

# INLINE Flowmeter for Continuous Flow Measurement

SE30

## For use with fitting S030, DN15-50 mm

- Turn & Lock bayonet fitting isolates sensor from media
- Economic integration in pipe systems
- 3-wire frequency version for direct connection to PLC (PNP and NPN)
- Connection to Bürkert evaluators in remote versions



Please see fitting S030

Unique bayonet style flow meter constructed from an SE30 sensor and an S030 flow fitting. Perfect for neutral, solid free liquids. A hall-effect sensor produces a square wave frequency proportional to the flow rate.

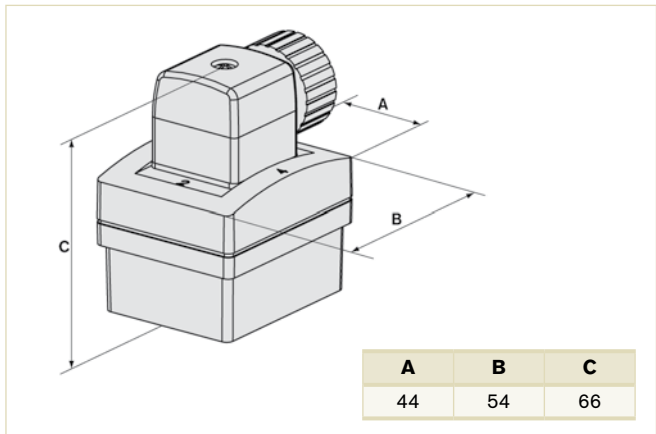
### Technical Data (Standard)

General data	
<b>Compatibility</b>	With fittings S030 (see corresp. datasheet)
<b>Materials</b>	
Housing, cover, male fixed conn.	PC
Cable plug / seal / screws	PA / NBR / Stainless steel
<b>Wetted parts materials</b>	
Fitting, sensor armature	Brass, stainless steel 1.4404/316L, PVC, PP, PVDF
Paddle wheel	PVDF
Axis, bearing / Seal	Ceramics / FKM or EPDM (depending on Sensor-Fitting version)
<b>Electrical connection</b>	Cable plug EN 175301-803 (Type 2508) (included in delivery)
<b>Connection cable</b>	max. 1.5 mm <sup>2</sup> cross section; max. 50 m length, shielded
Complete device data (fitting + electronic module)	
<b>Pipe diameter</b>	DN06 to DN65
<b>Measuring range</b>	0.3 to 10 m/s
<b>Medium temp. with fitting in</b>	
PVC / PP	0 to 50°C / 0 to 80°C
Stainless steel, brass, PVDF	-15 to 100°C
<b>Medium pressure max.</b>	PN10 (with plastic fitting) PN16 (with metal fitting) (PN40 on request, see S030 data sheet)
<b>Viscosity / Pollution</b>	300 cSt. max. / max. 1% (Size of particles 0.5 mm max.)
<b>Measurement error</b>	
Teach-In	±1% of Reading <sup>1)</sup> (at the teach flow rate value)
Standard K-factor	±2.5% of Reading <sup>1)</sup>
<b>Linearity</b>	±0.5% of F.S.* <sup>1)</sup>
<b>Repeatability</b>	±0.4% of Reading <sup>1)</sup>
Environment	
<b>Ambient temperature</b>	-15 to + 60°C (5 to 140°F) (operating and storage)
<b>Relative humidity</b>	≤ 80%, without condensation

\* F.S. = Full scale (10 m/s)

<sup>1)</sup> Under reference conditions i.e. measuring fluid = water, ambient and water temperature = 20°C (68°F), applying the minimum inlet and outlet pipe straights, matched inside pipe dimensions.

### Envelope Dimensions [mm] (see datasheet for details)



Electrical data	
<b>Operating voltage</b>	12 - 36 V DC filtered and regulated (via Bürkert transmitter the device is connected for "Low Power" version)
<b>Current consumption</b>	with sensor
Hall version	≤ 30 mA
Hall "Low power" version	≤ 0.8 mA
<b>Output: Frequency</b>	
Hall version	2 transistors NPN and PNP, open collector, max. 100 mA, frequency: 0 to 300 Hz; duty cycle 1/2 ± 10% NPN output: 0.2-36 V DC PNP output: supply voltage
Hall "Low Power" version	1 transistor NPN, open collector, max. 10 mA, frequency: 0 to 300 Hz; duty cycle 1/2 ± 10%
<b>Dielectric strength</b>	2300 V AC
<b>Reversed polarity of DC</b>	Protected
Standards and approvals	
<b>Protection class</b>	IP65 with connector plugged-in and tightened
Standard and directives	
EMC	EN 61000-6-2, 61000-6-3
Pressure	Complying with article 3 of §3 from 97/23/CE directive.*
Vibration	EN 60068-2-6
Shock	EN 60068-2-27

## Technical Data (Standard)

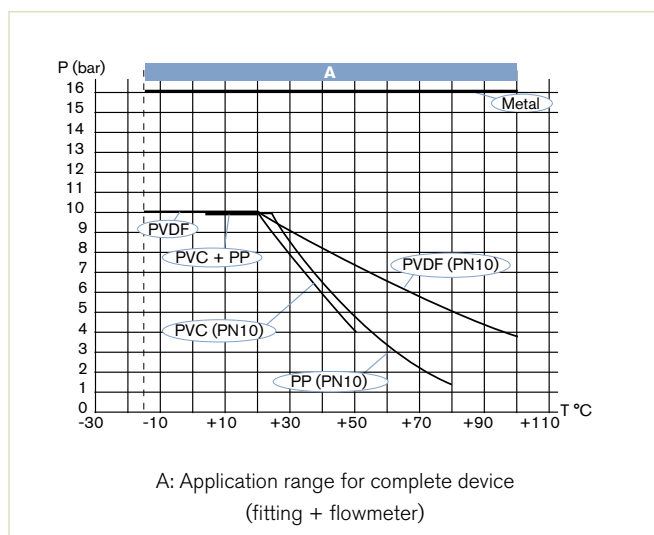
\* For the 97/23/CE pressure directive, the device can only be used under following conditions (dependent on max. pressure, pipe diameter and fluid).

Type of fluid	Conditions
Fluid group 1, §1.3.a	DN ≤ 25 only
Fluid group 2, §1.3.a	DN ≤ 32 or DN > 32 and PN*DN ≤ 1000
Fluid group 1, §1.3.b	PN*DN ≤ 2000
Fluid group 2, §1.3.b	DN ≤ 200

## Options

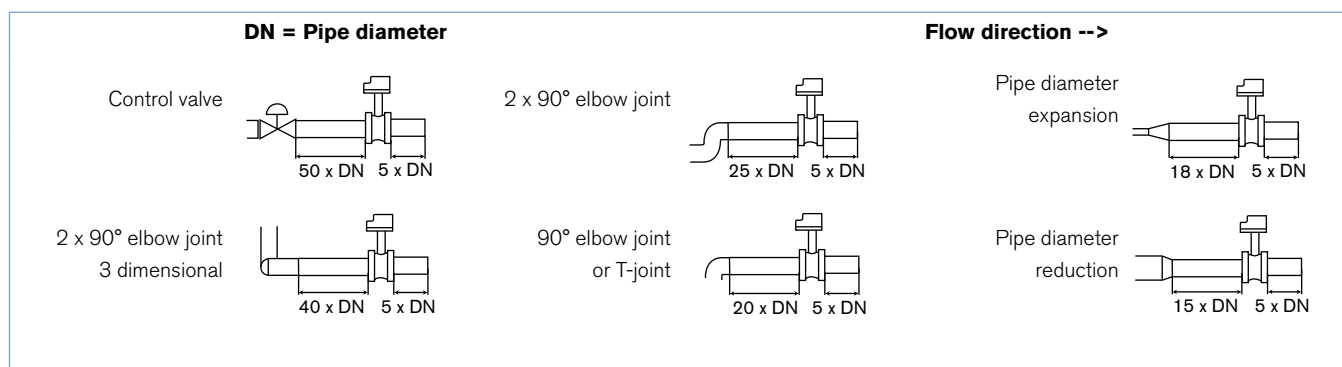
- AS-i Connection
- Hygienic clamp and ASME weld end connections
- ANSI flange connection
- PVDF and PP fittings.
- High flow fittings (8020) to DN350 mm
- Various sealing materials
- Individual calibration certificate

## Pressure/Temperature Diagram



## Installation

EN ISO 5167-1 prescribes the inlet and outlet distances that must be observed when installing fittings in pipe lines to achieve calm flow conditions. Below you will find the most important layouts that could lead to turbulence in the flow, and the associated prescribed minimum inlet and outlet distances. Make sure that the measuring point is steady, to ensure good measuring conditions



## Ordering Chart

Description	Item no.
Hall	423 913
Hall (use with 8025)	423 914
Meter for High Temperatures *	449 694

\*see separate datasheet 8030, for high temperatures

**Note:** The electronic module, SE30 and the fitting, S030 must be ordered separately