

Automation for a Changing World

Delta Multifunction Pressure Sensor DPA Series



www.deltaww.com

 **DELTA**
Smarter. Greener. Together.

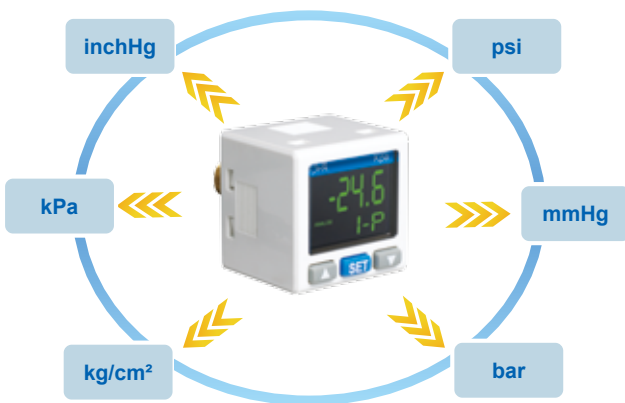
Multifunction Pressure Sensor DPA Series

- ▶ Energy-saving mode
- ▶ Various unit conversion
- ▶ Analog output function
- ▶ Various output modes
- ▶ 10 sets of output response time setup
- ▶ 3 sets of color display
- ▶ Fast zero reset
- ▶ Safety control function
- ▶ Easy code display
- ▶ Parameter copy function



Various Unit Conversion

The DPA Series offers 6 kinds of globally adopted pressure units for measurement and display.



Fast Parameter Copy

The DPA Series fast copies the internal parameters to other slaves and saves repeated parameter setup time.



3-Color LCD Display (Green, Red, Orange)

The large LCD with a green, red and orange 3-color LCD display allows users to set the display color according to the ambient environment, such as when the pressure is within normal range or exceeds the allowed range. The display's color is orange when in parameter setup mode. This makes it easy for reading and reduces operation errors.

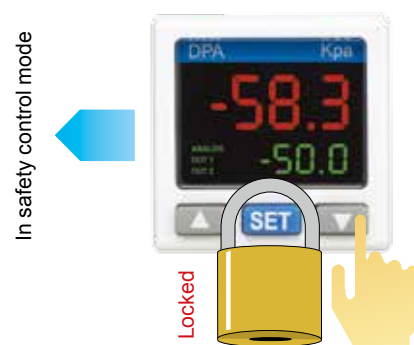


Color for upper / lower limit display (green / red)

Parameter set up (orange)

Safety Control Mode

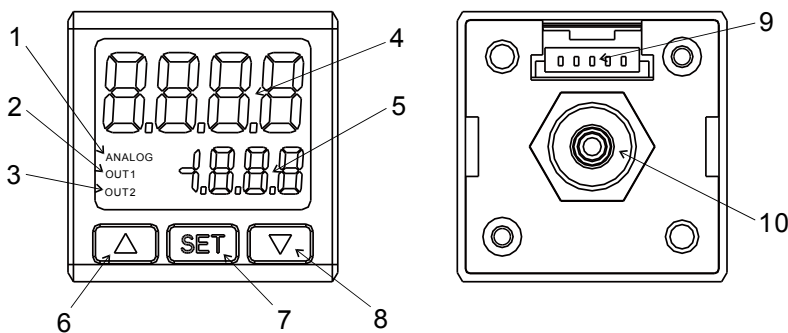
The safety control mode prevents operators from carelessly touching relevant parameters and affecting the operation and production of the equipment.



Specifications

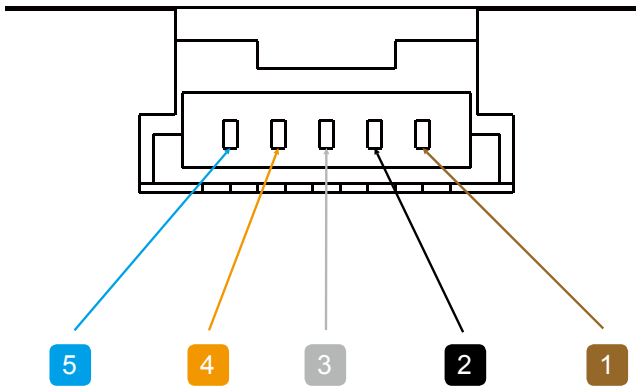
| | | |
|-------------------------------|------------------------|--|
| Power Supply | Voltage range | 12 ~ 24 V _{DC} ± 10% no isolation |
| | Power consumption | 40 mA Max.; current output type 60 mA Max. |
| Pressure Measurement | Pressure type | Non-corrosive gas, gauge type |
| | Measurable range | DPA01: -100 kPa ~ 100 kPa DPA10: -100 kPa ~ 1,000 kPa |
| | Max. durable pressure | DPA01: 200 kPa DPA10: 1,500 kPa |
| | Measurement accuracy | ± 3% entire process |
| | Temperature inaccuracy | ± 2% entire process |
| | Display | Setup display |
| | Status display | LCD output status display |
| | Display mode | 3 colors for different modes |
| | Cycle | 250 ms, 500 ms, 1,000 ms |
| Output | Number of outputs | Built-in 2 NPN or PNP transistor digital outputs and 1 analog output |
| | Transistor output | NPN: Max. durable pressure 30V / 100 mA, residual voltage 1.5V PNP: Max. durable pressure 30V / 100 mA, residual voltage 1.5V |
| | Analog output | 1 ~ 5V: Min. output load resistance 1,000 Ω 4 ~ 20 mA: Max. output load resistance 400 Ω; linear inaccuracy < 2% entire process |
| | Response time | 2 ms, 4 ms, 10 ms, 30 ms, 50 ms, 100 ms, 250 ms, 500 ms, 1,000 ms, 5,000 ms |
| | Output inaccuracy | Linear inaccuracy: < ± 2% entire process |
| Pore Size | P | Outer diameter PT1/8, inner diameter M5 |
| | N | Outer diameter NPT1/8, inner diameter M5 |
| | R | Outer diameter Rc1/8, inner diameter M5 |
| Shock Resistance | | 10 ~ 550 Hz, 100 mm, 3 axes for 2 hours |
| Vibration Resistance | | Max. 100 m/s ² , 3 axes 6 directions, 3 times each |
| Operating Ambient Temperature | | 0°C ~ +50°C |
| Storage Temperature | | -20°C ~ +65°C |
| Altitude | | < 2,000 m |
| Operating Relative Humidity | | 35% ~ 80% RH (non-condensing) |

Product Profile & Outline



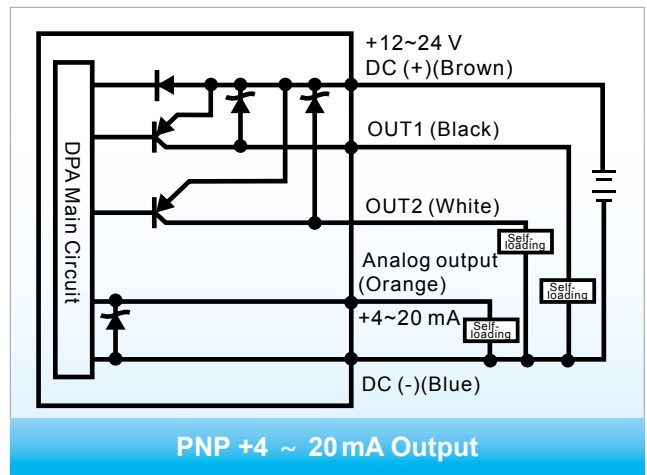
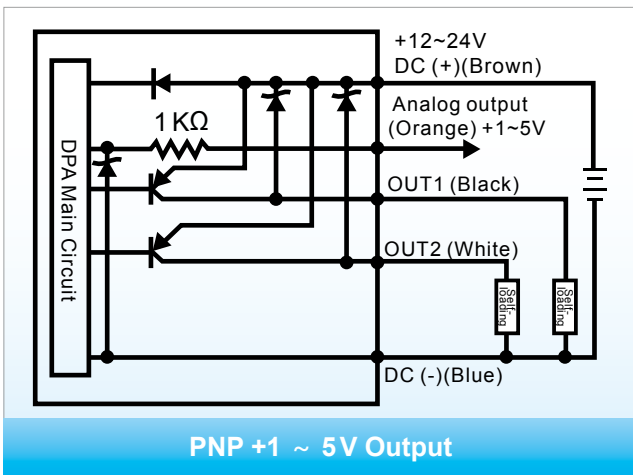
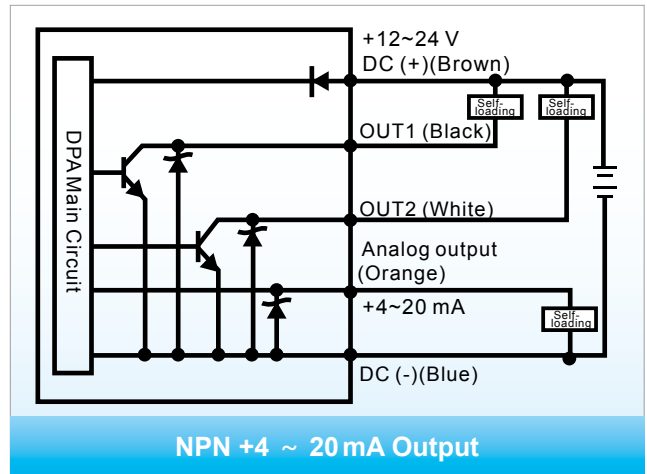
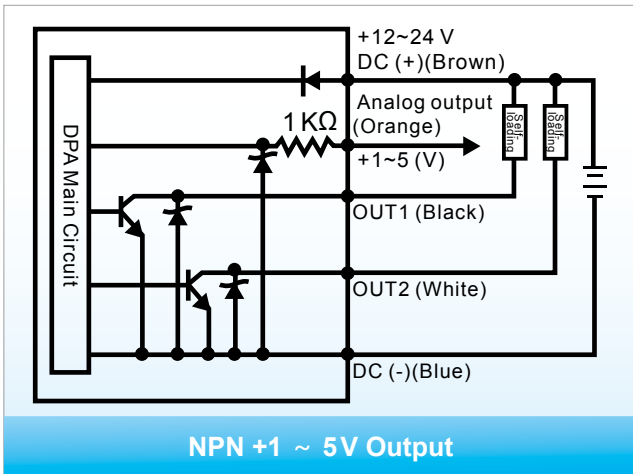
- 1 Analog output indicator
- 2 Digital output 1 indicator
- 3 Digital output 2 indicator
- 4 Pressure / parameter display
- 5 SV / setup item display
- 6 UP key
- 7 SET key
- 8 DOWN key
- 9 Power supply and output terminals
- 10 Pressure input pore

Terminals

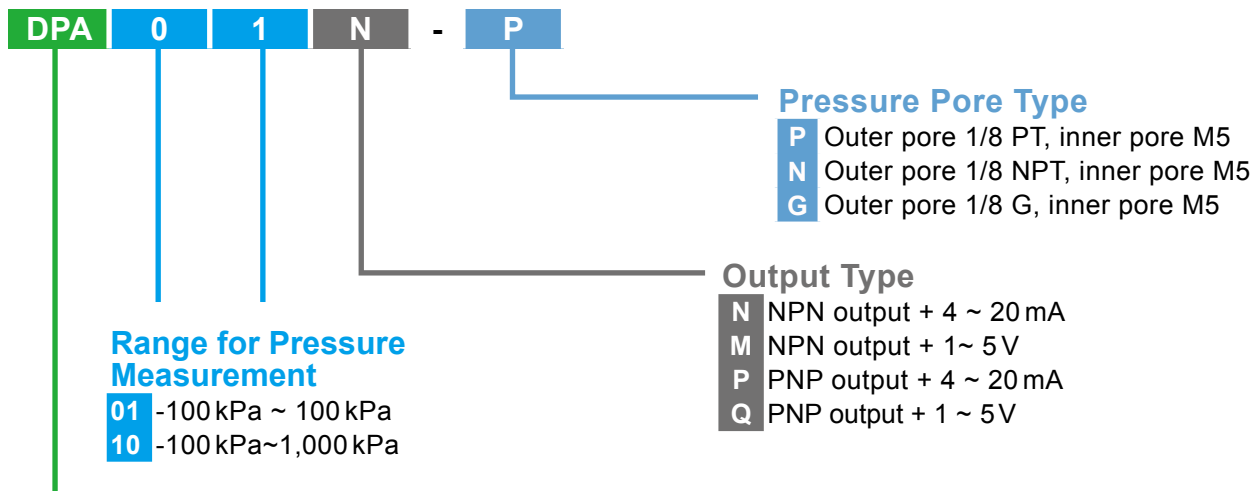


- 1 Positive power supply input (Brown)
- 2 Digital output 1 signal (Black)
- 3 Digital output 2 signal (White)
- 4 Analog output signal (Orange)
- 5 Negative power supply input (Blue)

Various Output Control Modes

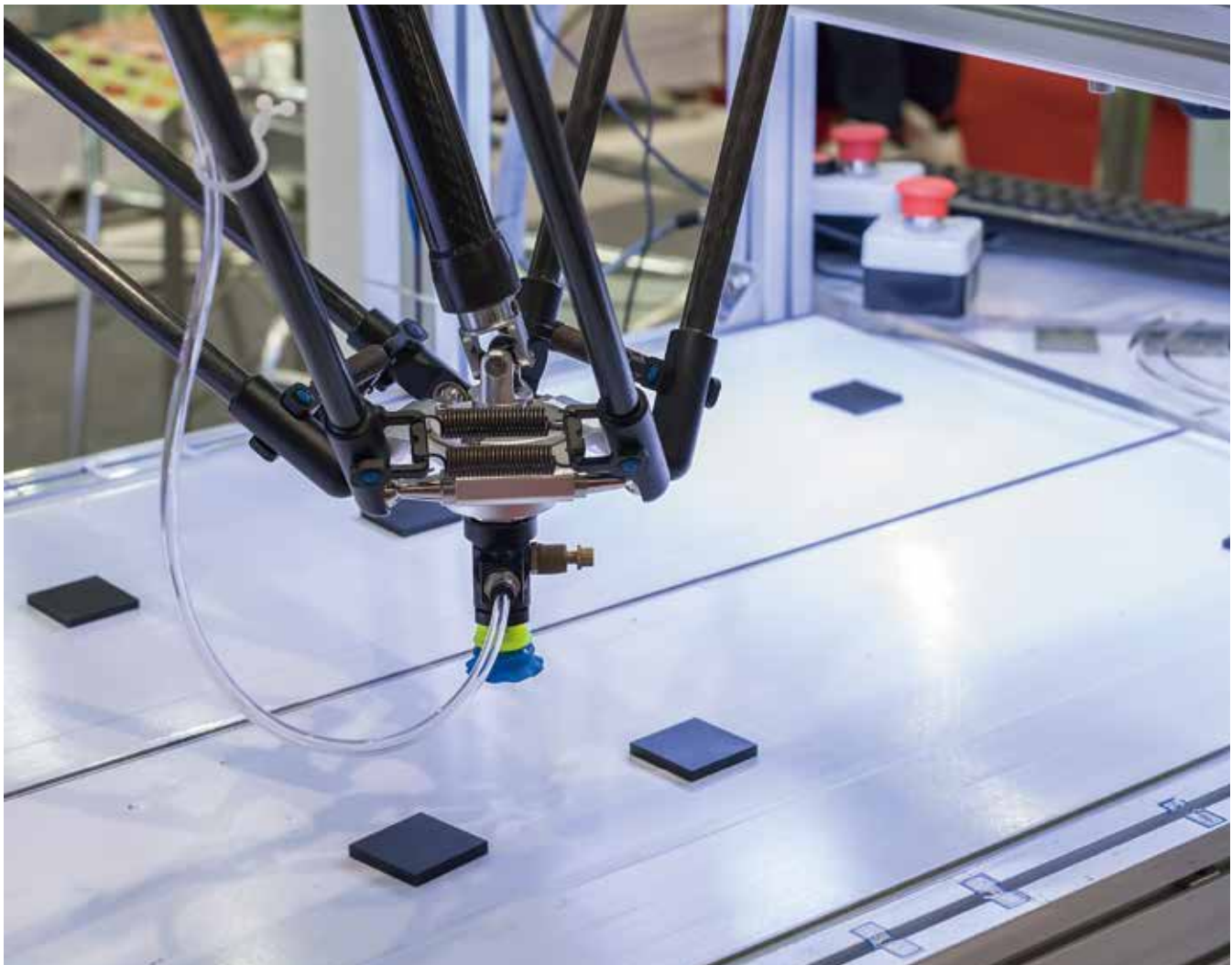


Ordering Information



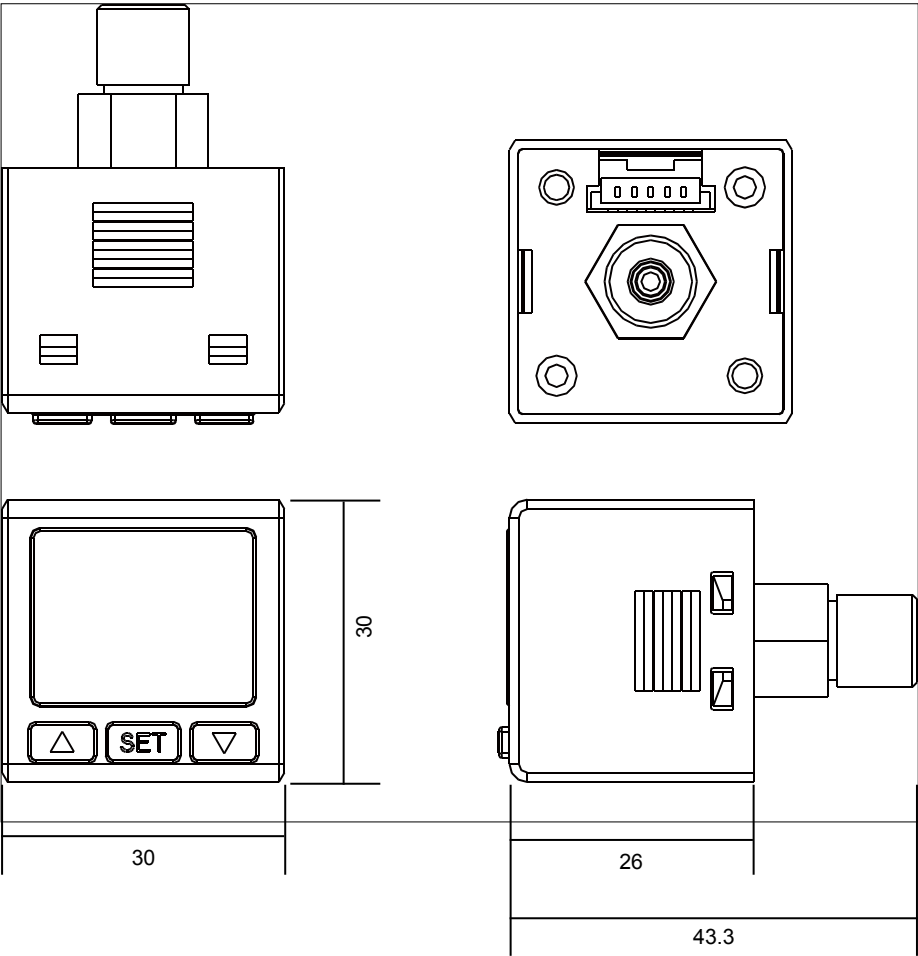
Product Name

DPA Series pressure sensor



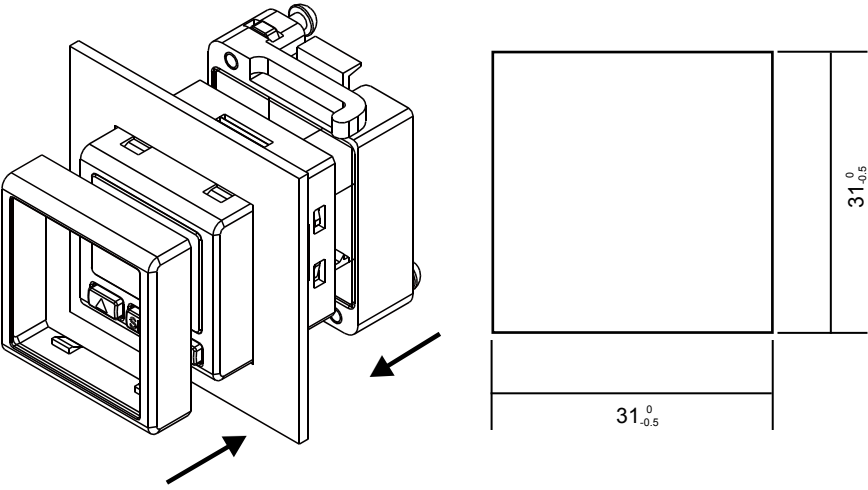


Dimensions Unit : mm



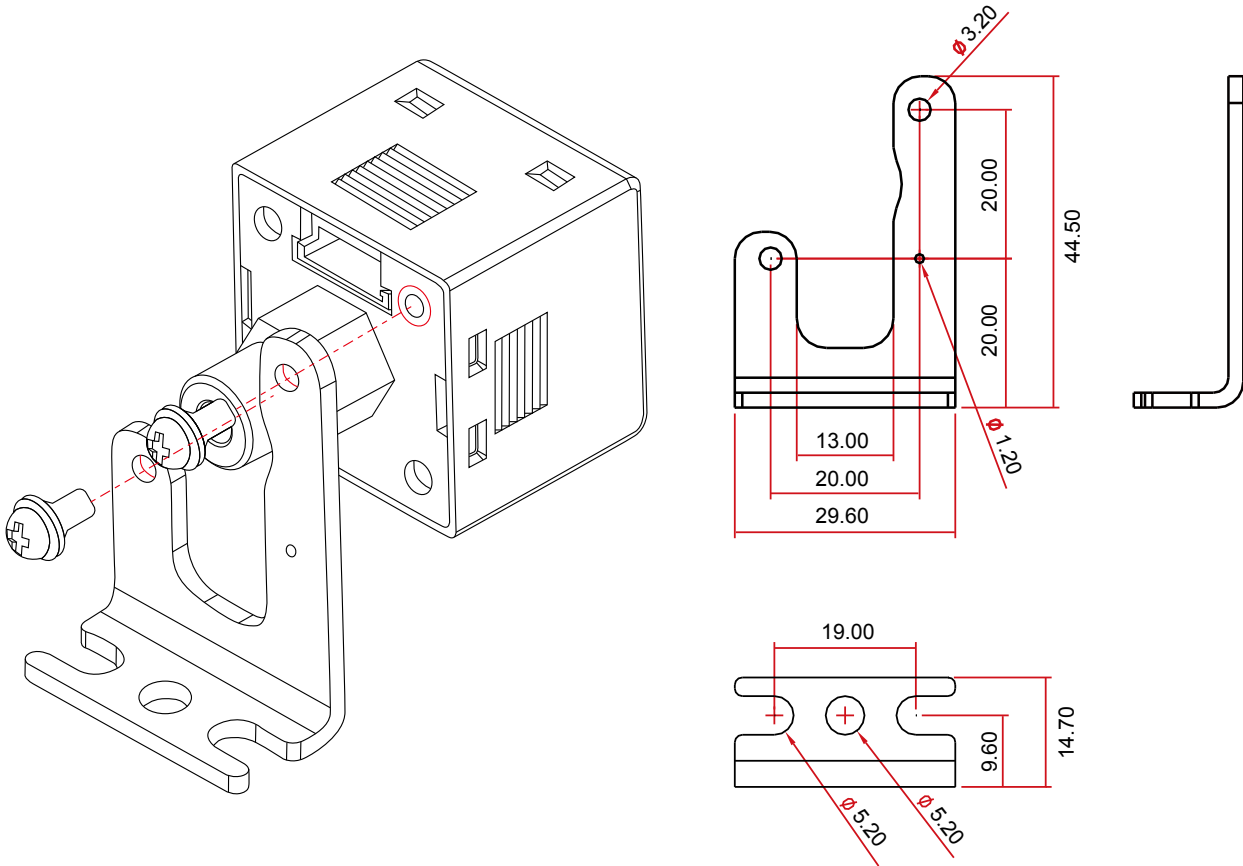
Panel Accessory Unit : mm

Model: DPA-PFKit



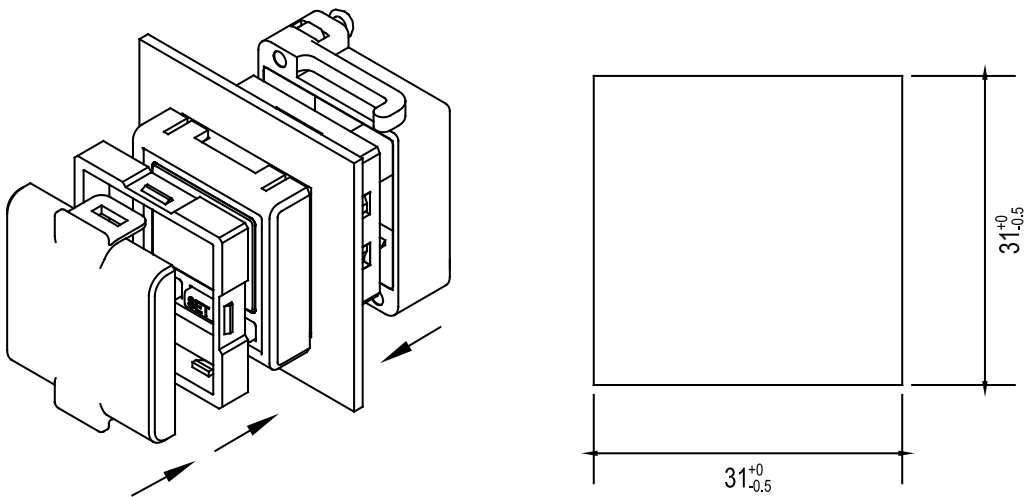
Shelf Accessory Unit : mm

Model: DPA-FMKit



Transparent Protective Cover Unit : mm

Model: DPA-FPCKIT





Smarter. Greener. Together.

Industrial Automation Headquarters

Delta Electronics, Inc.

Taoyuan Technology Center
No.18, Xinglong Rd., Taoyuan District,
Taoyuan City 33068, Taiwan
TEL: 886-3-362-6301 / FAX: 886-3-371-6301

Asia

Delta Electronics (Shanghai) Co., Ltd.

No.182 Minyu Rd., Pudong Shanghai, P.R.C.
Post code : 201209
TEL: 86-21-6872-3988 / FAX: 86-21-6872-3996
Customer Service: 400-820-9595

Delta Electronics (Japan), Inc.

Tokyo Office
Industrial Automation Sales Department
2-1-14 Shibadaimon, Minato-ku
Tokyo, Japan 105-0012
TEL: 81-3-5733-1155 / FAX: 81-3-5733-1255

Delta Electronics (Korea), Inc.

Seoul Office
1511, 219, Gasan Digital 1-Ro., Geumcheon-gu,
Seoul, 08501 South Korea
TEL: 82-2-515-5305 / FAX: 82-2-515-5302

Delta Energy Systems (Singapore) Pte Ltd.

4 Kaki Bukit Avenue 1, #05-04, Singapore 417939
TEL: 65-6747-5155 / FAX: 65-6744-9228

Delta Electronics (India) Pvt. Ltd.

Plot No.43, Sector 35, HSIIDC Gurgaon,
PIN 122001, Haryana, India
TEL: 91-124-4874900 / FAX : 91-124-4874945

Delta Electronics (Thailand) PCL.

909 Soi 9, Moo 4, Bangpoo Industrial Estate (E.P.Z),
Pattana 1 Rd., T.Phraksa, A.Muang,
Samutprakarn 10280, Thailand
TEL: 66-2709-2800 / FAX : 662-709-2827

Delta Energy Systems (Australia) Pty Ltd.

Unit 20-21/45 Normanby Rd., Notting Hill Vic 3168, Australia
TEL: 61-3-9543-3720

Americas

Delta Products Corporation (USA)

Raleigh Office
P.O. Box 12173, 5101 Davis Drive,
Research Triangle Park, NC 27709, U.S.A.
TEL: 1-919-767-3813 / FAX: 1-919-767-3969

Delta Greentech (Brasil) S/A

São Paulo Office
Rua Itapeva, 26 – 3º Andar - Bela Vista
CEP: 01332-000 – São Paulo – SP - Brasil
TEL: 55-11-3530-8642 / FAX: 55-11-3530-8640

Delta Electronics International Mexico S.A. de C.V.

Mexico Office
Vía Dr. Gustavo Baz No. 2160, Colonia La Loma,
54060 Tlalnepantla Estado de Mexico
TEL: 52-55-2628-3015 #3050/3052

EMEA

Delta Electronics (Netherlands) BV

Eindhoven Office
De Witbogt 20, 5652 AG Eindhoven, The Netherlands
MAIL: Sales.IA.EMEA@deltaww.com
MAIL: Sales.IA.Benelux@deltaww.com

Delta Electronics (France) S.A.

ZI du bois Chaland 2 15 rue des Pyrénées,
Lisses 91056 Evry Cedex, France
MAIL: Sales.IA.FR@deltaww.com

Delta Electronics Solutions (Spain) S.L.U

Ctra. De Villaverde a Vallecas, 265 1º Dcha Ed.
Hormigueras – P.I. de Vallecas 28031 Madrid
C/Llull, 321-329 (Edificio CINC) | 22@Barcelona, 08019 Barcelona
MAIL: Sales.IA.Iberia@deltaww.com

Delta Electronics (Italy) Srl

Ufficio di Milano Via Senigallia 18/2 20161 Milano (MI)
Piazza Grazioli 18 00186 Roma, Italy
MAIL: Sales.IA.Italy@deltaww.com

Delta Electronics (Netherlands) BV

Coesterweg 45, D-59494 Soest, Germany
MAIL: Sales.IA.DACH@deltaww.com

Delta Energy Systems LLC (CIS)

Vereyskaya Plaza II, office 112 Vereyskaya str.
17 121357 Moscow, Russia
MAIL: Sales.IA.RU@deltaww.com

Delta Greentech Ltd. (Turkiye)

Serifali Mevkii Barboros Bulvari Soylesi Sok
No 19 34775, Y.Dudullu-Umraniye/Istanbul
MAIL: Sales.IA.Turkey@delta-emea.com

Delta Energy Systems AG (Dubai BR)

P.O. Box 185668, Gate 7, 3rd Floor, Hamarain Centre,
Dubai, United Arab Emirates
MAIL: Sales.IA.MEA@deltaww.com