

Specifications

Unless otherwise noted, the following specifications apply at +22°C (+72°F) using a 3300 NSv Probe and Extension Cable, and an AISI 4140 steel target.

 These specifications also apply to 990 with modifications 147202-01 (RMOD 4140 3300XL 8MM 5M) and 165335-01 (MOD 4140 3300 XL 8MM 9M).

Electrical

Input	Accepts 1 non-contacting 3300 NSv Proximity Probe and extension cable.
Power	Requires +12 to +35 Vdc input at the transmitter terminal.
4 to 20 mA signal output	4 to 20 mAdc over specified full-scale range in 2-wire configuration.
4 to 20 mA loop accuracy	Within ±1.5% over specified full-scale range. Accuracy is rated from the TEST signal input to the voltage measured across a 250 Ω loop resistance. The ±1.5% error is in addition to the Prox Out Incremental Scale Factor.
Probe gap	Probe must be gapped between 0.5 and 1.75 mm (20 and 55 mils) from target to ensure full scale range.
Maximum loop resistance	1,000 Ω including cable at 35 Vdc.
Current limiting	23 mA typical.
Zero and span	Non-interacting external adjustments.
NOT OK/signal defeat	Signal output will go to less than 3.6 mA within 100 μs after a Not OK condition occurs. Signal output is restored within 2-3 seconds after the Not OK condition is removed.

Power-up inhibit	Signal output stays at less than 3.6 mA (NOT OK) for 2 to 3 seconds after power is applied. The purpose is to signal that the device is not yet ready. Transients may be observed when device goes O.K.
Proximitior sensor output	Compatible with ungrounded, portable test equipment. When using grounded, ac-powered test equipment, use the 122115-01 Test Adapter for signal isolation.
Output impedance	Prox Out has a 10 kΩ output impedance calibrated for a 10 MΩ load.
Prox out linear range	1.4 mm (55 mils). Begins at approximately 0.25 mm (10 mils) from target surface.
Prox Out incremental scale factor	7.87 mV/μm (200 mV/mil) ±6.5% typical including interchangeability errors when measured in increments of 0.25 mm (10 mils) over the linear range using a flat 30 mm (1.2 inch) target. Worst case 7.87 mV/μm ±10%. Typical Noise Level: 50 mV/pp.
Temperature stability	Incremental scale factor remains within ±10% of 7.87 mV/μm (200 mV/mil) from 0°C to +70°C (+32°F to +158°F).
Frequency response	5 Hz to 6,000 Hz +0, 3 dB.
Minimum target size	9.5 mm (0.375 in) diameter.
Leadwire length	Maximum for Proximitior Sensor Output (BNC connector), maximum cable distance is 3 meters (10 feet).
Non-Hazardous, Zone 2 or Div 2 Hazardous area locations	Power Supply: 28 V