

135613-01

High-Temperature Case Expansion Transducer

PRODUCT TECHNICAL REFERENCE

Bently Nevada 135613-01 is the 25.4 mm range version of the high-temperature dc LVDT case-expansion transducer system. It measures turbine-casing thermal growth and interfaces with the documented 3500/45 position-monitoring arrangement.

OFFICIAL SOURCE

24765 and 135613 Case Expansion Transducer Systems Datasheet | 141598 Rev. K

Verified technical profile

High-Temperature Case Expansion Transducer

Transducer type	High-temperature dc LVDT
Input power	+13.5 to +26 Vdc, 30 mA minimum
Output	+1 to +6 Vdc
Scale factor	0.20 V/mm (5.0 V/in)
Linear range	25.4 mm (1.0 in)
Rod length option	127 mm (5.0 in)
-3 dB frequency	200 Hz typical
Stability	0.125% full-scale
Non-linearity	<0.25% full-scale
Operating temperature	-25 to 85 deg C
Housing design	NEMA 4
Compatible position monitor	3500/45

Dimensions and weight are intentionally excluded from the product fields for this batch.

System role and engineering boundaries

Bently Nevada 135613-01 is the 25.4 mm range version of the high-temperature dc LVDT case-expansion transducer system. It measures turbine-casing thermal growth and interfaces with the documented 3500/45 position-monitoring arrangement.

1

Extends case-expansion measurement into the documented high-temperature environment

2

Provides a conditioned voltage proportional to LVDT rod movement

3

Uses a weatherproof NEMA 4 housing arrangement

4

Supports dual-channel evaluation of turbine sliding-foot movement

ENGINEERING NOTE

Install 135613-01 in the approved high-temperature case-expansion housing and route the transducer wiring to minimize RF coupling; CE installations require the documented ferrite bead at the transducer end. Verify the 3500/45 scale, rod geometry and dual-channel direction before startup trending.

Industrial application matrix

Four source-supported operating contexts for this exact product.

High-temperature turbine case growth Tracks casing expansion during startup and online thermal operation.	3500/45 position monitoring Feeds the compatible position monitor used for the high-temperature dual-transducer arrangement.
Thermal growth differential review Supports comparison of casing movement with rotor growth to identify rub risk.	Sliding-foot condition trending Helps identify unequal motion that may indicate an obstructed turbine casing foot.

Related-series navigation

Eight verified Apter Power product pages, kept separate from the manufacturer source record.

RELATED APTER POWER SERIES PAGES	
01	330500-00-02 Velomitor sensor
02	16925-30 seismic interconnect cable
03	330130-080-02-05 extension cable
04	330104-00-08-10-02-05 proximity probe
05	330930-065-01-05 NSv extension cable
06	330902-00-90-10-01-05 armored proximity probe
07	330901-00-14-10-02-00 NSv proximity probe
08	330909-00-60-10-01-00 armored NSv probe

Navigation links only - not manufacturer evidence for technical parameters.

SOURCE RECORD

24765 and 135613 Case Expansion Transducer Systems Datasheet | 141598 Rev. K

APTER POWER SALES TEAM

WHATSAPP / PHONE
+86 180 3023 5313

EMAIL
sales13@apterpower.com

WEBSITE
www.apterpower.com



135613-01