Bently Nevada 165855-11

Complete product information

Bently Nevada 165855-11 identifies a 165855 cylinder pressure transducer with the 11 armored 0-6.8 bar absolute-pressure range option for reciprocating compressors.

Product and offer identity

Complete part number	165855-11
Product type	Reciprocating Compressor Cylinder Pressure Transducer
Condition	New, original product
Shipping	Swift global dispatch
Shipping size (est.)	18cm x 14cm x 4cm
Weight	0.4 kg
Country of origin	USA
Tariff reference	8537101190
Ships from	Xiamen, Fujian, China

Technical specifications

Transducer family	165855 cylinder pressure
Pressure range option	11; 0 to 6.8 bar (0 to 100 psia), with armor
Measured quantity	Cyclic absolute cylinder pressure
Pressure port	7/8-14 UNF; SAE J1926 mating seal
Interconnect cable family	146824
Monitor family	3500/77M cylinder pressure
Supply	18 to 30 Vdc
Maximum current	Less than 15 mA
Full-scale output	10 +/- 0.3 Vdc
Zero output	0.5 +/- 0.1 Vdc
Frequency response	0 to 5500 Hz, +/-1 dB
Approval suffix	Not present in supplied 165855-11 identity

Overview

The 11 pressure option covers 0-6.8 bar absolute cyclic pressure and includes armor. The published 165855 ordering format has a separate approval suffix; the supplied identity stops at 11, so approval marking must be checked on the actual unit rather than inferred.

The sensor head mounts at a compressor indicator port or an approved isolation-valve adapter. Its electronics are separated from the wetted end by an integral cable and connect through the 146824 interconnect to a compatible 3500/77M measurement channel.

Use the unit-specific pressure-temperature compensation data supplied with the sensor when configuring the monitor. Protect the diaphragm and confirm the O-ring material, process gas and SAE J1926 sealing arrangement before pressurizing.

Applications and compatibility

Cylinder pressure trend

Measure cyclic absolute pressure for reciprocating-compressor condition analysis.

Pressure-versus-crank-angle review

Use the compensated channel within the approved machine monitoring configuration.

Compressor protection

Integrate with the 3500/77M channel and verify alarm settings against the site design.

Maintenance exchange

Retain sensor-specific compensation values and port-sealing details during replacement.

Product precautions

Pressure isolation

Use a compatible isolation valve and depressurize before removing the sensor.

Process wetted materials

Verify sensor, adapter and O-ring compatibility with the actual gas or liquid.

SAE J1926 seal

The 7/8-14 body requires the correct mating bore for adequate pressure sealing.

Diaphragm handling

Keep objects away from the sensor diaphragm during transport and installation.

Compensation data

Load the supplied unit-specific temperature points into the approved monitor.

Approval marking

Do not assign a hazardous-area rating from the incomplete 165855-11 code alone.

Buyer information

Send the exact complete marking, application, quantity and required delivery destination. Confirm the offered condition and included items in the written quotation; shipment details are established with the order.

Lifecycle and available-unit details

The current manufacturer lifecycle phase for this exact complete ordering identity is not established here. Review the installed machine configuration before a replacement decision.

The offered unit is New, original product. Request available label and connector photographs for comparison with the installed part before approving the supply scope.

Engineering questions

Why must the O-ring of 165855-11 be checked for process-gas compatibility?	An incompatible seal can degrade and cause leakage. Confirm the actual media and select the approved seal material before pressurizing.
What happens if 165855-11 is mounted in a bore that does not meet SAE J1926?	The thread alone does not establish a pressure seal. Use the specified mating geometry and verify the isolation-valve or adapter arrangement.

How should the compensation data for 165855-11 be handled during replacement?	Retain the data supplied with the actual sensor and load the corresponding points into the 3500/77M configuration; do not reuse another sensor file.
Why is the diaphragm of 165855-11 protected during installation?	Contact with tools or foreign objects can damage the sensing surface and corrupt pressure measurement. Use the manufacturer handling procedure.
Can the missing approval suffix on 165855-11 be inferred from its 11 range option?	No. The 11 segment selects range and armor, while hazardous-area approval is a separate ordering segment. Verify the actual label.
What could cause an offset in the signal from 165855-11?	Check the zero output, supply, wiring, compensation data and process state before changing monitor calibration or replacing the sensor.
How should a pressure line be made safe before servicing 165855-11?	Follow the site isolation procedure, depressurize and confirm the indicator port is safe before loosening the sensor or adapter.
What evidence should be recorded after commissioning 165855-11?	Keep complete marking, sensor compensation data, pressure-port and seal details, monitor channel, zero/full-scale checks and accepted cycle trend.

Additional technical criteria

Pressure output span	Full-scale output is 10 +/-0.3 Vdc.
Zero signal	Published zero output is 0.5 +/-0.1 Vdc.
Power	18-30 Vdc, under 15 mA.
Frequency response	DC to 5500 Hz within +/-1 dB.
Proof pressure	1.5 times full scale for the selected pressure range.
Burst pressure	3 times full scale for the 100 psia option.
Mating seal	SAE J1926 geometry is required; thread fit alone is insufficient.
Data retention	Unit-specific compensation points must be retained with the sensor.

Engineering integration decisions

Identity boundary	The supplied short identity omits the separate approval suffix; confirm any required approval on the actual marking.
Pressure interface	Review port geometry, O-ring selection and approved isolation hardware as one pressure boundary.
Compensation	Keep the compensation points supplied with this physical sensor when configuring the monitor.

Technical basis

Bently Nevada 165855 Cylinder Pressure Transducer, 166815 Rev. M

Discuss the complete marking and installed application with Apter Power.
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