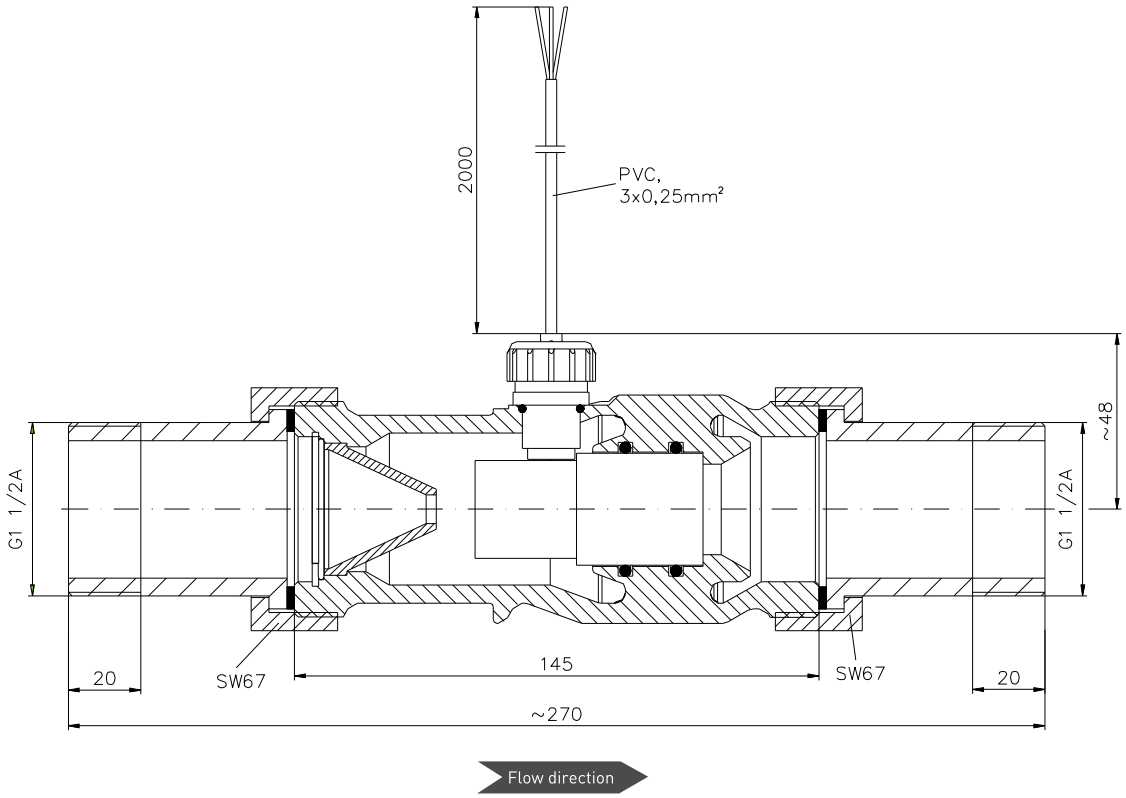
Turbotron VT 40

VTH / VTM / VTI 40

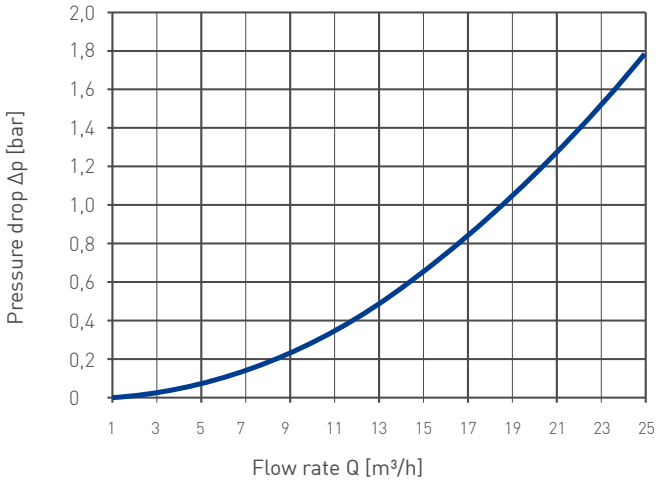
Type VTH 40

Type	VTH 40 economy-priced type for standard and serial applications	VTM 40 for higher pressure, plug connection	VTI 40 magnet-free rotor, plug connection
Material pipe section	Brass	Brass	Brass
Measurement range	0.4...25 m³/h (6.7...417 l/min)		
Accuracy	±7 % of the measured value between 0.4...3 m³/h ±5 % of the measured value between 3...25 m³/h		
Reproducibility	±0.5 %		
Signal output	From 0.28 m³/h		
Medium temperature	Max. 85 °C	Max. 85 °C	Max. 60 °C
Pressure rating	PN 10	PN 50	PN 10
Nominal Diameter	DN 40		
Process connection	G 2 male thread, supplementary screwed connection recommended		
Sensor	Hall effekt sensor	Hall effekt sensor	Inductive proximity switch
Output signal → Pulse rate / K-factor → Resolution → Signal shape → Signal current	 26.6 pulses/l 37.6 ml/pulse Square wave signal NPN open collector Max. 19 mA	 26.6 pulses/l 37.6 ml/pulse Square wave signal NPN open collector Max. 19 mA	 26.6 pulses/l 37.6 ml/pulse Square wave signal PNP open collector Max. 200 mA
Electrical connection	2 m PVC cable, screened (T_{max} = 75 °C)	4 pin plug connector M12 x 1	
Power supply	10...30 VDC optional 4.5...26.5 VDC	6.5...24 VDC short circuit proof and reverse polarity protected	10...30 VDC
Degree of protection	IP54		
Max. particle size in the medium	< 0.63 mm		
Integrated screen filter	Flat filter, mesh size 0.63 mm		

Dimensions and typical pressure drop



Pressure drop



Materials, options and order code

	Medium contacting	VTH 40 MS-410	VTM 40 MS-410	VTI 40 MS-410
Pipe section	✓	Brass CW724R		
Turbine cage	✓	PPO Noryl GFN 1630V		PPO Noryl GFN 3V
Rotor	✓	PPO Noryl GFN 1520V		PPO Noryl GFN 2V
Rotor assembly	✓	Hard ferrite magnets		Stainless steel 1.4305
Shaft	✓	Stainless steel 1.4539		
Bearing	✓	Sapphire / PA		
Housing for Hall sensor	✓	PPO Noryl GFN 1630 V	Brass, CW602N/CW614N	PA66-natural
O-ring	✓	EPDM		
Flow guiding cone	✓	POM		
Screen filter	✓	Stainless steel 1.4301		
Retaining ring	✓	Bronze		

Options	
Turbine flow transmitter, analog output 4...20 mA	Description, see page 108
Turbine flow switch (contact)	Description, see page 109
Version for local display TD 32500	Description, see page 114

Order example			**VT4025MS**	**HN**	**P000F**	**E***
Type						
VT 40			VT4025MS			
Version						
VTH	Standard	10...30 VDC		HN		
	Option	4.5...26.5 VDC		HK		
VTM				MN		
VTI				IP		
Electrical connection						
Cable (only VTH)					P000F	
4 pin connector M12 x 1 (only VTI, VTM)					S000F	
Options						
Electronics						
Including transducer 4...20 mA						
→ Corresponds with 0...150 l/min						E
→ Corresponds with 0...250 l/min						F
→ Corresponds with 0...400 l/min						G
Switching output VE						6
Switching output VE with pulse output						7
Version for local display TD 32500 (display must be ordered separately)						4

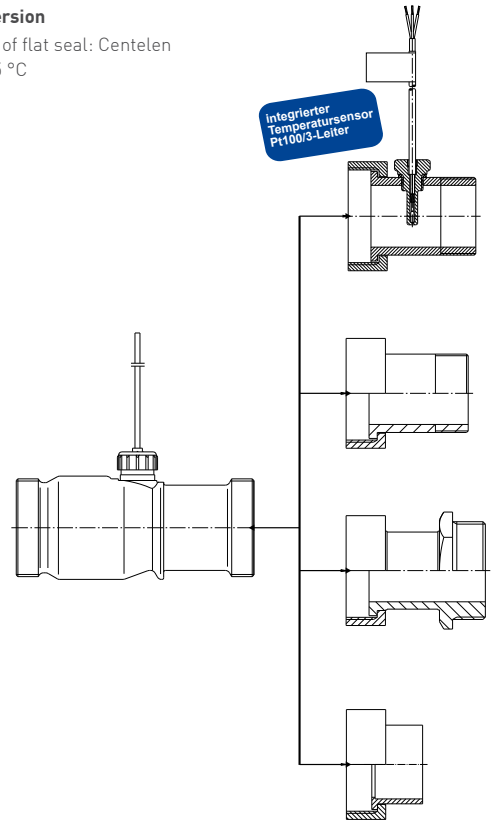
* If you do not require any of the options, digits of the order code do not apply.

Accessory

Connection adapters Turbotron VT 40

Supplied piecewise including required seals.

Brass version
Material of flat seal: Centelen
T_{max} = 85 °C



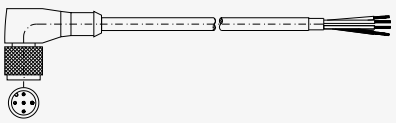
Screw coupling
with temperature sensor
G 1½-ISO 228
Order code VT1311

Screw coupling
R 1½-DIN EN 10226-1 2004-10
Order code VT40Z00000002

Screw coupling
G 2-ISO 228
Order code VT40Z00000001

Soldering coupling
Ø42 mm
PN 16
Order code VT1313

Connection cable Turbotron VT 40

Connection cable	Length	Order code	
Connection cable for turbine flow sensor with cable socked M12 x 1 molded lead, 4 pin, shielded, sheathing material PUR (T_{max} = 70 °C) UL-approval	3 m 5 m 10 m	XVT 2053 XVT 2009 XVT 2070	
4 pin cable socket M12 x 1 angle type unassembled		VT 1331