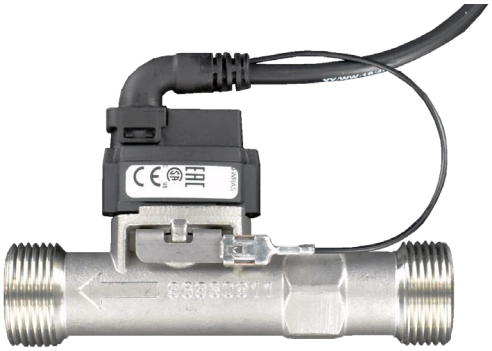
Flow sensors for liquids FVA 645-GVxQT5
Variant in stainless steel without any moving parts, with integrated temperature measuring



- Measuring section in stainless steel
- Application in systems with laminar flow, no pressure surges, no air pockets, no suspended solids
- Without any moving parts
- Integrated temperature measuring
- Low pressure loss
- Wide temperature range
- High-speed reaction time
- Using with water
- For heat output measurement in heating systems and cooling plant

Technical Data:

Flow	
Measuring principle	Pressure pulsation Kármán vortex street
Measuring range	see variants
Accuracy	using water as medium at 0 to +100 °C ±1.5 % of final value
Resolution	see variants
Reaction time (63 %)	< 3 s
Temperature	
Measuring range	0 to +100 °C
Accuracy	±1 K at +15 to +90 °C ±2 K at 0 to +100 °C
Resolution	0.1 K
Reaction time (63 %)	<0.25 second under flow conditions 50 % of final value
Process connection	2x male thread see variants
Pressure	10 bar
Pressure loss	0.1 bar, typical under flow conditions, 50 % of final value

Suitable conditions	
Media	Water, Viscosity < 2 mm²/s) and conductivity >2 µS/cm
Temp. of medium	0 to +100 °C
Ambient temperature	-25 to +60 °C
Ambient humidity	up to 95 % RH, non-condensing
Electrical connections	
Output signal	2x 0.5 to 3.5 V (4.1 V)
Power supply	5 VDC (±5 %), <10 mA via ALMEMO® connector
Connection	Sensor with 2.9-meter connecting cable and ALMEMO® connector
Fitting length	see variants
Materials (in contact with media) Corrosion-resistant coating EPDM, PPS, PPA 40-GF	
Pipe piece	Stainless steel 1.4408; (inside pipe PPA 40-GF)

! Note: The sensor can only be operated by plugging DIRECTLY onto an ALMEMO® device.
(NOT with extension cables ZA9060VKx or ZA9090VKCx).

Variants

Sensor for flow rate and temperature over a measured section, including ALMEMO® connecting cable, 2.9 meters

Measuring range	ALMEMO® Resolution	Process connection	Fitting length	Order no.
1 to 18 l/min	0.01 l/min	G 3/4“ male thread	ca. 110 mm	**FVA645GV18QT5**
2 to 40 l/min	0.01 l/min	G 3/4“ male thread	ca. 110 mm	**FVA645GV40QT5**
5 to 100 l/min	0.1 l/min	G 1“ male thread	ca. 129 mm	**FVA645GV100QT5**
10 to 200 l/min	0.1 l/min	G 1 1/4“ male thread	ca. 137.5 mm	**FVA645GV200QT5**

DAkkS accredited calibration KV91xx, flow, for probes, see chapter „Calibration certificates“.
The DAkkS accredited calibration fulfills the requirements of DIN EN ISO/IEC 17025 for test equipment.

11/2025 • We reserve the right to make technical changes.