



- Low-Cost OEM Draw wire sensor
- Output: Potentiometric, Voltage, Current
- 2M, 3.5M, 5M Absolute Travel
- -20-80°C Operating Temperature
- Analog (0-10V), Current (4-20mA)
- IP65
- Customizable Stroke
- +/- .3% Linearity FS

DESCRIPTION

The PDW10 is an OEM draw wire sensor manufactured for industrial applications requiring long term stability in a harsh environment. This draw wire technology allows customer specified strokes for custom applications. The industrial plastic design is made for higher temperature applications where dust, humidity, and/or grease might be an issue.

The PDW10 sensor is easy to use, install, and flexible in the use of various mobile applications.

The design is simple, cost effective, and proves reliable for OEM customers. Please contact us for Custom design availability.

APPLICATIONS

- Industrial Automation
- Mobile Cranes
- Industrial Doors
- Medical beds

Maximum Environmental Ratings

Operating Temperature -20°C to 80°C
 Storage Temperature Range -25°C to 80°C

Supply Voltage.....14-27VDC
 Dimensions 90 X 100 X 90

PDW10 Operational Characteristics

$V_+ = 5V$, $V_- = 0V$, Temperature = 25°C					
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage	V_{DD}	14	24	27	V
Supply Current	I_{DD}	12	15	30	mA
Upper Output Voltage (Note 1)	V_{OUT}		10		V
Lower Output Voltage	V_{OUT}		0		V
Linearity (Note 2)		-0.3		0.3	%FS
Temperature Error (Null and Span) (Note 3)		-0.4		+0.4	%FS
Response Time	t_R		1	5	ms
Load Impedance			5K		Ω
Material	Housing	Plastic, PA6GF30			
	Draw-wire	Coated Polyimide SS (.45mm \emptyset)			
Protection Class		IP65			
Operating Temperature Range	C	-20		80	C

Notes:

1) Measured with Supply Voltage at 24V. 2) Defined as best straight line 3) Measured from 0°C to 70°C 4) Measured over compensated temperature range 10-50C

Application Information

Package

The two piece sensor body design is made of a high temperature plastic, which allows for easy manufacturability and long term stability. Vibration proof design made for industrial applications.

Stability

The inductive sensing element is mounted to a ceramic base and sealed into the high temperature plastic housing. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Electrical Connections

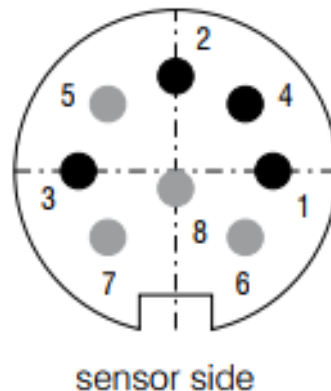
Wire Color	Connection
White	V+
Brown	GND
Green	Output
Yellow	Out GND

Media

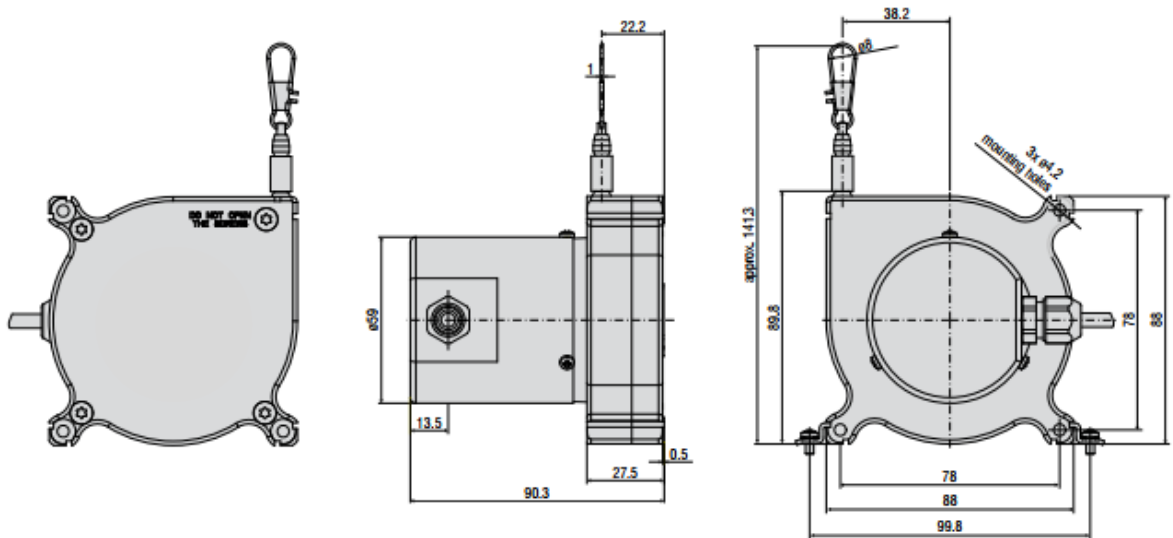
The plastic material is tolerant to the following media but not limited to oil, air, gas, some corrosive media, and salt water.

Linear ranges

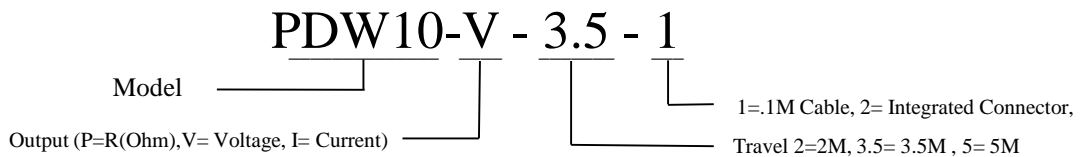
Standard stroke 2.5M, 3M, and 5M. Custom linear displacement ranges are available for OEM customers.



Mechanical Dimensions (mm)



Part Number Configuration



Standard Part Numbers

Model	Linear Range (M)	Connection Type
PDW10-V-3.5-1	3.5	1M Cable
PDW10-I-5-2	5	Connector
PDW10-V-5-2	5	Connector

Notice:

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