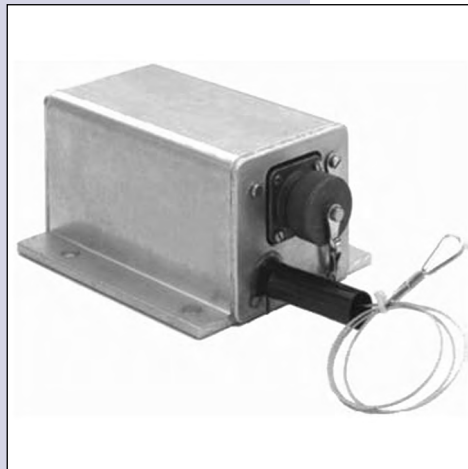




MCX120A
String
Potentiometer
(Yo-Yo) Sensor

Technical
Information



Revision History

Table of Revisions

Date	Page	Changed	Rev
24 Jul, 2013	4, 6	Feature and Options list and Dimension drawing	CA
08 Mar, 2011	Cover	Added PLUS+1™ Compliant	BB
10 Jan, 2011	7	Connection diagram	BA
05 Jan, 2011	4	Typo, page 4	AB
04 Jan, 2011		Replaces BLN-96-9242-E	AA

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MCX120A String Potentiometer (Yo-Yo) Sensor

Technical Information

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Description

The MCX120 String Potentiometer (Yo-Yo) Sensor uses a 10-turn potentiometer as the sensing element for length measurement. It is designed for use as a feedback sensor in for example measuring the cutting depth of a planer.

Features

- Rugged housing
- Easy to install
- Internal “Snap-Back” protection
- MS connector
- Length measurement up to 400 mm
- Moisture and corrosion resistant
- Withstands vibration and shock

Ordering Information

Reference

Part number	Total Resistance	Connector
500394	1 k Ω	6 pin MS

Theory of Operation

The sensor consists of a 10-turn potentiometer, a spring mechanism and a spooled steel cable.

The potentiometer with a total resistance of 1 k Ω (\pm 10 %) converts the cable length into a usable electrical signal.

With the complete retracted cable the resistance between B and C is about 800 Ω , during pulling the cable the resistance is reduced down to minimum about 300 Ω .

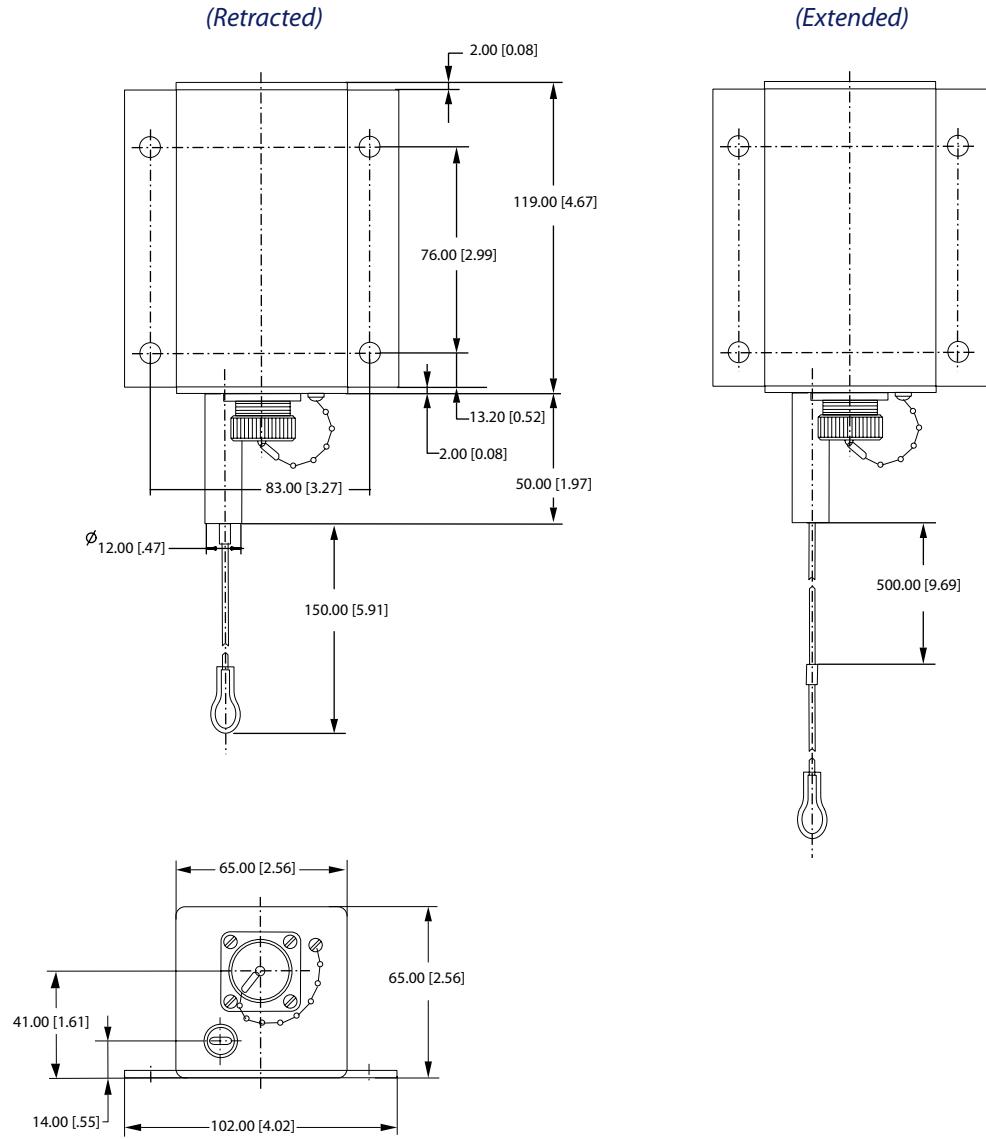
The calibration of the sensor is done in the connected control unit.

Electrical*Specifications*

Input voltage	4.5 to 12 Vdc
Resistance tolerance:	± 10 % related to RTOTAL
Linearity	$\pm 0,2$ %
Load 2W	70° C (158° F)

Dimensions

MCX120A String Potentiometer (Yo-Yo) Sensor



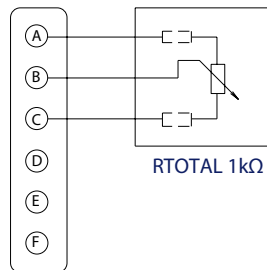
Accessories

Reference

Part Number	Type	Cable length
KW01009	Unshielded	2 to 10 ft
KW01026	Shielded	2 to 10 ft

Wiring

Connection Diagram



P200 048



- Bent Axis Motors
- Closed Circuit Axial Piston Pumps and Motors
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