

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 Reversing possible
Pressure rating	PN 25
Temperature ranges	
Medium	-25...110 °C
Ambient	-25...80 °C
Electrical data	
Electrical connection → VHS → VH3	Plug connector DIN EN 175301-803-A incl. cable socket 1.5 m 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
Protection class EN 60730-1	Class II

Approvals



Benefits

- Flow switches with pipe tees DN 8...50
- Brass or stainless steel
- Various connectors or 1.5 m jacket cable
- Optional high pressure version up to 160 bar

Options

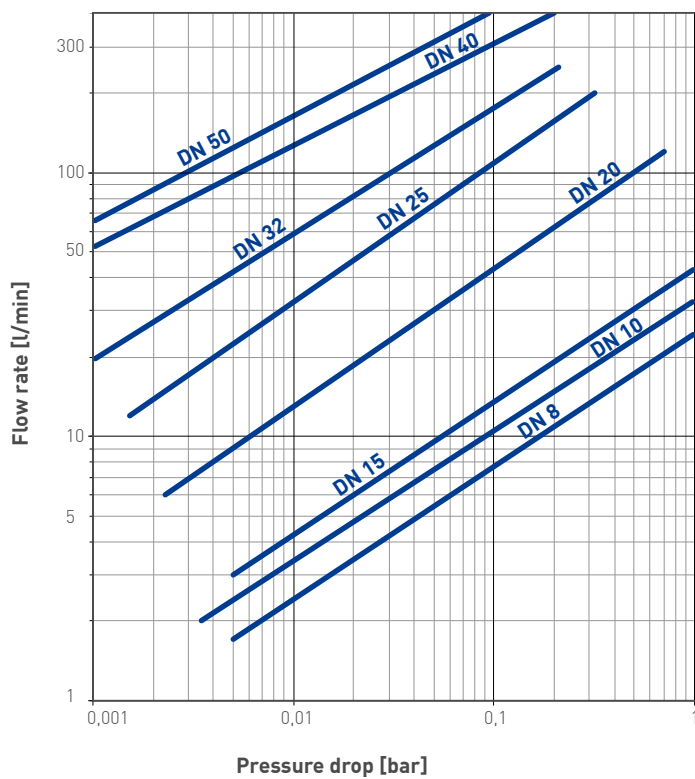
Electrical connection (version VHS)	→ Plug connector DIN EN 175301-803-A incl. cable socket with two LED for switching voltages 24 V...230 V AC/DC ±20 %, ambient temperature -20...70 °C → 4-pin-sensor plug M12 x 1
For use in potentially explosive atmospheres	Version VH...X
High pressure version made of brass on request	→ Up to 160 bar (incl. certificate)

Setpoint ranges and typical pressure drop

Nominal diameter	Thread connection D ₁	Setpoint ranges [l/min]*				Max. flow rate [l/min]
		VHS		VH3		
		Increasing flow ON	Decreasing flow OFF	Increasing flow ON	Decreasing flow OFF	
DN 8	G ¹ / ₄	2.1...2.7	1.8...2.4	1.9...2.5	1.7...2.3	45
DN 10	G ³ / ₈	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 15	G ¹ / ₂	3.4...4.2	3.0...3.8	3.2...4.0	3.0...3.8	67
DN 15	G ¹ / ₂ male**	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 15	G ³ / ₄ male**	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 20	G ³ / ₄	7.0...9.1	6.4...8.2	6.6...8.2	6.3...7.8	120
DN 25	G 1	13.5...17.0	12.0...15.5	13.0...15.5	12.5...15.0	195
DN 32	G 1 ¹ / ₄	15.5...20.5	14.5...19.0	14.5...18.0	13.5...17.0	240
DN 40	G 1 ¹ / ₂	26.5...34.5	25.5...32.5	25.0...31.0	24.0...30.0	400
DN 50	G 2	39.5...51.0	39.0...50.0	37.5...47.5	36.5...46.5	400

* Water, 20 °C, horizontal pipe, tolerance ±15 %

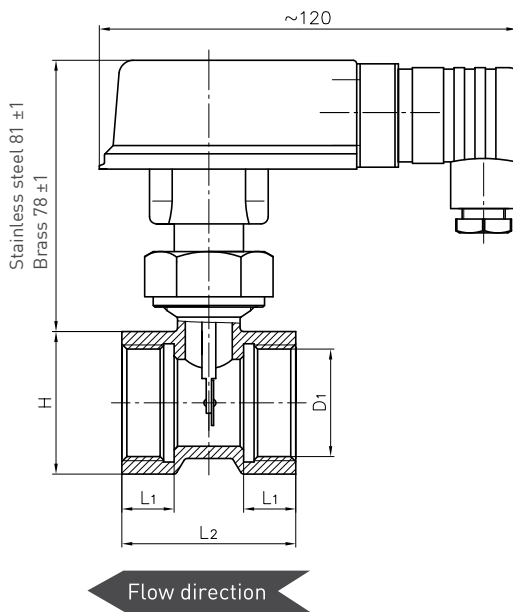
** Only available as brass version



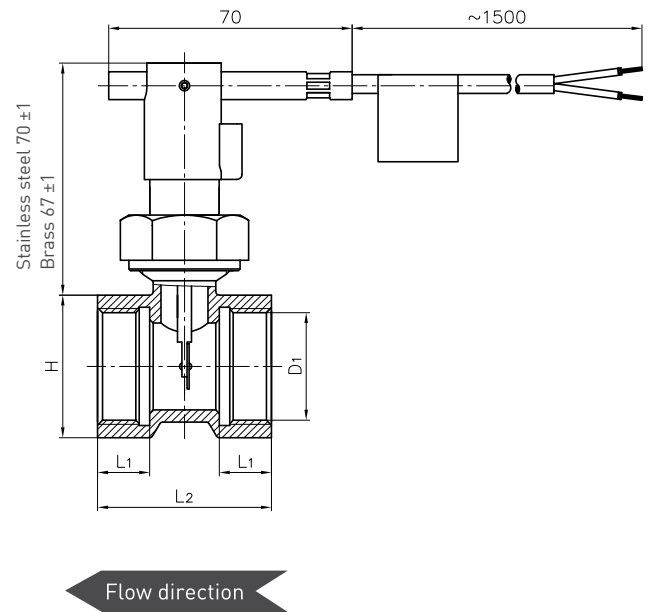
Dimensions and materials

Dimensions [mm]						
Thread connection D ₁	L ₁	L ₂	H	L ₁	L ₂	H
	Brass version			Stainless steel version		
G ¹ / ₄	11	50	27	11	50	27
G ³ / ₈	11	50	27	11	50	27
G ¹ / ₂	11	50	27	11	50	27
G ¹ / ₂ (male)	10	60				
G ³ / ₄ (male)	11	50				
G ³ / ₄	15	50	32	15	50	32
G 1	15	50	41	15	50	41
G 1 ¹ / ₄	15	50	48	15	50	46
G 1 ¹ / ₂	15	50	55	15	50	55
G 2	22	64	70	15	50	70

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	PPO Noryl GFN 3	PVDF
Rivet	Brass CW508L	Stainless steel 1.4303
Pin	Stainless steel 1.4571	
Magnet	Hard ferrite	
O-ring	NBR	