

PY3

RECTILINEAR DISPLACEMENT TRANSDUCER WITH BEARING TIP



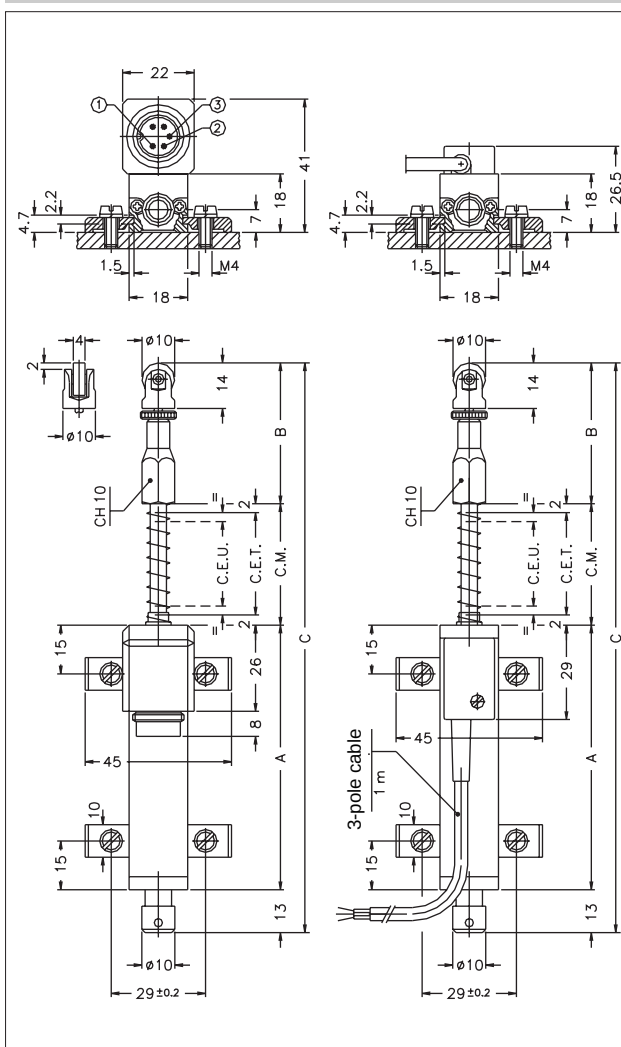
Main features

- 25 to 50 mm. stroke
- Double support of the control rod and return spring
- Tip with M2.5 thread and stainless steel precision bearing
- Independent linearity up to $\pm 0,1\%$
- Infinite resolution
- No variation of electrical signal outside theoretical electrical stroke
- Inhibited rotation of the control rod
- Displacement speed up to 10 m/s
- Working temperature: -30...+100°C
- Electrical connections:
PY3 F 3-pole 1m. screened cable 1m.
PY3 C 5-pole connector DIN43322
- Life duration: > 100x10⁶ operations (within C.E.U.)
- Grade of protection IP40

TECHNICAL DATA

Useful electrical stroke (C.E.U.)	25/50
Independent linearity (within C.E.U.)	see table
Displacement speed	≤ 10 m/s
Displacement force	≤ 4N
Vibrations	5...2000Hz, Amax =0,75 mm amax. = 20 g
Shock	50 g, 11ms.
Tolerance on resistance	± 20%
Recommended cursor current	< 0,1 µA
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 (0W at 120°C)	see table
Temp. Coeff. of the resistance	-200 ± 200ppm/°C
Actual Temperature Coefficient of the output voltage	< 1,5ppm/°C
Working temperature	-30...+100°C
Storage temperature	-50...+120°C
Case material	Anodised aluminium Nylon 66 GF 40
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 $I_c \leq 0.1 \mu A$.

MECHANICAL / ELECTRICAL DATA

MODEL		25	50
Useful electrical stroke (C.E.U.) +1/-0	mm	25	50
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. + 1	
Resistance (C.E.T.)	kΩ	1	5
Independent linearity (within C.E.U.)	± %	0,2	0,1
Dissipation at 40° (0W at 120°C)	W	0,6	1,2
Maximum applicable voltage	V	25	60
Mechanical stroke (C.M.)	mm	C.E.U. + 5	
Case length (A)	mm	C.E.U. + 38	
Tip length (B)	mm	43	51
Total length (C)	mm	149	207

ACCESSORIES

STANDARD ACCESSORIES

Fixing kit for PY3:

4 brackets, M4x10 screws, grower

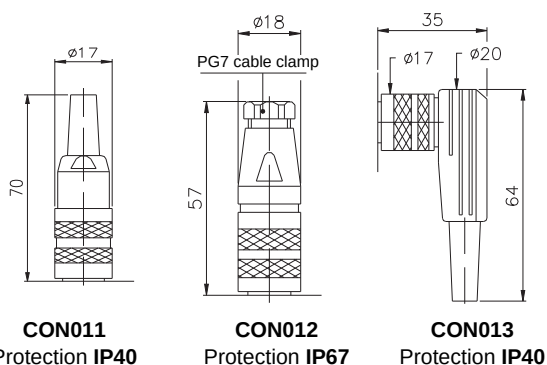
Bearing tip

Code

PKIT005

PTAS001

OPTIONAL ACCESSORIES



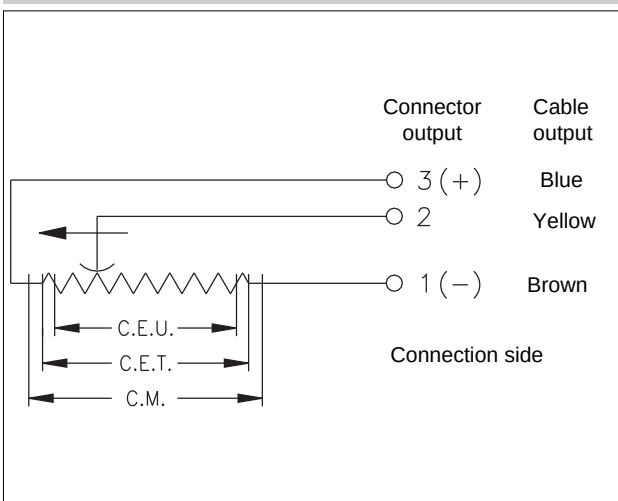
CON011
Protection **IP40**

CON012
Protection **IP67**

CON013
Protection **IP40**

Extraction length of the connector 10 mm.

ELECTRICAL CONNECTIONS



ORDER CODE

Displacement transducer

PY3

Cable output

F

Connector output
DIN43322

C

Model

3-pole PVC cable output
3 x 0,25 1m

S

Connector
output

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

Example: **PY3 - C - 50**

Displacement transducer model PY3, 5-pole connector
output, useful electrical stroke (C.E.U.) 50mm.

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



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