



RE 022 / RE 030

Vibro-Meter Proximity sensor



DESCRIPTION

The proximity transducers RE 022, RE 030 measure with the assistance of the transmitter RE 101 / R102 non-contacting the relative position of an object. The temperature of the transducer is measured and the temperature error is compensated.

SPECIFICATIONS

Transducer

Ambient temperature range:	- 20 to +200° C
Casing material:	Brass, nickel plated
Protection class:	IP 68
Measuring ranges:	see „Transducer characteristic“
Deviation of linearity:	± 2 %
Resistance:	for a multitude of oils, chemicals and solvents
Deviation over temperature range:	-30°C to +120°C ± 6 % FSR (RE 022 / 030 with 1m cable in the temperature area)
Deviation over temperature range:	With the Transmitter and cable between 0°C to +45°C +23°C to +85°C ± 4 % FSR (RE 022 / 030 with 1m cable in the temperature area)
	With the Transmitter and cable between 0°C to +45°C

Connection cable

Type:	Teflon cable, 4 wire screened
Ambient temperature range:	- 20 to +220° C
Length:	Order dependent, optional: 3, 5, or 10 meter
Diameter:	3 mm
Min. radius of bend:	20 mm
Resistance:	for a multitude of oils, chemicals and solvents

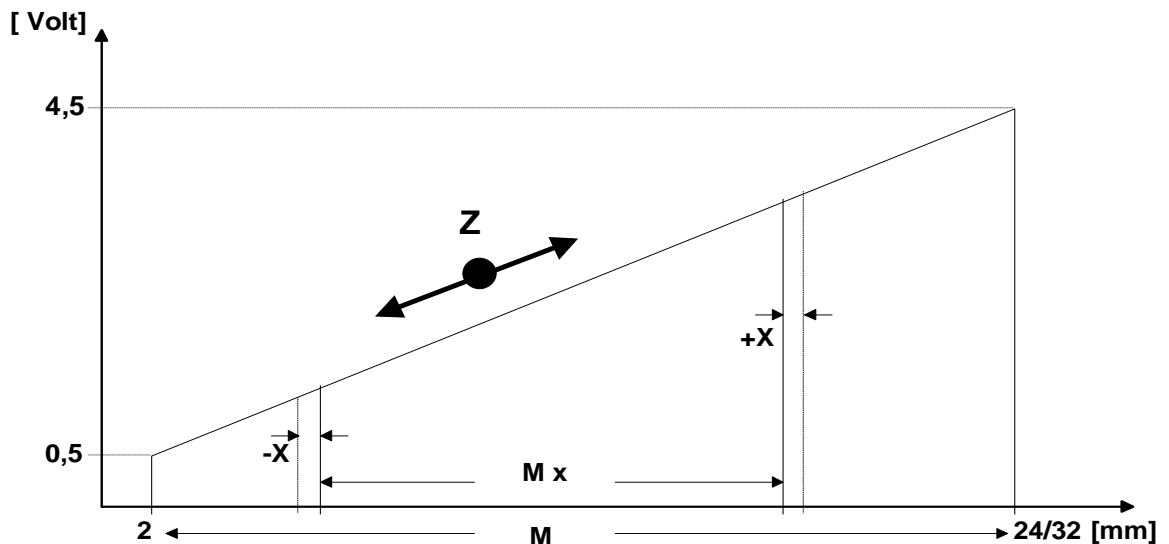
Protective hose

Type:	KS 10–8 E
Ambient temperature range:	- 20 to +220° C
Material:	stainless spiral hose
Length:	Order dependent, see above
External diameter:	10 mm
Inner diameter:	8 mm
Min. radius of bend:	40 mm
Resistance:	for a multitude of oils, chemicals and solvents

Cable connections

White:	Sensor coil +	(Terminal 11 RE101 / RE102)
Brown:	Sensor coil -	(Terminal 12 RE101 / RE102)
Green-yellow:	Screen	(Terminal 13 RE101 / RE102)
Yellow:	Measuring of temperature	(Terminal 14 RE101 / RE102)
Green:	Measuring of temperature	(Terminal 15 RE101 / RE102)

RE 022 / 030 signal characteristic



Choose of measuring range:

- M:** The overall working range of the transducer characteristic can be chosen as measuring range.
RE022 = 22 mm max. measuring range = 0,5 ... 4,5 Volt
RE030 = 30 mm max. measuring range = 0,5 ... 4,5 Volt

Attention:

In case of $M = Mx$, there is a single-sided reduction of the measuring range if Z displaces the working point.

- Mx:** The measuring range is chosen within the transducer characteristics of the transducers RE022, RE030, for example: from 3,0mm to 19,0 mm, which corresponds to a measuring range of 16 mm.

The chosen measuring range 0 to 100% is transformed by the transmitter RE 101 / RE 102 in a current of 4 to 20 mA.

- X:** Inaccuracy at the mechanical installation of the transducer can be corrected by means of the potentiometer Z . The compensation amounts to $X = \pm 10\%$ of measuring range full-scale value and is recorded in the test report.

Assignment

The proximity sensor RE 022 or 030 are designed for transmitter types RE 101 or 102.
The implementation is logged in the test report.
The proximity sensors are exchangeable, if no individual settings on Transmitter are done.
Any pairing or assignment has to result an additional exchange error of $\leq \pm 2\%$.

MOUNTING CONDITIONS

A particular advantage of the transducer is that the surface of the target must not be larger than the measuring area of the transducer.

The transducer can be flush mounted without affecting the measurement.

The transducer can be mounted by four different ways:

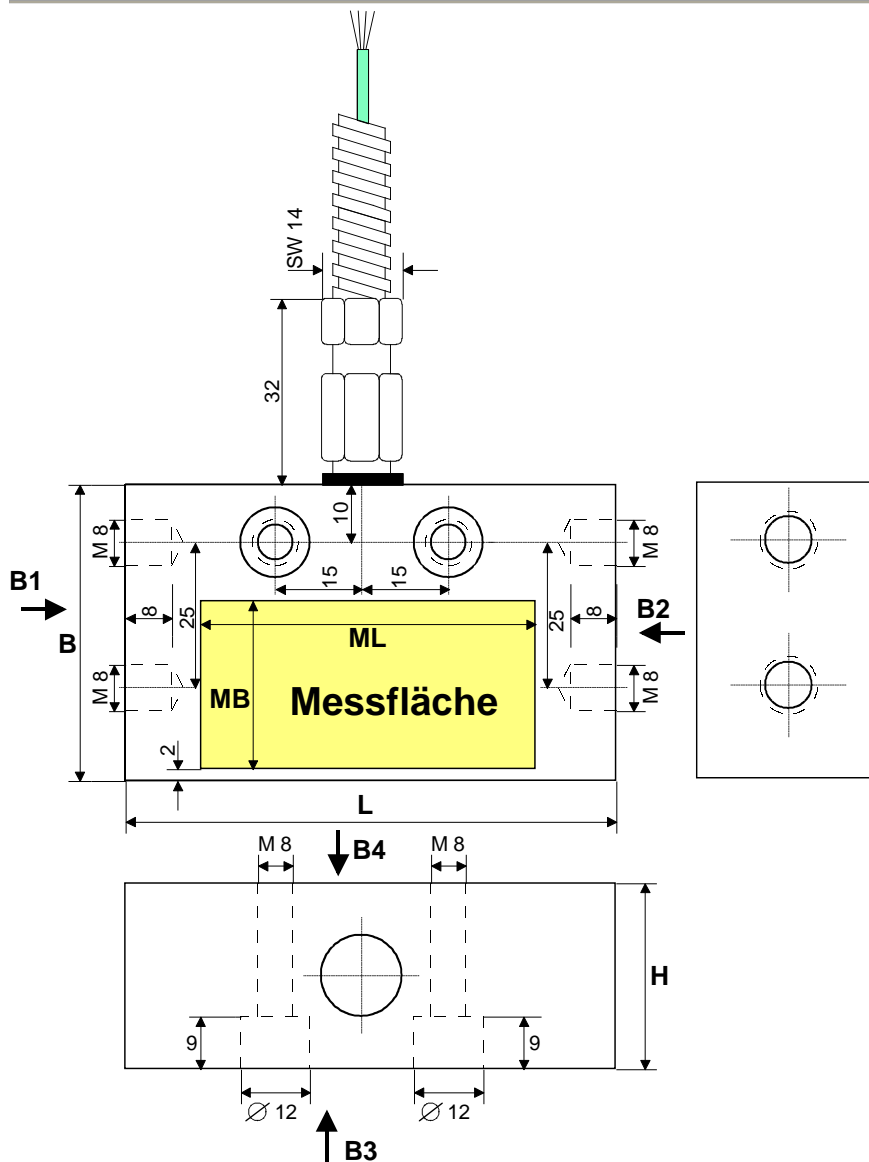
On page B1, B2 and B4 with two screws M8.

On page B3 with two-cylinder M6 hexagon socket screws.

The correct functioning of the system must be checked during the installation.

If necessary, the function can be optimized by setting potentiometers Z, S and L.

DRAWING



Dimensions in mm

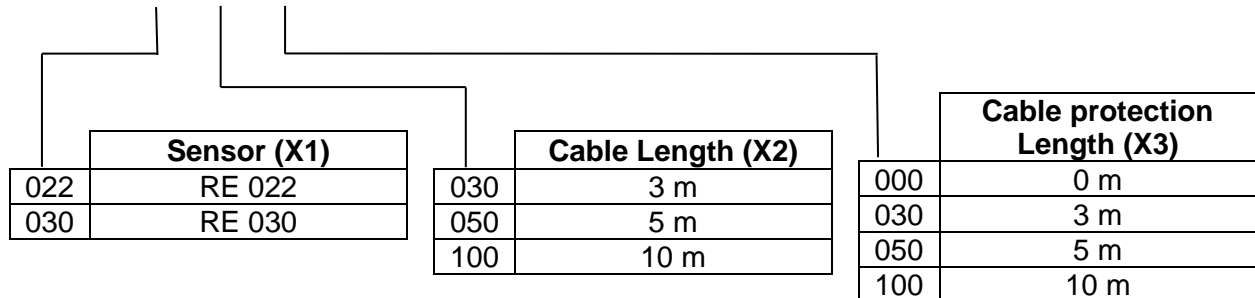
Typ	B	L	H
RE 022	51	85	32
RE 030	55	100	44

Measuring area in mm

Typ	MB	ML
RE 022	29	57
RE 030	33	76

ORDERING CODE

VMD – RE X1 – X2 – X3



Example: VMD-RE-022-050-000

RE 022, integral cable 5m without cable protection

Subject to change without notice.

Sales Offices

The complete list can be found on our
webpage: www.meggitt.com

Your local representative

Meggitt GmbH

Kaiserleistraße 51
63067 Offenbach am Main
Deutschland / Germany

Tel.+49 (0) 69 9799050
Fax +49 (0) 69 97990526
E-Mail: info@de.meggitt.com
www.meggitt.de



MEGGITT
smart engineering for
extreme environments