



Principal characteristics

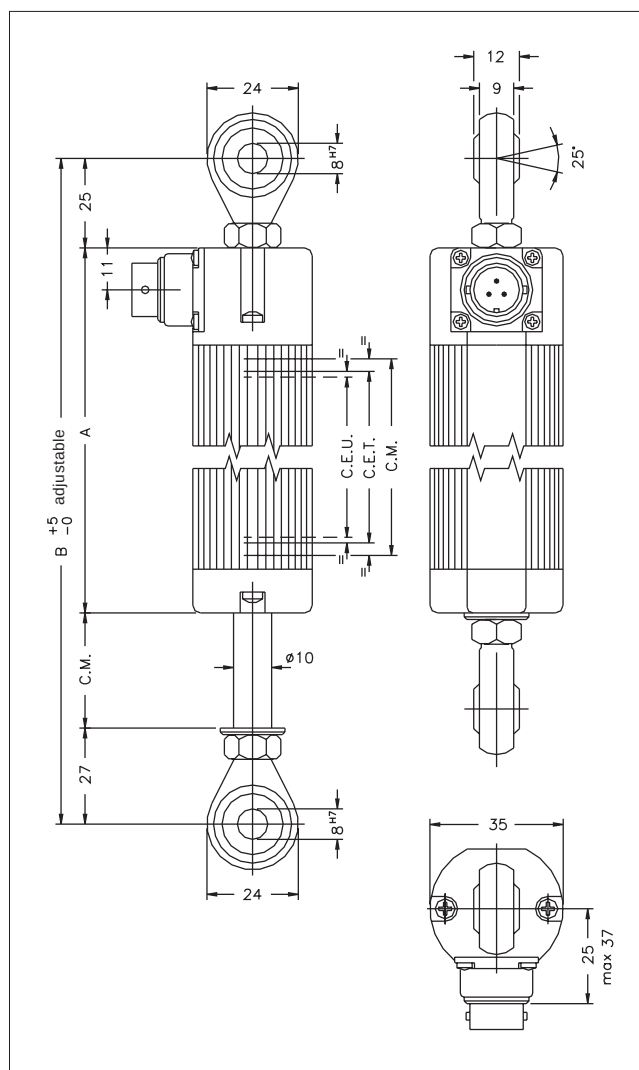
- The transducer is designed to satisfy extreme applicative demands in terms of mechanical strength.
- The 10 mm diameter rod, large steel joints, and reinforced structure make this series mechanically ideal for metalworking, woodworking, and ceramics.
- Installation is simplified by the lack of electrical signal variation at output outside theoretical electrical stroke.
- The structure based on self-aligning and weight-bearing ball joints permits assembly with free movement of the transducer axle.

TECHNICAL DATA

Useful electrical stroke (C.E.U.)	50/100/130/150/175/200/225/275/300/360/375/400/450/500/600/750
Independent linearity (within C.E.U.)	$\pm 0,05\%$
Resolution	infinite
Repeatability	0,01mm
Protection	IP65
Displacement speed	≤ 5 m/s
Displacement force	≤ 10 N
Life	>25x10 ⁶ strokes, or 100x10 ⁶ operations, whichever is less (within C.E.U.)
Vibrations	5...2000Hz, Amax = 0,75 mm a max. = 20 g
Shock	50 g, 11ms.
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	< 0,1 μ A
Maximum cursor current	10mA
Max. applicable voltage	60V
Electrical isolation	>100M Ω a 500V~, 1bar, 2s
Dielectric strength	< 100 μ A a 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	3W
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 G 25
Control rod material	Stainless steel AISI 303
Fixing	2 selfloading and selfaligning ball-joints

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 $I_c \leq 0.1 \mu A$.

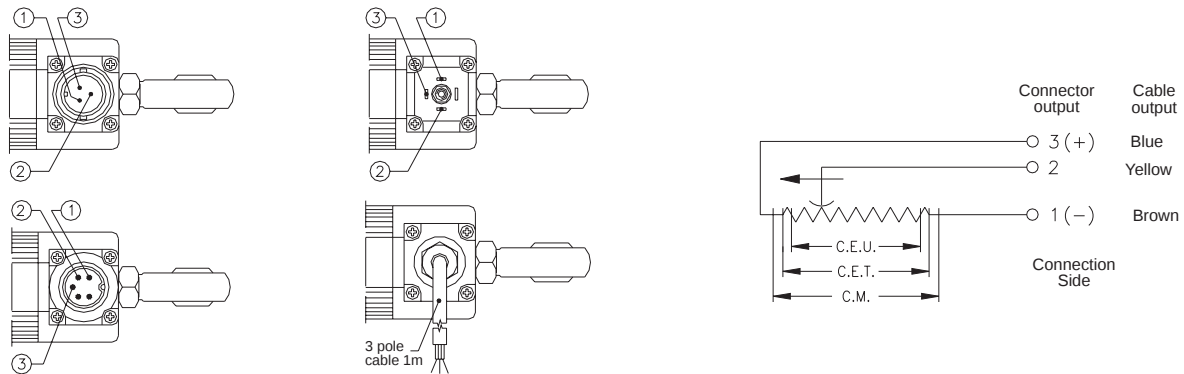
MECHANICAL DIMENSIONS



MECHANICAL / ELECTRICAL DATA

MODEL		50	100	130	150	175	200	225	275	300	360	375	400	450	500	600	750
Useful electrical stroke (C.E.U.) +3/-0	mm	50	100	130	150	175	200	225	275	300	360	375	400	450	500	600	750
Theoretical electrical stroke (C.E.T.) ± 1	mm	C.E.U. + 3					C.E.U. + 4					364	380	406	457	508	762
Resistance (C.E.T.)	kΩ	5					5					5	5	5	5	5	10
Mechanical stroke (C.M.)	mm	C.E.U. + 9					C.E.U. + 10					370	386	412	463	518	772
Case length (A)	mm	C.E.U. + 129					C.E.U. + 130					496	512	538	589	664	918
Min. distance between ball-joints (B)	mm	C.E.U. + 181					C.E.U. + 182					547,5	564	590	641	716	970

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 PC		
3-pole connector output	H	☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0
4-pole connector output	M	
DIN43650 ISO4400		
5-pole connector output		
DIN45322	B	
3-pole PVC cable output	F	☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0
3x0,25 1m		
Model		☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0 ☐ 0 ☐ X ☐ 0 ☐ 0

No certificate attached	0
Linearity curve to be attached	L
Cable length: 1 m	0
Cable length: 2 m	2
Cable length: 3 m	3
Other lengths on request	
Color of plastic heads (green)	0
Color of plastic heads (black)	N

Ex.: PC - M - 275
 Displacement transducer model PC, 4 pole connector output
 DIN43650 - ISO 4400, useful electrical stroke (C.E.U.) 275mm

OPTIONAL ACCESSORIES

4-pin 90° radial female PCM connector DIN43650 IP65 clamp PG9 for Ø6 - Ø8 mm wire	CON008
3-pin axial female PCH connector IP40 clamp for wire Ø4 - Ø6 mm	CON002
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

GEFRAN

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