

-DEPFILAWP-310 series

Draw Wire sensor

Ref: 4226

Rev: A



DESCRIPTION

DEPFILAWP-310 series draw wire sensors consists of an aluminum anodized rotary potentiometer controlled by stainless steel wire, enabling measurements by pulling and rewinding the wire. Different stroke lengths between 0...5100 mm and 0...10000 mm are available. The linear motion is converted to potentiometric output.

DEPFILAWP-310 works with 24VDC supply and is offered in 2 different series: "A" series (4-20 mA analog output with the help of the converter card) or "V" series (0-10 VDC analog output with the help of the converter card).

This small and compact potentiometer is robust and easy to install, and may serve many industrial applications, such as: Material Handling & Lifting Systems (elevators, lifting platforms, forklifts...), Processing & Manufacturing Machinery (wood, glass, paper, metal sheet, injection... machines), Automation, Robotics & Positioning (Industrial robots, X-Y axis displacement, Horizontal control equipment...), Hydraulic and Pneumatic systems (air compressor, dam protections, press...), Measurement, Control & Quality (Liquid level measurements and position control...).

TECHNICAL DATA

MODEL	
INPUT	Potentiometric
Measuring Type	Potentiometric
Stroke (measuring) Length*	Different measuring lengths between 0...5100 mm and 0...10000 mm
Maximum Speed	0.5 m/s
Supply voltage*	'A' and 'V' models: 12...30 VDC Potentiometric output model: 42V max.
Required Force	12 N
Resistance*	5 K Ω (standard), 10 K Ω
OUTPUT	Potentiometric
Output signals *	0-10 VDC 4-20 mA
Linearity	$\pm 0.5\%$ FS
ENVIRONMENTAL	
Operating Temperatures	-25°C ... +85°C
Relative Humidity	95%
Weight	~2700 gr
Protection Class	IP53
Connection Cable Length*	3m (standard), 5m, 10m
Construction Material	Housing: Aluminum/steel/plastic Measuring Wire: Stainless steel

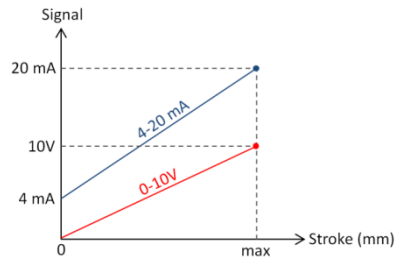
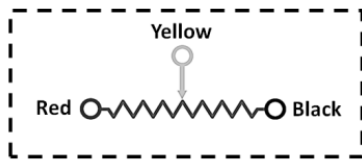
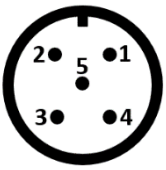
Note: The specifications specified by () vary depending on the model selected. The detailed code table for product selection is shown on page 4.*

ELECTRICAL CONNECTION

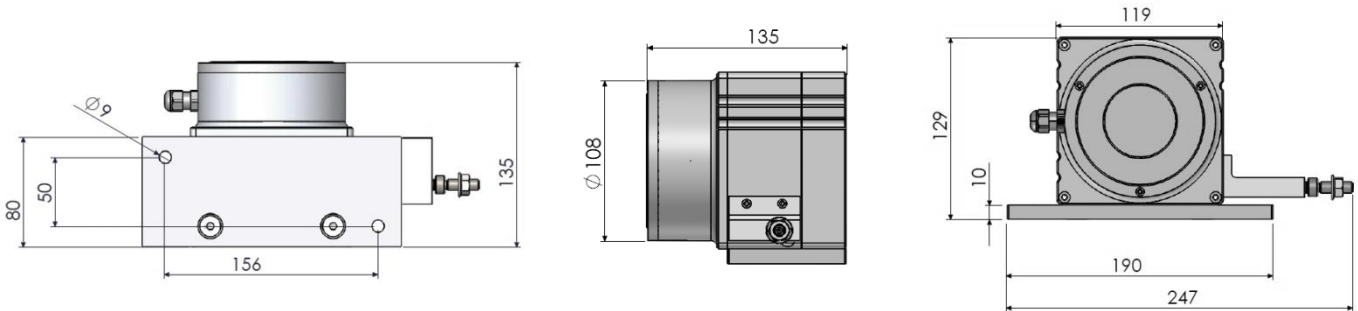
Never make or undo electrical connections to the sensor when voltage is applied, as this may damage the devices.

0-10V or POTENTIOMETER Connection		
Signal	M12-5 Pin Male Socket	Cable
Earth	Pin 1	Silver
+V	Pin 2	Red
0V	Pin 3	Black
0-10V / Pot	Pin 4	Yellow
-	Pin 5	-

4-20 mA Connection		
Signal	M12-5 Pin Male Socket	Cable
Earth	Pin 1	Silver
+V	Pin 2	Red
-	Pin 3	-
4-20 mA	Pin 4	Yellow
-	Pin 5	-

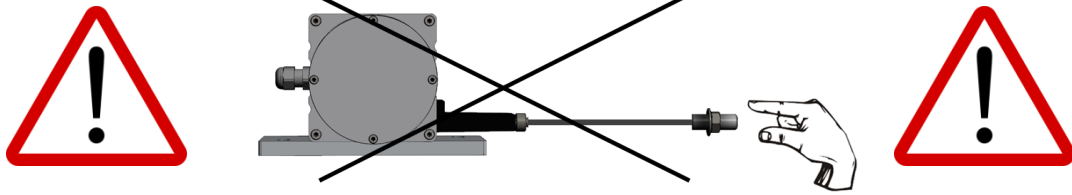


MECHANICAL DIMENSIONS

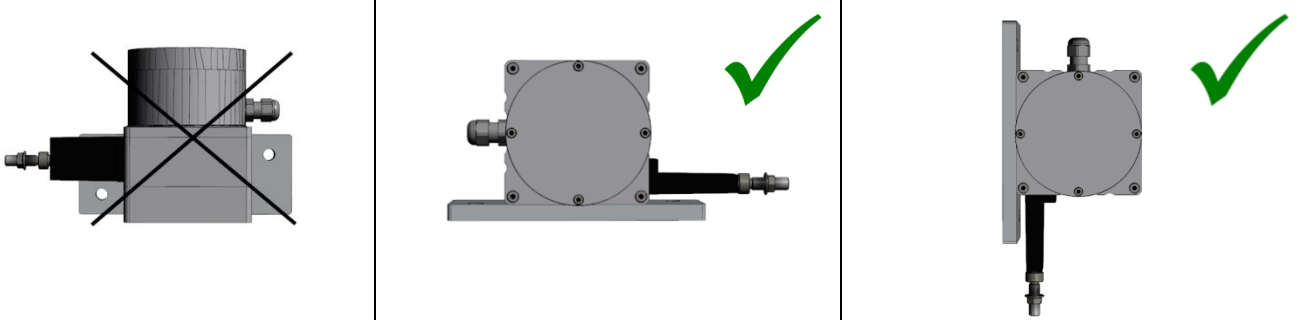


MOUNTINGS AND WARNINGS

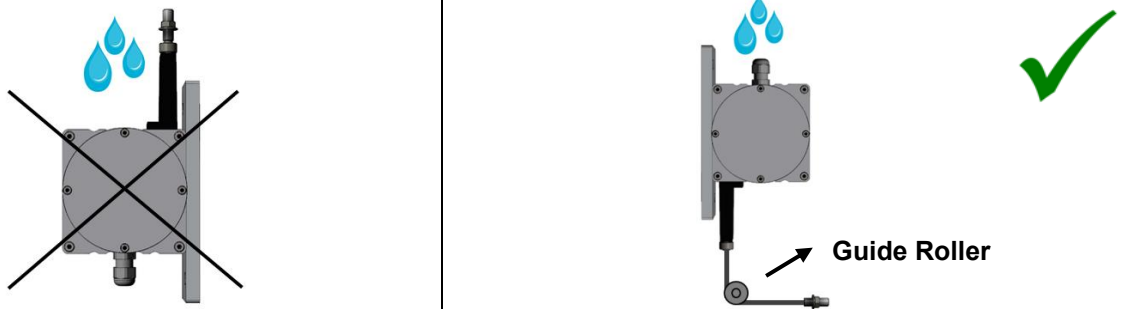
1. Never release the wire after pulling. Otherwise, the coil spring will be damaged.



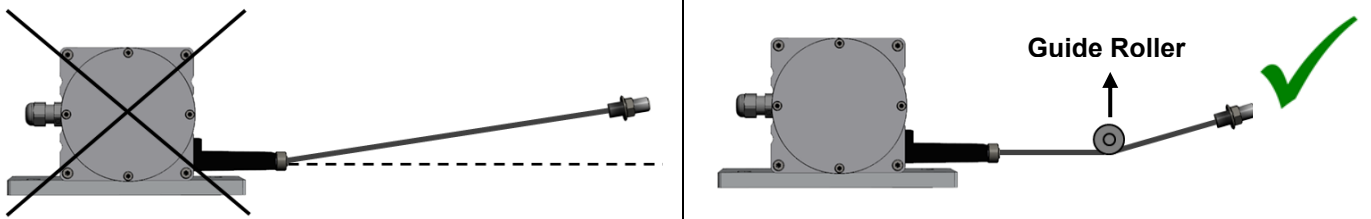
2. Mount the sensor according to the mounting directions shown below.



3. If case of rain or water trickle, the wire outlet should always face water downstream. If necessary, use guide rollers.

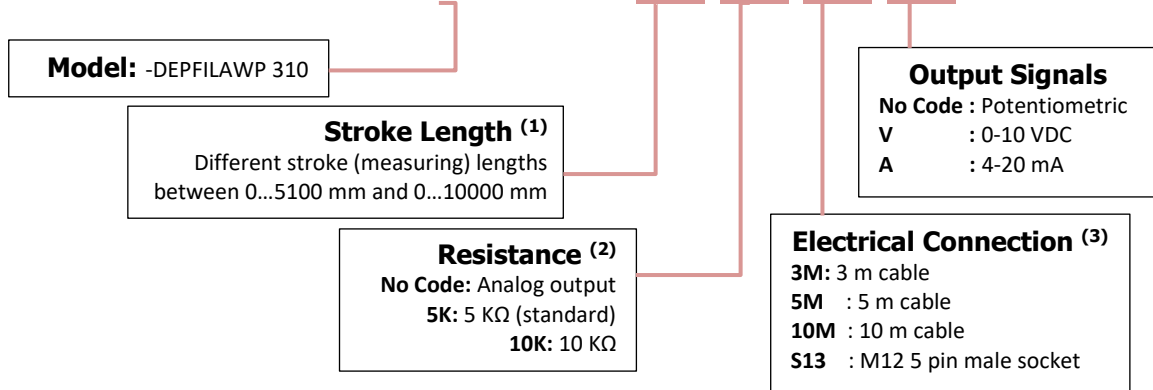


4. The wire should always be pulled out in straight line (no angle). If necessary, use guide rollers.



Important Note: In case of non-compliance with these recommendations, any malfunctions that may occur will not be covered by the warranty.

ORDERING INFORMATION

-DEPFILAWP-310

- (1) For other (special production) stroke lengths, please contact us.
 (2) For products with analog output, resistance value is not selected. Please contact for other resistance options for potentiometric output products.
 (3) Product can be requested with cable or socket. Please contact us for other cable length and socket model requests.

Example Code 1: (Potentiometric output): -DEPFILAWP-310-6000-5K-S13

-DEPFILAWP 310 series, 6000 mm stroke, 5K resistance, 1 pcs M12 5 pin male socket, potentiometric output

Example Code 2: -DEPFILAWP -310-6000-3M-V

-DEPFILAWP 310 series, 6000 mm stroke, 3 meter-cable output, voltage output

REVISIONS HISTORY

REVISION	DATE	DESCRIPTION
A	18/07/2025	Creation of the document

CONTACT

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