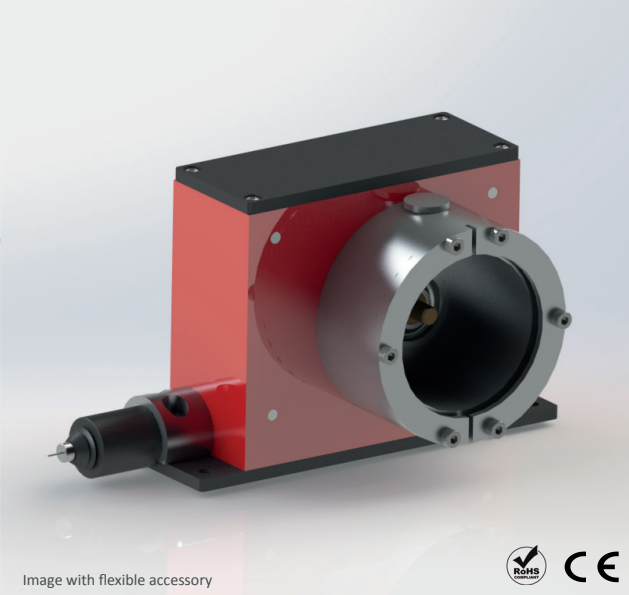
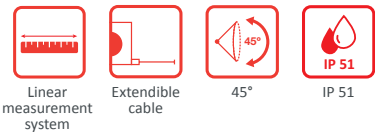


Image with flexible accessory

DRAW WIRE SERIES EM4

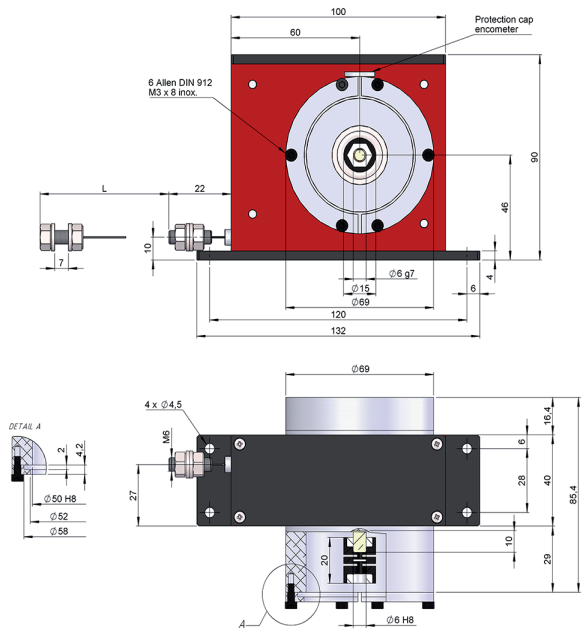
EXTENDIBLE CABLE MEASUREMENT SYSTEM

- Measuring linear distances up to 4 meters
- Any mounting position possible
- Protection class IP51 according to DIN EN 60529
- The drum shaft can drive any kind of rotary encoder (encoder, potentiometer, ...)
- Stainless steel extendible cable Ø 0,61 AISI316



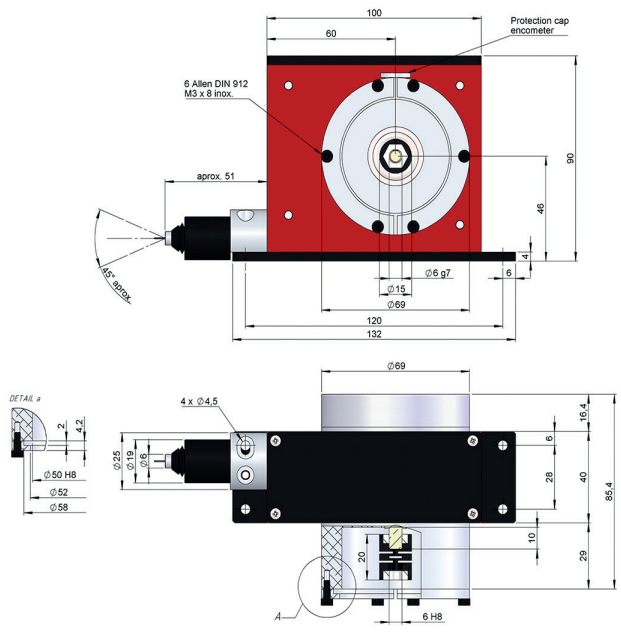
Linear measurement system | Extendible cable | 45° | IP 51

90.1404



Drawing 90.1404 with standard bell synchro and coupling type 1

90.1404 FX



Drawing 90.1404 FX with flexible accessory, standard bell synchro and coupling type 1

REFERENCE

Reference example: **90.1404-SY1**

Serie	Fixing system to sensor	Coupling	Special customer
90.1404 / 90.1404 FX -	☐☐	☐	☐☐
90.1404. Standard **90.1404 FX.** Flexible accessory	**SY.** Standard bell synchro **CL.** Clamping bell	**1.** PFP 1520 06/06 **2.** PFP 1520 06/635 **3.** PFP 2224 06/10	**AW.** Inverted caps **AV.** Double restoring force

Request the EM4 already coupled to an electronic output device that could be an Incremental Optical Encoder, Multiturn Absolute Optical Encoder, Potenti ometer or Multiturn Absolute Magnetic Encoder.

Hohner Elektrotechnik GmbH | Gewerbehof 1 D-59368 Werne
Telefon: (0 23 89) 98 78-0 Telefax: (0 23 89) 98 78-27 | info@hohner-elektrotechnik.de www.hohner-elektrotechnik.de

hohner Elektrotechnik Werne

DRAW WIRE SERIES EM4

EXTENDIBLE CABLE MEASUREMENT SYSTEM

TECHNICAL SPECIFICATIONS

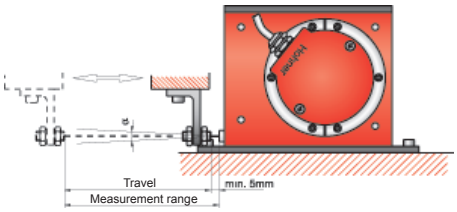
MODEL	EM4
Reference	*90.1404 / 90.1404 FX*
Travel	200 mm ±0,06 / per turn
Cable*	Ø 0,61 stainless steel AISI316 (structure 19 x 7 + 0)
Measurement range, up to (mm)	4000
Maximum cable extension (mm)	4010
Minimum cable static tension	3 N - Standard 6 N - Special customer AV
Maximum cable static tension	8,9 N - Standard 18 N - Special customer AV
Maximum extension acceleration	35 m/s² - Standard 30 m/s² - Special customer AV
Maximum recovery accelaration	10 m/s² - Standard 20 m/s² - Special customer AV
Maximum speed	1 m/s
Protection against dust and splashes according to DIN EN 60529	IP51

(*) Other types of cables are possible on special order

INSTALLATION

EM4 units are secured to a flat machine surface by means of three or four M4 screws.

The cable must be correctly aligned and under no circumstances must it exceed the measurement range.

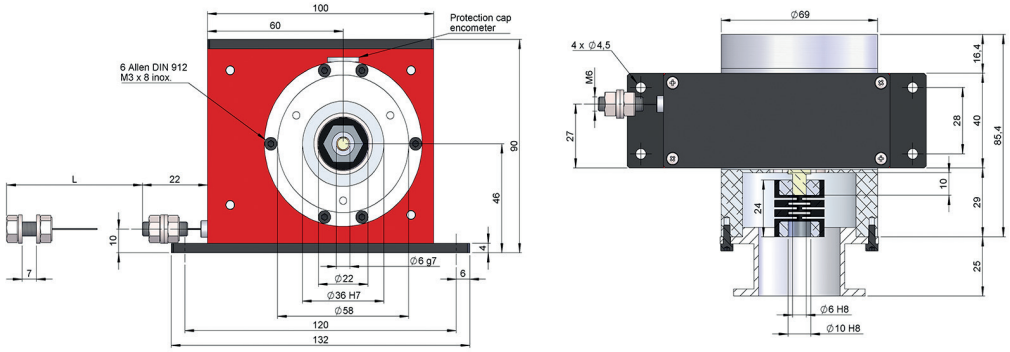


EM 90.1404: α < 2°
EM 90.1404 FX: α < 45°

Special customer AW for inverted caps.

FIXING SENSOR SYSTEM DIMENSIONS

Fixing system to sensor type CL
Clamping bell



Coupling type 3
PFP 2224 06/10

OUTPUT DEVICES

We can supply the EM4 already coupled to an electronic output device that could be an Incremental Optical Encoder, Multiturn Absolute Optical Encoder, Potentiometer or Multiturn Absolute Magnetic Encoder:

If it is required to obtain a determined resolution "r" (mm per pulse) in the case of using an absolute or incremental encoder, the number of encoder pulses (n) will be:

$$n = \frac{D}{r}$$

(D is EM4 travel in mm)

Using a potentiometer, an output "r" ratio (in Ω per mm) is obtained in accordance with:

$$r = \frac{R}{D \times n}$$

(R is the rated resistance and n is the maximum number of turns)

As standard, we have potentiometers of R=10KΩ and n=10 turns available in stock. It must be taken into consideration that the mechanical travel of the potentiometer may limit the EM4 measurement range.

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