GEFRAN

PR65

ROTATIVE POSITION TRANSDUCER
IN CONDUCTIVE PLASTIC

Main features

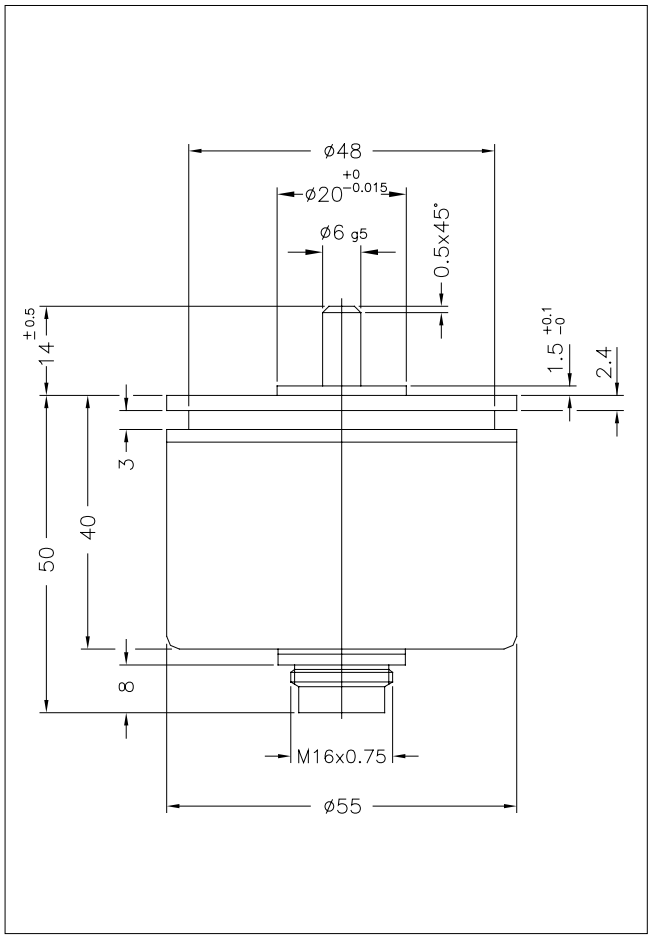
- *Sealed industrial version*
- *Independent linearity up to ± 0,05% (standard ± 0,5%)*
- *Working temperature: -55...+100°C*
- *Repetibility 0,01% della C.E.T.*
- *Life duration: >100x10⁶ operations at 10 r.p.s. (within C.E.U.)*
- *Infinite resolution*
- *Electrical connection: 5-pole connector DIN 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, Amax =0,75 mm amax. = 20 g
Shock	50 g, 11ms.
Hysteresis (backlash)	<= 15” of arc
Tolerance on resistance total	± 20%
Recommended cursor current	< 0,1μA
Maximum cursor current	10mA
Electrical isolation	>100MΩ a 500V=, 1bar, 2s
Dielectric strength	< 100 μA a 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	see table
Actual Temperature Coefficient of the output voltage	< 1,5ppm/°C
Working temperature	-55...+100°C
Storage temperature	-55...+125°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

Important: 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 Ic ≤ 0.1 μA.

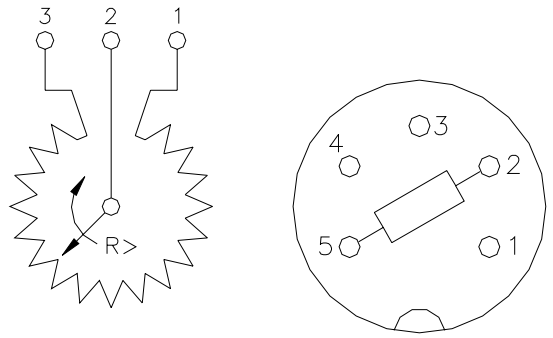
MECHANICAL DIMENSIONS



MECHANICAL / ELECTRICAL DATA

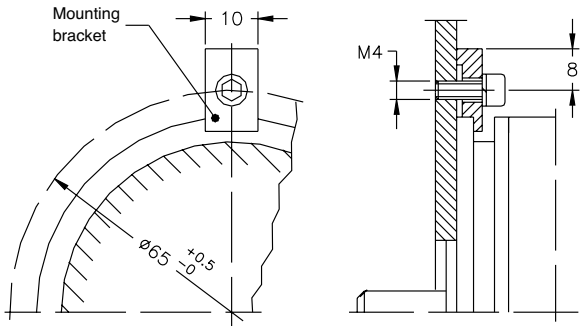
Model		PR65
Theoretical electrical stroke (C.E.T.)	°	345 ± 4°
Useful electrical stroke (C.E.U.)	°	C.E.T. -2°
Resistance (C.E.T.)	kΩ	1 - 4.7 - 10
Indipendent linearity (within C.E.U.)	±%	A = ± 1% B = ± 0,5% C = ± 0,25% D = ± 0,1% E = ± 0,05%
Dissipation at 40°C (0W at 120°C)	W	1.25
Mechanical rotation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

ELECTRICAL CONNECTIONS



A 5KΩ protection resistance has been connected between pins 2 (cursor) and 5; in case of the cursor is connected to pin 5, eventual short-circuits due to wiring errors are avoided.

MOUNTING DIAGRAM



ORDER CODE

Rotative transducer **PR65** **0** ☐ ☐ ☐

Linearity (std. B)	**A = ± 1%** **B = ± 0,5%** **C = ± 0,25%** **D = ± 0,1%** **E = ± 0,05%**

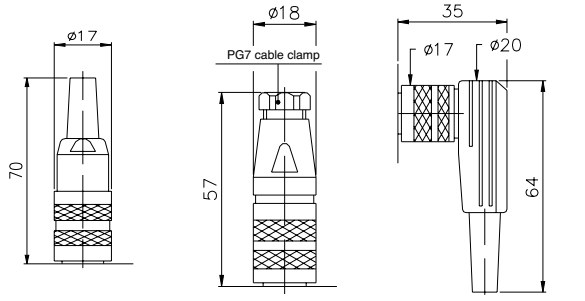
Resistance value (std.103)	**1kΩ**	**102**
	4,7kΩ	**472**
	10kΩ	**103**

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.

OPTIONAL ACCESSORIES

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

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