



#### Principal characteristics

- The 3/4" cylindrical housing, plus the option of all fastening systems (brackets, joints or flange), makes the PZ34 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

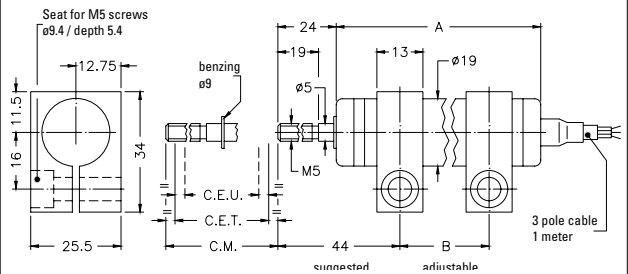
Useful electrical stroke (C.E.U.)	25/50/75/100/125/150/175/200/250/300
Resolution	infinite
Protection	IP60
Independent linearity (within C.E.U.)	see table
Displacement speed	$\leq 10$ m/s
Displacement force	$\leq 0.5$ N
Life	$>25 \times 10^6$ strokes, or $100 \times 10^6$ operations, whichever is less (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	$< 0,1 \mu A$
Maximum cursor current	10mA
Max. applicable voltage	see table
Electrical isolation	$>100M\Omega$ at 500V=, 1bar, 2s
Dielectric strength	$< 100 \mu A$ at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	see table
Actual Temperature Coefficient of the output voltage	$< 1,5ppm/^{\circ}C$
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

#### Important:

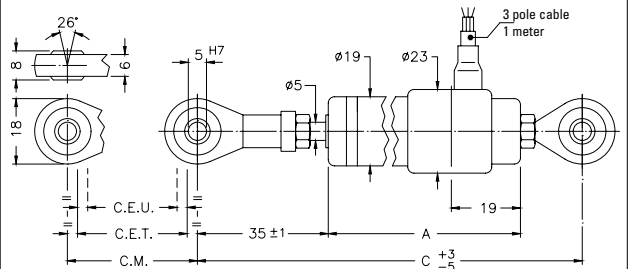
all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor  $I_c \leq 0.1 \mu A$ .

#### MECHANICAL DIMENSIONS

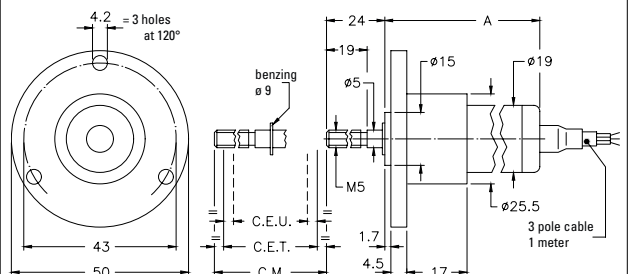
##### PZ34-S



##### PZ34-A



##### PZ34-F



## MECHANICAL / ELECTRICAL DATA

MODEL		25	50	75	100	125	150	175	200	250	300	
Useful electrical stroke (C.E.U.) +1/-0	mm	25	50	75	100	125	150	175	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	7	8	10	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	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	233,5	258,5	308,5	358,5
	mod. PZ34 - A	mm	110	135	160	185	210	235	260	285	335	385
	mod. PZ34 - F	mm	83,5	108,5	133,5	158,5	183,5	208,5	233,5	258,5	308,5	358,5
Recom. distance between brackets (B)	mm	47	72	97	122	147	172	197	222	272	322	
Min. distance between ball-joints (C)	mm	163	188	213	238	263	288	313	338	388	438	
Weight	mod. PZ34 - S	g	90	105	130	160	175	190	205	215	245	275
	mod. PZ34 - A	g	110	125	150	180	195	210	225	235	260	285
	mod. PZ34 - F	g	100	115	140	170	185	200	215	225	255	280

## ELECTRICAL CONNECTIONS

**Cable output**  
blue  
yellow  
brown

C.E.U.  
C.E.T.  
C.M.

*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 **PZ34**     0 0 0 X 0 0 X 0 0

Mounting by brackets	<b>S</b>
Mounting by selfaligning ball-joints	<b>A</b>
Mounting by flange	<b>F</b>

**Model**  

Color of plastic heads (green)	<b>0</b>
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Cable length 1 mt	<b>0</b>
Cable length 2 mt	<b>2</b>
Cable length 3 mt	<b>3</b>
Other lengths on request	<b>.....</b>

No certificate attached	<b>0</b>
Linearity curve to be attached	<b>L</b>

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

## ACCESSORIES

	Code
Mounting brackets for PZ34-S (2 pieces included in the confection)	<b>STA075</b>

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