

# DRAW WIRE SENSOR

Links to further documents for this series:  
[Installation guide](#)



## FX SERIES

### Key-Features:

- Wear-free Hall-effect sensor element
- Ultra-compact body, Ø 38.1 mm
- Ideal for applications with very high cycle numbers
- Measurement ranges from 50 up to 375 mm
- Linearity  $\pm 1$  % of full range
- Output signal 0...10 V
- Very low weight of 35 g
- Draw wire: stainless steel, jacketed stainless steel
- Thermoplastic body

### Content

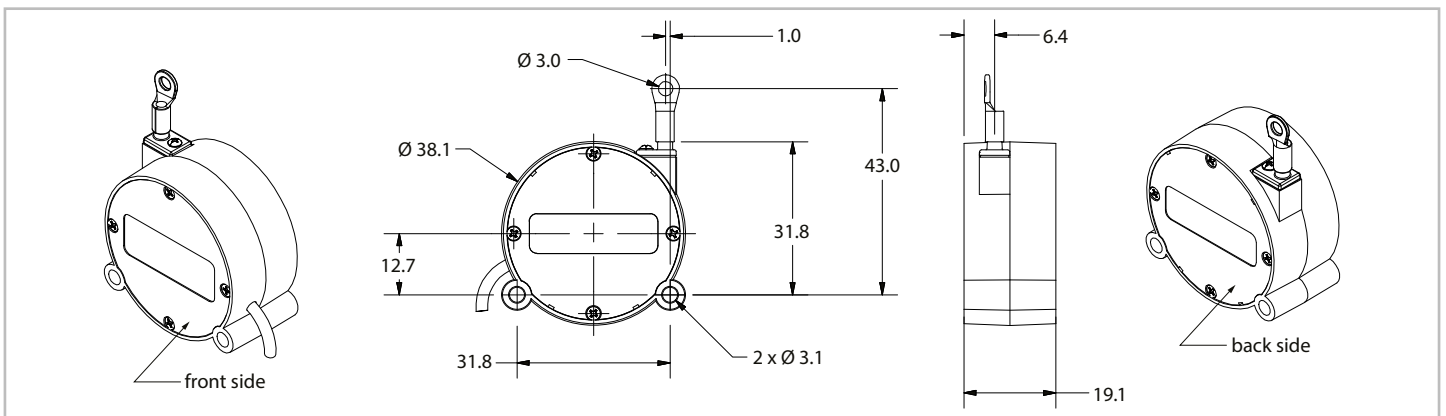
<a href="#">Technical Data</a>	2
<a href="#">Technical Drawing</a>	2
<a href="#">Electrical Connection</a>	3
<a href="#">Warning Notices</a>	3
<a href="#">Order Code</a>	4
<a href="#">Accessories</a>	4

## TECHNICAL DATA

Measurement ranges	[mm]	50 / 75 / 100 / 125 / 150 / 200 / 250 / 300 / 375
Linearity <sup>1)</sup>	[%]	±1
Repeatability <sup>1)</sup>	[%]	±0.03
Resolution <sup>1)</sup>	[%]	0.024
Sensor element		Hall-Effect sensor
Output signal	[VDC]	0...10 (+0, -0.2)
Output impedance max.	[Ω]	10
Output load min.	[kΩ]	100
Power supply	[VDC]	4.9...30
Excitation current max.	[mA]	30
Connection		cable output with open ends, cable output with connector at cable end with or without mating connector
Protection class		IP52 or IP65
Humidity		95 %, not condensing
Reverse polarity protection		yes
Operating temperature	[°C]	-25...+75
Storage temperature	[°C]	-50...+80
Shock resistance		50 g, 0.1 ms max.
Vibration resistance		15 g, 0.1 ms max.
Life cycle		approx. 6.000.000 cycles
Extraction force	[N]	nominal 1.5
Housing		thermoplastic body
Draw wire		Nylon jacketed stainless steel Ø 0.46 mm / optional: stainless steel Ø 0.41 mm
Weight	[g]	35

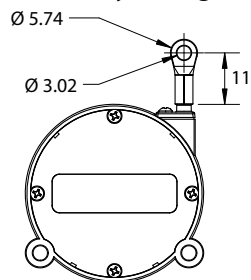
<sup>1)</sup> based on the measurement range

## TECHNICAL DRAWING

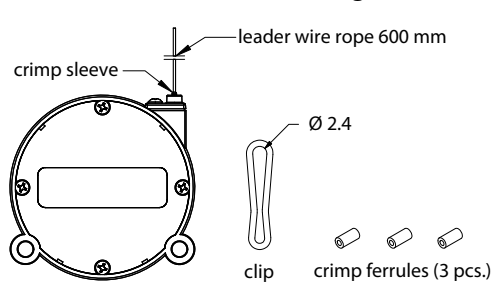


### Draw wire attachment

#### with eye fitting

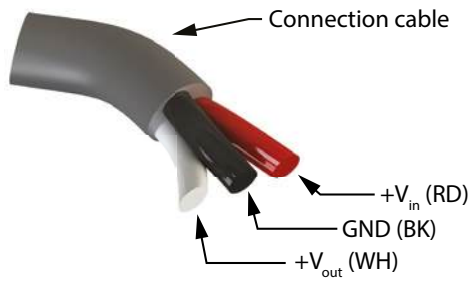


#### leader wire with fittings

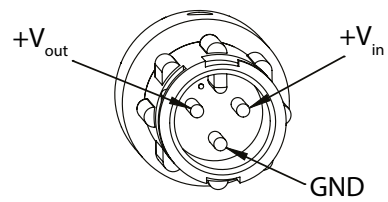


## ELECTRICAL CONNECTION

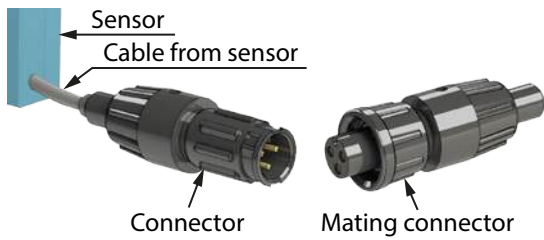
### Cable output



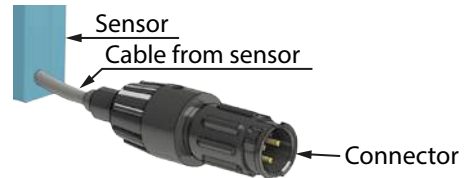
### Connector output pin assignment



### Connector output option C



### Connector output option K



## 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.
- Never exceed the specified measurement range when extracting the rope!
- 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.

## ORDER CODE

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

Measurement range [mm]	
50	2
75	3
100	4
125	5
150	6
200	8
250	10
300	12
375	15

Draw wire	
Nylon jacketed, stainless steel, Ø 0.45 mm	N
Stainless steel, Ø 0.41 mm	S

	Connection type
N	Cable with open ends
C	Cable with connector and mating con.
K	Cable with connector without mating con.

	Cable length fixed cable
P	0.15 m
Q	0.5 m
1	1 m
2	2 m

	Protection Class
1	IP52
2	IP65

	Draw wire attachment
1	Eye fitting
2	Leader wire rope with fitting

## ACCESSORIES

### Connection cable for option K

10248-1M	cable 1 m, with mating connector
10248-2M	cable 2 m, with mating connector
10248-3M	cable 3 m, with mating connector
10248-4M	cable 4 m, with mating connector
10248-5M	cable 5 m, with mating connector

### Digital displays for sensors with analog output, 2 channel

WAY-AX-S	touch screen, supply: 18...30 VDC
WAY-AX-AC	touch screen, supply: 115...230 VAC

For more information and options please refer to the [WAY-AX data sheet](#).

Subject to change without prior notice.

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