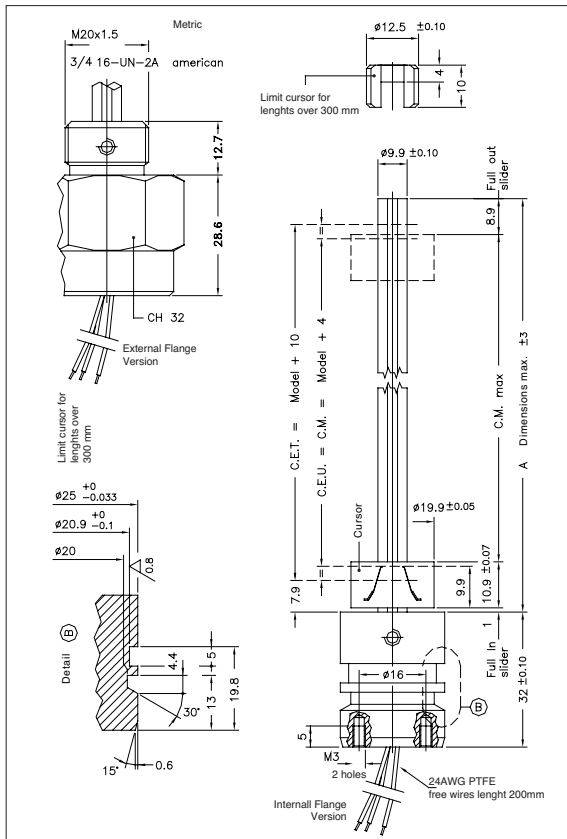




### Principal characteristics

- 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

100/150/200/300/350/500/550

#### 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

standard  $\leq 1,5$  m/s

#### 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

$\leq 1,5$  ppm/°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

$\leq 1.5$  m/s

#### Displacement force

$\leq 1$  N

#### Rod material

Anodised aluminium

#### Flange material

Stainless steel AISI 303

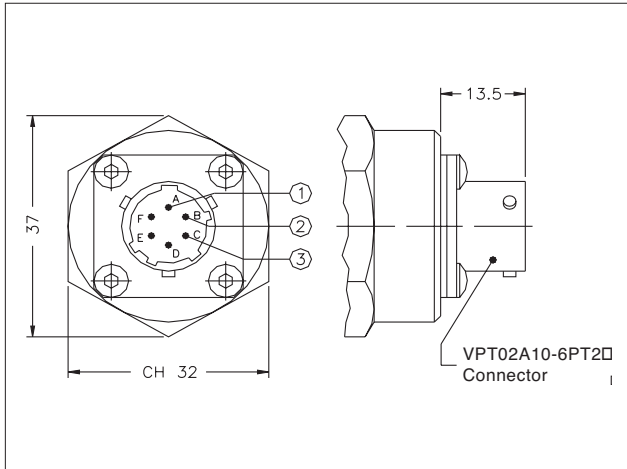
#### Fixing

Internal or external flange

## MECHANICAL / ELECTRICAL DATA

MODEL		100	150	200	300	350	500	550	
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	324,8	374,8	524,8	574,8	

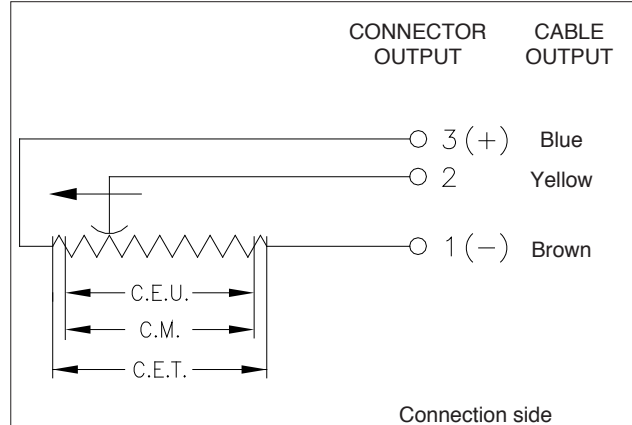
## EXT. FLANGE VERSION / CONNECTOR



## OPTIONAL ACCESSORIES

	Code
6 pole Female connector	<b>CON300</b>

## 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		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)**

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

0 0 0 0 X 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