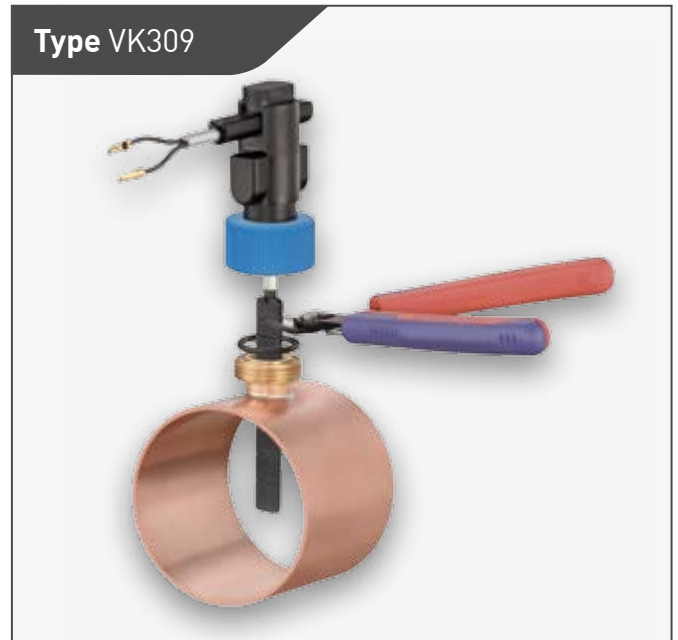


Flow switches for insertion installation

Soldering adapter with trimmable paddle



Technical data	VHS09	VK309
Switching function	Contact → closes at increasing flow → opens at decreasing flow Reversing possible	
Pressure rating	PN 25	PN 10
Temperature ranges		
Medium	-25...110 °C	-25...100 °C
Ambient	-25...80 °C	-25...70 °C
Electrical data		
Electrical connection	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

- Universal Flow switches for copper pipes \varnothing 32...88.9
- Glass fibre reinforced paddle simply to be trimmed to needed length
- Soldering adapter for copper pipes
- Easy installation due to union nut

Options	
Electrical connection (version VHS09)	→ Plug connector DIN EN 175301-803-A incl. cable socket with two LED for switching voltages 24 V...230 V AC/DC \pm 20 %, ambient temperature -20...70 °C → 4-pin-sensor plug M12 x 1

Option on request (version VK309)

- Recognized component ETL according to UL & CSA standards

For copper pipes	Paddle to be trimmed to			Setpoints [m ³ /h]*		Max. flow rate [m ³ /h]
	Paddle mark	Dimensions	Installation length L ₁	Increasing flow ON**	Decreasing flow OFF	
\varnothing 32 x 1	9	12 x 9 mm	39 mm	2.0	1.9	10
\varnothing 35 x 1	9	12 x 9 mm	39 mm	2.6	2.4	20
	15	12 x 15 mm	45 mm	1.8	1.6	13
\varnothing 35 x 1.5	9	12 x 9 mm	39 mm	2.5	2.2	18
	15	12 x 15 mm	45 mm	1.7	1.6	12
\varnothing 42 x 1.5***	9	12 x 9 mm	39 mm	3.9	3.7	30
	20	12 x 20 mm	50 mm	2.2	2.1	15
\varnothing 54 x 1.5	30	12 x 30 mm	60 mm	3.2	3.0	21
\varnothing 54 x 2	30	12 x 30 mm	60 mm	3.0	2.9	20
\varnothing 64 x 2***	15	12 x 15 mm	45 mm	8.6	7.9	53
	40	12 x 40 mm	70 mm	4.0	3.7	24
\varnothing 76.1 x 2***	15	12 x 15 mm	45 mm	13.6	12.1	80
	50	12 x 50 mm	80 mm	5.2	4.7	31
\varnothing 88.9 x 2***	30	12 x 30 mm	60 mm	10.9	10.7	67
	60	12 x 60 mm	90 mm	6.1	5.9	39

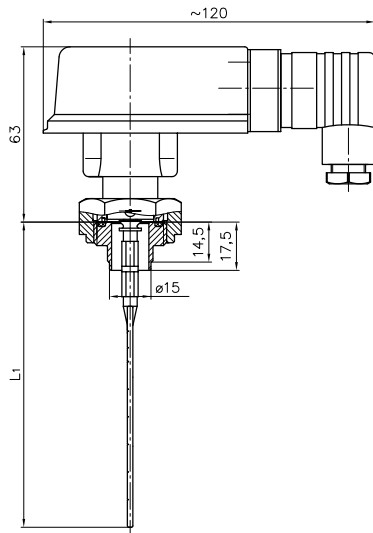
* Water, 20 °C, horizontal pipe, tolerance \pm 15 %

** Typical value

*** Values for min. and max. paddle lengths specified. Values for intermediate paddle lengths, see operating manual.

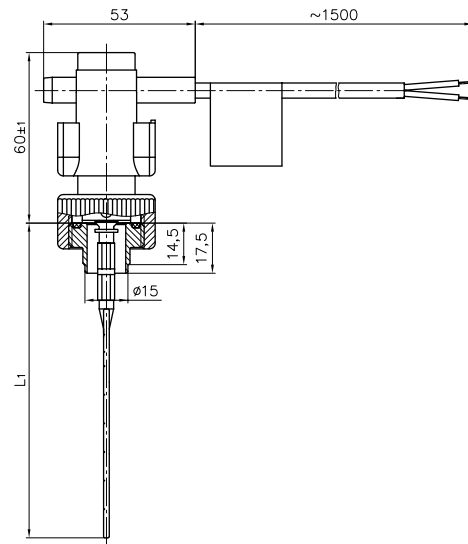
Dimensions and materials

VHS09



Flow direction

VK309



Flow direction

Materials in contact with fluid

Type	VHS09	VK309
Body	Brass CW614N	Noryl PPO GFN3
Paddle	Noryl PPO GFN3 / stainless steel	
Process connection	Brass CW614N	
Magnet	Hard ferrite	
O-ring	NBR	

Order code

Order code	
Flow switches VHS09	
Plug connector incl. cable socket (standard)	VHS09M2P171D11
Plug connector incl. cable socket with LED (option)	VHS09M2P191D11
4-pin-sensor plug M12 x 1 (option)	VHS09M2P181D11
Flow switches VK309	
1.5 m PVC jacket cable	VK309M2P10PD11

