

GT2-H32

High-Accuracy Digital Contact Sensor Head

KEYENCE GT2-H32 is a 32 mm high-accuracy digital contact sensor head in the GT2 series. It converts stylus displacement into absolute position data for dimensional inspection and machine-position verification.

PRODUCT SNAPSHOT

BRAND
KEYENCE

FAMILY
GT2 Series High-Accuracy Digital Contact S

PART
GT2-H32

ORIGIN / HS
Japan / 8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE
+86 180 3023 5313

EMAIL
sales13@apterpower.com

WEBSITE
www.apterpower.com



PRODUCT OVERVIEW

KEYENCE GT2-H32 is a 32 mm high-accuracy digital contact sensor head in the GT2 series. It converts stylus displacement into absolute position data for dimensional inspection and machine-position verification.

- 1

Provides absolute contact displacement measurement without tracking error
- 2

Uses an optical scale and CMOS projection method inside the sensor head
- 3

Supports downward, side and upward mounting orientations
- 4

Connects to the GT2 measurement system through an optional M8 head cable

SYSTEM COMPONENTS

- GT2 compatible amplifier or communication unit
- optional M8 sensor-head cable
- supplied stainless-steel contact
- rigid fixture aligned to the measurement axis

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
GT2-H32	GT2 Series 32 mm digital contact sensor head	Open product page

TECHNICAL DATA

PARAMETER	VALUE
Detection system	Quartz glass scale; CMOS image sensor projection; absolute type
Measuring range	32 mm
Resolution	0.5 μ m
Indicated accuracy	3 μ m p-p at 20 degC
Measuring force - downward	2.1 N at range center
Measuring force - side	1.8 N at range center
Measuring force - upward	1.5 N at range center
Sampling cycle	1 ms
Mechanical response	6 Hz at 20 degC

PARAMETER	VALUE
Enclosure rating	IP67
Ambient temperature	-10 to +55 degC; no freezing
Relative humidity	35 to 85% RH; no condensation
Vibration resistance	10 to 55 Hz; 1.5 mm double amplitude; 2 h per X/Y/Z axis
Main-body material	Zinc die-casting
Indicator material	Polyarylate
Dust-boot material	NBR
Contact materials	TYPE304 and 440C stainless steel
Sensor-head connection	M8 connector; optional cable

TECHNICAL NOTE

Mount GT2-H32 on a rigid fixture with the plunger aligned to the travel axis, select the cable and amplifier for the installed GT2 system, and verify zero, repeatable contact and full travel before production measurement.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

In-process dimensional inspection of machined parts

Provides absolute contact displacement measurement without tracking error

Press stroke and seating-position confirmation

Uses an optical scale and CMOS projection method inside the sensor head

Assembly height and thickness verification

Supports downward, side and upward mounting orientations

Fixture datum and machine-position feedback

Connects to the GT2 measurement system through an optional M8 head cable

PRODUCT PRECAUTIONS

- 1 Verify the GT2-H32 marking and the complete connected GT2 amplifier configuration before installation.
- 2 Remove power from the connected amplifier before attaching or detaching the M8 sensor-head cable.
- 3 Align the plunger with the measurement direction so the contact is not side-loaded.
- 4 Keep the contact, dust boot and connector free of chips, coolant residue and impact damage.
- 5 Select a mounting orientation whose measuring force is acceptable for the workpiece surface.
- 6 Confirm the fixture permits the full 32 mm travel without bottoming the plunger.
- 7 Re-establish the measurement datum after mechanical adjustment or sensor-head replacement.
- 8 Run a controlled master-part check and confirm the indicator and measurement response before release.

ENGINEER FAQ

Q1 Does GT2-H32 match GT2 compatible amplifier or communication unit in a In-process dimensional inspection of machined parts installation?

Verify the complete GT2-H32 marking, the documented GT2 Series High-Accuracy Digital Contact Sensors position and the installed GT2 compatible amplifier or communication unit before fitting the assembly.

Q3 Which GT2 Series High-Accuracy Digital Contact Sensors records should be captured before removing GT2-H32?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with GT2-H32 before disconnection.

Q5 Which optional M8 sensor-head cable condition should be checked when GT2-H32 reports an abnormal state?

Check the optional M8 sensor-head cable supply, seating and connection first, then compare channel diagnostics with the recorded GT2-H32 baseline.

Q7 What maintenance evidence is required after GT2-H32 is used for Assembly height and thickness verification?

Retain the nameplate record, corrective action, final diagnostics and a controlled assembly height and thickness verification functional-test result for GT2-H32.

Q2 How should GT2-H32 be wired when it must provides absolute contact displacement measurement without tracking error?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for GT2-H32; then continuity-test the affected path.

Q4 What controlled test confirms that GT2-H32 can uses an optical scale and cmos projection method inside the sensor head?

Apply the approved field or simulated stimulus, observe the GT2 Series High-Accuracy Digital Contact Sensors indication and confirm the intended response without bypassing the normal interlocks.

Q6 Can GT2-H32 be moved directly into Press stroke and seating-position confirmation without validating rigid fixture aligned to the measurement axis?

No. Confirm the rigid fixture aligned to the measurement axis, revision, connection scheme and GT2 Series High-Accuracy Digital Contact Sensors configuration before transferring GT2-H32 to that duty.

Q8 How should GT2-H32 be returned to service in Fixture datum and machine-position feedback?

Restore power under control, verify supports downward, side and upward mounting orientations, exercise the intended signal path and release GT2-H32 only after the GT2 Series High-Accuracy Digital Contact Sensors remains in its approved operating state.