

Standard sensor cable

with 90° angled M12 connector

CABXX-90

The XX in the order code means the cable length mentioned below in the Length available section e.g. CAB05-90

Description

Rheonics viscosity and density sensor probes connect to the sensor electronics using a sensor cable. The probes (SRV, SRD, DVP) have an M12 8-pin connector, while the sensor electronics (SME) use an 8-pin terminal connection. Each sensor probe comes with a cable configured according to the specifications in the RFQ ([Request for Quotation](#)).

Specifications

Cable Type

Standard

Insulation material - Sheath

PUR

IP Rating

IP68

Temperature range

-30°C to 90°C
-20°F to 190°F

Molded connector

M12 8-pin Female
A-coded 90° Angled

Lengths Available

- 5 m (15 ft) CAB05-90
- 10 m (30 ft) CAB10-90
- 30 m (90 ft) CAB30-90
- Custom length (up to 500 m/1500 feet) CAB500-90



Information tables

Presented below are the detailed technical specification outlining the characteristics and performance parameters of the 90° angled sensor cable. These data provide information on the cable's electrical, mechanical, and environmental specifications.

Description

Overview	M12-A Cable Connector, Number of Poles: 8, Shielded, IP68, UL Listed, Black PUR, 8 x 0.25 mm ²
Conforming Standards	IEC 61076-2-101

Technical Data

Connector

Connection	M12
Cable outlet	Angled
Gender	Female
Number of pins	8
Body color	BLACK
Coding	A
Contact Material	Metal, CuZn, gold-plated
Contact Body Material	Plastic, TPU, BK
Locking Material	Metal, CuZn, nickel-plated
Contact surface	Plastic, TPU, BK

Wire Cables

Wire cross-section	8 x 0.25 mm ²
Wire colors	WH, BN, GN, YE, GY, PK, BU, RD
Wire color assignment	1 WH, 2 BN, 3 GN, 4 YE, 5 GY, 6 PK, 7 BU, 8 RD
Wire structure	32 x 0.10 mm
Wire insulation material	PP
Outer diameter of jacket	6.30 mm

Cable

Bending radius (fixed)	5 x Ø-cable
Bending radius (motion)	12 x Ø-cable
Temperature range (mobile)	-30°C...+90°C
Temperature range (fixed)	-40°C...+90°C
Shielding	Yes
Cable sheath material	PUR
Cable end assembly	Open cable end
Rated voltage cable	≤300 V

Electrical data

Rated voltage	30V
Insulation resistance	≥ 10 ⁸ Ω
Resistance	≤ 5mΩ
Overvoltage category	II
Insulation material group	II
Insulation material	PP

Mechanical Data

Degree of Protection	IP68
Mechanical life-cycle	>100 mating cycles

Environmental conditions

Degree of pollution	3 (Suitable for industrial and harsh environments)
Current load per pin	Rated for maximum 2A
Halogen-free	Yes
Safety instructions	<p>The connector must not be connected or disconnected under load. Failure to do so or improper use may result in damage to device and personal injury.</p> <p>Connectors with protection classes IP68 are not suitable for underwater use. When used outdoors, the connectors must be additionally protected against corrosion.</p>

Performance

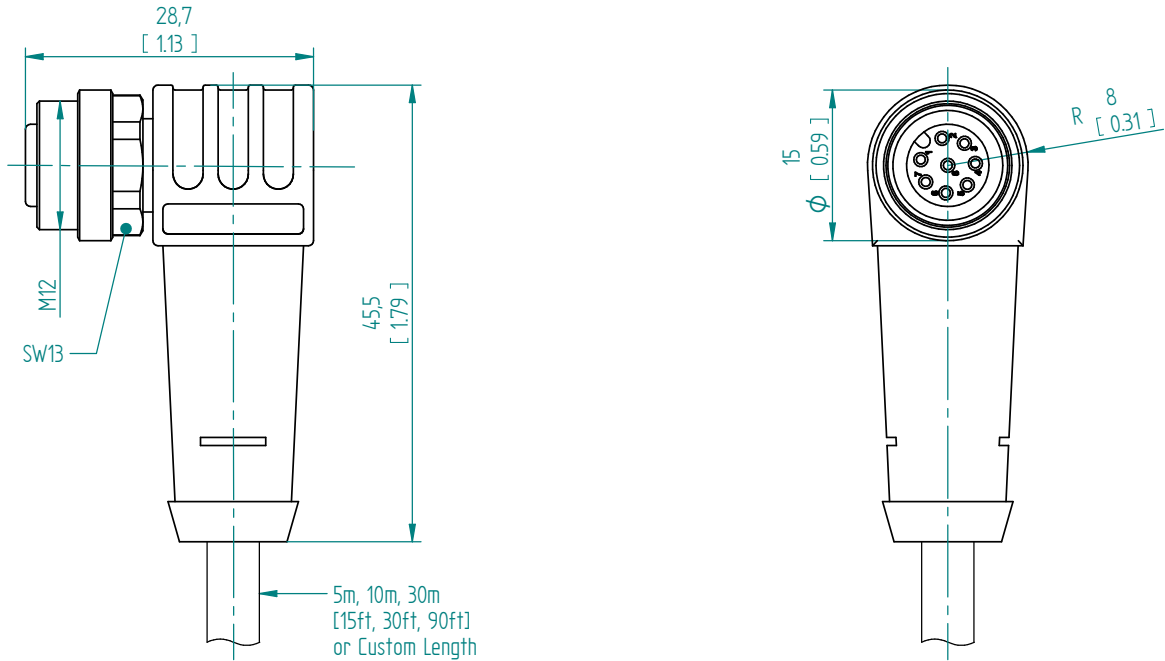
Suited Applications

- Robotics
- Machine- tool
- Metal-cutting production

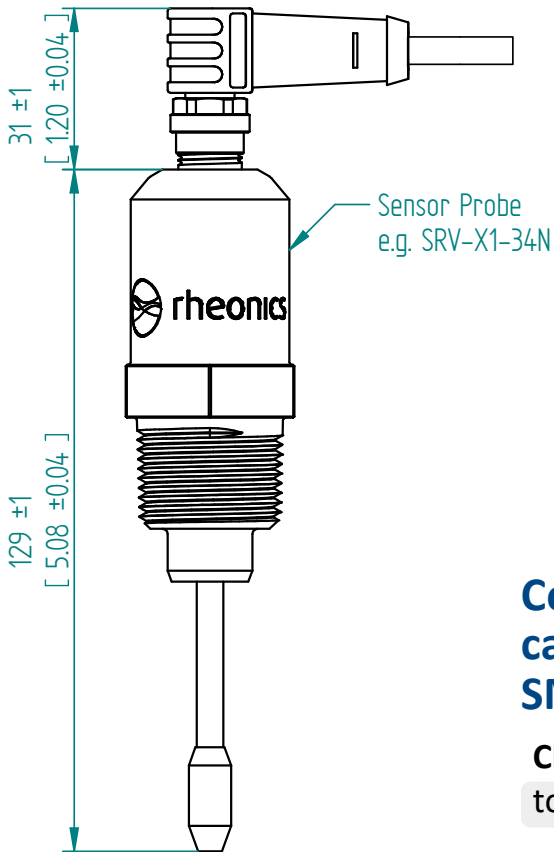
Special features

Flame retardant, halogen free, hydrolysis proof, LABS free, oil resistant, ozone resistant, recyclable, RoHs compliant, acid- and alkali resistant, drag chain-adapted, welding sparks resistant, seawater resistant, silicone free, torsion resistant, UV resistant

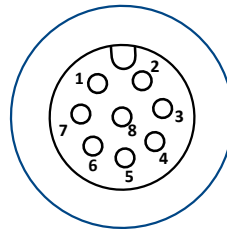
CABXX-90° Sensor Cable and Connector Dimensions



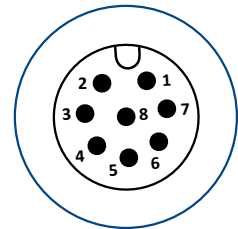
Conector Installation Drawing



Female
Sensor Cable



Male
Sensor Probe



Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
White	Brown	Green	Yellow	Gray	Pink	Blue	Red

Connecting sensor cable to Electronics SMET

Click or scan the QR to access the full article



Units: mm [inch]