Bently Nevada TACH100-01 174652-01

Technical Reference and Engineering Data

Bently Nevada TACH100-01 174652-01 is a tach100 standalone digital tachometer for the Bently Nevada speed-indication and Keyphasor measurement platform. The complete marking must be matched to the installed hardware, wiring and configuration before replacement.

01 Exact identity and system role

Complete model	TACH100-01 174652-01
Product type	TACH100 standalone digital tachometer
Manufacturer	Bently Nevada
Technical source	Bently Nevada TACH100 Standalone Digital Tachometer Datasheet 176063 Rev. L
Input hysteresis	0.2 to 2.5 V DC, adjustable
Events per turn	1 to 99, adjustable
AC supply	110 to 230 V AC, 50/60 Hz
Fuse	1.5 A slow-blow
Nominal power consumption	1.01 W with 888888 displayed
Display	6-digit, 7-segment LED

System position

TACH100-01 174652-01 converts a proximity-transducer pulse train into a six-digit speed display; events-per-turn and hysteresis settings must match the actual target geometry.

Lifecycle and installed-base context

Exact product phase	A current manufacturing phase for the combined TACH100-01 174652-01 identity has not been separately declared in the reviewed manufacturer material.
Product support	The current TACH100 technical data retains the standalone tachometer function, input settings and panel-installation requirements used for support planning.
Supply boundary	Apter Power availability applies to the offered marked unit and is separate from manufacturer lifecycle status.

02 Verified technical data

Input hysteresis	0.2 to 2.5 V DC, adjustable
Events per turn	1 to 99, adjustable
AC supply	110 to 230 V AC, 50/60 Hz
Fuse	1.5 A slow-blow
Nominal power consumption	1.01 W with 888888 displayed
Display	6-digit, 7-segment LED
Digit height	13.2 mm
Measurement range	1 to 999,999 rpm

Additional engineering data

Resolution	1 rpm
Accuracy	+/-0.015% of displayed input speed
Display update threshold	0.003% minimum input change
Proximitor power	-24 V DC at 20 mA maximum
Operating temperature	0 to +60 deg C
Storage temperature	-40 to +85 deg C
Relative humidity	95% maximum, noncondensing
Altitude	2,000 m maximum

Applicability boundary

TACH100 operating values are manufacturer data. The combined TACH100-01 and 174652-01 markings must both be retained in the offered identity.

03 Integration and engineering interpretation

Local machine speed display

Provide RPM indication close to rotating equipment.

Remote control-room indication

Repeat a permanently installed monitoring-system speed signal at a remote location.

Standalone Proximitor-powered channel

Supply one compatible Proximitor and display its speed signal.

Multiple-events-per-turn sensing

Scale speed from a documented multi-event target using the configured event count.

Technical notes

Input relationship	Set the adjustable 0.2 to 2.5 V DC hysteresis and 1 to 99 events-per-turn value from the actual transducer signal and machine target count.
Power and display	Provide the protected 110 to 230 V AC, 50/60 Hz supply and verify the six-digit display against an independent speed reference before release.
Technical reference	Bently Nevada TACH100 Standalone Digital Tachometer Datasheet 176063 Rev. L.

Interpretation boundaries

Probe-only limit	Do not present complete-system range, scale or linearity as a standalone output of TACH100-01 174652-01.
Target influence	Material, geometry, finish and nearby conductive surfaces can change the installed response.
Length influence	Probe lead and extension cable form part of the calibrated electrical relationship.
Temperature influence	Apply component temperature limits at their actual locations and compare with process transients.
Mechanical influence	Thread engagement, rigidity, target travel and cable support affect repeatability and service life.
Acceptance rule	Use the approved machine baseline and maintenance procedure for the final as-left decision.

04 Diagnostic decisions and support record

How should events per turn be set on TACH100-01 174652-01?	Count the physical target events per shaft revolution from the machine drawing and set the tachometer to the same value before comparing speed.
What should be checked if TACH100-01 174652-01 displays a stable but incorrect speed?	Review events-per-turn setting, target geometry, signal polarity, threshold behavior and the independent reference used for comparison.
How can TACH100-01 174652-01 be connected to an externally powered Keyphasor signal?	Follow the manufacturer wiring arrangement for signal and common in parallel with the monitor input without connecting the internal sensor supply to the external source.
What causes an unstable reading on TACH100-01 174652-01?	Inspect probe gap, target runout, connector noise, shield/common wiring, hysteresis setting and signal amplitude through the full speed range.
What evidence should be recorded before replacing TACH100-01 174652-01?	Capture the complete nameplate, installed slot or mounting position, companion hardware, wiring identifiers and the accepted operating baseline for the tach100 standalone digital tachometer.
How should an intermittent fault around TACH100-01 174652-01 be isolated?	Separate field wiring, connector, supply, grounding, configuration and host-system causes. Reproduce the symptom under a controlled test and change only one variable at a time.
What configuration evidence should be retained after commissioning TACH100-01 174652-01?	Retain the hardware identity, firmware or parameter record where applicable, channel assignment, as-left measurements, alarm or diagnostic state and the approved functional-test result.
When should TACH100-01 174652-01 be rejected during incoming inspection?	Quarantine the item if the complete marking, connector keying, board revision, protective coating, terminal condition or required companion hardware differs from the approved replacement record.

Verified source

Bently Nevada TACH100 Standalone Digital Tachometer Datasheet 176063 Rev. L

Related product references

Related product	330500-00-01
Related product	330980-70-CN
Related product	330930-040-03-00
Related product	84661-96

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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Acceptance evidence package

Nameplate evidence	Overall and close photographs showing TACH100-01 174652-01, revision, approval and serial details where present.
Installation evidence	Views of the rack position, mechanical datum, terminal assignment, cable route and strain relief.
Configuration evidence	Export or screenshots identifying the approved hardware assignment and parameters without exposing credentials.
Baseline evidence	As-found readings with units, test conditions, machine state and the instrument used.
Inspection evidence	Connector, contact, insulation, fastener, contamination and heat-condition observations.
Functional evidence	As-left readings and the controlled input, output or channel response used for acceptance.
Change evidence	Any wiring, setting, firmware or mechanical change linked to its approved work reference.
Release evidence	Technician, reviewer, date, asset reference and the maintenance-record location for traceability.

Controlled acceptance sequence

01 Isolate	Place the monitored machine and channel in the approved maintenance state; prove the required isolation.
02 Photograph	Capture TACH100-01 174652-01, the installed datum, connector, route and companion-component markings.
03 Measure	Record mechanical position and the applicable stopped-machine electrical reading before removal.
04 Compare	Check delivered identity, interfaces and evidence against the approved drawing and spare-parts record.
05 Install	Fit without twisting the lead; preserve thread engagement, target clearance, bend radius and strain relief.
06 Set point	Establish the operating gap or datum only with the approved stopped-machine procedure.
07 Prove	Compare local reading, monitor indication and controlled operating response with the accepted baseline.
08 Handover	Record as-left values, photographs, deviations, responsible technician and release approval.

Evidence quality controls

Traceability	Each value is tied to TACH100-01 174652-01, the asset location, test state, instrument and date.
Repeatability	The same approved method and comparable operating state are used for before-and-after readings.
Resolution	Recorded precision does not exceed the capability of the instrument or source document.
Reference state	Stopped, energized, loaded and process-running observations are clearly distinguished.
Change control	Every changed setting, connection or mechanical datum has an approved reason and reviewer.
Retention	Evidence remains accessible with the maintenance record for future troubleshooting and replacement review.