< Actual Size >

The World's Smallest Pressure Sensor

Built-in Amplifier type
AP-C30W Series

Separate Amplifier type
AP-C40W Series

Separate Thin Amplifier type
AP-V40AW Series

☐type

COMPACT PRESSURE SENSOR
THE IDEAL SIZE FOR EASY INSTALLATION AND OPERABILITY

World's Smallest Model
with the Largest Character Height

The world's most compact pressure sensor with a width of 30 mm,
height of 25 mm and the largest character height in its class of 11 mm.
Furthermore, the AP-C30W Series incorporates a very easy-to-see 2-color LED display
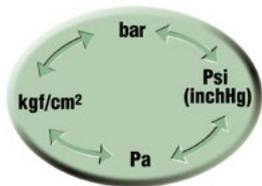
Actual size

25 mm

11 mm

30 mm

Subminiature Digital Pressure Sensor
AP-C30W Series

Unit conversion function

The pressure can be displayed in
any of the four pressure units
enabling it to be used worldwide.

## HIGHEST PERFORMANCE IN ITS CLASS

Highest in Class · **High Resolution: 10x
Area Focus Function** (AP-C31W and AP-C33W)

Based on the set reference pressure, the detected
pressure can be precisely displayed within a ±20%
pressure range. The AP-C30W Series ensures a
resolution of 0.01 kPa*, which is the highest in its class.
The AP-C30W also features a zero-shift function.

* When the AP-C31W is used in focus mode.

Reference pressure set to -50.0 kPa (AP-C31W)

| 0 | -30.0 | Reference pressure -50.0 | -70.0 | (kPa) -101.3 |
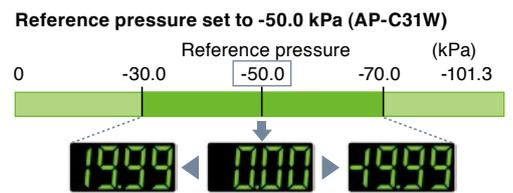
A range between -30.01 kPa and -69.99 kPa is displayed as shown
above. "FFF" or "-FFF" will be displayed in excess of the focus range.

Industry's First · **All-in-one I/O Function**

Independent 2-point output, analog monitor output,
and a zero-shift input are incorporated as standard
functions. There is no need to have multiple sensors to
solve your pressure application.

* Either the analog output or zero-shift input is selectable.

**Independent
2-point output**

**Analog
monitor output**

**Zero-shift
input**

Industry's First · **A Multi-range Model Playing
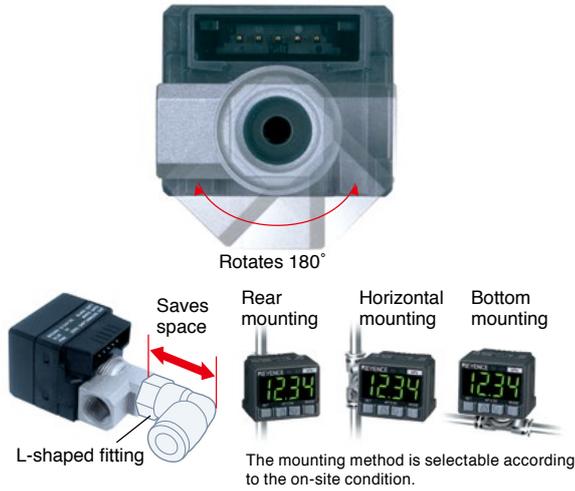Three Roles** (AP-C30W)

A new multi-range model is available, which supports a
number of applications. By making setting changes,
the AP-C30W can be used as a negative pressure
model, positive pressure model, or a compound
pressure model. Therefore, there is no need to keep a
variety of models in stock.

| | -100.0 k | 0 | (Pa) 100.0 k |

Negative
pressure mode

Positive
pressure mode

Compound
pressure mode

FLEXIBLE MOUNTING

World's First Rotary Pressure Port

The unit incorporates a pressure port that rotates 180°, which directly connects to pipes in any direction. The pressure port is of non-slip structure. Therefore, the connection angle will not shift due to vibration. Furthermore, in the case of horizontal mounting, the unit does not require any L-shaped fittings, thus saving the space behind the rear panel. (Patent pending)

Rotates 180°

Saves space

L-shaped fitting

Rear mounting   Horizontal mounting   Bottom mounting

The mounting method is selectable according to the on-site condition.

Connector-type Wiring Ensures Ease of Installation and Maintenance

The wiring cables are provided with connectors for easy connection.

Power supply and I/O cables are provided with connectors that ensure ease of connection and disconnection.
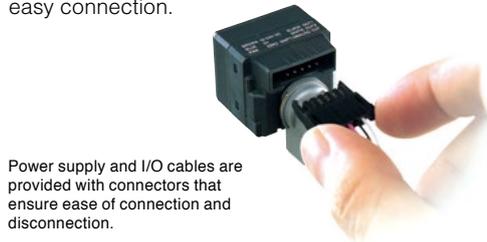
Versatile Mounting using a variety of brackets

Four types of brackets allow mounting of the sensor up to 13 different ways, including a nameplate attachment type and a slanted type.

Nameplate attachment

Base pressure A   Base pressure B   Base pressure C

Slanted and facing down

Slanted and facing up

Wall mounting   Horizontal mounting   Panel mounting

Flush side-by-side mounting

A newly designed panel attachment allows side-by-side close mounting vertically or horizontally, thus saving space.

Front protection cover

UNRIVALED EASE OF USE

As Easy as Fiberoptic Sensors

The button arrangement of the AP-C30W models is the same as fiberoptic sensors. Auto tuning is possible by just pressing the SET button. Furthermore, it allows manual threshold value adjustments, thus making it possible to operate the unit just like fiberoptic sensors.

DIRECT ACCESS
Direct access to threshold values

Button Layout Based on Human Ergonomics

The buttons are laid out with importance attached to operability. For example, the SET button is placed at a lower level to prevent operational mistakes, such as pressing more than one button simultaneously.

SET   AP-C31W   MODE

SET button   Manual adjustment button   MODE button

KEYENCE CORPORATION

V type
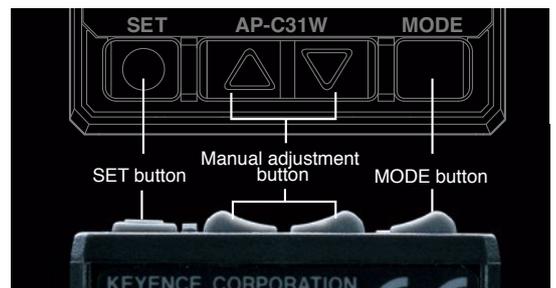
HIGH-SPEED, HIGH-PRECISION, SEPARATE AMPLIFIER TYPE WITH NO PNEUMATIC TUBING LAYOUT REQUIRED

Separate Sensor Head and Amplifier

The subminiature sensor head can be mounted right next to the detection point. As a result, loss of response time due to the air tube length is eliminated.

Subminiature sensor head
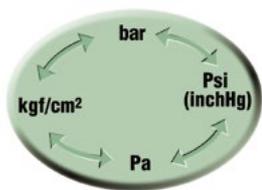AP-41M (Negative pressure type)

Super-tough Electrical Cable

The cable is highly flexible, thus allowing easy routing and handling compared to urethane tubing.

Compact snap-on connector with free-cut cable

One-line connection for saving mounting space and wiring.

bar
Psi (inchHg)
kgf/cm²
Pa

Unit conversion function

The pressure can be displayed in any of the four pressure units enabling it to be used worldwide.

Digital Pressure Sensor Saves Wiring Effort
AP-V40AW Series

HIGHEST SPECIFICATIONS

Highest in Class **High resolution: 10x**

The AP-41M and AP-41 can achieve a resolution of 0.01 inchHg. A minute difference in pressure can be stably detected.

* High-resolution mode

Normal mode   High resolution mode

The unit displays the present value down to 1/100 of a digit, thus allowing fine settings.

Highest in Class **1 ms High-speed Response**

The AP-V40AW Series ensures a response time as low as 1 ms. The AP-V40AW Series has an analog monitor output without any delay, because the processing time is only 1 ms.

Conventional model

AP-V40AW Series

Response Time 2.5 times faster response than conventional speeds

Industry's First **All-in-one I/O Function** (AP-V41AW)

Independent 2-point output, analog monitor output, and a zero-shift input are incorporated as standard functions. There is no need to select multiple sensors to solve your applications.

* Either the analog output or zero-shift input is selectable.

Independent 2-point output	Analog monitor output	Zero-shift input

World's First **New AI (Artificial Intelligence) Tuning Function Incorporated** (Patent Pending)

The pressure change is sampled while the system is in operation, and the optimum zero-shift timing and threshold values are automatically set. Suction check can be easily done.

NEW-STYLE AMPLIFIER

Operation is Just Like Fiberoptic Sensors

Auto tuning of the AP-V40AW Series is possible by just pressing the SET button. Furthermore, manual threshold value adjustment is made possible with a simple rocker switch. The AP-V40AW Series operates just like our fiberoptic sensors.

SET button

Manual adjustment button

DIRECT ACCESS
Direct access to threshold values

Industry's First | Space-saving Design

The amplifier is only 9 mm wide, which is the industry's thinnest model. A number of units can be coupled and installed side-by-side, minimizing the required mounting space.

9 mm

Industry's First | The Industry's First Wire-saving Pressure Sensor

The one-line system supplies power through the connector to the expansion units on the side of the main amplifier. This eliminates two wires from each expansion unit. KEYENCE's Fiberoptic Sensors and Laser Sensors can be used in combination.
(If only AP-VAW amplifiers are used, a maximum of eight expansion units can be coupled.)
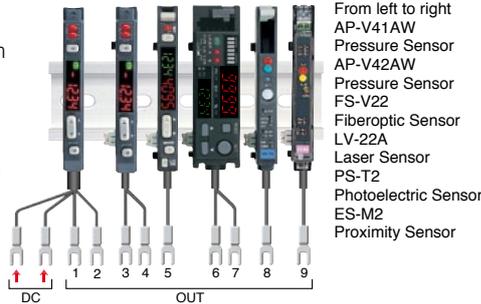
Main unit: AP-V41AW
Expansion unit: AP-V42AW

From left to right
AP-V41AW Pressure Sensor
AP-V42AW Pressure Sensor
FS-V22 Fiberoptic Sensor
LV-22A Laser Sensor
PS-T2 Photoelectric Sensor
ES-M2 Proximity Sensor

DC   OUT
1 2   3 4 5   6 7   8   9

The High-precision, Separate Amplifier Cube Models

C type

❚ Industry's most compact amplifier

❚ Easy-to-see, large, two-color LED display

❚ High-resolution (10x), area focus function

❚ Fast response time of 1 ms

❚ Supports zero-shift input

❚ Zero-shift timer incorporated

❚ Analog output function incorporated

❚ Active two-point tuning function incorporated

Separate Amplifier Type
Subminiature Digital Pressure Sensor
AP-C40W Series

Versatile head variations for every application

Subminiature Sensor Head
AP-41M (Negative Pressure Type)

M3 mounting thread

Flexible Super-tough cable
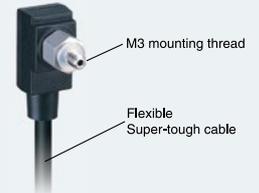
Half the size of the Conventional Model and Ultra-light Weight at 4.8 g
The head is 17.3 (L) x 10.3 (W) x 6.8 (H) mm in size, the volume of which is half the size of conventional ones. Furthermore, the head weighs only 4.8 g and is ideal for compact, high-speed suction devices.

Compact Sensor Head
AP-41 (Negative pressure model)
AP-43 (Positive pressure model)
AP-44 (Compound pressure model)

M5 mounting thread

Multi-purpose Sensor Supporting Most Pressure Applications
Negative pressure, positive pressure, and compound pressure models are all available. The AP-41, AP-43, and AP-44 are compact and suitable for most applications, including suction checks, base pressure control and leak testing.

Pressure Difference Sensor Head
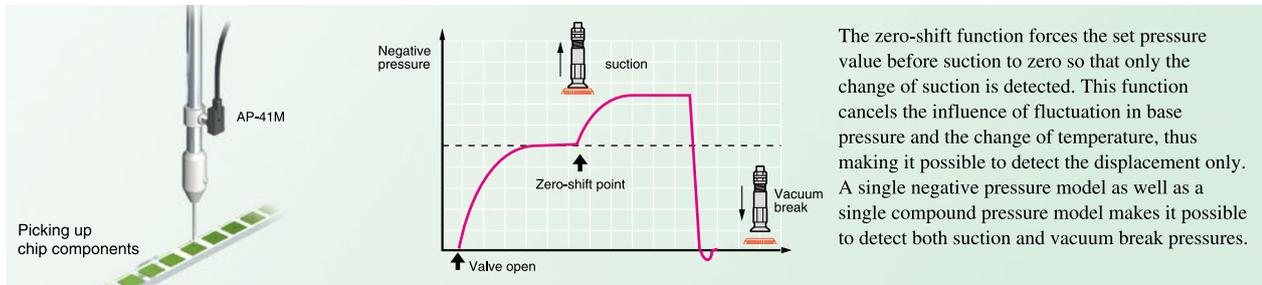### AP-48

Detects the Difference between Two Ports
The AP-48 detects the difference in pressure between high and low ports. The difference in normal air pressure is detectable at a wide range of 100 kPa. It is ideal for a variety of leak tests.

Versatile Application Solving Functions

Suction Check

[Point 1] Zero-shift Ensures Pressure Change is only Monitored During Suction.

Negative pressure

suction

AP-41M

Zero-shift point

Vacuum break

Picking up chip components

Valve open

The zero-shift function forces the set pressure value before suction to zero so that only the change of suction is detected. This function cancels the influence of fluctuation in base pressure and the change of temperature, thus making it possible to detect the displacement only. A single negative pressure model as well as a single compound pressure model makes it possible to detect both suction and vacuum break pressures.

[Point 2] Dedicated Suction Check Mode to Ensure Stable Detection

AP-CW/VW models incorporate the A-1 mode (a dedicated suction check mode). In order to make stable suction checks, it is necessary to make a zero shift at a point as close as possible to the starting port of suction. AP-CW/VW models incorporate a zero-shift timer which can set in 1-ms increments the time between the input of the zero-shift signal and the moment a zero shift is executed.

AI Tuning Sets All Values Automatically

AI tuning samples the difference in pressure of equipment during continuous operation, and calculates the optimum zero-shift timer value (T) and the threshold value (P1), thus making ideal settings automatically. (AP-VW model only)

Change of Pressure during Suction

Starting point of suction is adjusted by Zero-shift point

P1

0

Difference in suction pressure

Threshold value

Valve open

T

Zero shift executed

Zero-shift input (Trigger signal)
*valve open and servo control signals etc.

The change of suction will be detected precisely, without being influenced by external disturbances, such as the change of base pressure, if the pressure at this point is shifted to the reference value (zero).
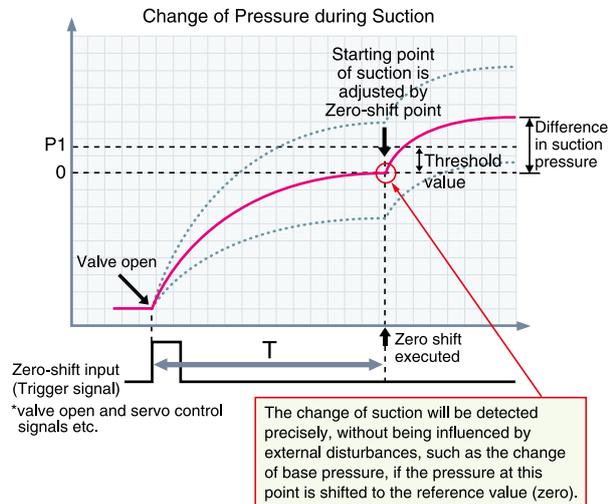
Base Pressure Control

[Point 1] Upper and Lower "Window" Tolerances are easily set.

Supplying screws

Upper limit

Output1 ON

Lower limit

Output   ON
           OFF

Time

Window Mode [F-3]

Base pressure monitoring is possible by just setting upper and lower pressure limits. Moreover, the output will turn OFF in the event of wire disconnection as if an error in pressure is detected. Use the F-1/F-2 modes to allow two independent outputs for the upper and lower limit values.

[Point 2] Chatter Prevention

The chatter prevention function is incorporated so that instantaneous changes in pressure can be ignored.

Pressure

A temporary drop in base pressure when a large-diameter cylinder is in operation or the ejector is ON.

Set value

0

Output   ON
           OFF
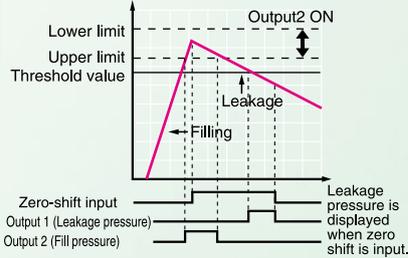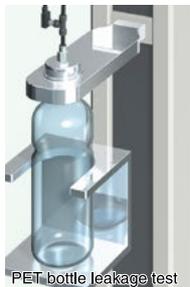
The instantaneous change of pressure is ignored.
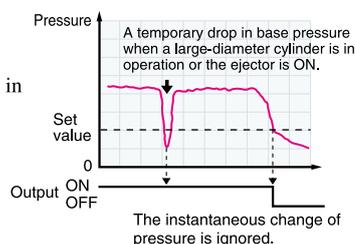
[Point 3] Easy-to-see 2-color LED Display

Using two colors (green while in normal operation and red when pressure is in excess of the upper or lower limit) allows an error to be instantly recognized.

Leakage Test

[Point 1] Detects Both Fill and Leakage Pressure

Lower limit
Upper limit
Threshold value
Output2 ON
Leakage
Filling

Zero-shift input
Output 1 (Leakage pressure)
Output 2 (Fill pressure)

Leakage pressure is displayed when zero shift is input.

PET bottle leakage test

Output 1 detects leakage pressure
Output 2 detects fill pressure

1 When the air/gas builds up to a certain pressure, output2 turns on and closes the valve. Zero-shift is also set.
2 Only the difference in displacement pressure due to leakage will be displayed while the zero shift is ON.
3 The pressure change due to leakage is checked with output1.
4 Normal pressure will be displayed when the zero-shift function turns OFF. Then the fill pressure can be checked again.

(Output 2 always detects the difference from atmospheric pressure.)

A single unit plays two display roles.
Normal pressure
85.0
Leakage pressure
0.0
-10.4
Normal pressure
74.6

*Output 1 will be displayed while zero-shift input is ON when in A-2 mode.

Seating Check

[Point 1] Zero-shift Function Cancels Base Pressure Fluctuation

Only the pressure change by seating will be checked after the zero shift.

Pressure value at the releasing point

Zero shift   Zero shift

Seating of material on press machine
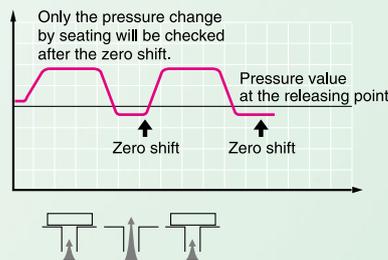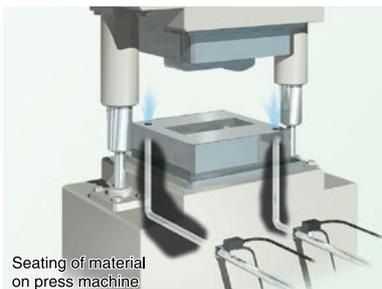
By performing a zero shift at the time of starting the system, a seating check will be made according to the base pressure of the day. By performing a zero shift before valve is seated, a lighter pressure change can be detected.

[Point 2] Resolution: 10x

If the high-resolution mode (on the AP-V40AW Series) or the area focus mode (excluding the AP-C30W) is used, not only the existence of the workpiece but also check the delicate difference in pressure caused by positioning of the workpiece can be detected precisely.

AP-C30W

c**UL**us CE

Specifications

Type		Multi range			Negative pressure	Positive pressure
Model	NPN	AP-C30W			AP-C31W	AP-C33W
	PNP	AP-C30WP			AP-C31WP	AP-C33WP

Rated pressure range		Negative pressure mode 0 to -101.3kPa	Positive pressure mode 0 to -100.0kPa	Compound pressure mode +101.3 to -101.3kPa	0 to -101.3kPa	0 to +1.000MPa
Proof pressure		500kPa				1.5MPa
Fluid type		Air or non-corrosive gases				
Pressure type		Gauge pressure				
Electrical rating	Power supply voltage	12 to 24 VDC ±10% with ripple (p-p) of 10% max.				
	Power consumption			12 V	24 V	
			Normal	720 mW (60 mA) max.	960 mW (40 mA) max.	
			Economical mode	480 mW (40 mA) max.	720 mW (30 mA) max.	
Display		3 1/2-digit, 2-color, 7-segment LED (Character height: 11 mm) Display cycle: 10 times/s				
Set and display range 1.		-10 to +110% of F.S.			-15 to +110% of F.S.	
Operation indicator		Red LED x 2 (corresponding to control output 1 and 2)				
Resolution	Multi range	Negative 0.1kPa	Positive 0.1kPa	Compound 0.2kPa		
	Normal mode				0.1kPa	0.001MPa
	Focus mode				0.01kPa	0.1kPa
Hysteresis 2.		Variable (Standard: 0.5% of F.S.)				
Display temperature characteristic		±1% of F.S. max.				
Response time (chatter prevention function)		2.5, 5, 100, or 500 ms (selectable)				
Zero-shift input		Input time: 2 ms or more. (or analog output selectable)				
Control output		NPN open collector 100 mA max. (at 40 V or below) with max. residual voltage of 1 V, 2 outputs (NO or NC selectable)				
Analog output		1 to 5 V with load impedance of 1 kΩ max. (or zero-shift input selectable)				
Ambient temperature		0 to 50°C, No condensation				
Ambient humidity		35 to 85%, No condensation				
Vibration		10 to 55 Hz, 1.5 mm double amplitude in X, Y, and Z directions, 2 hours respectively				
Pressure port		Rc (PT) 1/8 180° rotation				
Material		Front housing: Polysulfone, Rear housing: PBT, Front seat: Polycarbonate, Pressure port: Zinc die-casting				
Weight		Approx. 30 g (without cable) Approx. 85 g (with 2-m cable)				
Accessory		Power supply cord (2-m with connector), Unit seal 3.				

1. The focus range applies while in focus mode only. 2. A standard of 0.2% of FS applies while in focus mode. 3. The seal is provided with the AP-C33W only.

Connection Diagrams

I/O Circuit Diagram (AP-C30W/C31W/C33W)
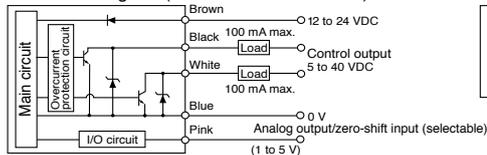
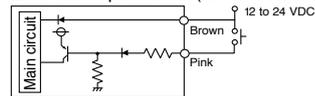Zero-shift Input Circuit (AP-C30W/C31W/C33W)
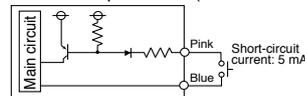
Analog Output Circuit
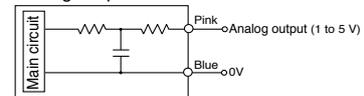
I/O Circuit Diagram (AP-C30WP/C31WP/C33WP)
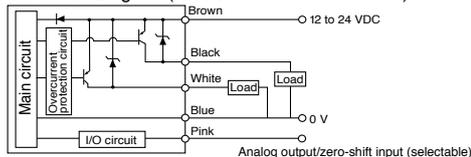
Zero-shift Input Circuit (AP-C30WP/C31WP/C33WP)

Display Unit Selection Chart

Display unit can be changed by setting as shown below.

AP-C30W Series

Setting ╲ Model	Multi range AP-C30W	Negative pressure AP-C31W	Positive pressure AP-C33W
PA	kPa	kPa	MPa (kPa)
GF	kg/cm²	—	kg/cm²
nnH	mmHg	mmHg	—
inH	inHg	inHg	—
Psi	psi	psi	psi
Bar	bar	bar (mbar)	bar

(   ) shows the data in Focus mode.

AP-C40W/V40AW Series

Setting ╲ Model	Negative pressure AP-41	Positive pressure AP-43	Multi range AP-44	Positive pressure AP-47	Multi range AP-48
PA	kPa	Mpa (kPa)	kPa	kPa	kPa
GF	—	kgf/cm²	—	—	kg/cm²
nnH	mmHg	—	mmHg	mmH₂O	—
inH	inHg	—	inHg	inH₂O	—
Psi	psi	psi	psi	—	psi
Bar	bar (mbar)	bar	bar (mbar)	mbar	bar (mbar)

(   ) shows the data in Focus (AP-C40) or High-Resolution mode (using AP-V40AW).

AP-V40AW/C40W

Sensor Head Variations

Shape	Rated pressure range*	Pressure ype	Major applications	-100 k 0 100 k 1M (Pa)	Model
	0 to -101.3 kPa	Negative pressure	Suction check		AP-41M
	0 to -101.3 kPa	Negative pressure	Suction check		AP-41
	0 to 1 MPa	Positive pressure	Base pressure control and leakage test		AP-43
	101.3 to -101.3 kPa	Compound pressure	Suction check and vacuum break check		AP-44
	-101.3 to +101.3 kPa	Pressure difference	Comparison leakage test		AP-48

*The set pressure range is between -15% and +110% of the rated pressure range.

Specifications

Sensor Head

Model	AP-41M	AP-41	AP-43	AP-44	AP-48
Rated pressure range	0 to -101.3 kPa		0 to +1.000 MPa	+101.3 to -101.3 kPa	-101.3 to +101.3 kPa
Proof pressure	500 kPa		1.5 MPa	500 kPa	
Fluid type	Air or non-corrosive gases				
Pressure type	Gauge pressure				
Temperature characteristic	±2% of F.S. max.				
Pressure port	M5 (M3) male screw (AP-41M is M3)				R1/8
Ambient temperature	0 to 50°C, No condensation				
Ambient humidity	35 to 85%, No condensation				
Vibration	10 to 55 Hz, 1.5 mm double amplitude in X, Y, and Z directions, 4 hours respectively				
Shock	1,000 m/s2 in X, Y, and Z directions 10 times respectively (60 times in total)				
Material	Housing: PBT, Screw: Stainless steel				
Weight	7 g (without cable) 70 g (with 3-m cable) (41 M: 4.8 g / 67.8 g)				35 g (without cable) 98 g (with 3-m cable)

Amplifier Unit

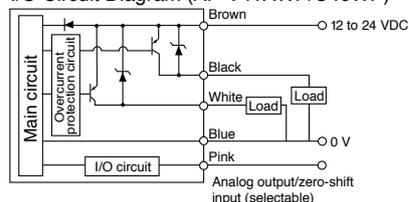| Model	NPN	AP-V41AW/V42AW/C40W			
	PNP	AP-V41AWP/V42AWP/C40WP			
Applicable sensor head		AP-41M/41	AP-43	AP-44	AP-48
Power supply		12 to 24 VDC ±10% with ripple (p-p) of 10% max.			
Current consumption		AP-V41AW/V42AW	12 V	24 V	AP-C40W	12 V	24 V
		Normal	720 mW (60 mA) max.	960 mW (40 mA) max.	Normal	780 mW (65 mA) max.	1080 mW (45 mA) max.
		Economical mode	480 mW (40 mA) max.	720 mW (30 mA) max.	Economical mode	540 mW (45 mA) max.	840 mW (35 mA) max.
Display	AP-V41AW(P)/V42AW(P)	4 1/2-digit, 2-color, 7-segment LED (Character height: 4.5 mm) AI indicator (green) Display cycle: 10 times/s			
	AP-C40W(P)	3 1/2-digit, 2-color, 7-segment LED (Character height: 11 mm) Display cycle: 10 times/s			
Set and display range		-15 to +110% of F.S. [2]			
Operation indicator		Red LED x 2 (corresponding to control output 1 and 2)			
Resolution	Standard mode	0.1 kPa	0.001 MPa	0.1 kPa	
	High-resolution/ Focus mode	0.01 kPa	0.1 kPa	0.02 kPa	
Repetitive precision		±0.2% of F.S.			
Hysteresis		Variable (Standard: 0.5% of FS; high-resolution/focus mode: 0.1% of F.S.)			
Display temperature characteristics		±1% of F.S. max.			
Response time (chattering prevention function)		1 (in high-speed mode only), 2.5, 5, 100, or 500 ms (selectable)			
Zero-shift input		Input time: 2 ms or more (or analog output selectable)			
Control output		NPN open collector 100 mA max. (at 40 V or below)[3] with max. residual voltage of 1 V, 2 outputs (NO or NC selectable)			
		PNP open collector 100 mA max. (at 30 V or below)[3] with max. residual voltage of 1 V, 2 outputs (NO or NC selectable)			
Analog voltage output [1]		1 to 5 V with load impedance of 1 kW max. (or zero-shift input selectable)			
Ambient temperature		0 to 50°C, No condensation			
Ambient humidity		35 to 85%, No condensation			
Vibration		10 to 55 Hz, 1.5 mm double amplitude in X, Y, and Z directions, 2 hours respectively			
Material	AP-V41AW(P)/V42AW(P)	Polycarbonate			
	AP-C40W(P)	Front housing: Polysulfone, Rear housing: PBT, Front seat: Polycarbonate			
Weight		AP-V41AW(P) and AP-V42AW(P): Approx. 80 g (with 2-m cable) AP-C40W(P): Approx. 74 g (with 2-m cable)			
Accessory	AP-V41AW(P)/V42AW(P)	Mounting Bracket (AP-V41AW(P)), End Unit (AP-V42AW(P)), Head Connector, and Expansion Seal (AP-V42AW(P))			
	AP-C40W(P)	Power supply code (2-m cable with connector), head connector, and unit seal			

1. Only the AP-V41AW(P) (Main unit) and AP-C40W(P) apply. 2. The focus range applies while in focus mode only.
3. The maximum current is 20 mA if the AP-V42AW as an expansion unit is installed.
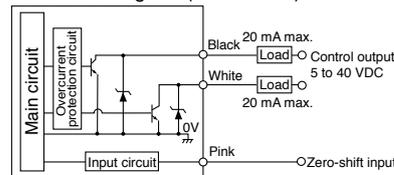
Connection Diagrams
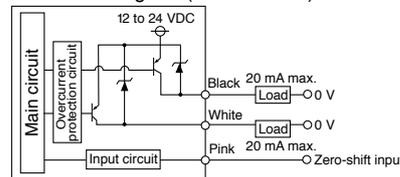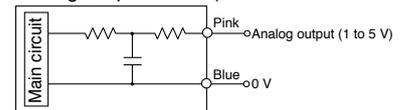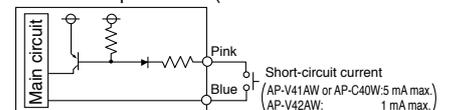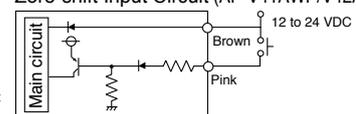
I/O Circuit Diagram (AP-V41AW/C40W)

I/O Circuit Diagram (AP-V42AW)

Analog Output Circuit (AP-V41AW/V41AWP/C40W)

Zero-shift Input Circuit (AP-V41AW/V42AW/C40W)
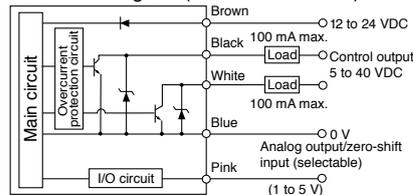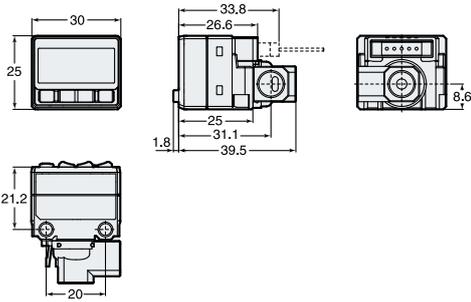
I/O Circuit Diagram (AP-V41AWP/C40WP)

I/O Circuit Diagram (AP-V42AWP)

Zero-shift Input Circuit (AP-V41AWP/V42AWP/C40WP)

AP-C30W/C40W
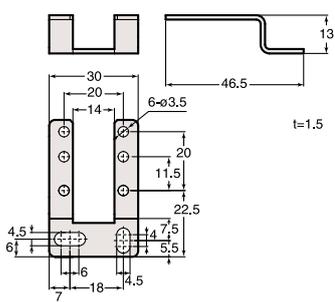
Dimensions

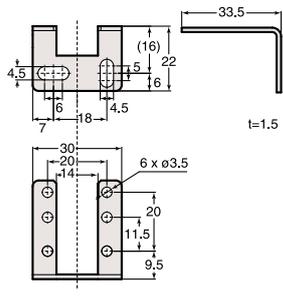### Amplifier Unit
AP-C30W Series
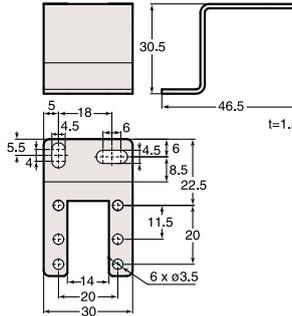

AP-C40W Series
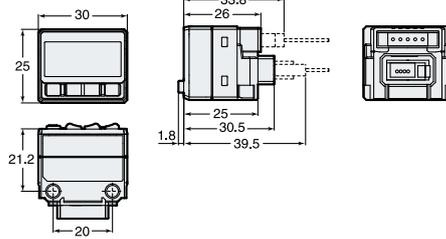
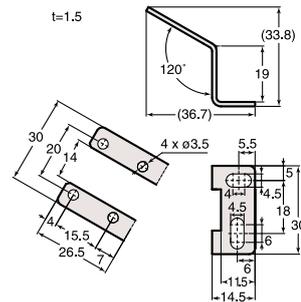### AP-B01 Mounting Bracket
(Optional)

AP-B02 Mounting Bracket
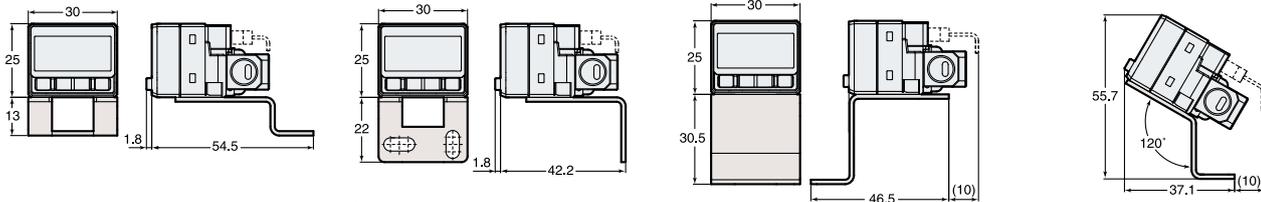(Optional)

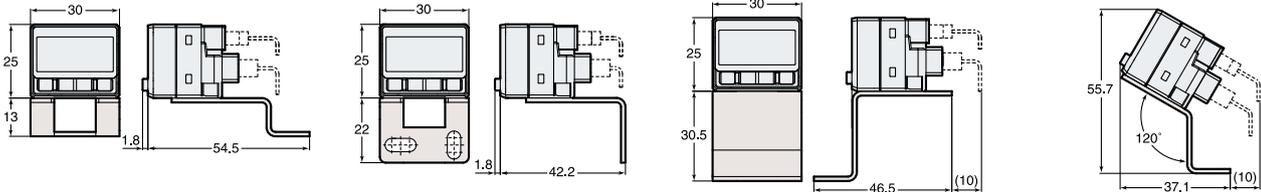### AP-B03 Mounting Bracket
(Optional)

AP-B04 Mounting Bracket
(Optional)

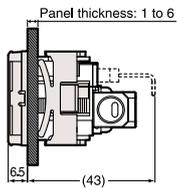### Mounting Examples of AP-C30W Series

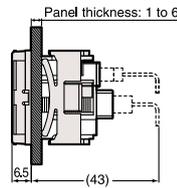### Mounting Examples of AP-C40W Series
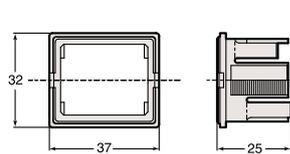

AP-A01 Panel Mounting Bracket (Optional)

Mounting Examples of AP-C30W Series

Panel thickness: 1 to 6

Mounting Examples of AP-C40W Series

Panel thickness: 1 to 6

Panel Mounting Bracket

Panel Mounting Ring
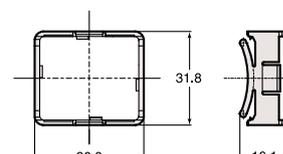
Protective Front Cover
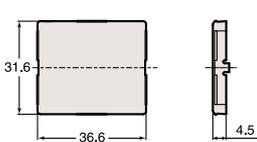
Panel Cutout
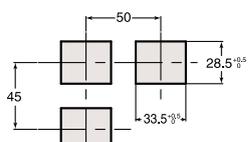
(Horizontal Side-by-side Close Mounting)
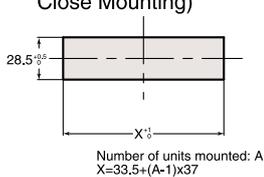
(Vertical Side-by-side Close Mounting)

Number of units mounted: A
X=33.5+(A-1)x37

Number of units mounted: A
Y=28.5+(A-1)x32
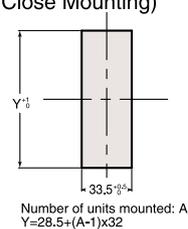
AP-V40AW

▌Dimensions

Amplifier Unit

AP-V41AW Series

ø3.9, 5-core, brown/blue: 0.34 mm²
Black/white/pink: 0.18 mm²
Cable length: 2 m

(Maximum when the cover is opened 92)

MAX 135°
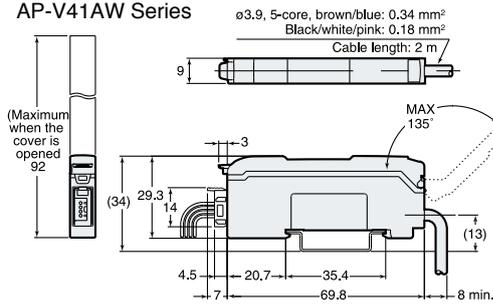
With Mounting Bracket
(included with AP-V41AW)

29.4
(37.4)
(16.3)
3.8
22.9
25.7
25.4
2 x ø3.4
Spot facing: ø6
d=2.7

2 x (4.4 x 3.4)
Spot facing: ø7
d=4
9
15
31
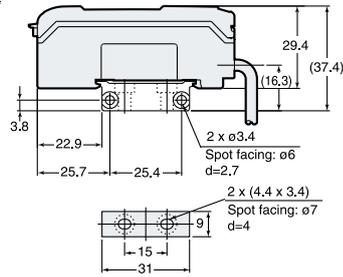
When several units are connected

End Unit   End Unit*

6   L   6
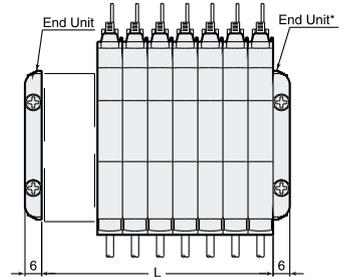
* When using expansion units, be sure to use
the end unit.

9
3
(34)
29.3
14
4.5
20.7
35.4
7
69.8
(13)
8 min.

AP-V42AW Series

ø3.9, 3-core, Black/white/pink: 0.18 mm²
Cable length: 2 m

(Maximum when the cover is opened 92)
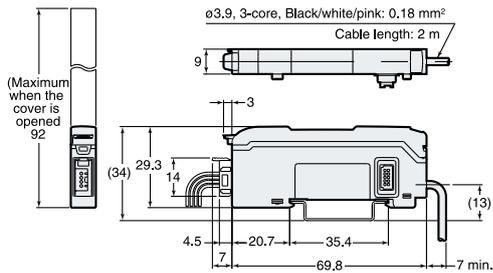
End Unit (included with AP-V42AW)

6

DIN-rail mounting

(22.6) 20.8
9.2
35.4
53.8

9
3
(34)
29.3
14
4.5
20.7
35.4
7
69.8
(13)
7 min.
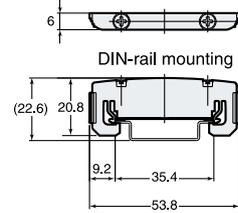
No. of expansion units	L (mm)
1	18
2	27
3	36
4	45
5	54
6	63
7	72
8	81

Sensor Head

AP-41M

10.3
17.3 6
0.9
19
9.2
9.8
4
6.7
M3 x 0.5
Cable length: 3 m
(Oil-resistive flexible type)
ø3.6 (4-core x 0.18 mm²)

AP-41/43/44

20   5.5   13
10
12   9
5
10
M5
Cable length: 3 m (Oil-resistive flexible type)
ø3.6 (4 conductors x 0.18 mm²)

AP-48

Cable length: 3 m
(Oil-resistive flexible type)
ø3.6 (4-core x 0.18 mm²)

18.5
16.6   8.3
68.2   35
12.5
16.6
15.5
8.5
33.5
26.5
35
12   12
2-ø4
12.5
4   9
3
R1.5
3
10
Rc (PT)1/8

(23)
13   4
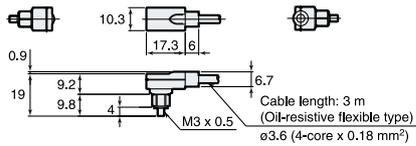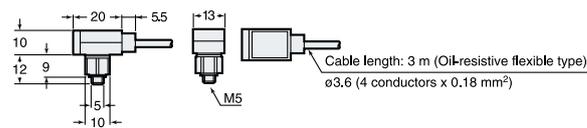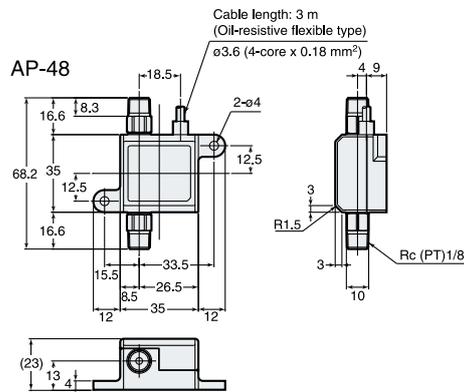
Option

AP-C30W and AP-C40W Use

Horizontal Mounting Bracket
AP-B01

Wall Mounting Bracket
AP-B02

Nameplate Mounting
Bracket   AP-B03

Slanted Mounting Bracket
AP-B04

Panel Mounting Bracket
AP-A01

Mounting example

Mounting example

Mounting example

Mounting example

Mounting example

AP-C30W Use

Bourdon Replacement Joint
OP-35423

AP-V40A/C40AW Use

T-type Snap-on Joint
ø4 Use OP-33156
ø6 Use OP-33157

M5(Female)
M5(Female)
ø4
ø6

T-type Snap-on Joint
M3 Use OP-42220

M3(Female)
ø4

Screw Conduit Joint
OP-33155

M5(Female)
M5(Female)
M5(Male)
M5(Female)
Rc (PT)1/8

1/8-conversion Joint
OP-35388

Reduction Joint
OP-33158

M5(Female)
ø6

High-functional Type Suitable for Any Fluids and Environments
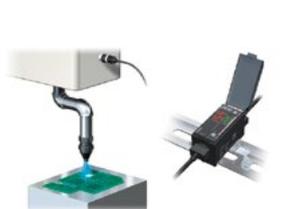
AP-V80W Series

Separate Amplifier Type

▌ Full stainless steel structure
▌ 7 models of head variations for a wide range of applications
▌ Dual digital display amplifiers

Application

Base pressure control

High-pressure cleaning
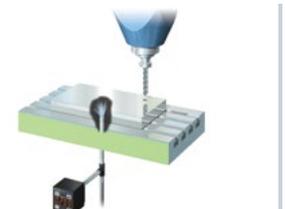
AP-50 Series

Compact Built-in Amplifier type

Features

▌ Stainless diaphragm is adopted
▌ Subminiature, environment-resistant type for water oil
▌ IP-67 enclosure rating in consideration of protection from dust and fluid drops

Application

Suction check on the LCD glass at washing stage

Workpiece seating check on cutting machine or pressing machine

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SAFETY INFORMATION
Please read the instruction manual carefully in order to safely operate any KEYENCE product.

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