



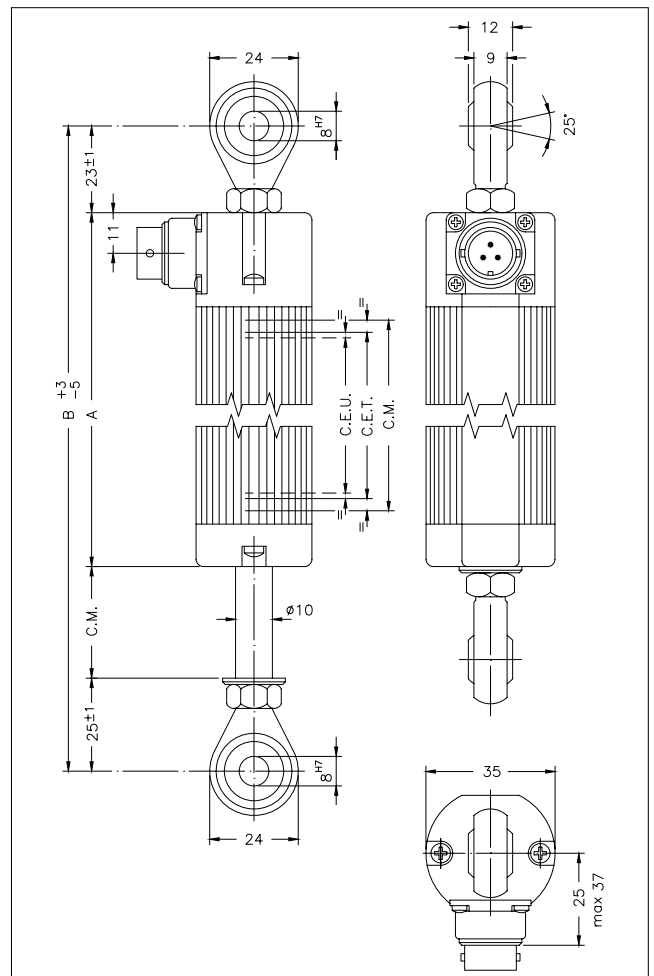
#### Principal characteristics

- 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.)	± 0,05%
Resolution	Infinite
Repeatability	0.01 mm
Protection	IP65
Displacement speed	≤ 5 m/s
Displacement force	≤ 15 N
Life	> 25x10 <sup>8</sup> m strokes, or > 100x10 <sup>6</sup> operations, whichever is less (within C.E.U.)
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
Max. applicable voltage	60V
Electrical isolation	>100MΩ at 500V=, 1bar, 2s
Dielectric strength	< 100μA at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	3W
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
Control rod material	Stainless steel AISI 303
Fixing	2 selfloading and selfaligning ball-joints

#### MECHANICAL DIMENSIONS

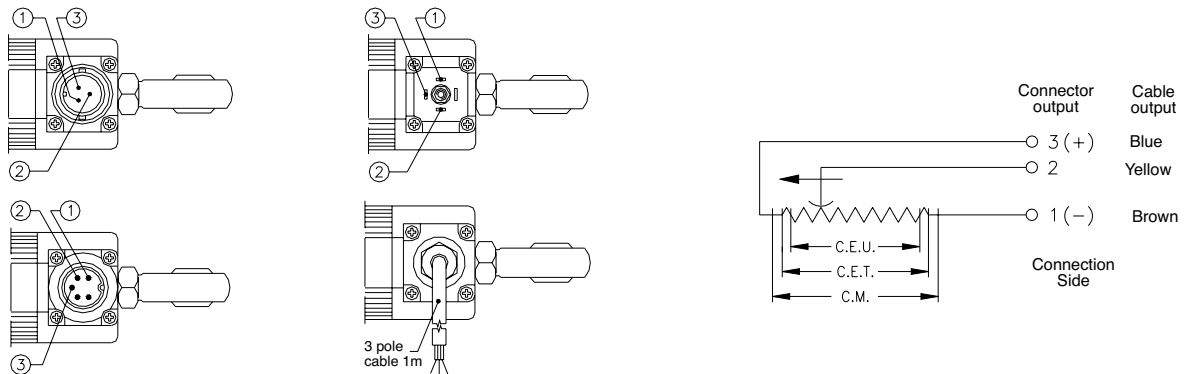


**Important:** all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor  $I_c \leq 0.1 \mu A$ .

## MECHANICAL / ELECTRICAL DATA

MODEL		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	609	762
Resistance (C.E.T.)	kΩ	5					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	619	772
Case length (A)	mm	C.E.U. + 130.5					C.E.U. + 131.5					497.5	513.5	539.5	590.5	665.5	766.5	919.5
Min. distance between ball-joints (B)	mm	C.E.U. + 177					C.E.U. + 178					544	560	586	637	712	813	966

## 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	<b>PC</b>																			
3-pole connector output	<b>H</b>																			
4-pole connector output	<b>M</b>																			
DIN43650 ISO4400																				
5-pole connector output	<b>B</b>																			
DIN45322																				
3-pole PVC cable output	<b>F</b>																			
3x0,25 1m																				

Model

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 INDUSTRIAL STANDARD EN175301 spacing 9,4 mm IP65 PG7 for cable ø4 - ø6 mm	<b>CON008</b>
3-pin axial female PCH connector IP40 clamp for wire ø4 - ø6 mm	<b>CON002</b>
5-pin axial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm	<b>CON011</b>
5-pin axial female PCB connector DIN43322 IP65 clamp PG7 for wire ø4 - ø6 mm	<b>CON012</b>
5-pin 90° radial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm	<b>CON013</b>

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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DTS\_PC\_05-2016\_ENG