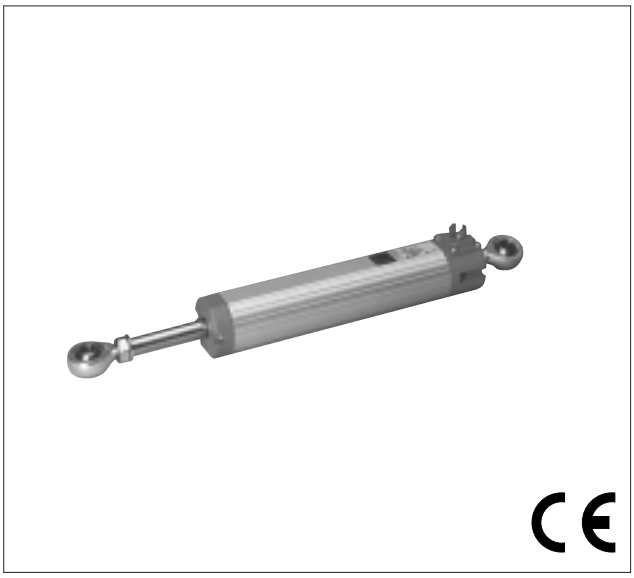
GEFRAN

PC

SELFLOADING RECTILINEAR DISPLACEMENT TRANSDUCER WITH CYLINDRICAL CASE



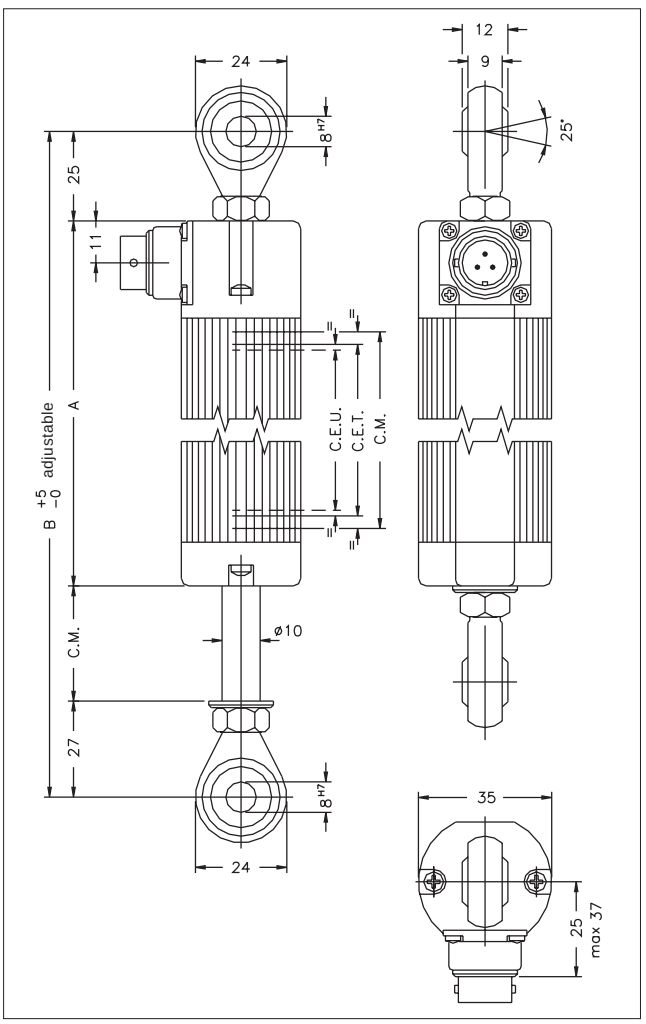
Main features

- *50 to 750 mm. stroke*
- *Mechanical fixing and selfaligning linkage using 2 ball-joints*
- *Maximum angular movement up to ± 30°*
- *Independent linearity ± 0,05%*
- *Repetibility 0,01 mm.*
- *Infinite resolution*
- *No variation of electrical signal outside theoretical electrical stroke*
- *Displacement speed up to 5 m/s*
- *Working temperature: -30...+100°C*
- *Electrical connections:*
  PC H 3-pole connector
  PC M 4-pole connector to standard DIN43650-ISO4400
  PC B 5-pole connector (DIN43322)
  PC F 3-pole screened cable (1 m length)
- *Life duration: > 25x10⁶ meters or > 100x10⁶ operations, whichever is the smaller (within C.E.U.)*
- *Grade of protection IP65*
- *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.)	50/100/130/150/175/200/225/275/ 300/360/375/400/450/500/600/750
Independent linearity (within C.E.U.)	± 0,05%
Displacement speed	≤ 5 m/s
Displacement force	≤ 10 N
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	60V
Electrical isolation	>100MΩ at 500V=, 1bar, 2s
Dielectri strength	< 100 μA at 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 G25
Control rod material	Stainless steel AISI 303
Fixing	2 selfloading and selfaligning ball-joints

MECHANICAL DIMENSIONS

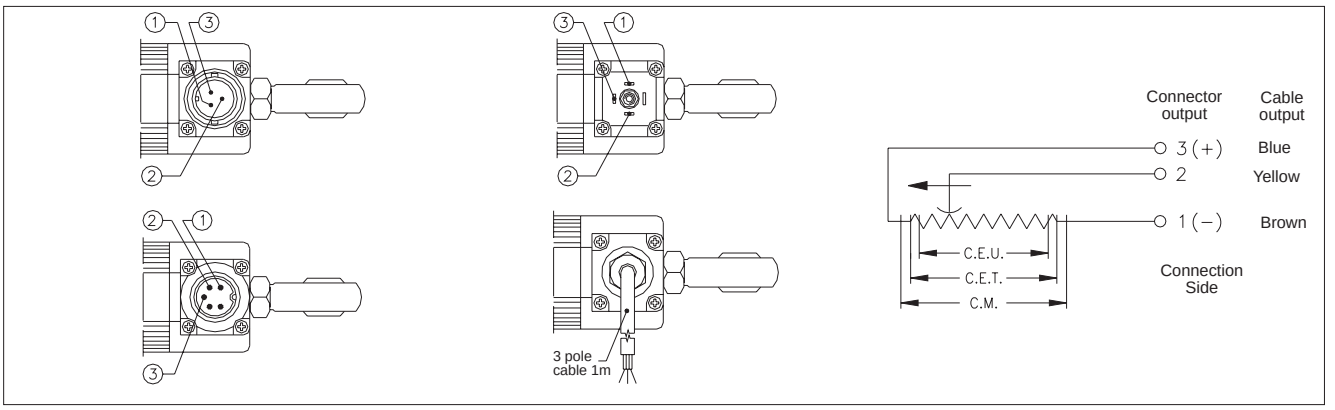


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic ≤ 0.1 μA.

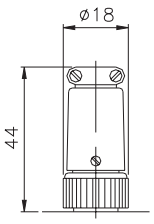
MECHANICAL / ELECTRICAL DATA

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. + 129					C.E.U. + 130				496	512	538	589	664	765	918
Min. distance between ball-joints (B)	mm	C.E.U. + 181					C.E.U. + 182				547,5	564	590	641	716	817	970

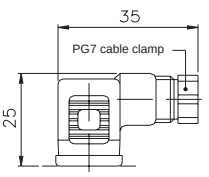
ELECTRICAL CONNECTIONS



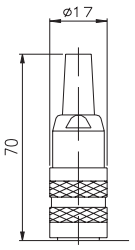
OPTIONAL ACCESSORIES



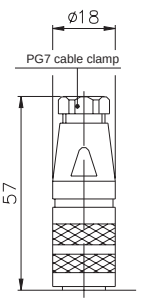
CON002 - IP40 Prot.
(3 Pole Female conn.)



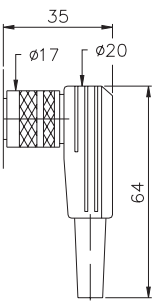
CON008 - IP65 Prot.
(DIN43650 4 pole Female conn.)



CON011 - IP40 Prot.
(DIN43322 5 pole Female conn.)



CON012 - IP67 Prot.
(DIN43322 5 pole Female conn.)



CON013 - IP40 Prot.
(DIN43322 5 pole Female conn.)

Extraction length of the connector 10 mm.

ORDER CODE

Displacement transducer **PC** □ □ □

3-pole connector output	**H**
4-pole connector output DIN43650 ISO4400	**M**
5-pole connector output DIN45322	**B**
3-pole PVC cable output 3x0,25 1m	**F**

Model

If requested, it is possible to supply models with non-standard mechanical and/or electrical features.

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

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