

Linear Position Technology

Linear Magnetic Position System

Draw Wire Encoder DW33



Temperature
range



Maximum
speed



High protection
level

Miniaturized

- Measuring length up to 600 mm.
- Wide temperature range.



Simple

- For applications with low travel speeds.
- Easy to install.

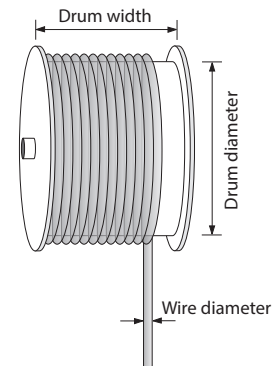
Versatile

- Available with potentiometer, voltage or current outputs.

Mechanical Characteristics (Draw Wire Mechanics):

Extension force:	Fmin	0.67 lbs (3.0 N)
Max. speed:		2.62 ft/s (0.8 m/s)
Linearity:		±0.35%
Repeat accuracy:		±0.15 mm
Working temperature:		+14 to +176 °F (-10 to +80 °C)
Weight:		approx. 0.13 lbs (60 g)
Materials:		housing: plastic wire: stainless steel Ø 0.4 mm, plastic coated
Protection (acc. to EN 60529):		IP50

Operating Principle:



Construction:

The core of a draw wire device is a drum mounted on bearings, onto which a wire is wound. Winding takes place via a spring-loaded device.

Note:

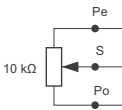
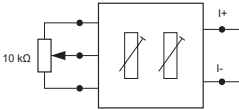
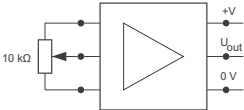
Exceeding the maximum extension length of the draw wire will lead to damage to the wire and the mechanics.

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Electrical Characteristics (Analog Output):

Analog output [Key code]:	0-10 V [8D]	4-20 mA [7F]	Potentiometer [PB]
Supply voltage:	15-28 VDC	15-28 VDC	max. 48 VDC
Output:	0-10 V	4-20 mA	10 kOhm

Connection diagrams:



Recommended load current:	15 mA	-	-
Load:	-	max. 500Ω	-
Temperature range:	-14 to +176 °F (-10 to +80 °C)	-14 to +176 °F (-10 to +80 °C)	-14 to +176 °F (-10 to +80 °C)

ROHS compliant according to EU guideline 2011/65/EU

Standard Wiring:

Color	BN	WH	GN
0-10 VDC	+24 VDC	0 V	U _{out}
4-20 mA	+I	-I	N/C
Potentiometer	Po	Pe	S

Accessories:

- See page H1, Connectivity, for cables and connectors

Draw Wire Encoder DW33

Part Number Key: DW33 with Analog Sensor

A	B		C		D		E
DW	300	-	33	-	7F	-	C0.5M

A	Type
DW	Draw Wire

B	Measuring Range
300	300 mm Steel Wire ¹⁾
600	600 mm Steel Wire

¹⁾Not suitable with output code 'PB'

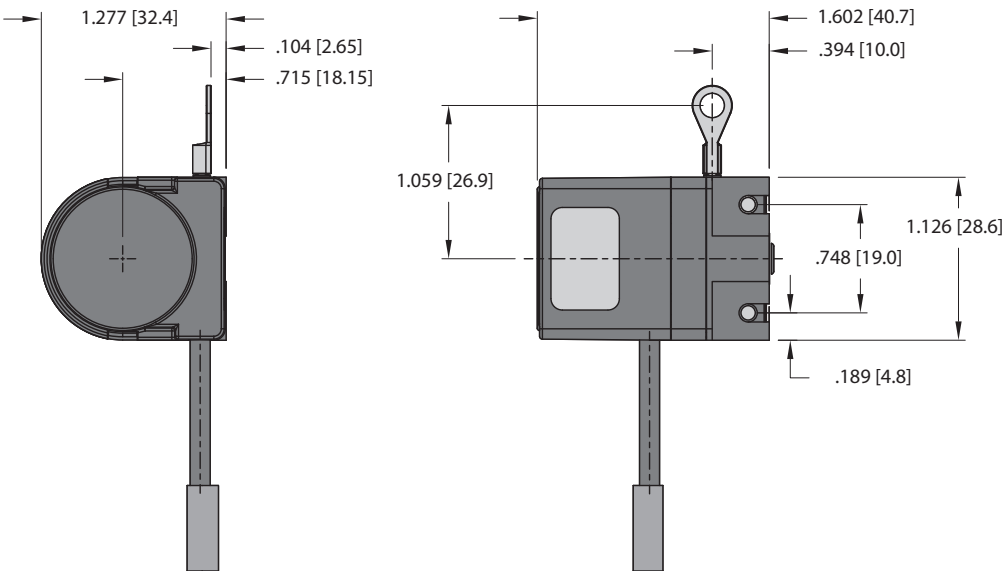
C	Housing
33	33 mm

D	Voltage Supply and Output Type
7F	15-28 VDC, 4-20 mA
8D	15-28 VDC, 0-10 V
PB	48 VDC max, 10 kΩ Potentiometer

E	Type of Connection
C0.5M	Radial Cable (0.5 m PUR)

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Dimensions: DW33



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