

EX sensor cable

with straight M12 connector

CABXX-EX

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

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](#)). This sensor cable is rated to be used in a hazardous zone and environment.

Specifications

Cable Type

Circular connector

Insulation material - Sheath

Special PVC for intrinsically safe installations

IP Rating

IP67

Temperature range

-30°C to 80°C
-20°F to 180°F

Connector

M12 8-pin Female
A-coded Straight

Lengths Available

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



Information tables

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

Description

Overview M12, female, A-coded; 8-poles; CuSn, shielded, Blue, 4 x 2 x 0.5 mm²

Conforming Standards DIN EN 50363-3

Technical Data

Connector

Connection	M12
Cable outlet	Straight
Gender	Female
Number of pins	8
Body color	BLUE
Coding	A
Contact Material	CuSn
Contact Body Material	PA 6.6
Locking Material	Zinc die-cast, nickel-plated
Contact surface	Ni/Au

Wire Cables

Wire cross-section	0.14 x 0.5 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	PVC / PE / PP / rubber
Outer diameter of jacket	5 mm x 9.7 mm

Cable

Bending radius (fixed)	5 x \emptyset -cable
Bending radius (motion)	10 x \emptyset -cable
Temperature range (mobile)	-10°C to +80°C
Temperature range (fixed)	-30°C to +80°C
Shielding	Yes
Cable sheath material	PVC
Rated voltage cable	≤ 300 V

Electrical data

Rated voltage	30 V
Insulation resistance	≥ 100 M Ω
Overvoltage category	II
Insulation material	PP

Mechanical Data

Degree of Protection	IP67
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
Silicone-free	Yes
Cadmium-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.

Performance

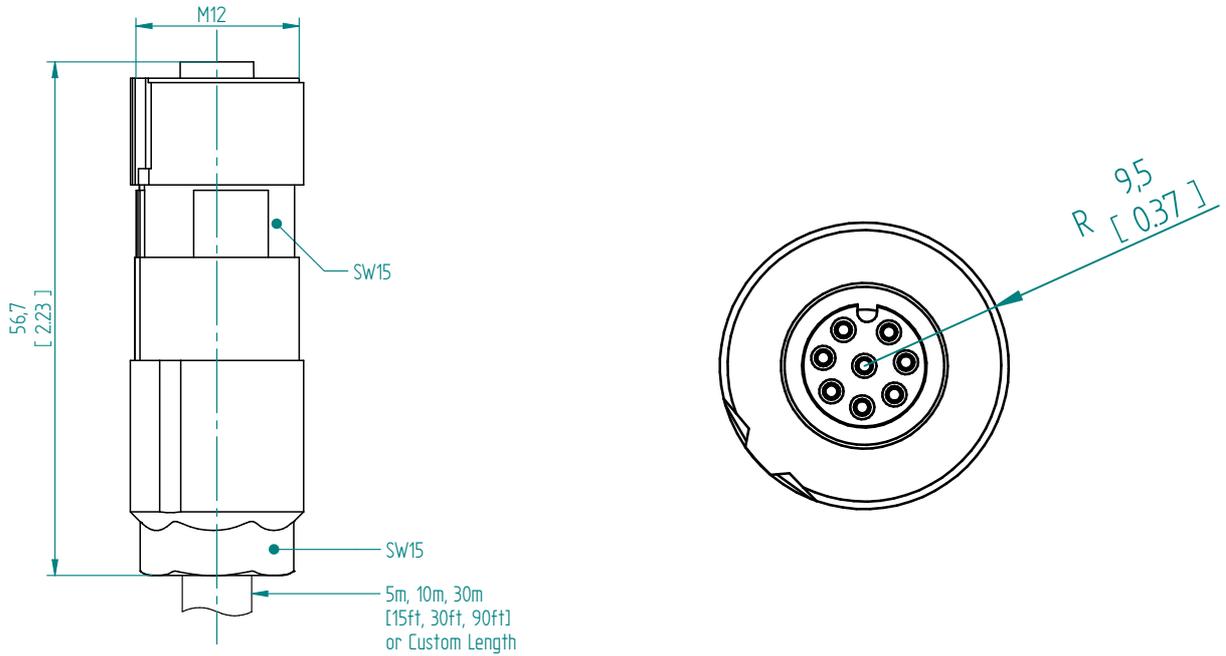
Application

Used for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control.

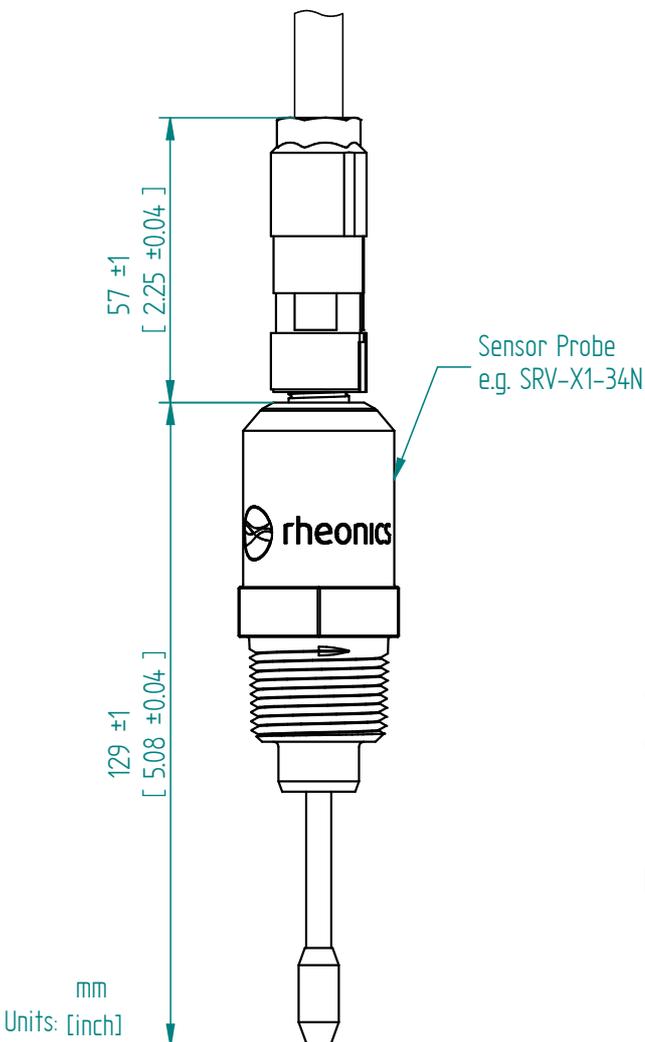
For explosion-endangered areas marked as intrinsically safe (blue) (ignition protection type -i-) flexible control or measurement cable for intrinsically safe systems in measurement and control technology.

These cables are not suitable for burial in the ground.

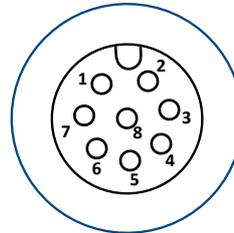
CABXX-EX Sensor Cable and Connector Dimensions



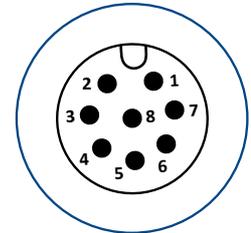
Connector Installation Drawing



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 EX sensor cable to SME-DRM Electronics

Click or scan the QR to access the full article



mm
Units: [inch]