

INDUSTRIAL AUTOMATION PRODUCT

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.

IDENTITY	VERIFIED VALUE
Manufacturer	KEYENCE
System family	GT2 Series High-Accuracy Digital Contact Sensors
Part number	GT2-H32
Country	Japan
HS code	8537101190

APTER POWER SALES TEAM

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Technical Specifications

Technical values below are limited to the named KEYENCE product record.

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
Operation indicator	2-color LED; red and green

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
Weight	Approx. 270 g; cable excluded

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	GT2 compatible amplifier or communication unit
Companion hardware	optional M8 sensor-head cable
Field connection	supplied stainless-steel contact
Primary system function	Provides absolute contact displacement measurement without tracking error
Controlled acceptance duty	In-process dimensional inspection of machined parts

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System Role and Architecture

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.

FUNCTION 1

Provides absolute contact displacement measurement without tracking error

FUNCTION 2

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

FUNCTION 3

Supports downward, side and upward mounting orientations

FUNCTION 4

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

Matched system components

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

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	GT2 compatible amplifier or communication unit
Companion hardware	optional M8 sensor-head cable
Field connection	supplied stainless-steel contact
Primary system function	Provides absolute contact displacement measurement without tracking error
Controlled acceptance duty	In-process dimensional inspection of machined parts

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Applications and Engineering Context

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

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.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	GT2-H32 / GT2-H32 recorded
Physical interface	GT2 compatible amplifier or communication unit
Companion check	optional M8 sensor-head cable
Functional proof	Provides absolute contact displacement measurement without tracking error
Application test	In-process dimensional inspection of machined parts

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Engineering 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.

RELATED PRODUCTS ON APTER POWER

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

MANUFACTURER SOURCE RECORD

KEYENCE GT2-H32 Sensor Head Product Data

GT2-H32 online specification record

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