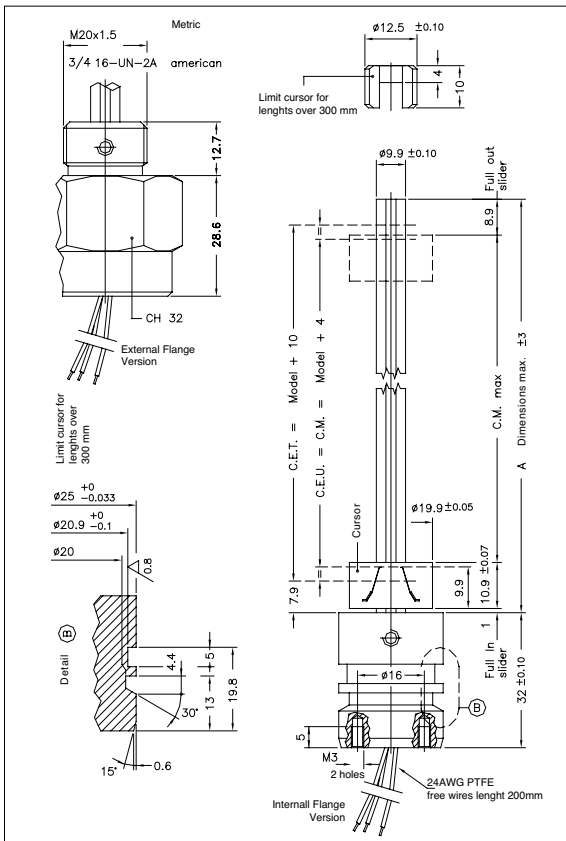




### Principal characteristics

- 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

> 25x10<sup>6</sup> m strokes, or 100x10<sup>6</sup> maneuvers, whichever is less (within C.E.U.)

#### Displacement speed

$\leq 5 \text{ ppm}/^\circ\text{C}$

#### Vibrations

5...2000Hz, Amax = 0,75 mm a max. = 20 g

#### Shock

50 g, 11ms.

#### Tolerance on resistance

$\pm 20\%$

#### Recommended cursor current

$< 0,1 \mu A$

#### Maximum cursor current

10mA

#### Dissipation at 40°C (0W at 120°C)

3W

#### Max. applicable voltage

60V

#### Actual Temperature coefficient of the output voltage

$\leq 5 \text{ ppm}/^\circ\text{C}$

#### Electrical isolation

>100M $\Omega$  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

$\leq 5 \text{ ppm}/^\circ\text{C}$

#### Displacement force

$\leq 1 \text{ N}$

#### Rod material

Anodised aluminium

#### Flange material

Stainless steel AISI 303

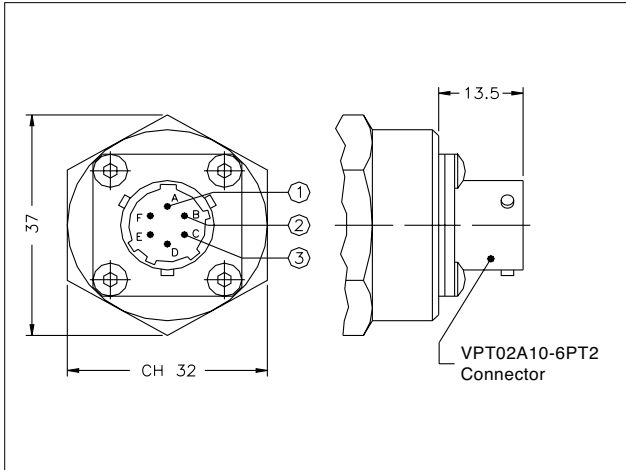
#### Fixing

Internal or external flange

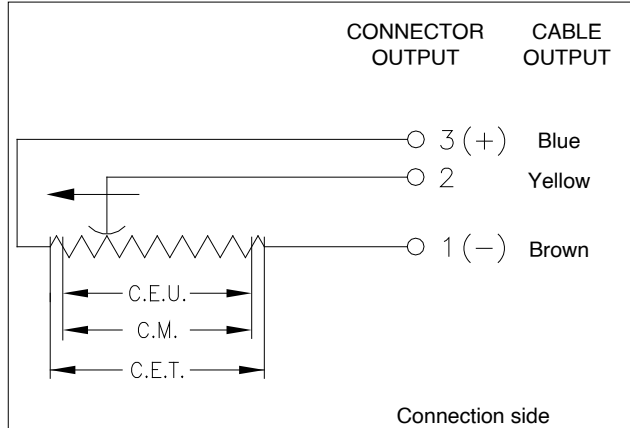
## ELECTRICAL / MECHANICAL DATA

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	<b>CON300</b>

## 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>IC</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 free wires 200mm length output	<b>F</b>																				
Connector output (only for ext flange)	<b>C</b>																				
MODEL																					
Internal flange version	<b>I</b>																				
External flange version	<b>E</b>																				
<b>Thread</b>																					
Internal flange		---																			
External flange	Metric	<b>M</b>																			
	American	<b>I</b>																			

**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.

**Cable length (10 cm)**

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

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

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