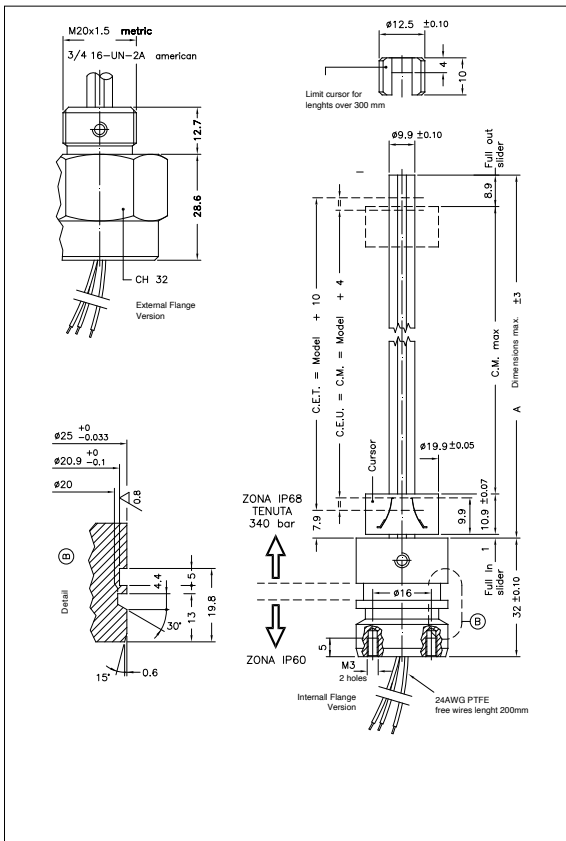




Principal characteristics

- Transducer with exposed tracks, allowing rod diameter is reduced to be reduced to a minimum to permit installation in small cylinders.
- Thanks to a special constructive technique, the IC transducer provides high resistance to the working pressures of oil-pressure cylinders (max 340 bar)
- Available with internal flanges or external threads to guarantee mechanical compatibility with all principal cylinder types.

MECHANICAL DIMENSIONS



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

TECHNICAL DATA

Model

from 100 to 700 mm
(for intermediate strokes see table "Electrical / Mechanical Data")

Resolution

infinite

Repeatability

0,01mm

Independent linearity (within C.E.U.)

$\pm 0,1\%$

Life

$> 25 \times 10^6$ m strokes, or 100×10^6 maneuvers, whichever is less (within C.E.U.)

Displacement speed

≤ 5 ppm/ $^{\circ}C$

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

Dissipation at 40°C (0W at 120°C)

3W

Max. applicable voltage

60V

Actual Temperature coefficient of the output voltage

≤ 5 ppm/ $^{\circ}C$

Electrical isolation

$> 100 M\Omega$ a 500V~, 1bar, 2s

Dielectric strength

$< 100 \mu A$ a 500V~, 50Hz, 2s, 1bar

Working temperature

-30...+100°C

Storage temperature

-50...+120°C

Displacement speed

≤ 5 ppm/ $^{\circ}C$

Displacement force

≤ 1 N

Rod material

Anodised aluminium

Flange material

Stainless steel AISI 303

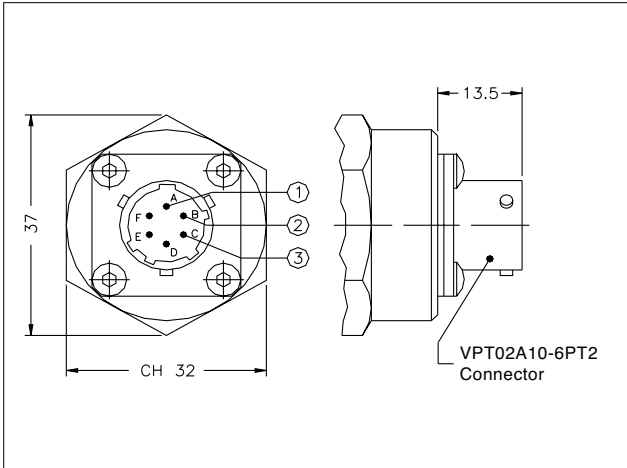
Fixing

Internal or external flange

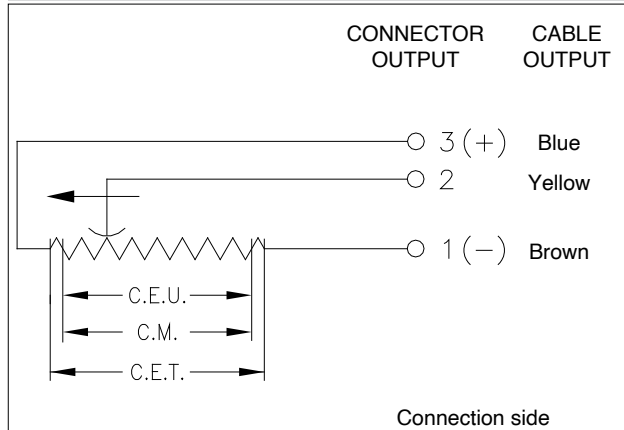
ELECTRICAL / MECHANICAL DATA

MODEL		100	150	200	250	300	350	400	500	550	700
Useful electrical stroke (C.E.U.) ± 1	mm	MODEL + 4									
Theoretical electrical stroke (C.E.T.) ± 1	mm	MODEL + 10									
Resistance (C.E.T.)	kΩ	10									
Mechanical stroke (C.M.) ± 1	mm	MODEL + 4									
Maximum length (A)	mm	124,8	174,8	224,8	274,8	324,8	374,8	424,8	524,8	574,8	724,8

EXT. FLANGE VERSION / CONNECTOR



ELECTRICAL CONNECTIONS



OPTIONAL ACCESSORIES

	Code
6 pole Female connector	CON300

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 **IC**

3 free wires 200mm length output	F
Connector output (only for ext flange)	C

MODEL

Internal flange version	I
External flange version	E

Thread		
Internal flange		---
External flange	Metric	M
	American	I

Cable length (10 cm) **M**

This part of the code only applies to the model with 3 wires output IC-F

0 0 0 0 0 X 0 0 0 0 X 0 0

Ex.: **IC - F - 300 - E - M**
 Displacement transducer model IC, 3 free wires 200mm. length output, external flange, metric thread and useful electrical stroke (C.E.U.) 300mm.

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