

## P1D-X High and Low Temperature Cylinders

For extreme conditions these cylinders for high and low temperatures have materials and sealing systems specially designed for their particular temperature ranges. End covers and pistons are made entirely from metal, to give optimum function at **high** or **low** temperature in combination with seals made from specially tested materials and special grease.



- Conforms to ISO 15552.
- Bore 32-125 mm.
- Double acting.
- Stainless steel piston rod.
- Robust and corrosion resistant.
- Adjustable air cushioning.
- Retained stainless steel cushioning screws.
- Wide range of mountings and drop-in sensors

### Operating information

Working pressure:	Max 10 bar
Working temperature:	
High temp. version	<b>-10°C to +150°C</b>
Low temp. version	<b>-40°C to +80°C</b>

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

### P1D-X - Double acting - High temperature

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

Stroke mm	Order code
25	<b>P1D-X032MF-0025</b>
40	<b>P1D-X032MF-0040</b>
50	<b>P1D-X032MF-0050</b>
80	<b>P1D-X032MF-0080</b>
100	<b>P1D-X032MF-0100</b>
125	<b>P1D-X032MF-0125</b>
160	<b>P1D-X032MF-0160</b>
200	<b>P1D-X032MF-0200</b>
250	<b>P1D-X032MF-0250</b>
320	<b>P1D-X032MF-0320</b>
400	<b>P1D-X032MF-0400</b>
500	<b>P1D-X032MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X040MF-0025</b>
40	<b>P1D-X040MF-0040</b>
50	<b>P1D-X040MF-0050</b>
80	<b>P1D-X040MF-0080</b>
100	<b>P1D-X040MF-0100</b>
125	<b>P1D-X040MF-0125</b>
160	<b>P1D-X040MF-0160</b>
200	<b>P1D-X040MF-0200</b>
250	<b>P1D-X040MF-0250</b>
320	<b>P1D-X040MF-0320</b>
400	<b>P1D-X040MF-0400</b>
500	<b>P1D-X040MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X050MF-0025</b>
40	<b>P1D-X050MF-0040</b>
50	<b>P1D-X050MF-0050</b>
80	<b>P1D-X050MF-0080</b>
100	<b>P1D-X050MF-0100</b>
125	<b>P1D-X050MF-0125</b>
160	<b>P1D-X050MF-0160</b>
200	<b>P1D-X050MF-0200</b>
250	<b>P1D-X050MF-0250</b>
320	<b>P1D-X050MF-0320</b>
400	<b>P1D-X050MF-0400</b>
500	<b>P1D-X050MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X063MF-0025</b>
40	<b>P1D-X063MF-0040</b>
50	<b>P1D-X063MF-0050</b>
80	<b>P1D-X063MF-0080</b>
100	<b>P1D-X063MF-0100</b>
125	<b>P1D-X063MF-0125</b>
160	<b>P1D-X063MF-0160</b>
200	<b>P1D-X063MF-0200</b>
250	<b>P1D-X063MF-0250</b>
320	<b>P1D-X063MF-0320</b>
400	<b>P1D-X063MF-0400</b>
500	<b>P1D-X063MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X080MF-0025</b>
40	<b>P1D-X080MF-0040</b>
50	<b>P1D-X080MF-0050</b>
80	<b>P1D-X080MF-0080</b>
100	<b>P1D-X080MF-0100</b>
125	<b>P1D-X080MF-0125</b>
160	<b>P1D-X080MF-0160</b>
200	<b>P1D-X080MF-0200</b>
250	<b>P1D-X080MF-0250</b>
320	<b>P1D-X080MF-0320</b>
400	<b>P1D-X080MF-0400</b>
500	<b>P1D-X080MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X100MF-0025</b>
40	<b>P1D-X100MF-0040</b>
50	<b>P1D-X100MF-0050</b>
80	<b>P1D-X100MF-0080</b>
100	<b>P1D-X100MF-0100</b>
125	<b>P1D-X100MF-0125</b>
160	<b>P1D-X100MF-0160</b>
200	<b>P1D-X100MF-0200</b>
250	<b>P1D-X100MF-0250</b>
320	<b>P1D-X100MF-0320</b>
400	<b>P1D-X100MF-0400</b>
500	<b>P1D-X100MF-0500</b>

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

Stroke mm	Order code
25	<b>P1D-X125MF-0025</b>
40	<b>P1D-X125MF-0040</b>
50	<b>P1D-X125MF-0050</b>
80	<b>P1D-X125MF-0080</b>
100	<b>P1D-X125MF-0100</b>
125	<b>P1D-X125MF-0125</b>
160	<b>P1D-X125MF-0160</b>
200	<b>P1D-X125MF-0200</b>
250	<b>P1D-X125MF-0250</b>
320	<b>P1D-X125MF-0320</b>
400	<b>P1D-X125MF-0400</b>
500	<b>P1D-X125MF-0500</b>

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

#### P1D-X High Temperature

Certain restrictions apply when choosing sensors due to the temperature range.

High temperature cylinders cannot be fitted with sensors. (the magnetic field strength in high temperatures is too low to ensure correct reliable sensor function).

## P1D-X - Double acting - Low temperature

### Ø32mm - (G<sup>1/8</sup>)

Stroke mm	Order code
25	P1D-X032ML-0025
40	P1D-X032ML-0040
50	P1D-X032ML-0050
80	P1D-X032ML-0080
100	P1D-X032ML-0100
125	P1D-X032ML-0125
160	P1D-X032ML-0160
200	P1D-X032ML-0200
250	P1D-X032ML-0250
320	P1D-X032ML-0320
400	P1D-X032ML-0400
500	P1D-X032ML-0500

### Ø40mm - (G<sup>1/4</sup>)

Stroke mm	Order code
25	P1D-X040ML-0025
40	P1D-X040ML-0040
50	P1D-X040ML-0050
80	P1D-X040ML-0080
100	P1D-X040ML-0100
125	P1D-X040ML-0125
160	P1D-X040ML-0160
200	P1D-X040ML-0200
250	P1D-X040ML-0250
320	P1D-X040ML-0320
400	P1D-X040ML-0400
500	P1D-X040ML-0500

### Ø50mm - (G<sup>1/4</sup>)

Stroke mm	Order code
25	P1D-X050ML-0025
40	P1D-X050ML-0040
50	P1D-X050ML-0050
80	P1D-X050ML-0080
100	P1D-X050ML-0100
125	P1D-X050ML-0125
160	P1D-X050ML-0160
200	P1D-X050ML-0200
250	P1D-X050ML-0250
320	P1D-X050ML-0320
400	P1D-X050ML-0400
500	P1D-X050ML-0500

### Ø63mm - (G<sup>3/8</sup>)

Stroke mm	Order code
25	P1D-X063ML-0025
40	P1D-X063ML-0040
50	P1D-X063ML-0050
80	P1D-X063ML-0080
100	P1D-X063ML-0100
125	P1D-X063ML-0125
160	P1D-X063ML-0160
200	P1D-X063ML-0200
250	P1D-X063ML-0250
320	P1D-X063ML-0320
400	P1D-X063ML-0400
500	P1D-X063ML-0500

### Ø80mm - (G<sup>3/4</sup>)

Stroke mm	Order code
25	P1D-X080ML-0025
40	P1D-X080ML-0040
50	P1D-X080ML-0050
80	P1D-X080ML-0080
100	P1D-X080ML-0100
125	P1D-X080ML-0125
160	P1D-X080ML-0160
200	P1D-X080ML-0200
250	P1D-X080ML-0250
320	P1D-X080ML-0320
400	P1D-X080ML-0400
500	P1D-X080ML-0500

### Ø100mm - (G<sup>1/2</sup>)

Stroke mm	Order code
25	P1D-X100ML-0025
40	P1D-X100ML-0040
50	P1D-X100ML-0050
80	P1D-X100ML-0080
100	P1D-X100ML-0100
125	P1D-X100ML-0125
160	P1D-X100ML-0160
200	P1D-X100ML-0200
250	P1D-X100ML-0250
320	P1D-X100ML-0320
400	P1D-X100ML-0400
500	P1D-X100ML-0500

### Ø125mm - (G<sup>1/2</sup>)

Stroke mm	Order code
25	P1D-X125ML-0025
40	P1D-X125ML-0040
50	P1D-X125ML-0050
80	P1D-X125ML-0080
100	P1D-X125ML-0100
125	P1D-X125ML-0125
160	P1D-X125ML-0160
200	P1D-X125ML-0200
250	P1D-X125ML-0250
320	P1D-X125ML-0320
400	P1D-X125ML-0400
500	P1D-X125ML-0500

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

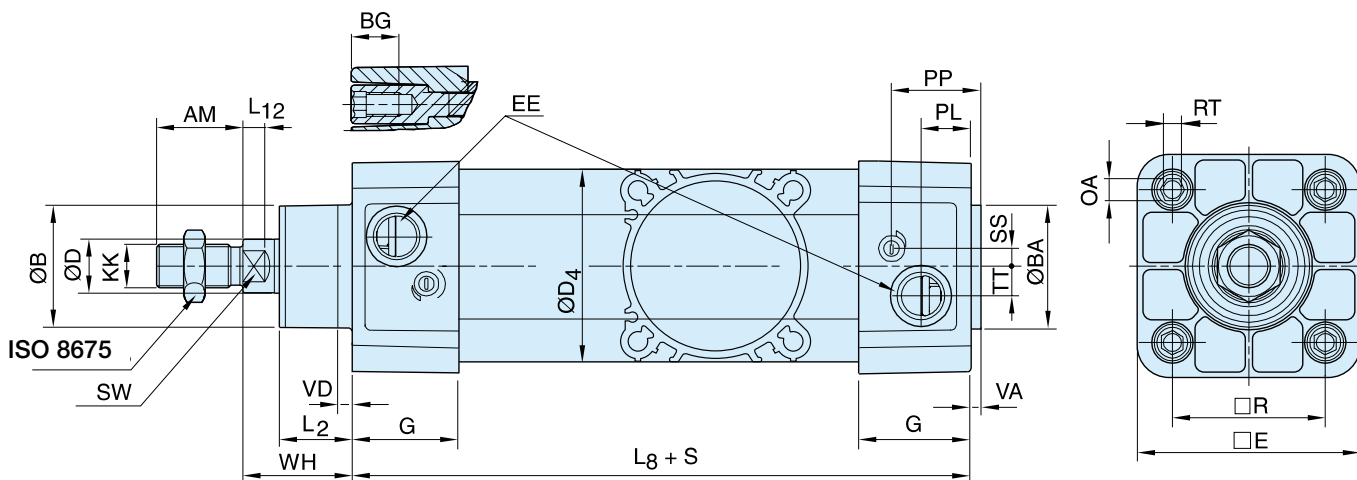
#### Sensors



For sensors see page 78.

The standard low temperature P1D-X version has a magnetic ring in the piston for proximity sensing but please note that these sensors are normally specified for full performance down to -25°C only.

P1D-X Series Dimensions



Dimensions

Cylinder bore mm	AM mm	B mm	BA mm	BG mm	D mm	D4 mm	E mm	EE mm	G mm	KK	L2 mm	L8 mm	L12 mm
32	22	30	30	16	12	45,0	48,0	G1/8	28,5	M10x1,25	16,8	94	6,0
40	24	35	35	16	16	52,0	53,5	G1/4	33,0	M12x1,25	19,0	105	6,5
50	32	40	40	16	20	60,7	65,2	G1/4	33,5	M16x1,5	24,0	106	8,0
63	32	45	45	16	20	71,5	75,5	G3/8	39,5	M16x1,5	24,3	121	8,0
80	40	45	45	17	25	86,7	95,0	G3/8	39,5	M20x1,5	30,0	128	10,0
100	40	55	55	17	25	106,7	114,0	G1/2	44,5	M20x1,5	34,0	138	14,0
125	54	60	60	20	32	134,0	139,0	G1/2	51,0	M27x2	45,0	160	18,0

Cylinder bore mm	OA mm	PL mm	PP mm	R mm	RT	SS mm	SW mm	TT mm	VA mm	VD mm	WH mm
32	6,0	14,0	24,2	32,5	M6	5,5	10	4,2	3,5	4,5	26
40	6,0	16,0	27,5	38,0	M6	8,0	13	5,5	3,5	4,5	30
50	8,0	14,0	29,3	46,5	M8	9,0	17	7,5	3,5	4,5	37
63	8,0	16,6	30,8	56,5	M8	6,5	17	10,0	3,5	4,5	37
80	6,0	16,8	33,5	72,0	M10	0	22	11,5	3,5	4,5	46
100	6,0	20,5	37,5	89,0	M10	0	22	14,5	3,5	4,5	51
125	8,0	23,3	45,8	110,0	M12	0	27	15,0	5,5	6,5	65

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

For mountings refer to page 42.