

# ***DRAW WIRE SENSOR***



## ***Series FX-HM***

### ***Key-Features:***

- *Wear-free Hall-effect sensor element*
- *Ultra compact body, Ø 3.81 cm*
- *ideal for applications with very high cycle numbers*
- *Measurement ranges from 50 up to 375 mm*
- *Linearity  $\pm 1.0$  % of full range*
- *Output signal 0...10 V*
- *Very low weight of 35 g*
- *Wire rope: stainless steel, jacketed stainless steel*
- *Thermoplastic body*

### **Content:**

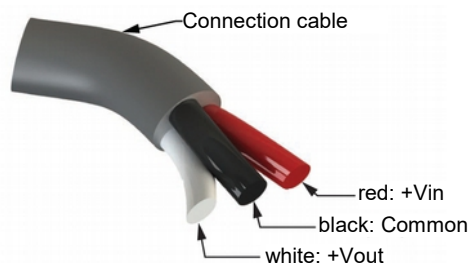
<b><i>Technical Data</i></b>	<b><i>....2</i></b>
<b><i>Electrical Connection</i></b>	<b><i>....2</i></b>
<b><i>Technical Drawing</i></b>	<b><i>....3</i></b>
<b><i>Order Code</i></b>	<b><i>....4</i></b>

## TECHNICAL DATA

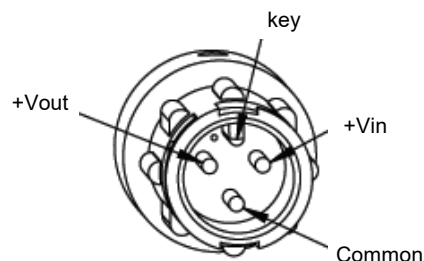
Measurement Ranges	50, 75, 100, 125, 150, 200, 250, 300, 375 mm
Sensor element	Hall-Effect sensor
Protection class	IP52
Voltage supply	4.9...30 VDC
Excitation current	max. 30 mA
Resolution	0.024% of full scale
Linearity	±1 % of full scale
Repeatability	±0.03% of full scale
Working temperature	-25...+75 °C
Humidity	95% no condensation
Output signal	0...10 VDC +0.0 – 0.4 VDC
Wire Rope	Nylon jacketed stainless steel, Ø 0.46 mm, stainless steel 0.4 mm
Wire rope tension	Nominal 1.5 N
Housing material	Thermoplastic body
Weight	35 g
Electrical connection	cable output open ends / cable output with connector at cable end / cable output with connector at cable end plus mating connector
Output impedance	max. 10 Ω
Output load	min. 10 kΩ
Protection	reversed polarity
Life expectancy	approx 6.000.000 cycles
Shock	50 g, 0.1 ms max.
Vibration	15 g, 0.1 ms max.

## ELECTRICAL CONNECTION

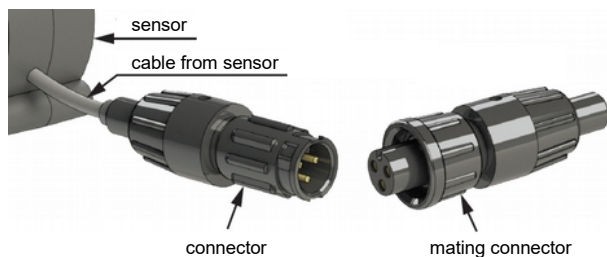
### Cable output



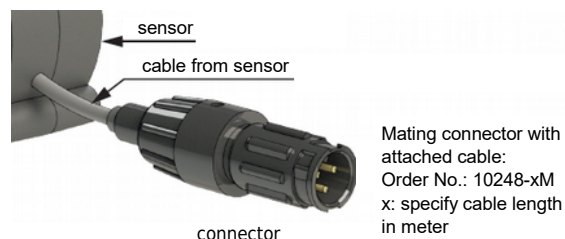
### Connector output



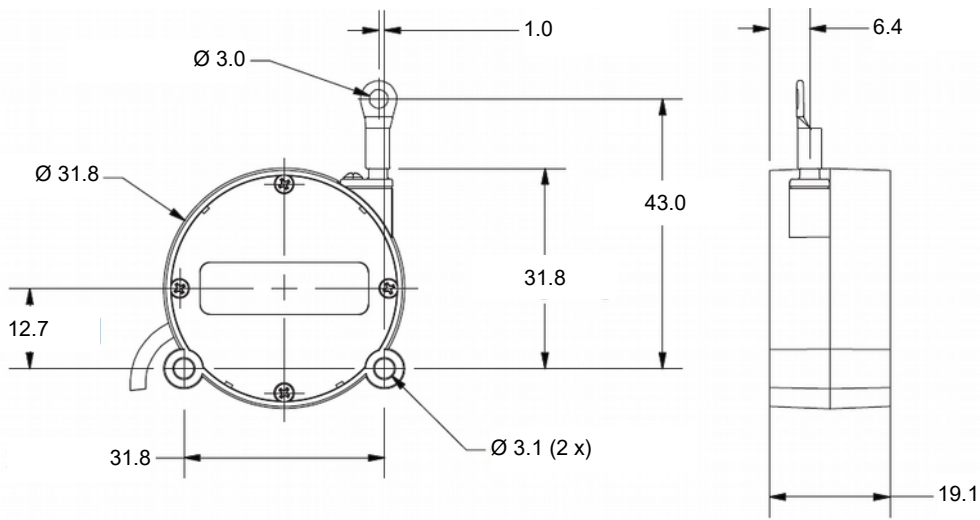
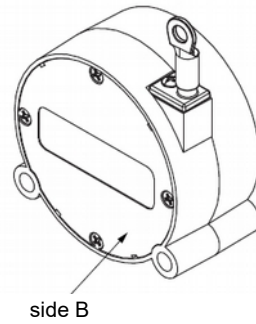
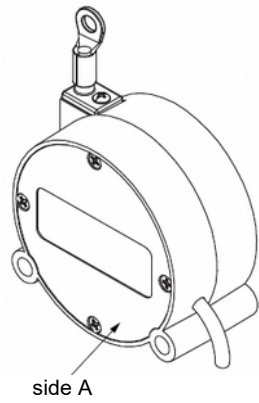
### Connector output option C



### Connector output option K

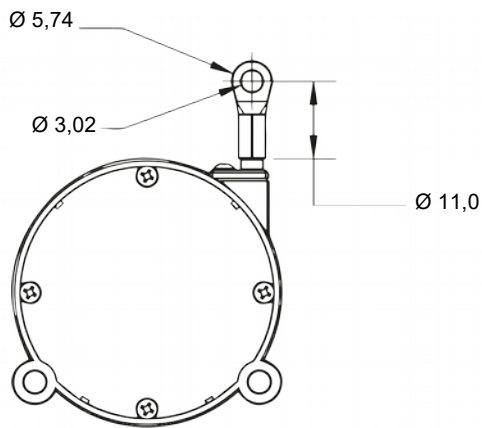


# TECHNICAL DRAWING

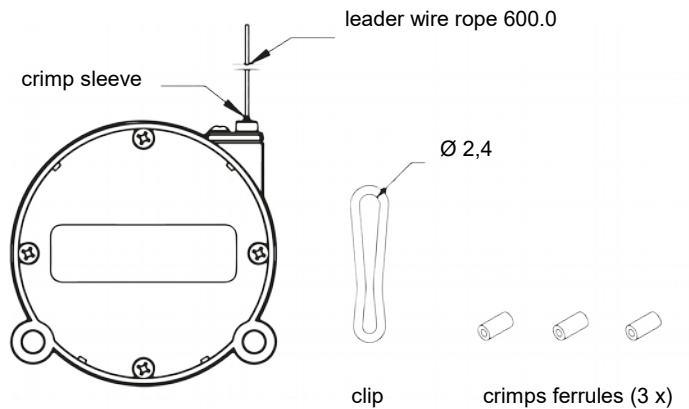


dimensions in mm

## Wire rope attachment



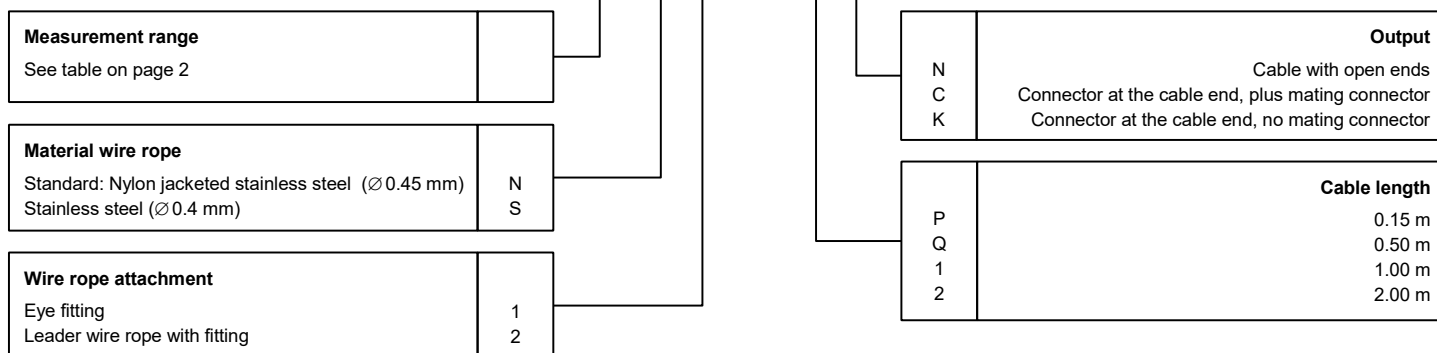
with eye fitting



leader wire with fittings

## ORDER CODE

FX - HM - [ ] - [ ] [ ] S - N [ ] [ ]



Standard version: FX-HM-...-N1S-NPN

## ACCESSORIES

### Connection cables for option K

10248-1M	1 meter with attached connector
10248-2M	2 meter with attached connector
10248-3M	3 meter with attached connector
10248-4M	4 meter with attached connector
10248-5M	5 meter with attached connector

## WARNING NOTICES

- Don't let the rope snap back. If the rope is retracted freely, this may lead to injuries (whiplash effect) and the device may be damaged. Caution when unhooking and retracting the rope into the sensor.
- The transducer must be installed away from sources of magnetic fields, as they may influence the measurement results.
- Do not try to open the device. The stored energy of the spring drive may lead to injuries when being mishandled.
- Do not touch the rope when operating the sensor.
- Avoid guiding the rope over edges or corners. Use a deflection pulley instead.
- Do not operate the sensor if the rope is buckled or damaged. A ripping of the rope may lead to injuries or a damaging of the sensor.



Subject to change without prior notice.

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