

Turbine flow sensors // VTY20

US version available

Note: The US versions are separate products.
The units are not converted, but pre-configured at the factory for the respective variants.



Highlights

- Low wear and extremely long durability due to high quality bearing
- Practically no deviation in mass production due to fixed pulse rate, wide measuring span (up to 1:60),
- High measuring accuracy, mostly independent of fitting position due to integrated flow straightener

Technical data		
Material pipe section	Brass	Stainless steel
Flow range	1...60 l/min (60...3.600 l/h)	
Flow range	0.26...16 US gpm (15.9...951 US gph)	
Accuracy	±1 % of range ±1 % of reading	
Repeatability	±1 %	
Signal output	From 0.8 l/min (48 l/h)	
Signal output	From 0.21 US gpm (12.7 US gph)	
Medium temperature	0...90 °C (non-freezing)	
Medium temperature	32...194 °F (non-freezing)	
Ambient temperature	0...70 °C	
Ambient temperature	32...158 °F	
Pressure rating	PN 16	
Pressure rating	Max. 232 psi	
Nominal diameter	DN 20	
Nominal pipe size	¾"	
Process connection	G 1 male thread	
Process connection	1" NPT male thread	
Sensor	Hall effect sensor	
Output signal	Square wave - frequency signal, NPN open collector	

Technical data

Technical data		
Material pipe section	Brass	Stainless steel
Pulse duty ratio	50:50	
Pulse rate / K-factor	119 pulses/l	122 pulses/l
Pulse rate / K-factor	450 pulses/gallon	462 pulses/gallon
Electrical connection	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
Electrical connection	3.2" single wire with Molex Mini-Fit® Jr. plug connector (part number 39-01-4036) optional: 19.7" PVC cable	78.7" PVC cable
Power supply	4.5...24 VDC	

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. 2206802](#)

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

Kiwa Regulation 4* (KUKreg4) Certification, [Certificate no. 2203738 \(1\)](#)

* not available for process connection NPT and stainless steel version

** not available for stainless steel version



NSF/ANSI 372, [Certificate no. 8492](#)

NSF/ANSI 61, [Certificate no. N-8491](#)

Available for:

VY2060MKHNX1N5

VY2060MKHN05N5

Version with G-thread on request

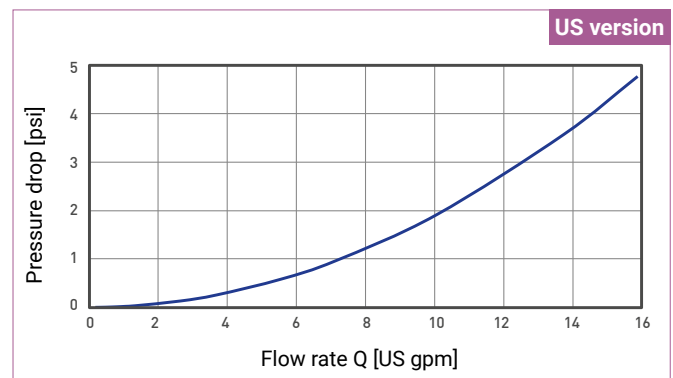
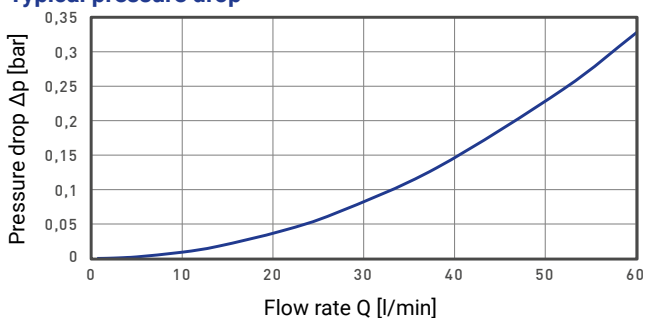
NSF/ANSI 372

NSF/ANSI 61



Typical pressure drop

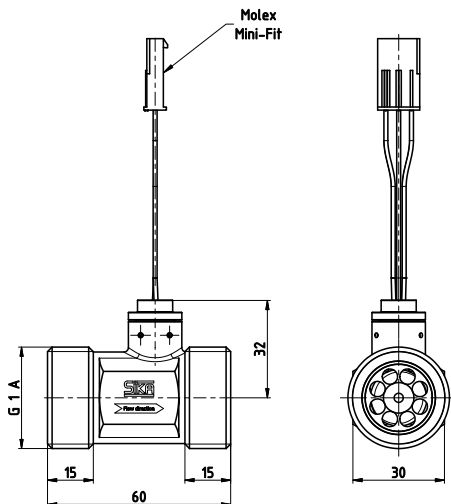
Typical pressure drop



Technical drawings

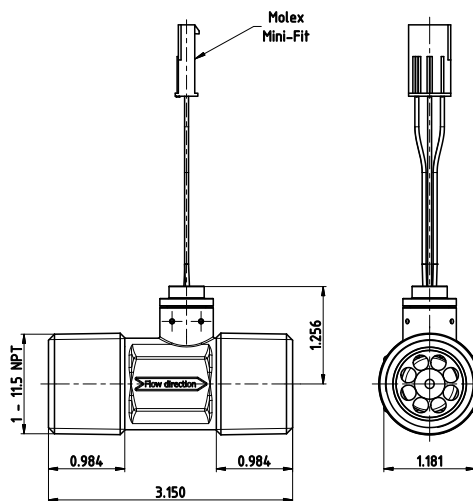
Threaded version

All Dimensions in mm

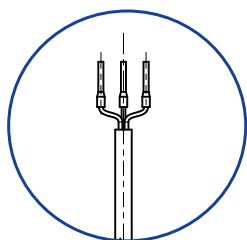


NPT version

All Dimensions in inch



Alternative electrical connection

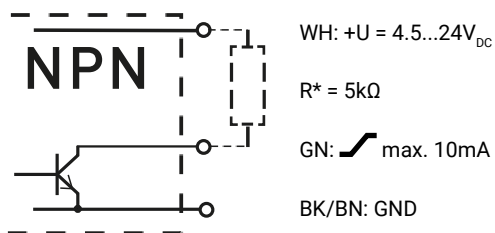


Materials

Materials in contact with fluid			
VTY20	Stainless steel	G thread, brass	NPT thread, brass
Pipe section	Stainless steel 1.4308	Brass CW617N	Brass CW724R
Turbine cage	PPE+PS Noryl™ 30 % glass fibre reinforced		
Rotor	PPE+PS Noryl™ 30 % glass fibre reinforced		
Magnet	Hard ferrite		
Shaft	Stainless steel / hard metal		
Axial bearing	Sapphire		
Radial bearing	PEEK Victrex™		
O-ring	EPDM		

Wiring // Pin assignment

Wiring

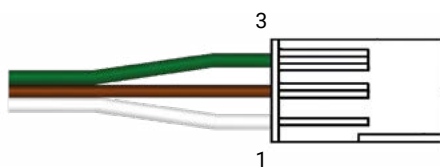
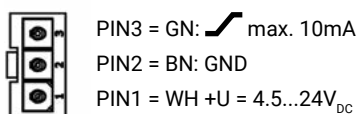


Colour code

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



Article numbers

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

Note minimum order quantities.

Article numbers // US versions

Order code		
Type		
VTY20, brass	VY2060MKHN	
VTY20, stainless steel	VY2060VAHN	
Electrical connection		
3.2" single wire with Molex Mini-Fit® Jr. plug connector		X1N5
19.7" PVC cable		05N5
78.7" PVC cable		20N5
Example order number	VY2060MKHN	X1N5

Note minimum order quantities.