

## SS400120

### Flow sensors • Sensors for water

Sensor flow, calorimetric, Ø40mm 73long, G1/4", 24V DC, PNP NO, M12 plug connector 4-pin, V4A, pressure resistance 100bar, manual setting

including Sealing, Screwdriver



The function of the flow sensor is based on the calorimetric principle. The sensor is heated by a few degrees Celsius from the inside compared to the flow medium into which it protrudes. If the medium flows, the heat generated in the sensor is dissipated by the medium. The temperature generated in the sensor is measured and compared with the temperature of the medium, which is also measured. The flow condition for each medium can be derived from the temperature difference obtained. Applications for these sensors include monitoring cooling systems, ventilation systems, dry running of pumps and monitoring the presence of liquid or gas flows.

#### Electrical features

Number of switching outputs	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	400 mA
Readiness delay	15000 ms
Setting procedure	Manual adjustment   Potentiometer
No-load current	70 mA
Number of pins	4
Reaction time	2000 ms
Residual ripple	20 %
Voltage drop	2 V
Measurement principle	calorimetric
Operating voltage (DC)	19,2 - 28,8 V
ardSOCA_ElektrischerAnschluss	M12 4-pin plug connector
ardSOCA_Betriebsspannung	19-29VDC
ardTEEL_Temperaturgradient	250K/min (>0.6m/s)
ardTEEL_Schutzfunktionen	Reverse polarity protection   Short circuit protection

**Mechanical features**

Type of process connection	G1/4 inch
Design	Cylinder plain
Pressure resistance	100 bar
Diameter	40 mm
Thread length	25 mm
Length	73 mm
Medium temperature	-20 - 80 °C
Measuring range of flow velocity with water	0,01 - 1,5 m/s
Measuring range of flow velocity with oil	0,03 - 3 m/s
Wrench size	19 mm
Degree of protection (IP)	IP67
Housing material	Stainless steel 1.4571
Sensing element material	Stainless steel 1.4571
Ambient temperature	-20 - 80 °C
ardSOCA_Abmessungen	Ø40mm, 73mm long

**Other features**

Reference medium / object	Oil
ardTE00_Anwendungen	Hydraulic applications

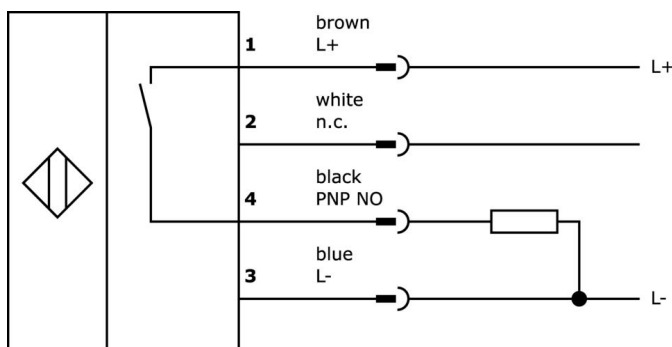
**Classification**

ETIM 8	EC002580 Flow monitoring device
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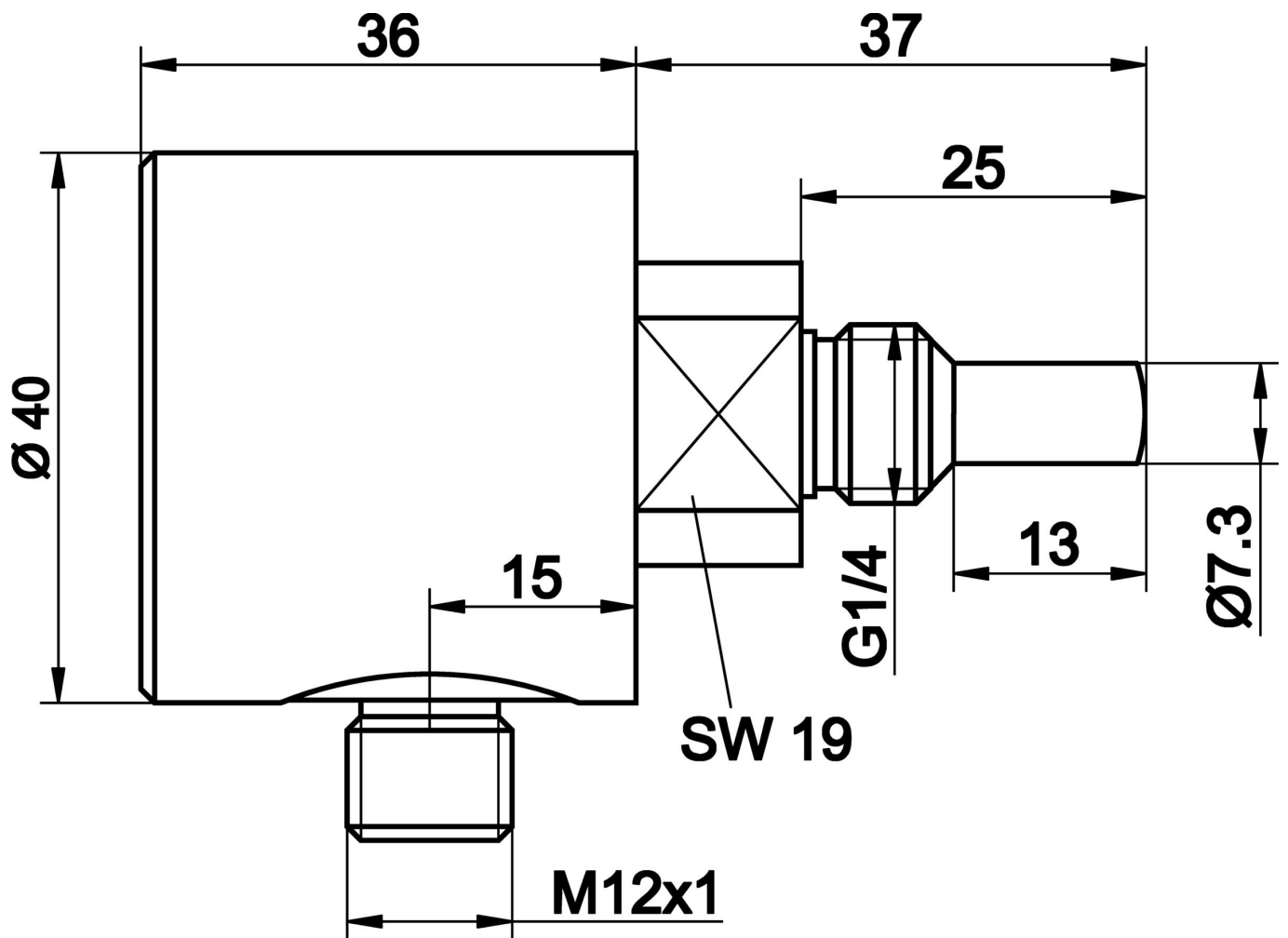
**More**

IPF Product Group	300 flow sensors
packaging dimensions	160 x 99 x 60 mm
gross weight	320 g
Customs tariff number	90261021
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



Dimensional drawing



**Extract accessories program**

**VK200221**



Connection cable, 2m, M12  
Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silic...

**VK200225**



Connection cable, 2m, M12  
Female (socket) 3pin Straight, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Sili...

**VK003020**



Cable socket, angular, self-assembly, screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 socket 4-pin, IP67, PBT

**VK003024**



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Female (socket) 4pin, IP67, PBT

**VK200021**



Connection cable, 2m, M12  
Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK200025**



Connection cable, 2m, M12  
Female (socket) 3pin Straight, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK000041**



Adaption, M12 Female (socket) 4pin Straight, M8 Male (connector) 4pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

**VK030F62**



Connection cable, 0.3m, M12 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK060F62**



Connection cable, 0.6m, M12 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

You can find further accessories on our homepage



**Installation**

Mounting / installation may only be carried out by a qualified electrician!



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

**Safety warnings**

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.