Specifications

Electrical

Proximitor Sensor Input	3300 XL 8 mm Proximity Probe with a 1-metre cable length installed in the probe sleeve.
Power	Requires -17.5 Vdc to -26 Vdc without barriers at 12 mA maximum consumption, -23 Vdc to -26 Vdc with barriers. Operation at a more positive voltage than -23.5 Vdc can result in reduced linear range.
Supply Sensitivity	Less than 2 mV change in output voltage per volt change in input voltage.
Output resistance	50 Ω
Nominal Probe DC Resistance (R_{PROBE})	
Resistance from the Center Conductor to the Outer Conductor	
Probe Length (m)	R_{PROBE} (Ω)
1.0	7.59 ± 0.50

Field wiring	0.2 to 1.5 mm² (16 to 24 AWG) . Recommend using 3-conductor shielded triax cable and tinned field wiring. Maximum length of 305 metres (1,000 feet) between the 3300 XL Proximitor Sensor and the monitor. See the frequency response graph (Figure 1, page 7) for signal rolloff at high frequencies when using longer field wiring lengths.
Linear Range	2 mm (80 mils). Linear range begins at approximately 0.25 mm (10 mils) from target and is from 0.25 mm to 2.3 mm (10 mils to 90 mils) (approximately –1 Vdc to –17 Vdc).
Recommended Gap Setting	1.27 mm (50 mils)
Incremental Scale Factor (ISF)	7.87 V/mm (200 mV/mil) ±5% including interchangeability error when measured in increments of 0.25 mm (10 mils) over the 80 mil linear range from 0 °C to +45 °C (+32 °F to +113 °F) at a maximum altitude of 2000m.
Deviation from best fit straight line (DSL)	
Standard 1 metre system	Less than ±0.025mm (±1 mil) with components at 0 °C to +45 °C (+32 °F to +113 °F).
Frequency Response	0 to 10 kHz: +0, -3 dB, with up to 305 metres (1000 feet) of field wiring.
Minimum Target Size	15.2 mm (0.6 in) diameter (flat target)
Shaft Diameter	
Minimum	50.8 mm (2.0 in)

Recommended minimum	76.2 mm (3.0 in) When gapped at the center of the linear range, the interaction between two separate transducer systems (cross-talk) will be less than 50 mV on shaft diameters of at least 50 mm (2.0 in) or greater. Care should be taken to maintain minimum separation of transducer tips, generally at least 40 mm (1.6 in) for axial position measurements or 38 mm (1.5 in) for radial vibration measurements to limit cross-talk to 50 mV or less. Radial vibration or position measurements on shaft diameters smaller than 76.2 mm (3.0 in) will generally result in a change in scale factor. Consult Performance Specification 159484 for additional information.

Effects of 60 Hz Magnetic Files Up To 300 Gauss		
Output Voltage in Mil pp/Gauss		
Gap (mils)	1-metre Proximitor Sensor	Probe
10	0.0124	0.0004
50	0.0110	0.0014
90	0.0126	0.0045
Electrical Classification: Complies with the European CE mark.		

Mechanical

Housing Ratings	IP66 rating verified by BASEEFA report number T07/0709.

Probe Tip Material	Polyphenylene Sulfide (PPS)
Probe Case Material	AISI 304 stainless steel
Probe Cable	1-metre length, 75 Ω triaxial, fluoroethylene propylene (FEP) insulated.
Probe Connector	Gold-plated brass ClickLoc connector.
Probe Tensile Strength	330 N (75 lb) between probe cable and case, maximum.
Housing Material	Ultraviolet (UV) resistant, glass-reinforced polyphenylene sulfide (PPS) thermoplastic containing conductive fibers.
Sleeve Material and Retaining Chain	AISI 304 stainless steel
Outer Sleeve and Retaining Screws	AISI 303 stainless steel
Sleeve O-Ring Material	Neoprene
Grounding Liner and Retaining Plate Material	AISI 304 Stainless Steel
Vibration Isolation Material	Extra Soft Cellular Silicone
Lid Label Material	Gloss Radiant White Polyester

Recommended Torque	
Retaining Nut	29.5 N·m (260 in·lb)
Probe Sleeve Locknut	39.3 N·m (350 in·lb)
Housing Strength Typical	Outer sleeve was mounted on a test stand with its axis parallel to horizontal and the housing mounted on the outer sleeve through an end hole. The housing supported 912 N (205 lbf) placed approximately 38 mm (1.5 in) from the unsupported end with the cover fastened in place and grounding liner installed.
Housing Impact Strength	Certified by BASEEFA to withstand two separate 4 Joule (5.4 ft·lb) impacts at -39°C (-38°F) and at 115°C (239°F). CSA verified that samples of the housing and cover could withstand a 7 Joule (9.5 ft·lb) impact at ambient room temperature.
Total System Weight	1.44 kg (3.2 lbm) typical with 0.3 metre (12 in) sleeve length.

Environmental Limits

Probe Temperature Range	
Operating Temperature	-52°C to +177°C (-62°F to +351°F) Exposing the probe to temperatures below −34°C (-29°F) may cause premature failure of the pressure seal.

Probe Housing and Proximitor Sensor	
Operating Temperature	-52°C to +100°C (-62°F to +212°F)
Proxpac Storage Temperature	-52°C to +105°C (-62°F to +221°F)
Relative Humidity (PROXPAC XL Sensor and probe)	100% condensing, non-submersible when connectors are protected. When properly sealed, moisture should not enter the housing. Users should take precautions to prevent moisture from traveling through the conduit into the housing.
Hot Water and Steam Exposure Effects	(Specification not guaranteed) Brief periods (up to one week) of contact with hot water 95 °C (203 °F) and/or condensing steam should not significantly affect the strength of the plastic housing. Longer contact with hot water or steam may weaken the plastic housing during the first 6 to 8 weeks of exposure and ultimately reduce the housing strength to approximately half of the initial value. Tests of actual housing performance after contact with hot water and condensing steam have not been conducted.

PROXPAC XL Proximity Transducer, Metric

330881-AA-BB-CCC-DD-EE

A: Probe and Approvals Option	
0 0	No probe; Proximitor sensor without approvals
0 1	No probe; Proximitor sensor with Multiple Approvals
1 6	3300 XL 8 mm probe without approvals
2 8	3300 XL 8 mm probe with Multiple Approvals
B: Standoff Adapter Option (B Dimension)	
	Order in increments of 10 mm. Minimum length: 40 mm Maximum length: 200 mm
Examples	
0 0	No standoff adapter
0 4	40 mm
2 0	200 mm
C: Probe Penetration Option (C Dimension)	
	For penetration lengths between 25 and 50 mm, counter bore may be required in machine case to reduce probe side view and/or rear view effects. Order in increments of 1 mm. Minimum length: 25 mm Maximum length: 760 mm
Examples	
0 0 0	No probe sleeve
0 5 0	50 mm
7 6 0	760 mm
D: Fittings Option (supplied as a kit)	
0 0	No fittings; two plugs and two washers
0 1	One M25 fitting, two plugs
0 2	Two M25 fittings, one plug
0 3	One M20 fitting, two plugs
0 5	One PG21 to PG11 reducer, two plugs
0 6	One 3/4-14 NPT fitting, one 3/4-14 NPT to 1/2-14 NPT SST reducer and two plugs
0 7	One PG21 x M20 fitting, two plugs
0 8	Two PG21 x M20 fittings, one plug Conduit fittings are necessary when hardline conduit or metal piping is brought into the housing. If using flexible conduit, you should order with integral 3/4-14 NPT fittings so that you do not require additional conduit fittings with the housing. If using flexible conduit, order the D = 0 0 option.
E: Mounting Thread Option	
0 0	No outer sleeve assembly
0 1	M24 X 3
0 2	3/4-14 NPT (required if ordering Standoff Adapter Option)

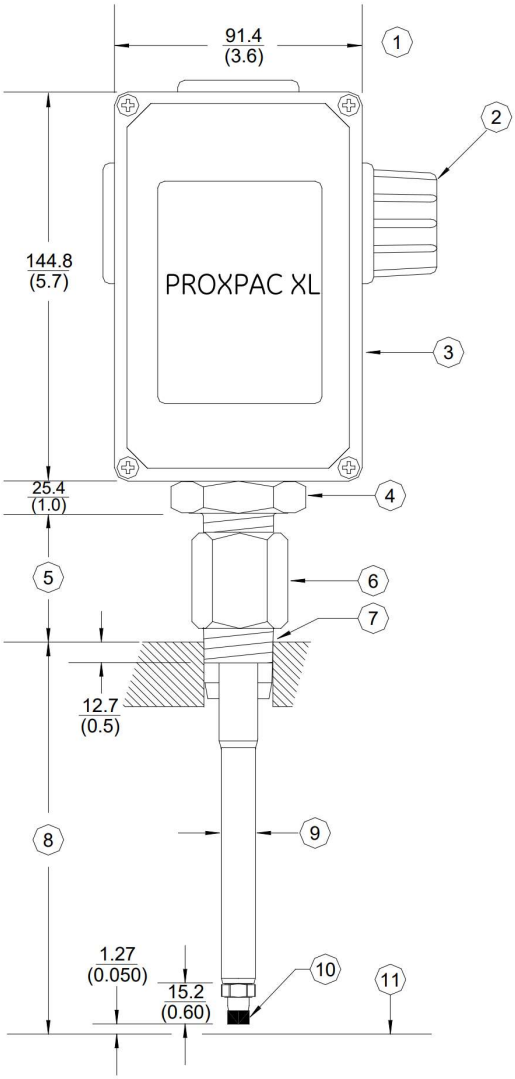


Figure 2: Dimensions for PROXPAC XL Proximity Transducer Assembly

1. Depth = 92.7 (3.65)
2. Fitting "D"
3. PROXPAC XL Housing
4. 42 (1.75) hexagonal
5. Dimension "B"
6. Standoff adaptor (optional)
7. 3/4-14 NPT
8. Dimension "C"
9. 12.7 (0.5) diameter stainless steel sleeve
10. Probe
11. Target surface