

Servo-Inclinometer/ Accelerometer TS series

FEATURES:

- Low range acceleration/tilt sensor
- High accuracy closed loop operation
- Infinite resolution
- Excellent repeatability
- High environmental resistance
- Fast response
- Low power unregulated supply
- High level, low impedance output
- Cost effective



SPECIFICATIONS:

	ACCELERATION	TILT
Measuring range	$\pm 0.1g$, up to $\pm 1g$	± 5 to ± 90 degrees
Non-linearity error ^{1), 2)}	0.02%FR typ (1)	0.02%FR typ (2)
Resolution	$< 0.00001g$	< 1 arc-sec
Non-repeatability & Hysteresis	$< 0.005\%$ FR	
Sensitive axis misalignment	< 0.5 deg	
Cross-axis sensitivity	$< 0.002g/g$	
Bias	$< 0.1\%$ FR	
Power supply	$\pm 15VDC$ @ 8mA unregulated (± 13 to $\pm 17VDC$)	
Output	$\pm 5v$ FS @ 10 mA max.	
Output impedance	$< 10 \Omega$	
Step response	50 msec	
Zero temperature coefficient	2 arc-sec / $^{\circ}C$ typ	
Span temperature coefficient	0.01%/ $^{\circ}C$ typ	
Temperature range ($^{\circ}C$)	-30 to +70 operating -40 to +85 survival	
Maximum overload	100g constant acceleration	
Shock survival	250g, 11msec	
Housing material	Sulphuric anodized # 2024 Aluminum alloy	
Weight	100 grams	

Notes: 1) Non-linearity error defined as maximum deviation of any point from the best straight line, in percents of the full measuring range.

2) Non-linearity error defined as maximum deviation of any point from the theoretical sine function line, in percents of the full measuring range. Linearity specified for up to ± 30 degrees range; error is 0.05% deg. for ± 45 deg. range, 0.1% for ± 60 degrees

DIMENSIONS (INCH/[mm]):

