Bently Nevada 3300/45 is a dual differential-expansion monitor that accepts two proximity-transducer signals and continuously indicates both magnitude and direction of rotor-to-casing axial movement. Channel B can be disabled when only one measurement location is required.

## Exact identity

| | |
|---|---|
| **Exact Identifier** | 3300/45 |
| **Monitor** | Dual differential expansion |
| **Inputs** | Two proximity-transducer channels |
| **Rack Family** | 3300 monitoring system |

## Installed context

| Exact item | Installed context | Acceptance |
|---|---|---|
| 3300/45 | Mating component or rack position | Machine-specific functional check |

## Steam-turbine differential expansion

Monitor rotor growth relative to the casing during startup and shutdown.

## Turbine supervisory instrumentation

Integrate two axial proximity measurements into a 3300 monitoring rack.

## Single-point expansion

Disable channel B when the approved machine design uses one location.

## Recorder integration

Send configured current or voltage outputs to a recorder or control system.

## Related models

| | |
|---|---|
| **Bently Nevada 330103-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330103-00-20-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-00-03-05-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-02-10-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330905-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330980-51-CN** | Related portfolio reference; verify the complete execution. |


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## Manufacturer-supported characteristics

| | |
|---|---|
| **Monitor Function** | Dual differential expansion |
| **Input Channels** | Two proximity-transducer signals |
| **Channel B** | May be disabled for single-location use |
| **Input Impedance** | 10 kohm |
| **Scale Factor Selection** | 20 mV/mil or 10 mV/mil, jumper selectable |
| **Power Consumption** | 1.5 W nominal |

## Additional data

| | |
|---|---|
| **Recorder Outputs** | 4-20 mA, 0 to -10 VDC, or 1 to 5 VDC |
| **Buffered Outputs** | Front coaxial and rear terminal for each channel |
| **Alarm Setpoints** | Alert and Danger per channel |
| **Display** | 63-segment vertical LCD per channel with center gap scale |
| **Operating Temperature** | 0 to +65 deg C |
| **Rack Position** | Any available monitor position after power supply and system monitor |

## Interpretation boundary

The supplied reference file is evidence only and must not be linked or uploaded on the product page.

## Evidence discipline

Unverified weight, dimensions and suffix meanings are intentionally omitted. Confirm them only from the exact manufacturer record or nameplate.

## Related models

| | |
|---|---|
| **Bently Nevada 330103-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330103-00-20-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-00-03-05-02-00** | Related portfolio reference; verify the complete execution. |
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### 01 / Field precaution

Verify the complete 3300/45 identity and installed rack position.

### 02 / Field precaution

Record both proximity-transducer inputs before disturbing field wiring.

### 03 / Field precaution

Confirm the selected 10 or 20 mV/mil scale factor for each channel.

### 04 / Field precaution

Restore full-scale, upscale direction and zero-position settings.

### 05 / Field precaution

Check recorder-output mode and receiving-channel scaling.

### 06 / Field precaution

Restore Alert, Danger, time delay, latching and relay voting logic.

### 07 / Field precaution

Verify channel-B enable or disable state against the machine design.

### 08 / Field precaution

Test probe gap, displayed movement, recorder output and alarm response before release.

## Acceptance checkpoints

| | |
|---|---|
| **Identity** | Full model and nameplate recorded |
| **Mechanical** | Mounting, enclosure and routing inspected |
| **Electrical** | Power, loop or cable checks follow the applicable source |
| **Integration** | Mating components and system length confirmed |
| **Acceptance** | Machine-specific functional result recorded |

## Related models

| | |
|---|---|
| **Bently Nevada 330103-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330103-00-20-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-00-03-05-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-02-10-10-02-00** | Related portfolio reference; verify the complete execution. |
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## What does Bently Nevada 3300/45 measure?

It measures differential expansion, or rotor axial position relative to the machine casing.

## How many channels does Bently Nevada 3300/45 provide?

It provides two continuous differential-expansion channels.

## Can channel B be disabled on Bently Nevada 3300/45?

Yes. Channel B can be turned off for a machine requiring one measurement location.

## Which transducer signals does Bently Nevada 3300/45 accept?

It accepts two compatible proximity-probe transducer signals.

## Which recorder outputs are available from Bently Nevada 3300/45?

The monitor can be configured for 4-20 mA, 0 to -10 VDC or 1 to 5 VDC outputs.

## How are alarms arranged on Bently Nevada 3300/45?

Each channel has independent Alert and Danger setpoints.

## What scale factors can Bently Nevada 3300/45 use?

The input can be jumper-selected for 20 mV/mil or 10 mV/mil.

## What confirms commissioning of Bently Nevada 3300/45?

Verify probe gaps, both movement directions, recorder scaling, channel state and alarm response.

## Related models

| | |
|---|---|
| **Bently Nevada 330103-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330103-00-20-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330104-00-03-05-02-00** | Related portfolio reference; verify the complete execution. |
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3300/45

## Evidence record

| | |
|---|---|
| **Manufacturer** | Bently Nevada, a Baker Hughes company |
| **Reference** | 3300/45 Dual Differential Expansion Monitor Specifications and Ordering Information, document 141507 |
| **Exact identifier** | 3300/45 |
| **Evidence boundary** | Only directly supported family and ordering statements are used |

## Related models

| | |
|---|---|
| **Bently Nevada 330103-00-03-10-02-00** | Related portfolio reference; verify the complete execution. |
| **Bently Nevada 330103-00-20-10-02-00** | Related portfolio reference; verify the complete execution. |
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## Recommendation rule

Brand + model links identify related product pages. They do not claim compatibility or substitution.

## Service record

Retain exact identity, installed point, companion components, as-found condition, inspection evidence and machine-specific acceptance result.

## Manufacturer evidence

141507: function and input data p. 1; outputs, alarms and indicators p. 2; environment and ordering p. 3; field wiring p. 4. The supplied reference PDF is used only for data and is not uploaded.

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