

76683-90

35 mm Proximitior Sensor

CONTROLLED ENGINEERING COPY

Use only with the documented 35 mm probe arrangement and a 9 m total electrical cable length; preserve single-point shield grounding and verify calibration against the installed target.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	76683-90
Manufacturer part	76683-90
Hardware type	76683-90
System family	7200 Series 35 mm Proximity Transducer System



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01 PRE-INSTALLATION PLAN

- 1

Verify the complete 76683-90 nameplate and installed system position before work.
- 2

Place the connected machine and monitoring channel in the approved maintenance state before handling 76683-90.
- 3

Isolate the documented supply and field wiring before disconnecting 76683-90.
- 4

Record every terminal, cable, shield and companion component associated with 76683-90.
- 5

Protect the coaxial connection and prevent contamination or mechanical damage during replacement of 76683-90.

MATCHED HARDWARE

- 7200 Series 35 mm Proximity Transducer System
- documented companion probe or cable
- approved field wiring and shielding
- monitoring-channel configuration record

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	76683-90 / 76683-90 recorded
Physical interface	7200 Series 35 mm Proximity Transducer System
Companion check	documented companion probe or cable
Functional proof	Conditions the 35 mm eddy-current probe signal
Application test	Thrust position



02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Complete model	76683-90
Manufacturer	Bently Nevada
Product family	7200 Series 35 mm Proximity Transducer System
Catalog option	76683-90
Required electrical length	9 m total probe lead plus extension cable
Calibration range	500 mils (12.7 mm), approximately 50 to 550 mils
Average scale factor	20.00 mV/mil (0.787 V/mm) nominal system value
Supply voltage	-18 Vdc to -24 Vdc
Current draw	24 mA maximum with 10 kohm load
Output resistance	50 ohms
Output load	Calibrated into a 10 kohm resistive load
Frequency response	0 to 600,000 rpm, +0/-5%
Target calibration	AISI E4140 steel
System use	Shaft alignment, thrust position and differential expansion

FIELD NOTE

Use only with the documented 35 mm probe arrangement and a 9 m total electrical cable length; preserve single-point shield grounding and verify calibration against the installed target.



03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	76683-90 / 76683-90 recorded
Physical interface	7200 Series 35 mm Proximity Transducer System
Companion check	documented companion probe or cable
Functional proof	Conditions the 35 mm eddy-current probe signal
Application test	Thrust position

04 RETURN-TO-SERVICE RECORD

- ☐
- Match the documented system length and target material before energizing 76683-90.
- ☐
- Restore power with correct polarity and review the output for fault indications after energizing 76683-90.
- ☐
- Complete a controlled response test and retain the final acceptance record for 76683-90.
- ☐
- Confirm the intended process response before normal operation.

VERIFICATION RECORD

PRODUCT IDENTITY	76683-90
INSTALLED POSITION	Documented 7200 Series 35 mm Proximity Transducer System position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

RELATED BENTLY NEVADA PRODUCTS ON APTER POWER

BRAND + MODEL	RELATED PRODUCT	APTER POWER LINK
Bently Nevada 330909-00-25-10-02-00	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 330908-21-35-10-02-00	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 330905-0-25-05-02-IN	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 330903-00-07-10-01-CN	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 330903-00-07-10-01-00	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 330162-03-45-45-05-05-94-01-02	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 86691-00750-0435-15	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 200350-02-00-01	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 21500-00-12-10-02	Bently Nevada monitoring product	Open Bently Nevada page
Bently Nevada 21500-00-32-05-02	Bently Nevada monitoring product	Open Bently Nevada page

SOURCE IDENTIFIERS

Bently Nevada 35 mm Proximitor Transducer System 7200 Series manual
77290-01 Rev. F; user-authorized source copy

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