



# Cylinder Control Accessories

Catalogue no. PDE2566TCUK-ev  
Edition : January 2007



- Increases piston speeds, super sensitive diaphragm
- Extremely low operating differential
- Virtually stiction free
- May be used as differential shuttle valve
- High temperature option



### Operating information

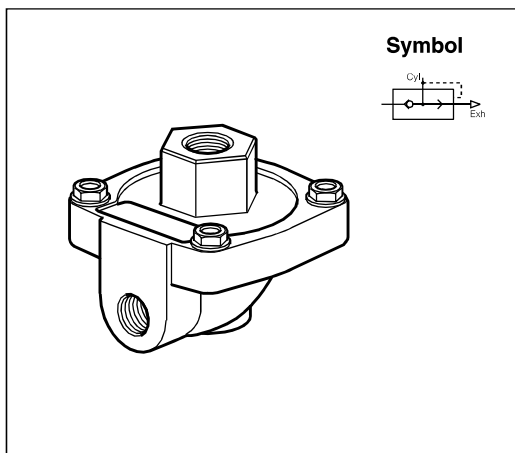
Operating pressure: 0,2 to 10 bar  
 Operating temperature (Standard): -10°C to +80°C  
 Operating temperature (High): -10°C to +180°C  
 Body material: Aluminium  
 Diaphragm material (Standard): Nitrile  
 Diaphragm material (High): Viton

### Standard version

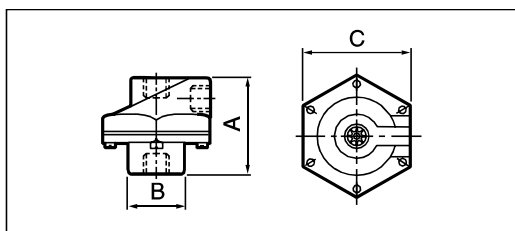
Port Size	Cv Rating	Weight kg	Order Code
G1/4	2,3	0,20	<b>P4Q-BA12</b>
G3/8	3,6	0,18	<b>P4Q-BA13</b>
G1/2	6,6	0,50	<b>P4Q-CA14</b>
G3/4	7,3	0,44	<b>P4Q-CA16</b>

### High temperature version

Port Size	Cv Rating	Weight kg	Order Code
G1/4	2,3	0,20	<b>P4Q-BV12</b>
G3/8	3,6	0,18	<b>P4Q-BV13</b>
G1/2	6,6	0,50	<b>P4Q-CV14</b>
G3/4	7,3	0,44	<b>P4Q-CV16</b>



### Quick Exhaust Valves - Dimensions



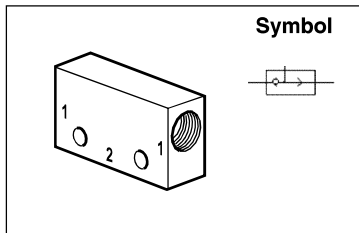
Order code	Port Size	A	B	C
<b>P4Q-B*12</b>	G1/4	52	25	62
<b>P4Q-B*13</b>	G3/8	52	25	62
<b>P4Q-B*14</b>	G1/2	73	38	86
<b>P4Q-B*16</b>	G3/4	73	38	86

- Allows two separate signals to be applied to the air pilot
- 0,6 bar differential, Viton seals as standard



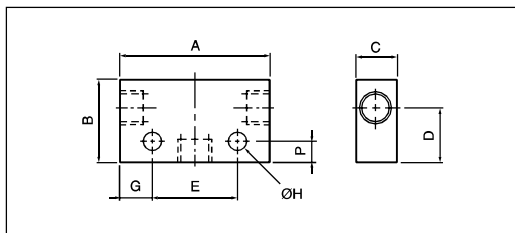
### Operating information

Operating pressure: 1,3 to 17 bar  
 Flow: See table below  
 Operating temperature: -10°C to +60°C  
 Body material M5 and G1/8: Aluminium  
 Body material G1/4: Zinc  
 Shuttle ball material: Plastic



Port Size	Qmax input at 6 bar, l/min	Weight kg	Order Code
M5	36	0,040	<b>M33005</b>
G1/8	509	0,100	<b>B43005B</b>
G1/4	1076	0,172	<b>B53005A</b>

### Shuttle Valves - Dimensions



Order code	Port Size	A	B	C	D	E	F	G	H
<b>M33005</b>	M5	27,5	24	15	16,0	15	6	6,3	3,2
<b>M43005B</b>	G1/8	44,0	24	15	16,0	25	6	9,5	4,5
<b>B53005A</b>	G1/4	52,0	30	22	20,5	35	10	8,5	5,5

- Detects stoppage of a cylinder due to a pressure drop in the exhaust chamber
- For direct mounting to cylinders
- Choice of pneumatic, electrical or electronic output
- Wide range of sizes



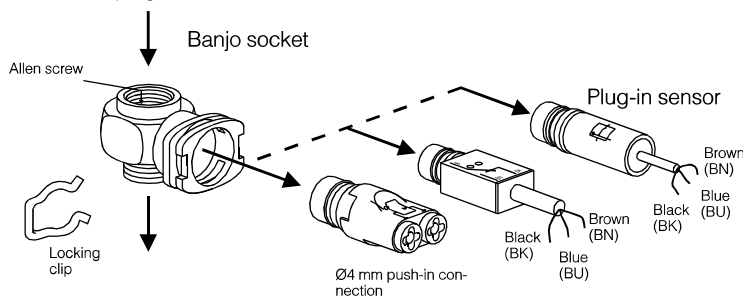
**Operating information**

Operating pressure:	0 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Operating temperature:	-15°C to +60°C
Storage temperature:	-40°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	10 million
Maximum operating frequency:	10 Hz
Output characteristics:	Pneumatic: Flow at 6 bar 90l/mn Electrical: C/contact 2,5A/250V AC, 5W 48V DC Electronic: PNP N/C or N/O 10 to 30V 75 mA DC
Maximum connecting torque:	M5 = 1Nm; 1/8 = 8Nm; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material:	Thermo plastic
Connection thread:	Brass

**Dimensions and piloting pressures next page**

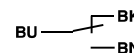
**Assembly**

All back pressure sensors are a combination of two distinct parts: a banjo socket + a plug-in sensor.



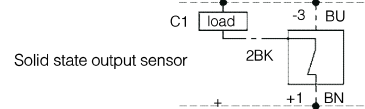
**Connection**

Output signal connection

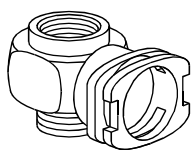


Pneumatic output sensor: Ø4 mm push-in

Electric output sensor

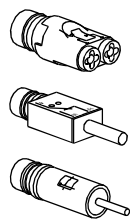


**Banjo Sockets**



Thread Size for Cylinder Port	Female Thread	Tool Required	Weight Kg	Order code
M5	M5	8mm flat spanner	0,04	<b>PWS-B155</b>
G1/8	G1/8	5mm Allen key	0,04	<b>PWS-B188</b>
G1/4	G1/4	8mm Allen key	0,05	<b>PWS-B199</b>
G3/8	G3/8	10mm Allen key	0,07	<b>PWS-B133</b>
G1/2	G1/2	12mm Allen key	0,11	<b>PWS-B122</b>

**Plug-in Sensors**



Sensing function	Output function	Output Connection	Output characteristics	Weight kg	Order code
Exhaust back pressure decay	Pneumatic	Push-in Ø4mm	NO valve flow rate at 6 bar 90 l/mn	0,09	<b>PWS-P111</b>
	Electrical ~Ve = 3A	3 wires 0,5mm <sup>2</sup> length 2m	CO contact 12 to 230V ~ / 10VA* 12 to 48 VDC/5W*	0,08	<b>PWS-M1012</b>
	Solid state	3 wires 0,1mm <sup>2</sup> length 2m	PNP type NC	0,07	<b>PWS-E101</b>
			10/30VDC** 75 mA, NO	0,07	<b>PWS-E111</b>

\* Suitable for low currents : 250 V ~ / 4 mA ; 24 VDC / 10 mA \*\* Including ripple

- Detects stoppage of a cylinder due to a pressure drop in the exhaust chamber
- Single unit design
- For direct mounting to cylinders
- Pneumatic output
- Wide range of sizes

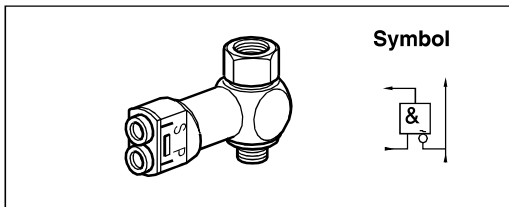


**Operating information**

Operating pressure:	0 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	10 million
Maximum operating frequency:	1 Hz
Output characteristics:	Flow @ 6 bar 90l/m
Maximum connecting torque:	M5 = 1Nm; 1/8 = 8Nm; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material:	Zinc alloy / Thermo plastic
Connection thread:	Brass

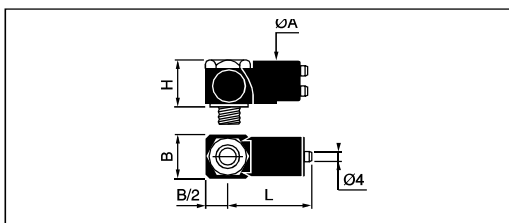
Plug-in & Monoblock back pressure sensors	Pilot	Depilot
	operating pressure	operating pressure
PWS-P111	6bar	6bar
PWS-M1012	4,4	0,4
PWS-E101 & E111	1,5	0,6
PWS-C	1,5	0,6
	1,6 ±0,2	0,3

**Back Pressure Sensor for Cylinder Mounting**



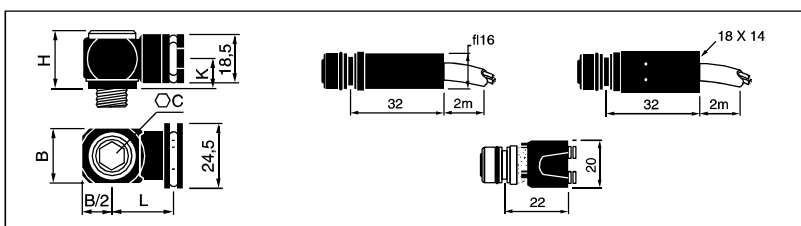
Thread Cylinder Port	Thread Supply Port	Bore Ømm	Weight kg	Order code
M5	M5	2	0,10	<b>PWS-C5145</b>
G1/8	G1/8	5	0,11	<b>PWS-C5148</b>
G1/4	G1/4	7	0,10	<b>PWS-C5149</b>
G3/8	G3/8	10	0,17	<b>PWS-C5143</b>
G1/2	G1/2	14	0,15	<b>PWS-C5142</b>

**Back Pressure Sensors - Mono block - Dimensions**



Order code	ØA	B	H	L
<b>PWS-CS145</b>	19	11,0	16,0	42
<b>PWS-CS148</b>	22	16,5	29,0	40
<b>PWS-CS149</b>	22	23,5	26,0	43
<b>PWS-CS143</b>	22	23,5	36,5	43
<b>PWS-CS142</b>	22	32,0	29,5	48

**Back Pressure Sensors - Modular - Dimensions**



Order code	C	B	H	K	L
<b>PWS-B155</b>	8	11	16,5	10	17
<b>PWS-B188</b>	5	16	20,0	10	20
<b>PWS-B199</b>	8	21	20,0	10	22
<b>PWS-B133</b>	10	28	22,0	12	25
<b>PWS-B122</b>	12	33	26,0	14	26

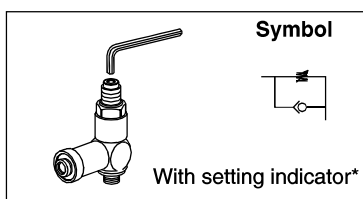
- Adjusts the actuating force developed by a cylinder
- For direct mounting to power valve
- Threaded or push-in ports
- Adjustment by allen key or knurled knob
- Wide range of sizes



**Operating information**

Operating pressure:	1 to 8 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table below
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
Maximum connecting torque:	1/8 = 8Nm ; 1/4 = 12Nm; 3/8 = 30Nm
Body material:	Zinc alloy
Connection thread:	Brass
Adjustment mode:	Allen key

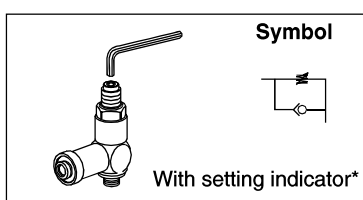
**With Push-in Connection**



Thread size for cylinder port	Push-in Connection, Ømm	Qmax input at 6 bar, l/min*	Weight kg	Order code
G1/8	6	570	0,30	<b>PWP-B1268</b>
G1/4	6	530	0,30	<b>PWP-B1269</b>
G1/4	8	870	0,30	<b>PWP-B1289</b>
G1/4	10	1400	0,54	<b>PWP-B1299</b>
G3/8	10	1530	0,55	<b>PWP-B1293</b>

\* Adjustment is carried out using a 6mm Allen key or a knurled knob.

**With Threaded Connection**

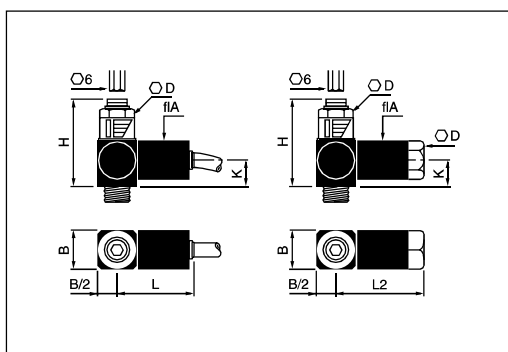


Thread size for cylinder port	Push-in Connection, Ømm	Qmax input at 6 bar, l/min*	Weight kg	Order code
G1/8	G1/8	570	0,34	<b>PWP-B1888</b>
G1/4	G1/4	870	0,34	<b>PWP-B1899</b>
G3/8	G3/8	3200	0,62	<b>PWP-B1833</b>

\* Adjustment is carried out using a 6mm Allen key or a knurled knob.

**Clip-in knurled adjustment knob for optimisers**

Weight kg	Order code
0,03	<b>PWP-Z13</b>



**Dimensions**

Order code	ØA	B	D	H	K	L	L2
<b>PWP-B1268</b>	22	21	19	58,0	13,5	39	
<b>PWP-B1269</b>	22	21	19	58,0	13,5	39	
<b>PWP-B1289</b>	22	21	19	58,0	13,5	39	
<b>PWP-B1299</b>	27	28	19	65,5	16,5	50	
<b>PWP-B1293</b>	27	28	27	65,5	16,5	50	
<b>PWP-B1888</b>	22	21	19	58,0	13,5		43
<b>PWP-B1899</b>	22	21	19	58,0	13,5		43
<b>PWP-B1833</b>	27	28	27	65,5	16,5		55

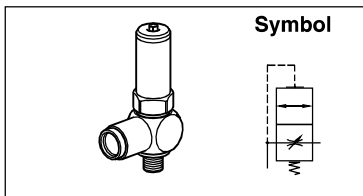
- Enables a gradual increase in pressure
- For direct mounting to power valve
- Instant push-in connections
- Adjustment by allen key



**Operating information**

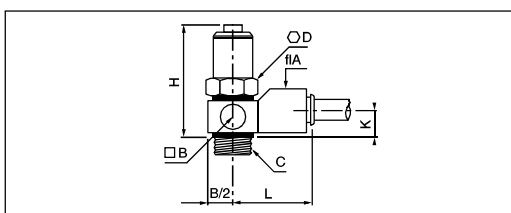
Operating pressure:	3 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table below
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	1/4 : 10 million; 3/8 : 5 million
Maximum operating frequency:	1 Hz
Maximum connecting torque:	1/4 = 12Nm; 3/8 = 30Nm
Body material:	Thermo plastic
Connection thread:	Brass
Adjustment mode:	Allen key

**With Push-in Connection**



Thread	Push-in Connection, Ømm	Flow rate at 6 bar, l/min	Weight kg	Order code
G1/4	8	1500	0,07	<b>PWD-P2489</b>
G1/4	10	2000	0,12	<b>PWD-P2499</b>
G3/8	10	2000	0,13	<b>PWD-P2493</b>

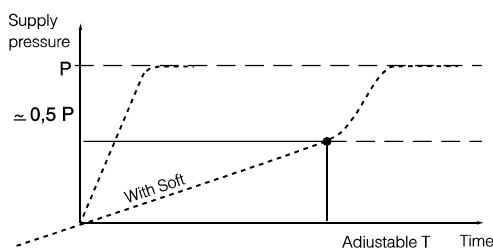
**Dimensions**



Order code	ØA	B	ØC	D	H maxi	K	L
<b>PWD-P2489</b>	15,0	20	G1/4	17	61	8,5	27,5
<b>PWD-P2499</b>	19,5	25	G1/4	22	62	11,8	41,0
<b>PWD-P2493</b>	19,5	25	G3/8	22	62	11,8	41,0

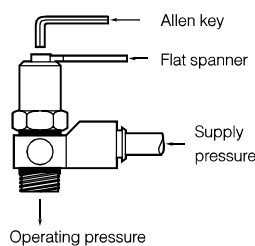
**Operation**

A Soft starter provides a progressive increase in pressure, in a section of a pneumatic system. When pressure reaches half the supply pressure, full pressure is applied automatically.



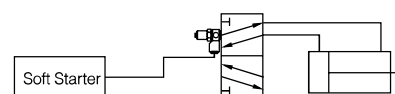
**Adjustment**

Allen key adjustment of flow rate for slow pressure increase.



**Mounting**

These compact devices with push-in tube connection are fitted to the N°1 port of the power valve.



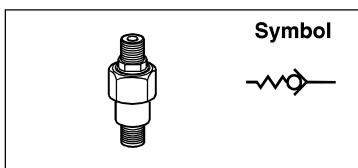
- Rugged brass body design
- Standard or high temperature options
- Low 0,1 bar operating pressure
- Full flow in one direction only
- Compact design



**Operating information**

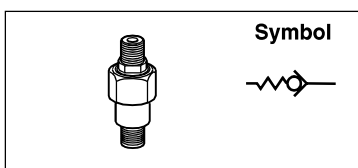
Operating pressure: 0,1 to 17 bar  
 Flow: Qmax at 6 bar, l/min\* 1/8 = 1200L/m; 1/4 - 1350 L/m  
 Operating temperature: Standard: -26°C to +85°C  
 High: -26°C to +230°C  
 Body material: Brass  
 Seal material: Standard: Nitrile  
 High: Viton

**Standard version**



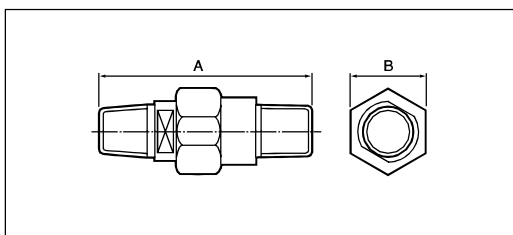
Thread size	Weight kg	Order code
G1/8	0,68	<b>3047X</b>
G1/4	0,72	<b>3047B</b>

**High temperature version**



Thread size	Weight kg	Order code
G1/8	0,68	<b>3047XV</b>
G1/4	0,72	<b>3047BV</b>

**Dimensions**



Order code	Port Size	A	B
<b>3047X/XV</b>	G1/8	51	21
<b>3047B/BV</b>	G1/4	49	21



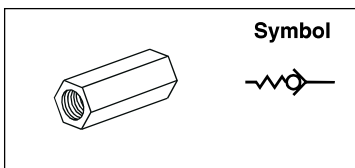
- Aluminium bodies
- Long life
- Low opening pressure
- Full flow in one direction only



### Operating information

Operating pressure:	0,1 to 10 bar
Operating temperature:	-20°C to +70°C
Body material:	Anodised aluminium
Seal material:	Nitrile

### VB - Aluminium

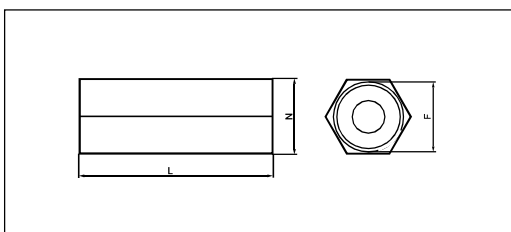


Symbol



Port size	Weight kg	Order code
G1/8	0,01	<b>VB12-Q-NQ-5</b>
G1/4	0,01	<b>VB22-Q-NQ-5</b>
G1/2	0,05	<b>VB42-Q-NQ-5</b>

### Dimensions



Order code	F	L	N
<b>VB12-Q-NQ-5</b>	G1/8	31	14
<b>VQB22-Q-NQ-5</b>	G1/4	40	17
<b>VB42-Q-NQ-5</b>	G1/2	59	27

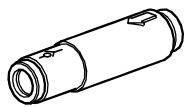
- Low 0,1 bar operating pressure
- Full flow in one direction only
- Compact design
- Instant push-in connections



### Operating information

Operating pressure:	0,2 to 10 bar
Flow:	See below
Operating temperature:	-15°C to +70°C
Storage temperature	-20°C to +70°C
Body material:	Thermo plastic

### Line Mounted Non-return Valves



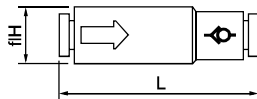
Sold in lots of 10

Symbol



Push-in Connection Ømm	Flow Rate at 6 bar, l/min	Weight kg	Order code
4	200	0,01	<b>PWA-L1444</b>
6	660	0,02	<b>PWA-L1466</b>
8	1600	0,02	<b>PWA-L1488</b>

### Dimensions



Order code	ØH	L
<b>PWA-L1444</b>	11,0	43,0
<b>PWA-L1466</b>	13,0	49,5
<b>PWA-L1488</b>	13,5	55,0

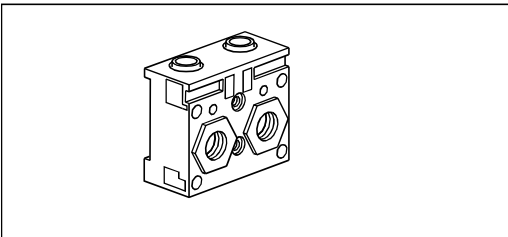
- For the remote mounting of cylinder control accessories
- Suitable for use with - Flow regulators
  - Blockers
  - Unloaders
  - Combined devices
  - Optimisers
  - Soft start



**Operating information**

Operating pressure: 0,2 to 10 bar  
 Flow: See below  
 Operating temperature: -15°C to +70°C  
 Storage temperature: -20°C to +70°C  
 Body material: Thermo plastic

**Terminal Block Subbases for Cylinder Controls\***



For Mounting Other Cylinder Controls	Push-in Connection Ømm	Bore Ømm	Weight kg	Order code
G1/8	6	4	0,05	<b>PZC-B2268</b>
G1/4	8	6	0,05	<b>PZC-B2289</b>

\* For remote mounting of all cylinder controls, when mounting on power valves or cylinders is impractical. The subbase is designed for mounting two components side by side.

**Dimensions**

