GEFRAN

RECTILINEAR DISPLACEMENT TRANSDUCER



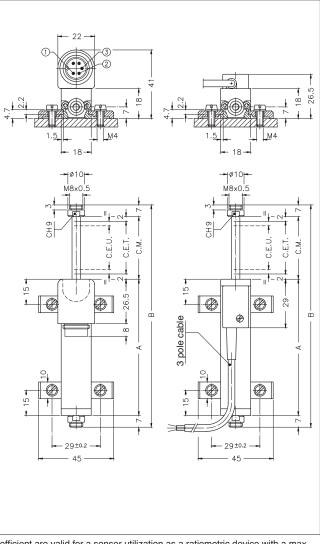
Principal characteristics

- The transducer's compactness makes it suitable for installation in small spaces and for detecting small shifts.
- The side connection creates a through-rod structure with double rod support, guaranteeing greater overall strength of the transducer.
- Installation is simplified by the lack of electrical signal variation at output outside theoretical electrical stroke.
- Ideal for small mechanical devices, valves, and test tools and benches.

TECHNICAL DATA

| Useful electrical stroke (C.E.U.) | 25/50/75/100/150 |
|--|---|
| Resolution | Infinite |
| Independent linearity (within C.E.U.) | see table |
| Displacement speed | ≤ 10 m/s |
| Displacement force | ≤ 0.30 N |
| Life | >25x10°m strokes,or 100x10° operations, whichever is less (within C.E.U.) |
| Vibrations | 52000Hz, Amax =0,75 mm amax. = 20 g |
| Shock | 50 g, 11ms. |
| Tolerance on resistance | ± 20% |
| Recommended cursor current | < 0,1 μΑ |
| Maximum cursor current | 10mA |
| Maximum applicable voltage | see table |
| Electrical isolation | >100MΩ a 500V=, 1bar, 2s |
| Dielectric strength | < 100 μA a 500V~, 50Hz, 2s, 1bar |
| Dissipation at 40°C (0W at 120°C) | see table |
| 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 G 25 |
| Control rod material | Stainless steel AISI 303 |
| Fixing | Brackets with variable longitudinal axis |

MECHANICAL DIMENSIONS

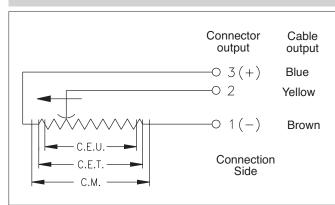


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic \leq 0.1 μ A.

MECHANICAL / ELECTRICAL DATA

| Model | | 25 | 50 | 75 | 100 | 150 |
|---|-----|-------------|-----|-----|-----|------|
| Useful electrical stroke (C.E.U.) +3/-0 | mm | 25 | 50 | 75 | 100 | 150 |
| Theoretical electrical stroke (C.E.T.) ±1 | mm | C.E.U. +1 | | | | |
| Resistance (C.E.T.) | kΩ | 1 | 5 | 5 | 5 | 5 |
| Independent linearity (within C.E.U.) | ± % | 0.2 | 0.1 | 0.1 | 0.1 | 0.05 |
| Dissipation at 40° (0W at 120°C) | W | 0.6 | 1.2 | 1.8 | 2.5 | 3.6 |
| Maximum applicable voltage | V | 25 60 | | | | |
| Mechanical stroke (C.M.) | mm | C.E.U. + 5 | | | | |
| Case length (A) | mm | C.E.U. + 38 | | | | |
| Total length (B) | mm | 107 | 157 | 207 | 257 | 357 |

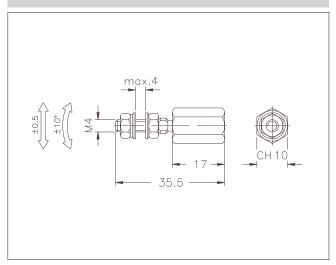
ELECTRICAL CONNECTIONS



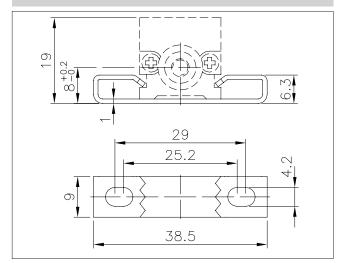
INSTALLATION INSTRUCTIONS

- 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.

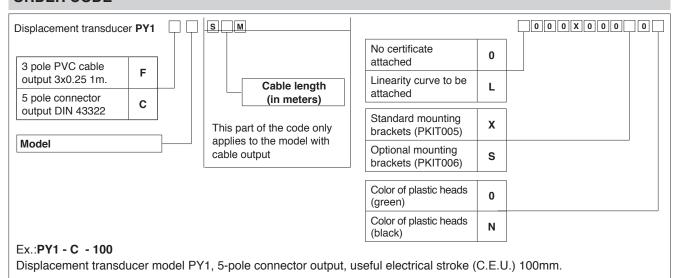
COUPLING JOINT



OPTIONAL FIXING KIT PKIT006



ORDER CODE



ACCESSORIES

| STANDARD ACCESSORIES | | | | |
|---|---------|--|--|--|
| Fixing kit: 4 brackets, M4x10 screws, grower | PKIT005 | | | |
| Fixing kit: 2 "wraparound" brackets (0000X000S00 configurator option) | PKIT006 | | | |
| Coupling joint | PKIT020 | | | |
| OPTIONAL ACCESSORIES | | | | |
| 5-pin axial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm | CON011 | | | |
| 5-pin axial female PCB connector DIN43322 IP65 clamp PG7 for wire ø4 - ø6 mm | CON012 | | | |
| 5-pin 90° radial female PCB connector DIN43322 IP40 clamp for wire ø4 - ø6 mm | CON013 | | | |
| | | | | |

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

