

P5GA - Angular double acting, square jaw carriers

The P5GA is a compact angular gripper with a closed angle of -10° and an open angle of $+30^\circ$. With double acting mechanism the gripper is suitable for internal or external gripping applications. For flexible installation mounting is available on three sides and the anodised body has recessed sensor grooves.

- Bore sizes Ø12, 16, 20, 25 and 32mm
- Double acting
- Anodised corrosion protection
- Magnetic piston as standard
- Optional sensors



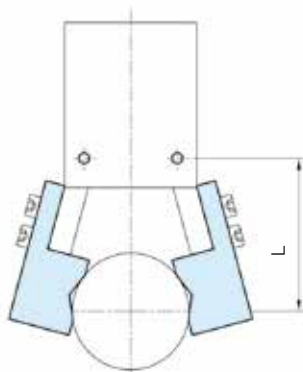
Technical Information

Acting type	Double acting				
Bore (mm)	12	16	20	25	32
Port size	M3 x 0.5	M5 x 0.8			
Medium	Air				
Operating pressure range	1.5 - 7 bar				
Temperature range	-5 to +60°C (no freezing)				
Max frequency	180 Cycles/min				
Lubrication	Cylinder	Not required			
Lever	Grease				
Max. arm length mm (L)	30	40	60	70	85
Theoretical holding force kgf-cm					
	Closed side	0.4xP	0.9xP	1.7xP	3.4xP
	Opened side	0.5xP	1.2xP	2.3xP	4.4xP
Clamp / Release angle	-10 to +30°				
Clamping force (F)	$F = M / L \times 0.85$				
Weight (g)	53	103	193	327	525
L : Arm length (mm), M : Theoretical moment (kgf-cm)					
F : Clamping force (kgf), P : Operating pressure (kgf/cm²)					
For more information see www.parker.com/euro_pneumatic					

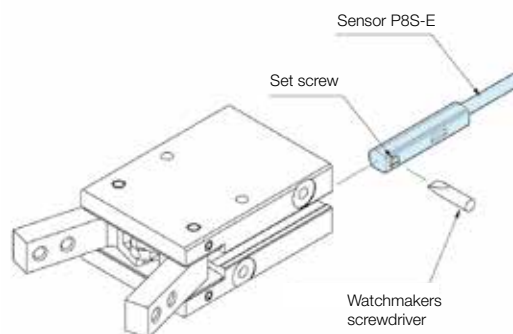
P5GA - Angular Grippers

Bore mm	Order code
12	P5GA-012MSG030B
16	P5GA-016MSG030B
20	P5GA-020MSG030B
25	P5GA-025MSG030B
32	P5GA-032MSG030B

Length of gripping point



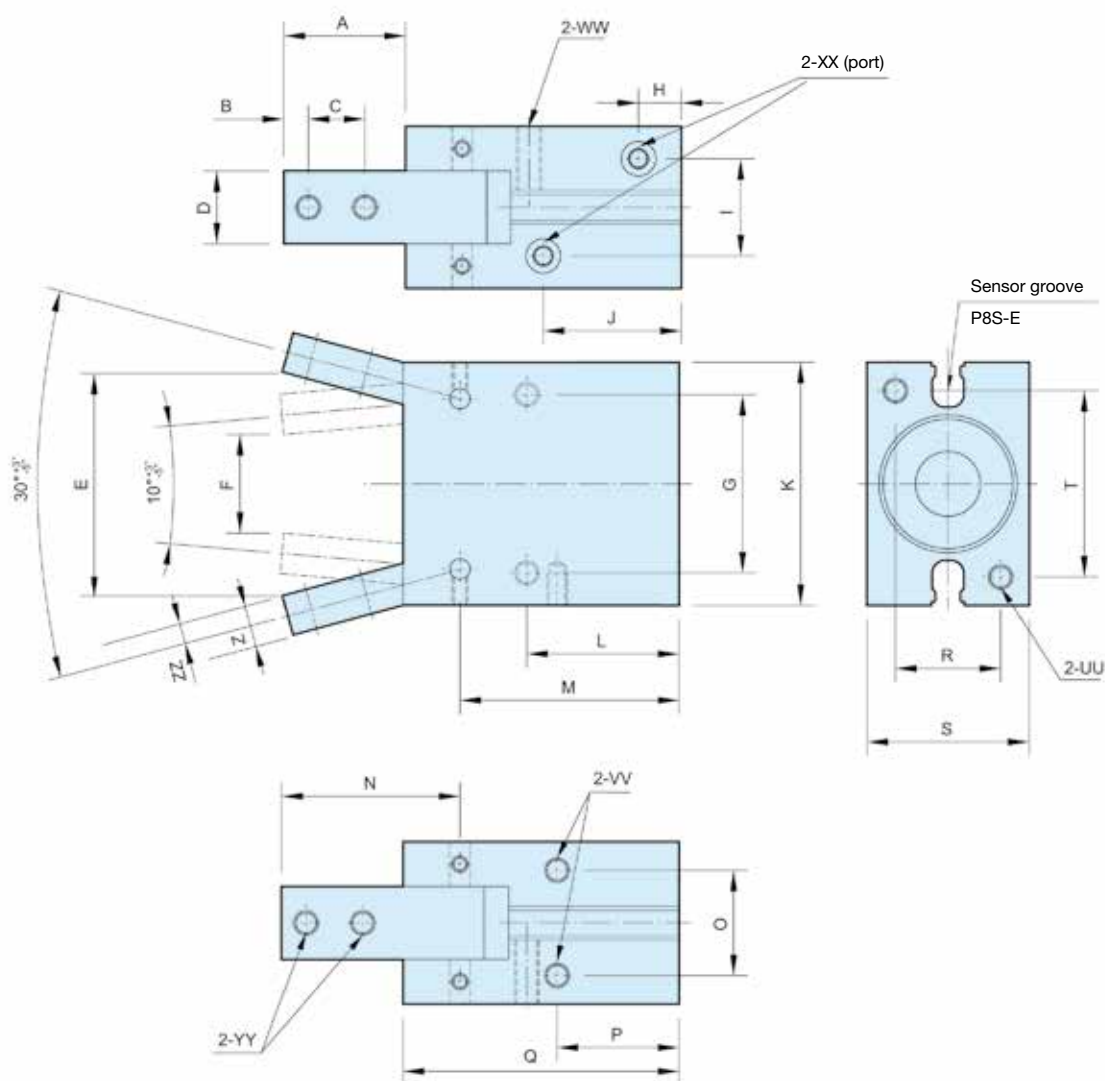
Installation of sensor



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	B	C	D 0/-0.03	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
12	15,4	3	6	7	26,3	9	20	7,5	10,2	23,5	28	20	32,9	21,5	10,2	16	39	10	16	22
16	17,5	3	8	9	31,1	14	24	7,5	12	22	34	22,5	35	25	14	18	42,5	14	22	26
20	22	4	10	12	40,1	18	30	8	13	25	45	25	39,5	32,5	16	19	50	16	26	35
25	26	5	12	14	47,9	21	36	8,5	18	28	52	28,5	45,5	38,5	20	21,5	58	20	32	40
32	30	6	14	18	55,1	24	44	10,5	24	34	60	37,5	54	44	26	30	68	26	40	46

Bore mm	UU	VV	WW	XX	YY	Z	ZZ
12	M3 x 5 depth	M3 x 5 depth	M3 x 5 depth	M3 x 5 depth	M3	5	2,5
16	M4 x 7 depth	M4 x 7 depth	M4 x 7 depth	M5 x 5 depth	M3	6	3
20	M5 x 8 depth	M5 x 8 depth	M5 x 8 depth	M5 x 5 depth	M4	7	3,5
25	M6 x 10 depth	M6 x 10 depth	M6 x 10 depth	M5 x 5 depth	M5	9	4
32	M6 x 10 depth	M6 x 10 depth	M6 x 10 depth	M5 x 5 depth	M6	10	5

P5GB - Parallel double acting, square jaw carriers

Available with a comprehensive range of bore sizes Ø12 - 32 mm the P5GB double acting parallel gripper is an accurate workpiece holding device. The anodised aluminium body has flexible installation mountings on three sides and recessed sensor grooves.

- Bore sizes Ø12, 16, 20, 25 and 32mm
- Double acting
- Anodised corrosion protection
- Magnetic piston as standard
- Optional sensors



Technical Information

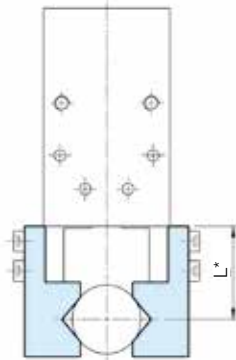
Acting type		Double acting				
Bore (mm)		12	16	20	25	32
Port size		M3 x 0.5		M5 x 0.8		
Medium		Air				
Operating pressure range		1.5 - 7 bar				
Temperature range		-5 to +60°C (no freezing)				
Max frequency		180 Cycles/min				
Lubrication	Cylinder	Not required				
Lever	Grease					
Max. arm length mm (L)		30	40	60	70	85
Theoretical holding force kgf-cm						
	Closed side	0.8	2.4	4.7	7.5	10
	Opened side	0.5	1.8	3.5	6.0	8.5
Lever open / closed stroke		6	8	12	14	16
Weight (g)		66	144	255	419	719

For more information see www.parker.com/euro_pneumatic

P5GB - Parallel Grippers

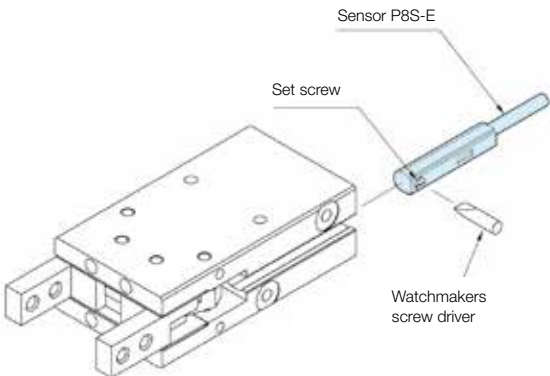
Bore mm	Order code
12	P5GB-012MSG006B
16	P5GB-016MSG008B
20	P5GB-020MSG012B
25	P5GB-025MSG014B
32	P5GB-032MSG016B

Length of gripping point



* L = gripping joint length 30mm, pressure 5kgf/cm²

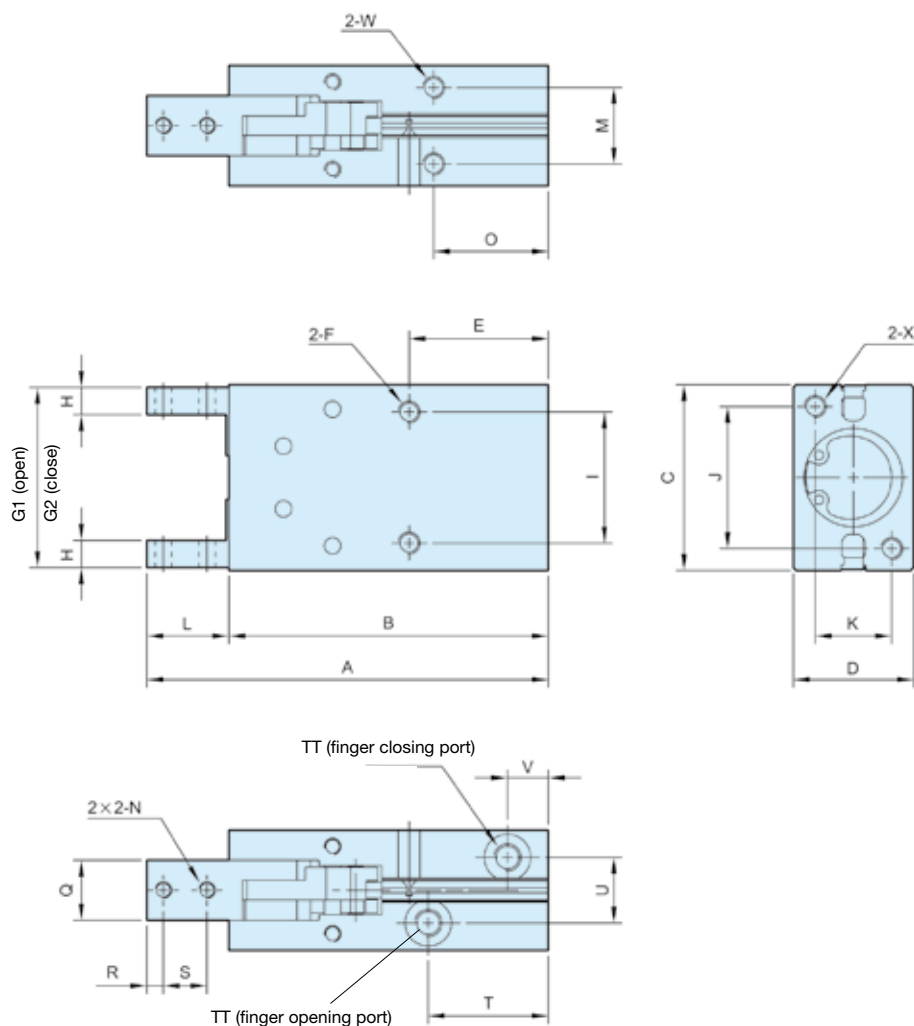
Installation of sensor



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	B	C	D	E	F	G1	G2	H	I	J	K	L	M	N	O	Q 0/-0.03	R
12	63,5	50,5	28	16	20	M3 x 0.5 x 5 depth	27	21	4	18	17	10	13	10	M3 x 0.5	16	7	3
16	73,5	58,5	34	22	25,5	M4 x 0.7 x 11 depth	33	25	5	24	26	14	15	14	M3 x 0.5	21	11	3
20	88,5	69,5	45	26	25	M5 x 0.8 x 8 depth	44	32	6	30	35	16	19	16	M4 x 0.7	19	12	4
25	102,5	78,5	52	32	28	M6 x 1.0 x 10 depth	51	37	8	36	40	20	24	20	M5 x 0.8	22	14	5
32	120,5	90,5	60	40	34	M6 x 1.0 x 10 depth	59	43	10	44	46	24	30	26	M6 x 1.0	26	20	7

Bore mm	S	T	TT	U	V	W	X
12	6	23	M5 x 0.8 x 5 depth	10,2	7,5	M3 x 0.5 x 5 depth	M3 x 0.5 x 5 depth
16	8	22	M5 x 0.8 x 5 depth	12	7,5	M4 x 0.7 x 7 depth	M4 x 0.7 x 7 depth
20	10	26	M5 x 0.8 x 5 depth	13	8	M5 x 0.8 x 8 depth	M5 x 0.8 x 8 depth
25	12	29	M5 x 0.8 x 5 depth	18	8,5	M6 x 1.0 x 10 depth	M6 x 1.0 x 10 depth
32	15	35	M5 x 0.8 x 5 depth	24	10,5	M6 x 1.0 x 10 depth	M6 x 1.0 x 10 depth

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

P5GD - Parallel Grippers

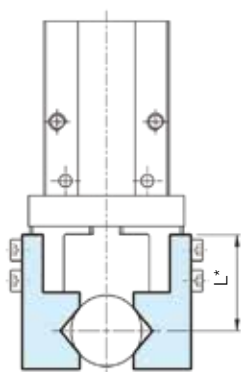
Bore mm	Order code
10	P5GD-010MSG004B
16	P5GD-016MSG006B
20	P5GD-020MSG010B
25	P5GD-025MSG014B

Bore	Gripping force ⁽¹⁾		Opening closing stroke (both sides) (mm)
	Gripping force per finger effective value N (kgf)		
	External	Internal	
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)

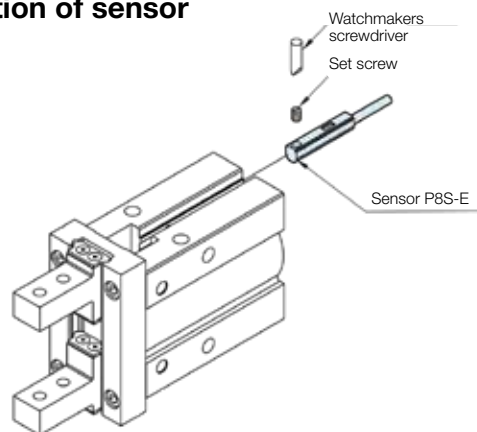
For more information see www.parker.com/euro_pneumatic

Length of gripping point



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

Installation of sensor



Sensors - Series P8S-E

Magnetic Sensor

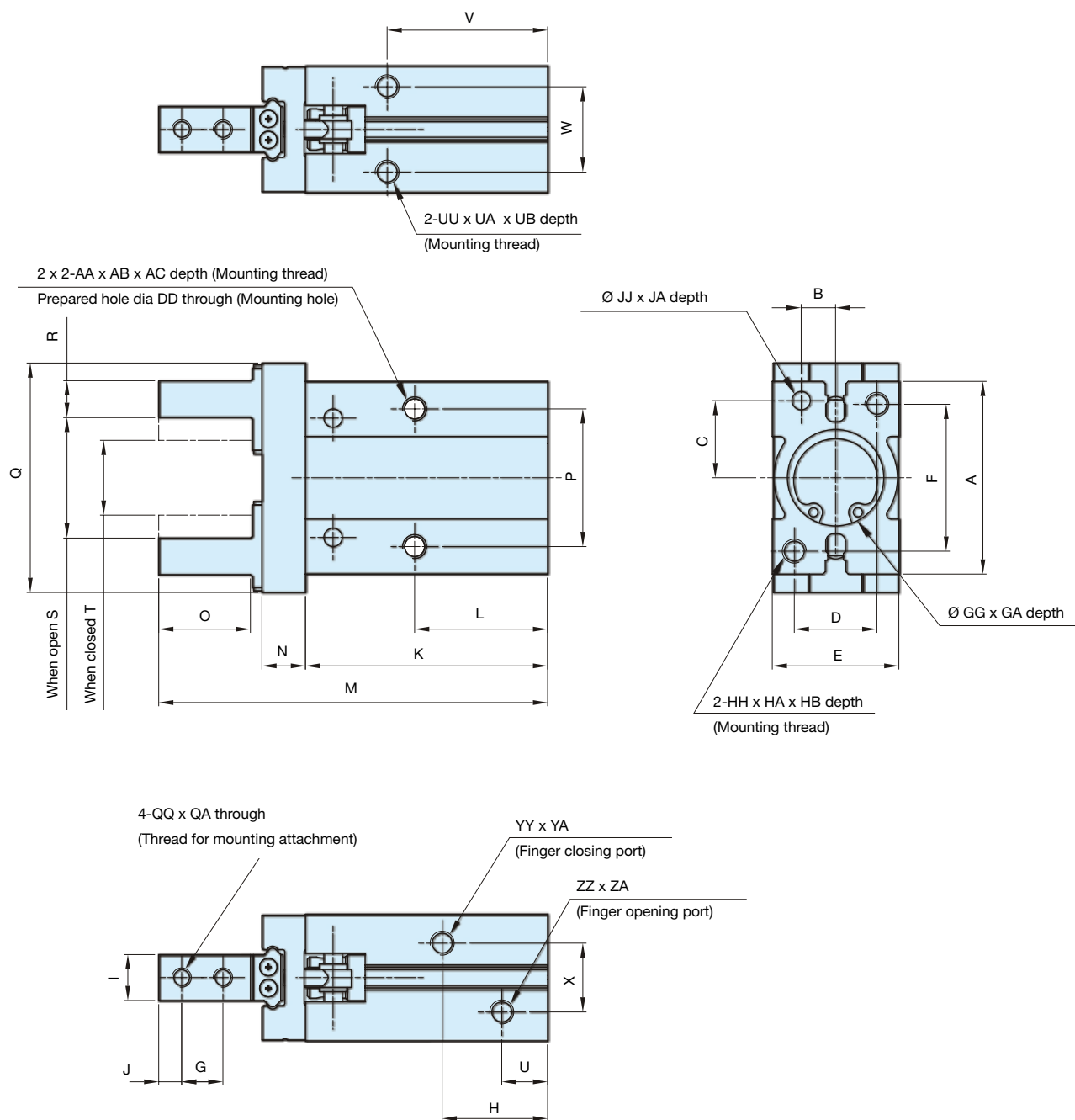
M8 - Snap in

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				

P5GL - 180° Angular double acting, cam style, square jaw carriers

The P5GL is a 180° angular gripper of compact size and lightweight construction. With double acting movement high gripping forces are achieved via internal cams. The anodised body has mounting points on four sides and sensors can be fitted in any of the four integral grooves.

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



Technical Information

Acting type	Double acting			
Bore (mm)	10	16	20	25
Medium	Air			
Operating pressure range	1 to 6 bar			
Temperature range	-10 to +60°C (no freezing)			
Repeatability	± 0.2 mm			
Max operating frequency	60 Cycles/min			
Lubrication	Not required			
Effective force (Nm) at (5kgf/cm²)	0.16	0.54	1.10	2.28
Operating angle (both sides)	Opened side	180° - 182°		
	Closed side	-3°		
Weight (g)	80	150	320	600

For more information see www.parker.com/euro_pneumatic

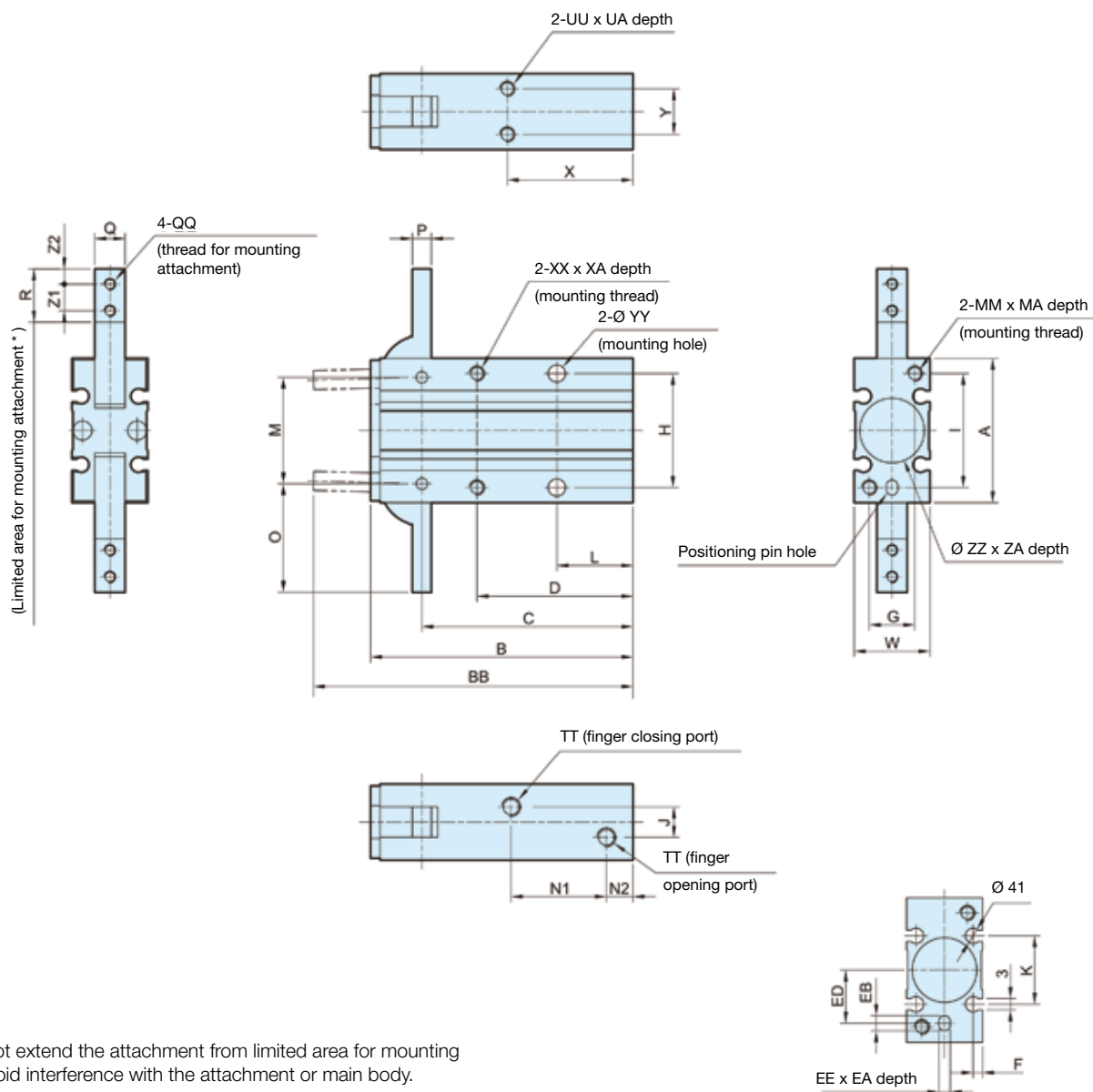
P5GL - 180° Angular Grippers - Cam Style

Bore mm	Order code
10	P5GL-010MSG180B
16	P5GL-016MSG180B
20	P5GL-020MSG180B
25	P5GL-025MSG180B

Sensors - Series P8S-H

Magnetic Sensor	M8 - Snap in	Flying lead
		
	0.165 m PUR cable with M8 connector	1 m PUR cable
Reed NO	P8S-HRSUS	P8S-HRFCs

Dimensions (mm)



* Do not extend the attachment from limited area for mounting to avoid interference with the attachment or main body.

Bore mm	A	B	BB	C	D	EE	EA	EB	ED	F	G	H	I	J	K	L	M	MA	MM	N1	N2	O	P	Q
12	30	58	71	47,5	35	3H9 ^{+0.025} ₋₀	3	4	9	2	9	24	24	3	13	18	22	6	M3 x 0.5	23	7	23,5	4	6 ^{+0.005} _{-0.025}
16	38	69	84	55,5	41	3H9 ^{+0.025} ₋₀	3	4	15	2,5	12	30	30	8	18	20	28	8	M4 x 0.7	25	7	28,5	5	8 ^{+0.005} _{-0.025}
20	48	86	106	69	50	4H9 ^{+0.030} ₋₀	4	5	19	3	16	36	38	12	20	25	36	10	M5 x 0.8	32	8	37	8	10 ^{+0.005} _{-0.025}
25	58	107	131	86	60	4H9 ^{+0.030} ₋₀	4	5	23	3	18	42	46	14	24	30	45	12	M6 x 1	42	8	45	10	12 ^{+0.005} _{-0.025}

Bore mm	QH	QQ	R	TT	UA	UU	W	X	XA	XX	Y	YY	ZA	ZZ	Z1	Z2
12	3,4	M3 x 0.5	12	M5 x 0.8 x 5 depth	4	M3 x 0.5	15	30	6	M3 x 0.5	9	3,4	1,5	11H9 ^{+0.043} ₋₀	6	3
16	3,4	M3 x 0.5	14	M5 x 0.8 x 5 depth	5	M4 x 0.7	20	33	8	M4 x 0.7	12	4,5	1,5	17H9 ^{+0.043} ₋₀	7	4
20	4,5	M4 x 0.7	18	M5 x 0.8 x 5 depth	8	M5 x 0.8	26	42	10	M5 x 0.8	14	5,5	1,5	21H9 ^{+0.052} ₋₀	9	5
25	5,5	M5 x 0.8	22,5	M5 x 0.8 x 5 depth	10	M6 x 1	30	50	12	M6 x 1	16	6,6	1,5	26H9 ^{+0.052} ₋₀	12	6