

RECTILINEAR DISPLACEMENT TRANSDUCER FOR MOUNTING INSIDE HYDRAULIC ACTUATORS

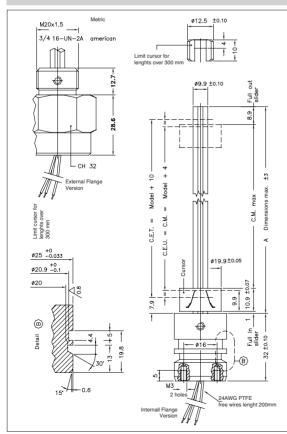




Principal characteristics

- 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 ratiometric device with a max current across the cursor lc \leq 0.1 μA .

TECHNICAL DATA

Model

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

Resolution

infinite

Repeatibility

0,01mm

Independent linearity (within C.E.U.)

± 0.1%

Life

 $> 25 \text{x} 10^{\text{s}}$ m strokes, or 100x106 maneuvers, whichever is less (within C.E.U.)

Displacement speed

standard ≤ 1,5 m/s

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

Dissipation at 40°C (0W at 120°C)

3W

Max. applicable voltage

60V

Actual Temperature coefficient of the output voltage

≤ 1,5 ppm/°C

Electrical isolation

>100MΩ a 500V=, 1bar, 2s

Dielectric strength

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

Working temperature

-30...+100°C

Storage temperature

-50...+120°C

Displacement speed

≤ 1.5 m/s

Displacement force

≤1 N

Rod material

Anodised aluminium

Flange material

Stainless steel AISI 303

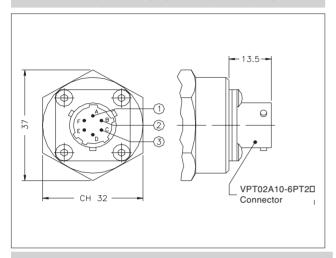
Fixing

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

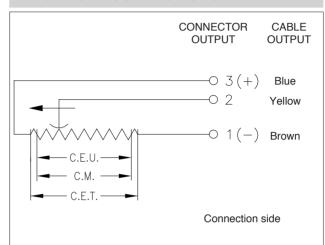
EXT. FLANGE VERSION / CONNECTOR



OPTIONAL ACCESSORIES

Code
6 pole Female connector CON300

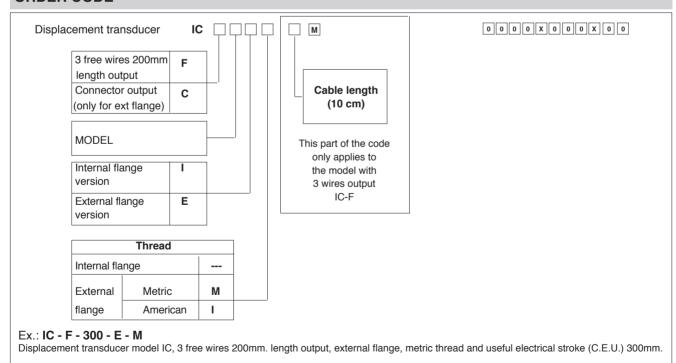
ELECTRICAL CONNECTIONS



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



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

