

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 band** for 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. 2,5 m/s
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)


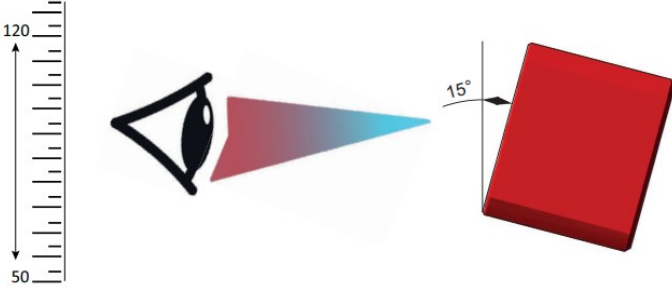
Electrical characteristics

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

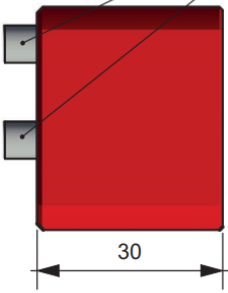
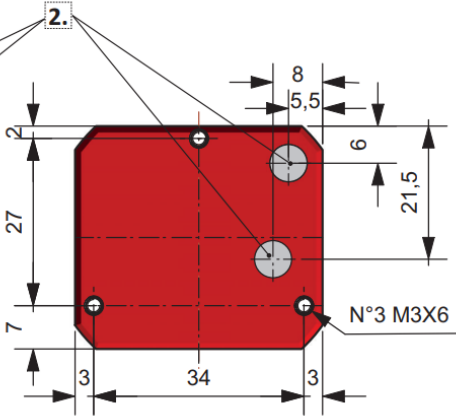




Datasheet

View / Mounting position

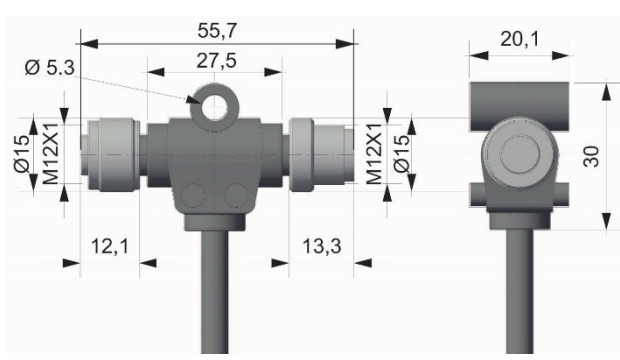
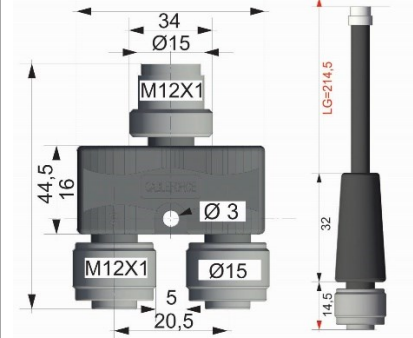
View A	Mounting position
	 <p>A To be positioned at a height of 50 cm to 120 cm.</p> <p>For optimal visibility, orient the device according to the viewing angle as shown.</p>

Dimensions Position indicator

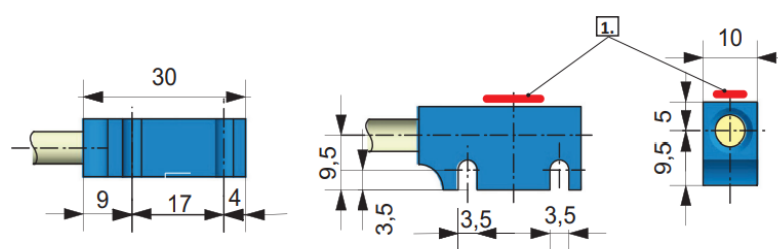
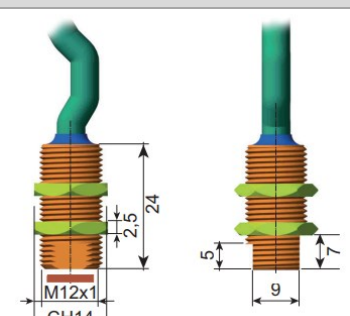
F4RS-MT		Top view
	 <p>All dimensions in mm</p>	 
<p>1. Battery compartment, 2. Power supply and communication cables</p>		

Datasheet


Dimensions Connector

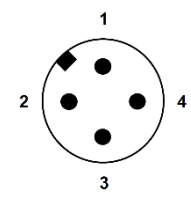
T-Connector M12T (standard)	Y-Connector M12Y (optional)
	
T-connector, 4-pole plug + 4-pole socket M12x1 (A-coded)	Y-connector, 4-pole socket 2x M12x1 (A-coded), optional
All dimensions in mm	

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

Datasheet

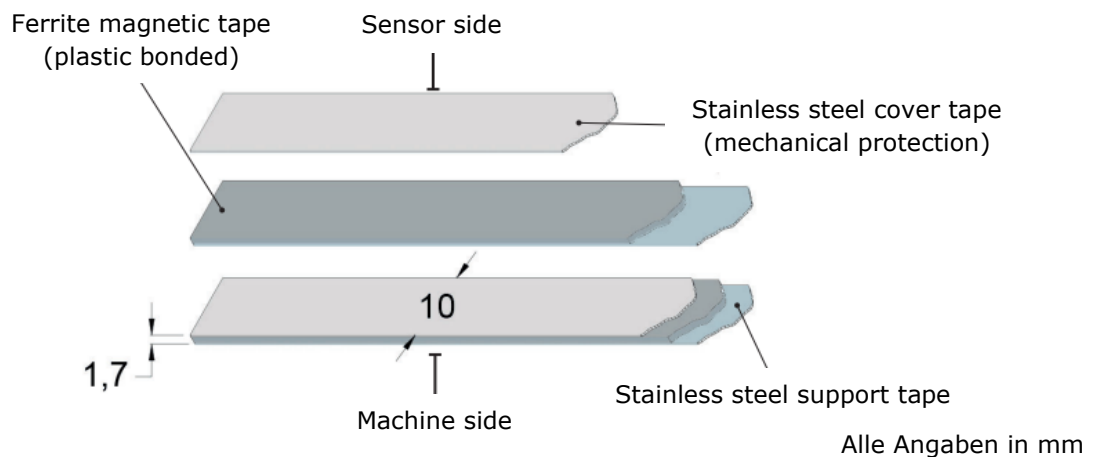
Magnetic band



Combinable with magnetic band for linear measurement Type **P50/10** (optional), on request.

Dimensions Magnetic band

Magnetic band P50/10 (optional)



Fieldbus connectivity

Protocol gateway for EP4_RS and F4RS



GATEWAY-EP4-F4

Protocol converter which connects the EP4_RS and F4RS position indicators to fieldbus networks.



Datasheet

Ordering example

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

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 band P50/10 (optional)

Type **P50/10**

P50/10 = magnetic band, pole pitch 5 mm, 10 mm width, incl. stainless steel cover tape

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)

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

GATEWAY-EP4-F4 = Gateway for position indicators

Fieldbus

PROFINET = Profinet

ETHERNETIP = EtherNet/IP

ETHERCAT = EtherCat

POWERLINK = Ethernet Powerlink

Manufacturer: **FIAMA**
since 1913

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