb	490 N 110.2 lb	1350 N 303.5 lb	1470 N 330.5 lb	6.75 Kg 14.85 lb	± 0.01 mm ±0.0004 in	0.53 Kg 1.17 lb
HPG 309	8 mm 0.31 in	55 cm³ 3.36 in³	370 N 83.2 lb	395 N 88.8 lb	1110 N 249.5 lb	1185 N 266.4 lb	5.55 Kg 12.21 lb	± 0.01 mm ±0.0004 in	0.85 Kg 1.87 lb
HPG 309 S	4 mm 0.16 in	55 cm³ 3.36 in³	740 N 166.4 lb	790 N 177.6 lb	2220 N 499.1 lb	2370 N 532.8 lb	11.10 Kg 24.42 lb	± 0.01 mm ±0.0004 in	0.88 Kg 1.94 lb
HPG 311	10 mm 0.39 in	115 cm³ 7.02 in³	650 N 146.1 lb	680 N 152.9 lb	1950 N 438.4 lb	2040 N 458.6 lb	9.75 Kg 21.45 lb	± 0.01 mm ±0.0004 in	1.6 Kg 3.52 lb
HPG 311 S	5 mm 0.20 in	115 cm³ 7.02 in³	1300 N 292.2 lb	1360 N 305.7 lb	3900 N 876.7 lb	4080 N 917.2 lb	19.50 Kg 42.90 lb	± 0.01 mm ±0.0004 in	1.66 Kg 3.65 lb
HPG 313	12 mm 0.47 in	220 cm³ 13.42 in³	980 N 220.3 lb	1030 N 231.5 lb	2940 N 660.9 lb	3090 N 694.6 lb	14.70 Kg 32.34 lb	± 0.01 mm ±0.0004 in	2.9 Kg 6.38 lb
HPG 313 S	6 mm 0.24 in	220 cm³ 13.42 in³	1960 N 440.6 lb	2060 N 463.1 lb	5880 N 1321.8 lb	6180 N 1389.3 lb	29.40 Kg 64.68 lb	± 0.01 mm ±0.0004 in	3 Kg 6.60 lb
HPG 317	16 mm 0.63 in	500 cm³ 30.50 in³	1855 N 417.0 lb	1930 N 433.9 lb	5565 N 1251.0 lb	5790 N 1301.6 lb	27.82 Kg 61.21 lb	± 0.015 mm ±0.0006 in	5.7 Kg 12.54 lb
HPG 317 S	8 mm 0.31 in	500 cm³ 30.50 in³	3710 N 834.0 lb	3860 N 867.7 lb	11130 N 2502.0 lb	11580 N 2603.2 lb	55.65 Kg 122.42 lb	± 0.015 mm ±0.0006 in	6 Kg 13.20 lb
HPG 322	25 mm 0.98 in	850 cm³ 51.85 in³	2520 N 566.5 lb	2610 N 586.7 lb	7560 N 1699.5 lb	7830 N 1760.2 lb	37.80 Kg 83.16 lb	± 0.02 mm ±0.0008 in	11.5 Kg 25.30 lb
HPG 322 S	14 mm 0.55 in	850 cm³ 51.85 in³	4365 N 981.3 lb	4525 N 1017.2 lb	13095 N 2943.8 lb	13575 N 3051.7 lb	65.47 Kg 144.04 lb	± 0.02 mm ±0.0008 in	12.5 Kg 27.50 lb
HPG 330	35 mm 1.38 in	2900 cm³ 176.90 in³	5015 N 1127.4 lb	5200 N 1169.0 lb	15045 N 3382.1 lb	15600 N 3506.9 lb	75.22 Kg 165.49 lb	± 0.03 mm ±0.0012 in	33 Kg 72.60 lb
HPG 330 S	20 mm 0.79 in	2900 cm³ 176.90 in³	8690 N 1953.5 lb	9030 N 2029.9 lb	26070 N 5860.5 lb	27090 N 6089.8 lb	130.35 Kg 286.78 lb	± 0.03 mm ±0.0012 in	34.5 Kg 75.90 lb

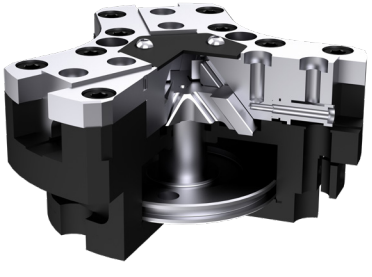
* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece

Operating pressure **3 – 8 bar (43.5-116 psi)** Spring Assist Version **4.5 - 6 bar (65 - 87 psi)**
Ambient temperature **5-60°C (41-140 °F)**
Sound emissions (sound pressure) **≤ 70 db (A) in any direction**

SECTIONAL DIAGRAM

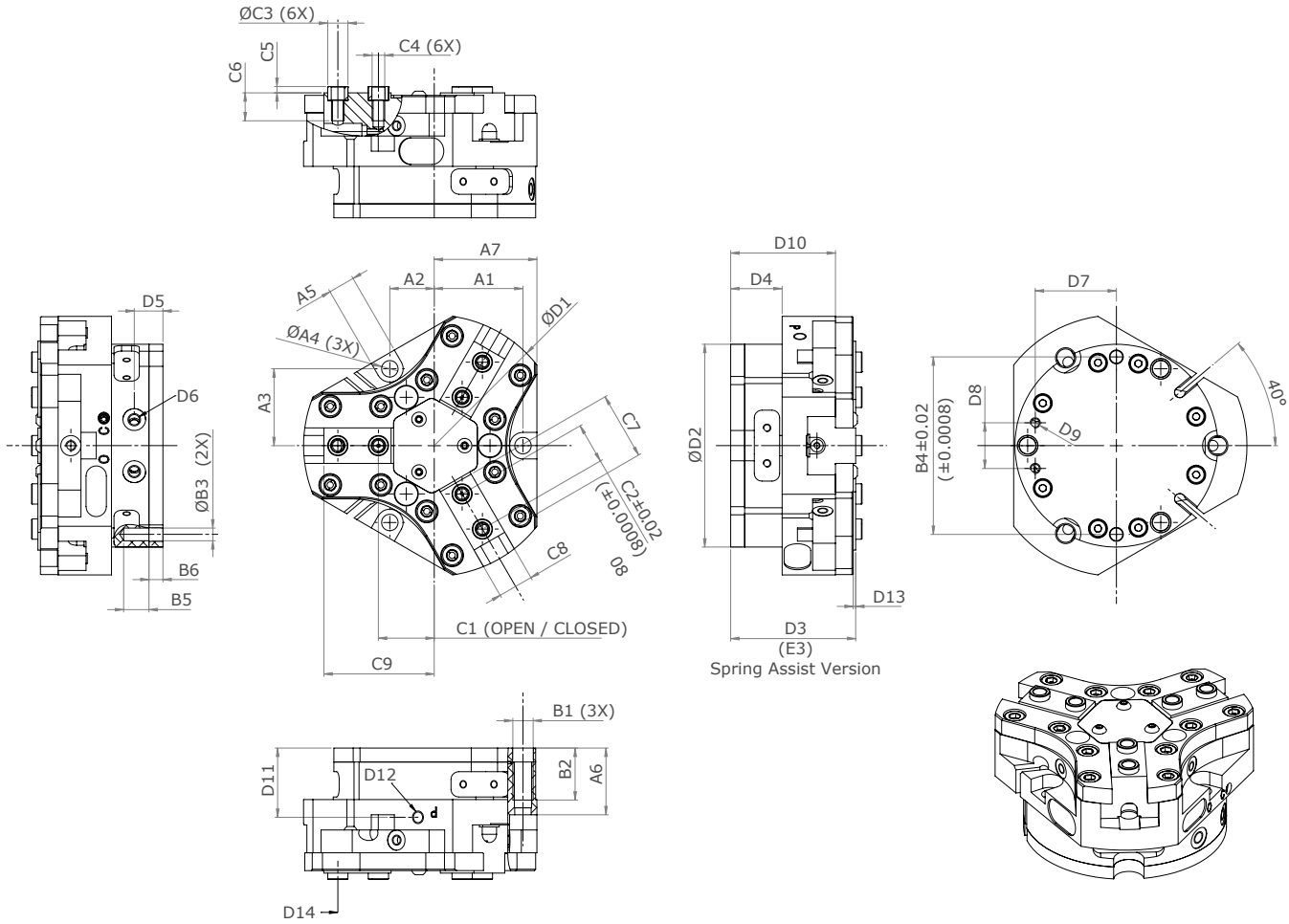


Guidelines for the selection of a gripper model
Selection of the correct gripper model depends on the workpiece's weight, the friction coefficient between the fingers and the workpiece and the required motion of the application.
Due to inertial forces associated with motion, we recommend that the holding 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



• Dimensional information available at our technical department

Options

- High force version (S version)
- Spring integrated into cylinder as energy storage to maintain a minimum gripping force even in the case of a pressure drop (specify upon order whether spring assist is desired for opening or closing)
- Mounting brackets for inductive proximity switches
- Magnetic switches

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