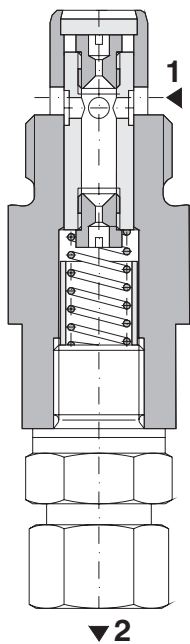


## 2-Way Flow Regulator, Pressure Compensated, Not Adjustable

# VSK

M18 x 1.5 / M22 x 1.5 / G 3/8 •  $Q_{max}$  10 l/min (3 GPM) •  $p_{max}$  320 bar (4600 PSI)

VSK4



### Technical Features

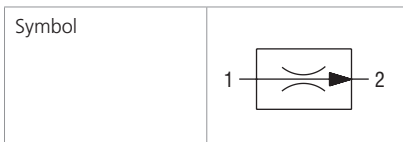
- › Set flow rate independent of load pressure and temperature changes
- › Adjusted flow rate depends on the orifice area
- › Hardened precision parts
- › Quiet and modulated response to load changes
- › Used in meter-in, meter out, or bleed-off applications
- › Two design models for in-block installation
- › Wide selection of throttling orifices
- › The housing of the VSK2 valve is without surface treatment, the VSK4 housing is phosphated. All the other parts are zinc-coated.

### Functional Description

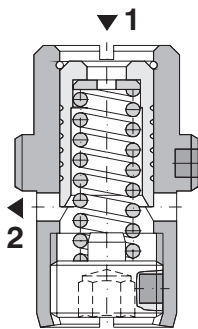
The pressure compensated flow control valves VSK are designed to control flow rates independently of pressure and temperature, especially in systems where only small movements due to load changes are required. The flow rate stabilization is provided by a pressure compensator in the direction from 1 to 2.

In the direction 2 - 1, the valve works as an ordinary throttle valve without pressure compensation.

The set flow rate is constant and depends on the orifice area – see the respective characteristics.



VSK2



### Technical Data

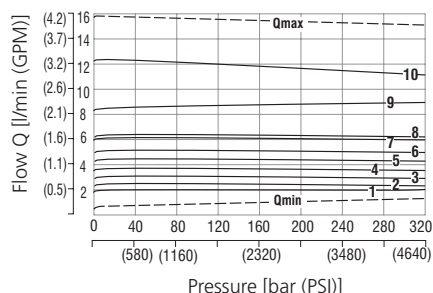
Valve size	M18 x 1.5 / M22 x 1.5 / G 3/8	
Max. flow	l/min (GPM)	10 (2.6)
Max. operating pressure	bar (PSI)	320 (4640)
Fluid temperature range	°C (°F)	-30 ... +120 (-22 ... +248)
Weight	kg (lbs)	0.01 (0.022)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Spare parts	SP_8010	

### Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

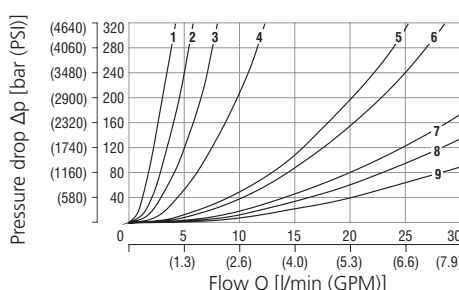
#### Regulated flow related to input pressure

Flow direction 1 - 2 (regulated flow)  
VSK2 + VSK4



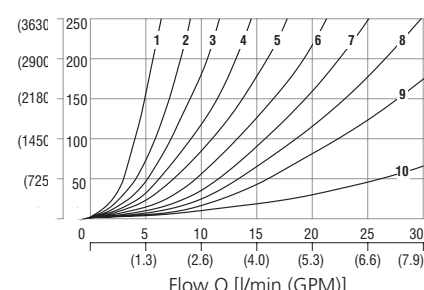
#### Pressure drop related to flow rate

Flow direction 2 - 1  
(throttling without compensation)  
VSK4 (orifice diameter (mm/100))



#### Pressure drop related to flow rate

Flow direction 2 - 1  
(throttling without compensation)  
VSK2 (orifice diameter (mm/100))



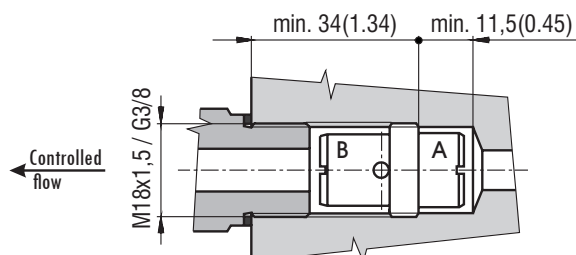
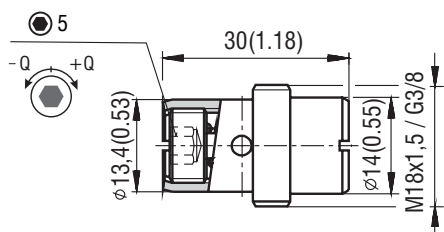
1 → 2										
VSK2 + VSK4 Orifice diameter (mm/100)										
$Q_{min}$					$Q_{max}$					
No.	1	2	3	4	5	6	7	8	9	10
∅ orifice	100	110	120	130	140	150	160	180	200	250

2 → 1		Orifice diameter (mm/100)				
No.	1	2	3	4	5	
∅ orifice	55	80	100	120	160	
No.	6	7	8	9		
∅ orifice	180	210	230	260		

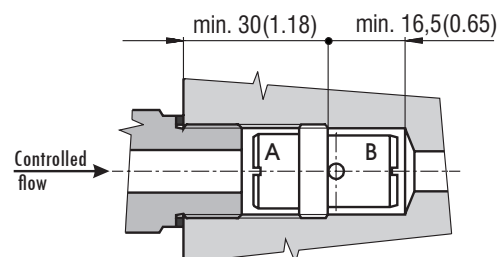
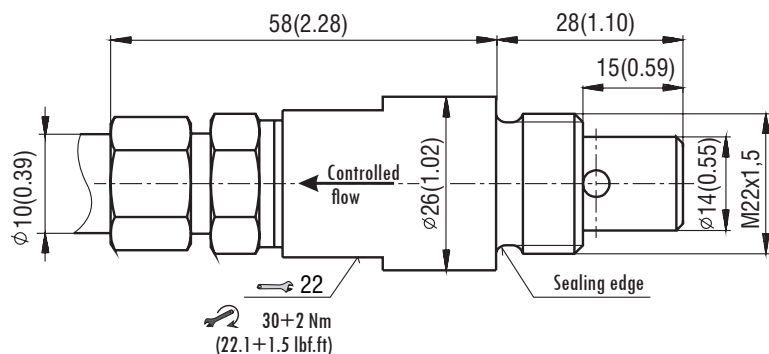
2 → 1		Orifice diameter (mm/100)				
No.	1	2	3	4	5	
∅ orifice	100	110	120	130	140	
No.	6	7	8	9	10	
∅ orifice	150	160	180	200	250	

**Dimensions** in millimeters (inches)

**VSK2-M2-x**



**VSK4-M4-x**



**Approximate Flow Rates Corresponding to Orifice Diameter**

VSK2		VSK4	
Orifice diameter [mm/100]	Flow range l/min (GPM) at 32 bar (464 PSI) adjusted to customer spec. at manufacturer	Orifice diameter [mm/100]	Flow range l/min (GPM) at input pressure 32 bar (464 PSI)
55	0.3 - 0.6 (0.08 - 0.16)	100	2.1 (0.56)
80	1.4 - 1.7 (0.37 - 0.45)	110	2.4 (0.63)
100	1.8 - 2.4 (0.48 - 0.63)	120	3.0 (0.79)
120	3.1 - 4.0 (0.82 - 1.06)	130	3.8 (1.01)
160	5.5 - 6.5 (1.46 - 1.72)	140	4.3 (1.14)
180	5.6 - 7.1 (1.48 - 1.88)	150	4.9 (1.30)
210	8.5 - 10.8 (2.25 - 2.86)	160	6.3 (1.67)
230	10.7 - 13.3 (2.83 - 3.52)	180	6.6 (1.75)
260	12.0 - 16.4 (3.17 - 4.34)	200	8.7 (2.30)
		250	12.5 (3.31)

**Ordering Code**

**VSK** [ ] - [ ] - [ ] - [ ]

**2-Way flow regulator, pressure compensated, not adjustable**

**Model**  
 screw-in cartridge **2**  
 pipe mounted / screw-in cartridge **4**

**Connection threads**  
 metric thread (M18 x 1.5 for VSK2) **M2**  
 metric thread (M22 x 1.5 for VSK4) **M4**  
 pipe thread (G 3/8 only for VSK2) **G4**

**No designation** VSK2 housing without surface treatment  
 VSK4 housing is phosphated  
 steel parts zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**A\*** zinc-coated (ZnCr-3), ISO 9227 (240 h)  
**B\*** zinc-coated (ZnNi), ISO 9227 (520 h)

**Surface treatment**

\*only for VSK4

<b>VSK2</b>	055	080	100	-	120	-	-	-	160	180	-	210	230	-	260
<b>VSK4</b>	-	-	100	110	120	130	140	150	160	180	200	-	-	250	-