With serial output for target value input or transmission of the actual value















# Features at a glance

- Programmable electronic position indicator combinable with magnetic ring for rotative measurement linear measurement and fieldbus interface for accurate adjustment control of spindles.
- All parameters are freely programmable.
- LCD with two rows with backlight for target- and actual value.
- Suitable for semi-automatic and monitored adjustments of spindles.
- Freely programmable via keyboard operation with RS485 Modbus interface.
- RS485 Modbus for network connection with PLC or remote monitoring system.
- User guidance via 2 signal LEDs (green/red) to indicate: position has been reached / not reached.
- PUR-sensor cable suitable for mobile laying in cable chains
- Fieldbus connection via gateway interface: Profinet, EtherNet/IP, EtherCat and Powerlink. Battery lifetime: 6 to 8 years.

# **Mechanical characteristics**

| Weight                             | 150 g (only display)   |
|------------------------------------|--|
| Display                            | LCD with backlight, digit height 7,5 mm                                    |
|                                    | First row: target value – second row: actual value                         |
| Display range                      | -99999; +99999   |
| Speed                              | Max. 1.000 rpm   |
| Sensor cable                       | PUR-cable, Ø5,5 mm – pre-wired, not detachable,                            |
|                                    | for mobile laying in cable chains; cable length: 0.5, 1, 3, 5 or 10 meters |
| Operating temperature              | 0°C to +50°C   |
| Relative humidity                  | 35 to 85% (no condensation)  |
| Protection class                   | IP54 display, IP67 sensor  |
| Connection type /serial connection | Open cable end (standard)  |
|                                    | T-connector, 4-pole plug + 4-pole socket M12x1 (A-coded)                   |
|                                    | Y-connector, 4-pole socket 2x M12x1 (A-coded), optional                    |
| Power supply                       | Cable length 135 mm (with T-connector)                                     |
| /serial output                     | Cable length 200 mm (with Y-connector)                                     |

# **Electrical characteristic**

| Power supply                        | 10-30 VDC, max. 100 mA                              |
|-------------------------------------|---|
| Battery                             | 3,6 V- 1/2 AA, lifetime 6-8 years                   |
| Available functions                 | Reset, absolute/ incremental value,                 |
|                                     | mm/ inch-conversion, offset                         |
| Keyboard                            | Frontal keyboard – 3 programming- and function keys |
| Serial port                         | RS485 - MODBUS RTU                                  |
| Electromagnetic compatibility (EMC) | 2014/30/UE  |
| RoHS                                | 2011/65/UE  |

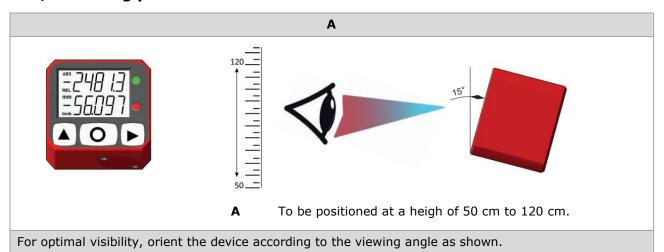
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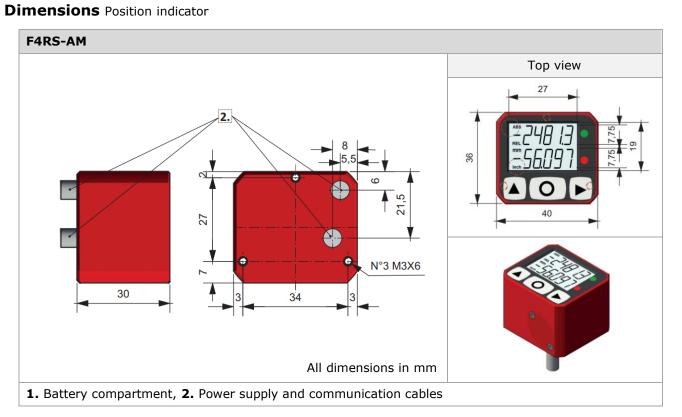
Fon: +497665/93465-0 Fax: +497665/93465-22

Measure

Control

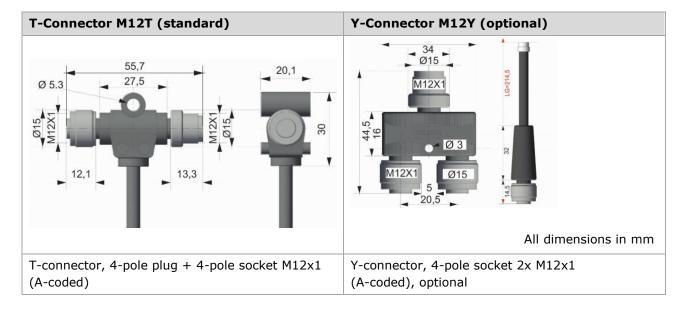
# View / Mounting position



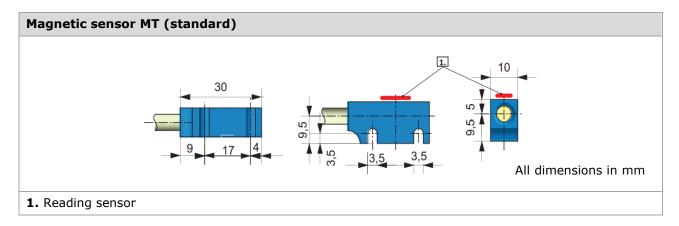


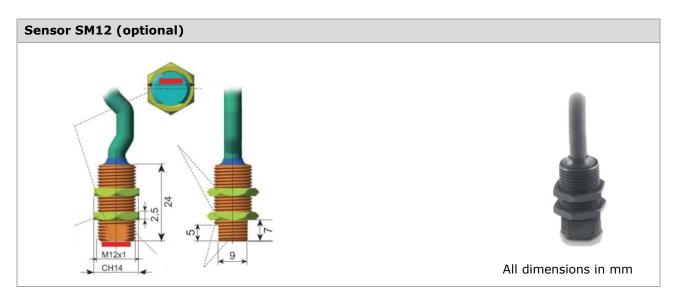
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## **Dimensions** Connector



# **Dimensions** Magnetic sensor





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Measure

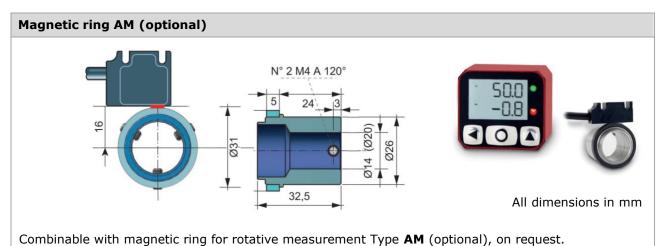
**Indicate** 

Control

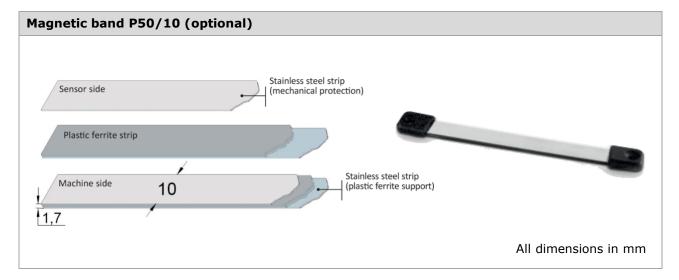
Sensors



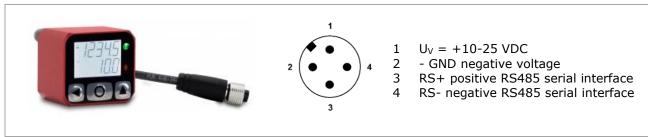
# **Dimensions** Magnetic ring



# **Dimensions** Magnetic band



### Sensor-power supply cable



Position indicator with sensor-power supply cable M12 4-pole (thread connector) / pin

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Control

# F4RS - rotatory

# Datasheet



## Fieldbus connectivity (optional)

### Protocol gateway for F4RS and EP4\_RS



### **GATEWAY-EP4-F4**

Protocol converter which connects the EP4\_RS and F4RS position indicators to fieldbus networks.









# Ordering example

**Type** F4RS 1.0 ΜT F4RS

F4RS-AM = Version for magnetic ring

### Mounting position

= To be positioned at a heigh of 50 cm to 120

### Sensor power supply cable

0.5 = 0.5 m

1.0 = 1 m

= 3 m3.0

5.0 = 5 m10.0 = 10 m

## **Connection type**

= Open cable end (standard)

M12T = T-connector: 4-pole plug + 4-pole socket M12x1 (A-coded) M12Y = Y-connector: 4-pin socket 2x M12x1 (A-coded), optional

### Sensor

MT (standard)

SM12 (optional)

# Ordering example Magnetic ring AM (optional)

Type AM14

**AM14** = Ø14 mm AM20 = Ø20 mm AM12.7  $= Ø12,7 \text{ mm } (\frac{1}{2}")$ 

AM19.05 = Ø19,05 mm (%'')

AM25 = Ø25 mm

Specification = Inner diameter. Other magnetic rings available on request.

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**Indicate** Measure

Control

Sensors

**Mechanics Accessory** 

# Position indicator - electronic digital

# F4RS - rotatory



# Datasheet

## Ordering example Magnetic band P50 (optional)

P50/10 -1.0 P50/10 = Magnetic band, pole pitch5 mm, 10 mm width, incl. Stainless steel covering tape Länge (m) 1,0 = 1 m

Length of magnetic tape at least 30 cm, then multiples of 50 cm. Other lengths available on request

Ordering example GATEWAY-EP4-F4 for Fieldbus connectivity (optional)

GATEWAY-EP4-F4 -Type **PROFINET GATEWAY-EP4-F4** = Gateway for position indicators

**Fieldbus** 

PROFINET = Profinet ETHERNETIP = EtherNet/IP ETHERCAT = EtherCat

= Ethernet Powerlink POWERLINK

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement. FIAMA

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**Indicate** 

Sensors

**Mechanics Accessory**