

3300 XL High Temperature Proximity System

Datasheet

Cordant™

141623 Rev. H



Description

Gas and steam turbines can produce temperatures hot enough to damage or destroy conventional proximity probes. The 3300 High Temperature Proximity System (HTPS) is designed to withstand the extreme temperatures found inside gas turbines, steam turbines and other types of rotating machinery. The HTPS measures vibration, thrust position, differential expansion and other parameters inside the hot areas of these machines. High temperature installations include:

- Near a labyrinth seal in steam turbines
- Differential expansion in steam turbines
- When probe cables are routed through struts that support the bearing housing of a gas turbine
- When probe cables are routed out through the exhaust path of a gas turbine
- Monitoring a troublesome bearing in a high temperature area
- Mode shape analysis at the mid-span location on steam and gas turbines for online machinery diagnostics
- Interstage radial and axial seal clearance measurements at the mid-span location of multi-stage steam turbines to minimize seal rubs
- Most hot bearing locations that can destroy conventional proximity probes

3300 XL High Temperature Probe, Smooth Case

330303-AAA-BB-CC-DD-EE

A: Overall Case Length Option:



Mounting bracket is included with the proximity probe.

Order in increments of 0.1 in (2.54 mm)

Threaded length configurations

Maximum case length	9.9 in (251.5 mm)
Minimum case length	0.6 in (15.2 mm)
Example	0 6 0 = 6.0 in (152.4 mm)

B: Hardline Length Option:

10	1.0 metre (3.3 feet)
20	2.0 metres (6.6 feet)
50	5.0 metres (16.4 feet)

C: Total Length Option:



Extension cable is included with the proximity probe.

90	9.0 metres (30 feet)
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D: Extension Cable Armor Option:

00	Without stainless steel armor
01	With stainless steel armor

E: Agency Approval Option:

00	Not required
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3300 XL 16mm High Temperature Proximitors Sensor

330380-AA-BB (replaced 330300)

A: Total Length and Mounting Option

90	9 meter, panel mount
91	9 meter, DIN mount
92	9 meter, no mounting hardware

B: Agency Approval

00	Not required
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Accessories

125M6030	3300 XL 16mm High Temperature Proximity System User Guide
159132	Performance Specification
134835-01	Mounting bracket for 330303 smooth case probe (spare).

Spare Extension Cable

330330-AAA-BB-CC

A: Cable Length Option:



The 3300 XL 16 mm HTPS extension cable is matched to the probe. If you lose or damage an extension cable, a replacement cable can be trimmed to the same capacitance as the original. A probe serial number will be required when ordering a spare extension cable for matching.

040	4.0 metres (13.1 feet)
070	7.0 metres (23.0 feet)
080	8.0 metres (26.3 feet)

B: Armor Option:

00	Without stainless steel armor
01	With stainless steel armor

C: Agency Approval Option:

00	Not required
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Armor Length

Cable Length Option	Armor Length ± 0.05 m (0.17 ft)
040	1.9 metres (6.25 ft)
070	5.6 metres (18.4 ft)
080	6.6 metres (21.7 ft)

Field Wiring Cable

132501-AA

1.0 mm² (18 AWG), 3 conductor twisted, shielded cable for connections between Proximitor sensor and monitor. Terminal ring lugs are installed at each end, including an extra shield ring lug at the monitor end.

A: Cable Length Option in Feet:

Order in increments of 1.0 foot (0.3 metres)

Minimum length	2 feet (0.6 metres)
Maximum length	99 feet (30 metres)
Example	15 = 15 feet (4.6 metres)