



Main features

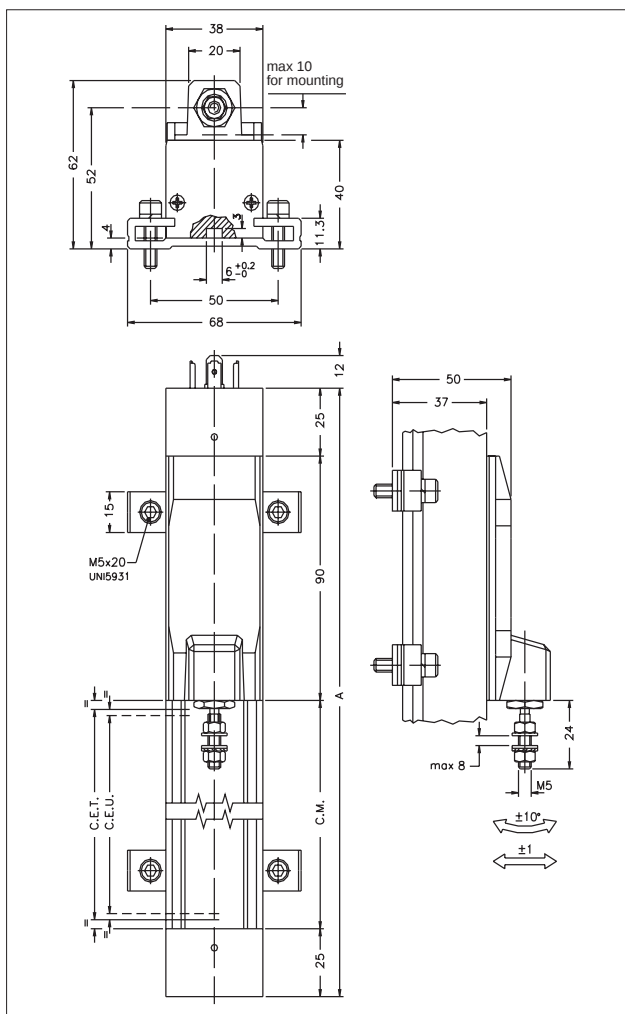
- 100 to 2000 mm. stroke
 - Mechanical linkage using joint with take up of play, M5 thread
 - Independent linearity up to $\pm 0,05\%$
 - Repetibility 0,01 mm.
 - Infinite resolution
 - No variation of electrical signal outside theoretical electrical stroke
 - Displacement speed up to:
4 m/s PK L version
10 m/s PK H version
 - Working temperature: $-30...+100^{\circ}\text{C}$
 - Electrical connections:
PK M 4-pole connector to standard DIN43650 ISO4400
PK B 5-pole connector (DIN43322)
 - Life duration: $> 25 \times 10^6$ meters or $> 100 \times 10^6$ operations, whichever is the smaller (within C.E.U.)
 - Grade of protection IP40
 - Suitable for use in explosive environments with presence of gas (groups IIA, IIB, IIC) and combustible powders.
- Standards for simple device:
ATEX CEI EN 50020 2003 - paragraph 5.4 a

TECHNICAL DATA

Useful electrical stroke (C.E.U.)	100/130/150/175/200/225/250/300/350/360/400/450/500/600/700/750/850/900/1000/1250/1500/1750/2000
Independent linearity (within C.E.U.)	$\pm 0,1\%$ from 100 to 400 $\pm 0,05$ from 450 to 2000
Displacement speed	≤ 4 m/s PK L - ≤ 10 m/s PK H
Displacement force	≤ 1.2 N
Vibrations	5...2000Hz, $A_{max} = 0,75$ mm $a_{max} = 20$ g
Shock	50 g, 11ms.
Acceleration operative	200 m/s ² max (20g)
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	$< 0,1 \mu\text{A}$
Maximum cursor current	10mA
Maximum applicable voltage	60V
Electrical isolation	$> 100\text{M}\Omega$ at 500V~, 1bar, 2s
Dielectric strength	$< 100 \mu\text{A}$ at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	3W
Actual Temperature Coefficient of the output voltage	$< 1,5\text{ppm}/^{\circ}\text{C}$
Working temperature	$-30...+100^{\circ}\text{C}$
Storage temperature	$-50...+120^{\circ}\text{C}$
Case material	Anodised aluminium Nylon 66 G25
Cursor block material	Nylon 66 GF 40 Latilub 73/13
Fixing	Brackets with variable longitudinal axis

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 $I_c \leq 0.1 \mu\text{A}$.

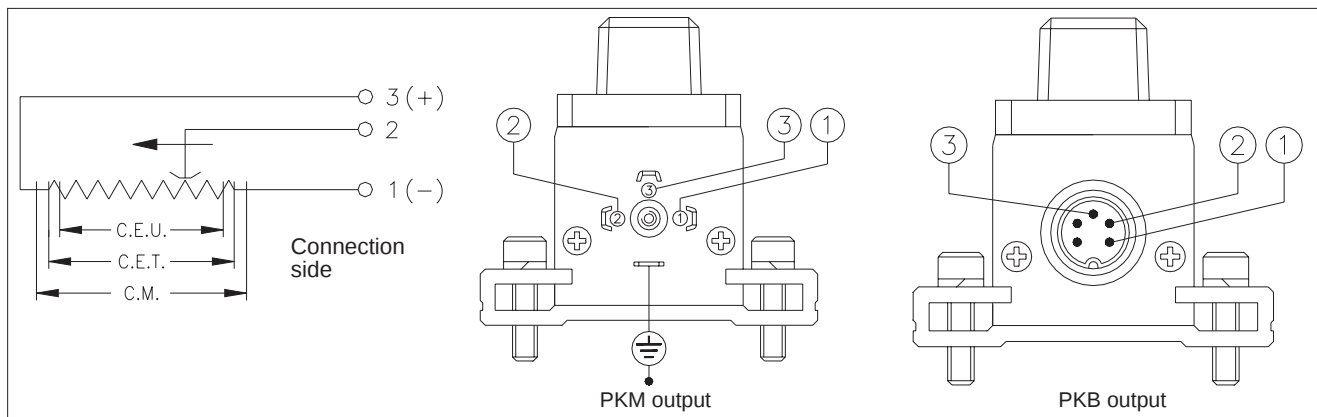
MECHANICAL DIMENSIONS



MECHANICAL / ELECTRICAL DATA

MODEL		100	130	150	175	200	225	250	300	350	360	400	450	500	600	700	750	850	900	1000	1250	1500	1750	2000
Useful electrical stroke (C.E.U.) +3/-0	mm	100	130	150	175	200	225	250	300	350	360	400	450	500	600	700	750	850	900	1000	1250	1500	1760	2000
Theoretical electrical stroke (C.E.T.) ±1	mm	103	133	153	178	204	229	254	305	355	365	406	458	509	611	713	763	865	915	1017	1271	1521	1771	2021
Resistenza (sulla C.E.T.)	kΩ	5									10										20			
Corsa meccanica (C.M.)	mm	113	143	163	188	214	239	264	315	365	375	416	468	519	621	723	773	875	925	1027	1281	1531	1781	2031
Lunghezza custodia (A)	mm	253	283	303	328	354	379	404	455	505	515	556	608	659	761	863	913	1015	1065	1167	1421	1671	1921	2171

ELECTRICAL CONNECTIONS



ACCESSORIES

STANDARD ACCESSORIES

Fixing kit for PK from 100 to 900:
2 brackets, screws, grower

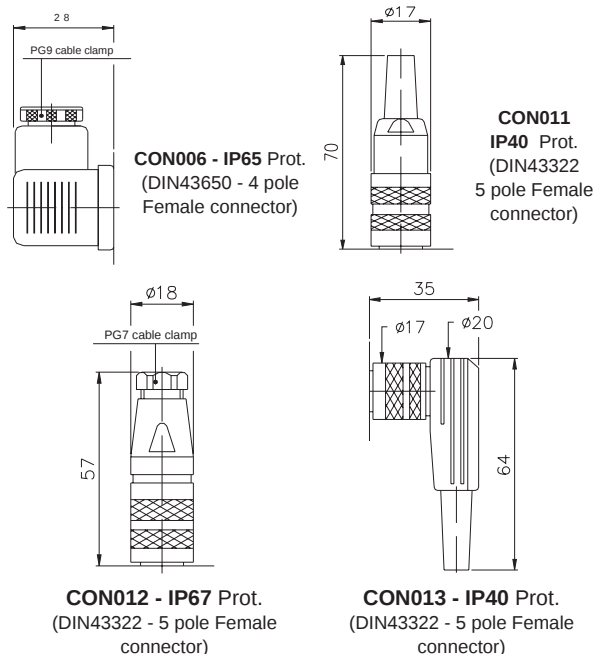
Code

PKIT010

Fixing kit for PK from 1000 to 2000:
3 brackets, screws, grower

PKIT011

OPTIONAL ACCESSORIES



Extraction length of the connector 10 mm.

ORDER CODE

Displacement transducer

PK

4-pole connector output
DIN43650-ISO4400

M

5-pole connector output
DIN43322

B

Model

Displacement speed
up to 4m/s

L

Displacement speed
up to 10m/s

H

If requested, it is possible to supply
models with non-standard mechanical
and/or electrical features

Example: PK - M - 275 - L

Displacement transducer model PK, 4-pole connector output
DIN 43650 -9 ISO 4400, useful electrical stroke (C.E.U.)
275mm, displacement speed up to 4 m/s.

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

GEFRAN

GEFRAN spa
via Sebina, 74
25050 PROVAGLIO D'ISEO (BS) - ITALIA
ph. 0309888.1 - fax. 0309839063
Internet: <http://www.gefran.com>

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