

VVX

TEESING

WWW.TEESING.COM



VVX40

## Your Advantages

Series	VVX
	<ul style="list-style-type: none"> <li>• No mechanical wear → Flow sensor for liquids with no moving parts</li> <li>• Highest strength and performance → Rugged brass body</li> <li>• Completely encapsulated piezoceramic sensor to detect the vortices → No direct contact with the medium</li> </ul>

Technical data	VVX32	VVX40
Nominal diameter	DN 32	DN 40
Process connection	G 1½-ISO 228 male, incl. O-rings	G 2-ISO 228 male, incl. O-rings
Inner diameter	Ø 32 mm	Ø 40 mm
Medium	Water and aqueous solutions	
Pressure rating	PN 16	
Degree of protection EN 60529	IP65***	
<b>Flow measuring</b>		
Measuring range	20...200 l/min	30...400 l/min
Accuracy	±2 % of range*, deviations with high viscous media	
Repeatability	±0.5 % or ±1 %, see temperature ranges ambient	
<b>Temperature measuring</b>		
Measuring range	0...90 °C	
Accuracy	±1 k	
<b>Temperature ranges</b>		
Medium	5...90 °C, -20...90 °C**	
Ambient	5...70 °C → Repeatability ±0,5 %, -20...5 °C → Repeatability ±1 %	
<b>Electrical data</b>		
Electrical connection	5-pin plug connector M12 x 1	
Power supply	8...30 V DC or 5 V DC (±5 %) or 12...24 VDC****	
Current consumption	< 15 mA	

WWW.TEESING.COM | +31 70 413 07 50

Three different versions available:

- Frequency output (1)
- Analogue 0.5...3.5 V and frequency output (2)
- Analogue 0...10 V or 4...20 mA and frequency output (3)

Frequency output 1	VVX32	VVX40
Output signal flow	Frequency signal, square wave, pulse duty ratio 50:50, signal current max. 20 mA	
Pulse rate	100 1/l	50 1/l
Output signal temperature	Pt1000 2 wire, class B or NTC 10.74k, B 0/100 3450 or none	

Analogue output 2	VVX32	VVX40
Output signal flow	0.5...3.5 V	
Scaling	0...200 l/min	0...400 l/min
Voltage rate → 0.5...3.5 V	0.0150 V / l/min	0.0075 V / l/min
Output signal temperature	Voltage signal 0.5...3.5 V corresponds to -25...100 °C or Pt1000 2 wire, class B or NTC 10.74k, B 0/100 3450 or none	

Analogue output 3	VVX32	VVX40
Output signal flow	0...10 V or 4...20 mA	
Scaling	0...200 l/min	0...400 l/min
Voltage rate → 0...10 V	0.05000 V / l/min	0.02500 V / l/min
Current rate → 4...20 mA	0.08000 mA / l/min	0.04000 mA / l/min

\* Test conditions:

- Test medium water
- Media temperature 20...30 °C
- Inlet pressure 7...10 bar
- Defined inlet and outlet pipes (see operating manual)

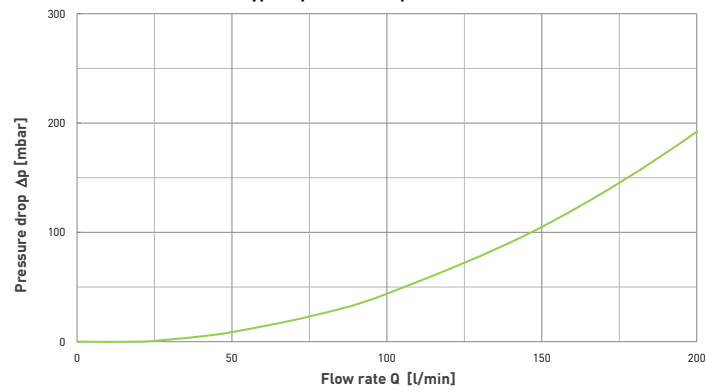
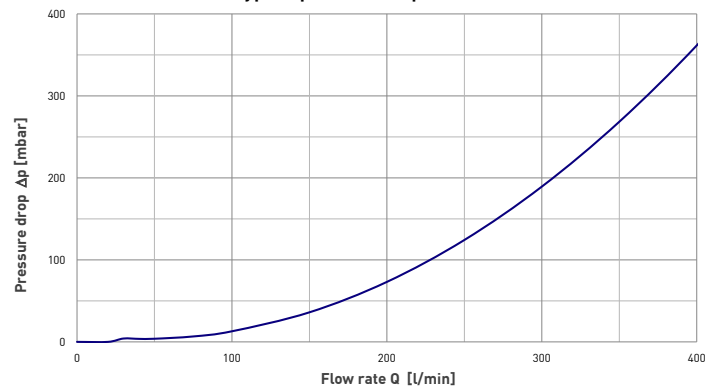
\*\*\* With attached cable socket only

\*\*\*\* Only available for output signal flow 4...20 mA and 0...10 V

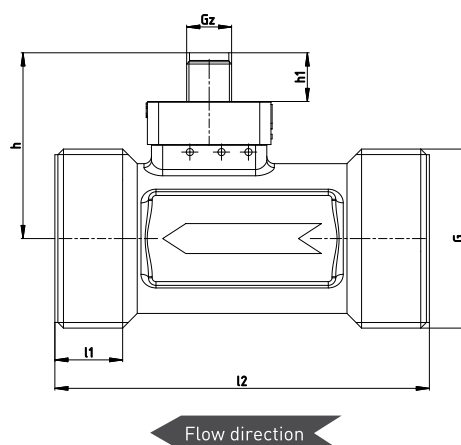
\*\* Temperature cycle test: -20 °C / 70 °C, 0 % rH, cycle time 1.5 h, temperature gradient approx. 2.5 K/min, hold time at -20 °C and 70 °C 10 min each, 90 cycles: no failures

**TEESING**

WWW.TEESING.COM

**Typical pressure drop VVX32****Typical pressure drop VVX40**

## V VX threaded versions



Dimensions [mm]	h	h1	l1	l2	G	Gz
V VX32	49.6	13	18	100	G 1½	M12 x 1
V VX40	53.6	13	18.2	110	G 2	M12 x 1

## Materials in contact with media

Body /tube	Brass CW617N-DW
Sensor	ETFE Tefzel®
O-rings	EPDM
Immersion sleeve	Brass CW617N-DW
Bluff body	PPS Fortron® 40 % glass fibre reinforced

**TEESING**

WWW.TEESING.COM

**Version frequency output**

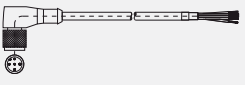

Order code						
Nominal diameter						
DN 32	VXDDS		B			51U
DN 40	VXEES		P			52X
Power supply						
8...30 V DC		G			1	
5 V DC		N			2	
Output signal temperature						
Pt1000				RRRP		
NTC 10.74K				RRRN		
None				0000		
Example order number		VXDDS	G	B	RRRP	1 51U

**Version analogue output (0.5...3.5 V) and frequency output**

Order code						
Nominal diameter						
DN 32	VXDDSNB	UI				51U
DN 40	VXEESNP	UM				52X
Output signal temperature						
0.5...3.5 V				U1		
Pt1000				RP		
NTC 10.74K				RN		
none				00		
Power supply						
8...30 V DC					1	
5 V DC					2	
Example order number		VXEESNP	UM	RP	1	52X

**Version analogue output (0...10 V or 4...20 mA) and frequency output**

Order code						
Nominal diameter						
DN 32	VXDDSGB					I00351U
DN 40	VXEESGP					M00352X
Output signal flow						
0...10 V				V		
4...20 mA				A		
Example order number		VXDDSGB	A			I00351U

Order code				
Type	Accessories		Length	Order number
VWX32 VWX40		Connection cable with 5 pin cable socket M12 x 1, angle type molded lead 5 x 0.34 mm <sup>2</sup> , sheathing material PVC (Tmax = 80 °C)*	1 m	XVWX040
			2 m	XVWX051
			3 m	XVWX039
			5 m	XVWX041
			10 m	XVWX042
		Connection cable with 5 pin cable socket M12 x 1, molded lead 5 x 0.34 mm <sup>2</sup> , sheathing material PVC, 4 pin Molex MicroBlade wire-to-board housing, (Tmax = 80 °C)	1.5 m	XVWX065

\* Connection cable with UL approval on request