

# Flow switches made of metal

With threaded pipe tee

## Type VHS / VH3



### Technical data

<b>Switching function</b>	Contact → closes at increasing flow → opens at decreasing flow Reversing possible
<b>Pressure rating</b>	PN 25
<b>Temperature ranges</b>	
<b>Medium</b>	-25...110 °C
<b>Ambient</b>	-25...80 °C
<b>Electrical data</b>	
<b>Electrical connection</b> → VHS → VH3	Plug connector DIN EN 175301-803-A incl. cable socket 1.5 m PVC jacket cable
<b>Switching current</b>	Max. 1 A
<b>Switching voltage</b>	Max. 230 VAC, 48 VDC
<b>Rating</b>	Max. 26 VA, 20 W
<b>Degree of protection EN 60529</b>	IP65
<b>Protection class EN 60730-1</b>	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

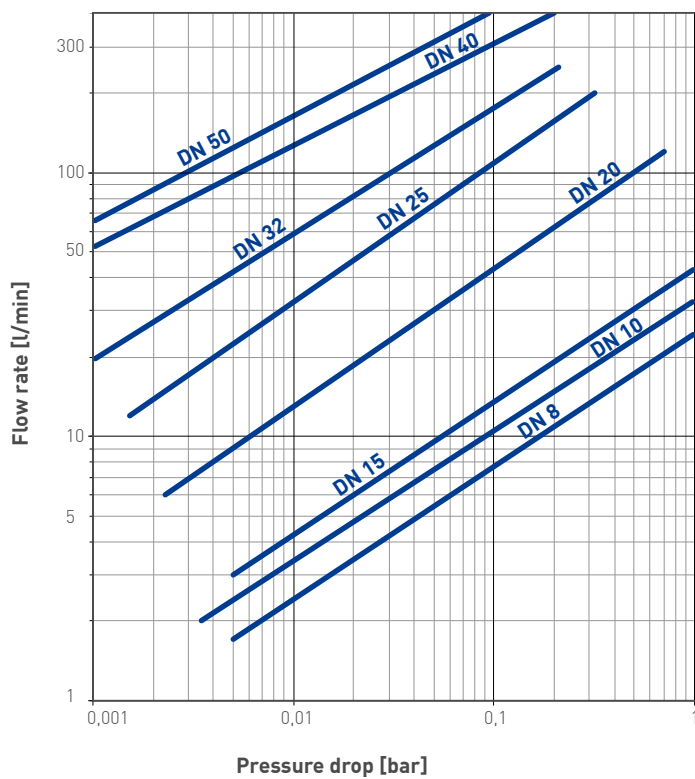
<b>Electrical connection (version VHS)</b>	→ Plug connector DIN EN 175301-803-A incl. cable socket with two LED for switching voltages 24 V...230 V AC/DC ±20 %, ambient temperature -20...70 °C → 4-pin-sensor plug M12 x 1
<b>For use in potentially explosive atmospheres</b>	Version VH...X
<b>High pressure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

## Setpoint ranges and typical pressure drop

Nominal diameter	Thread connection D <sub>1</sub>	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 <sup>1</sup> / <sub>4</sub>	2.1...2.7	1.8...2.4	1.9...2.5	1.7...2.3	45
DN 10	G <sup>3</sup> / <sub>8</sub>	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 15	G <sup>1</sup> / <sub>2</sub>	3.4...4.2	3.0...3.8	3.2...4.0	3.0...3.8	67
DN 15	G <sup>1</sup> / <sub>2</sub> male**	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 15	G <sup>3</sup> / <sub>4</sub> male**	2.5...3.2	2.2...2.9	2.4...3.0	2.1...2.8	60
DN 20	G <sup>3</sup> / <sub>4</sub>	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 <sup>1</sup> / <sub>4</sub>	15.5...20.5	14.5...19.0	14.5...18.0	13.5...17.0	240
DN 40	G 1 <sup>1</sup> / <sub>2</sub>	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 %

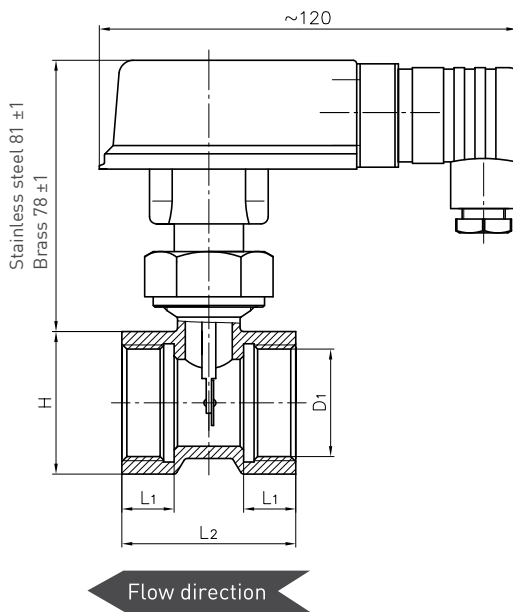
\*\* Only available as brass version



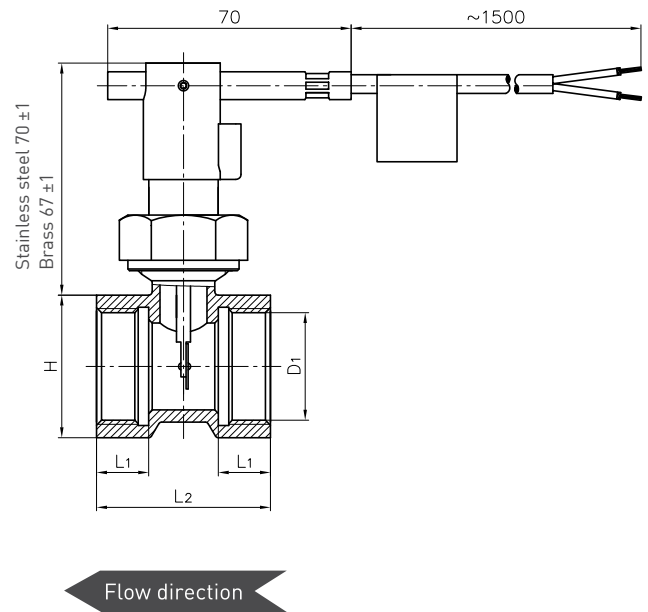
## Dimensions and materials

Dimensions [mm]						
Thread connection D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	H	L <sub>1</sub>	L <sub>2</sub>	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
<b>Body, Paddle</b>	Brass CW614N	Stainless steel 1.4571
<b>Pipe tee</b>	Brass CW617N	Stainless steel 1.4571
<b>Bushing</b>	PPO Noryl GFN 3	PVDF
<b>Rivet</b>	Brass CW508L	Stainless steel 1.4303
<b>Pin</b>	Stainless steel 1.4571	
<b>Magnet</b>	Hard ferrite	
<b>O-ring</b>	NBR	

## Order code

Order example		VHS	08	M011	7	1	I1	1
<b>Type</b>								
<b>Flow switches VHS</b>								
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			
<b>Flow switches VH3</b>								
1.5 m PVC jacket cable	VH3				1			
1.5 m PVC blue jacket cable (only for option „for use in potentially explosive atmospheres“)	VH3				3			
<b>Nominal diameter</b>	<b>Thread connection</b>							
DN 8	G $\frac{1}{4}$		08				I1	
DN 10	G $\frac{3}{8}$		10				I2	
DN 15	G $\frac{1}{2}$		15				I3	
DN 15	G $\frac{1}{2}$ male (only brass version)		15				A3	
DN 15	G $\frac{3}{4}$ male (only brass version)		15				A4	
DN 20	G $\frac{3}{4}$		20				I4	
DN 25	G 1		25				I5	
DN 32	G 1 $\frac{1}{4}$		32				I6	
DN 40	G 1 $\frac{1}{2}$		40				I7	
DN 50	G 2		50				I8	
<b>Material</b>								
Brass			M011			1		1
Stainless steel			M031			3		3
<b>Version</b>								
Standard								[ ]*
For use in potentially explosive atmospheres (Option)**								X

\* No character

\*\* Only available with blue jacket cable or with plug connector incl. cable socket

