

DRAW WIRE SENSOR



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Series ZX

Key-Features:

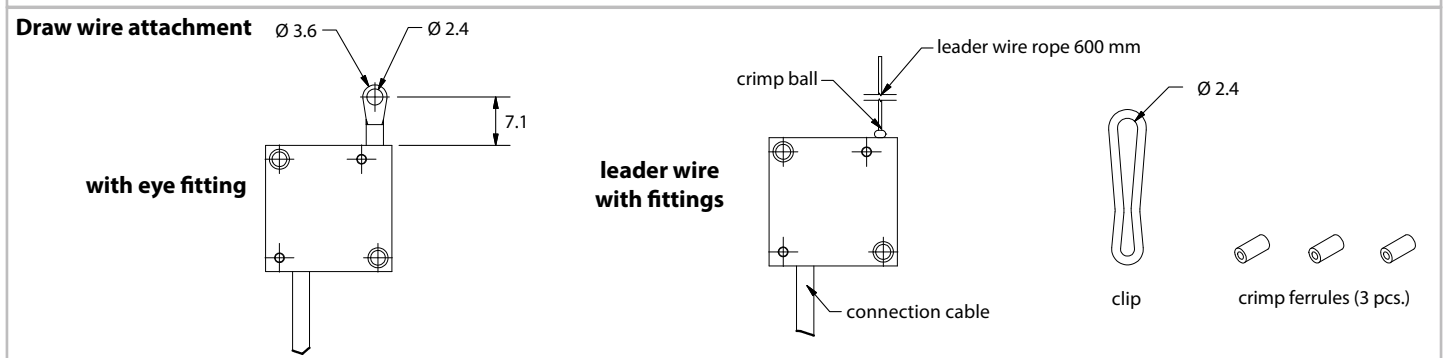
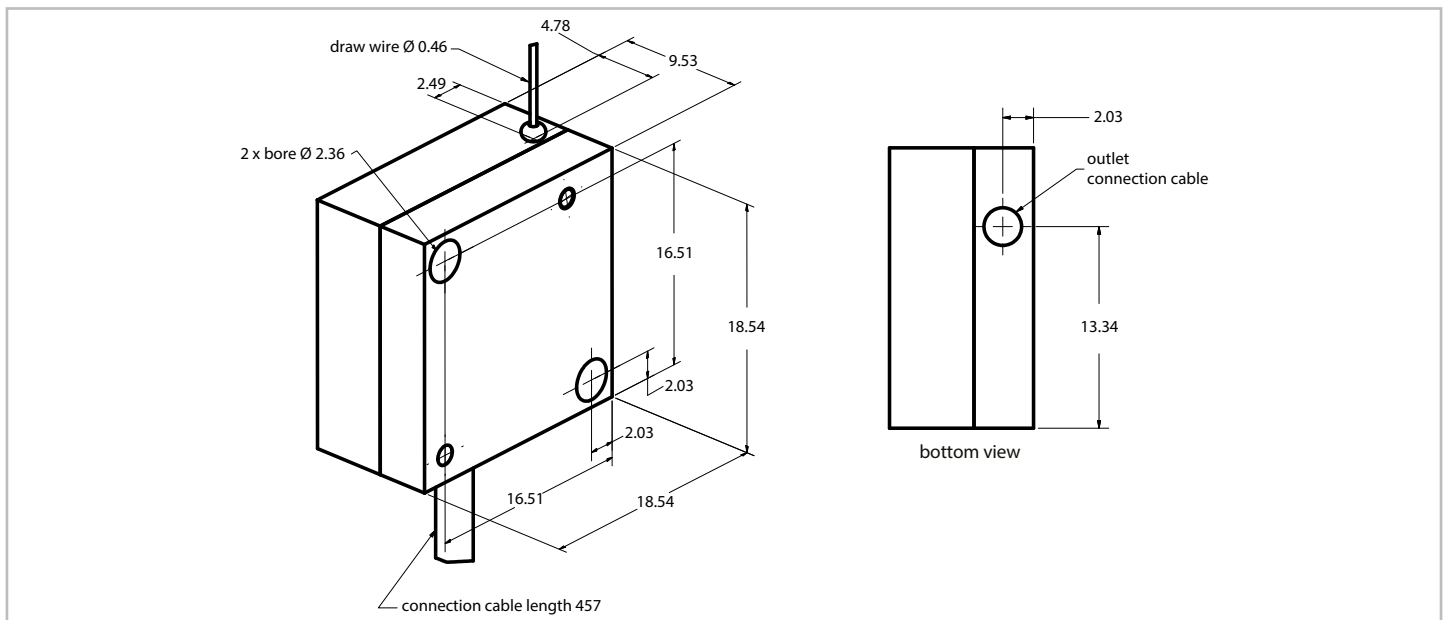
- **Ultra-compact body**
- **Measurement range 38 mm**
- **Sensor element: potentiometer or hall effect device**
- **Linearity $\pm 1\%$**
- **Anodized aluminium housing**
- **Very low weight of 15 g**
- **Wire rope: Nylon jacketed stainless steel**
- **Easy mounting**

TECHNICAL DATA

		ZX-PA	ZX-HM
Measurement range	[mm]	38	
Linearity	[%]	±1 (of full scale)	
Repeatability		±0.03 % (of full scale)	±0.08 mm
Resolution		depends on the signal quality of the reference voltage	0.04 mm
Dynamic	[Hz]	25 (over full range extension)	
Sensor element		Potentiometer	Hall-Effect device
Output signal		24.8 mV/mm at 1 VDC input voltage ¹⁾	89 % ± 3 % of power supply
Output impedance	[kΩ]	0...5	-
Input impedance	[kΩ]	5 ± 10 %	-
Min. load impedance	[kΩ]	-	min. 30
Power supply	[VDC]	max. 30	5 ± 0.25
Current consumption max.	[mA]	-	21
Connection		cable, 3 wires, length 457 mm	
Protection class		IP40	
Operating temperature	[°C]	-55...+100	-40...+100
Storage temperature	[°C]	-65...+100	-55...+100
Shock resistance		50 g, 0.1 ms max.	
Vibration resistance		15 g, 0.1 ms max.	
Life cycle		approx. 10,000,000 cycles	approx. 30,000,000 cycles
Extraction force	[N]	1.1	
Housing		anodized aluminium	
Draw wire		Nylon jacketed stainless steel, Ø 0.46 mm	
Weight	[g]	12	15

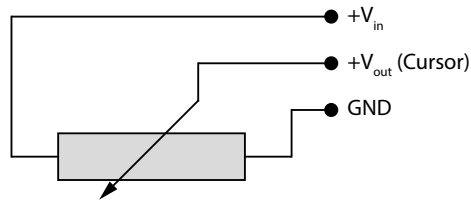
¹⁾ For nominal output in application, multiply value shown by actual excitation voltage.

TECHNICAL DRAWING

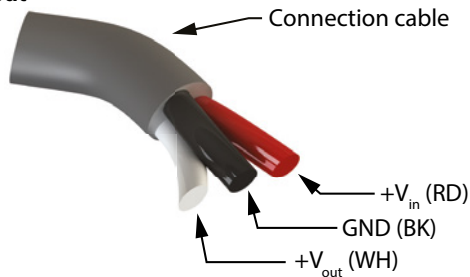


ELECTRICAL CONNECTION

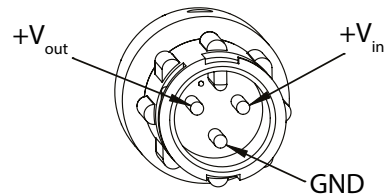
Circuit diagram ZX-PA



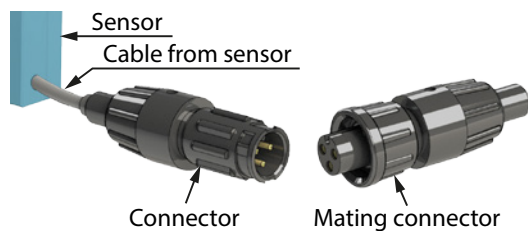
Cable output



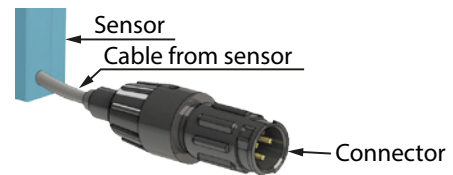
Connector output pin assignment



Connector output option C



Connector output option K



Accessory: cable with mating connector 10248-xM (x = length in m)

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

ZX - - 1.5 -

Sensor element Potentiometer Hall-Effect Device	PA HM
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Draw wire attachment With eye fitting Leader wire with fittings	A B
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N C K	Connection type Cable with open ends Connector at cable with mating connector Connector at cable without mating con.
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P Q 1 2	Cable length fixed cable 0.15 m 0.5 m 1 m (HM version only) 2 m (HM version only)
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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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