

INSTALLATION GUIDE

Magnetostrictive Sensor Series MAP

For more information please see the data sheet at
www.waycon.biz/products/magnetostrictive-transducers/

FIRST STEPS

WayCon Positionsmesstechnik GmbH would like to thank you for the trust you have placed in us and our products. This manual will make you familiar with the installation and operation of our magnetostrictive sensors. Please read this manual carefully before initial operation!

Unpacking and checking:

Carefully lift the device out of the box by grabbing the housing. After unpacking the device, check it for any visible damage as a result of rough handling during the shipment. Check the delivery for completeness.

If necessary consult the transportation company, or contact WayCon directly for further assistance.

GENERAL NOTES

The transducer must be installed away from sources of magnetic fields, both static and 50 Hz (electric motors, solenoids, etc.). The sensors must be powered with non-distributed networks and always at lengths of less than 30 mt.

The transducer connection cable must be wired separately from power cables and/or solenoid controls, drives, or remote switches. The line used for power supply must be dedicated to the transducers or must be drawn directly from the power terminals and as near as possible.

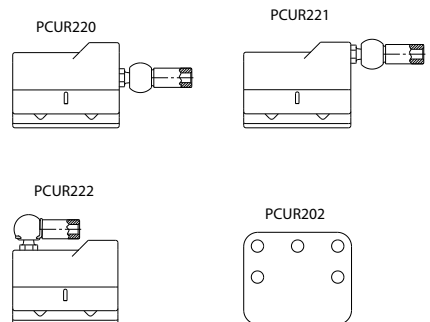
The transducer's cursor is a magnet. Therefore, if there are iron filings or small magnetic metal fragments in proximity of the transducer, avoid the use of sliding cursors, as there would be a risk of material accumulation on the cursor, creating problems for sliding. Use a floating cursor instead.

MAGNETIC CURSORS

Magnetic cursors (please order separately)

Cursor	Description
PCUR220	standard version; guided sliding, axial joint, low
PCUR221	guided sliding, axial joint, high
PCUR222	guided sliding, angled joint
PCUR202	unguided floating ¹⁾

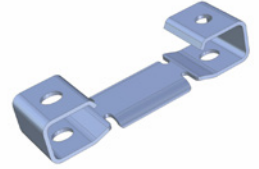
¹⁾ The adjustment has to be done 2...7 mm above the MAP-profile.
Allowed lateral deviation ± 2 mm. Installation only on a support made of non-magnetic material.



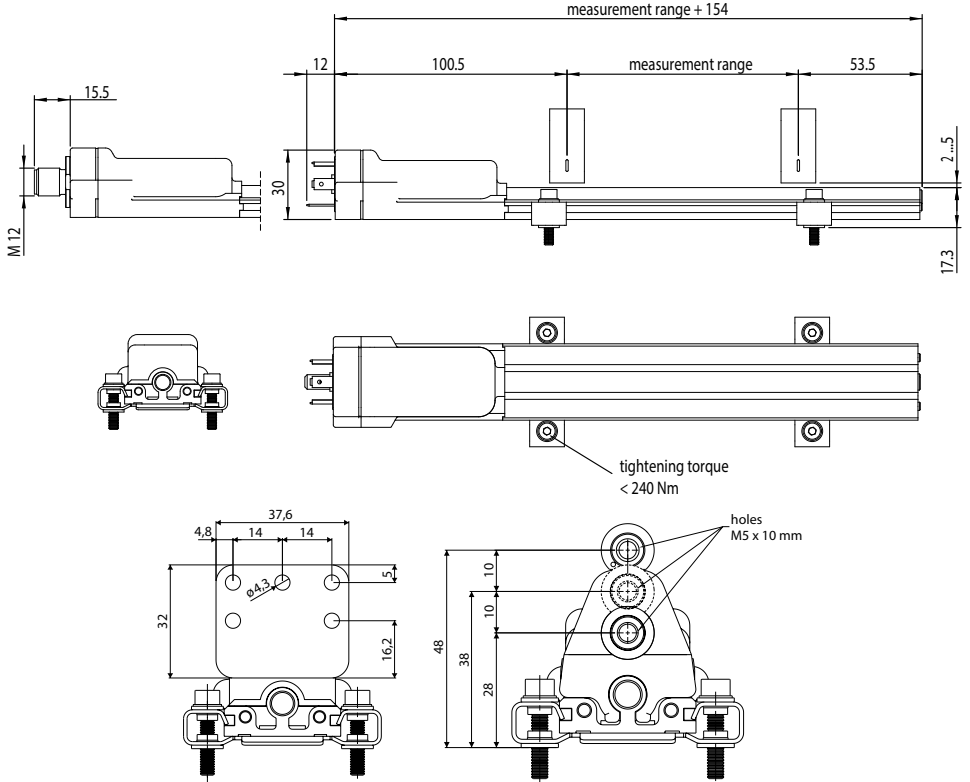
MOUNTING THE SENSOR

Brackets (please order separately)

1 set includes 2 brackets. We recommend to use 1 set for each 250...300 mm of the measurement range.



Set	Distance of bores	Screws	Length	Material
PKIT590	42.5 mm	M4	56 mm	steel
PKIT591	50 mm	M5	63.5 mm	steel



During installation, please observe the magnetically inactive range before and after the measurement range. The inactive range is 100.5 mm on the connector side and 53.5 mm on the front side (see drawing above).

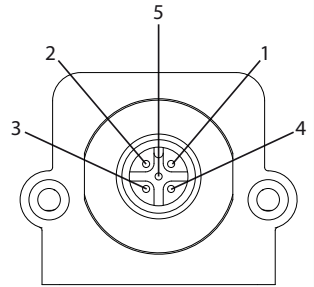
ELECTRICAL CONNECTION

MAP-A-A:

Connector M12, 5 pins, male

Power supply: 24 VDC, $\pm 20\%$

Function	Pin
Signal	1
GND _{Signal}	2
n. c.	3
GND _{Supply}	4
+V	5

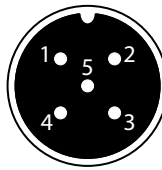


Accessory connection cable

Cable with mating connector M12, female, 5 pins, IP67

K5PXM-S-M12 | X m, straight connector, shielded

K5PXM-SW-M12 | X m, angular connector, shielded



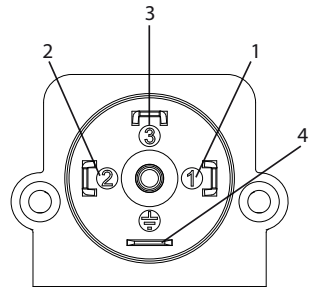
Pin	Cable colour
1	BN
2	WH
3	BU
4	BK
5	GY

MAP-A-M:

Connector EN175301-803 Form A, 4 pins, male

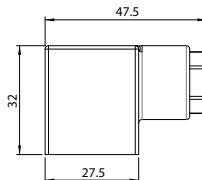
Power supply: 24 VDC, $\pm 20\%$

Function	Pin
+V	1
Signal	2
GND	3
Shield	4



Accessory mating connector CON006

for self assembly, angular, IP65, 4 pins,
cable gland PG9 for cable diameter 6..8 mm





DISPOSAL

Please always dispose of defective or irreparable appliances in an environmentally friendly manner and in accordance with the applicable legal provisions and disposal regulations. If required, we will be happy to assist you with environmentally friendly disposal.

Caution: Incorrect disposal can cause environmental damage!

Certain components such as electrical waste, electronic components, lubricants and other auxiliary materials must be disposed of as hazardous waste.

Please note that hazardous materials may only be disposed of by authorized specialist companies.

Dismantled components should be disposed of as follows:

- Metal components with scrap metal
- Electronic components with electronic waste
- Plastic parts at the recycling centre
- Other components must be sorted and disposed of according to their material properties