

330780-51-CN

3300 XL 11 mm Proximity Sensor

Bently Nevada 330780-51-CN is the documented 3300 XL 11 mm Proximity Sensor for the matched Bently Nevada 3300 XL 11 mm Proximity Transducer System.

| IDENTITY      | VERIFIED VALUE                                          |
|---------------|---------------------------------------------------------|
| Manufacturer  | Bently Nevada                                           |
| System family | Bently Nevada 3300 XL 11 mm Proximity Transducer System |
| Part number   | 330780-51-CN                                            |
| Product role  | Exact article identity: Bently Nevada 330780-51-CN      |
| Lifecycle     | Installed product record                                |

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING NOTE

Match 330780-51-CN to the documented host, physical interface and connection arrangement. Restore the recorded configuration and verify diagnostics and controlled channel response before release.

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# Technical Specifications

Technical values below are limited to the named Bently Nevada product record and directly applicable manufacturer documentation.

| PARAMETER             | VALUE                           | PARAMETER                | VALUE                              |
|-----------------------|---------------------------------|--------------------------|------------------------------------|
| Complete order number | 330780-51-CN                    | System linear range      | 4.0 mm (160 mils)                  |
| Component             | 3300 XL 11 mm Proximitor Sensor | Recommended gap          | 2.5 mm (100 mils)                  |
| System length         | 5.0 m                           | Incremental scale factor | 3.94 V/mm (100 mV/mil)             |
| Mounting              | DIN mount                       | Frequency response       | 0 to 8 kHz, +0/-3 dB typical       |
| Approval option       | China country-specific approval | Supply                   | -17.5 to -26 V DC without barriers |

## Verified Product Record

| DATA GROUP                 | VERIFIED VALUE                                                                                                                                                                                      |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installed host / carrier   | Bently Nevada 3300 XL 11 mm Proximity Transducer System                                                                                                                                             |
| Primary system role        | Exact article identity: Bently Nevada 330780-51-CN                                                                                                                                                  |
| Connection boundary        | Match 330780-51-CN to the documented host, physical interface and connection arrangement. Restore the recorded configuration and verify diagnostics and controlled channel response before release. |
| Controlled acceptance duty | Axial thrust-position monitoring                                                                                                                                                                    |

### ENGINEERING BOUNDARY

Confirm 330780-51-CN, host identity, hardware execution, interfaces, wiring, shielding, grounding, configuration, accessories and controlled functional-test results before commissioning.

## Pre-Installation Checks

|   |                                                                                 |   |                                                                             |
|---|---------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------|
| 1 | Confirm the complete Bently Nevada 330780-51-CN marking and installed position. | 2 | Place the machine and protection channel in the approved maintenance state. |
| 3 | Isolate the circuit and apply ESD-safe handling controls.                       | 4 | Record connectors, terminals, cable route, shielding and grounding.         |

## Documented Service Record

| RECORD ITEM        | REQUIRED ENTRY                                          |
|--------------------|---------------------------------------------------------|
| As-found article   | 330780-51-CN                                            |
| Installed host     | Bently Nevada 3300 XL 11 mm Proximity Transducer System |
| Connection record  | Capture before removal                                  |
| Controlled release | Diagnostics and functional proof                        |

## System Role and Architecture

Bently Nevada 330780-51-CN is the documented 3300 XL 11 mm Proximitor Sensor for the matched Bently Nevada 3300 XL 11 mm Proximity Transducer System.

**FUNCTION 1**  
Exact article identity: Bently Nevada 330780-51-CN

**FUNCTION 2**  
Documented component: 3300 XL 11 mm Proximitor Sensor

**FUNCTION 3**  
Installed family: Bently Nevada 3300 XL 11 mm Proximity Transducer System

**FUNCTION 4**  
Controlled replacement and verification workflow

### Matched System Components

| NO. | DOCUMENTED COMPONENT / ROLE                                                                                                                                                                         |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Bently Nevada 3300 XL 11 mm Proximity Transducer System                                                                                                                                             |
| 2   | 3300 XL 11 mm Proximitor Sensor                                                                                                                                                                     |
| 3   | Axial thrust-position monitoring                                                                                                                                                                    |
| 4   | Match 330780-51-CN to the documented host, physical interface and connection arrangement. Restore the recorded configuration and verify diagnostics and controlled channel response before release. |

### System Integration Record

| INTEGRATION ITEM       | DOCUMENTED ROLE                                                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host identity          | Bently Nevada 3300 XL 11 mm Proximity Transducer System                                                                                                               |
| Interface role         | Exact article identity: Bently Nevada 330780-51-CN                                                                                                                    |
| Field / power context  | Use 330780-51-CN only with the documented Bently Nevada host system and matched interfaces. Preserve the as-found configuration during replacement and commissioning. |
| Commissioning evidence | Complete a controlled response and alarm test before service release.                                                                                                 |

### Installation and Connection Checks

- 1

Verify the documented host, hardware execution and technical values.
- 2

Restore the approved interfaces and channel configuration.
- 3

Review bias, channel and monitor diagnostics after energization.
- 4

Complete a controlled response and alarm test before service release.

#### MANUFACTURER SOURCE RECORD

3300 XL 11 mm Proximity Transducer System Datasheet  
146256 Rev. T

# Applications and Engineering Context

**Axial thrust-position monitoring**  
  
Uses the extended linear range for a documented thrust channel.

**Steam-turbine differential expansion**  
  
Conditions the long-range proximity signal in a matched 11 mm system.

**Reciprocating-compressor rod position**  
  
Supports configured rod-position or rod-drop measurements.

**Keyphasor and zero-speed measurement**  
  
Provides the conditioned phase-reference or speed signal to the monitor.

## TECHNICAL NOTE

Match 330780-51-CN to the documented host, physical interface and connection arrangement. Restore the recorded configuration and verify diagnostics and controlled channel response before release.

## Model-Specific Acceptance Evidence

| CHECK              | ACCEPTANCE CONDITION                                                  |
|--------------------|-----------------------------------------------------------------------|
| Identity           | 330780-51-CN recorded                                                 |
| Host / carrier     | Bently Nevada 3300 XL 11 mm Proximity Transducer System               |
| Physical interface | Exact article identity: Bently Nevada 330780-51-CN                    |
| Configuration      | Review bias, channel and monitor diagnostics after energization.      |
| Functional proof   | Complete a controlled response and alarm test before service release. |

## IMPORTANT NOTICE

Confirm 330780-51-CN, host identity, hardware execution, interfaces, wiring, shielding, grounding, configuration, accessories and controlled functional-test results before commissioning.

## Controlled Release Summary

| RELEASE ITEM     | MODEL-SPECIFIC CONDITION                                              |
|------------------|-----------------------------------------------------------------------|
| Article identity | 330780-51-CN                                                          |
| Approved role    | Axial thrust-position monitoring                                      |
| Final validation | Complete a controlled response and alarm test before service release. |

# Engineering Precautions

- 1

Confirm the complete Bently Nevada 330780-51-CN marking and installed position.
- 2

Place the machine and protection channel in the approved maintenance state.
- 3

Isolate the circuit and apply ESD-safe handling controls.
- 4

Record connectors, terminals, cable route, shielding and grounding.
- 5

Verify the documented host, hardware execution and technical values.
- 6

Restore the approved interfaces and channel configuration.
- 7

Review bias, channel and monitor diagnostics after energization.
- 8

Complete a controlled response and alarm test before service release.

## Related Products on Apter Power

| MODEL                                 | SYSTEM ROLE           | APTER POWER PAGE                                                |
|---------------------------------------|-----------------------|-----------------------------------------------------------------|
| Bently Nevada 330190-040-01-00        | Bently Nevada product | <a href="#">View Bently Nevada 330190-040-01-00 page</a>        |
| Bently Nevada 330103-00-07-10-02-CN   | Bently Nevada product | <a href="#">View Bently Nevada 330103-00-07-10-02-CN page</a>   |
| Bently Nevada 330706-005-046-10-02-05 | Bently Nevada product | <a href="#">View Bently Nevada 330706-005-046-10-02-05 page</a> |
| Bently Nevada 129957-085-310-05       | Bently Nevada product | <a href="#">View Bently Nevada 129957-085-310-05 page</a>       |
| Bently Nevada 330190-085-00-05        | Bently Nevada product | <a href="#">View Bently Nevada 330190-085-00-05 page</a>        |
| Bently Nevada 330102-00-79-05-02-05   | Bently Nevada product | <a href="#">View Bently Nevada 330102-00-79-05-02-05 page</a>   |
| Bently Nevada 330102-00-43-05-02-05   | Bently Nevada product | <a href="#">View Bently Nevada 330102-00-43-05-02-05 page</a>   |
| Bently Nevada 330101-XX-XX-20-02-CN   | Bently Nevada product | <a href="#">View Bently Nevada 330101-XX-XX-20-02-CN page</a>   |

## MANUFACTURER SOURCE RECORD

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