

## Turbine flow sensors // VTY20



### VTY20

#### Your advantages

Series	VTY20
	<ul style="list-style-type: none"> <li>• Low wear and extremely long durability due to high quality bearing</li> <li>• Practically no deviation in mass production due to fixed pulse rate, wide measuring span (up to 1:60),</li> <li>• High measuring accuracy, mostly independent of fitting position due to integrated flow straightener</li> </ul>

#### Technical data

<b>Material pipe section</b>	Brass	Stainless steel
<b>Flow range</b>	1...60 l/min	
<b>Accuracy</b>	±1 % of range ±1 % of reading	
<b>Repeatability</b>	±1 %	
<b>Signal output</b>	From 0.8 l/min	
<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 20	
<b>Process connection</b>	G 1 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>	119 pulses/l	122 pulses/l
<b>Electrical connection</b>	80 mm single wire with Molex Mini-Fit® Jr. plug connector (part number 39-01-4036) optional: 0.5 m PVC cable	2 m PVC cable
<b>Power supply</b>	4.5...24 VDC	
<b>Pressure drop</b>	0.33 bar (at Q = 60 l/min)	

#### Approvals



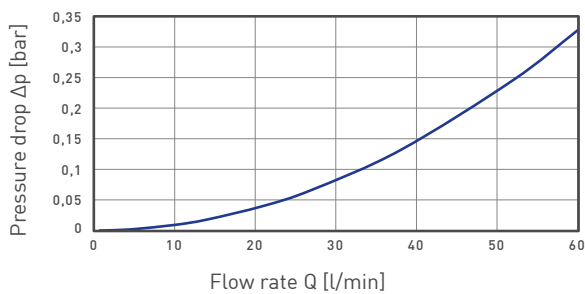
#### Available for:

VY2060MKHNX1N5  
VY2060MKHN05N5

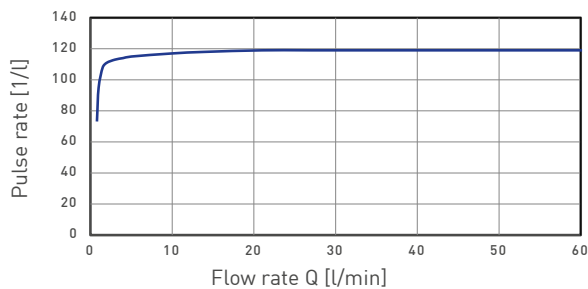
Version with G-thread on request

Plastic parts and O-Ring comply with KTW-guidance or the Elastomer Guideline of the German Federal Environmental Agency

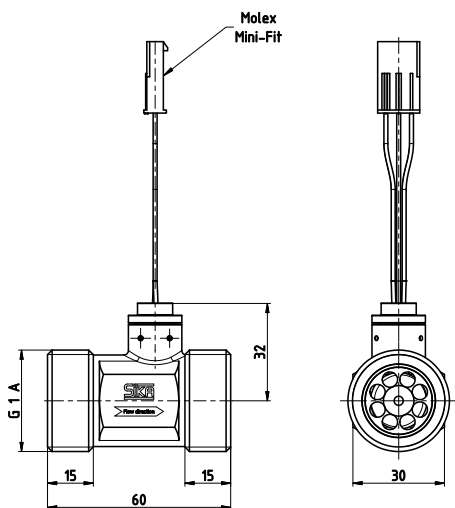
**Typical pressure drop**



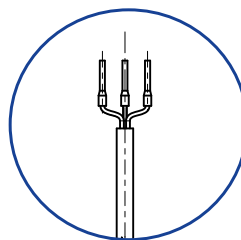
**Characteristic curve**



**VTY20**



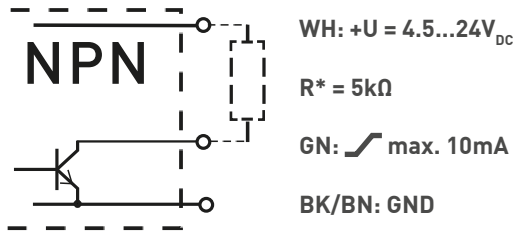
**Alternative electrical connection**



**Materials in contact with fluid**

<b>Pipe section</b>	Brass CW617N or stainless steel 1.4308
<b>Turbine cage</b>	PPE+PS Noryl™ 30 % glass fibre reinforced
<b>Rotor</b>	PPE+PS Noryl™ 30 % glass fibre reinforced
<b>Magnet</b>	Hard ferrite
<b>Shaft</b>	Stainless steel 1.4305 / Tungsten carbide
<b>Axial bearing</b>	Sapphire
<b>Radial bearing</b>	PEEK Victrex™
<b>O-ring</b>	EPDM

## Wiring

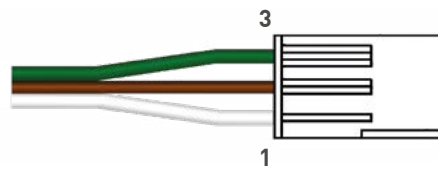
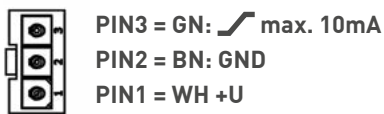


## Colour code

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

\* Recommended pull-up resistance R ~ 5kΩ

## Pin assignment Molex Mini-Fit® plug



Order code		
<b>Type</b>		
VTY20, brass	VY2060MAHN	
VTY20, stainless steel	VY2060VAHN	
<b>Electrical connection</b>		
80 mm single wire with Molex Mini-Fit® Jr. plug connector		X1A5
0.5 m PVC cable		05A5
2 m PVC cable		20A5
<b>Example order number</b>	<b>VY2060MAHN</b>	<b>X1A5</b>

