

# Datasheet

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 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


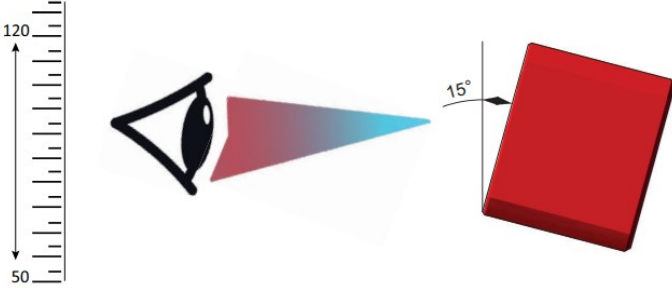
Weight	150 g (only display)
Display	LCD with backlight, digit height 7,5 mm First row: target value – second row: actual value
Display range	-99999; +99999
Speed	Max. 1.000 rpm
Sensor cable	PUR-cable, Ø5,5 mm – pre-wired, not detachable, for mobile laying in cable chains; cable length: 0.5, 1, 3, 5 or 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	T-connector, 4-pole plug + 4-pole socket M12x1 (A-coded) Y-connector, 4-pole socket 2x M12x1 (A-coded), optional
Power supply /serial output	Cable length 135 mm (with T-connector) Cable length 200 mm (with Y-connector)

## Electrical characteristics

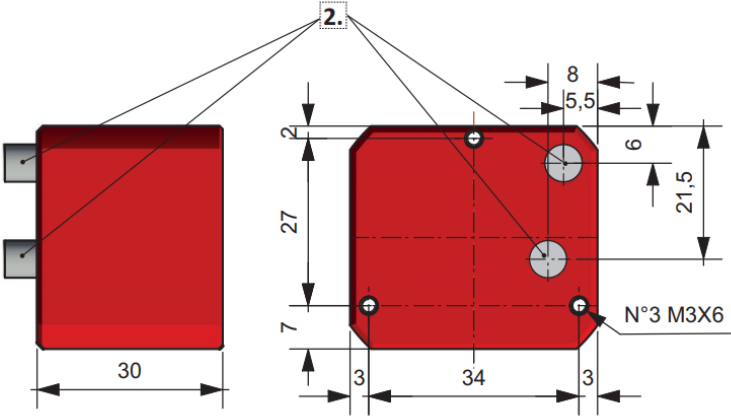
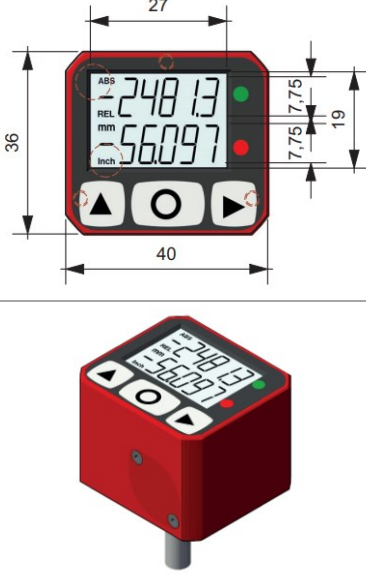
Power supply	10-30 VDC, max. 100 mA
Battery	3,6 V- 1/2 AA, lifetime 6-8 years
Available functions	Reset, absolute/ incremental value, mm/ inch-conversion, offset
Keyboard	Frontal keyboard – 3 programming- and function keys
Serial port	RS485 – MODBUS RTU
Electromagnetic compatibility (EMC)	2014/30/UE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

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## View / Mounting position

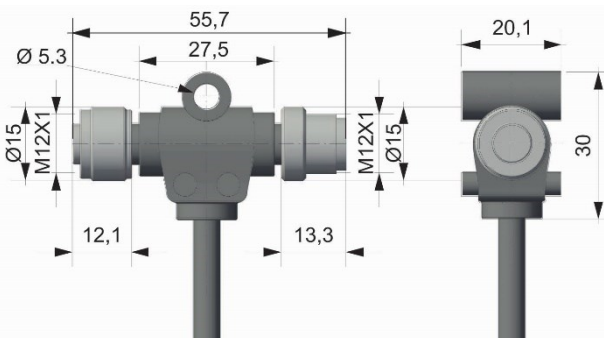
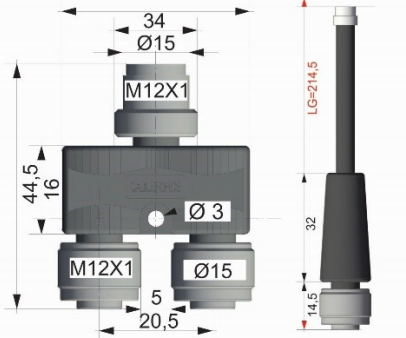
View A	Mounting position
	 <p><b>A</b> To be positioned at a height of 50 cm to 120 cm.</p> <p>For optimal visibility, orient the device according to the viewing angle as shown.</p>

## Dimensions Position indicator

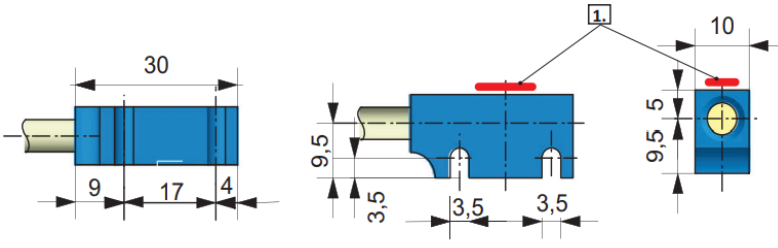
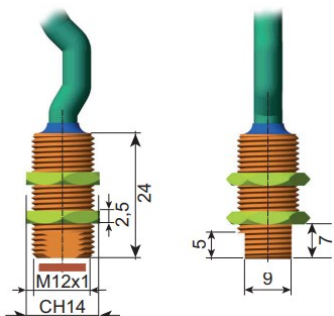
F4RS-MT		Top view
 <p style="text-align: center;">All dimensions in mm</p>		
<p><b>1.</b> Battery compartment, <b>2.</b> Power supply and communication cables</p>		

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## Dimensions Connector

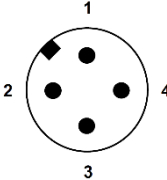
T-Connector M12T (standard)	Y-Connector M12Y (optional)
	
T-connector, 4-pole plug + 4-pole socket M12x1 (A-coded)	Y-connector, 4-pole socket 2x M12x1 (A-coded), optional
All dimensions in mm	

## Dimensions Magnetic sensor

Magnetic sensor MT (standard)	Magnetic sensor SM12 (optional)
	
1. Reading sensor	All dimensions in mm

## Sensor-power supply cable



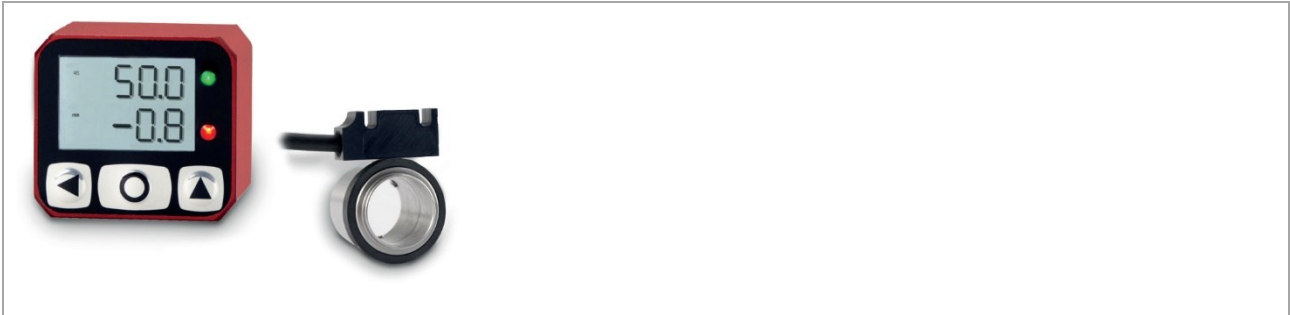


- 1  $U_V = +10-25$  VDC
- 2 - GND negative voltage
- 3 RS+ positive RS485 serial interface
- 4 RS- negative RS485 serial interface

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

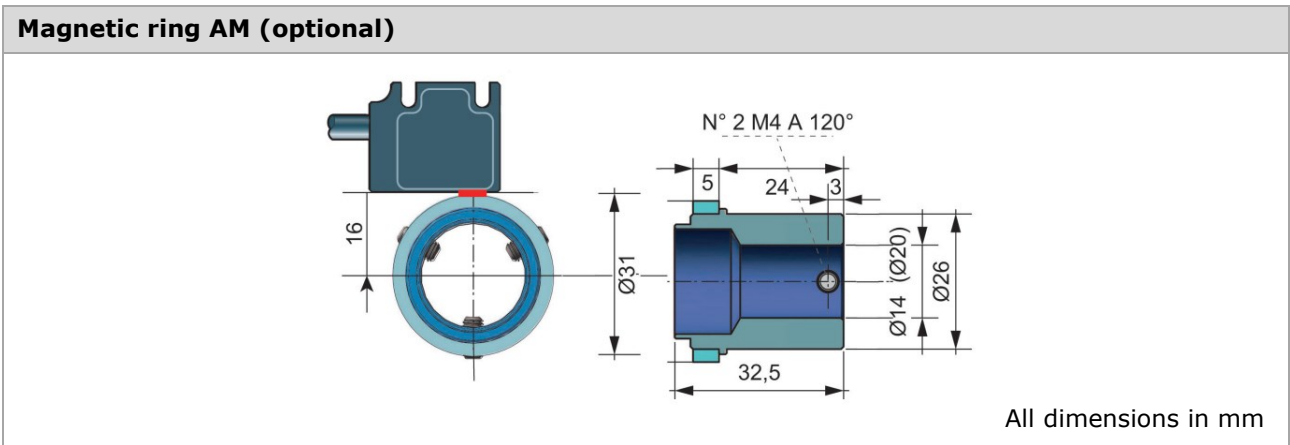
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## Magnetic ring

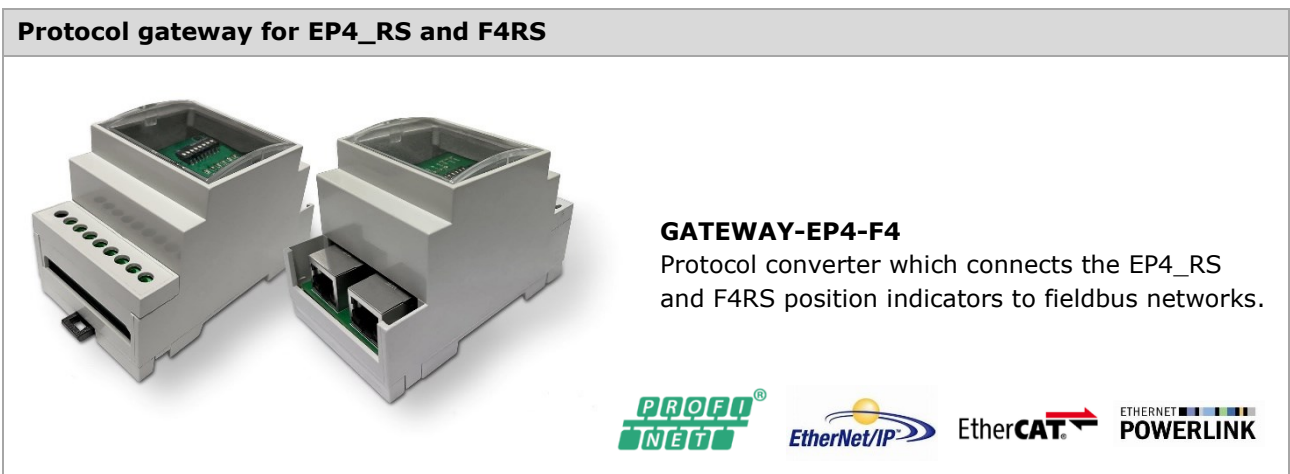


Combinable with magnetic ring for rotative measurement Type **AM** (optional), on request.

## Dimensions Magnetic ring



## Fieldbus connectivity



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## Ordering example

**Type** F4RS-AM - A - 1.0 - M12T - MT  
**F4RS-AM**

### Mounting position

**A** = To be positioned at a height of 50 cm to 120

### Sensor power supply cable

0.5 = 0,5 m

**1.0** = 1 m

3.0 = 3 m

5.0 = 5 m

10.0 = 10 m

### Connection type

**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 mm (1/2")

AM19.05 = Ø19,05 mm (3/4")

AM25 = Ø25 mm

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

## Ordering example GATEWAY-EP4-F4 for fieldbus connectivity (optional)

**Type** GATEWAY-EP4-F4 - PROFINET

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

### Fieldbus

**PROFINET** = Profinet

ETHERNETIP = EtherNet/IP

ETHERCAT = EtherCat

POWERLINK = Ethernet Powerlink

Manufacturer:



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