

## P1D-C Pro Clean Cylinders

This series of clean design cylinders offers two T slots within one face of the tube allowing the possibility to add sensors. The position of the T slots can be specified on any single face using the order code key. These cylinders have a clean design but are intended for applications where sensors are required.

- Available in 32 to 125 mm bores
- PUR seals for long service life
- Corrosion resistant design
- Lubricated with food grade grease
- Available as a sensor version



### Operating information

Working pressure: Max 10 bar  
Working temperature: -20°C to +80°C

For more information see [www.parker.com/euro\\_pneumatic](http://www.parker.com/euro_pneumatic)

### P1D-C - Double acting

#### Ø32mm - (G<sup>1</sup>/<sub>8</sub>)

Stroke mm	Order code
25	P1D-C032MST0025
40	P1D-C032MST0040
50	P1D-C032MST0050
80	P1D-C032MST0080
100	P1D-C032MST0100
125	P1D-C032MST0125
160	P1D-C032MST0160
200	P1D-C032MST0200
250	P1D-C032MST0250
320	P1D-C032MST0320
400	P1D-C032MST0400
500	P1D-C032MST0500

#### Ø40mm - (G<sup>1</sup>/<sub>4</sub>)

Stroke mm	Order code
25	P1D-C040MST0025
40	P1D-C040MST0040
50	P1D-C040MST0050
80	P1D-C040MST0080
100	P1D-C040MST0100
125	P1D-C040MST0125
160	P1D-C040MST0160
200	P1D-C040MST0200
250	P1D-C040MST0250
320	P1D-C040MST0320
400	P1D-C040MST0400
500	P1D-C040MST0500

#### Ø50mm - (G<sup>1</sup>/<sub>4</sub>)

Stroke mm	Order code
25	P1D-C050MST0025
40	P1D-C050MST0040
50	P1D-C050MST0050
80	P1D-C050MST0080
100	P1D-C050MST0100
125	P1D-C050MST0125
160	P1D-C050MST0160
200	P1D-C050MST0200
250	P1D-C050MST0250
320	P1D-C050MST0320
400	P1D-C050MST0400
500	P1D-C050MST0500

#### Ø63mm - (G<sup>3</sup>/<sub>8</sub>)

Stroke mm	Order code
25	P1D-C063MST0025
40	P1D-C063MST0040
50	P1D-C063MST0050
80	P1D-C063MST0080
100	P1D-C063MST0100
125	P1D-C063MST0125
160	P1D-C063MST0160
200	P1D-C063MST0200
250	P1D-C063MST0250
320	P1D-C063MST0320
400	P1D-C063MST0400
500	P1D-C063MST0500

#### Ø80mm - (G<sup>3</sup>/<sub>8</sub>)

Stroke mm	Order code
25	P1D-C080MST0025
40	P1D-C080MST0040
50	P1D-C080MST0050
80	P1D-C080MST0080
100	P1D-C080MST0100
125	P1D-C080MST0125
160	P1D-C080MST0160
200	P1D-C080MST0200
250	P1D-C080MST0250
320	P1D-C080MST0320
400	P1D-C080MST0400
500	P1D-C080MST0500

#### Ø100mm - (G<sup>1</sup>/<sub>2</sub>)

Stroke mm	Order code
25	P1D-C100MST0025
40	P1D-C100MST0040
50	P1D-C100MST0050
80	P1D-C100MST0080
100	P1D-C100MST0100
125	P1D-C100MST0125
160	P1D-C100MST0160
200	P1D-C100MST0200
250	P1D-C100MST0250
320	P1D-C100MST0320
400	P1D-C100MST0400
500	P1D-C100MST0500

#### Ø125mm - (G<sup>1</sup>/<sub>2</sub>)

Stroke mm	Order code
25	P1D-C125MST0025
40	P1D-C125MST0040
50	P1D-C125MST0050
80	P1D-C125MST0080
100	P1D-C125MST0100
125	P1D-C125MST0125
160	P1D-C125MST0160
200	P1D-C125MST0200
250	P1D-C125MST0250
320	P1D-C125MST0320
400	P1D-C125MST0400
500	P1D-C125MST0500

For other T slots position, please contact Sales Office.

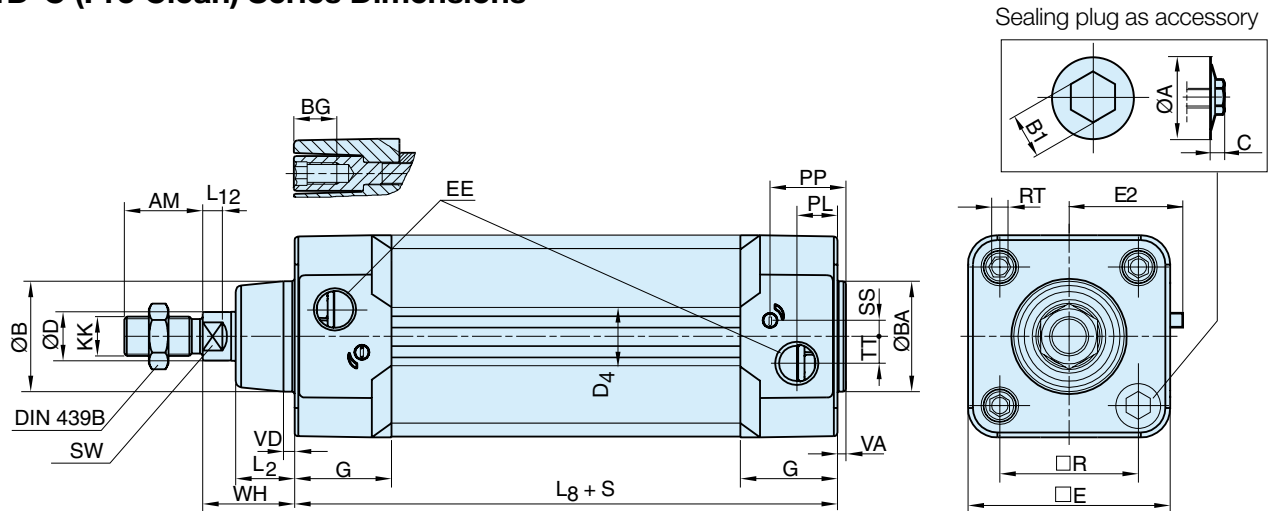
The cylinders are supplied complete with a zinc plated steel piston rod nut.

#### Sensors

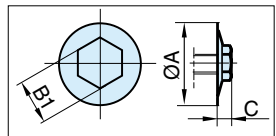


For sensors see page 78.

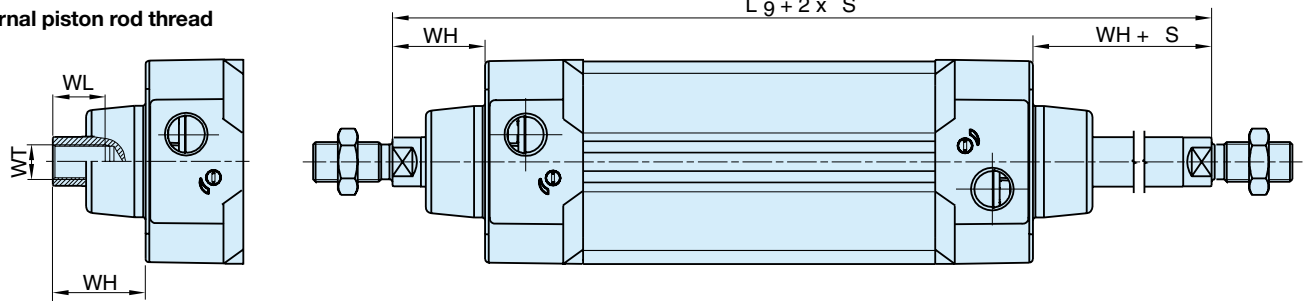
**P1D-C (Pro Clean) Series Dimensions**



Sealing plug as accessory



**Internal piston rod thread**



**Dimensions**

Cylinder bore mm	A mm	AM mm	B mm	B1 mm	BA mm	BG mm	C mm	D mm	D4 mm	E mm	EE mm	G mm	KK	L2 mm
32	15	22	30	8	30	16	5,2	12	45,0	50,0	G1/8	28,5	M10x1,25	16,0
40	15	24	35	8	35	16	5,2	16	52,0	57,4	G1/4	33,0	M12x1,25	19,0
50	18,5	32	40	10	40	16	6,7	20	60,7	69,4	G1/4	33,5	M16x1,5	24,0
63	18,5	32	45	10	45	16	6,7	20	71,5	82,4	G3/8	39,5	M16x1,5	24,0
80	21,5	40	45	11	45	17	7,8	25	86,7	99,4	G3/8	39,5	M20x1,5	30,0
100	21,5	40	55	11	55	17	7,8	25	106,7	116,0	G1/2	44,5	M20x1,5	32,4
125	24	54	60	13	60	20	9,3	32	134,0	139,0	G1/2	51,0	M27x2	45,0

Cylinder bore mm	L8 mm	L9 mm	L12 mm	PL mm	PP mm	R mm	RT	SS mm	SW mm	TT mm	VA mm	VD mm	WH mm	WL mm	WT
32	94	146	6,0	13,0	21,8	32,5	M6	4,0	10	4,5	3,5	4,5	26	21	M8x1
40	105	165	6,5	14,0	21,9	38,0	M6	8,0	13	5,5	3,5	4,5	30	23	M10x1,25
50	106	180	8,0	14,0	23,0	46,5	M8	4,0	17	7,5	3,5	5,0	37	31	M14x1,5
63	121	195	8,0	16,4	27,4	56,5	M8	6,5	17	11,0	3,5	5,0	37	31	M14x1,5
80	128	220	10,0	16,0	30,5	72,0	M10	0	22	15,0	3,5	4,0	46	39	M18x1,5
100	138	240	14,0	18,0	35,8	89,0	M10	0	22	20,0	3,5	4,0	51	39	M18x1,5
125	160	290	18,0	28,0	40,5	110,0	M12	0	27	17,5	5,5	6,0	65	53	M24x2

S=Stroke

**Tolerances**

Cylinder bore mm	B	BA	L <sub>3</sub> mm	L <sub>9</sub> mm	R mm	Stroke tolerance up to stroke 500 mm	Stroke tolerance for stroke over 500 mm
32	d11	d11	±0,4	±2	±0,5	+0,3/+2,0	+0,3/+3,0
40	d11	d11	±0,7	±2	±0,5	+0,3/+2,0	+0,3/+3,0
50	d11	d11	±0,7	±2	±0,6	+0,3/+2,0	+0,3/+3,0
63	d11	d11	±0,8	±2	±0,7	+0,3/+2,0	+0,3/+3,0
80	d11	d11	±0,8	±3	±0,7	+0,3/+2,0	+0,3/+3,0
100	d11	d11	±1,0	±3	±0,7	+0,3/+2,0	+0,3/+3,0
125	d11	d11	±1,0	±3	±1,1	+0,3/+2,0	+0,3/+3,0

## Design Variants for P1D-C

### Alternative piston rod materials

All P1D cylinders in all bores, Ø32-125 mm, can be ordered with the following piston rod materials:

- Steel, chromed-plated
- Stainless steel, roller polished (standard)
- Acid-proof steel, roller polished
- Stainless steel, chromed-plated



### Through piston rod

All P1D cylinders in all bores, Ø32-125 mm, are available with a through rod. Cylinders with a through rod can take higher side forces thanks to the double support for the piston rod.



### Operation with dry piston rod

In many applications, primarily in the foodstuffs industry, the cylinders are cleaned frequently. This means that the film of grease on the piston rod is washed off, which puts special demands on the materials and the design of the piston rod seal system (scraper ring and piston rod seal). Parker Hannifin has developed a piston rod seal system specially designed for dry rod operation. This is available as options for this type of application, for all bores of P1D cylinders. The system has a specially designed L-shaped seal and the material is self-lubricating, high molecular weight plastics (HDPE) – the same system as in our P1S stainless steel cylinders.



### Alternative scraper materials

For use in applications where chemicals may affect the scraper in the front end cover, an option with a scraper in FPM rubber for better chemical resistance is available.

On request there is also a scraper in food approved polyurethane material.

