



# Cylinder Control Accessories

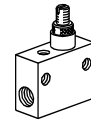
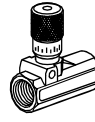
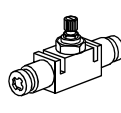
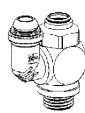
Catalogue no. PDE2566TCUK-ev  
Edition : January 2007



**Cylinder control accessories**

**Speed/flow controllers**

**Blockers**



**PTFL8**

**PTF8**

**PTF8E6**

**PWR-L**

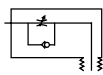
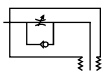
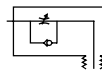
**33**

**3250**

**VQB**

**PWB**

**Symbol**



**Body material:**

Metal



Thermoplastic



**Mounting:**

On cylinder



In line



Panel



On valve

**Adjustment:**

By tool



By hand



Micrometer adjustment



Sizes

1

3/4

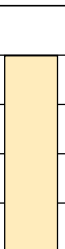
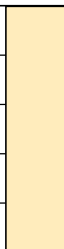
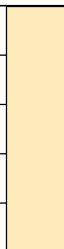
1/2

3/8

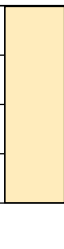
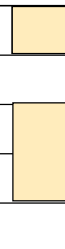
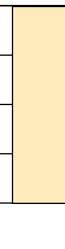
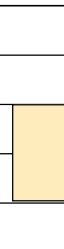
1/4

1/8

M5



12 mm  
10 mm  
8 mm  
6 mm  
4 mm



Refer to page

6

7

8

9

10

11 - 12

13 - 14

15 - 16



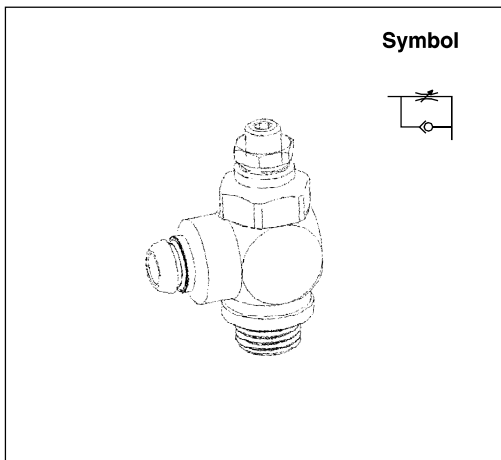
- For direct mounting on to cylinder
- Allen key adjustment
- Push-in connection
- Wide range of sizes



**Operating and additional information**

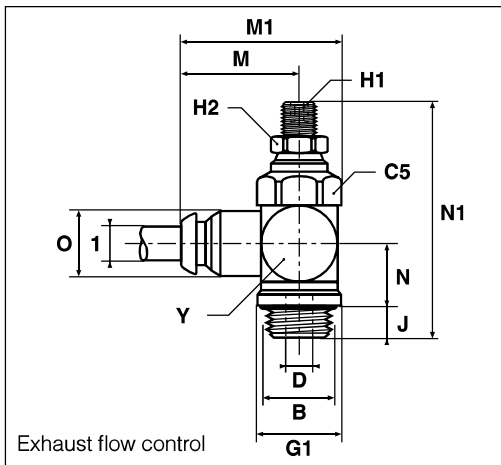
Operating pressure: 1 to 10 bar  
 Operating temperature: -25°C to +100°C  
 Sealing device: M5 Nylon washer  
 1/8 - 1/2 BSPP Nitrile E.D. seal  
 Terminations: 4mm - 12mm push-in connection  
 6mm - 12mm - compression connection  
 Maximum connecting torque: M5= 0,5Nm ; 1/8=9Nm ; 1/4=15Nm ; 3/8=22Nm ; 1/2=42Nm  
 Body material: Brass black epoxy coated  
 Lock nut: Brass

**PTFL4/8PB - Flow regulator with push-in connection**



Thread	Port thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
M5x0,8	4	19	33,4	0,015	<b>PTFL8PB4M5**</b>
G1/8	4	18	105	0,042	<b>PTFL4PB4-1/8</b>
M5x0,8	6	19	36	0,019	<b>PTFL8PB6M5**</b>
G1/8	6	18	160	0,044	<b>PTFL4PB6-1/8</b>
G1/4	6	12,5	360	0,074	<b>PTFL4PB6-1/4</b>
G3/8	6	17	440	0,147	<b>PTFL4PB6-3/8</b>
G1/8	8	18	160	0,064	<b>PTFL4PB8-1/8</b>
G1/4	8	12,5	355	0,079	<b>PTFL4PB8-1/4</b>
G3/8	8	17	720	0,152	<b>PTFL4PB8-3/8</b>
G1/4	10	12,5	380	0,076	<b>PTFL4PB10-1/4</b>
G3/8	10	17	835	0,138	<b>PTFL4PB10-3/8</b>
G1/2	10	21	974	0,224	<b>PTFL4PB10-1/2</b>
G3/8	12	17	805	0,143	<b>PTFL4PB12-3/8</b>
G1/2	12	21	1284	0,225	<b>PTFL4PB12-1/2</b>

\* Screw closed  
 \*\* These fittings are supplied with Nylon seal



Order code	C5	D	G1	H1	H2	J	M	M1	N	N1	O	Y
<b>PTFL8PB4M5**</b>	8	1,65	10,0	1,5	8	4	19,5	24,5	6,3	28,5	10	10
<b>PTFL4PB4-1/8</b>	14	3,00	14,4	2,0	7	6	22,0	30,1	10,7	43,7	10	14
<b>PTFL8PB6M5**</b>	8	1,65	10,0	1,5	8	4	20,5	26,5	7,3	31,0	12	12
<b>PTFL4PB6-1/8</b>	14	3,20	14,4	2,0	7	6	23,5	31,6	10,7	43,7	12	14
<b>PTFL4PB6-1/4</b>	17	5,20	18,4	4,0	11	7	25,0	34,9	13,8	51,8	12	17
<b>PTFL4PB6-3/8</b>	22	5,50	21,6	4,0	11	7	28,0	40,7	17,3	63,7	12	22
<b>PTFL4PB8-1/8</b>	14	3,20	14,4	2,0	7	6	25,0	33,1	10,7	43,7	14	14
<b>PTFL4PB8-1/4</b>	17	5,20	18,4	4,0	11	7	28,5	38,3	13,8	51,8	14	17
<b>PTFL4PB8-3/8</b>	22	6,00	21,6	4,0	11	7	29,5	42,2	17,3	63,7	14	22
<b>PTFL4PB10-1/4</b>	17	5,20	18,4	4,0	11	7	31,5	41,3	13,8	51,8	17	17
<b>PTFL4PB10-3/8</b>	22	6,00	21,6	4,0	11	7	34,0	46,7	17,3	63,7	17	22
<b>PTFL4PB10-1/2</b>	27	8,00	26,5	4,0	14	9	36,5	52,1	20,1	76,1	17	27
<b>PTFL4PB12-3/8</b>	22	6,00	21,6	4,0	11	7	34,0	46,7	17,3	63,7	20	22
<b>PTFL4PB12-1/2</b>	27	8,50	26,5	4,0	14	9	36,5	52,1	20,1	76,1	20	27

Exhaust flow control

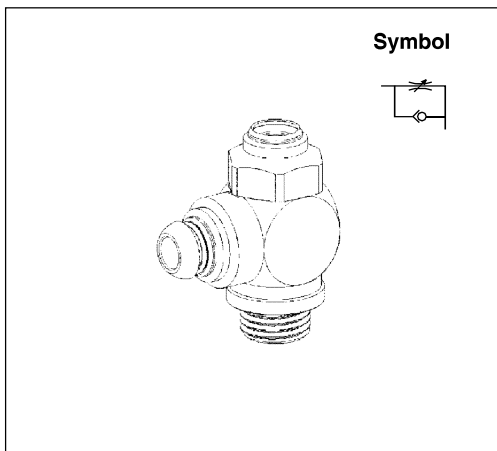
- For direct mounting on to cylinder
- Allen key adjustment
- Push-in connection
- Wide range of sizes



**Operating and additional information**

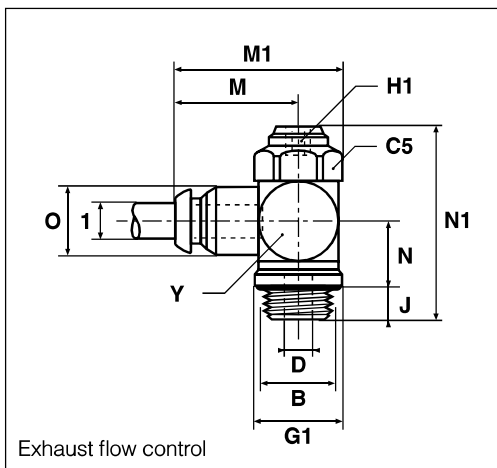
Operating pressure: 1 to 10 bar  
 Operating temperature: -25°C to +100°C  
 Sealing device: M5 Nylon washer  
 1/8 - 1/2 BSPP Nitrile E.D. seal  
 Terminations: 4mm - 12mm push-in connection  
 1/8 - 1/2 BSPP + M5 Female thread DIN 3852 long  
 Maximum connecting torque: M5= 0,5Nm ; 1/8=9Nm ; 1/4=15Nm ; 3/8=22Nm ; 1/2=42Nm  
 Body material: Brass blackepoxy coated  
 Lock nut: Brass

**PTF4/8PB - Flow regulator with push-in connection**



Thread	Port thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
M5x0,8	4	19	33,4	0,014	<b>PTF8PB4M5**</b>
G1/8	4	18	105	0,035	<b>PTF4PB4-1/8</b>
M5x0,8	6	19	36	0,019	<b>PTF8PB6M5**</b>
G1/8	6	18	160	0,037	<b>PTF4PB6-1/8</b>
G1/4	6	12,5	360	0,065	<b>PTF4PB6-1/4</b>
G1/4	6	17	440	0,142	<b>PTF4PB6-3/8</b>
G1/8	8	18	160	0,043	<b>PTF4PB8-1/8</b>
G1/4	8	12,5	355	0,070	<b>PTF4PB8-1/4</b>
G3/8	8	17	720	0,146	<b>PTF4PB8-3/8</b>
G1/4	10	12,5	380	0,067	<b>PTF4PB10-1/4</b>
G3/8	10	17	835	0,131	<b>PTF4PB10-3/8</b>
G1/2	10	21	974	0,231	<b>PTF4PB10-1/2</b>
G3/8	12	17	805	0,200	<b>PTF4PB12-3/8</b>
G1/2	12	21	1284	0,232	<b>PTF4PB12-1/2</b>

\* Screw closed  
 \*\* These fittings are supplied with Nylon seal



Order code	C5	D	G1	H1	J	M	M1	N	N1	O	Y
<b>PTF8PB4M5**</b>	8	1,65	10,0	1,5	4	19,5	24,5	6,3	22,0	10	10
<b>PTF4PB4-1/8</b>	14	3,00	14,4	2,0	6	22,0	30,1	10,7	34,5	10	14
<b>PTF8PB6M5**</b>	8	1,65	10,0	1,5	4	20,5	26,5	7,3	24,5	12	12
<b>PTF4PB6-1/8</b>	14	3,20	14,4	2,0	6	23,5	31,6	10,7	34,5	12	14
<b>PTF4PB6-1/4</b>	17	5,20	18,4	4,0	7	25,0	34,9	13,8	41,0	12	17
<b>PTF4PB6-3/8</b>	22	5,50	21,6	4,0	7	28,0	40,7	17,3	51,0	12	22
<b>PTF4PB8-1/8</b>	14	3,20	14,4	2,0	6	25,0	33,1	10,7	34,5	14	14
<b>PTF4PB8-1/4</b>	17	5,20	18,4	4,0	7	28,5	38,3	13,8	41,0	14	17
<b>PTF4PB8-3/8</b>	22	6,00	21,6	4,0	7	29,5	42,2	17,3	51,0	14	22
<b>PTF4PB10-1/4</b>	17	5,20	18,4	4,0	7	31,5	41,3	13,8	41,0	17	17
<b>PTF4PB10-3/8</b>	22	6,00	21,6	4,0	7	34,0	46,7	17,3	51,0	17	22
<b>PTF4PB10-1/2</b>	27	8,00	26,5	4,0	9	36,5	52,1	20,1	61,0	17	27
<b>PTF4PB12-3/8</b>	22	6,00	21,6	4,0	7	34,0	46,7	17,3	51,0	20	22
<b>PTF4PB12-1/2</b>	27	8,50	26,5	4,0	9	36,5	52,1	20,1	61,0	20	27

- For direct mounting on to cylinder
- Allen key adjustment
- Push-in connection
- Wide range of sizes



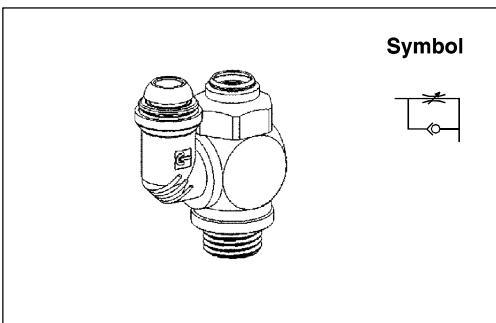
**Operating and additional information**

Operating pressure:	1 to 10 bar
Operating temperature:	-25°C to +70°C
Bolt material:	Brass black epoxy coated
Swivel elbow material:	High resistance polyamide
Bolt material:	Brass
Bolt threads:	M5 - 1/8 BSPP - 1/4 BSPP - 3/8 BSPP
Sealing device:	Nylon washer 1/8 - 3/8 BSPP Nitrile E.D. seal
Terminations:	4mm - 8mm push-in connection
Maximum connecting torque:	M5= 0,5Nm ; 1/8=9Nm ; 1/4=15Nm ; 3/8=22Nm ; 1/2=42Nm
Adjustment screw:	Brass

**Flow adjustment**

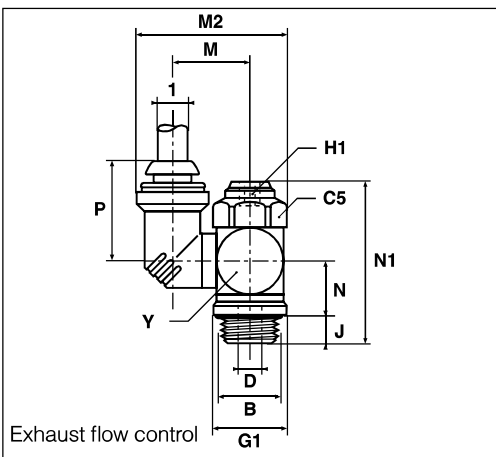
Flow control is adjusted with an Allen key.  
 The large number of turns from fully closed to fully open allows for precise flow control.

**PTF4/8E6PB - Flow regulator with push-in connection**



Thread	Port thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
M5x0,8	4	19	35	0,016	<b>PTF8E6PB4M5**</b>
G1/8	4	18	68	0,037	<b>PTF4E6PB4-1/8</b>
M5x0,8	6	18	37	0,020	<b>PTF8E6PB6M5**</b>
G1/8	6	18	175	0,038	<b>PTF4E6PB6-1/8</b>
G1/4	6	12,5	215	0,070	<b>PTF4E6PB6-1/4</b>
G3/8	6	17	250	0,132	<b>PTF4E6PB6-3/8</b>
G1/8	8	18	155	0,040	<b>PTF4E6PB8-1/8</b>
G1/4	8	12,5	343	0,073	<b>PTF4E6PB8-1/4</b>
G3/8	8	17	505	0,136	<b>PTF4E6PB8-3/8</b>

\* Screw closed  
 \*\* These fittings are supplied with Nylon seal



Order code	C5	D	G1	H1	J	M	M2	N	N1	P	Y
<b>PTF8E6PB4M5**</b>	8	1,65	10,0	1,5	4	11,7	18,4	6,2	22,5	20,5	10
<b>PTF4E6PB4-1/8</b>	14	3,00	14,4	2,0	6	14,3	30,0	10,7	34,5	20,5	14
<b>PTF8E6PB6M5**</b>	8	1,65	10,0	1,5	4	12,7	20,4	7,2	24,5	23,0	12
<b>PTF4E6PB6-1/8</b>	14	3,20	14,4	2,0	6	15,3	31,0	10,7	34,5	23,0	14
<b>PTF4E6PB6-1/4</b>	17	5,20	18,4	4,0	7	17,3	35,0	13,8	41,0	23,0	17
<b>PTF4E6PB6-3/8</b>	22	5,50	21,6	4,0	7	19,8	40,0	17,3	51,0	23,0	22
<b>PTF4E6PB8-1/8</b>	14	3,20	14,4	2,0	6	16,8	33,5	10,7	34,5	25,0	14
<b>PTF4E6PB8-1/4</b>	17	5,20	18,4	4,0	7	18,3	37,0	13,8	41,0	25,0	17
<b>PTF4E6PB8-3/8</b>	22	6,00	21,6	4,0	7	20,8	42,0	17,3	51,0	25,0	22

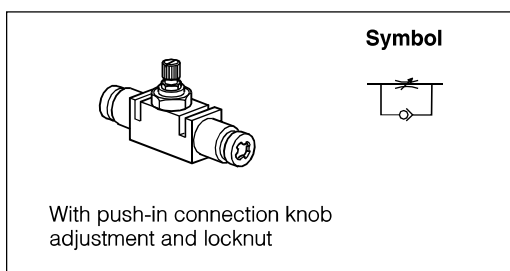
- For inline or surface mounting
- Manual adjustment by knob with lock nut
- Instant push-in fitting
- High flow
- Wide range of sizes



### Operating and additional information

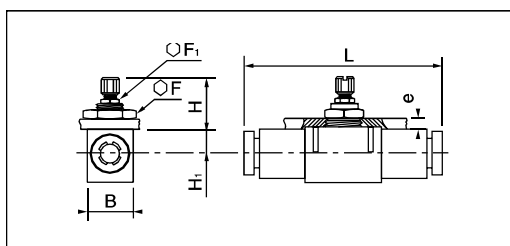
Operating pressure:	1 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table below
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
Vibration resistance:	Conforming to section 19-2 of Bureau Veritas regulations
Body material:	Thermo plastic
Adjustment mode:	Knurled knob
Adjustment locking:	Hexagonal lock nut

### Main data for Speed Controls, PWR-L Series



Push-in connection	Adjustment angle	Qmax input at 6 bar, l/min*	Weight kg	Order code
4	13	200	0,02	<b>PWR-L1444</b>
6	12	400	0,04	<b>PWR-L1466</b>
8	15	720	0,06	<b>PWR-L1488</b>
10	18	1360	0,13	<b>PWR-L1499</b>
12	20	1950	0,15	<b>PWR-L1411</b>

\* Screw closed



Order code	B	F	F1	e	H+	H-	H1	L	Q
<b>PWR-L1444</b>	12,0	14	*	6	25,5	21,5	6,5	39,0	10,5
<b>PWR-L1466</b>	17,0	19	*	7	32,5	27,5	7,5	54,0	17,0
<b>PWR-L1488</b>	18,5	24	11	7	34,5	28,5	9,0	60,5	19,0
<b>PWR-L1499</b>	24,0	30	14	7	38,5	29,5	11,5	76,0	25,0
<b>PWR-L1411</b>	28,0	32	14	8	42,0	32,0	12,5	86,0	28,0

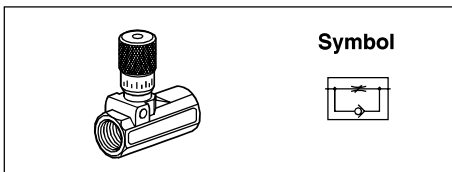
- Micrometer type adjustment
- Fine control
- Integral mounting hole
- Non-return and needle valves



**Operating and additional information**

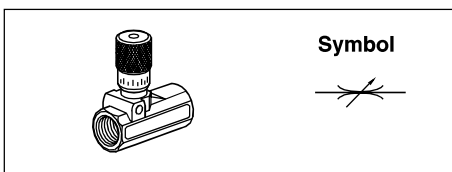
Operating pressure: 0 to 17 bar  
 Flow: See curve below  
 Operating temperature: -40°C to +80°C  
 Body material: Brass  
 Control knob: Aluminium  
 Adjustment mode: Knurled knob

**Flow Control with By-pass**

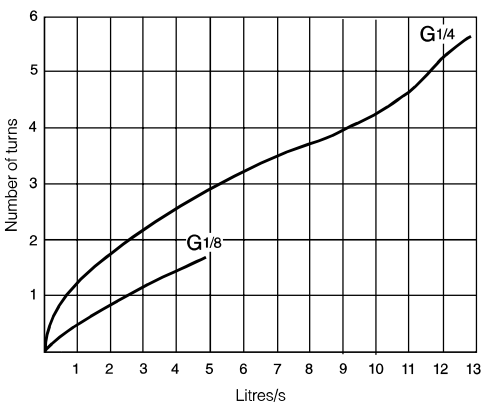


Thread	Number of turns	Qmax input at 6 bar, l/min	Weight kg	Order code
G1/8	5	300	0,076	<b>337A</b>
G1/4	6	780	0,134	<b>337B</b>

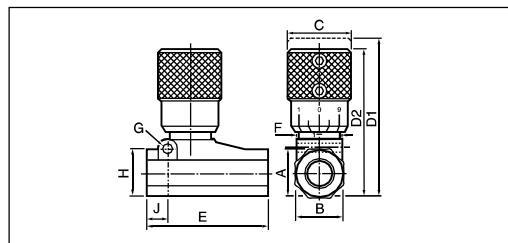
**Flow Control with By-directional Control**



Thread	Number of turns	Qmax input at 6 bar, l/min	Weight kg	Order code
G1/8	5	300	0,078	<b>338A</b>
G1/4	6	780	0,132	<b>338B</b>



**Micrometer Flow Control Valves - Dimensions**



Order code	Port size	A	B	C	D1 open	D2 closed	E	F	G	H	J
<b>337A</b>	G1/8	14,5	14,5	19	51	46	40	12	-	-	-
<b>337B</b>	G1/4	17,5	18,0	19	58	51	50	12	4,8	19	10
<b>338A</b>	G1/8	14,5	14,5	19	51	46	40	12	-	-	-
<b>338B</b>	G1/4	17,5	18,0	19	58	51	50	12	4,8	19	10



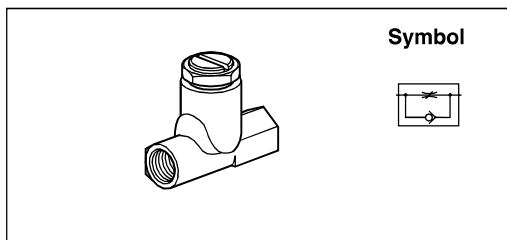
- Screw driver or hand adjustment
- Rugged brass bodies
- Panel mounted versions
- High flow rate
- High flow by-pass
- Wide range of sizes



### Operating and additional information

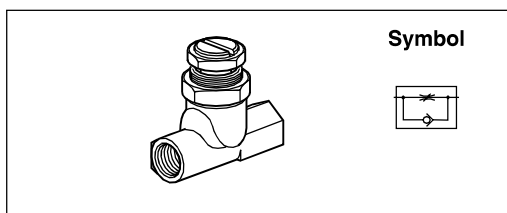
Operating pressure:	0 to 28 bar for air - 0 to 55 bar oil or water
Operating temperature:	-10°C to +80°C
Body material:	Brass
Control knob:	Brass
Adjustment mode:	Knurled knob or screw driver adjustment

### Standard Type



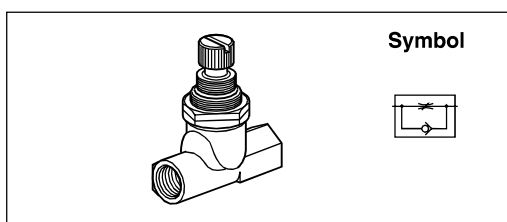
Thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
G1/8	6	1320	0,114	<b>B3250X</b>
G1/4	5	2880	0,224	<b>B3250AB</b>
G3/8	5	6300	0,378	<b>B3250BB</b>
G1/2	5	7680	0,792	<b>B3250CB</b>
G3/4	4,5	10680	1,300	<b>B3250DB</b>

### Panel Mounting Type



Thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
G1/8	6	1320	0,120	<b>B3250XP</b>
G1/4	5	2880	0,226	<b>B3250ABP</b>

### Panel Mounted Hand Adjustment Type

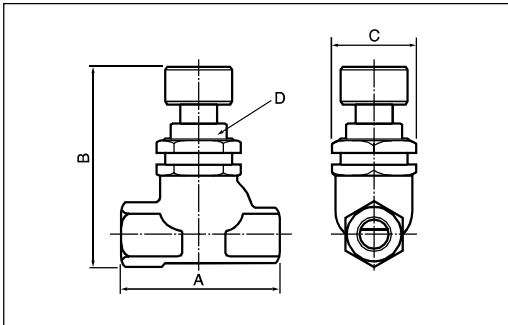


Thread	Number of turns	Qmax input at 6 bar, l/min*	Weight kg	Order code
G1/8	6	1320	0,128	<b>B3250HX</b>
G1/4	5	2880	0,238	<b>B3250HA</b>

\* Screw closed

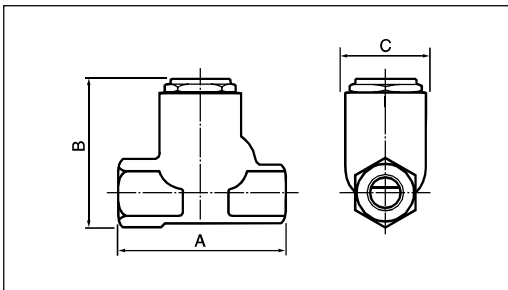
## Dimensions, Flow Control Valves, B3250 Series

### Flow Control Valves, Panel Mounted Hand Adjustment Type



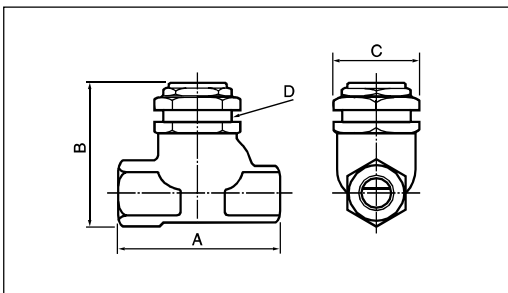
Order code	Port size	A	B	C	D
<b>B3250HX</b>	G1/8	44	57	21	20
<b>B3250HA</b>	G1/4	57	70	32	25

### Flow Control Valves, Standard Type



Order code	Port size	A	B	C
<b>B3250X</b>	G1/8	44	40	21
<b>B3250AB</b>	G1/4	57	51	28
<b>B3250BB</b>	G3/8	68	64	35
<b>B3250CB</b>	G1/2	79	78	41
<b>B3250DB</b>	G3/4	90	92	51

### Flow Control Valves, Panel Mounted Type



Order code	Port size	A	B	C	D
<b>B3250XP</b>	G1/8	44	40	21	20
<b>B3250ABP</b>	G1/4	57	51	32	25

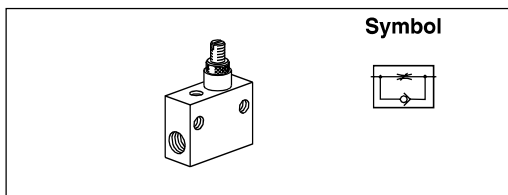
- Integral mounting holes
- Screw driver adjustable
- Panel mounting option



### Operating information

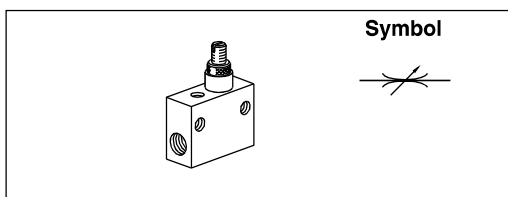
Working pressure                      Max 10 bar  
 Working temperature                -20 °C to +70 °C

### Flow Control Valves with By-pass



Thread	Number of turns	Qmax input at 6 bar, l/min	Weight kg	Order code
G1/8	13	72	0,03	<b>VQB12-Q-0X-5*</b>
G1/8	13	240	0,03	<b>VQB12-Q-0-5</b>
G1/4	13	1320	0,07	<b>VQB22-Q-0-5</b>
G1/2	13	3600	0,27	<b>VQB42-Q-0-5</b>

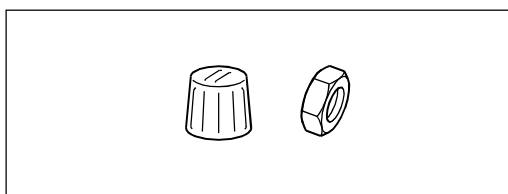
### Flow Control Valves with By-directional Control



Thread	Number of turns	Qmax input at 6 bar, l/min	Weight kg	Order code
G1/8	13	72	0,03	<b>VQB12-0X-5*</b>
G1/8	13	240	0,03	<b>VQB12-0-5</b>
G1/4	13	1320	0,07	<b>VQB22-0-5</b>
G1/2	13	3600	0,26	<b>VQB42-0-5</b>

\* Extra fine adjustment

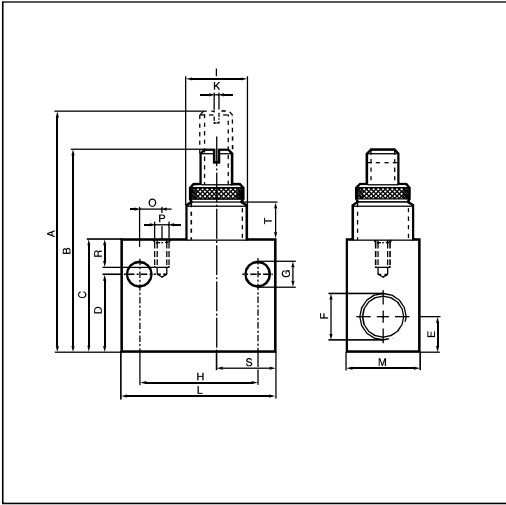
### Knob and nut for Panel Mounting



To Suit	Weight kg	Order code
VQB12	0,008	<b>9128177212</b>
VQB22	0,014	<b>9128177222</b>
VQB42	0,037	<b>9128177242</b>

**Dimensions, Flow Control Valves, VQB Series**

**Flow Control Valves - Dimensions**



Order code	A	B	C	D	E	F	G	H	I
VQB12-(Q)-OX-5	49	42	22	15	6,5	G1/8	5,8	24	M12x1
VQB12-(Q)-O-5	49	42	22	15	6,5	G1/8	5,8	24	M12x1
VQB22-(Q)-O-5	64	53	30	21	8,5	G1/4	7,0	32	M16x1
VQB42-(Q)-O-5	99	85	50	36	16,5	G1/2	7,0	50	M24x1,5

Order code	K	L	M	O	P	R	S	T
VQB12-(Q)-OX-5	1,2	32	15	-	-	-	13,5	8,8
VQB12-(Q)-O-5	1,2	32	15	-	-	-	13,5	8,8
VQB22-(Q)-O-5	1,2	42	20	6,0	M4	7	16,0	10,0
VQB42-(Q)-O-5	1,8	62	30	19,5	M4	7	20,5	15,2

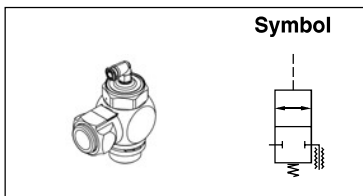
- For direct cylinder mounting
- Blocker only or multifunction options
- Threaded or push-in ports
- Blocker/Flow Regulator device adjustable with manual barrel
- Wide range of sizes



**Operating information**

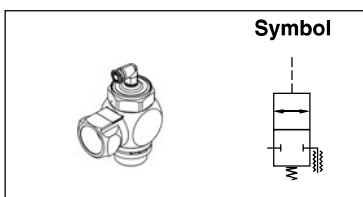
Operating pressure:	1 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table opposite
Operating temperature:	-15°C to +60°C
Storage temperature:	-40°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	10 million
Maximum operating frequency:	10Hz
Vibration resistance:	According to IEC 68 - 2 - 6
Maximum connecting torque:	1/8 = 8Nm ; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material (Blocker):	Zinc alloy
Body material (Blocker/Flow Regulator):	Thermo plastic
Connection thread:	Brass
Adjustment mode (Blocker/Flow Regulator):	Rotating barrel
Adjustment locking (Blocker/Flow Regulator):	Knurled lock nut
Internal seal at 6 bar:	≤ 0,6 l/h ANR

**With Push-in Connection**



Connection for pilot port	Thread	Connection for tube ,Ømm	Qmax input at 6 bar, l/min	Weight kg	Order code
Push-in Ø4mm	G1/8	6	500	0,15	<b>PWB-A1468</b>
	G1/4	6	650	0,15	<b>PWB-A1469</b>
	G1/4	8	650	0,15	<b>PWB-A1489</b>
	G3/8	8	1600	0,18	<b>PWB-A1483</b>
	G3/8	10	1750	0,18	<b>PWB-A1493</b>
	G1/2	12	2050	0,50	<b>PWB-A1412</b>

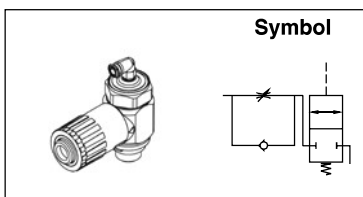
**With Threaded Connection**



Connection for pilot port	Thread	Connection for tube ,Ømm	Qmax input at 6 bar, l/min*	Weight kg	Order code
Push-in Ø4mm	G1/8	G1/4	500	0,18	<b>PWB-A1898</b>
	G1/4	G1/4	650	0,18	<b>PWB-A1899</b>
M5*	G3/8	G3/8	1750	0,19	<b>PWB-A1833</b>
	G1/2	G1/2	2050	0,48	<b>PWB-A1822</b>

\* Available with Ø4mm push-in connection, add 4 to the end of the Order code; example: **PWB-A18994**

**With Push-in Connection, Barrel Adjustment and Locknut**

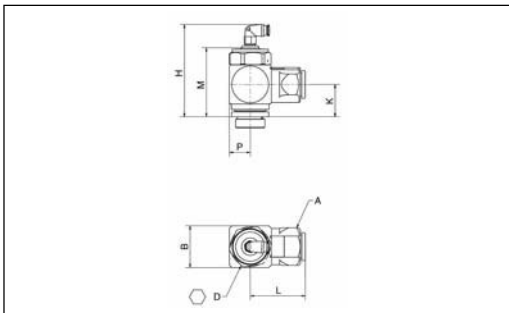


Connection for pilot port	Thread	Connection for tube ,Ømm	Qmax input at 6 bar, l/min	Weight kg	Order code
Ø4mm	G1/8	4	330	0,13	<b>PWR-HB1448</b>
	G1/8	6	500	0,13	<b>PWR-HB1468</b>
	G1/4	6	500	0,13	<b>PWR-HB1469</b>
	G1/4	8	600	0,13	<b>PWR-HB1489</b>
	G3/8	8	1200	0,18	<b>PWR-HB1483</b>
	G3/8	10	1300	0,18	<b>PWR-HB1493</b>
	G1/2	10	1400	0,13	<b>PWR-HB1492</b>

Blockers	Pilot				Depilot			
	operating pressure				operating pressure			
	2bar	4bar	6bar	8bar	2bar	4bar	6bar	8bar
<b>PWB-A1898</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWB-A1899</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWB-A1833</b>	2,5	2,8	2,9	3,4	1,1	1,3	1,6	1,9
<b>PWB-A1822</b>	2,5	2,8	2,9	3,4	1,1	1,3	1,6	1,9

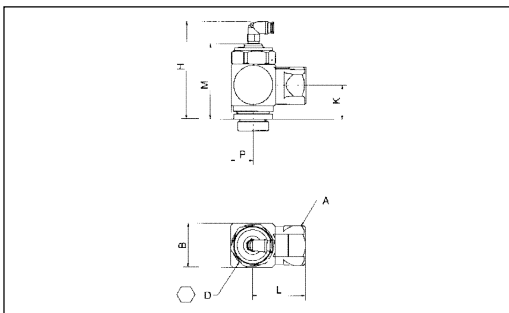
Combined speed controllers & blockers	Pilot				Depilot			
	operating pressure				operating pressure			
	2bar	4bar	6bar	8bar	2bar	4bar	6bar	8bar
<b>PWR-HB1448</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWR-HB1468</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWR-HB1469</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWR-HB1489</b>	3,1	3,5	4,0	4,5	0,8	1,0	1,2	1,4
<b>PWR-HB1483</b>	2,5	2,8	2,9	3,4	1,1	1,3	1,6	1,9
<b>PWR-HB1493</b>	2,5	2,8	2,9	3,4	1,1	1,3	1,6	1,9

**Blocker with push-in connection - dimensions**



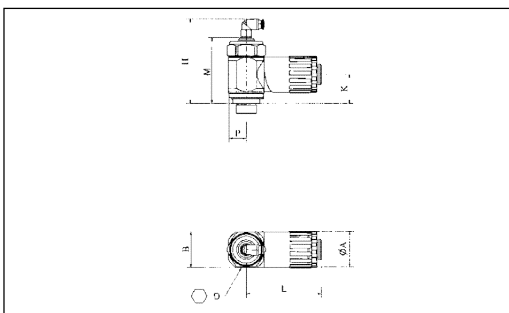
Order code	A	B	D	H	K	L	P	M
<b>PWB-A1468</b>	∅ 22	21	21	59,0	16,5	39	11	43
<b>PWB-A1469</b>	∅ 22	21	21	59,0	16,5	39	11	43
<b>PWB-A1489</b>	∅ 22	21	21	59,0	16,5	39	11	43
<b>PWB-A1483</b>	□ 27	30	27	66,5	22,5	39	15	52
<b>PWB-A1493</b>	□ 27	30	27	66,5	22,5	39	15	52
<b>PWB-A1412</b>	□ 27	30	27	66,5	22,5	39	15	52

**Blocker with threaded connection - dimensions**



Order code	A	B	D	H	K	L	C	P	M
<b>PWB-A1898</b>	∅ 22	21	21	59,0	16,5	43,5	∅ 24	11	43
<b>PWB-A1899</b>	∅ 22	21	21	59,0	16,5	43,5	∅ 24	11	43
<b>PWB-A1833</b>	□ 27	30	27	66,5	22,5	36,0	□ 27	15	52
<b>PWB-A1822</b>	□ 27	30	27	66,5	22,5	36,0	□ 27	15	52

**Blocker/Flow regulator - dimensions**



Order code	∅A	B	D	H	K	L	P
<b>PWR-HB1448</b>	22,5	21	21	59	16,5	47,0	12,5
<b>PWR-HB1468</b>	22,5	21	21	59	16,5	47,0	12,5
<b>PWR-HB1469</b>	22,5	21	21	59	16,5	47,0	12,5
<b>PWR-HB1489</b>	22,5	21	21	59	16,5	47,0	12,5
<b>PWR-HB1483</b>	29,0	30	27	64,5	22,5	60,0	15,0
<b>PWR-HB1493</b>	29,0	30	27	64,5	22,5	60,0	15,0
<b>PWR-HB1492</b>	29,0	30	27	64,5	22,5	60,0	15,0