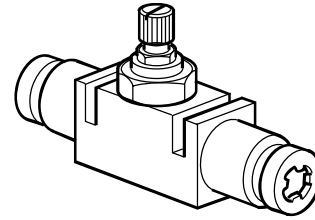


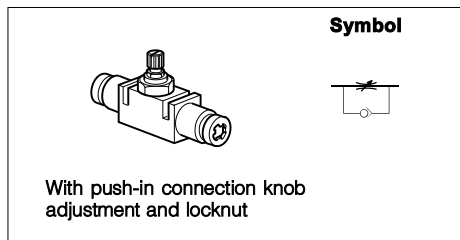
- For inline or surface mounting
- Manual adjustment by knob with lock nut
- Instant push-in fitting
- High flow
- Wide range of sizes



## Operating and additional information

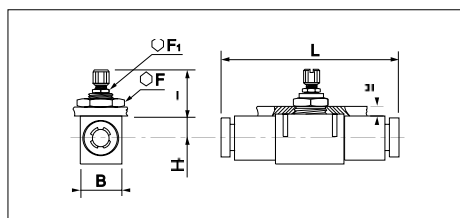
Operating pressure:	1 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table below
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
Vibration resistance:	Conforming to section 19-2 of Bureau Veritas regulations
Body material: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

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



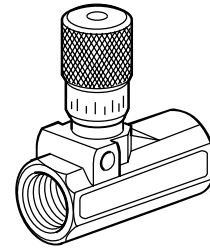
Push-in connection	Adjustment angle	Qmax input at 6 bar, l/min*	Weight Kg	Order code
4	13	200	0,02	<b>PWR-L1444</b>
6	12	400	0,04	<b>PWR-L1466</b>
8	15	720	0,06	<b>PWR-L1488</b>
10	18	1360	0,13	<b>PWR-L1499</b>
12	20	1950	0,15	<b>PWR-L1411</b>

\* Screw closed



Type	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

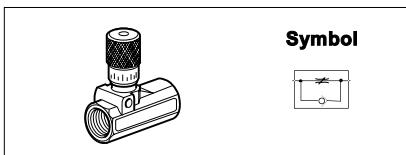


For detailed information see technical leaflet 2140

## Operating and additional information

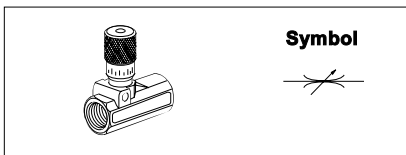
Operating pressure:	0 to 17 bar
Flow:	See curve below
Operating temperature:	-40°C to +80°C
Body material:	Brass
Control knob:	Aluminium
Adjustment mode:	Knurled knob

## Flow Control with By-pass

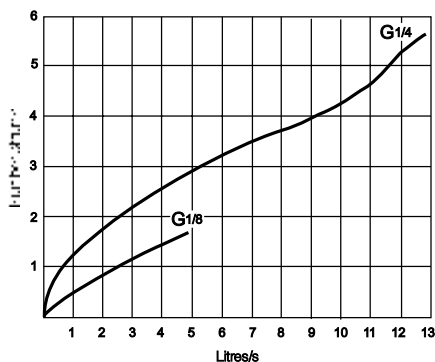


Thread	Number of turns	Qmax input at 6 bar, l/min	Weight Kg	Order code
G1/8	5	300	0,076	<b>337A</b>
G1/4	6	780	0,134	<b>337B</b>

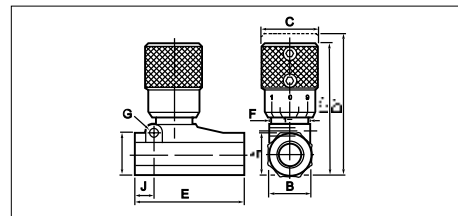
## Flow Control with By-directional Control



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>

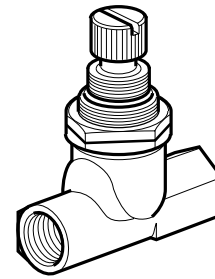


## Micrometer Flow Control Valves - Dimensions



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

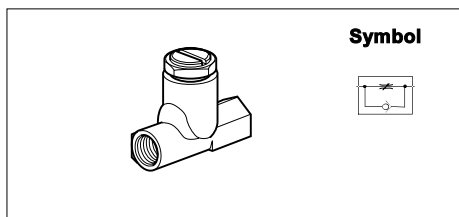
- Screw driver or hand adjustment
- Rugged brass bodies
- Panel mounted versions
- High flow rate
- High flow by-pass
- Wide range of sizes



## Operating and additional information

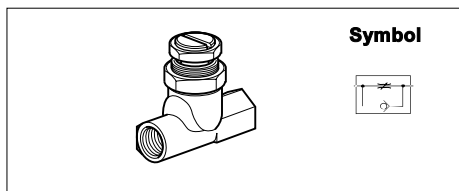
Operating pressure: 0 to 28 bar for air - 0 to 55 bar oil or water  
 Operating temperature: -10°C to +80°C  
 Body material: Brass  
 Control knob: Brass  
 Adjustment mode: Knurled knob or screw driver adjustment

## Standard Type



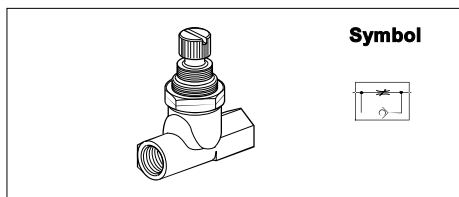
Thread	Number of turns	Qmax Input at 6 bar, l/min*	Weight Kg	Order code
G1/8	6	1320	0,114	<b>B3250X</b>
G1/4	5	2880	0,224	<b>B3250AB</b>
G3/8	5	6300	0,378	<b>B3250BB</b>
G1/2	5	7680	0,792	<b>B3250CB</b>
G3/4	4,5	10680	1,300	<b>B3250DB</b>

## 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>

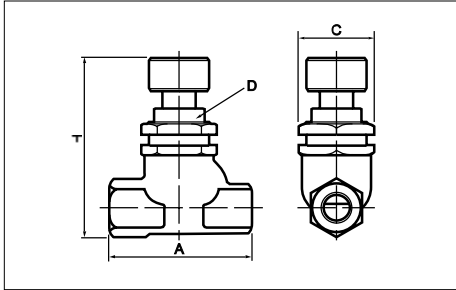
## Panel Mounted Hand Adjustment Type



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>

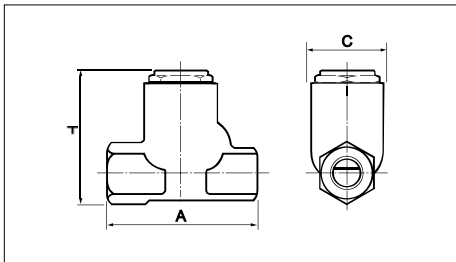
## Dimensions, Flow Control Valves, B3250 Series

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



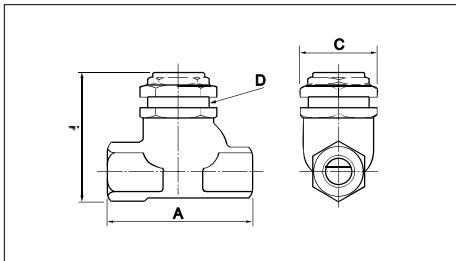
Order code	Port size	A	B	C	D
<b>B3250HX</b>	G1/8	44	57	21	20
<b>B3250HA</b>	G1/4	57	70	32	25

### Flow Control Valves, Standard Type



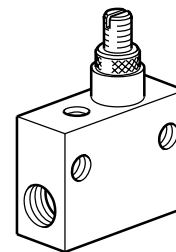
Order code	Port size	A	B	C
<b>B3250X</b>	G1/8	44	40	21
<b>B3250AB</b>	G1/4	57	51	28
<b>B3250BB</b>	G3/8	68	64	35
<b>B3250CB</b>	G1/2	79	78	41
<b>B3250DB</b>	G3/4	90	92	51

### 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
- Roller for mechanical actuation available

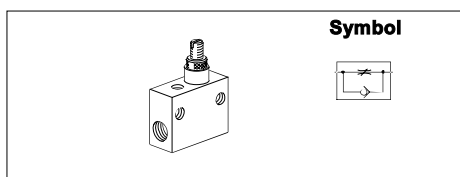


For detailed information see technical leaflet 9127 0035-02

## Operating information

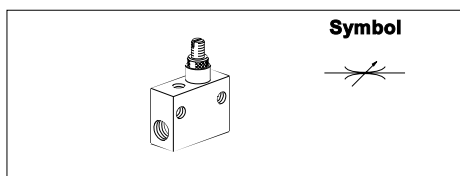
Working pressure                      Max 10 bar  
 Working temperature                -20 °C to +70 °C

## 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>

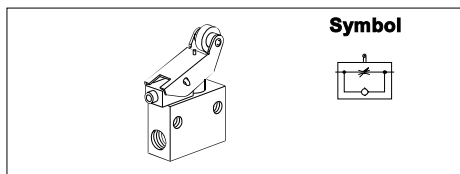
## Flow Control Valves with By-directional Control



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>

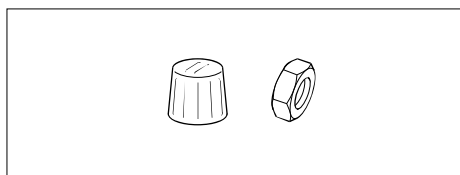
\* Extra fine adjustment

## Roller Operated, Flow Control Valves with By-pass



Thread	Qmax input at 6 bar, l/min*	Weight Kg	Order code
G1/4	1320	0,11	<b>VQB22-Q-0WG-5</b>
G1/2	3600	0,27	<b>VQB42-Q-0WG-5</b>

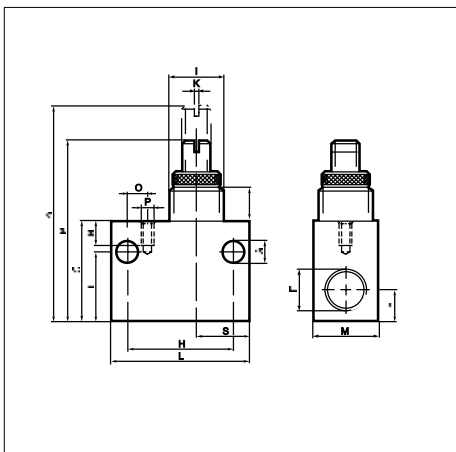
## knob and nut for Panel Mounting



To Suit	Weight Kg	Order code
VQB12	0,008	<b>9128 1772-12</b>
VQB22	0,014	<b>9128 1772-22</b>
VQB42	0,037	<b>9128 1772-42</b>

## Dimensions, Flow Control Valves, VQB Series

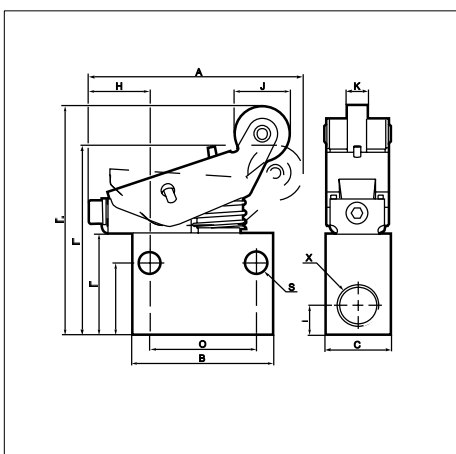
### Flow Control Valves - Dimensions



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

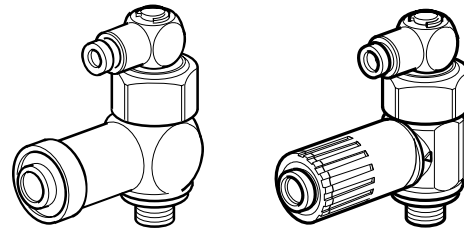
### Roller operated, Flow Control Valves - Dimensions



Order code	A	B	C	D	E	F	G	H
VQB22-Q-OWG-5	64,5	42	20	68	55	30	21	18,5
VQB42-Q-OWG-5	64,5	62	30	88	75	50	36	5,0

Order code	J	K	L	O	S	X
VQB22-Q-OWG-5	16	6	8,5	32	7	G1/4
VQB42-Q-OWG-5	16	6	16,5	50	7	G1/2

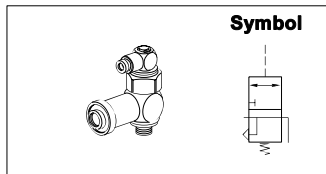
- For direct cylinder mounting
- Unloader only or multifunction options
- Threaded or push-in ports
- Unloader/Flow Regulator device adjustable with manual barrel
- Wide range of sizes



## Operating information

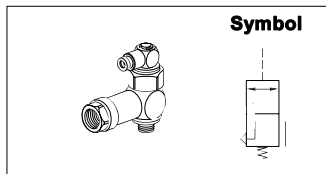
Operating pressure:	1 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Flow:	See table below
Operating temperature:	-15°C to +60°C
Storage temperature:	-40°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	1 million
Maximum operating frequency:	1Hz
Vibration resistance:	Conforming to section 19-2 of Bureau Veritas regulations
Maximum connecting torque:	1/8 = 8Nm ; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material (Unloader):	Zinc alloy
Body material (Unloader/Flow Regulator):	Thermo plastic
Connection thread:	Brass
Adjustment mode (Unloader/Flow Regulator):	Rotating barrel
Adjustment locking (Unloader/Flow Regulator):	Knurled lock nut

## Unloader with Push-in Connection



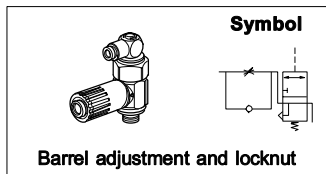
Connection for pilot port	Thread	Connection for tube ,Ømm	Qmax input at 6 bar, l/min*	Weight kg	Order code
Push-in Ø4mm	G1/8	6	1450	0,13	<b>PWE-A1468</b>
	G1/4	8	2800	0,15	<b>PWE-A1489</b>
	G3/8	10	3950	0,18	<b>PWE-A1493</b>
	G1/2	12	4750	0,50	<b>PWE-A1412</b>

## Unloader 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	1450	0,13	<b>PWE-A1898</b>
	G1/4	G1/4	2800	0,16	<b>PWE-A1899</b>
	G3/8	G3/8	3950	0,19	<b>PWE-A1833</b>
	G1/2	G1/2	4750	0,48	<b>PWE-A1822</b>

## Combined Unloader/Flow Control with Push-in Connection



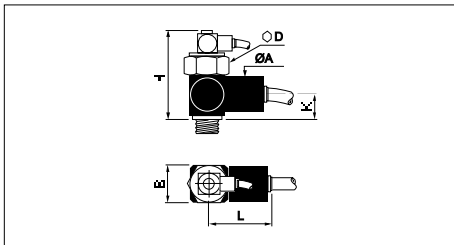
Connection for pilot port	Thread	Connection for tube ,Ømm	Qmax input at 6 bar, l/min*	Weight kg	Order code
Push-in Ø4mm	G1/8	4	1450	0,10	<b>PWR-HE1448</b>
	G1/8	6	1450	0,10	<b>PWR-HE1468</b>
	G1/4	6	2800	0,10	<b>PWR-HE1469</b>
	G1/4	8	2800	0,10	<b>PWR-HE1489</b>
	G3/8	8	3950	0,18	<b>PWR-HE1483</b>
	G3/8	10	3950	0,18	<b>PWR-HE1493</b>

# Unloader and Unloader/Flow Regulator PWE/PWR-HE

Unloaders	Pilot			Depilot		
	operating pressure			operating pressure		
	3bar	6bar	8bar	3bar	6bar	8bar
<b>PWE-A1468/1898</b>	1,75	3,35	4,5	0,95	2,05	2,75
<b>PWE-A1489/1899</b>	2,35	4,3	5,9	0,95	2,05	2,75
<b>PWE-A1493/1833</b>	2,0	4,1	4,8	0,90	2,0	3,0
<b>PWE-A1412/1822</b>	1,4	3,35	5,0	0,90	2,2	3,5

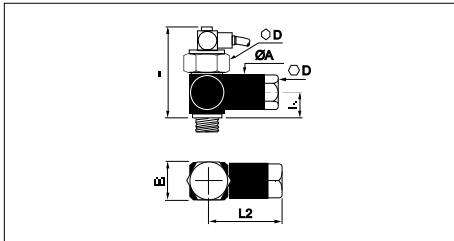
Combined speed controllers & unloaders	Pilot			Depilot		
	operating pressure			operating pressure		
	3bar	6bar	8bar	3bar	6bar	8bar
<b>PWR-HE1448</b>	1,75	3,35	4,5	0,95	2,05	2,75
<b>PWR-HE1468</b>	1,75	3,35	4,5	0,95	2,05	2,75
<b>PWR-HE1469</b>	2,35	4,3	5,9	0,95	2,05	2,75
<b>PWR-HE1489</b>	2,35	4,3	5,9	0,95	2,05	2,75
<b>PWR-HE1483</b>	2,0	4,1	4,8	0,90	2,0	3,0
<b>PWR-HE1493</b>	2,0	4,1	4,8	0,90	2,0	3,0

## Unloaders - Dimensions



### Push-in Connection

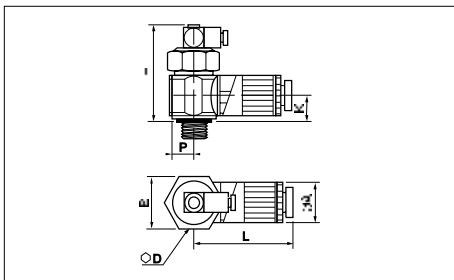
Order code	ØA	B	D	H	K	L
<b>PWE-A1468</b>	22	21	24	54	13	39
<b>PWE-A1489</b>	22	21	24	54	13	39
<b>PWE-A1493</b>	27	28	24	62	16	50
<b>PWE-A1412</b>	31	33	30	73	24	66



### Threaded Connection

Order code	ØA	B	D	H	K	L2
<b>PWE-A1898</b>	22	21	24	54	13	43
<b>PWE-A1899</b>	22	21	24	54	13	43
<b>PWE-A1833</b>	27	28	24	62	16	55
<b>PWE-A1822</b>	31	33	30	73	24	63

## Unloaders/Flow Regulators - Dimensions



Order code	ØA	B	D	H	K	L	P
<b>PWR-HE1448</b>	22,5	21	24	59	19,5	47,0	12,5
<b>PWR-HE1468</b>	22,5	21	24	59	19,5	47,0	12,5
<b>PWR-HE1469</b>	22,5	21	24	53	13,5	47,0	12,5
<b>PWR-HE1489</b>	22,5	21	24	53	13,5	47,5	12,5
<b>PWR-HE1483</b>	29,0	28	24	53	15,5	60,0	15,0
<b>PWR-HE1493</b>	29,0	28	24	53	15,5	60,0	15,0