

# Installation instructions for Paddle Flow Switch Serie VH 780

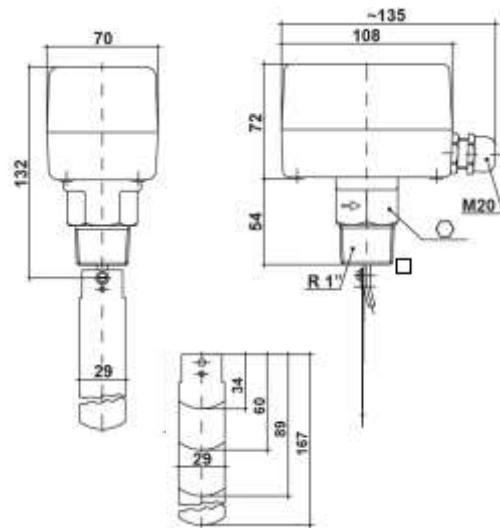
NU 175

Before installation, check whether the material of the Paddle Flow Switch is suitable for the medium to be monitored.

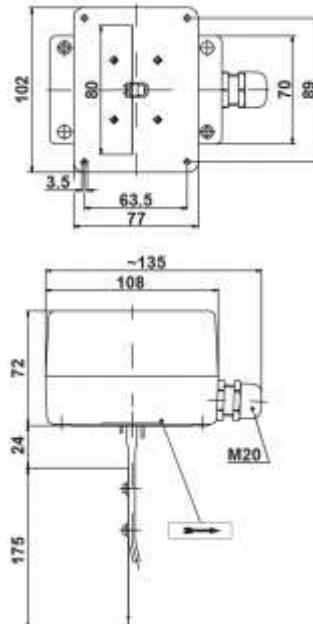
## Material specifications for parts in contact with the medium

Designation	Brass	Stainless steel
Connection	CW617N (CuZn40Pb2)	1.4541 (316 L)
Paddle pole	CW607N (CuZn38Pb1)	1.4541 (316 L)
Bellows	CW453 (CuSn8)	1.4404 (Stainless steel)
Paddle		Stainless steel 1.4404
Switching housing		ABS/PC
Switching housing cap		ABS

Types: SVH780J411 / SVH780J412  
SVH780J431 / SVH780J432



Type: SVH780V112A



## General notes on installation:

- A. Any installation position for the paddle flow switch is possible.
- B. In case of installation in vertical pipelines, the weight of the paddle should be compensated for by adjusting the switching point.
- C. If possible, install the paddle flow control switch in horizontal pipes.
- D. There is an arrow on the paddle flow switch. It is essential that this arrow points in the flow direction. And that the switch enclosure runs parallel to the pipe axis.
- E. The calming sections should be at least 5 x DN both upstream and downstream of the paddle flow control switch.
- F. The paddle flow control switch must be installed so that the paddle does not impact the pipe wall.



## WARNING! No safety component!

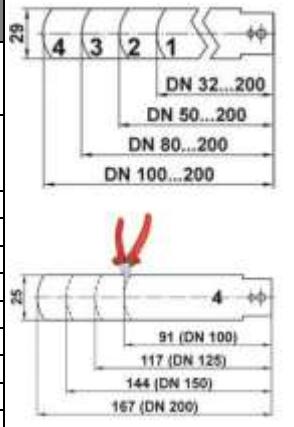
The SVH 780 are not safety components in accordance with Directive 2006-42-EG (Machine Directive).

Never use the SVH 780 as a safety component.

**Setpoint adjustment:**

Turning the adjustment screw clockwise increases the switch-off point. The supplied paddle allows the unit to be adapted to suit various pipe nominal diameters and also permits the switching point to be adjusted.

Setpoint table						
DN	Paddle N°.	Dimension** Paddle	Standard- Setpoints * SVH 780 J411 / SVH 780 J431		Standard- Setpoints * SVH 780 J412 / SVH 780 J432	
			ON m³/h (H2O)	ON m³/h (H2O)	ON m³/h (H2O)	ON m³/h (H2O)
32	1	29x34	1,3 ... 3,0	0,8 ... 2,8	0,9...1,6	0,25 ... 1,4
40	1	29x34	1,7 ... 4,0	1,1 ... 3,7	1,2...2,2	0,5 ... 1,9
50	1+2	29x60	3,1 ... 6,1	2,2 ... 5,7	2,3...4,1	0,9 ... 3,6
65	1+2	29x60	4,0 ... 7,0	2,7 ... 6,5	3,1...5,5	1,2 ... 4,9
80	1+2+3	29x89	6,2 ... 11,4	4,3 ... 10,7	4,9...8,2	2,1 ... 7,4
100	1+2+3+4	29x91, gekürzt	8,0 ... 18,4	6,1 ... 17,3	7,7...13,0	3,3 ... 11,6
125	1+2+3+4	29x117, gekürzt	12,9...26,8	9,3 ... 25,2	11,5 ... 19,6	5,0 ... 17,5
150	1+2+3+4	29x144, gekürzt	16,8 ... 32,7	12,3 ... 30,6	14,1 ... 23,9	6,1 ... 21,4
200	1+2+3+4	29x167	46,1 ... 94,2	38,6 ... 90,8	36,5 ... 61,8	21,7 ... 55,3



\* All Setpoints are valid for operating pressures up to 11 bar.

\*\* Higher Setpoints by selecting a smaller paddle possible.

**Technical data and type plate:**

The technical data of customised versions can deviate from the details in these instructions. Please observe the details on the type plate.

Technical data		Type plate
Operating temperature (medium)	-40...120 °C	 www.citec.fr  Art.No. : SVH780J411LS10110 max. 15(8)A, 24...250 VAC Tmax (ambient) = 85°C Tmax (medium) = 120°C pmax = 11 bar IP 65
Ambient temperature	-40...85 °C	
Storage / transport temperature	-40...+85 °C, <95% r.F	
max. operating pressure: - Brass - Stainless steel	11 bar 20 bar	
Degree of protection	IP 65	

**Electrical data:**

Change over contact, max. contact rating: 24...250 VAC; max.15 A ; 8 A inductive load

Voltage Current	5 V	10 V	12 V	24 V	30 V	48 V	120 V	250 V
AC	0,07 A	0,1 A	0,15 A	15 (8) A				
DC	0,05 A	0,05 A	0,07 A	2 A	5 A	5 A	5 A	-/-

**General notes on installation type SVH780V112A:**

- A. The indicated switch point ranges for type SVH780V112A refer to the edge parameter atmospheric pressure and ambient temperature.
- B. The switch point adjustment range from 2,5 to 8 m/s can be reached by a supplementary modification of the paddle according the opposite figure.
- C. For seating the connecting flange an Abil-flat gasket will be supplied, too.

Technical data		Material	
Setpoints (Air)	1,0 ... 5,0 m/s	Paddle	Stainless steel 1.4301
Setpoints (Air, paddle modified)	2,5 ... 8,0 m/s	Sheet plate	Galvanized steel
Connection	Flange	Gasket Flange	Abil-Flachdichtung

