GEFRAN

PC67

SELFLOADING RECTILINEAR DISPLACEMENT TRANSDUCER WITH IP67 PROTECTION DEGREE



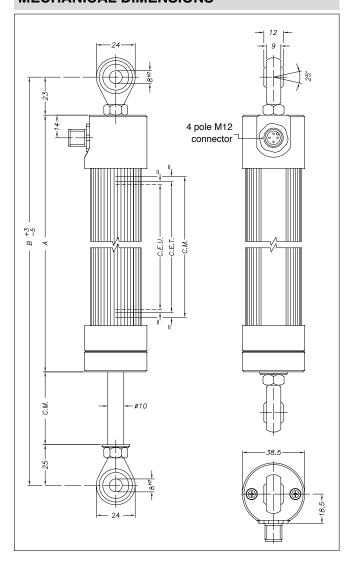
Applicative characteristics

- The PC67 displacement transducer was developed to guarantee a high protection level (IP67) in applications under harsh conditions and outdoors, where it may be necessary to work in the presence of dust, dirt, or liquids (not in prolonged immersion).
- The robust structure of the PC series has been improved thanks to a sealing system (patent pending) that makes it extremely reliable.
- Ideal for mobile hydraulic applications, on agricultural machines, earth-moving equipment and utility vehicles.

TECHNICAL DATA

Useful electrical stroke	50/100/130/150/175/200/225/275/
(C.E.U.)	300/360/375/400/450/500/600/750
Independent linearity	± 0,05%
(within C.E.U.)	± 0,075% for stroke ≤ 150mm
Resolution	Infinite
Repeatibility	0,01 mm
Electrical connection	4 pole M12 connector
Protection	IP67 (use M12 4-pin female
	connector with IP67 protection
	level or higher)
Life	> 25x106 m strokes, or
(NOT for prolonged immersion)	
	is less (within C.E.U.)
Displacement speed	Standard ≤ 3 m/s max ≤ 5 m/s
Displacement force	≤ 30 N
Vibrations	52000Hz, Amax =0,75 mm
	amax. = 20 g
Shock	50 g, 11ms.
Tolerance on resistance	± 20%
Recommended cursor	< 0,1 µA
current	
Maximum cursor	
current	10mA
Maximum applicable voltage	60V
Electrical isolation	>100MΩ at 500V=, 1bar, 2s
Dielectric strength	$< 100 \mu A$ at $500 V_{\sim}$, $50 Hz$, 2s, 1bar
Dissipation at 40°C	3W
(0W at 120°C)	
Temperature Coefficient	-200+200 ppm/°C typic
of the resistance	
Actual Temperature	
Coefficient of the	≤ 5 ppm/°C typic
output voltage	
Working	
temperature	-30+100°C
Storage	
temperature	-50+120°C
Case material	Anodised aluminium
Control rod material	C45 steel, chromium plated 20µm
Mounting method	2 selfloading and
	selfaligning ball-joints

MECHANICAL DIMENSIONS



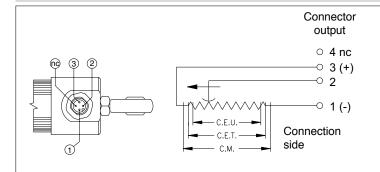
Important: all the data reported in the catalogue (linearity, lifetime, temperature coefficient) are valid for a sensor utilization as a ratiometric device with a max current across the cursor $lc \le 0.1 \mu A$.

MECHANICAL / ELECTRICAL DATA

MODEL		50	100	130	150	175	200	225	275	300	360	375	400	450	500	600	750
Useful electrical stroke (C.E.U.) +3/-0	mm	50	100	130	150	175	200	225	275	300	360	375	400	450	500	600	750
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. + 3					C.E.U. + 4				365	380	406	457	508	609	762
Resistance (C.E.T.)	kΩ	5											10				
Mechanical stroke (C.M.)	mm	C.E.U. + 9					C.E.U. + 10					386	412	463	518	619	772
Case length (A)	mm	C.E.U. + 148				C.E.U. + 149			515	531	557	608	683	784	937		
Min. distance between ball-joints	mm	C.E.U. + 196					C.E.U. + 197			563	579	605	656	731	832	985	

Note: It is recommended to keep the sliding parts lubrificated, at least every 6 months.

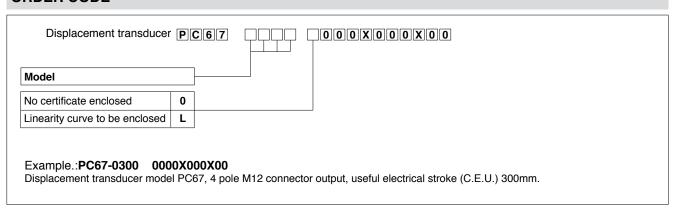
ELECTRICAL CONNECTIONS



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



ACCESSORIES (to order separately)

4 pole M12 female connector axial, IP67-IEC48B, wire clamp for Ø6-Ø8mm wire

4 pole M12 female connector radial 90°, IP67

CON050

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

