

PZ34

RECTILINEAR DISPLACEMENT TRANSDUCER
WITH CYLINDRICAL CASE



Main features

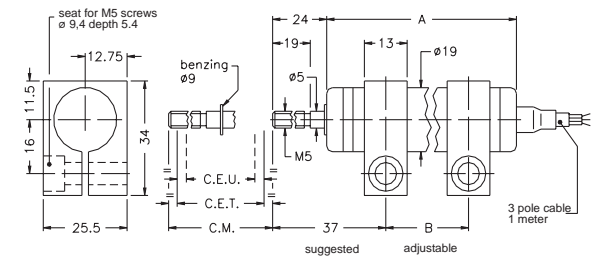
- 25 to 250 mm. stroke
- Mechanical fixing using brackets, selfaligning ball-joints or flange
- Independent linearity up to $\pm 0,05\%$
- Infinite resolution
- No variation of electrical signal outside theoretical electrical stroke
- Displacement speed 10 m/s
- Working temperature: $-30...+100^{\circ}\text{C}$
- Electrical connection: 3-pole screened cable (1m length)
- Life duration: $> 25 \times 10^6$ meters or $> 100 \times 10^6$ operations, whichever is the smaller (within C.E.U.)
- Grade of protection IP60

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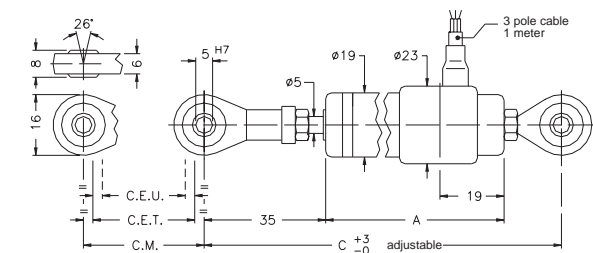
Useful electrical stroke (C.E.U.)	25/50/75/100/125/150/200/250
Independent linearity (within C.E.U.)	see table
Displacement speed	≤ 10 m/s
Displacement force	$\leq 0.5\text{N}$
Vibrations	5...2000Hz, $A_{\text{max}} = 0,75$ mm $a_{\text{max}} = 20$ g
Shock	50 g, 11ms.
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	$< 0,1 \mu\text{A}$
Maximum cursor current	10mA
Maximum applicable voltage	see table
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)	see table
Temp. Coeff. of the resistance	$-200 \pm 200\text{ppm}/^{\circ}\text{C}$
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 GV 40
Control rod material	Stainless steel AISI 303
Fixing	Brackets, selfaligning ball-joints or flange

MECHANICAL DIMENSIONS

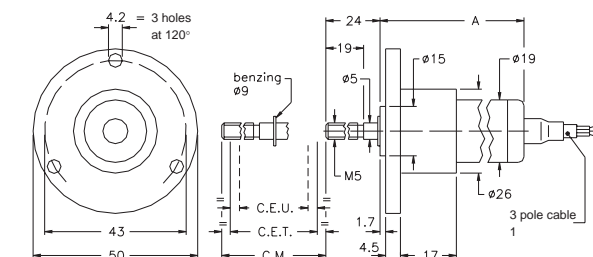
PZ34-S



PZ34-A



PZ34-F

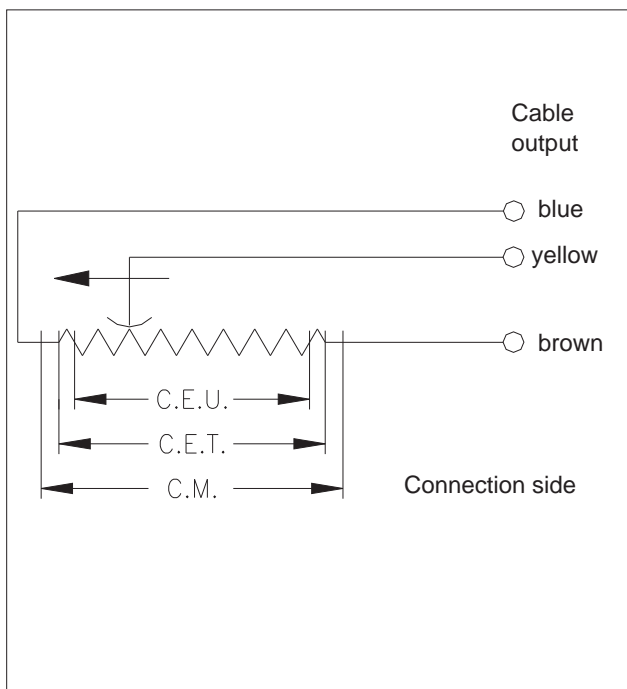


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \mu\text{A}$.

MECHANICAL / ELECTRICAL DATA

MODEL		25	50	75	100	125	150	200	250	
Useful electrical stroke (C.E.U.) +1/-0	mm	25	50	75	100	125	150	200	250	
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. +1								
Resistance (C.E.T.)	kΩ	1	2	3	4	5	6	8	10	
Independent linearity (within C.E.U.)	± %	0,2	0,1	0,1	0,1	0,05	0,05	0,05	0,05	
Dissipation at 40°C (0W at 120°C)	W	0,8	1,6	2,6	3					
Maximum applicable voltage	V	20	40	60						
Mechanical stroke (C.M.)	mm	C.E.U. +5								
Case length (A)	mod. PZ34 - S	mm	83,5	108,5	133,5	158,5	183,5	208,5	258,5	308,5
	mod. PZ34 - A	mm	110	135	160	185	210	235	285	335
	mod. PZ34 - F	mm	83,5	108,5	133,5	158,5	183,5	208,5	258,5	308,5
Recom. distance between brackets (B)	mm	47	72	97	122	147	172	222	272	
Min. distance between ball-joints (C)	mm	163	188	213	238	263	288	338	388	
Weight	mod. PZ34 - S	g	90	105	130	160	175	190	215	245
	mod. PZ34 - A	g	110	125	150	180	195	210	235	260
	mod. PZ34 - F	g	100	115	140	170	185	200	225	255

ELECTRICAL CONNECTIONS



STANDARD ACCESSORIES

	Code
2 mounting brackets for PZ34-S	STA075

ORDER CODE

Displacement transducer **PZ34**

Mounting by brackets	S
Mounting by selfaligning ball-joints	A
Mounting by flange	F

Model

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

Example: **PZ34 - F - 125**
 Displacement transducer model PZ34, mounting by flange, useful electrical stroke (C.E.U.) 125mm.

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



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



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