

GEFRAN

PZ12 RECTILINEAR DISPLACEMENT TRANSDUCER WITH CYLINDRICAL CASE



Principal characteristics

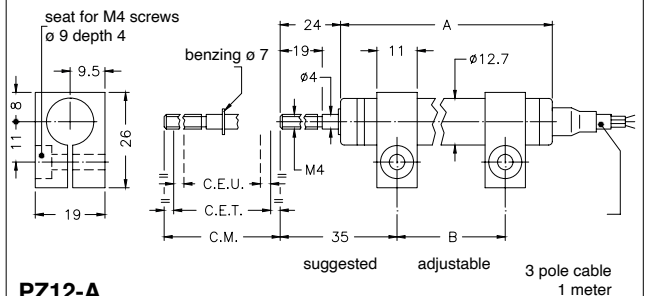
- The 1/2" cylindrical housing, plus the option of all fastening systems (brackets, joints or flange), makes the PZ12 series highly versatile for a wide range of applications.
- The optimized mechanical structure makes the product suitable for developing various special executions (contact Gefran customer service for details).
- Installation is simplified by the lack of electrical signal variation at output outside theoretical electrical stroke.
- Ideal for wood and glass working and finishing machines and for car test benches.

TECHNICAL DATA

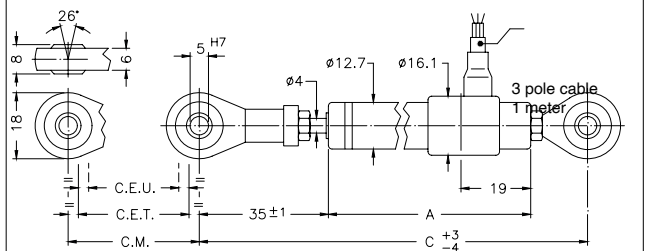
Useful electrical stroke (C.E.U.)	from 25 to 300 mm (for intermediate strokes see table "Electrical / Mechanical Data")
Resolution	infinite
Protection	IP60
Independent linearity (within C.E.U.)	see table
Displacement speed	≤ 10 m/s
Displacement force	≤ 0.5 N
Life	>25x10 ⁹ m strokes, or 100x10 ⁹ operations, whichever is less (within C.E.U.)
Vibrations	5...2000Hz, A _{max} = 0,75 mm a _{max} = 20 g
Shock	50 g, 11ms.
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	< 0,1 mA
Maximum cursor current	10mA
Max. applicable voltage	see table
Electrical isolation	>100M Ω a 500V=, 1bar, 2s
Dielectric strength	< 100 mA a 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	see table
Actual Temperature Coefficient of the output voltage	< 5 ppm/°C typical
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, selfaligning ball-joints or flange

MECHANICAL DIMENSIONS

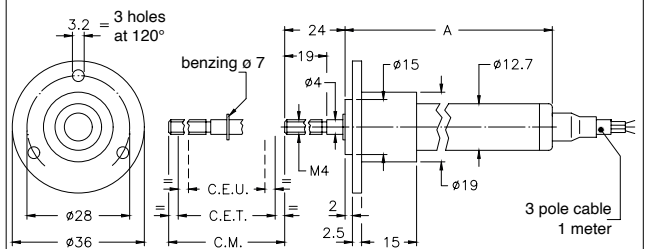
PZ12-S



PZ12-A



PZ12-F



MECHANICAL / ELECTRICAL DATA

MODEL		25	50	75	100	125	150	200	250	300	
Useful electrical stroke (C.E.U.) + 1 / -0	mm	25	50	75	100	125	150	200	250	300	
Theoretical electrical stroke (C.E.T.) ± 1	mm	C.E.U. +1									
Resistance (C.E.T.)	kΩ	1	2	3	4	5	6	8	6	12	
Independent linearity (within C.E.U.)	± %	0.2	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	
Dissipation at 40°C (0W at 120°C)	W	0.5	1	1.5	2	2.5	3	3	3	3	
Maximum applicable voltage	V	20	40	60							
Mechanical stroke (C.M.)	mm	C.E.U. +5									
Case length (A)	mod. PZ12 - S	mm	74.5	99.5	124.5	149.5	174.5	199.5	249.5	299.5	349.5
	mod. PZ12 - A	mm	102	127	152	177	202	227	277	327	377
	mod. PZ12 - F	mm	74.5	99.5	124.5	149.5	174.5	199.5	249.5	299.5	349.5
Recommended distance between brackets (B)	mm	42	67	92	117	142	167	217	267	317	
Minimum distance between ball-joints (C)	mm	153	178	203	228	253	278	328	378	428	
Weight	mod. PZ12 - S	g	45	55	65	75	85	95	115	135	155
	mod. PZ12 - A	g	70	80	90	100	110	120	140	160	180
	mod. PZ12 - F	g	60	70	80	90	100	110	130	150	170

ELECTRICAL CONNECTIONS

Connection side

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

Displacement transducer **PZ12**

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

Model

Example: **PZ12 - S - 25**
Displacement transducer model PZ12, mounting by brackets, useful electrical stroke (C.E.U.) 25mm

No certificate attached	0
Linearity curve to be attached	L
Cable length 1 mt	0
Cable length 2 mt	2
Cable length 3 mt	3
Other lengths on request
Colour of plastic heads (green)	0

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ACCESSORIES

	Code
Mounting brackets for PZ12-S (2 pieces included in the confection)	STA074

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