

Standard sensor cable

with straight M12 connector

CABXX

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

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° Straight

Lengths Available

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



Information tables

Presented below are the detailed technical specification outlining the characteristics and performance parameters of the 180° standard 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, Molded onto Cable, IP68, UL Listed, Black PUR, 8 x 0.25 mm ²
Conforming Standards	IEC 61076-2-101

Technical Data

Connector

Connection	M12
Cable outlet	Straight
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 \emptyset -cable
Bending radius (motion)	10 x \emptyset -cable
Temperature range (mobile)	-25°C...+90°C
Temperature range (fixed)	-50°C...+90°C
Shielding	Yes
Cable-jacket material	PUR
Cable sheath material	PUR
Cable end assembly	Open cable end

Electrical data

Rated voltage	30V
Insulation resistance	$\geq 10^{10} \Omega$
Resistance	$\leq 5m\Omega$
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 (at 40°C)	Rated for maximum 2A
Halogen-free	Yes

Safety instructions	The connectors are designed for use in plant, control, and electrical device construction. It is the responsibility of the user to verify whether the connectors can be used in other applications. Connectors with protection classes IP68 are not suitable for underwater use. When used outdoors, the connectors must be additionally protected against corrosion.
----------------------------	---

Performance

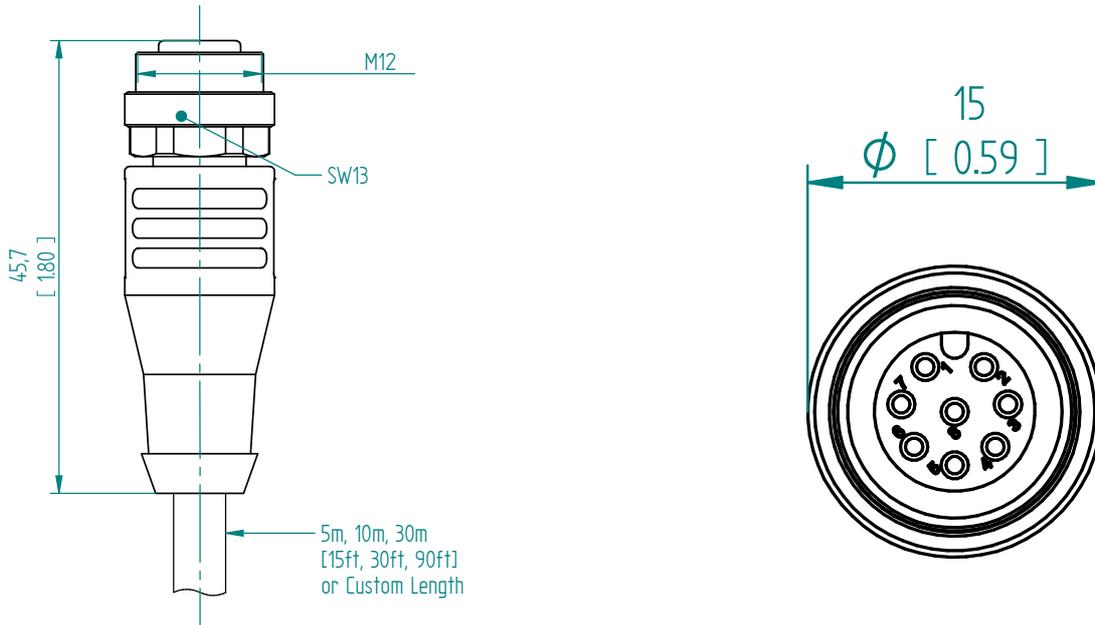
Suited Applications

- Robotics
- Machine- tool
- Metal-cutting production

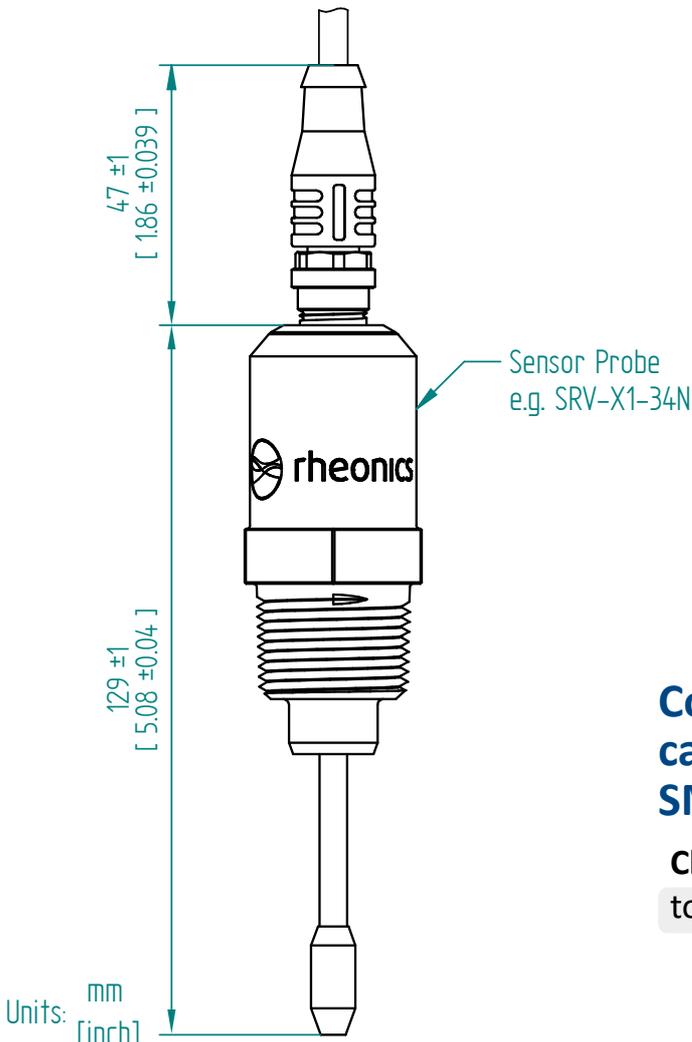
Special features

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

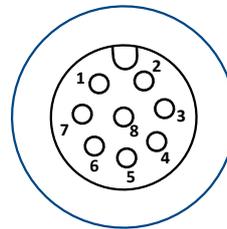
CABXX Sensor Cable and Connector Dimensions



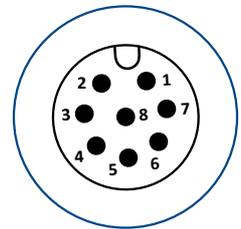
Conector Installation Drawing



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]