

# 3300 XL 8 mm Proximity Transducer System

## Datasheet

**Cordant™**

141194 Rev. AM



## Description

The 3300 XL 8 mm Proximity Transducer System consists of:

- One 3300 XL 8 mm probe,
- One 3300 XL extension cable<sup>1</sup>, and
- One 3300 XL Proximititor Sensor<sup>2</sup>.

The system provides an output voltage that is directly proportional to the distance between the probe tip and the observed conductive surface and can measure both static (position) and dynamic (vibration) values. The system's primary applications are vibration and position measurements on fluid-film bearing machines, as well as Keyphasor reference and speed measurements<sup>3</sup>.

The 3300 XL 8 mm system delivers the most advanced performance in our eddy current proximity transducer systems. The standard 3300 XL 8 mm 5-meter system also fully complies with the American Petroleum Institute's (API) 670 Standard for mechanical configuration, linear range, accuracy, and temperature stability. All 3300 XL 8 mm proximity transducer systems provide this level of performance and support complete interchangeability of probes, extension cables, and Proximititor sensors, eliminating the need to match or bench calibrate individual components.

Each 3300 XL 8 mm Transducer System component is backward compatible and interchangeable<sup>4</sup> with other non-XL 3300 series 5 mm and 8 mm transducer system components<sup>5</sup>. This compatibility includes the 3300 5 mm probe, for applications in which an 8 mm probe is too large for the available mounting space<sup>6,7</sup>.



**Baker Hughes** 

330101-00-08-05-02-00, 330101-00-08-05-02-05, 330101-00-08-10-02-00, 330101-00-08-10-02-05, 330101-00-12-10-02-00, 330101-00-12-10-02-05, 330101-00-16-10-02-00, 330101-00-16-10-02-05, 330101-00-20-05-02-00, 330101-00-20-10-02-00, 330101-00-20-10-02-05, 330101-00-30-10-02-00, 330101-00-30-10-02-05, 330101-00-40-05-02-00, 330101-00-40-10-02-00, 330101-00-40-10-02-05, 330101-00-60-10-02-00, 330101-00-60-10-02-05, 330102-00-20-10-02-00, 330103-00-02-10-02-05, 330103-00-04-10-02-00, 330103-00-05-10-02-00, 330104-00-06-10-02-00, 330104-01-05-50-02-00, 330105-02-12-05-02-00, 330105-02-12-05-02-05, 330105-02-12-10-02-00, 330105-02-12-10-02-05, 330106-05-30-05-02-00, 330106-05-30-05-02-05, 330106-05-30-10-02-00, 330106-05-30-10-02-05.

## Ordering Information for Proximity Sensor

### 3300 XL Proximity Sensor

#### 330180-AA-BB

A: Total Length and Mounting Option	
10	1.0 meter (3.3 feet) system length, panel mount
11	1.0 meter (3.3 feet) system length, DIN mount
12	1.0 meter (3.3 feet) system length, no mounting hardware
50	5.0 meters (16.4 feet) system length, panel mount
51	5.0 meters (16.4 feet) system length, DIN mount
52	5.0 meters (16.4 feet) system length, no mounting hardware
90	9.0 meters (29.5 feet) system length, panel mount
91	9.0 meters (29.5 feet) system length, DIN mount

92	9.0 meters (29.5 feet) system length, no mounting hardware
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#### B: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

## Ordering Information for Extension Cables

### 3300 XL Standard Extension Cable

#### 330130-AAA-BB-CC



Make sure that the extension cable length and the probe length, when added together, equal the Proximity Sensor total length.

#### A: Cable Length Option

030	3.0 meters (9.8 feet)
035	3.5 meters (11.5 feet)
040	4.0 meters (13.1 feet)
045	4.5 meters (14.8 feet)
060	6.0 meters (19.7 feet)
070	7.0 meters (22.9 feet)
075	7.5 meters (24.6 feet)
080	8.0 meters (26.2 feet)
085	8.5 meters (27.9 feet)

#### B: Connector Protector and Cable Option

00	Standard cable
01	Armored cable
02	Standard cable with connector protector

<b>03</b>	Armored cable with connector protector
<b>10</b>	FluidLoc cable
<b>11</b>	Armored FluidLoc cable
<b>12</b>	FluidLoc cable with connector protector
<b>13</b>	Armored FluidLoc cable with connector protector

**C: Agency Approval Option**

<b>00</b>	Not required
<b>05</b>	CSA, ATEX, IECEx Approvals

**3300 XL Extended Temperature Range (ETR) Extension Cable****330190-AAA-BB-CC**

Make sure that the extension cable length and the probe length, when added together, equal the Proximity Sensor total length.

**A: Cable Length Option**

<b>030</b>	3.0 meters (9.8 feet)
<b>035</b>	3.5 meters (11.1 feet)
<b>040</b>	4.0 meters (11.5 feet)
<b>045</b>	4.5 meters (14.8 feet)
<b>070</b>	7.0 meters (22.9 feet)
<b>075</b>	7.5 meters (24.6 feet)
<b>080</b>	8.0 meters (26.2 feet)
<b>085</b>	8.5 meters (27.9 feet)

**B: Cable Option**

<b>00</b>	Standard cable
<b>01</b>	Armored cable

**C: Agency Approval Option**

<b>00</b>	Not required
<b>05</b>	CSA, ATEX, IECEx Approvals

**Accessories**

141078	3300 XL 8 mm and 3300 5 mm Proximity Transducer System Manual.
175751	3300 XL Multi-Purpose Stainless Steel Housing. 12"x12"x6". Can hold up to 8 Proximity Sensors in a DIN-mount configuration or 6 Proximity Sensors in a panel-mount configuration. (Available with ATEX Zone 0 and Zone 1 certifications.)
176467	3300 XL Multi-Purpose Stainless Steel Housing. 12"x8"x6". Can hold up to 4 3300XL Proximity Sensors in both DIN-mount and panel-mount configurations. (Available with ATEX Zone 0 and Zone 1 certifications.)
330181	3300 XL Multi-Purpose Stainless Steel Housing. 13"x9.5"x7". Can hold up to 8 Proximity sensors in a DIN-mount configuration or 6 Proximity Sensors in a panel-mount configuration. Primarily used by customers requiring hazardous area approvals for their installations. Available with ATEX Zone 0 and Zone 1 and North American Division 1 and Division 2 certifications.
02120015	Bulk field wire. 1.0 mm <sup>2</sup> (18 AWG), 3 conductor, twisted, shielded cable with drain wire. Specify length in feet.
138492-01	Replacement panel-mount mounting pad.
138493-01	Replacement DIN-mount mounting pad.

148722-01	3300 XL test plug. The 3300 XL Test Plug contains 3 small test pins attached to 3 color-coded 1-meter wires, each terminated in a banana plug. The 3-pin adapter plugs into the test pin holes on 3300 XL-style Proximity sensors. You can use this test plug to check the performance of the Proximity sensor from the test pin holes in the terminal strip without removing the field wiring.	03839410	75Ω triaxial male connector protector. Male connector protectors install onto the extension cable and attach to the female connector protector on the probe, providing environmental protection of connectors.
04310310	3300 XL Proximity Sensor panel-mount screw. One 6-32 UNC thread forming mounting screw. Four screws are required for each Proximity sensor. (Screws supplied standard with Proximity housings [3300 XL panel-mount option]).	03839420	75Ω triaxial female connector protector. Female connector protectors install onto the probe lead and attach to the male connector protector on the extension cable, providing environmental protection of connectors. You can also place the connector protector onto the extension cable to slide over the connection to the Proximity sensor to protect that connection from the environment.
03200006	Silicone self-fusing tape. A 9.1-meter (10-yard) roll of silicone tape to protect connectors. This tape is easy to install and provides excellent electrical isolation and protection from the environment. We do not recommend using this tape inside the casing of the machine.	04301007	3/8-24 probe lock nut with safety wire holes. Single probe lock nut with 2 holes drilled through the nut in order to secure the lock nut in place with safety wire.
40113-02	Connector Protector Kit. Connector Protector Kit for 3300 XL 8 mm probes and extension cables, including connector protectors and installation tools.	04301008	M10 x 1 probe lock nut with safety wire holes. Single probe lock nut with 2 holes drilled through the nut in order to secure the lock nut in place with safety wire.
136536-01	Connector protector adapter. This allows you to use connector protector installation tools manufactured prior to 1998 with 75Ω ClickLoc connectors.	330153-01	3300 XL connector kit. Used on 3300 XL 8 mm probes and extension cables. Contains 1 pair each of male and female ClickLoc connectors, 2 color-coded sleeves, 2 pieces of slit FEP tubing, and 1 strip of silicone tape.
40180-02	Connector protectors. Package contains 10 pairs of connector protectors for 3300 XL 8 mm probes and extension cables.		

330153-09	3300 XL ETR Connector Kit. Used on ETR 3300 XL 8mm probes and 3300 ETR XL extension cables. Contains one pair of male and female ClickLoc connectors, two color-coded sleeves, two pieces of high temperature slit FEP tubing, and one strip of silicon tape.
163356	Connector Crimp Tool Kit. Includes 1 set of multiconnector inserts and connector installation instructions. Compatible only with 330153 connector kits or with probes shipped in 2003 or later with ClickLoc connectors uninstalled. Supplied with carrying case.