

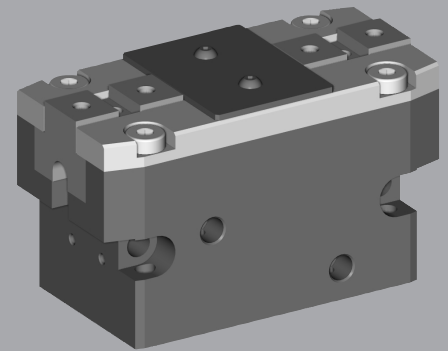
Pneumatic Parallel Grippers

QPG 2-Finger

QPG is a universal two-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	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
QPG 206	6 mm	7.3 cm ³	100 N	111 N	200 N	222 N	1.00 kg	0.32 kg	± 0.01 mm
	0.24 in	0.45 in ³	22.5 lb	25.0 lb	45.0 lb	49.9 lb	2.20 lb	0.70 lb	± 0.0004 in
QPG 206 S	3 mm	7.3 cm ³	200 N	221 N	400 N	442 N	2.00 kg	0.32 kg	± 0.01 mm
	0.12 in	0.45 in ³	45.0 lb	49.7 lb	89.9 lb	99.4 lb	4.40 lb	0.70 lb	± 0.0004 in
QPG 208	8 mm	16.5 cm ³	174 N	191 N	348 N	382 N	1.74 kg	0.58 kg	± 0.01 mm
	0.31 in	1.01 in ³	39.1 lb	42.9 lb	78.2 lb	85.9 lb	3.80 lb	1.28 lb	± 0.0004 in
QPG 208 S	4 mm	16.5 cm ³	345 N	377 N	690 N	754 N	3.45 kg	0.58 kg	± 0.01 mm
	0.16 in	1.01 in ³	77.6 lb	84.7 lb	155.1 lb	169.5 lb	7.60 lb	1.28 lb	± 0.0004 in
QPG 210	10 mm	31.9 cm ³	268 N	292 N	536 N	584 N	2.68 kg	1.00 kg	± 0.01 mm
	0.39 in	1.95 in ³	60.2 lb	65.6 lb	120.5 lb	131.3 lb	5.90 lb	2.20 lb	± 0.0004 in
QPG 210 S	5 mm	31.9 cm ³	528 N	576 N	1056 N	1152 N	5.28 kg	1.00 kg	± 0.01 mm
	0.20 in	1.95 in ³	119 lb	129.5 lb	237.4 lb	259.0 lb	11.60 lb	2.20 lb	± 0.0004 in
QPG 212	12 mm	59.4 cm ³	414 N	446 N	828 N	892 N	4.14 kg	1.70 kg	± 0.01 mm
	0.47 in	3.62 in ³	93.1 lb	100.3 lb	186.1 lb	200.5 lb	9.10 lb	3.74 lb	± 0.0004 in
QPG 212 S	6 mm	59.4 cm ³	819 N	883 N	1638 N	1766 N	8.19 kg	1.70 kg	± 0.01 mm
	0.24 in	3.62 in ³	184.1 lb	198.5 lb	368.2 lb	397.0 lb	18.00 lb	3.74 lb	± 0.0004 in
QPG 216	16 mm	118 cm ³	613 N	656 N	1226 N	1312 N	6.13 kg	2.80 kg	± 0.01 mm
	0.63 in	7.20 in ³	137.8 lb	147.5 lb	275.6 lb	294.9 lb	13.50 lb	6.16 lb	± 0.0004 in
QPG 216 S	8 mm	118 cm ³	1210 N	1296 N	2420 N	2592 N	12.10 kg	2.80 kg	± 0.01 mm
	0.31 in	7.20 in ³	272.0 lb	291.3 lb	544.0 lb	582.7 lb	26.60 lb	6.16 lb	± 0.0004 in
QPG 220	20 mm	267 cm ³	1140 N	1194 N	2280 N	2388 N	11.40 kg	6.00 kg	± 0.01 mm
	0.79 in	16.3 in ³	256.3 lb	268.4 lb	512.5 lb	536.8 lb	25.10 lb	13.20 lb	± 0.0004 in
QPG 220 S	10 mm	267 cm ³	2253 N	2360 N	4506 N	4720 N	22.53 kg	6.00 kg	± 0.01 mm
	0.39 in	16.3 in ³	506.5 lb	530.5 lb	1012.9 lb	1061.1 lb	49.60 lb	13.20 lb	± 0.0004 in
QPG 230	30 mm	801 cm ³	2300 N	2380 N	4600 N	4760 N	23.00 kg	19.00 kg	± 0.01 mm
	1.18 in	48.9 in ³	517.0 lb	535.0 lb	1034.1 lb	1070.0 lb	50.60 lb	41.80 lb	± 0.0004 in
QPG 230 S	15 mm	801 cm ³	4546 N	4705 N	9092 N	9410 N	45.46 kg	19.00 kg	± 0.01 mm
	0.59 in	48.9 in ³	1022 lb	1057.7 lb	2043.9 lb	2115.4 lb	100.00 lb	41.80 lb	± 0.0004 in

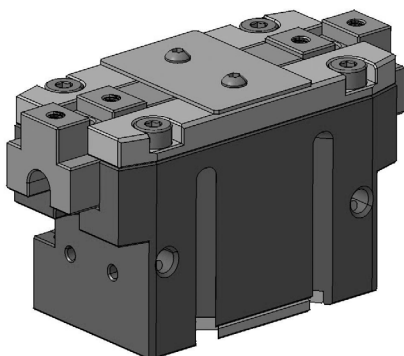
* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

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

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

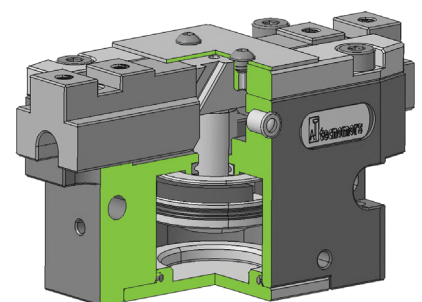
Noise Emission (Sound Pressure) **≤ 70 dB(A) in any direction**

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.

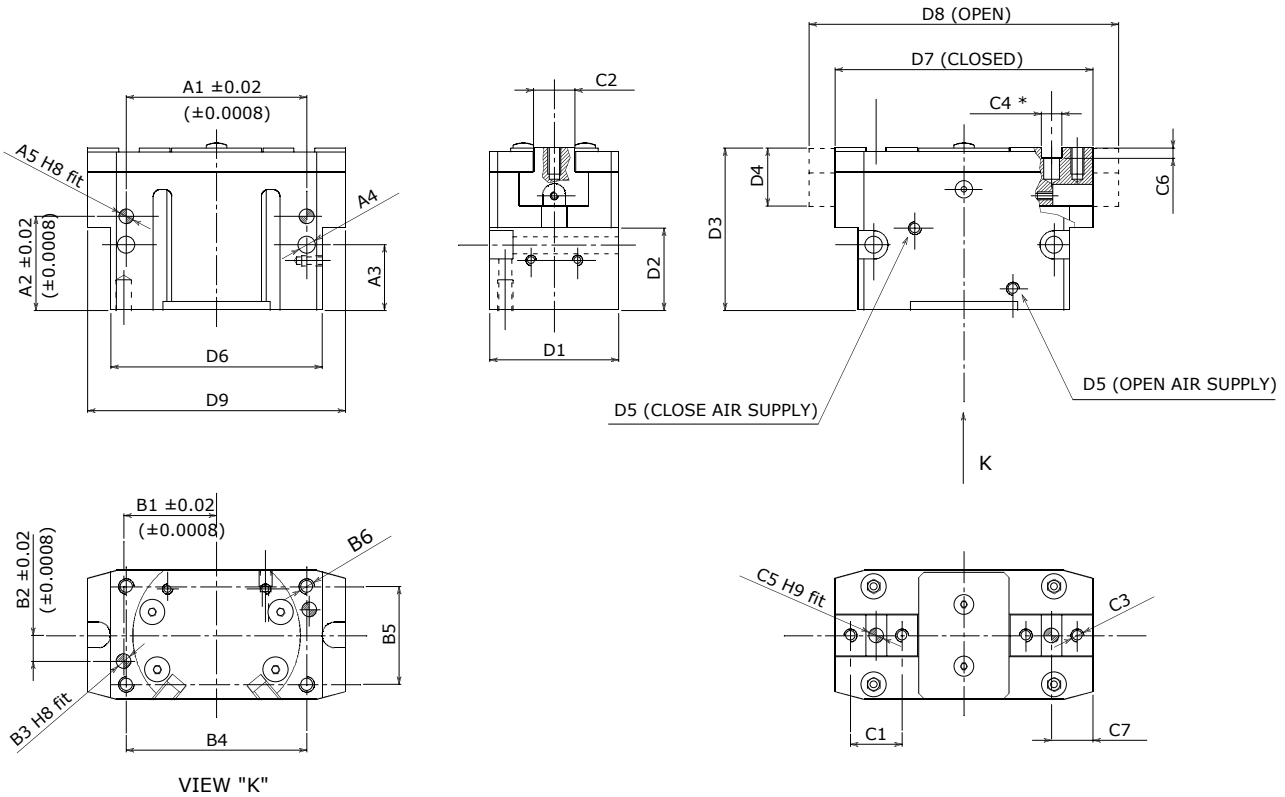


PRODUCT INFORMATION

QPG 2-Finger

Dowel hole depth: Body $\geq 1.5 d$ - Jaws $\geq 1.2 d$

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

- 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

	Mounting - Option # 1					Mounting - Option # 2					
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6
QPG 206	44	27.5	19.5	M4	4	23	6.5	4	44	27	M5
QPG 206 S	(1.73)	(1.08)	(0.77)		(0.16)	(0.91)	(0.26)	(0.16)	(1.73)	(1.06)	
QPG 208	54	32	22	M5	5	29	8	5	54	32	M5
QPG 208 S	(2.13)	(1.26)	(0.87)		(0.20)	(1.14)	(0.31)	(0.20)	(2.13)	(1.26)	
QPG 210	70	36.5	25.5	M6	6	36	10	6	70	38	M6
QPG 210 S	(2.76)	(1.44)	(1.00)		(0.24)	(1.42)	(0.39)	(0.24)	(2.76)	(1.50)	
QPG 212	90	43	31	M8	8	46	11	8	90	46	M8
QPG 212 S	(3.54)	(1.69)	(1.22)		(0.31)	(1.81)	(0.43)	(0.31)	(3.54)	(1.81)	
QPG 216	95	44	32	M8	8	55	15	8	95	56	M8
QPG 216 S	(3.74)	(1.73)	(1.26)		(0.31)	(2.17)	(0.59)	(0.31)	(3.74)	(2.20)	
QPG 220	120	52	38	M10	10	70	20	10	120	70	M10
QPG 220 S	(4.72)	(2.05)	(1.50)		(0.39)	(2.76)	(0.79)	(0.39)	(4.72)	(2.76)	
QPG 230	170	74	54	M12	12	95	27.5	12	170	95	M12
QPG 230 S	(6.69)	(2.91)	(2.13)		(0.47)	(3.74)	(1.08)	(0.47)	(6.69)	(3.74)	

	Finger Application					Informational Dimensions												
	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6	D7	D8	D9		
QPG 206	13	10	M4	5	4	3	10.5	36	24	47	16.5	M5	52	65	77 (3.03)	65		
QPG 206 S	(0.51)	(0.39)		(0.20)	(0.16)	(0.12)	(0.41)	(1.42)	(0.94)	(1.85)	(0.65)		(2.05)	(2.56)	71 (2.80)	(2.56)		
QPG 208	16	12	M4	6	5	3.5	12.5	42	28.5	55	19	M5	65	80	96 (3.78)	80		
QPG 208 S	(0.63)	(0.47)		(0.24)	(0.20)	(0.14)	(0.49)	(1.65)	(1.12)	(2.17)	(0.75)		(2.56)	(3.15)	88 (3.46)	(3.15)		
QPG 210	20	16	M5	8	6	4	16	50	32	63	22.5	M5	82	100	120 (4.72)	100		
QPG 210 S	(0.79)	(0.63)		(0.31)	(0.24)	(0.16)	(0.63)	(1.97)	(1.26)	(2.48)	(0.89)		(3.23)	(3.94)	110 (4.33)	(3.94)		
QPG 212	24	19	M6	8	6	4.5	20	60	38.5	74	26	G1/8	105	125	149 (5.87)	125		
QPG 212 S	(0.94)	(0.75)		(0.31)	(0.24)	(0.18)	(0.79)	(2.36)	(1.52)	(2.91)	(1.02)		(4.13)	(4.92)	137 (5.39)	(4.92)		
QPG 216	32	22	M8	10	8	4.5	25	72	45.5	88	30.5	G1/8	125	160	192 (7.56)	160		
QPG 216 S	(1.26)	(0.87)		(0.39)	(0.31)	(0.18)	(0.98)	(2.83)	(1.79)	(3.46)	(1.20)		(4.92)	(6.30)	176 (6.93)	(6.30)		
QPG 220	40	30	M10	12	10	5	32.5	100	55	108	38	G1/8	160	200	240 (9.45)	200		
QPG 220 S	(1.57)	(1.18)		(0.47)	(0.39)	(0.20)	(1.28)	(3.94)	(2.17)	(4.25)	(1.50)		(6.30)	(7.87)	220 (8.66)	(7.87)		
QPG 230	50	40	M16	14	12	6	60	140	75	150	55	G1/4	210	270	330 (12.99)	300		
QPG 230 S	(1.97)	(1.57)		(0.55)	(0.47)	(0.24)	(2.36)	(5.51)	(2.95)	(5.91)	(2.17)		(8.27)	(10.63)	300 (11.81)	(11.81)		

* 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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