

APTER POWER PRODUCT MANUAL

146054-034-20-02-05

3300 ceramic-capped proximity probe

The 146054-034-20-02-05 is supplied as a Bently Nevada 3300 ceramic-capped probe marking. Official Datasheet 172932 identifies 146054 as the 3/8-24 UNF version without armor. Its ceramic cap electrically isolates the sensing coil from conductive process fluid; the supplied three-digit 034 case field requires legacy or nameplate verification.

Connected to a correctly matched extension cable and 3300 XL 8 mm Proximity Sensor, the probe produces a gap-dependent signal for machinery vibration or position monitoring. The ceramic cap allows the probe to operate in applications with electrically conductive liquid around the probe tip, subject to the official sealing and installation limits.

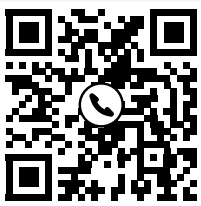
Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Ceramic-capped sensing. Conductive-fluid applications.

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SCAN FOR PRODUCT & QUOTE
146054-034-20-02-05

1. Product Overview and Identity

The 146054-034-20-02-05 is supplied as a Bently Nevada 3300 ceramic-capped probe marking. Official Datasheet 172932 identifies 146054 as the 3/8-24 UNF version without armor. Its ceramic cap electrically isolates the sensing coil from conductive process fluid; the supplied three-digit 034 case field requires legacy or nameplate verification.

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Model Configuration

Code	Officially supported interpretation
146054	3300 ceramic-capped probe, 3/8-24 UNF, without armor
034	Supplied three-character case field; current English table uses two characters
20	Suffix retained; verify field alignment before treating it as a length code
02	Suffix retained; verify connector field alignment on the nameplate
05	Suffix retained; verify approval field alignment and marking

Key Features

- Ceramic-capped probe family for conductive-fluid environments
- Official 146054 3/8-24 UNF unarmored family identity
- Matched 3300 XL 8 mm signal-conditioning architecture
- Nonstandard supplied case field preserved for verification

2. Technical Specifications

Only Bently Nevada-published family or exact-part information is stated. Nonstandard, placeholder, legacy-style, or MOD-controlled fields are identified rather than inferred.

Parameter	Verified value or limitation
Product Type	3300 ceramic-capped proximity probe
Verified Family Thread	3/8-24 UNF
Verified Family Armor	Without armor
Probe Tip	Ceramic capped
Matched Electronics	3300 XL 8 mm Proximitor Sensor with matched cable
System Linear Range	2.0 mm (80 mil) for the matched system
Nominal Scale Factor	7.87 V/mm (200 mV/mil)
Ceramic-Cap Purpose	Electrically isolates the sensing coil from conductive process fluid
Current Standard English Case Range	0.8 to 4.0 in, ordered in 0.1 in increments
Exact Supplied-Code Case Length and Mass	Not confirmed by the current official format

Configuration-Control Note

Datasheet 172932 identifies 146054 as a 3/8-24 UNF ceramic-capped probe without armor. The current standard format is 146054-AA-BB-CC-DD; the supplied 034 field is retained unchanged and not silently normalized to 34.

3. Functions, Applications and Components

Core Functions

- Measures probe-to-target gap through a matched proximity system
- Supports shaft vibration and position measurements
- Electrically isolates the sensing coil from conductive liquid at the tip
- Feeds a matched Proximitor Sensor and machinery monitor channel

Application Areas

Application	System role
Conductive-Fluid Machinery	Supports measurements where conductive liquid may contact the probe tip
Hydraulic and Process Equipment	Monitors compatible rotating shafts or conductive targets
Radial Vibration	Measures dynamic shaft displacement through the matched system
Position Monitoring	Measures static or axial target movement

Compatible Components

- 3300 XL 8 mm extension cable selected to complete the required system length
- 3300 XL 8 mm Proximitor Sensor matched to the total system length
- 3/8-24 UNF mounting hardware and sealing arrangement verified for the machine
- Compatible Bently Nevada monitor channel and approved conductive target

Lifecycle Status

Baker Hughes publishes Datasheet 172932 Rev. J for the 146054 family. The supplied 034 case field requires the physical nameplate or an applicable legacy/MOD drawing before mechanical substitution.

4. Installation Precautions

- Do not normalize 034 to 34 without the nameplate or legacy order document
- Confirm case length, insertion depth, and thread engagement before mounting
- Verify all wetted materials and pressure-sealing requirements for the process fluid
- Match probe, extension cable, and Proximito Sensor total system length
- Confirm the exact connector and approval marking before hazardous-area use

STOP - Verify before installation

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Use the physical nameplate and current Bently Nevada documentation as the controlling records.

5. Official Source and Use Notice

Official source

Baker Hughes / Bently Nevada 3300 Ceramic Capped Probe Datasheet 172932 Rev. J

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/146054-034-20-02-05>

Use Notice

This original Apter Power reference is prepared from the named Bently Nevada source. It is not a manufacturer publication and does not replace the official datasheet, physical nameplate, certificate, MOD or legacy drawing, installation instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.