GEFRAN

RECTILINEAR DISPLACEMENT TRANSDUCER WITH BALL TIP



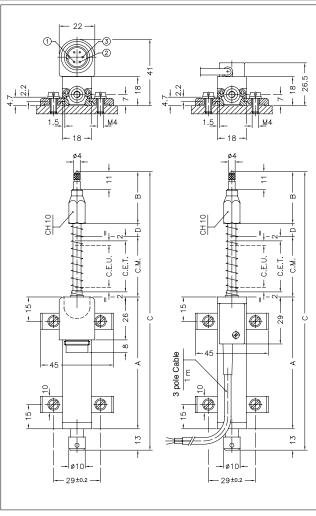
Principal characteristics

- The side connection creates a through-rod structure with double rod support, guaranteeing greater overall strength of the transducer.
- The return spring automatically returns the rod to zero position, making the transducer suitable for comparator applications.
- The tip with stainless steel ball is suitable for applications where the object to be measured is not subject to shifts transverse to the transducer axle.
- Ideal for checking the flatness or thickness of panels of various materials. Can also be used for valves or mechanical parts when the rod cannot be attached to the moving object.

TECHNICAL DATA

Useful electrical stroke (C.E.U.) 10/25/50/75/100
Resolution	Infinite
Independent linearity	see table
(within C.E.U.)	
Displacement speed	≤ 10 m/s
Displacement force	≤ 4N
Life	>25x10 ⁶ m strokes,or
	100x10 ⁶ operations, whichever
	is less (within C.E.U.)
Vibrations	52000Hz, Amax =0,75 mm
	amax. = 20 g
Shock	50 g, 11ms.
Tolerance on resistance	± 20%
Recommended cursor	< 0,1 μΑ
current	
Maximum cursor current	10mA
Maximum applicable voltage	see table
Electrical isolation	>100MΩ at 500V=, 1bar, 2s
Dielectric strength	< 100 μA at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C	see table
(0W a 120°C)	
Actual Temperat. Coefficient	< 1,5ppm/°C
of the output voltage	
Working temperature	-30+100°C
Storage temperature	-50+120°C
Case material	Anodised aluminium Nylon 66 G 25
Control rod material	Stainless steel AISI 303
Fixing	Brackets with variable
	longitudinal axis

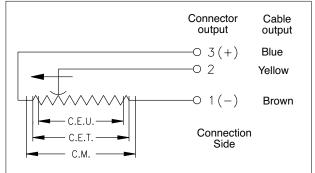
MECHANICAL DIMENSIONS



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 \leq 0.1 μ A.

MECHANICAL / ELECTRICAL DATA MODEL 25 50 75 100 Useful electrical stroke (C.E.U.) +1/-0 mm 10 25 50 76 101 Theoretical electrical stroke (C.E.T.) ±1 C.E.U. + 1 76 101 Resistance (C.E.T.) kΩ 5 5 5 1 Independent linearity (within C.E.U.) ± % 0,3 0,2 0,1 0,1 0,1 2,4 0,2 0.6 1,8 W 12 Dissipation at 40° (0W at 120°C) 60 60 ٧ 14 25 60 Maximum applicable voltage C.E.U. + 5 Mechanical stroke (C.M.) mm Case length (A) mm C.E.U. + 38 Tip length (B) 32 32 40 40 40 mm 138 196 251 307 Total length (C) 108 mm Quote (D) mm / / / 5 11

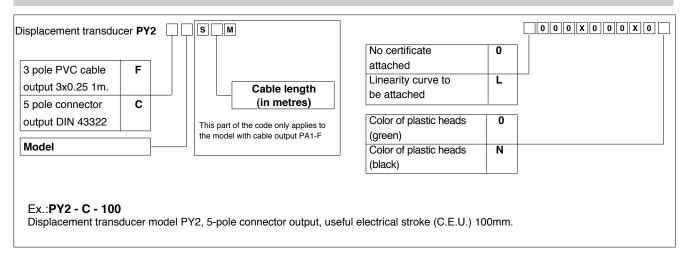
ELECTRICAL CONNECTIONS



INSTALLATION INSTRUCTIONS

- Respect the indicated electrical connections (DO NOT use the transducer as a variable resistance)
- When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise beyond 99% of the supply voltage.

ORDER CODE



ACCESSORIES

STANDARD ACCESSORIES	
Fixing kit for PA1: 4 brackets, M4x10 screws, washer	PKIT005
Tip with bal	PTAS000
OPTIONAL ACCESSORIES	
5-pin axial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm	CON011
5-pin axial female PCB connector DIN43322 IP65 clamp PG7 for wire ø4 - ø6 mm	CON012
5-pin 90° radial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm	CON013

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

