P5GD - Parallel precision guided double acting, square jaw carriers

The P5GD is a parallel double acting gripper with integral linear guides that provide rigidity and high precision for the stainless steel jaw carriers. The anodised aluminium body has mounting points on four sides and integral sensors grooves.

- Bore sizes Ø10, 16, 20 and 25mm
- Double acting
- Stainless steel jaw carriers
- Anodised corrosion protection
- Magnetic piston as standard
- Optional sensors

Technical Information

Acting type	Double acting			
Bore (mm)	10	16	20	25
Port size	M3 x 0.5	M5 x 0.8		
Medium	Air			
Operating pressure range	2 to 7 bar	1 to 7 bar		
Temperature range	-10 to +60°C (no freezing)			
Repeatability	± 0.01 mm			
Max operating frequency	180 Cycles/min			
Lubrication	Not required			
Weight (g)	55	125	250	460

Bore	Gripping force [1] Gripping force per finger effective value N (kgf) External	Internal	Opening closing stroke (both sides) (mm)
10	9.8 (1)	17 (1.7)	4
16	30 (3.1)	40 (4.1)	6
20	42 (4.3)	66 (6.7)	10
25	65 (6.6)	104 (10.6)	14

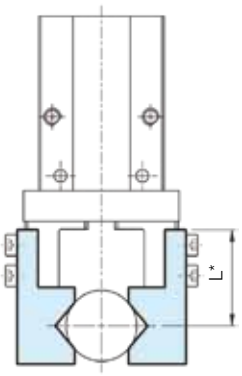
[1] Values based on pressure of 0.5 MPa (5.1 kgf/cm2)

For more information see www.parker.com/euro_pneumatic

P5GD - Parallel Grippers

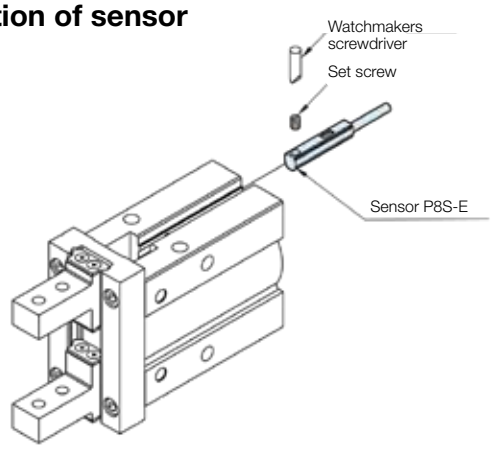
Bore mm	Order code
10	**P5GD-010MSG004B**
16	**P5GD-016MSG006B**
20	**P5GD-020MSG010B**
25	**P5GD-025MSG014B**

Length of gripping point



* L = Gripping point L = 20mm at center of stroke

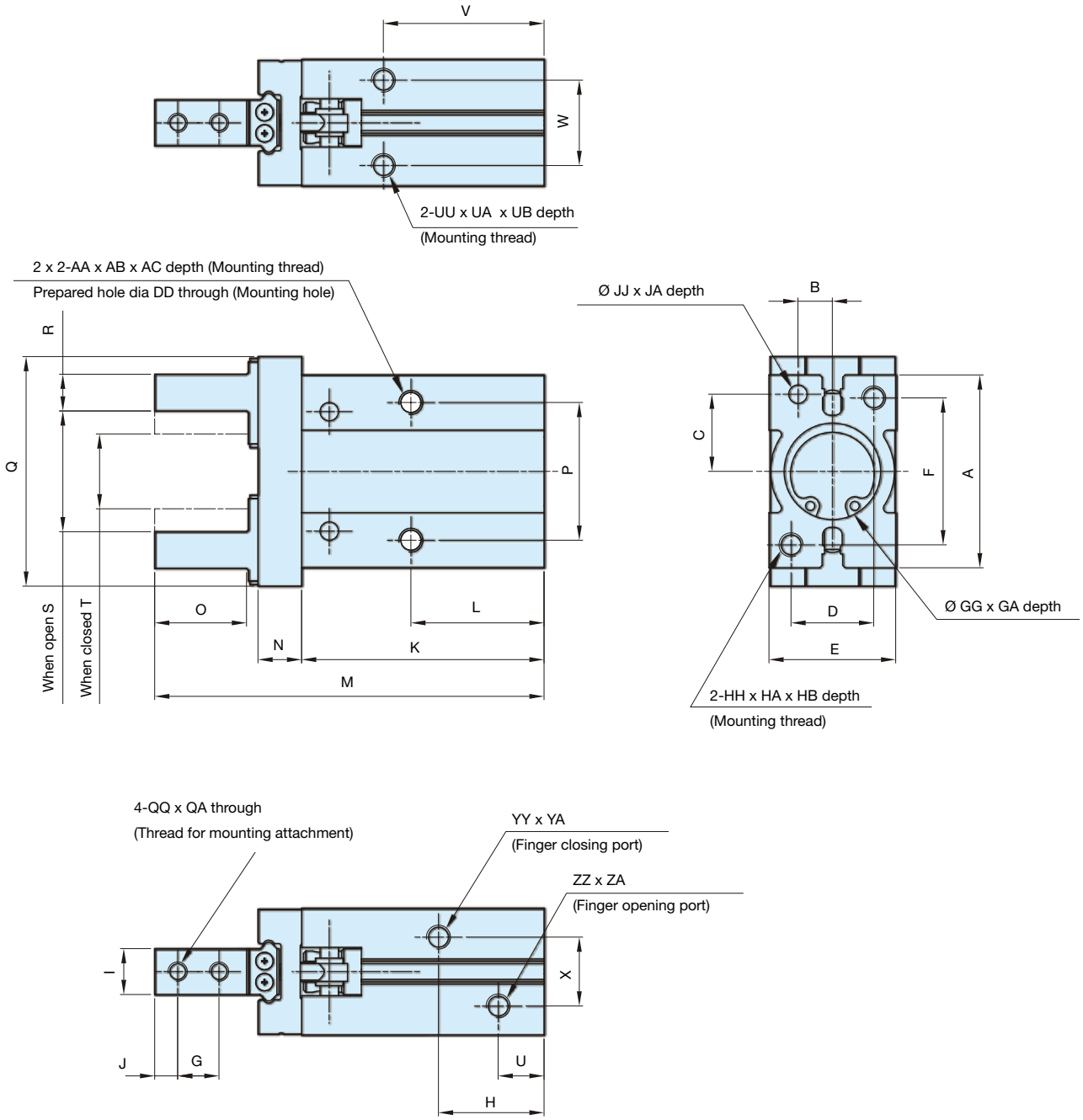
Installation of sensor



Sensors - Series P8S-E

Magnetic Sensor	M8 - Snap in	Flying lead
	0.165 m PUR cable with M8 connector	2 m PUR cable
PNP	**P8S-EPSUS**	**P8S-EPFXS**
NPN	**P8S-ENSUS**	**P8S-ENFXS**
Reed	**P8S-ERSUS**	**P8S-ERFXS**

Dimensions (mm)



Bore mm	A	AA	AB	AC	B	C	D	DD	E	F	G	GG	GA	H	HH	HA	HB	I	J	JJ	JA	K	L	M
10	23	M3	0.5	5.5	5.2 $^{+0.025}_{-0}$	7.6 $^{+0.02}_{-0.02}$	12	2.6	16.4 $^{+0.05}_{-0.05}$	18	5.7	11H9 $^{+0.043}_{-0}$	2	19	M3	0.5	6	5 $^{0}_{-0.05}$	3	2H9 $^{+0.025}_{-0}$	3	37.8	23	57
16	30.6	M4	0.7	8	6.5 $^{+0.25}_{-0}$	11 $^{+0.02}_{-0.02}$	15	3.4	23.6 $^{+0.05}_{-0.05}$	22	7	17H9 $^{+0.043}_{-0}$	2	19	M4	0.7	8	8 $^{0}_{-0.05}$	4	3H9 $^{+0.025}_{-0}$	3	42.5	24.5	67.3
20	42	M5	0.8	10	7.5 $^{+0.030}_{-0}$	16.8 $^{+0.02}_{-0.02}$	18	3.4	27.6 $^{+0.05}_{-0.05}$	32	9	21H9 $^{+0.052}_{-0}$	3	23	M5	0.8	10	10 $^{0}_{-0.05}$	5	4H9 $^{+0.030}_{-0}$	4	52.8	29	84.8
25	52	M6	1	12	10 $^{+0.02}_{-0.02}$	21.8 $^{+0.02}_{-0.02}$	22	5.1	33.6 $^{+0.05}_{-0.05}$	40	12	21H9 $^{+0.052}_{-0}$	3.5	23.5	M6	1	12	12 $^{0}_{-0.05}$	6	4H9 $^{+0.02}_{-0.02}$	4	63.6	30	102.7

Bore mm	N	O	P	Q	QQ	QA	R	S	T	U	UU	UA	UB	V	W	X	YY	YA	ZZ	ZA
10	6	12	16	29	M2.5	0.45	4 $^{0}_{-0.1}$	15.2 $^{+2.2}_{0}$	11.2 $^{0}_{-0.7}$	9	M3	0.5	6	27	11.4	10	M3	0.5	M3	0.5
16	7.5	15	24	38	M3	0.5	5 $^{0}_{-0.1}$	20.9 $^{+2.2}_{-0.2}$	14.9 $^{0}_{-0.7}$	8.5	M4	0.7	4.5	30	16	13	M5	0.8	M5	0.8
20	9.5	20	30	50	M4	0.7	8 $^{0}_{-0.1}$	26.3 $^{+2.2}_{-0.2}$	16.3 $^{0}_{-0.7}$	10	M5	0.8	8	35	18.6	15	M5	0.8	M5	0.8
25	11	25	36	63	M5	0.8	10 $^{0}_{-0.1}$	33.3 $^{+2.2}_{-0.2}$	19.3 $^{0}_{-0.8}$	9.7	M6	1	10	36.5	22	20	M5	0.8	M5	0.8