



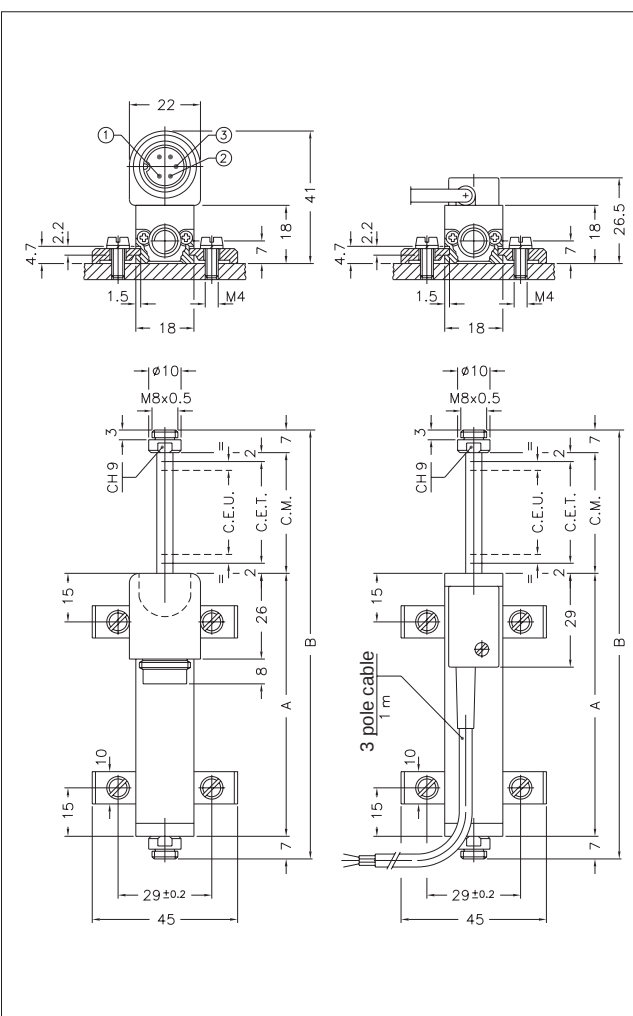
Principal characteristics

- The transducer's compactness makes it suitable for installation in small spaces and for detecting small shifts.
- The side connection creates a through-rod structure with double rod support, guaranteeing greater overall strength of the transducer.
- Installation is simplified by the lack of electrical signal variation at output outside theoretical electrical stroke.
- Ideal for small mechanical devices, valves, and test tools and benches.

TECHNICAL DATA

Useful electrical stroke (C.E.U.)	25/50/75/100/150
Resolution	Infinite
Independent linearity (within C.E.U.)	see table
Displacement speed	≤ 10 m/s
Displacement force	≤ 0.30 N
Life	$>25 \times 10^6$ m strokes,or 100×10^6 operations, whichever is less (within C.E.U.)
Vibrations	5...2000Hz, $A_{max} = 0,75$ mm $a_{max.} = 20$ g
Shock	50 g, 11ms.
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	$< 0,1 \mu A$
Maximum cursor current	10mA
Maximum applicable voltage	see table
Electrical isolation	$>100 M\Omega$ at 500V=, 1bar, 2s
Dielectric strength	$< 100 \mu A$ at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	see table
Actual Temperature Coefficient of the output voltage	$< 1,5$ ppm/°C
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

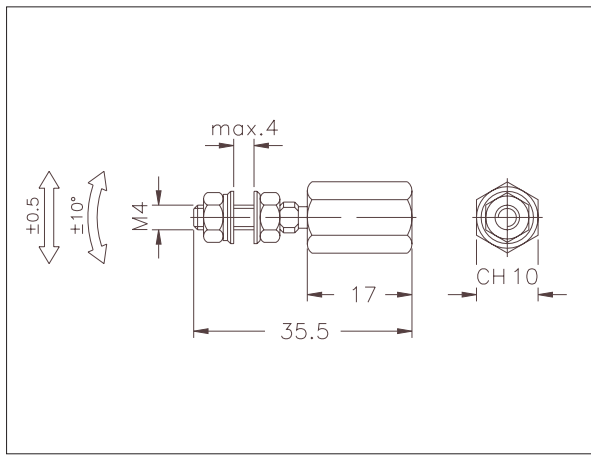


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \mu A$.

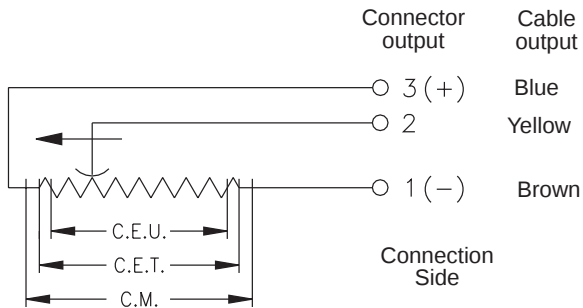
MECHANICAL / ELECTRICAL DATA

MODEL		25	50	75	100	150
Useful electrical stroke (C.E.U.) +3/-0	mm	25	50	75	100	150
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. + 1				
Resistance (C.E.T.)	kΩ	1	5	5	5	5
Independent linearity (within C.E.U.)	± %	0,2	0,1	0,1	0,1	0,05
Dissipation at 40° (0W at 120°C)	W	0,6	1,2	1,8	2,5	3,6
Maximum applicable voltage	V	25	60			
Mechanical stroke (C.M.)	mm	C.E.U. + 5				
Case length (A)	mm	C.E.U. + 38				
Total length (B)	mm	107	157	207	257	357

COUPLING JOINT



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

Displacement transducer **PY1**

3 pole PVC cable output 3x0.25 1m.	F
5 pole connector output DIN 43322	C

Model

Cable length (in metres)

This part of the code only applies to the model with cable output PA1-F

No certificate attached	0
Linearity curve to be attached	L
Color of plastic heads (green)	0
Color of plastic heads (black)	N

Ex.: **PY1 - C - 100**

Displacement transducer model PY1, 5-pole connector output, useful electrical stroke (C.E.U.) 100mm.

ACCESSORIES

STANDARD ACCESSORIES

Fixing kit for PA1: 4 brackets, M4x10 screws, washer PKIT005

PKIT005

Coupling joint PKIT020

PKIT020

OPTIONAL ACCESSORIES

5-pin axial female PCB connector DIN43322 IP40 clamp for wire $\varnothing 4 - \varnothing 6$ mm **CON011**

CON011

5-pin axial female PCB connector DIN43322 IP65 clamp PG7 for wire $\varnothing 4 - \varnothing 6$ mm **CON012**

CON012

5-pin 90° radial female PCB connector DIN43322 IP40 clamp for wire Ø4 - Ø6 mm **CON013**

CON013

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

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