AP-31K

KEYENCE CORPORATION · AP-30 series

FEATURES

Two-color digital display pressure sensor (Negative pressure, NPN).

Hardware

Product type:
Digital pressure sensor

Type:
Negative pressure, NPN

Rated pressure:
0 to -29.9 inchHg

Detectable pressure range:
-15 to +110 % of F.S.

Fluid type:
Air or non-corrosive gases

Type of pressure:
Gauge pressure

Display:
3½-digit, 2-color, 7-segment LED (Character height: 11 mm)

Display resolution:
0.1 inchHg, 0.1 kPa, 1 mmHg, 0.001 bar

Display temperature characteristic:
±1 % maximum (of F.S.) at 25 °C (0 to 50 °C range)

Response time:
2.5 / 5 / 100 / 500 ms selectable (chattering prevention)

Communication

Built-in ports:
None

Protocols:
None

Communication expansion:
None

Electrical

Supply voltage:
12 to 24 VDC ±10%

Current consumption:
50 mA maximum (at 24 V), 90 mA maximum (at 12 V)

Output type:
NPN open collector, 2-output (N.O./N.C. selectable)

Control output rating:
100 mA maximum (40 V maximum), Residual voltage: 1 V maximum

Analog output:
1 to 5 V (Load impedance: 47 kΩ minimum)

Environmental

Operating temperature:
0 to +50 °C (No freezing)

Relative humidity:
35 to 85 % RH (No condensation)

Protection rating:
Not available

Pressure resistance (proof pressure):
72.5 PSI

Vibration resistance:
10 to 55 Hz, Double amplitude 1.5 mm, 2 hours in each X, Y, Z direction

Physical

Dimensions (H×W×D):
Not available

Weight:
Approx. 120 g

Front housing:
Polyamide

Front panel sheet:
PET

Rear housing:
Polysulfone

Pressure port:
Die-cast zinc

Cable:
Oil-proof cabtyre cable

Lifecycle

Active; official Keyence production status confirmed via product/spec page (Last verified:
2026-09)