## **GEFRAN**

### **PZ67-A**

# RECTILINEAR DISPLACEMENT TRANSDUCER WITH IP67 PROTECTION LEVEL



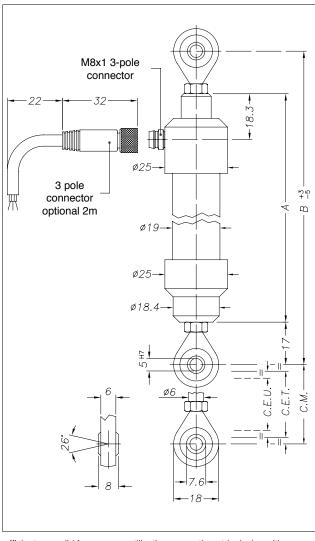
#### Main features

- This transducer is designed to guarantee a high protection level (IP67) in applications under harsh conditions and outdoors, where it may be necessary to work in the direct presence of dust, dirt, or liquids (not in prolonged immersion)
- Its high protection level and very small size make the PZ67-A unique in terms of reliability and flexible installation
- It is ideal for glass cutting and washing machines or for honers and sanders if there is direct exposure to liquids or even just steam
- Indicated for test and bench equipment, especially if outdoors

#### **TECHNICAL DATA**

Useful electrical stroke C.E.U.	   10/25/50/75/100/125/150/175/200/   250/300					
Independent linearity (within C.E.U.)	see table					
Resolution	infinite					
Repeatability	0.01mm					
Electrical connection	M8x1 3-pole connector					
Protection level	IP67 (use M8x1 3-pole female					
	connector with IP67 or					
	higher protection level)					
Life	> 25x106m strokes, or					
(NOT used in	> 100x10 <sup>6</sup> maneuvers, whichever					
prolonged immersion)	is less (within C.E.U.)					
Displacement speed	Standard ≤ 3 m/s max ≤ 5 m/s					
Displacement force	≤ 20N					
Vibrations	52000Hz, Amax =0,75 mm					
	amax. = 20 g					
Shock	50 g, 11ms.					
Acceleration	200 m/s² max (20g)					
Tolleranza sulla resistenza	± 20%					
Recommended cursor	< 0.1 μA					
current	•					
Maximum cursor current	10mA					
Maximum applicable voltage	see table					
Electric isolation	>100MΩ at 500V=, 1bar, 2s					
Dielectric strength	< 100 μA at 500V~ ,50Hz, 2s,1bar					
Dissipation at 40°C	3W					
(0W a 120°C)						
Thermal coefficient	-200+ 200 ppm/°C typical					
of resistance						
Actual Temperature Coefficient of the output voltage	≤ 5ppm/°C typical					
Working temperature	-30+100°C					
Storage temperature	-50+120°C					
Case material	Anodised aluminium					
Control rod material	C45 Chrome steel 20µm					
Mounting	Self-aligning joints with adjustable					
	distance between centers					

#### **MECHANICAL DIMENSIONS**

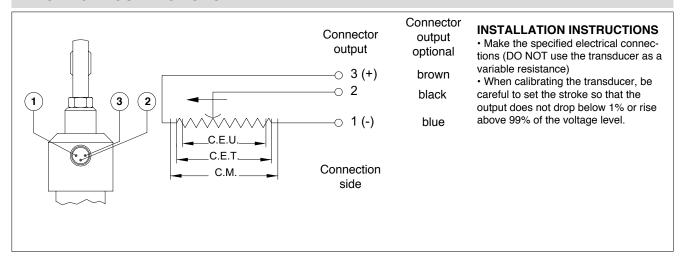


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic  $\leq$  0.1  $\mu$ A

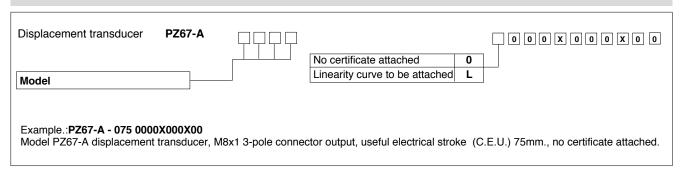
MECHANICAL / ELECTRICAL DATA													
MODEL		10	25	50	75	100	125	150	175	200	250	300	
Useful electrical stroke (C.E.U.) +1 / -0	mm	10	25	50	75	100	125	150	175	200	250	300	
Theoretical electrical stroke (C.E.T.) ± 1	mm	C.E.U. +1											
Resistance (sulla C.E.T.)	kΩ	1	1	2	3	4	5	6	7	8	10	12	
Independent linearity (within C.E.U.)	± %	0,5	0,2	0,1	0,1	0,1	0,05	0,05	0,05	0,05	0,05	0,05	
Dissipation at 40°C (0W at 120°C)	W	0,3	0,8	1,6	2,6								
Maximum applicable voltage	V	15	20	40	60								
Mechanical stroke (C.M.)	mm	C.E.U. +5											
Case length (A)	mm	113,5	128,5	153,5	178,5	203,5	228,5	253,5	278,5	303,5	353,5	403,5	
Recommended distance between brackets (B)	mm	148	163	188	213	238	263	288	313	338	388	438	

Note: It is recommended to keep the sliding parts lubrificated, with a lubricant general purpose least every 6 months.

#### **ELECTRICAL CONNECTIONS**



#### **ORDER CODE**



#### **ACCESSORIES** (on request)

Code
Female connector + 2 meter cable in wired PVC
CAV010

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

