

Flow monitors for insertion installation

Paddles interchangeable



Technical data	
Switching function	Change over contact
Pressure rating	Max. 11 bar (brass) Max. 20 bar (stainless steel)
Temperature ranges	
Medium	-40...120 °C
Ambient	-40...85 °C (10...90 % rH)
Storage and Transportation	-40...85 °C, < 95 % rH
Electrical data	
Change over contact max. contact rating	250 VAC, max. 15 A, 8 A inductive load
Degree of protection EN 60529	IP65
Protection class EN 60730-1	Class I

Benefits

- Insertion installation into existing pipes
- One unit covers a wide range of pipe sizes (DN 32...200)
- Two versions (set point ranges)
- Adjustable set point
- Micro switch for high contact rating
- Max. pressure rating 20 bar (stainless steel)
- Max. pressure rating 11 bar (brass)

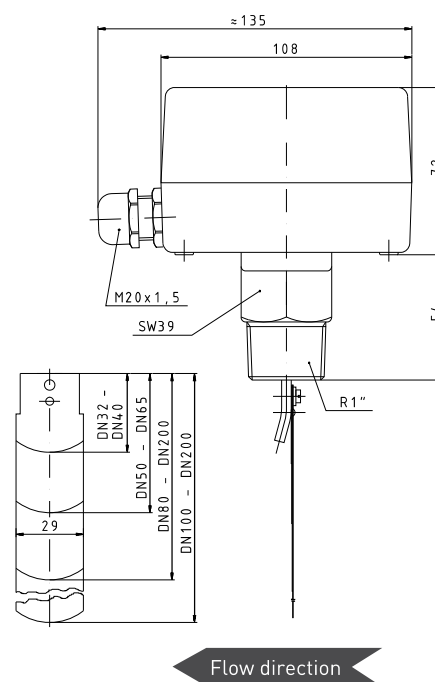
Nominal diameter	Paddle to select**	Set point ranges [m³/h]*				Max. flow rate [m³/h]
		Standard Setpoint		Low Setpoint		
		Increasing flow ON	Decreasing flow OFF	Increasing flow ON	Decreasing flow OFF	
DN 32	29 x 34 mm	1.3...3.0	0.8...2.8	0.9...1.6	0.25...1.4	3.6
DN 40	29 x 34 mm	1.7...4.0	1.1...3.7	1.2...2.2	0.5...1.6	4.8
DN 50	29 x 60 mm	3.1...6.1	2.2...5.7	2.3...4.1	0.9...3.6	7.3
DN 65	29 x 60 mm	4.0...7.0	2.7...6.5	3.1...5.5	1.2...4.9	8.4
DN 80	29 x 89 mm	6.2...11.4	4.3...10.7	4.9...8.2	2.1...7.4	13.7
DN 100	29 x 167 mm***	8.0...18.4	6.1...17.3	7.7...13.0	3.3...11.6	22.1
DN 125	29 x 167 mm***	12.9...26.8	9.3...25.2	11.5...19.6	5.0...17.5	32.2
DN 150	29 x 167 mm***	16.8...32.7	12.3...30.6	14.1...23.9	6.1...21.4	39.2
DN 200	29 x 167 mm	46.5...94.2	38.6...90.8	36.5...61.8	21.7...55.3	113

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

** Higher set points selectable by use of smaller paddle sizes.

*** Shortened

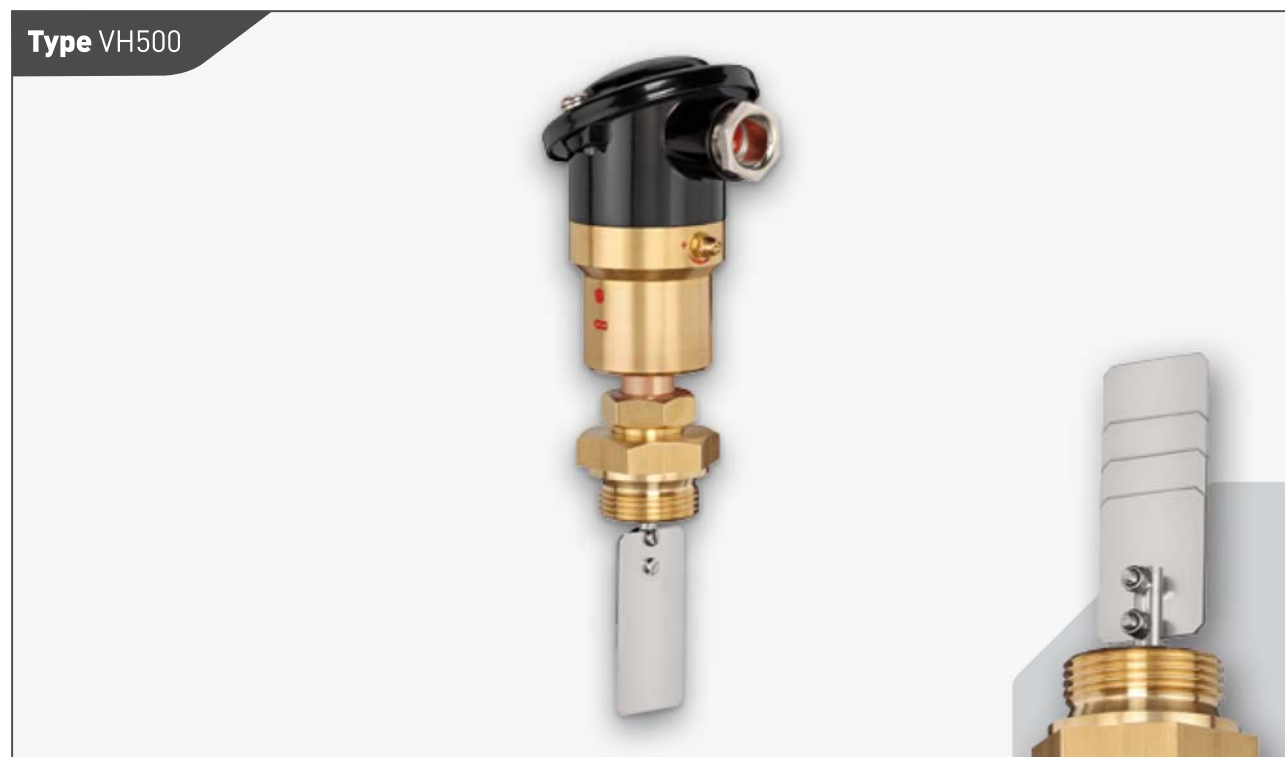
Materials in contact with fluid		
	Brass version	Stainless steel version
Body	Brass CW617N	Stainless steel 1.4404
Paddle	Stainless steel 1.4404	
Lever	Brass CW617N	Stainless steel 1.4404
Teeth lock washer	Stainless steel 1.4301	
Fastening screw	Stainless steel 1.4301	
Bellow	Bronze CW453	
Flat gasket	Betaflex 77	



Order example	VH780J4	1	1LS10110
Type			
VH780	VH780J4		
Material			
Brass		1	
Stainless steel		3	
Setpoint			
Standard			1LS10110
Low			2LS10110

Flow monitors for insertion installation

Paddles interchangeable, for marine applications



Technical data	
Switching function	Change over contact
Pressure rating (Test pressure)	Max. 6 bar (10 bar) Max. 10 bar (15 bar)
Temperatures	
Medium	Max. 100 °C
Ambient	Max. 85 °C
Electrical data	
Max. contact rating	24 VDC, 5 A resistance load 4 A inductive load 60 VDC, 1 A resistance load 0,5 A inductive load 250 VAC, 10 A resistance load 10 A inductive load
Degree of protection EN 60529	IP54
Protection class EN 60730-1	Class I
Approvals	
	Germanischer Lloyd, Type Approval Certificate No. 89824-94HH and 94970-10HH

Benefits

- Germanischer Lloyd Type Approval
- Suitable for water, oil, etc.
- Insertion installation into pipes or pipe tees DN 25...DN 50 or bigger
- Four paddles in different sizes included, selection in accordance to the pipe size
- Robust construction
- Vibration proofed to 4 g
- Wide set point ranges universal applicable
- Set point adjustment by paddle size selection and by adjustment screw
- Micro switch with high contact rating

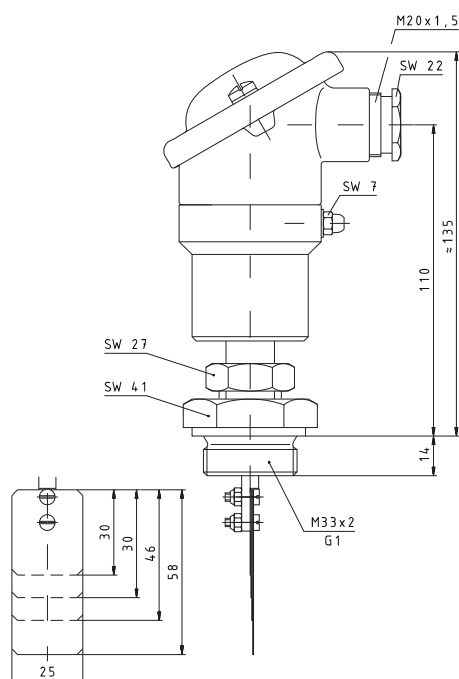
Setpoint ranges, dimensions and order code

Size of pipe tee	Paddle to select**	Set point ranges [m³/h]*	
		Increasing flow ON	Decreasing flow OFF
DN 25	25 x 30 mm	1,0...1,25	1,05...1,2
DN 32	25 x 38 mm	1,7...2,05	1,6...1,95
DN 40	25 x 46 mm	2,2...2,55	2,1...2,45
DN 50	25 x 58 mm	3,25...3,85	3,15...3,75

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

** Higher set points selectable by use of smaller paddle sizes

Set points for bigger pipe sizes on request

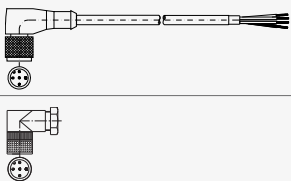


Materials in contact with fluid

Body, process connection	Brass 2.0401
Bellow system	Stainless steel 1.4571
Paddles	Stainless steel 1.4310
Flat gasket	HD 300
O-ring	NBR

Order example		VH500	N	I3451R41
Type				
VH500		VH500		
Pressure rating				
6 bar			N	
10 bar			R	
Process connection				
G1				I3451R41
M33 x 2				M3451M41

Accessories

Accessory part	Length	Order code	
Connection cable with 4-pin cable socket M12 x 1, angle type molded lead, sheathing material PUR, shielded, (T _{max} = 80 °C) - UL-approval	3 m 5 m 10 m	XVT 2053 XVT 2009 XVT 2070	
4 pin cable socket M12 x 1 angle type, unassembled		VT 1331	

