

PY3

RECTILINEAR DISPLACEMENT TRANSDUCER WITH BEARING TIP



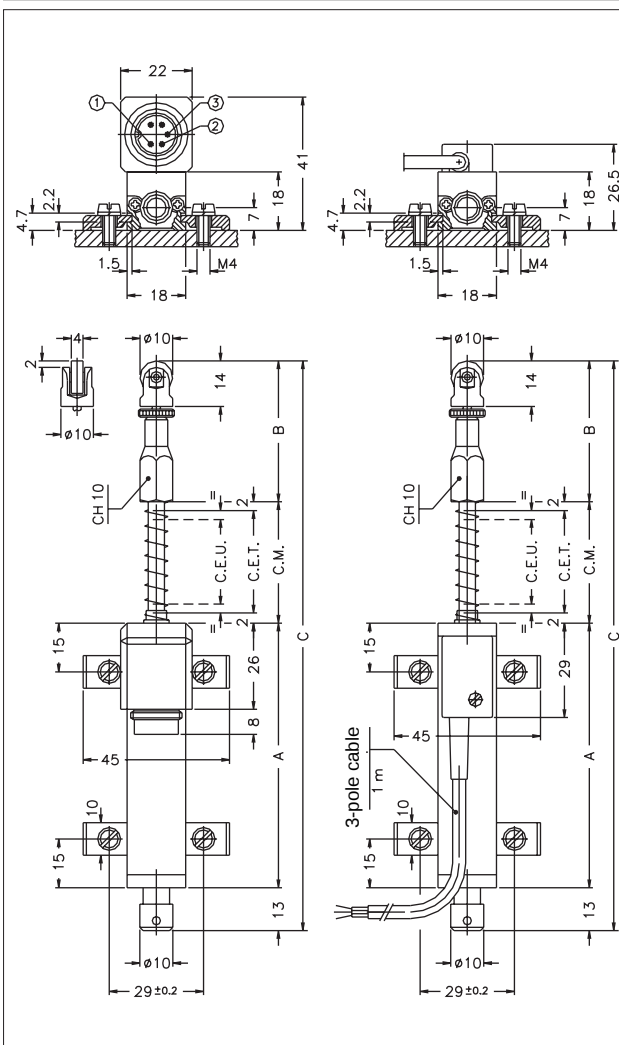
Main features

- 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

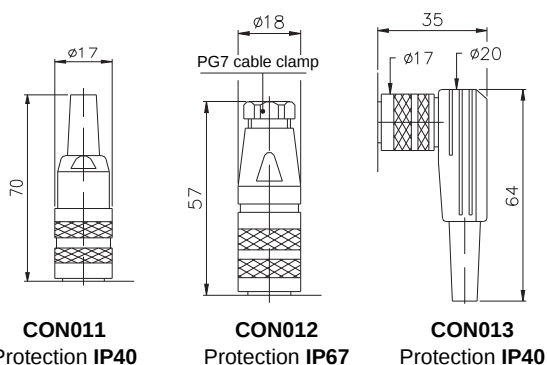
Bearing tip

Code

PKIT005

PTAS001

OPTIONAL ACCESSORIES



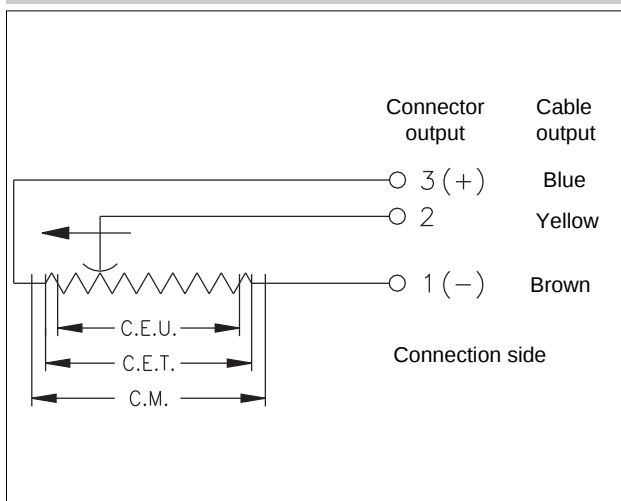
CON011
Protection IP40

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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