

INDUSTRIAL AUTOMATION PRODUCT

991-25-70-01-01

991 two-wire thrust transmitter

Axial displacement converted to a 4–20 mA current-loop signal

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	991 thrust transmitter system
Part number	991-25-70-01-01
Country	USA
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named Bently Nevada product record.

PARAMETER	TECHNICAL VALUE
Complete model	991-25-70-01-01
Full-scale range	25-0-25 mils
System length	7.0 m
Mounting	DIN-rail clip
Agency approval	CSA Division 2
Transmitter type	2-wire, loop powered
Supply voltage	+12 to +35 V DC
Process output	4 to 20 mA
Input system	3300 NSv proximity transducer system
Loop accuracy	+/-1.5%
Buffered output	BNC Prox Out
Buffered output impedance	10 kohm for 10 Mohm load
Not OK current	Below 3.6 mA
Not OK response	Within 100 us
Recovery time	Within 0.1 s
Humidity	Up to 100%, condensing
Adjustments	Zero and span
Power-up inhibit	Provided

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System Role and Architecture

Axial displacement converted to a 4–20 mA current-loop signal

FUNCTION 1

Accepts a matched 3300 NSv transducer signal

FUNCTION 2

Provides a loop-powered 4–20 mA displacement output

FUNCTION 3

Supplies a buffered BNC Prox Out for diagnostics

FUNCTION 4

Adds CSA Division 2 approval to the 25-0-25 mil configuration

Matched system components

- 3300 NSv probe
- matched extension cable and Proximity Sensor
- 12 to 35 VDC current loop
- PLC or DCS analog input

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3300 NSv probe
Companion hardware	matched extension cable and Proximity Sensor
Field connection	12 to 35 VDC current loop
Primary system function	Accepts a matched 3300 NSv transducer signal
Controlled acceptance duty	Turbine thrust-position monitoring

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Applications and Engineering Context

Turbine thrust-position monitoring

Accepts a matched 3300 NSv transducer signal

Compressor axial-displacement trending

Provides a loop-powered 4–20 mA displacement output

DCS thrust-alarm integration

Supplies a buffered BNC Prox Out for diagnostics

991 transmitter replacement

Adds CSA Division 2 approval to the 25-0-25 mil configuration

TECHNICAL NOTE

Confirm the complete 991-25-70-01-01 marking, MOD identity where present, matched 3300 NSv system length, mounting hardware, loop polarity and approved axial range; set zero and span only against the documented mechanical reference.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	991-25-70-01-01 / 991-25-70-01-01 recorded
Physical interface	3300 NSv probe
Companion check	matched extension cable and Proximitior Sensor
Functional proof	Accepts a matched 3300 NSv transducer signal
Application test	Turbine thrust-position monitoring

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Engineering Precautions

1

Verify the complete 991-25-70-01-01 marking and its assigned 991 thrust transmitter system position before work.

2

Place the connected turbine thrust-position monitoring process in the approved maintenance state.

3

Isolate applicable power and axial displacement converted to a 4–20 ma current-loop signal field energy before disconnecting conductors.

4

Record connector, conductor, address, firmware and software identities before removal.

5

Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
Bently Nevada 3500 45 176449 04	Related Bently Nevada machinery-monitoring product	View Bently Nevada 3500 45 176449 04 page
Bently Nevada 330106 05 30 05 02 00	Related Bently Nevada machinery-monitoring product	View Bently Nevada 330106 05 30 05 02 00 page
Bently Nevada 330171 00 12 05 01 05	Related Bently Nevada machinery-monitoring product	View Bently Nevada 330171 00 12 05 01 05 page
Bently Nevada 330171 00 33 50 01 05	Related Bently Nevada machinery-monitoring product	View Bently Nevada 330171 00 33 50 01 05 page
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Bently Nevada 330780 90 05 837097	Related Bently Nevada machinery-monitoring product	View Bently Nevada 330780 90 05 837097 page
Bently Nevada 102045 040 01 05	Related Bently Nevada machinery-monitoring product	View Bently Nevada 102045 040 01 05 page

MANUFACTURER SOURCE RECORD

Bently Nevada 991 Thrust Transmitter Datasheet

141618 Rev. R

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