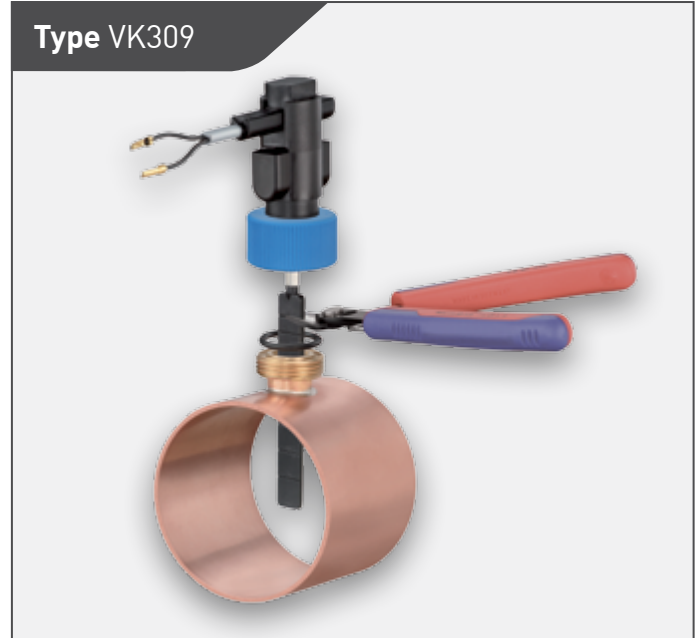
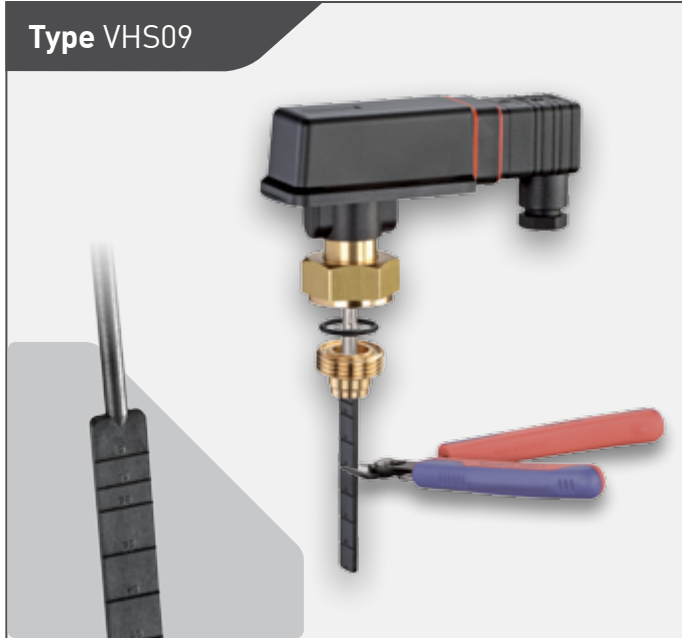





Flow switches for insertion installation

Soldering adapter with trimmable paddle



Technical data	VHS09	VK309
Switching function	Contact → closes at increasing flow → opens at decreasing flow Reversible	Contact → closes at increasing flow → opens at decreasing flow
Pressure rating	Max. 360 psi	Max. 160 psi
Temperature ranges		
Medium	-13...230 °F	-13...212 °F
Ambient	-13...176 °F	-13...158 °F
Electrical data		
Electrical connection	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		
	 	 <ul style="list-style-type: none"> • UL 508 • UL 353 • CSA C22.2#14-10

Advantages

- Universal Flow switches for copper pipes 1¼...3"
- Fully adjustable for pipe size and setpoint by trimming the paddle
- Glass fiber reinforced paddle
- Soldering adapter for copper pipes
- Easy installation due to union nut

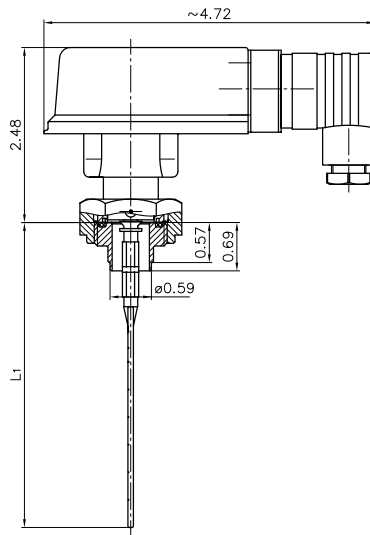
Options	
For type	See order code
VHS09	→ Plug connector DIN EN 175301-803-A incl.cable socket with two LED for switching voltages 24 V...230 V AC/DC ±20 %, ambient temperature -4...158 °C → or 4-pin-sensor plug M12 x 1
For type	On request
VK309	→ Reversed switching function

Set point ranges							
Paddle to be trimmed to							
	Paddle mark	9	15	20	30	40	50
	Installation length L ₁ [mm]	1.5	1.8	2	2.4	2.8	3.1
Nominal pipe size	Setpoints* / Max. flow rate [GPM]						
1¼"	Increasing flow ON**	10.2	7				
	Decreasing flow OFF	9.6	6.6				
	Max. flow rate	60	50				
1½"	Increasing flow ON**	16.5	11.5	8.8			
	Decreasing flow OFF	15	10.5	8.3			
	Max. flow rate	100	85	70			
2"	Increasing flow ON**		23	18.5	13.4		
	Decreasing flow OFF		21.6	17	12.5		
	Max. flow rate		150	130	85		
2½"	Increasing flow ON**		31.5	26.7	19.8	15.5	
	Decreasing flow OFF		29	24.7	18.5	14.9	
	Max. flow rate		250	200	150	120	
3"	Increasing flow ON**			48.4	36.3	28.5	23.9
	Decreasing flow OFF			45.9	34.2	26.5	22
	Max. flow rate			300	230	180	140

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

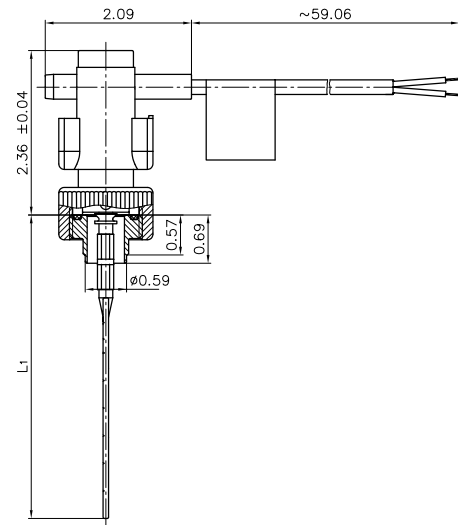
** Typical value

VHS09



Flow direction

VK309



Flow direction

Materials in contact with fluid

Type	VHS09	VK309
Body	Brass CW614N	PPE+PS Noryl™ 30 % glass fiber reinforced
Paddle	PPE+PS Noryl™ 30 % glass fiber reinforced / stainless steel	
Process connection	Brass CW614N	
Magnet	Hard ferrite	
O-ring	NBR	

Order code	
Type	
VHS09	
Plug connector incl. cable socket (standard)	VHS09M2P171D21
Plug connector incl. cable socket with LED (option)	VHS09M2P191D21
4-pin-sensor plug M12 x 1 (option)	VHS09M2P181D21
VK309	
59 inch PVC jacket cable	VK309M2P10PD21