

This range of stainless steel cylinders has been specially designed for use in difficult environments. Hygienic design, external seals of fluorinated rubber and prelubrication with our food-industry-approved grease according to USDA-H1 make the cylinders particularly suitable for food industry use. All cylinders have magnetic pistons for proximity position sensing. Fixing dimensions to ISO 6431 simplify installation and make the cylinders physically interchangeable throughout the world.

- Round cylinder to ISO 6431
- All stainless steel
- Clean, smooth washdown design
- Magnetic piston as standard
- Adjustable cushioning for long service life
- Complete range of mountings and sensors

 **For ATEX specific products contact Sales Office**



Operating information

Working pressure: Max 10 bar
 Temperature range: -20°C to +70°C
 ATEX approval: CE Ex IIGd c T4 120°C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For more information see www.parker.com/euro_pneumatic

Standard stroke lengths

Ø32mm - (G1/8)

Stroke mm	Order code
25	P1S-D032MS-0025
50	P1S-D032MS-0050
80	P1S-D032MS-0080
100	P1S-D032MS-0100
125	P1S-D032MS-0125
160	P1S-D032MS-0160
200	P1S-D032MS-0200
250	P1S-D032MS-0250
320	P1S-D032MS-0320
400	P1S-D032MS-0400
500	P1S-D032MS-0500

Ø63mm - (G3/8)

Stroke mm	Order code
25	P1S-D063MS-0025
50	P1S-D063MS-0050
80	P1S-D063MS-0080
100	P1S-D063MS-0100
125	P1S-D063MS-0125
160	P1S-D063MS-0160
200	P1S-D063MS-0200
250	P1S-D063MS-0250
320	P1S-D063MS-0320
400	P1S-D063MS-0400
500	P1S-D063MS-0500

Ø100mm - (G1/2)

Stroke mm	Order code
25	P1S-L100MS-0025
50	P1S-L100MS-0050
80	P1S-L100MS-0080
100	P1S-L100MS-0100
125	P1S-L100MS-0125
160	P1S-L100MS-0160
200	P1S-L100MS-0200
250	P1S-L100MS-0250
320	P1S-L100MS-0320
400	P1S-L100MS-0400
500	P1S-L100MS-0500

Ø40mm - (G1/4)

Stroke mm	Order code
25	P1S-D040MS-0025
50	P1S-D040MS-0050
80	P1S-D040MS-0080
100	P1S-D040MS-0100
125	P1S-D040MS-0125
160	P1S-D040MS-0160
200	P1S-D040MS-0200
250	P1S-D040MS-0250
320	P1S-D040MS-0320
400	P1S-D040MS-0400
500	P1S-D040MS-0500

Ø80mm - (G3/8)

Stroke mm	Order code
25	P1S-L080MS-0025
50	P1S-L080MS-0050
80	P1S-L080MS-0080
100	P1S-L080MS-0100
125	P1S-L080MS-0125
160	P1S-L080MS-0160
200	P1S-L080MS-0200
250	P1S-L080MS-0250
320	P1S-L080MS-0320
400	P1S-L080MS-0400
500	P1S-L080MS-0500

Ø125mm - (G1/2)

Stroke mm	Order code
25	P1S-L125MS-0025
50	P1S-L125MS-0050
80	P1S-L125MS-0080
100	P1S-L125MS-0100
125	P1S-L125MS-0125
160	P1S-L125MS-0160
200	P1S-L125MS-0200
250	P1S-L125MS-0250
320	P1S-L125MS-0320
400	P1S-L125MS-0400
500	P1S-L125MS-0500

Ø50mm - (G1/4)

Stroke mm	Order code
25	P1S-D050MS-0025
50	P1S-D050MS-0050
80	P1S-D050MS-0080
100	P1S-D050MS-0100
125	P1S-D050MS-0125
160	P1S-D050MS-0160
200	P1S-D050MS-0200
250	P1S-D050MS-0250
320	P1S-D050MS-0320
400	P1S-D050MS-0400
500	P1S-D050MS-0500

Design Variants

Working temperatures

High temperature -10°C to +150°C Non-magnetic piston

Low temperature
Ø10 and Ø125mm -40°C to +40°C Non-magnetic piston

Stainless steel scraper for piston rod
-20°C to +80°C Magnetic piston



Double acting options

Double-acting
adjustable cushioning Ø80 - Ø125

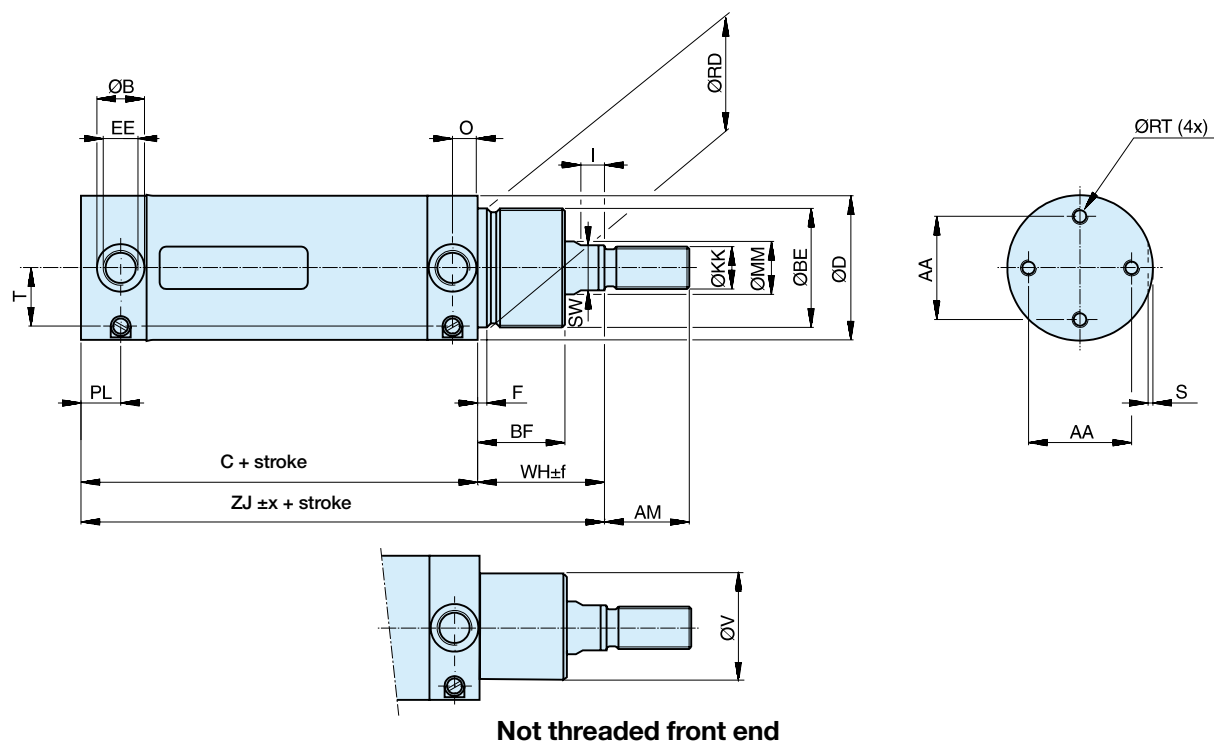


Double-acting
adjustable cushioning
through rod only Ø80 - Ø125



Mounting options

ISO 6431 Stainless Steel Cylinders are available with a variety of integral threaded mounting holes or trunnion pegs.



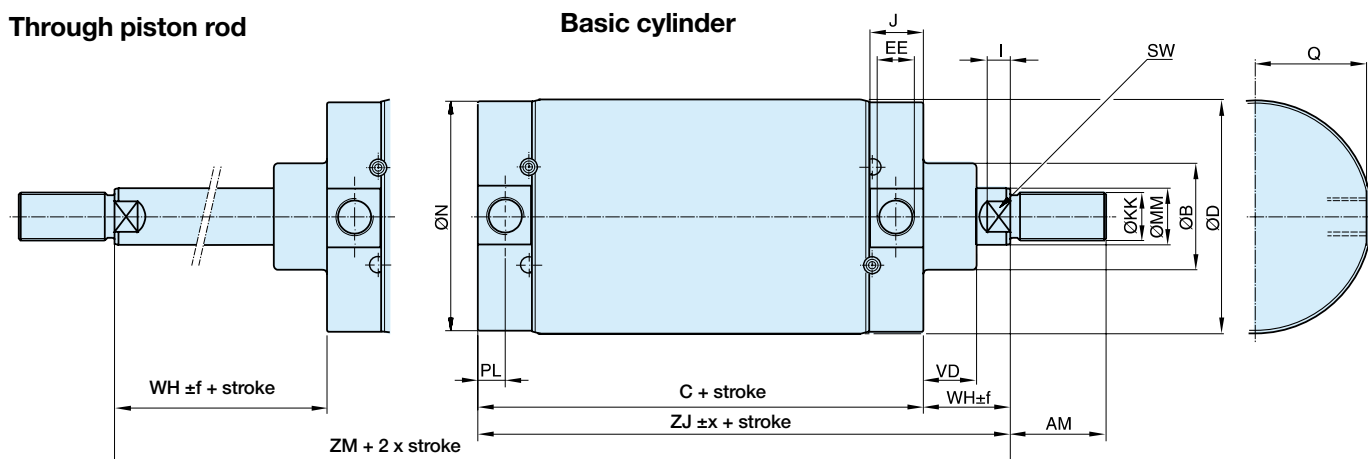
Dimensions Ø32-Ø63

Cylinder designation	AA mm	AM mm	B mm	BF mm	BE mm	C mm	D mm	EE mm	F mm	I mm	KK mm	MM mm	O mm	PL mm	RD mm	RT mm
P1S-D032M	24,5	22	15	25	M30x1,5	88	36	G1/8	4,2	6	M10x1,25	12	8	13	30	M5
P1S-D040M	30	24	18	30	M38x1,5	97	44	G1/4	4,5	9	M12x1,25	16	9,5	15	38	M6
P1S-D050M	39	32	18	33	M45x1,5	101	55	G1/4	4,5	9	M16x1,5	20	9,5	15	45	M6
P1S-D063M	49	32	25	33	M45x1,5	117	68	G3/8	4,5	9	M16x1,5	20	13,3	20,5	45	M8

Cylinder designation	S mm	SW mm	T mm	V mm	WH mm	ZJ mm	Mounting tolerances x f mm mm	Stroke length 0-500 mm mm
P1S-D032M	1,5	10	12,2	26	35,5	123,5	1,2 2,5	+2,0
P1S-D040M	1,5	14	16,5	35	44	141	1,0 2,2	+2,0
P1S-D050M	1,5	17	22	41	47	148	0,9 2,3	+2,0
P1S-D063M	1,5	17	26	41	47	164	1,4 2,3	+2,5

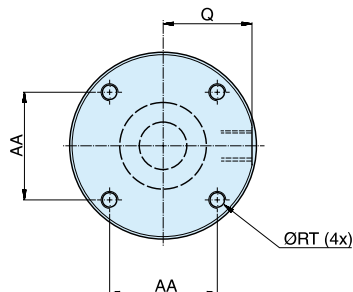
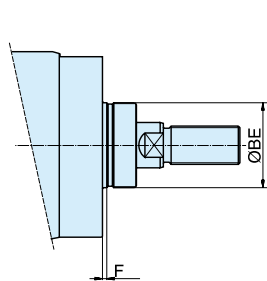
Through piston rod

Basic cylinder



Threaded front end

Mounting holes in the end covers



Dimensions Ø80-Ø125

Cylinder designation	AA mm	AM mm	B mm	BE	C mm	D mm	EE	F mm	KK	I mm	J mm	MM mm	N mm	PL mm	Q mm
P1S-•Ø80M	46	40	50	M50x1,5	141	86	G3/8	4	M20x1,5	10	24,5	25	84	12,5	40
P1S-•100M	60	40	50	M50x1,5	158	106	G1/2	4	M20x1,5	8	30	25	104	15,5	49,5
P1S-•125M	76	54	60	M60x2	183	133	G1/2	4	M27x2	13	30	32	129	15,5	62,5

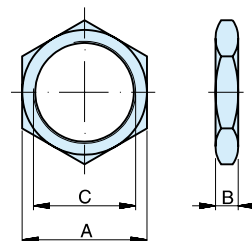
Cylinder designation	RT mm	SW mm	VD mm	WH mm	ZJ mm	ZM mm	Mounting tol. Stroke length x f 0-500 mm		
P1S-•Ø80M	M8	21	19	37	178	215	1,5	2,5	+2,5
P1S-•100M	M10	21	19	35	193	228	1,5	2,5	+2,5
P1S-•125M	M12	27	24	47	230	277	2,0	2,5	+4,0

Cylinder mountings Ø32 - Ø63

Mounting nut

Intended for fixed mounting of the cylinder via the neck.

Material: stainless steel, DIN X 5 CrNi 18 10

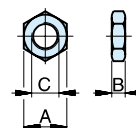


Cylinder Ø mm	A mm	B mm	C	Weight Kg	Order code
32	36	8	M30x1,5	0,03	9127294401
40	46	10	M38x1,5	0,06	9127294402
50	55	10	M45x1,5	0,08	9127294403
63	55	10	M45x1,5	0,08	9127294403

Cylinder mountings Ø32-Ø125

Rod nut

Intended for fixed mounting on the piston rod. Cylinders are supplied complete with one rod nut. (cylinders with through piston rods are supplied with two rod nuts.)

Material:
Stainless steel, DIN X 5 CrNi 18 10

Cylinder Ø	A mm	B mm	C mm	Weight Kg	Order code
32	17	5	M10x1,25	0,01	9126725404
40	19	6	M12x1,25	0,01	9126725405
50	24	8	M16x1,5	0,02	9126725406
63	24	8	M16x1,5	0,02	9126725406
80	30	10	M20x1,5	0,04	0261109921
100	30	10	M20x1,5	0,04	0261109921
125	41	13,5	M27x2	0,10	0261109922

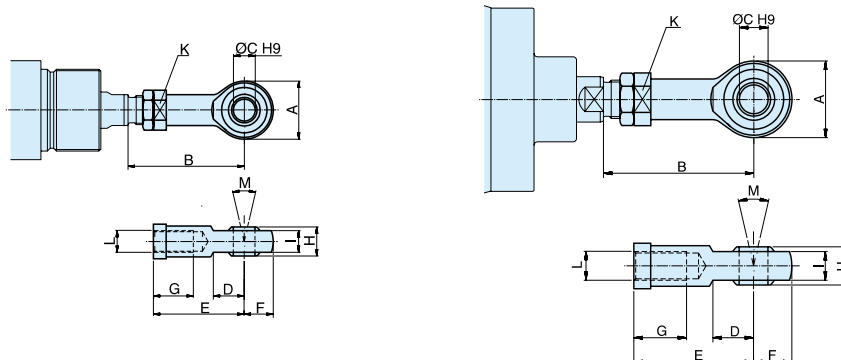
Cylinder mountings Ø32 - Ø125

Swivel rod eye



According to ISO 8139
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction.

Material:
Swivel rod eye: stainless steel, DIN X 5 CrNi 18 10
Ball: hardened stainless steel, DIN X 5 CrNi 18 10



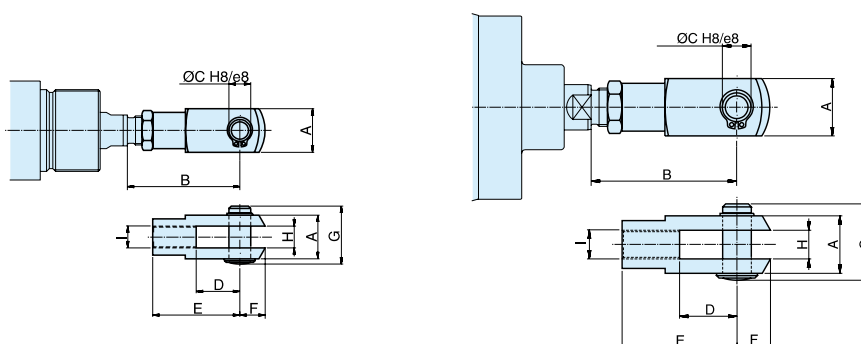
Cyl. Ø mm	A mm	B _{min} mm	B _{max} mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	L	M	Weight Kg	Order code
32	28	50	55	10	15	43	14	15	14	10,5	17	M10x1,25	24°	0,08	P1S-4JRT
40	32	56	62	12	17	50	16	22	16	12	19	M12x1,25	24°	0,12	P1S-4LRT
50	42	72	80	16	22	64	21	28	21	15	22	M16x1,5	30°	0,25	P1S-4MRT
63	42	72	80	16	22	64	21	28	21	15	22	M16x1,5	30°	0,25	P1S-4MRT
80	50	87	97	20	26	77	25	33	25	18	32	M20x1,5	30°	0,46	P1S-4PRT
100	50	87	97	20	26	77	25	33	25	18	32	M20x1,5	30°	0,46	P1S-4PRT
125	70	123,5	137	30	36	110	35	51	37	25	41	M27x2	30°	1,28	P1S-4RRT

Clevis



According to ISO 8140
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction. Supplied complete with pin.

Material:
Clevis: stainless steel, DIN X 10 CrNiS 18 9
Pin: stainless steel, DIN X 5 CrNi 18 10
Locking rings according to DIN 471



Cyl. Ø mm	A mm	B _{min} mm	B _{max} mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Weight Kg	Order code
32	20	46	52	10	20	40	12	28	10	M10x1,25	0,09	P1S-4JRD
40	24	54	60	12	24	48	19	32	12	M12x1,25	0,15	P1S-4LRD
50	32	72	80	16	32	64	25	42	16	M16x1,5	0,35	P1S-4MRD
63	32	72	80	16	32	64	25	42	16	M16x1,5	0,35	P1S-4MRD
80	40	90	100	20	40	80	32	50	20	M20x1,5	0,75	P1S-4PRD
100	40	90	100	20	40	80	32	50	20	M20x1,5	0,75	P1S-4PRD
125	55	123,5	137	30	54	110	45	72	30	M27x2	2,10	P1S-4RRD

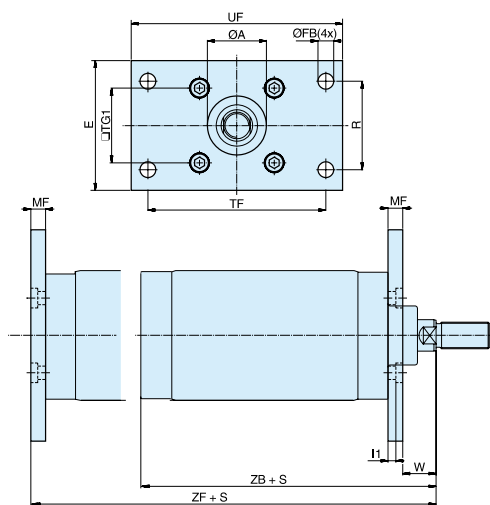
Cylinder mountings

Flange MF1/MF2



Intended for fixed attachment of cylinder version D, E, F or L. The flange is designed for mounting on the front or rear end covers.

Material:
Stainless steel, DIN X 5 CrNiMo 17 13 3



Cylinder Ø mm	A mm	FB mm	E mm	R mm	TF mm	TG1 mm	UF mm	MF mm	I1 mm	W mm	ZB mm	ZF mm	Weight Kg	Order code
80	50,2	12	86	63	126	46	150	12	6	25	178	190	0,97	P1S-4PMB
100	51	14	106	75	150	60	170	12	6	23	193	205	1,42	P1S-4QMB
125	61	16	132	90	180	76	205	15	8	32	230	245	1,55	P1S-4RMB

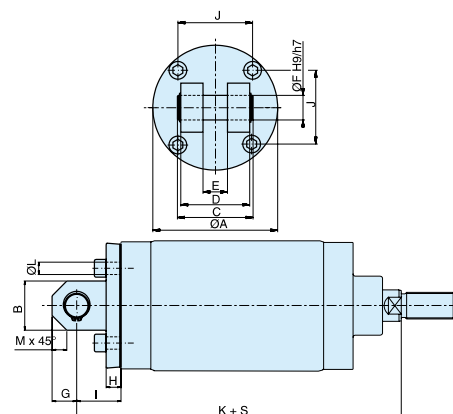
S = Stroke

Clevis bracket MP4



Intended for articulated mounting of cylinder versions D, F, or L. The bracket is mounted on the rear end cover and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.

Material:
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: stainless steel, DIN X 5 CrNiMo 17 13 3



Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	Weight Kg	Order code
80	80	30	57	50	16	16	15	12	32	46	210	8,6	9	0,78	P1S-4PME
100	103	42	67	60	20	20	21	12	37	60	230	10,6	12	1,42	P1S-4QME
125	127	50	77	70	25	25	25	15	45	76	275	12,6	15	2,06	P1S-4RME

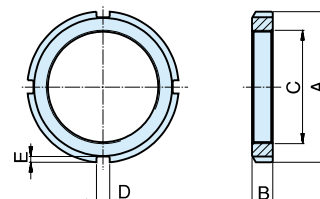
S = Stroke

Mounting nut



Intended for fixed mounting on the front end cover of cylinders according to cylinder version C or D.

Material:
Stainless steel, DIN X 5 CrNi 18 10



Cylinder Ø mm	A mm	B mm	C	D mm	E mm	Weight Kg	Order code
80	70	11	M50x1,5	6	2,5	0,16	9126461304
100	70	11	M50x1,5	6	2,5	0,16	9126461304
125	80	11	M60x2	7	3	0,19	9126461305

Cylinder mountings

Cylinder mountings

Type	Description	Cyl. bore Ø mm	Weight kg	Order code
Combined mounting MP2/MP4	Intended for articulated mounting of cylinder versions D, F or L. The unit is mounted on the rear end cover and is combined with bearing brackets MP2 and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.	80	1,29	P1S-4PML
		100	2,33	P1S-4QML
		125	3,30	P1S-4RML



Material:
Bearing brackets: stainless steel, DIN X 5 CrNi 18 10
Journal bearing: stainless steel,
Journal bearing: DIN X 5 CrNiMo 17 13 3/PTFE
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: stainless steel, DIN X 5 CrNiMo 17 13 3

Cylinder Ø mm	A mm	B mm	C mm	CD mm	d3 mm	E mm	FL mm	L mm	TG1 mm	XA mm	XD mm
80	12	64	82	16	9	74	32	20	46	242	210
100	12	74	98	20	11	90	37	25	60	267	230
125	15	90	118	25	13	110	45	30	76	320	275

S = Stroke

