Standard sensor cable

with 90° angled M12 connector

CAB-90-LXX

The XX in the order code means the cable length mentioned below in the Lenght available section e.g. CAB-90-L05

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

Fixed:-40°C to 90°C (20°F to 190°F)
Flexible:-25°C to 60°C (-13°F to 140°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 90° Cable Connector, Number of Poles: 8, Shielded, IP68, UL Listed, Black PUR, 8 x 0.25 mm²
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 mm²
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)	10 x Ø-cable
Temperature range (mobile)	-30°C...+90°C
Temperature range (fixed)	-40°C...+90°C
Temperature range (Drag chain)	-25°C...+60°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	≥ $10^8\Omega$
Overvoltage category	II
Insulation material group	II
Insulation material	PP

Mechanical Data

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

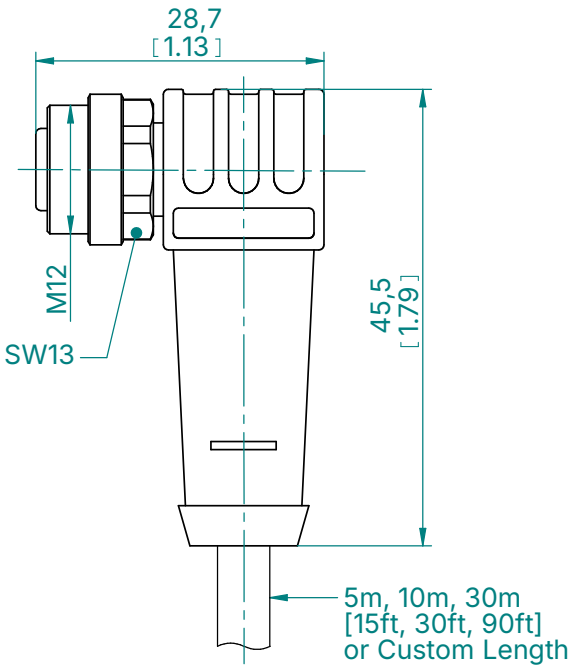
Environmental conditions

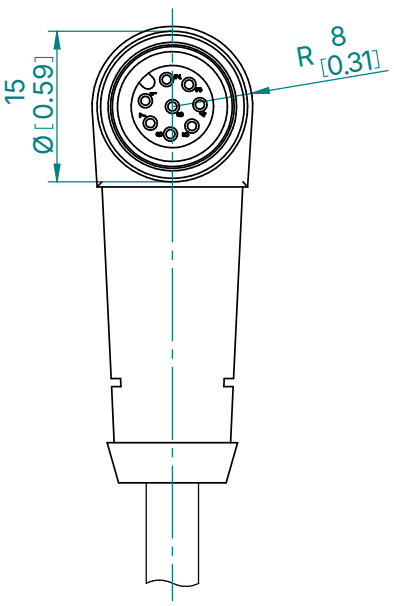
Degree of pollution	3 (Suitable for industrial and harsh environments)
Current load per pin	Rated for maximum 2A
Halogen-free	Yes
Safety instructions	The connector must not be connected or disconnected under load. Failure to do so or improper use may result in damage to device and personal injury. Connectors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

Performance

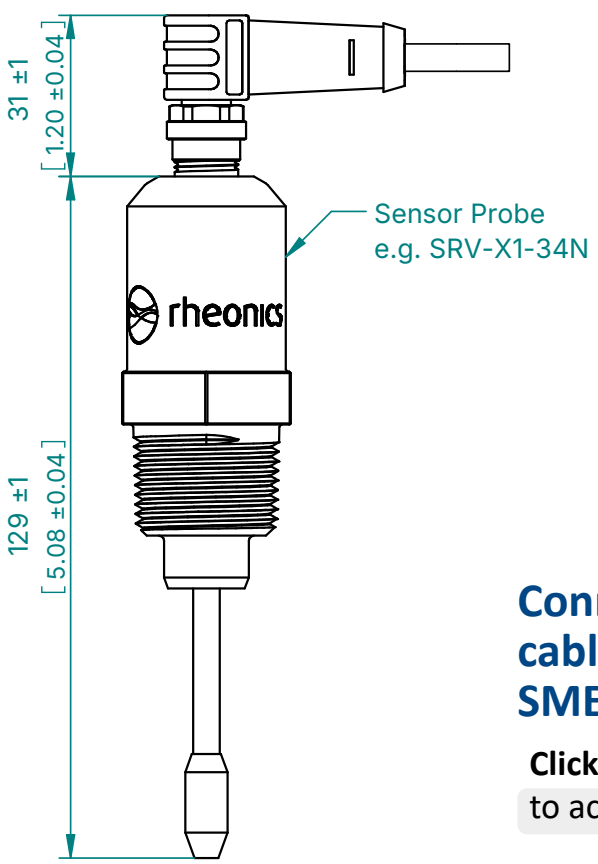
Special features	Flame retardant, halogen free, hydrolysis proof, LABS free, oil resistant, ozone resistant, recyclable, RoHs compliant, acid- and alkali resistant, drag chain-adapted, welding sparks resistant, seawater resistant, silicone free, torsion resistant, UV resistant

CABXX-90° Sensor Cable and Connector Dimensions



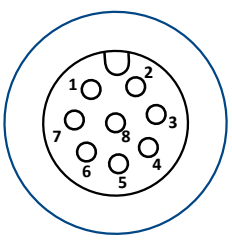


Conector Installation Drawing

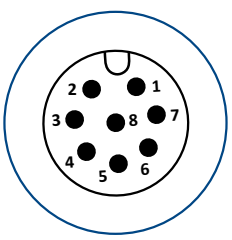


Units: mm [inch]

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

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