

GEFRAN

PY2

RECTILINEAR DISPLACEMENT TRANSDUCER WITH BALL TIP



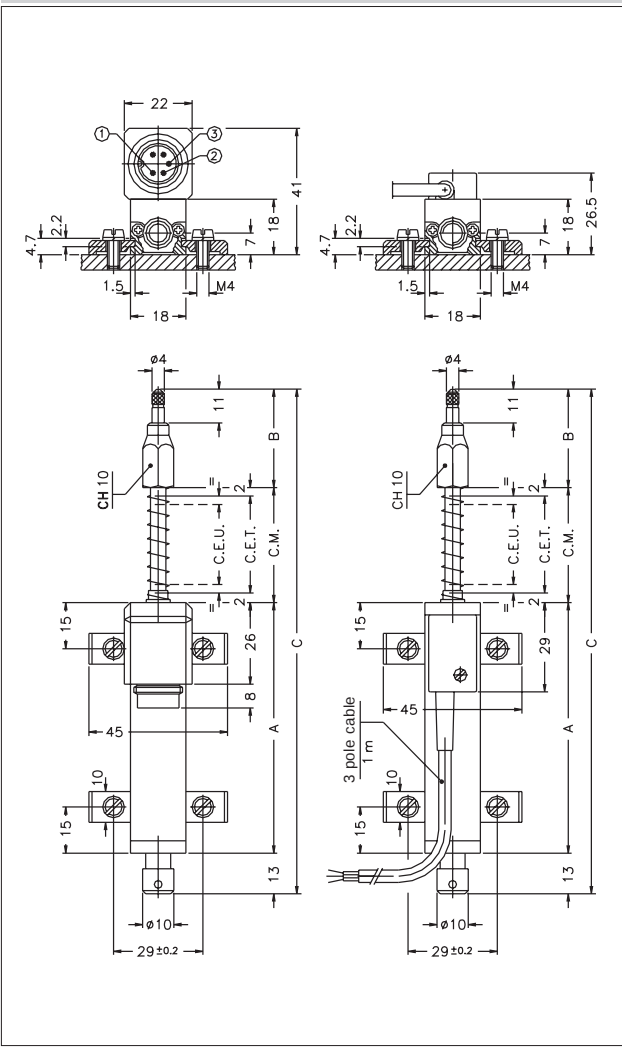
Main features

- 10 to 100 mm. stroke
 - Double support of the control rod and return spring
 - Tip with M2.5 thread and stainless steel ball
 - Independent linearity up to $\pm 0,1\%$
 - Infinite resolution
 - No variation of electrical signal outside theoretical electrical stroke
 - Displacement speed up to 10 m/s
 - Working temperature: $-30...+100^{\circ}\text{C}$
 - Electrical connections:
PY2 F 3 wire 1m screened cable
PY2 C 5-pole connector DIN43322
 - Life duration: $> 100 \times 10^6$ operations (within C.E.U.)
 - Grade of protection IP40
 - 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

Useful electrical stroke (C.E.U.)	10/25/50/75/100
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
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 G25
Control rod material	Stainless steel AISI 303
Fixing	Brackets with variable longitudinal axis

MECHANICAL DIMENSIONS

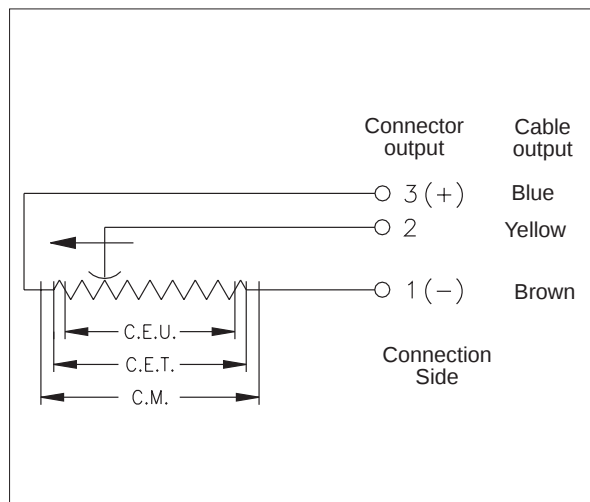


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \mu A$.

MECHANICAL / ELECTRICAL DATA

MODEL		10	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	mm	C.E.U. + 1			76	101
Resistance (C.E.T.)	kΩ	1	1	5	5	5
Independent linearity (within C.E.U.)	± %	0,3	0,2	0,1	0,1	0,1
Dissipation at 40° (0W at 120°C)	W	0,2	0,6	1,2	1,8	2,4
Maximum applicable voltage	V	14	25	60	60	60
Mechanical stroke (C.M.)	mm	C.E.U. + 5				
Case length (A)	mm	C.E.U. + 38				
Tip length (B)	mm	32	32	40	40	40
Total length (C)	mm	108	138	196	246	296

ELECTRICAL CONNECTIONS



ACCESSORIES

STANDARD ACCESSORIES

Fixing kit for PY2:

4 brackets, M4x10 screws, grower

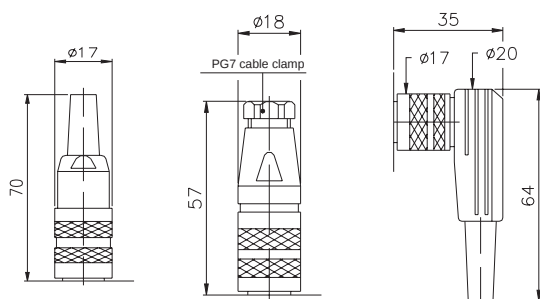
Ball tip

Code

PKIT005

PTAS000

OPTIONAL ACCESSORIES



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 10 mm.

ORDER CODE

Displacement transducer

PY2

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: PY2 - C - 100

Displacement transducer model PY2, 5-pole connector output, useful electrical stroke (C.E.U.) 100mm.

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>

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