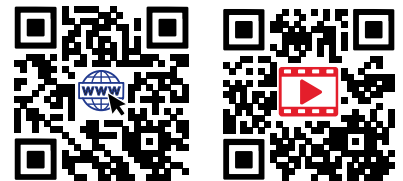


# Turbine flow sensors // VTY15



## Highlights

- Space-saving due to compact design
- Pressure loss optimized
- Low wear and extremely long service life due to high-quality bearings
- High measuring accuracy, largely independent of the installation position due to integrated flow straighteners

## Technical data

<b>Material pipe section</b>	Brass
<b>Flow range</b>	1...45 l/min (60...2.700 l/h)
<b>Accuracy</b>	±(1 % of range + 0.5 % of reading)
<b>Repeatability</b>	±1 %
<b>Signal output</b>	From 0.8 l/min (48 l/h)
<b>Medium temperature</b>	0...90 °C (non-freezing)
<b>Ambient temperature</b>	0...70 °C
<b>Pressure rating</b>	PN 16
<b>Nominal diameter</b>	DN 15
<b>Process connection</b>	G ¼ male thread
<b>Sensor</b>	Hall effect sensor
<b>Output signal</b>	Square wave frequency signal, NPN open collector
<b>Pulse duty ratio</b>	50:50
<b>Pulse rate / K-factor</b>	234 pulses/l
<b>Electrical connection</b>	80 mm single wires with Molex Mini-Fit® Jr. connector (part number 0039014036) optional: 0.5 m PVC cable or 1 m PVC cable
<b>Power supply</b>	4.5...24 VDC
<b>Current consumption</b>	Typ. 1.6 mA

# Approvals

## Drinking water approvals

**KTW-BWGL:** Product hygiene suitability for drinking water according to the 1+ system with external monitoring, [Certificate no. Z-346843-21-Hy112 Rev.01](#)

**WRAS** (approved product), [Certificate no. 2012341](#)

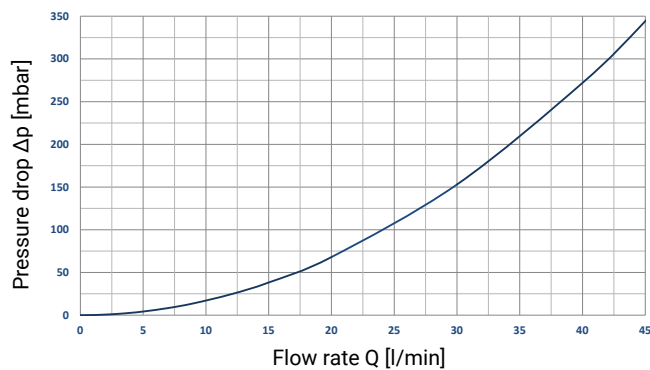
**ACS** (Attestation de conformité sanitaire), [Certificate no. 22 ACC LY 578](#)

**Kiwa Regulation 4** (KUKreg4) Certification, [Certificate no. 2012725](#)



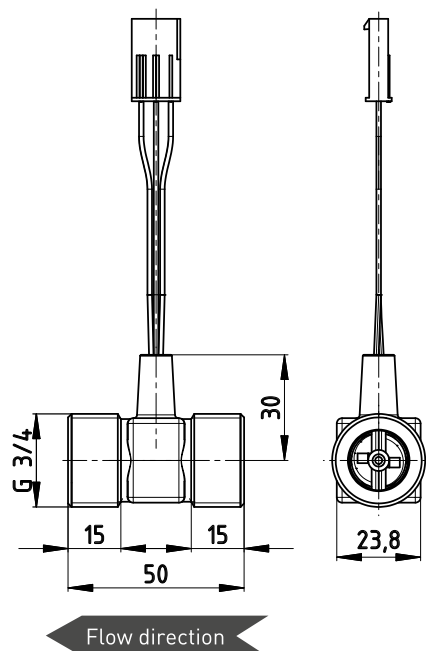
## Typical pressure drop

### Typical pressure drop

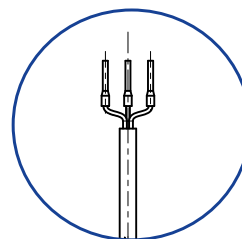


## Technical drawings

### VTY15



### Alternative electrical connection

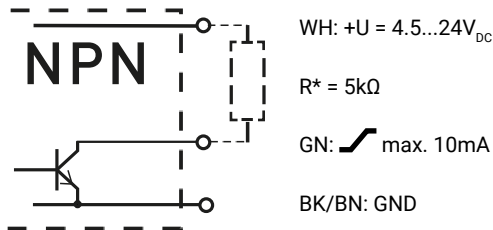


# Materials

Materials in contact with media	
Pipe section	Messing CW617N-DW
Turbine cage	PPE+PS Noryl™ 30 % glass fiber reinforced
Rotor	PPE+PS Noryl™ 30 % glass fiber reinforced
Magnet	Hard ferrite
Shaft	Stainless steel / hard metal
Axial bearing	Sapphire
Radial bearing	PEEK
Locking ring	Stainless steel

## Wiring // Pin assignment

### Wiring

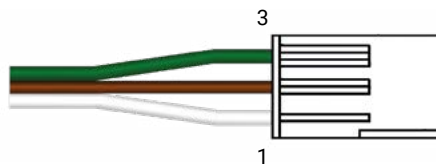
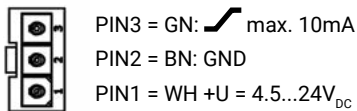


\* Recommended pull-up resistance R ~ 5kΩ

### Colour code

WH = white  
 GN = green  
 BK = black (single wire)  
 BN = brown (PVC cable / Molex)  
 R = resistance

### Pin assignment Molex Mini-Fit® plug



## Article numbers

Order code		
<b>Type</b>		
VTY15	VY1545MAHN	
<b>Electrical connection</b>		
80 mm single wires with Molex Mini-Fit® Jr. plug connector		X1A4
0.5 m PVC cable		05A4
1 m PVC cable		10A4
<b>Example order number</b>	<b>VY1545MAHN</b>	<b>X1A4</b>

Note minimum order quantities.