Datasheet

Programmable position indicator with integrated fieldbus interface.

Features at a glance

- Programmable electronic position indicator with through hollow shaft and integrated fieldbus interface for accurate adjustment control of spindles.
- Evolution of mechanical indicators, with comparable dimensions and the same mounting system, for semi-automatic adjustment monitored by PLC on a vast range of machines and plants even in complex and heterogenous working conditions.
- LCD with two rows with backlight for target- and actual value.
- Suitable for semi-automatic and monitored adjustments of spindles.
- Parameters freely programmable via keyboard operation with integrated fieldbus interface Profinet, Ethernet/IP, EtherCat, Powerlink and IO-Link for network connection with PLC or remote monitoring system.
- Display with 7.5 mm digit height offers excellent readability, also at greater distances.
- User guidance via 2 signal LEDs (green/red) to indicate: position has been reached / not reached.
- Battery lifetime: 6 to 8 years.
- Extensive accessories available: shaft clamping flange, reducing bushes, hand crank or hand wheel

Mechanical characteristics

Housing	Aluminium, anodized
Hollow shaft, EP43NET stainless steel EP46NET	Ø14 mm / Ø12,7 mm (1/2") Ø20 mm / Ø19,05 mm (3/4") / Ø25 mm / Ø25,4 mm (1")
Display	LCD with backlight, digit height 7,5 mm
Display range	-99999; +99999
Speed	max. 1.000 rpm
Resolution, max.	EP43NET: 3.200 pulses per revolution EP46NET: 4.000 pulses per revolution
Operating temperature	0°C to +50°C
Relative humidity	35 to 85% (no condensation)
Protection class	IP65
Electrical connection	1x M12x1 plug, 4-pole, A-coded (power supply)
Ethernet connection	2x M12x1 socket, 4-pole, D-coded (fieldbus communication)

Electrical characteristics

Power supply	10-30 VDC, max. 100 mA
Battery	3,6 V ½ AA, lifetime 6-8 years
Available functions	Reset, absolute / incremental value, mm / Inch conversation, offset
Keyboard	Frontside operation - 3 program and function keys
Interface /serial port	RS485 – Modbus RTU
Electromagnetic compatibility (EMC)	2014/30/UE
RoHS	2011/65/UE

EP43NET-EP46NET DB 2022-02-14 EN

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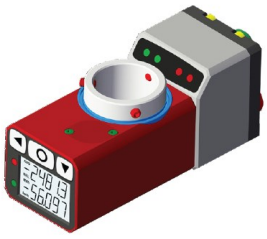
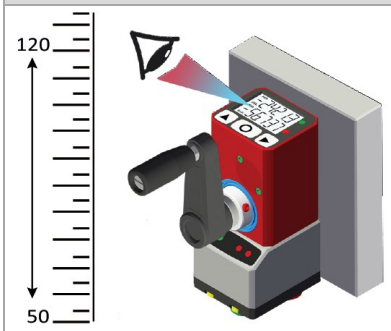
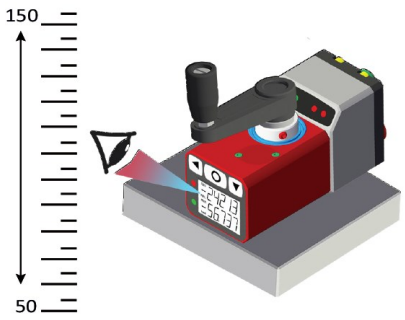
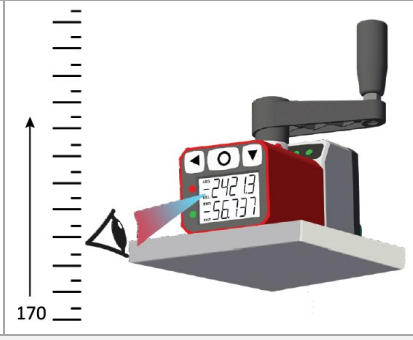
View

A		B1 – B2	
			

Mounting position

A	B1	B2
		

For optimal visibility, orient the device according to the viewing angle as shown.

A	For horizontal shaft. To be positioned at a height of 50 cm to 120 cm.
B1	For vertical shaft. To be positioned at a height of 50 cm to 150 cm.
B2	For vertical shaft. To be positioned at a height above 170 cm.

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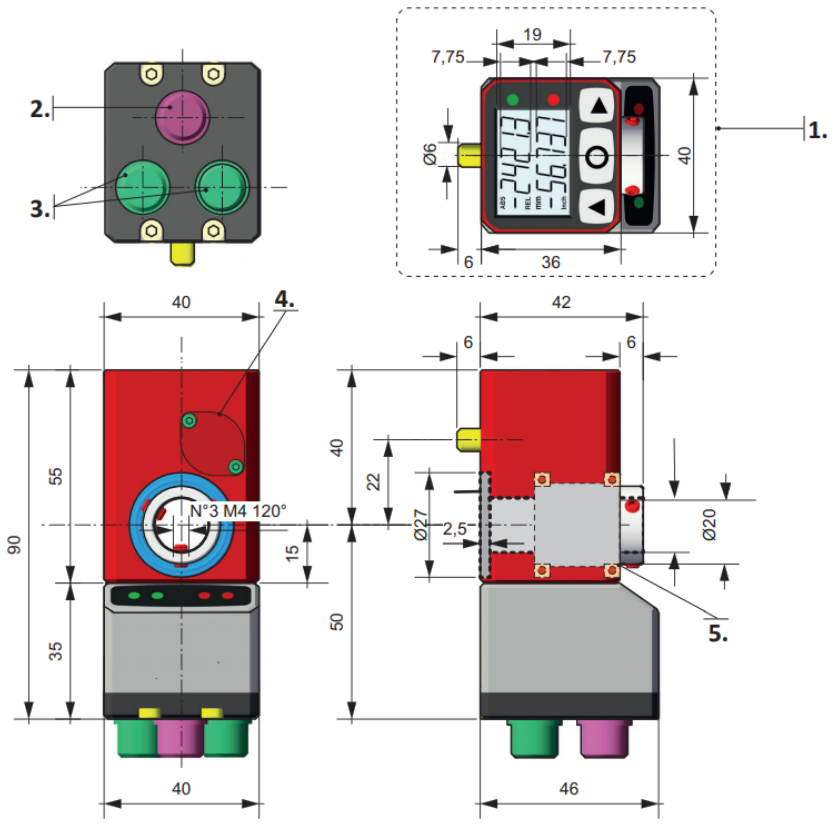
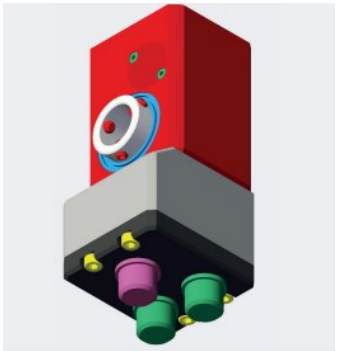
Dimensions

EP43NET





All dimensions in mm

1. Top view, **2.** Electrical connection, **3.** Ethernet connection, **4.** Battery compartment, **5.** ball bearing

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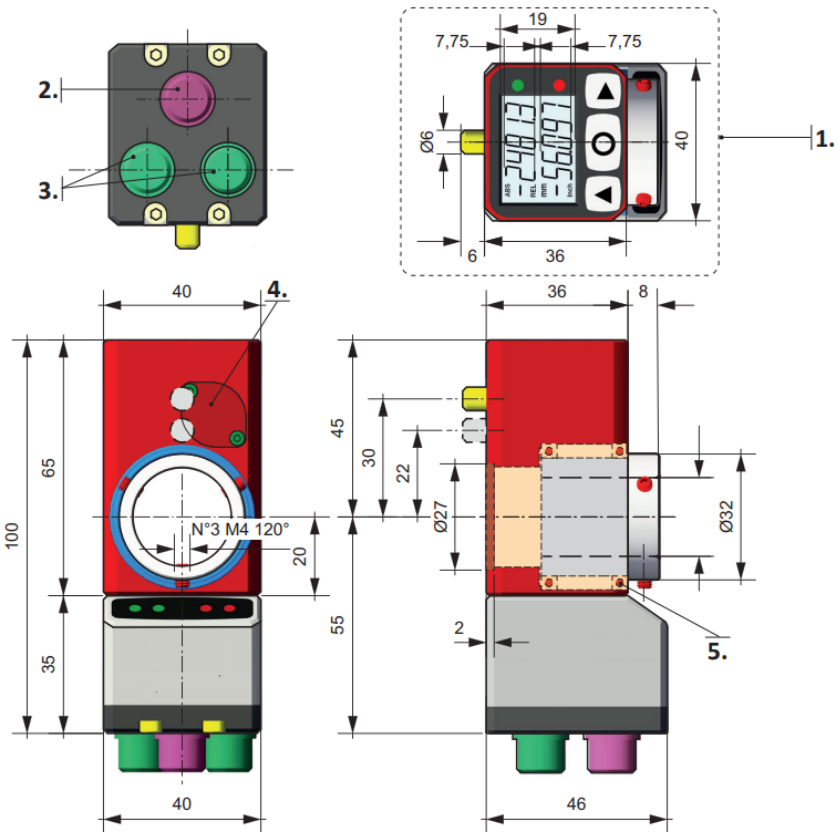
Dimensions

EP46NET



All dimensions in mm

1. Top view, **2.** Electrical connection, **3.** Ethernet connection, **4.** Battery compartment, **5.** ball bearing

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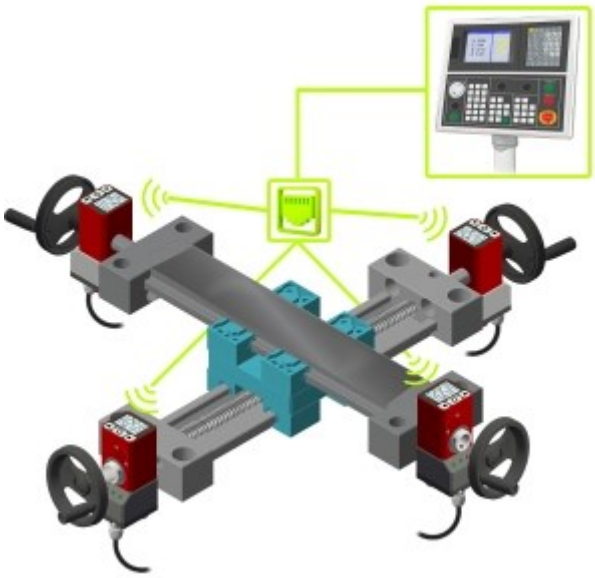
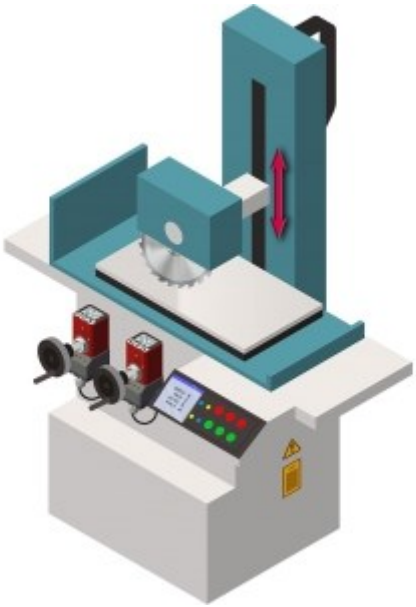
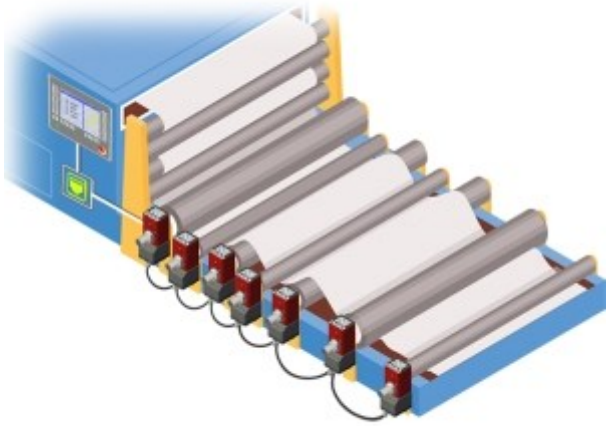
Application examples







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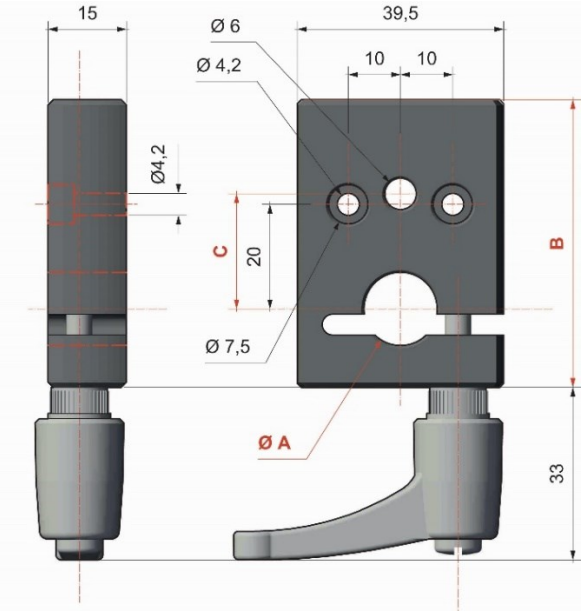
Accessories

Shaft clamping flange	Reducing bushes	Hand crank, Hand wheel
FL-B-EP43, FL-B-EP46	Position indicator/Hollow shaft **BF**	Hand crank **V.M** Hand wheel **V.R**

Dimensions Shaft clamping flange

Shaft clamping flange FL-B-EP43, FL-B-EP46

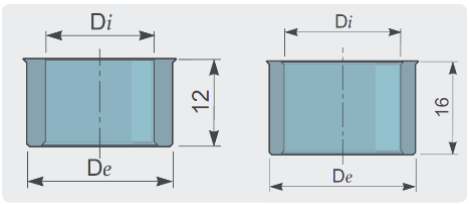


All dimensions in mm

	FL-B-EP43	FL-B-EP46
	Compatible with EP43NET	Compatible with EP46NET
	ØA = 14 -12,7 (1/2")	**ØA** = 20 – 19,05 (3/4") - 25
	B = 55	**B** = 65
	C = 22	**C** = 30

Dimensions for Position indicator/Hollow shaft

Reducing bushes BF



Di = inner diameter
De = outer diameter

All dimensions in mm

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Ordering examples

Type	EP43NET	-	A	-	F14	PROFINET

EP43NET
EP46NET

Mounting position
A = For horizontal shaft (positioned at a heigh of 50 cm to 120 cm)
B1 = For vertical shaft (positioned at a heigh of 50 cm to 150 cm)
B2 = For vertical shaft (positioned at a height above 170 cm)

Hollow shaft diameter
EP43NET:
F12.7 = 12,7 mm (½")
F14 = 14 mm

EP46NET:
F19.05 =19,05 mm (¾")
F20 = 20 mm
F25 = 25 mm
F25.4 = 25,4 mm (1")

Fieldbus interface
PROFINET = Profinet
ETHERNETIP = EtherNet/IP
ETHERCAT = EtherCat
POWERLINK = Ethernet Powerlink
IOLINK = IO-Link

Accessories (optional)

Type	FL-B-EP43	-	F14

FL-B-EP43 = Shaft clamping flange for EP43NET
FL-B-EP46 = Shaft clamping flange for EP46NET

Hollow shaft diameter
EP43NET:
F12.7 = 12,7 mm (½")
F14 = 14 mm

EP46NET:
F19.05 =19,05 mm (¾")
F20 = 20 mm
F25 = 25 mm

Type	BF	-	14/12

BF = Reducing bush for position indicator/hollow shaft

Outer-/inner diameter
EP43NET:
14/12 = 12 mm
14/10 = 10 mm
14/8 = 8 mm
14/6 = 6 mm

EP46NET:
20/18 = 18 mm
20/16 = 16 mm
20/15 = 15 mm
20/14 = 14 mm
20/12 = 12 mm

Manufacturer:

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