

B8823 A/C LVDT Signal Conditioner Specifications ¹

Oscillator

Output	700mV to 7V RMS, software adjustable in 10mV steps.
Frequency	5, 10 and 15kHz, jumper selectable, Default 5kHz.
Drive Current	0-50mA
Distortion	Typ. 2%, typical
T/C	Typ. Amplitude $\pm 40\text{ppm}/^\circ\text{C}$, Frequency $\pm 200\text{ppm}/^\circ\text{C}$
Output Impedance	100m Ω
Warm-up time	3 minutes

Demodulator

Transducer Gain	10, 20, 50, 100, 200 & 500mV/V (jumper selection)
Input Voltage	2.5 – 3750mV
Non-linearity	0.006%
Input Impedance	100k Ω \pm 1k Ω
Primary Filter	500Hz
Gain T/C	$\pm 40\text{ppm}/^\circ\text{C}$
Zero T/C	$\pm 30\text{ppm}/^\circ\text{C}$
Warmup Time	3 minutes
Output Gain	x1 ,x10 with jumper selection
Balance Resistor	Posts to solder transducer balance resistor internally, if required

Post Demodulator

Offset	Manual from front panel preset and via software
Calibration	\pm Voltage injection, pre-gain, set by front panel preset
Gain	Full Scale from $\pm 50, 100, 200, 500\text{mV}$ & 1 2, 5 & 10V at demodulator Software selectable.
Output	Voltage $\pm 10\text{V}$ peak to peak Type Single ended

Low-Pass Filter

Type	8-pole low pass Butterworth + guard filter
Modes	Bypass, DC, AC or Zero output.
Frequency	1, 2, 5, 10, 20, 50, 100, 200, 500Hz and 1, 2, 5, 10 and 20kHz.
Frequency Accuracy	0.01%
Gain vs Fo	0.50 Fo -0.02dB 1.00 Fo -2.7dB 2.00 Fo -48dB 4.00 Fo -78dB

Display

Monitor LEDs	High/Low indicator LEDs, operating on output and programmable over $\pm 10\text{V}$ range to indicate balance, overload or other output levels.
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Connectors

Transducer	5 pin 0B Lemo.
Main Output	Voltage $\pm 10\text{V}$ peak to peak Type Single ended Connections Output connector or A/D via rack's motherboard.
Monitor Output	Via miniature front panel mounted Coax connectors.

¹ Specification subject to change without notice