

Flow switches made of metal

With threaded pipe tee

Type VHS / VH3



Technical data

Switching function	Contact → closes at increasing flow → opens at decreasing flow Reversible
Pressure rating	Max. 360 psi
Temperature ranges	
Medium	-13...230 °F
Ambient	-13...176 °F
Electrical data	
Electrical connection → VHS → VH3	Plug connector DIN EN 175301-803-A incl. cable socket 59 inch PVC jacket cable
Switching current	Max. 1 A
Switching voltage	Max. 230 VAC, 48 VDC
Rating	Max. 26 VA, 20 W
Degree of protection EN 60529	IP65

Approvals



Advantages

- Flow switches with pipe tees 1/4...2"
- Brass or stainless steel
- Various connectors or 59 inch jacket cable

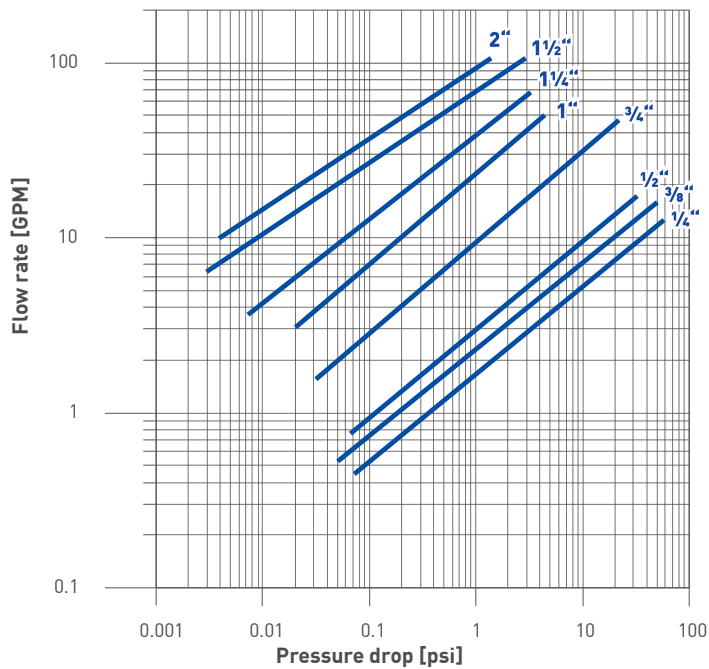
Options

For type	See order code
VHS	→ Plug connector DIN EN 175301-803-A incl. cable socket with two LED for switching voltages 24 V...230 V AC/DC ±20 %, ambient temperature -4...158 °F → or 4-pin-sensor plug M12 x 1

Thread connection D ₁	Setpoint ranges [GPM]*				Max. flow rate [GPM]
	Increasing flow ON		Decreasing flow OFF		
	VHS	VH3	VHS	VH3	
¼" NPT	0.6...0.7	0.5...0.7	0.5...0.6	0.4...0.6	11.7
⅜" NPT	0.7...0.8	0.6...0.8	0.6...0.8	0.5...0.7	15.6
½" NPT	0.9...1.1	0.9...1.1	0.8...1.0	0.8...1.0	17.4
¾" NPT	1.8...2.4	1.7...2.1	1.7...2.1	1.6...2.0	46.8
1" NPT	3.5...4.4	3.4...4.1	3.1...4.0	3.3...4.0	50.7
1¼" NPT	4.0...5.3	3.8...4.7	3.8...4.9	3.5...4.5	62.4
1½" NPT	6.9...8.9	6.6...8.2	6.6...8.5	6.3...8.0	104
2" NPT	10.3...13.3	9.9...12.5	10.2...13.0	9.6...12.3	104

* Water, 68 °F, horizontal pipe, tolerance ±15 %

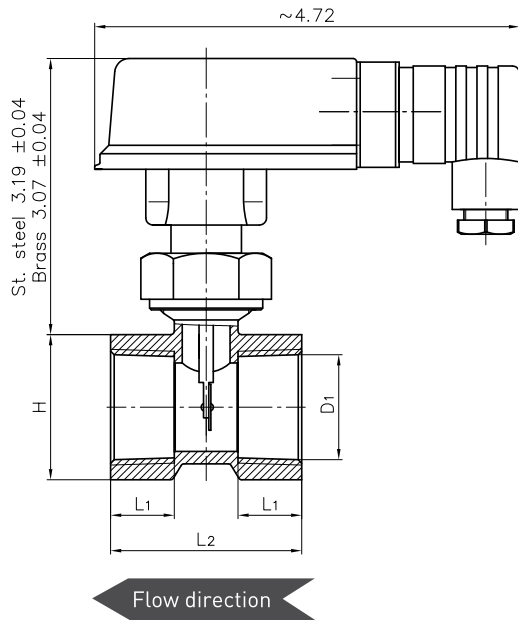
Typical pressure drop



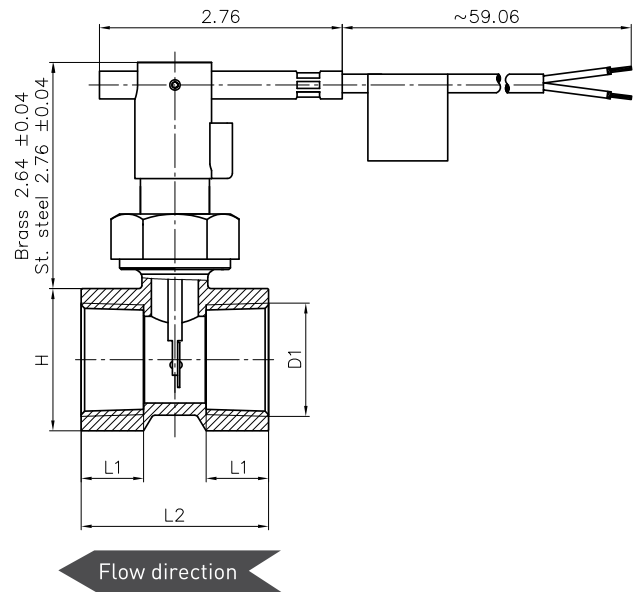
Dimensions [inch]

Thread connection D ₁	L ₁	L ₂	H	L ₁	L ₂	H
	Brass version			Stainless steel version		
1/4"NPT	0.49	1.97	1.05	0.49	1.97	1.05
3/8"NPT	0.59	1.97	1.05	0.59	1.97	1.05
1/2"NPT	0.59	1.97	1.05	0.78	2.36	1.05
3/4"NPT	0.78	2.36	1.37	0.78	2.36	1.26
1"NPT	0.71	2.12	1.61	0.98	2.76	1.61
1 1/4"NPT	0.98	2.76	1.81	0.98	2.76	1.81
1 1/2"NPT	0.98	2.76	2.16	0.98	2.76	2.16
2"NPT	0.98	2.76	2.76	0.98	2.76	2.76

VHS



VH3



Materials in contact with fluid

	Brass version	Stainless steel version
Body, Paddle	Brass CW614N	Stainless steel 1.4571
Pipe tee	Brass CW617N	Stainless steel 1.4571
Bushing	PPE+PS Noryl™ 30 % glass fiber reinforced	PVDF
Rivet	Brass CW508L	Stainless steel 1.4303
Pin	Stainless steel 1.4571	
Magnet	Hard ferrite	
O-ring	NBR	

Order code	Example → VHS	08	M011	7	1	N1	1	
Type								
Flow switches VHS								
Plug connector incl. cable socket (standard)	VHS			7				
Plug connector incl. cable socket with LED (option)	VHS			9				
4-pin-sensor plug M12 x 1 (option)	VHS			8				
Flow switches VH3								
59 inch PVC jacket cable	VH3			1				
Thread connection								
¼" NPT		08				N1		
⅜" NPT		10				N2		
½" NPT		15				N3		
¾" NPT		20				N4		
1" NPT		25				N5		
1¼" NPT		32				N6		
1½" NPT		40				N7		
2" NPT		50				N8		
Material								
Brass		M011			1			1
Stainless steel		M031			3			3
Version								
Standard								()*
For use in potentially explosive atmospheres (Option)**								X

* No character

** Only available with blue jacket cable or with plug connector incl. cable socket. Max. media temperature 212 °F.