

# 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



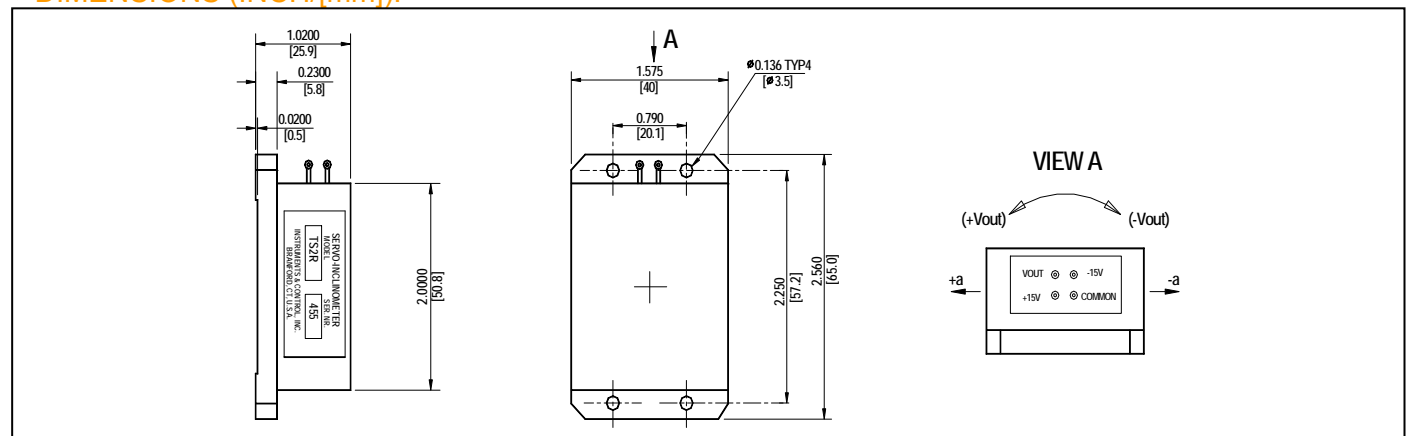
## SPECIFICATIONS:

	ACCELERATION	TILT
Measuring range	$\pm 0.1g$ , up to $\pm 1g$	$\pm 5$ to $\pm 90$ degrees
Non-linearity error <sup>1), 2)</sup>	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 ( $\pm 13$ 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  $\pm 30$  degrees range; error is 0.05% deg. for  $\pm 45$  deg. range, 0.1% for  $\pm 60$  degrees

## DIMENSIONS (INCH/[mm]):



Rev. E

© Singer Instruments & Control Ltd., 2012

WWW.SINGER-INSTRUMENTS.COM

Information furnished by Singer Instruments & Control is believed to be accurate and reliable. However, no responsibility is assumed by Singer Instruments & Control for its use, nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Singer Instruments & Control Ltd.

## Singer Instruments & Control Ltd.

2 Yozma St., Tirat Carmel 39032, ISRAEL  
yuval@singer-instruments.com

Tel: 972-4-857-8880  
Fax: 972-4-857-8881