



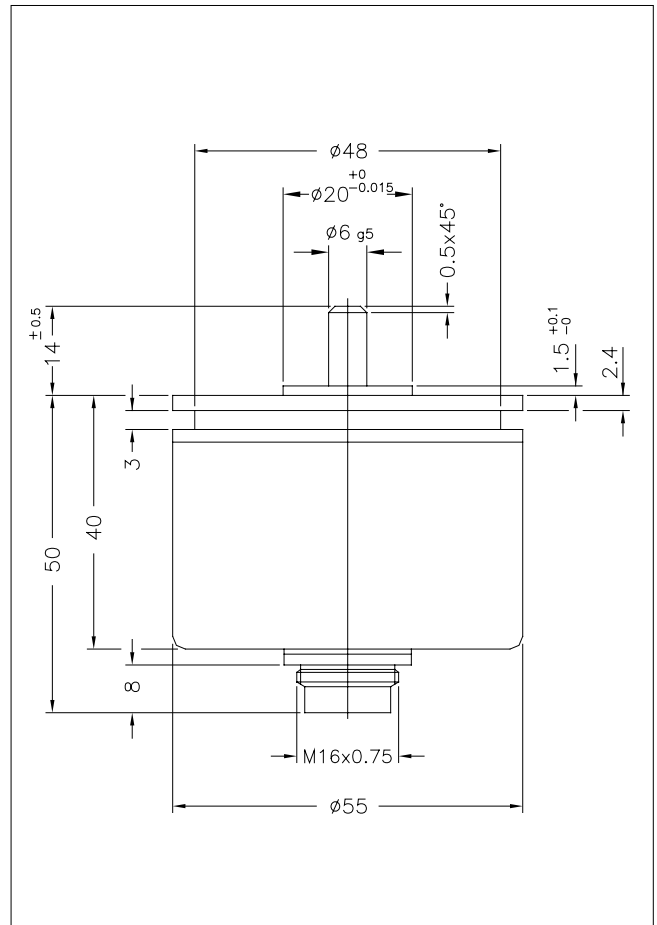
#### Main features

- Sealed industrial version
- Independent linearity up to  $\pm 0,05\%$  (standard  $\pm 0,5\%$ )
- Working temperature:  $-55...+100^{\circ}\text{C}$
- Repetibility  $0,01\%$  della C.E.T.
- Life duration:  $>100 \times 10^6$  operations at 10 r.p.s. (within C.E.U.)
- Infinite resolution
- Electrical connection: 5-pole connector DIN 43322
- Grade of protection IP65
- Suitable for use in explosive environments with presence of gas (groups IIA, IIB, IIC) and combustible powders. Standards for simple device: ATEX CEI EN 50020 2003 - paragraph 5.4 a

#### TECHNICAL DATA

Model	PR65
Vibrations	5...2000Hz, $A_{max} = 0,75$ mm $a_{max} = 20$ g
Shock	50 g, 11ms.
Hysteresis (backlash)	$\leq 15''$ of arc
Tolerance on resistance total	$\pm 20\%$
Recommended cursor current	$< 0,1 \mu\text{A}$
Maximum cursor current	10mA
Electrical isolation	$>100\text{M}\Omega$ a 500V $\sim$ , 1bar, 2s
Dielectric strength	$< 100 \mu\text{A}$ a 500V $\sim$ , 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	see table
Actual Temperature Coefficient of the output voltage	$< 1,5\text{ppm}/^{\circ}\text{C}$
Working temperature	$-55...+100^{\circ}\text{C}$
Storage temperature	$-55...+125^{\circ}\text{C}$
Case material	Nylon 66 GF 40
Shaft material	AISI 316
Bearings	High precision with double (ZZ) sealed screen in stainless steel
Flange	Anodised aluminium
<b>Important:</b> all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \mu\text{A}$ .	

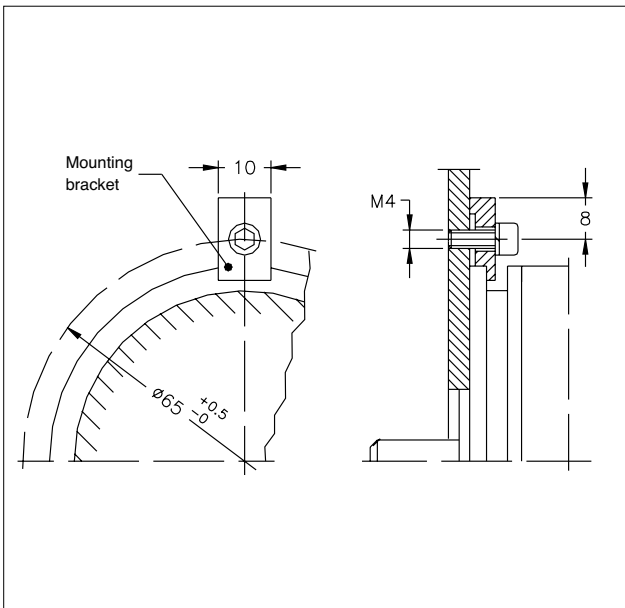
#### MECHANICAL DIMENSIONS



## MECHANICAL / ELECTRICAL DATA

Model		PR65
Theoretical electrical stroke (C.E.T.)	°	345 ± 4°
Useful electrical stroke (C.E.U.)	°	C.E.T. -2°
Resistance (C.E.T.)	kΩ	1 - 4.7 - 10
Independent linearity (within C.E.U.)	±%	A = ± 1% B = ± 0,5% C = ± 0,25% D = ± 0,1% E = ± 0,05%
Dissipation at 40°C (0W at 120°C)	W	1.25
Mechanical rotation (C.M.)	°	360° continuous
Weight	g	132

## MOUNTING DIAGRAM

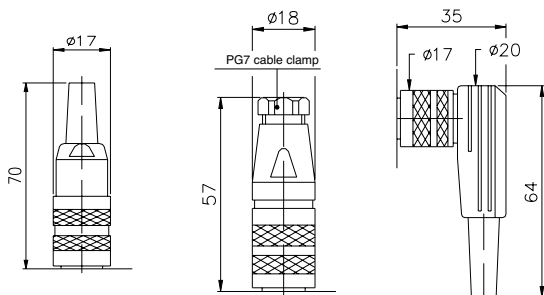


## OPTIONAL ACCESSORIES

Fixing kit for PR65:  
3 brackets, M4x10TCEI screws, grower  
(Included in the supply)

Code

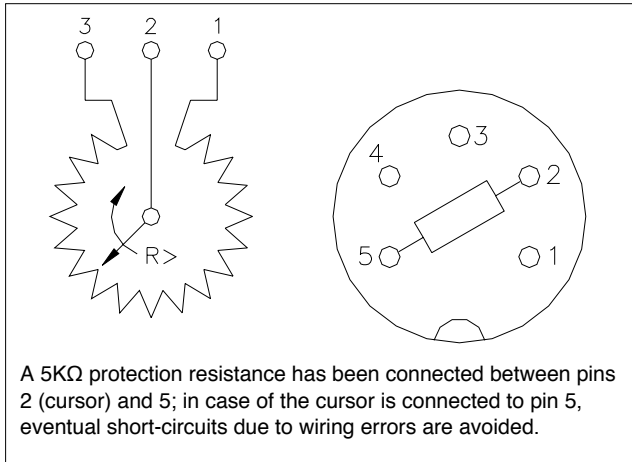
**PKIT008**



**CON011 - IP40 Prot.** (5 pole Female conn.)  
**CON012 - IP67 Prot.** (5 pole Female conn.)  
**CON013 - IP40 Prot.** (5 pole Female conn.)

Extraction length of the connector 10mm.

## ELECTRICAL CONNECTIONS



## ORDER CODE

Rotative transducer **PR65**

Linearity (std. B)	<b>A = ± 1%</b>
	<b>B = ± 0,5%</b>
	<b>C = ± 0,25%</b>
	<b>D = ± 0,1%</b>
	<b>E = ± 0,05%</b>

Resistance value (std. 103)	<b>1kΩ</b>	<b>102</b>
	<b>4,7kΩ</b>	<b>472</b>
	<b>10kΩ</b>	<b>103</b>

If requested, it is possible to supply models with non-standard mechanical and/or electrical features

Example: **PR65 - B - 0 - 103**

Rotative transducer model PR65, linearity ±0,5%, no voltage or current intermediate pick-offs, 10kΩ resistance.

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice

**GEFRAN**

GEFRAN spa  
via Sebina, 74  
25050 PROVAGLIO D'ISEO (BS) - ITALIA  
ph. 0309888.1 - fax. 0309839063  
Internet: <http://www.gefran.com>

DTS\_PR65\_11-2012\_ENG