

LVDT Converter

The A6500-LC Linear Variable Differential Transformer (LVDT) Converter is a single channel device for connection to inductive half-bridge sensors or LVDT sensors to the CSI 6500 ATG Advanced Turbo Guard. The converter powers the sensor with an excitation voltage and converts the displacement proportional sensor signal to an output voltage range that is suitable to the A6500-UM Universal Measuring Card of the CSI 6500 ATG.

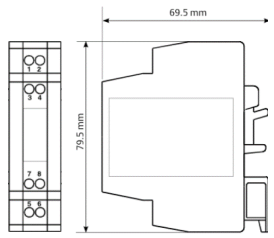
Measurement Performance

Measuring Range / absolute value	$\pm 12\text{mm}/24\text{mm}$	with PR 9350/01
	$\pm 25\text{mm}/50\text{mm}$	with PR 9350/02
	$\pm 50\text{mm}/100\text{mm}$	with PR 9350/04
	$\pm 75\text{mm}/150\text{mm}$	with PR 9350/06
	$\pm 100\text{mm}/200\text{mm}$	with PR 9350/08
	$\pm 150\text{mm}/300\text{mm}$	with PR 9340/12
	$\pm 20\text{mm}/40\text{mm}$	with PR 9314/41
Output voltage swing / range	app 4.8V/7.6 to 12.4V	with PR 9350/01
	app 9.2V/5.4 to 14.6V	with PR 9350/02
	app 9.2V/5.4 to 14.6V	with PR 9350/04
	app 10.4V/4.8 to 15.2V	with PR 9350/06
	app 11.0V/4.5 to 15.5V	with PR 9350/08
	app 12.2V/3.9 to 16.1V	with PR 9340/12
	app 3.2V/8.4 to 11.6V	with PR 9314/41 symmetrical around 10V
Temperature deviation	typical $\pm 5.0\%$	with PR 9350/01
	typical $\pm 2.5\%$	with PR 9350/02 to /12
Measurement Accuracy	$< \pm 2\%$ /measuring range (4.8 to 12.2V)	Deviation from nominal straight line
Measurement error at A6500-LC replacement		$< 1\%$

Signal Output

Standard signal voltage output range	+2 to +18V (protected against short circuit)	
Output voltage limits	app +1.1 to +23.3V @ +24V supply voltage	
Jitter	$< 10\text{mV}$ peak to peak	
Resistance	approximately $100\ \Omega$	
Switch on time	approximately 200ms	
Frequency range	0 to 10Hz (-3db)	



Power Supply	
Supply voltage range	+22.5V to +32V DC
Current consumption	<30 mA
Influence of supply voltage on output signal	<0.1%/V
Overvoltage protection	<60V (Use SELV/PELV power supply)
Sensor supply	
Voltage supply	app. 2.2Vrms , 5kHz
Environmental, General	
Protection Class	IP20 IEC 60529
Operating Temperature	-35°C to +75°C (-31°F to 167°F)
Storage Temperature	-35°C to +85°C (-31°F to 185°F)
Relative Humidity	5 to 95% (non-condensing)
Vibration	0.35mm (0.014in), 10 to 55Hz 5g, 55 to 150Hz According to EN 60068-2-6
Shock	15g according to EN 60068-2-27 6ms, 5000 shocks per axis
EMC Resistance	according to IEC 61326-1 max. 30m (98.43ft) sensor cable length
Current Consumption	<30 mA
Housing material	PA 6.6
Mounting	DIN-Rail
Connections	Screw terminal. (max. 1.5mm ² , wire-end sleeves)
Dimensions	
Width	20.0mm (0.787in)
Height	79.5mm (3.130in)
Length	69.5mm (2.736in)
Net weight	app 65g (0.143lbs)
Gross weight	app 195g (0.430lbs) includes standard packing
Packing volume	app 2.5dm ³ (0.08ft ³)
	
Compliance and Certifications	
CE	EMC – EN61326-1 2014/30/EU 2011/65/EU
CSA	CAN/CSA-C22.2 NO. 61010-1-12 CAN/CSA-C22.2 NO. 61010-2-201-14 UL 61010-1 (3rd Edition) UL 61010-2-201 (1st Edition)

Ordering Information

Model Number	Product Description
A6500-LC	LVDT CONVERTER FOR A6500-UM, DIN-RAIL

Product Accessories

Model Number	Product Description
BOX030	ACCESSORY WALL MOUNT ENCLOSURE FOR 6 CONVERTERS

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