

P1D Pro Clean with sensor function

This version is a P1D Pro Clean design with 2 T slots on one face of the tube giving then the possibility to add sensors. The cylinder has a clean design and is intended for applications where sensors still need to be used.

The P1D with the sensor function can of course be combined with other equipment and functions.

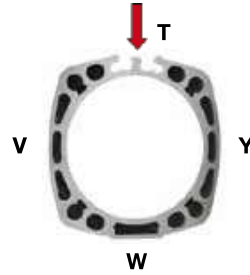


1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	1	D	-	C	0	4	0	W	S	T*	0	2	5	0

Cylinder version	
C Pro Clean	

P1D Pro Clean with sensor function is defined by the letter C in position 5, and in position 11 by the position of the 2 T slots.
 * T on the top, - Y on the right, W on the bottom, V on the left side and the 15-digit order code.
 Note: cylinder is showed piston rod in the front and air ports on the top to determine face position.

T slots position for ordering



With 2 T slots on the top - FPM scraper, stainless steel end covers screws

Cyl. bore mm	Stroke mm	Order code
32	25	P1D-C032WST0025
	40	P1D-C032WST0040
	50	P1D-C032WST0050
	80	P1D-C032WST0080
	100	P1D-C032WST0100
	125	P1D-C032WST0125
	160	P1D-C032WST0160
	200	P1D-C032WST0200
	250	P1D-C032WST0250
	320	P1D-C032WST0320
400	P1D-C032WST0400	
500	P1D-C032WST0500	

Cyl. bore mm	Stroke mm	Order code
63	25	P1D-C063WST0025
	40	P1D-C063WST0040
	50	P1D-C063WST0050
	80	P1D-C063WST0080
	100	P1D-C063WST0100
	125	P1D-C063WST0125
	160	P1D-C063WST0160
	200	P1D-C063WST0200
	250	P1D-C063WST0250
	320	P1D-C063WST0320
400	P1D-C063WST0400	
500	P1D-C063WST0500	

Cyl. bore mm	Stroke mm	Order code
125	25	P1D-C125WST0025
	40	P1D-C125WST0040
	50	P1D-C125WST0050
	80	P1D-C125WST0080
	100	P1D-C125WST0100
	125	P1D-C125WST0125
	160	P1D-C125WST0160
	200	P1D-C125WST0200
	250	P1D-C125WST0250
	320	P1D-C125WST0320
400	P1D-C125WST0400	
500	P1D-C125WST0500	

40	25	P1D-C040WST0025
	40	P1D-C040WST0040
	50	P1D-C040WST0050
	80	P1D-C040WST0080
	100	P1D-C040WST0100
	125	P1D-C040WST0125
	160	P1D-C040WST0160
	200	P1D-C040WST0200
	250	P1D-C040WST0250
	320	P1D-C040WST0320
400	P1D-C040WST0400	
500	P1D-C040WST0500	

80	25	P1D-C080WST0025
	40	P1D-C080WST0040
	50	P1D-C080WST0050
	80	P1D-C080WST0080
	100	P1D-C080WST0100
	125	P1D-C080WST0125
	160	P1D-C080WST0160
	200	P1D-C080WST0200
	250	P1D-C080WST0250
	320	P1D-C080WST0320
400	P1D-C080WST0400	
500	P1D-C080WST0500	

The cylinders are supplied complete with one stainless steel piston rod nut as standard.

Sealing plugs for end cover screws

See page 35.

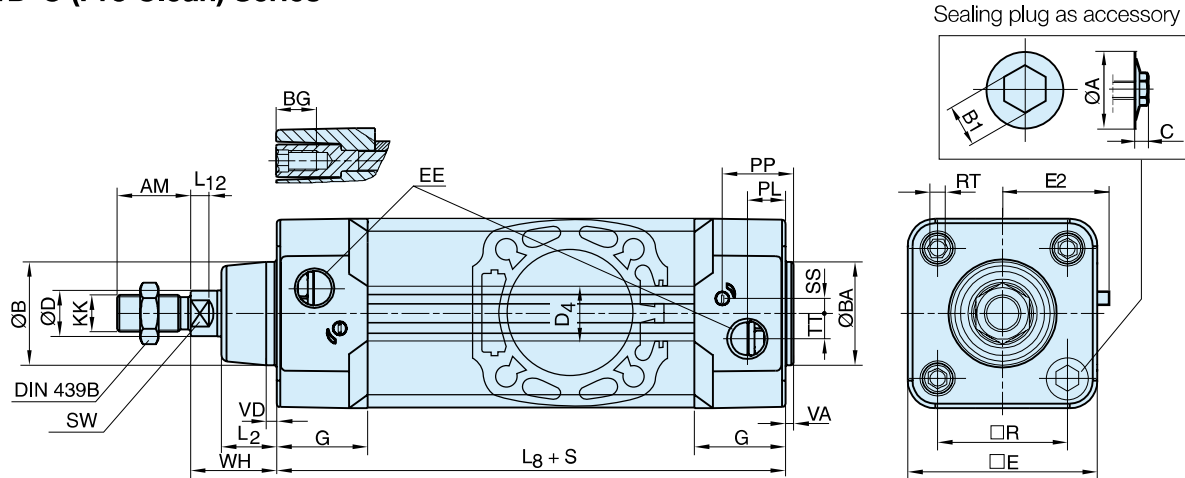
50	25	P1D-C050WST0025
	40	P1D-C050WST0040
	50	P1D-C050WST0050
	80	P1D-C050WST0080
	100	P1D-C050WST0100
	125	P1D-C050WST0125
	160	P1D-C050WST0160
	200	P1D-C050WST0200
	250	P1D-C050WST0250
	320	P1D-C050WST0320
400	P1D-C050WST0400	
500	P1D-C050WST0500	

100	25	P1D-C100WST0025
	40	P1D-C100WST0040
	50	P1D-C100WST0050
	80	P1D-C100WST0080
	100	P1D-C100WST0100
	125	P1D-C100WST0125
	160	P1D-C100WST0160
	200	P1D-C100WST0200
	250	P1D-C100WST0250
	320	P1D-C100WST0320
400	P1D-C100WST0400	
500	P1D-C100WST0500	

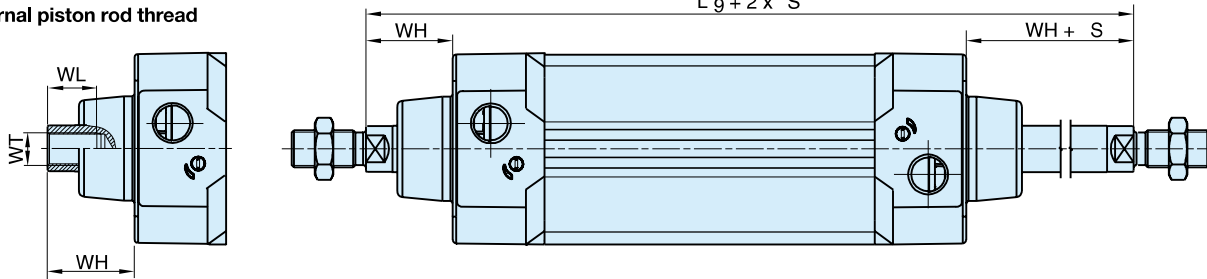
Sensors

For sensors see page 77.

P1D-C (Pro Clean) Series



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 mm	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 mm	SS mm	SW mm	TT mm	VA mm	VD mm	WH mm	WL mm	WT mm
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 ₈ mm	L ₉ 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 all P1D Series

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 applications, 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.

