

Flow switches | VHS, VH3

For insertion installation

US version available

Note: The US versions are separate products.
The units are not converted, but pre-configured at the factory for the respective variants.



Highlights

- Standard flow switches
- Direct installation into pipe lines DN 50...150 / pipe lines 2...6"
- Threaded adapters for tees and direct insertion into pipes
- Alternatively soldering adapter or welding adapter

Technical data		
Switching function	Contact → closes at increasing flow → opens at decreasing flow Reversing possible	
Pressure rating	PN 25	Max. 360 psi
Temperature ranges		
Medium	-25...110 °C	-13...230 °F
Ambient	-25...80 °C	-13...176 °F
Electrical data		
Electrical connection → VHS	Plug connector DIN EN 175301-803-A incl. cable socket 1.5 m PVC jacket cable / 59" PVC jacket cable	
→ VH3		
Max. switching current	1 A	
Max. switching voltage	230 VAC, 48 VDC	
Max. rating	26 VA, 20 W	
Degree of protection EN 60529	IP65	
Protection class EN 60730-1	Class II	
Approvals		
 CERTIFICATION MARK  Bauart geprüft Sicherheit Regelmäßige Produktions- überwachung www.tuv.com ID 0000069733		

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 -20...70 °C / -4...158 °F → or 4-pin-sensor plug M12 x 1
VHS / VH3	→ For use in potentially explosive atmospheres (version VH...X) max. medium temperature 100 °C / 212 °F

Setpoint ranges

Type	Process connection	Insert in Nominal diameter	Setpoint ranges [m³/h]*		Max. flow rate [m³/h]
			Increasing flow ON	Decreasing flow OFF	
VH305 / VHS05	Threaded adapter G½**	DN 50	1.9...2.7	1.8...2.6	30
		DN 80	5.0...8.0	4.9...7.9	80
		DN 100	8.3...12.5	8.2...12.4	150
		DN 150	17.5...25.0	17.4...24.9	200
VHS01	Soldering adapter / welding adapter	DN 50	3.8...4.9	3.7...4.8	30
		DN 80	9.0...14.3	8.9...14.2	100
		DN 100	13.0...18.8	12.7...18.4	150
		DN 150	33.0...46.0	32.9...45.9	200

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

** Installation into welded socket according to EN 10241, G½ female, length 15 mm

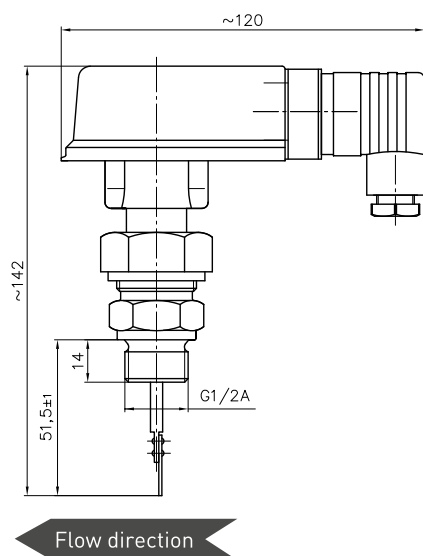
Type	Process connection	Insert in pipe size	Setpoint ranges [US gpm]*		Max. flow rate [US gpm]
			Increasing flow ON	Decreasing flow OFF	
VH305 / VHS05	Threaded adapter ½" NPT**	2"	8.7...11.9	7.9...11.4	132
		3"	22...35.2	21.6...7.9	352
		4"	36.5...55	36.1...54.6	660
		6"	77...110	76.6...110	880
VHS01	Soldering adapter / welding adapter	2"	16.7...21.6	16.3...21.1	132
		3"	39.6...62.9	39.2...62.5	440
		4"	57.2...82.7	55.9...81	660
		6"	145.2...202.4	145...202	880

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

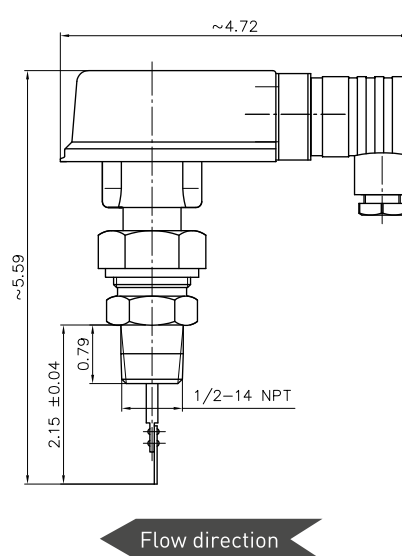
** Installation into pipes with welding socket ½" NPT female, socket length 1"

Technical drawings

VHS05

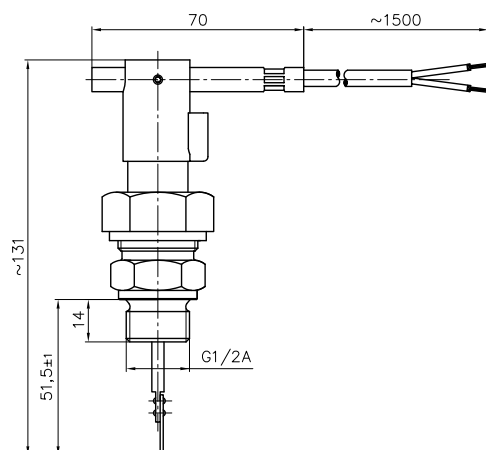


VHS05 NPT

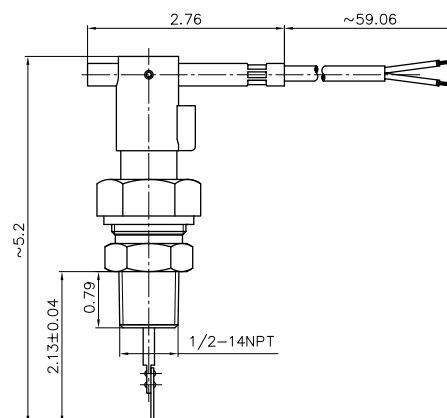


Technical drawings

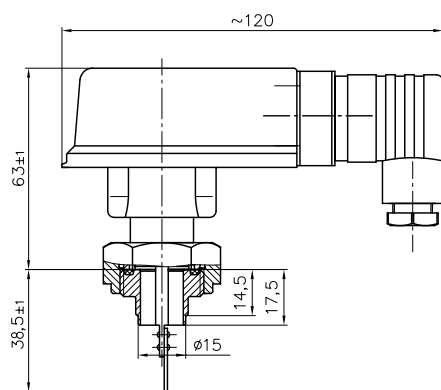
VH305



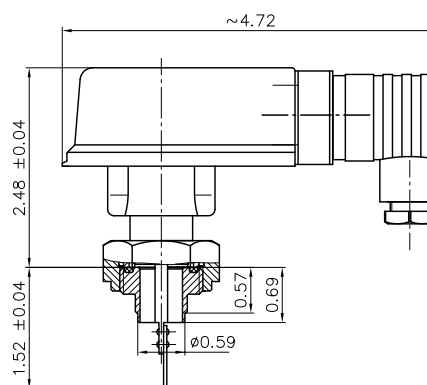
VH305 NPT



VHS01



VHS01 NPT



Materials

Materials in contact with fluid		
	Brass version	Stainless steel version
Body	Brass CW614N	Stainless steel 1.3964
Paddle	Brass CW614N	Stainless steel 1.4571
Process connection	VHS05: Brass CW614N VH305: Brass CW614N VHS01: Brass CW617N	Stainless steel 1.4571
Bushing	PPE+PS Noryl™ 30 % glass fibre reinforced	PVDF
Rivet	Brass CW508L	Stainless steel 1.4303
Pin	Stainless steel 1.4571	
Magnet	Hard ferrite	
O-ring	NBR	

Article numbers

Order code								
Type								
VHS								
Plug connector incl. cable socket (Standard)VHS		VHS		17				
Plug connector incl. cable socket with LED (option)VHS		VHS		19				
4-pin-sensor plug M12 x 1 (option)		VHS		18				
Process connection								
Threaded Adapter G½		05M0				R2		
Threaded Adapter ½" NPT		05M0				Z2		
Soldering adapter (brass) or welding adapter (stainless steel) 15 mm, NBR O-Ring		01M0				D1		
Soldering adapter (brass) or welding adapter (stainless steel) 5/8", NBR O-Ring		01M0				D2		
Material								
Brass			1		1		1	
Stainless steel			3		3		3	
Version								
Standard								()*
For use in potentially explosive atmospheres (option)**								X
Example order number		VHS	05M0	1	17	1	R2	1

* No character

** Only available with plug connector incl. cable socket

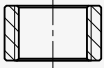
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Type	Article numbers
VHS05 Plug connector incl. cable socket, threaded Adapter G½, brass	VHS 05M0 1 17 1 R2 1

Order code								
Type								
VH305								
1.5 m PVC jacket cable		VH305M0		11		R2		
59" PVC jacket cable		VH305M0		11		Z2		
1.5 m PVC blue jacket cable (only for option „for use in potentially explosive atmospheres“)		VH305M0		13		R2		
Material								
Brass			1		1		1	
Stainless steel			3		3		3	
Version								
Standard								()*
For use in potentially explosive atmospheres (option)**								X
Example order number		VH305M0	1	11	1	R2	1	

* No character

** Only available with blue jacket cable

Order code		
Accessories	Order number	
 Welding socket according to EN 10241 G½ female thread, length 15 mm Steel S 235 JR	XVH1470	