

SCHMIDT® Flow Sensor

SS 20.015

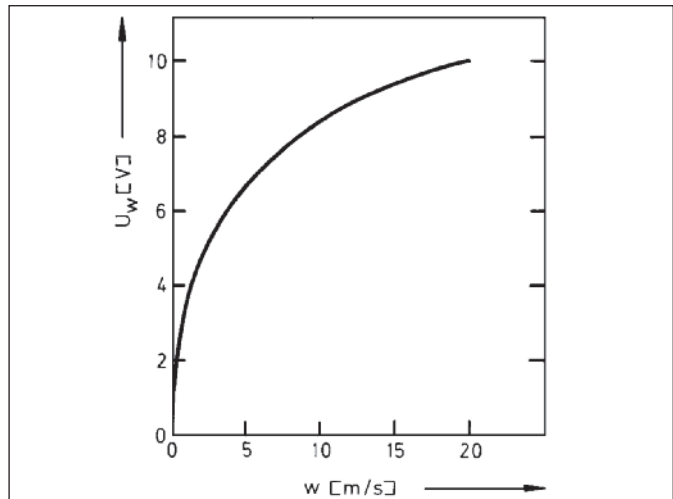
SS 20.016



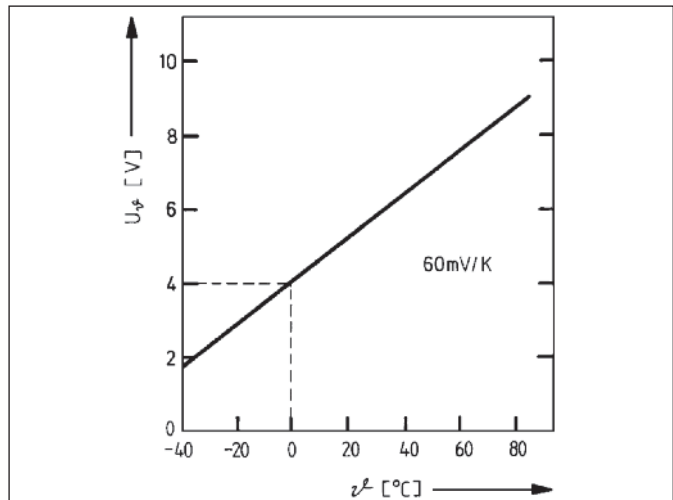
Technical data

Measuring range	flow (w_m) temperature	0 ... 20 m/s -40 ... +85 °C
Operating temperature	electronics sensor tip	-20 ... +50 °C -40 ... +85 °C
Humidity range		0 ... 95 % RH
Operating pressure	atmospheric overpressure	700 ... 1300 hPa (SS 20.015) 0 ... 10 bar (SS 20.016)
Measuring sensitivity	flow temperature	non linear 60 mV/K related to 4 V at 0 °C
Lower detection limit		0.06 m/s
Reproducibility	flow temperature	±2 % ±0.5 K under flow conditions
Relative measurement tolerance		±(0.12 m/s + 4.5 %) of measurement value
Response time (t_{90})	flow	1 s (step from 0 to 5 m/s)
Temperature-dependence (flow)	sensor tip electronics	typ. -0.005 %/°C of measured voltage level referred to a nominal temperature of 20 °C 0 % at a nominal temperature of 20 °C, max ± 5 % of measured voltage level at 20 °C in the temperature measuring range
Humidity dependence		not measurable up to approx. 30 °C max. ±5 % of measurement value within humidity range referred to 55 % RH at 80 °C
Flow-angle characteristics		independent of orientation in the longitudinal axis, compensated within a flow-angle range from -45 ° to +45 °
Output voltage	flow temperature	0...10 V 0...10 V, 4 V at 0 °C
Load resistance (permissible)		≥ 10 kΩ
Supply voltage		24 V DC ± 20 %
Current consumption		100 mA max.
Mounting		hexagonal lock nut on M18 external thread, length 20 mm
Electrical connection		cable 4 x 0.14 mm² pigtail with core end sleeves
Cable length		5 m
Cable length (permissible)		15 m
Housing		glass fibre reinforced PBT
Dimensions	housing sensor tip sensor tube	Ø 32 x 66 (mm) Ø 9 x 41 (mm) Ø 9 mm
Mounting length	L	90 / 160 / 360 / 500 mm
Weight by mass		ca. 100 g (L = 160 mm)
Protection type		IP 65 (housing) IP 67 (sensor head + tube)

Flow characteristics



Temperature characteristics



Mounting instructions

