



MCX120A
Potentiometer
Cable Sensor

Technical
Information



DESCRIPTION

The Cable Sensor MCX120A uses a 10-turn potentiometer as the sensing element for length measurement. It is designed for use as a feedback sensor in e.g. measuring the cutting depth of a planer.

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

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

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

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

FEATURES

- Rugged housing.
- Easy to install.
- MS-connector.
- Length measurement up to 400 mm.
- Moisture and corrosion resistant.
- Withstands vibration and shock.

ORDERING INFORMATION

Name	Resistance	Connector	Id. No.
MCX120A1003	$R_{\text{TOTAL}} 1\text{ k}\Omega$	MS-connector 6-pin	766600
MCX120A1005	$R_{\text{TOTAL}} 1\text{ k}\Omega$	MS-connector 6-pin	500394

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TECHNICAL DATA

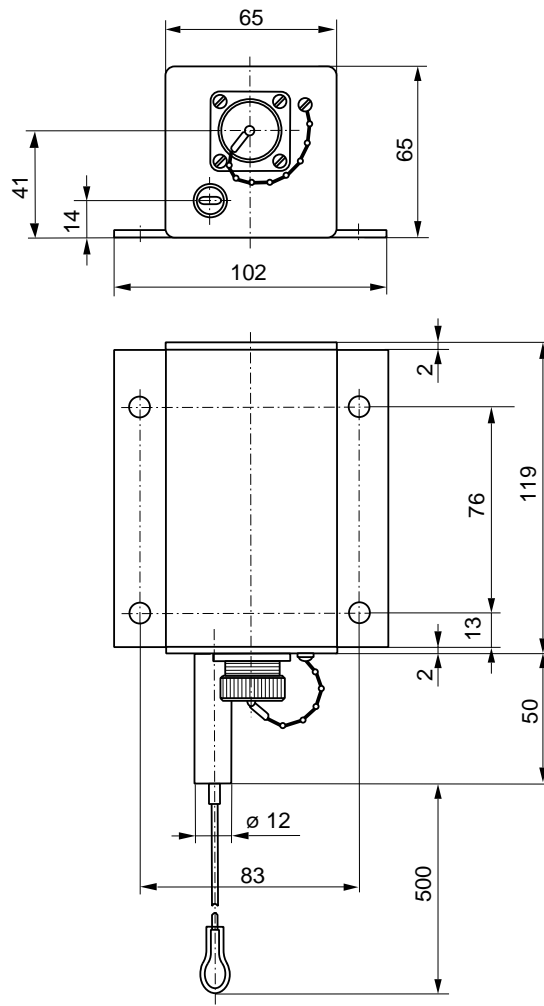
Input voltage:	4,5V _{DC} to 12V _{DC}
Resistance tolerance:	± 10% related to R _{TOTAL}
Linearity:	± 0,2%
Load:	2W (70°C)
Extract length of the cable:	max. 500 mm
Usable length of the cable:	400 mm

DIMENSIONS

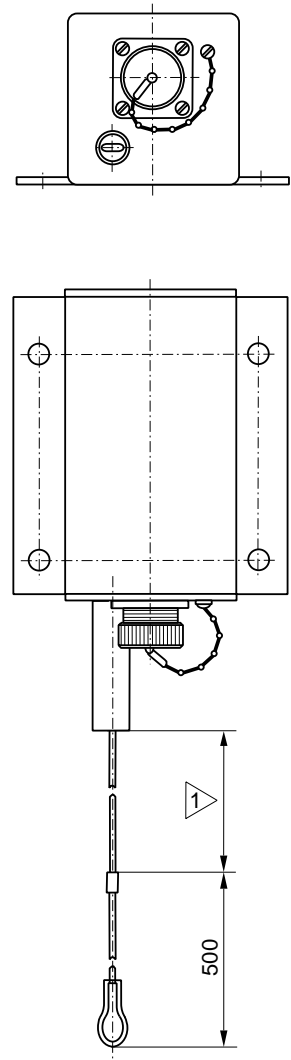
MCX120A1003

Usable length of the cable 400mm

Maximum cutting depth




Minimum cutting depth

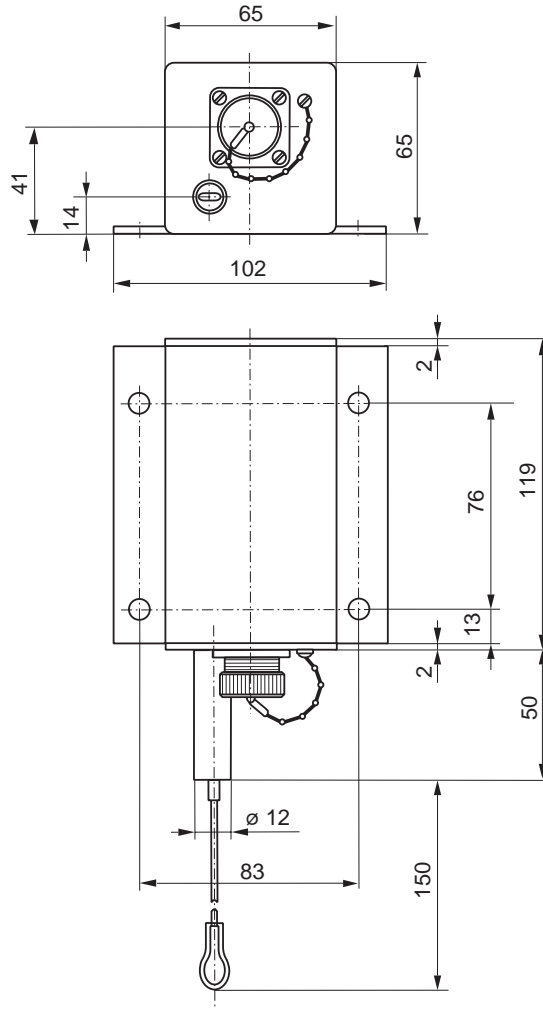


DIMENSIONS

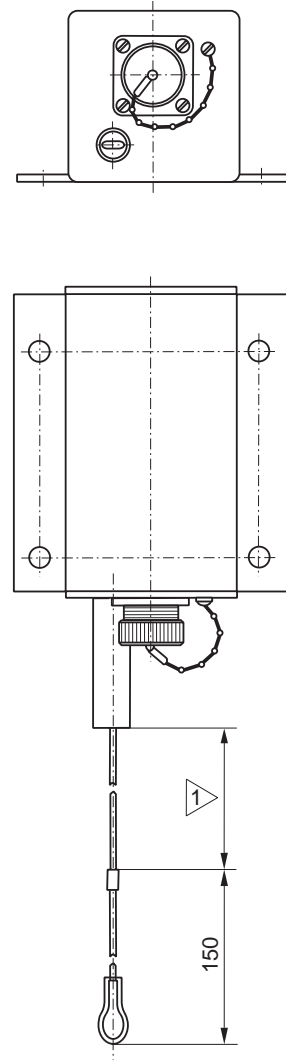
MCX120A1005

 Usable length of the cable 400mm

Maximum cutting depth

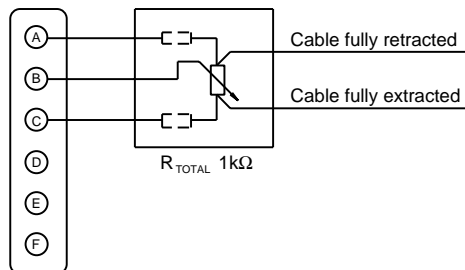


Minimum cutting depth



S00623

CONNECTION DIAGRAM



S00383



MCX120A Potentiometer Cable Sensor
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Notes

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Sauer-Danfoss (US) Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239-6000, Fax: +1 515 239-6618

Sauer-Danfoss (Neumünster) GmbH & Co. OHG
Postfach 2460, D-24531 Neumünster
Krokamp 35, D-24539 Neumünster, Germany
Phone: +49 4321 871-0, Fax: +49 4321 871-284

Sauer-Danfoss (Nordborg) A/S
DK-6430 Nordborg, Denmark
Phone: +45 7488-4444, Fax: +45 7488-4400

Sauer-Danfoss (US) Company
3500 Annapolis Lane North
Minneapolis, MN 55447, USA
Phone: +1 763 509-2084, Fax: +1 763 559-0108

www.sauer-danfoss.com