

# IP68

## HIGH PERFORMANCE

Outdoor Waterproof Box  
for 5G Technology!

# WG series

# WGPC series



IP68 High performance at 24-hours/1m-depth immersion



\*Do not use underwater/underground.



With a silicone waterproof gasket, and supported by multiple enclosing screws from the rear side, it allows the enclosure to maintain a stable high waterproofing capability.

Weather-resistant ASA material



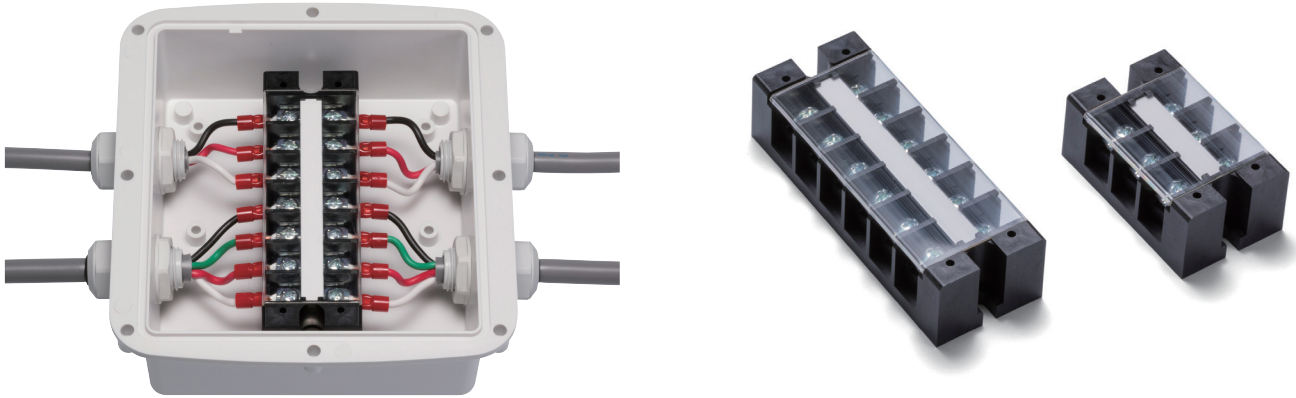
ASA material is resistant to deterioration and discoloration due to ultraviolet rays. Perfect for outdoor communication or network devices.

Captive screws for easy maintenance



There is no risk of screws dropping out and lost during maintenance. Captive screw is able to lock into a pre-drilled hole to provide a secure hold.

### Optional terminal blocks compatible



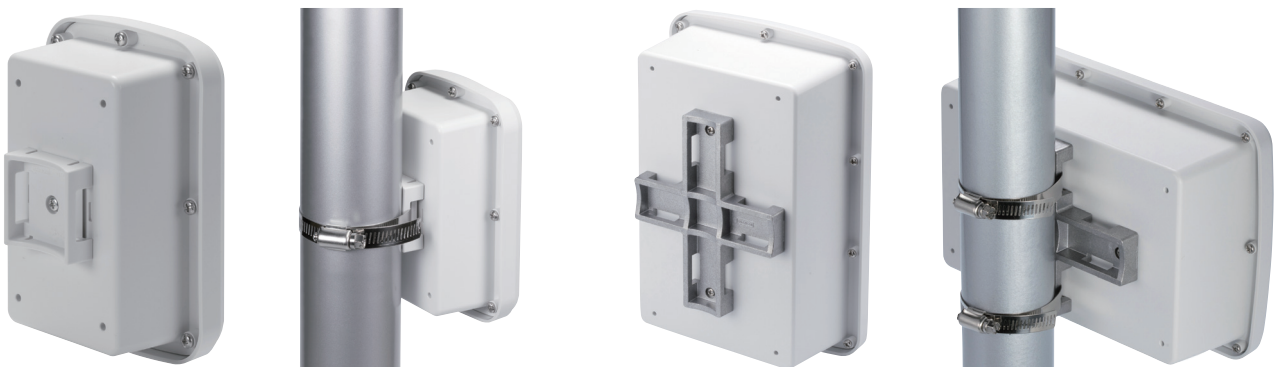
Optional terminal blocks, WTB series can be installed onto the existing bosses inside the WG • WGPC and WGV series box without additional processing or customization, hence can also function as a terminal junction box. (See page 115~116 for WTB terminal blocks.)

### Easy installation on walls & poles

#### WALL MOUNTING BRACKET



#### POLE MOUNTING BRACKET



#### POLE MOUNTING STRAP



WG series

IP68 WATERPROOF ASA BOX

NEW SIZE

WGPC series

IP68 WATERPROOF PC+ASA BOX

★ ★ NEW



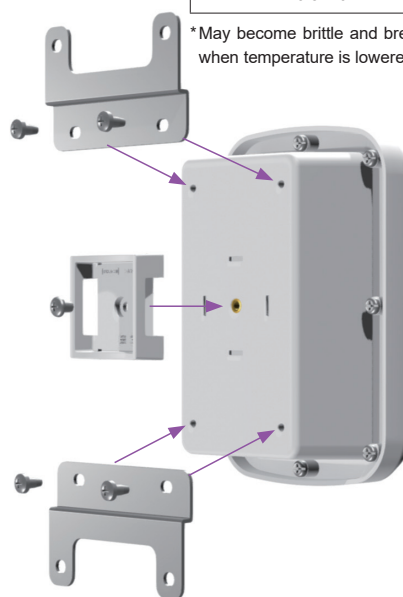
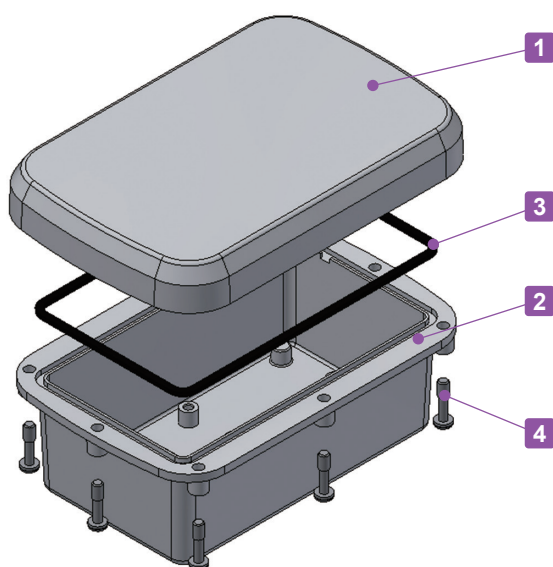
- IP68 high performance plastic box protected from immersion as long as 24 hours at 1m depth.
- ASA material is resistant to deterioration and discoloration from ultraviolet rays. PC/ASA material provides superior heat resistance and flame retardancy. Perfect for use as outdoor communication or network devices.
- Self-tapping captive screws which are able to lock into a pre-drilled hole and provide a secure hold for fastening the cover. Please drive the self-tapping captive screws for cutting a thread into the holes at first so that the cover and body can be secured together properly.



## Technical Data

Protection class :  
IP68 (24-hours/1m-depth)  
Operating temperature :  
WG : -30°C ~ +60°C  
WGPC : -30°C ~ +75°C  
Recommended torque :  
0.5 ~ 0.7N · m

\*May become brittle and break under impact when temperature is lowered close to -30°C.



There are 5 holes on the backside of the body (4 at each corner, 1 in center). 4 corner holes are for wall mounting bracket, and 1 center hole is for pole mounting bracket.

## WG Components

| No. | Part name                  | Pcs    | Material / Color             |
|-----|----------------------------|--------|------------------------------|
| 1   | Cover                      | 1      | ASA UL94HB / Off-white       |
| 2   | Body                       | 1      | ASA UL94HB / Off-white       |
| 3   | Gasket                     | 1      | Silicone / Black             |
| 4   | Self-tapping captive screw | 8 ~ 10 | Stainless steel / Unfinished |

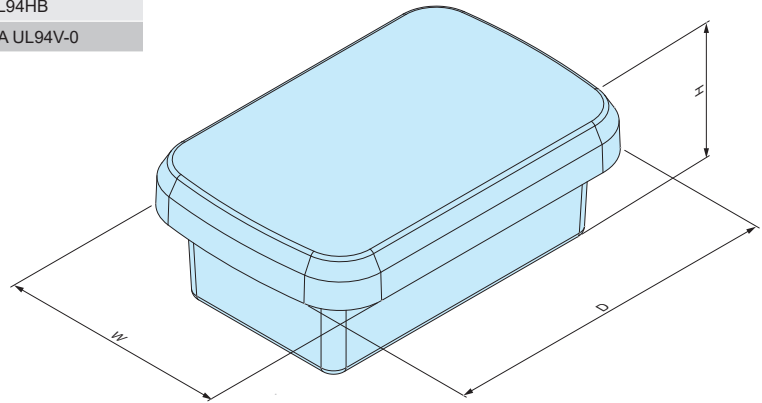
## WGPC Components

| No. | Part name                  | Pcs    | Material / Color             |
|-----|----------------------------|--------|------------------------------|
| 1   | Cover                      | 1      | PC/ASA UL94V-0 / Light gray  |
| 2   | Body                       | 1      | PC/ASA UL94V-0 / Light gray  |
| 3   | Gasket                     | 1      | Silicone / Black             |
| 4   | Self-tapping captive screw | 8 ~ 10 | Stainless steel / Unfinished |

## Color

| Series | Code | Color      | Material       |
|--------|------|------------|----------------|
| WG     | W    | Off-White  | ASA UL94HB     |
| WGPC   | G    | Light gray | PC/ASA UL94V-0 |

■ DXF/DWG/PDF/STP drawings available on our website.



## Product no. / Details

| Product no.            | External dimensions |     |     | Weight (g) |
|------------------------|---------------------|-----|-----|------------|
|                        | W                   | D   | H   |            |
| WG10-15- 6W            | 100                 | 150 | 55  | 169.5      |
| WG10-15- 8W            | 100                 | 150 | 75  | 192        |
| WG15-16- 6W            | 145                 | 155 | 55  | 232        |
| WG15-16- 8W            | 145                 | 155 | 80  | 266.5      |
| WG15-21- 6W            | 145                 | 210 | 60  | 314        |
| WG15-21- 9W            | 145                 | 210 | 90  | 367        |
| WG17-25- 8W            | 170                 | 250 | 80  | 470        |
| WG17-25-11W            | 170                 | 250 | 110 | 534        |
| WG23-25- 8W            | 225                 | 245 | 80  | 570        |
| WG23-25-11W            | 225                 | 245 | 110 | 645        |
| <b>NEW</b> WG25-33- 9W | 245                 | 325 | 90  | 965        |
| <b>NEW</b> WG25-33-12W | 245                 | 325 | 120 | 1,073      |
| <b>NEW</b> WG30-33- 9W | 300                 | 325 | 90  | 1,151      |
| <b>NEW</b> WG30-33-13W | 300                 | 325 | 130 | 1,285.5    |
| <b>NEW</b> WG28-40-10W | 280                 | 400 | 100 | 1,332.5    |
| <b>NEW</b> WG28-40-15W | 280                 | 400 | 150 | 1,529.5    |

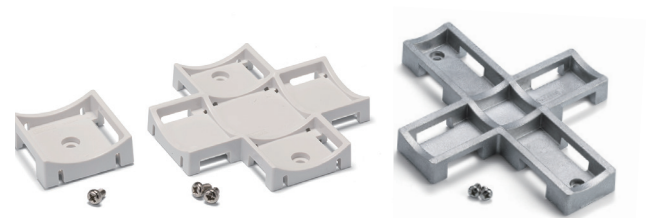
## Product no. / Details

| Product no.              | External dimensions |     |     | Weight (g) |
|--------------------------|---------------------|-----|-----|------------|
|                          | W                   | D   | H   |            |
| <b>NEW</b> WGPC10-15- 6G | 100                 | 150 | 55  | 188.5      |
| <b>NEW</b> WGPC10-15- 8G | 100                 | 150 | 75  | 213.5      |
| <b>NEW</b> WGPC15-16- 6G | 145                 | 155 | 55  | 258        |
| <b>NEW</b> WGPC15-16- 8G | 145                 | 155 | 80  | 296.5      |
| <b>NEW</b> WGPC15-21- 6G | 145                 | 210 | 60  | 349.5      |
| <b>NEW</b> WGPC15-21- 9G | 145                 | 210 | 90  | 408.5      |
| <b>NEW</b> WGPC17-25- 8G | 170                 | 250 | 80  | 523        |
| <b>NEW</b> WGPC17-25-11G | 170                 | 250 | 110 | 594        |
| <b>NEW</b> WGPC23-25- 8G | 225                 | 245 | 80  | 634        |
| <b>NEW</b> WGPC23-25-11G | 225                 | 245 | 110 | 717.5      |
| <b>NEW</b> WGPC25-33- 9G | 245                 | 325 | 90  | 1,073.5    |
| <b>NEW</b> WGPC25-33-12G | 245                 | 325 | 120 | 1,193.5    |
| <b>NEW</b> WGPC30-33- 9G | 300                 | 325 | 90  | 1,280      |
| <b>NEW</b> WGPC30-33-13G | 300                 | 325 | 130 | 1,430      |
| <b>NEW</b> WGPC28-40-10G | 280                 | 400 | 100 | 1,482      |
| <b>NEW</b> WGPC28-40-15G | 280                 | 400 | 150 | 1,701      |

## Accessories (Optional parts)



Wall mounting bracket WGF series  
See page 112



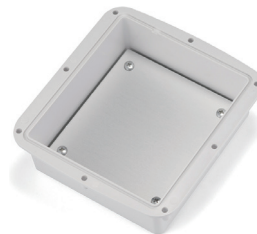
Pole mounting bracket WGMB • WPMB • SSK series  
See page 113 ~ 114 and 205 ~ 206



Pole mounting strap • belt SNB • PKB series  
See page 207 ~ 208



Tapping Standoff TPS series  
See page 397



Mounting plate WGP series  
See page 111



PCB mounting screw MT4-8T  
See page 112



Terminal block WTB series  
See page 115



DIN Rail FDR series  
See page 97



Protective vent PMF series  
See page 197 ~ 198



Cable gland  
See page 181 ~ 193



- IP68 high performance plastic box protected from immersion as long as 24 hours at 1m depth where external (surroundings) and internal (inside box) pressure are different.
- ASA material is resistant to deterioration and discoloration from ultraviolet rays. Perfect for use as outdoor communication or network devices.
- Self-tapping captive screws which are able to lock into a pre-drilled hole and provide a secure hold for fastening the cover. Please drive the self-tapping captive screws for cutting a thread into the holes at first so that the cover and body can be secured together properly.

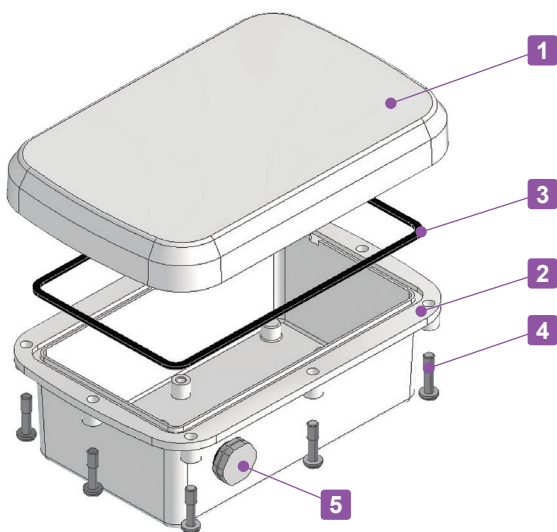


## Technical Data

|                                       |                          |
|---------------------------------------|--------------------------|
| Protection class :                    | IP68 (24-hours/1m-depth) |
| Operating temperature :               | -30°C ~ +60°C            |
| Recommended torque :                  | 0.5 ~ 0.7N • m           |
| Ventilation plug recommended torque : | 0.6 ~ 0.8N • m           |

\*May become brittle and break under impact when temperature is lowered close to -30°C.

Ventilation plug protects the enclosure from deformation by equalizing pressure in environments where there are differences between strong daytime and low nighttime temperatures, as well as venting the gas generated within.

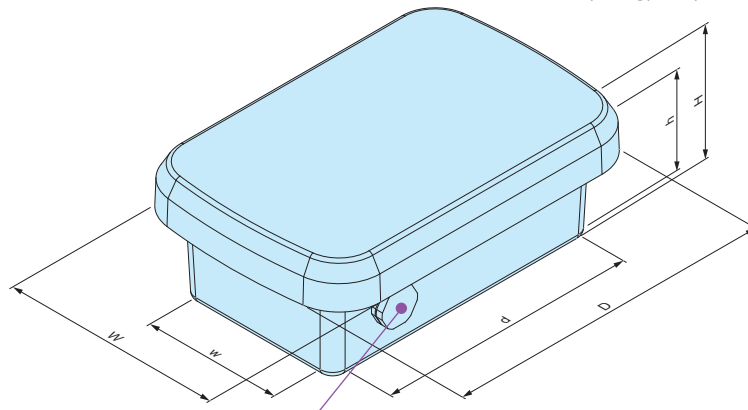


## Components

| No. | Part name                  | Pcs    | Material / Color               |
|-----|----------------------------|--------|--------------------------------|
| 1   | Cover                      | 1      | ASA UL94HB / Off-white         |
| 2   | Body                       | 1      | ASA UL94HB / Off-white         |
| 3   | Gasket                     | 1      | Silicone / Black               |
| 4   | Self-tapping captive screw | 8 ~ 10 | Stainless steel / Unfinished   |
| 5   | Ventilation plug           | 1      | PA66 + PA6 • PTFE / Light gray |

## WGV dimensions

■ DXF/DWG/PDF/STP drawings available on our website.



The location of the ventilation plug is pre-fixed.  
\*Customization for location change possible.

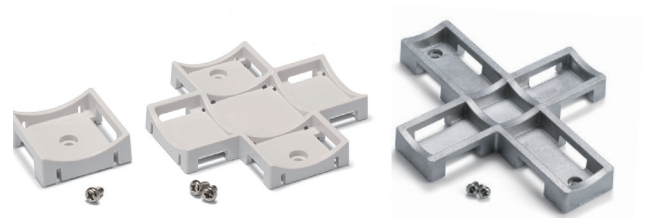
## Product no. / Details

| Product no.             | External dimensions |     |     | Internal dimensions |     |      | Screw    | Weight (g) |
|-------------------------|---------------------|-----|-----|---------------------|-----|------|----------|------------|
|                         | W                   | D   | H   | w                   | d   | h    |          |            |
| WGV10-15- 6W            | 100                 | 150 | 55  | 58                  | 115 | 43   | M4× 8pcs | 171        |
| WGV10-15- 8W            | 100                 | 150 | 75  | 57                  | 114 | 63   | M4× 8pcs | 193.5      |
| WGV15-16- 6W            | 145                 | 155 | 55  | 102                 | 120 | 43   | M4× 8pcs | 233.5      |
| WGV15-16- 8W            | 145                 | 155 | 80  | 100                 | 118 | 68   | M4× 8pcs | 268        |
| WGV15-21- 6W            | 145                 | 210 | 60  | 102                 | 174 | 48   | M4×10pcs | 315.5      |
| WGV15-21- 9W            | 145                 | 210 | 90  | 100                 | 172 | 78   | M4×10pcs | 368.5      |
| WGV17-25- 8W            | 170                 | 250 | 80  | 125                 | 209 | 67.5 | M4×10pcs | 471.5      |
| WGV17-25-11W            | 170                 | 250 | 110 | 122                 | 206 | 97.5 | M4×10pcs | 535.5      |
| WGV23-25- 8W            | 225                 | 245 | 80  | 180                 | 194 | 67.5 | M4×10pcs | 571.5      |
| WGV23-25-11W            | 225                 | 245 | 110 | 177                 | 191 | 97.5 | M4×10pcs | 646.5      |
| <b>NEW</b> WGV25-33- 9W | 245                 | 325 | 90  | 189                 | 268 | 74   | M4×10pcs | 966.5      |
| <b>NEW</b> WGV25-33-12W | 245                 | 325 | 120 | 186                 | 265 | 104  | M4×10pcs | 1,075.5    |
| <b>NEW</b> WGV30-33- 9W | 300                 | 325 | 90  | 244                 | 268 | 74   | M4×10pcs | 1,152.5    |
| <b>NEW</b> WGV30-33-13W | 300                 | 325 | 130 | 240                 | 264 | 114  | M4×10pcs | 1,288      |
| <b>NEW</b> WGV28-40-10W | 280                 | 400 | 100 | 223                 | 338 | 84   | M4×10pcs | 1,335      |
| <b>NEW</b> WGV28-40-15W | 280                 | 400 | 150 | 218                 | 333 | 134  | M4×10pcs | 1,532      |

## Accessories (Optional parts)



Wall mounting bracket WGF series  
See page 112



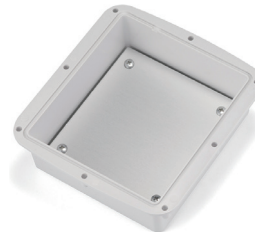
Pole mounting bracket WGMB • WPMB • SSK series  
See page 113 ~ 114 and 205 ~ 206



Pole mounting strap • belt SNB • PKB series  
See page 207 ~ 208



Tapping Standoff TPS series  
See page 397



Mounting plate WGP series  
See page 111



PCB mounting screw MT4-8T  
See page 112



Terminal block WTB series  
See page 115



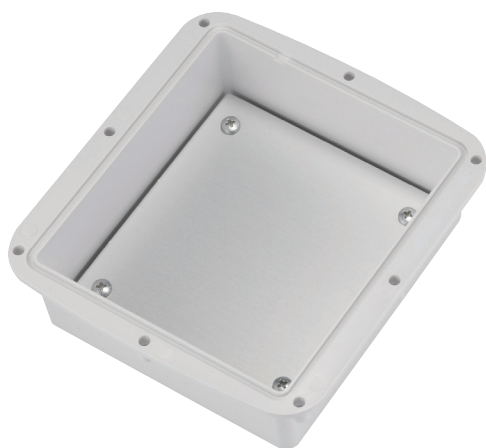
DIN rail FDR series  
See page 97



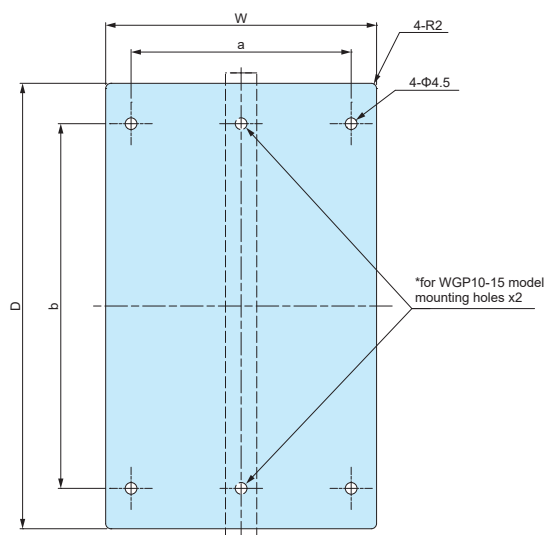
Protective vent PMF series  
See page 197 ~ 198



Cable gland  
See page 181 ~ 193

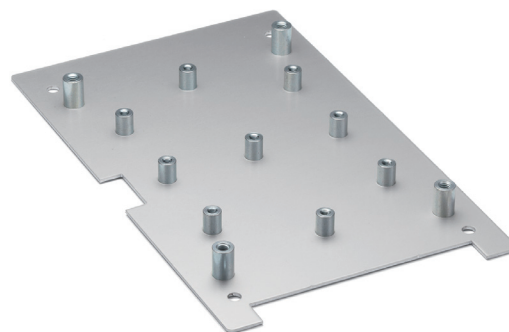
**WGP** series**MOUNTING PLATE for WG • WGPC • WGV****WGP dimensions**

■ DXF/DWG/PDF/STP drawings available on our website.



■ Material / Finish : A1100P (t=1.5mm) / Silver anodized

■ Hole milling, clinching spacer customizations are available.  
See page Custom-6 and our website for more details.

**Product no. / Details**

■ Mounting screws included.

| Product no.         | W   | D   | a    | b   | Suitable models        | Weight (g) |
|---------------------|-----|-----|------|-----|------------------------|------------|
| WGP10-15            | 60  | 112 | —    | 97  | WG • WGPC • WGV10-15-□ | 30         |
| WGP15-16            | 105 | 117 | 84.5 | 90  | WG • WGPC • WGV15-16-□ | 54         |
| WGP15-21            | 104 | 171 | 84.5 | 140 | WG • WGPC • WGV15-21-□ | 76         |
| WGP17-25            | 120 | 200 | 100  | 176 | WG • WGPC • WGV17-25-□ | 100        |
| WGP23-25            | 175 | 185 | 152  | 168 | WG • WGPC • WGV23-25-□ | 133        |
| <b>NEW</b> WGP25-33 | 178 | 254 | 154  | 230 | WG • WGPC • WGV25-33-□ | 190        |
| <b>NEW</b> WGP30-33 | 232 | 254 | 208  | 230 | WG • WGPC • WGV30-33-□ | 247.5      |
| <b>NEW</b> WGP28-40 | 210 | 322 | 184  | 298 | WG • WGPC • WGV28-40-□ | 283        |

**MT4-8T****PCB MOUNTING SCREW**

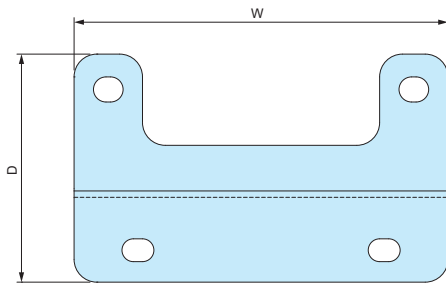
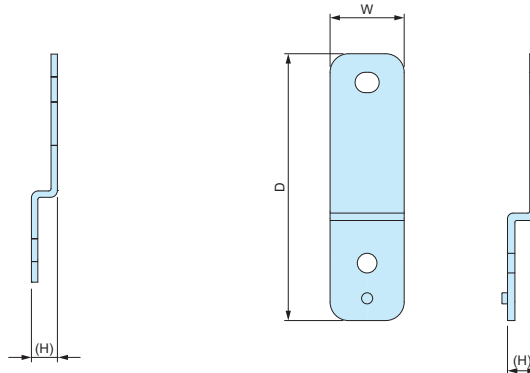
- Self-tapping screws for board mounting on bosses inside WG, WGPC and WGV series enclosures.

**Product no. / Details**

| Product no.                | Material | Finish             | Pack of |
|----------------------------|----------|--------------------|---------|
| MT4-8T (Bind tapping M4-8) | Steel    | Trivalent chromate | 20      |

**WGF series****WALL MOUNTING BRACKET for WG • WGPC • WGV****WGF dimensions**

- DXF/DWG/PDF/STP drawings available on our website.

**WGF-10 ~ WGF-25****WGF-L****Product no. / Details**

- Stainless steel mounting screws included.

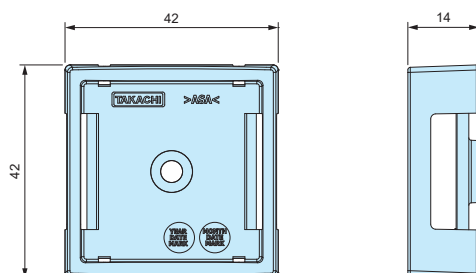
| Product no.      | W   | D  | (H)   | Suitable models                          | Material / Finish                       | Pack of |
|------------------|-----|----|-------|------------------------------------------|-----------------------------------------|---------|
| WGF-10           | 82  | 50 | (5.8) | WG • WGPC • WGV10-15-□ (W direction)     | Stainless steel t=1.5mm / Barrel finish | 2       |
| WGF-15           | 132 | 50 | (5.8) | WG • WGPC • WGV10-15-□ (D direction)     |                                         | 2       |
|                  |     |    |       | WG • WGPC • WGV15-16-□ (W • D direction) |                                         |         |
|                  |     |    |       | WG • WGPC • WGV15-21-□ (W direction)     |                                         |         |
|                  |     |    |       | WG • WGPC • WGV17-25-□ (W direction)     |                                         |         |
| WGF-23           | 184 | 55 | (8.0) | WG • WGPC • WGV15-21-□ (D direction)     | Stainless steel t=2.0mm / Barrel finish | 2       |
| WGF-25           | 210 | 55 | (8.0) | WG • WGPC • WGV23-25-□ (W direction)     |                                         | 2       |
|                  |     |    |       | WG • WGPC • WGV17-25-□ (D direction)     |                                         |         |
|                  |     |    |       | WG • WGPC • WGV23-25-□ (D direction)     |                                         |         |
|                  |     |    |       | WG • WGPC • WGV25-33-□ (W • D direction) |                                         |         |
| <b>NEW</b> WGF-L | 20  | 72 | (8.0) | WG • WGPC • WGV30-33-□ (W • D direction) | Stainless steel t=2.0mm / Barrel finish | 4       |
|                  |     |    |       | WG • WGPC • WGV28-40-□ (W • D direction) |                                         |         |

# WGMB-1W POLE MOUNTING BRACKET for WG • WGPC • WGV



■ DXF/DWG/PDF/STP drawings available on our website.

## WGMB dimensions



- Pole mount bracket made from weather resistant ASA material.
- Hole milling is not required when installing the mount bracket, thus allowing the enclosure to maintain its IP rating.
- WG • WGPC • WGV10-15-□ and 15-16-□ can be installed in both the W or D direction.
- Pole mount is possible with the use of SNB or PKB series mounting belt. (See website)

\* Operating temperature : -30°C ~ +60°C

## Product no. / Details

■ Mounting stainless steel screw included.

| Product no. | Suitable models                                                                                                             | Material / Color       | Weight (g) | Pack of |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------|------------|---------|
| WGMB-1W     | WG • WGPC • WGV10-15-□ / 1 pc required<br>WG • WGPC • WGV15-16-□ / 1 pc required<br>WG • WGPC • WGV15-21-□ / 2 pcs required | ASA UL94HB / Off-white | 9          | 1       |

## Installation example

Installation (1 pc)

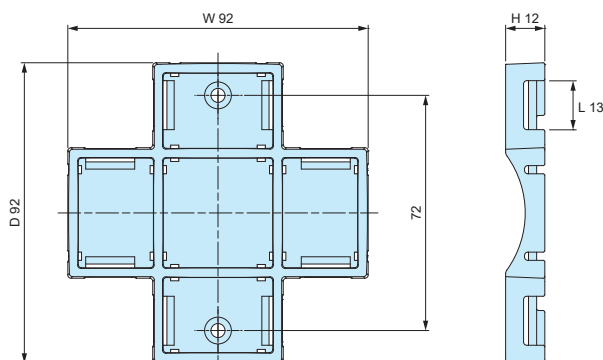
Installation (2 pcs)



# WPMB-M4-2G POLE MOUNTING BRACKET

■ DXF/DWG/PDF/STP drawings available on our website.

## WPMB-M4-2 dimensions



- Pole mount bracket made from weather resistant ASA material.
- Pole mounting belt can be installed in either W or D direction.
- Pole mount is possible with the use of PKB series mounting belt. (See page 208)
- Hole milling is not required when installing the mount bracket, thus allowing the enclosure to maintain its protection class.

\*Stainless steel screw belt SNB series is not usable on WPMB-M4-2 series.

\* Operating temperature : -30°C ~ +60°C

## Color

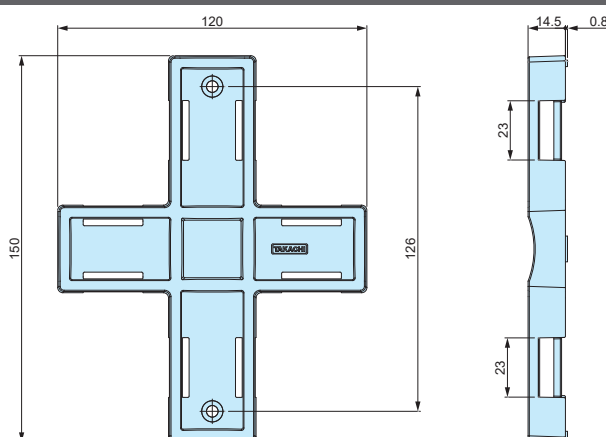
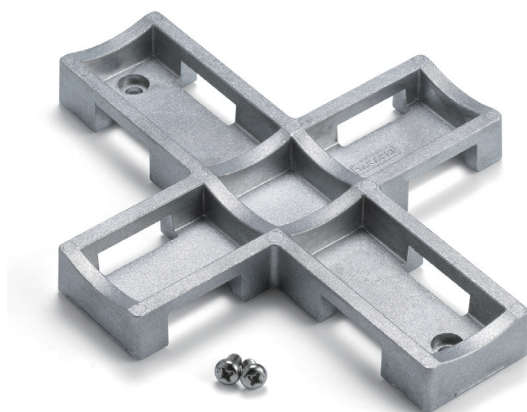
White gray

## Product no. / Details

■ Mounting stainless steel screw included.

| Product no. | Suitable models        | Recommended torque (N • m) | Weight (g) | Pack of |
|-------------|------------------------|----------------------------|------------|---------|
| WPMB-M4-2G  | WG • WGPC • WGV15-21-□ | 0.45 ~ 0.5                 | 24         | 1       |

■ Recommended torque listed is for reference only; actual may differ. Assemble after testing torque.

**WGMB-2N****DIECAST ALUMINIUM POLE MOUNTING BRACKET for WG • WGPC • WGV**

■ DXF/DWG/PDF/STP drawings available on our website.

- Pole mount bracket made from robust diecast aluminium.
- Hole milling is not required when installing the mount bracket, thus allowing the enclosure to maintain its protection class.
- Can be used for WG • WGPC • WGV17-25-□ and 23-25-□ models.
- Pole mounting belt can be installed in either W or D direction.
- Pole mount is possible with the use of SNB or PKB series mounting belt. (See page 207 ~ 208)

**Product no. / Details**

■ Stainless steel mounting screws included.

| Product no. | Suitable models                                  | Material / Finish                    | Weight (g) | Pack of |
|-------------|--------------------------------------------------|--------------------------------------|------------|---------|
| WGMB-2N     | WG • WGPC • WGV17-25-□<br>WG • WGPC • WGV23-25-□ | Diecast aluminium ADC12 / Shot blast | 126        | 1       |

**Installation example**

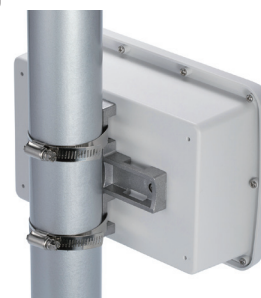
WGMB-2N



Vertical mounting



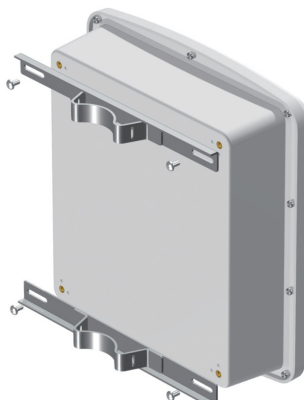
Horizontal mounting



SSK series (Pole mounting bracket for WG • WGPC • WGV25-33-9 ~ 28-40-15)

SSK series

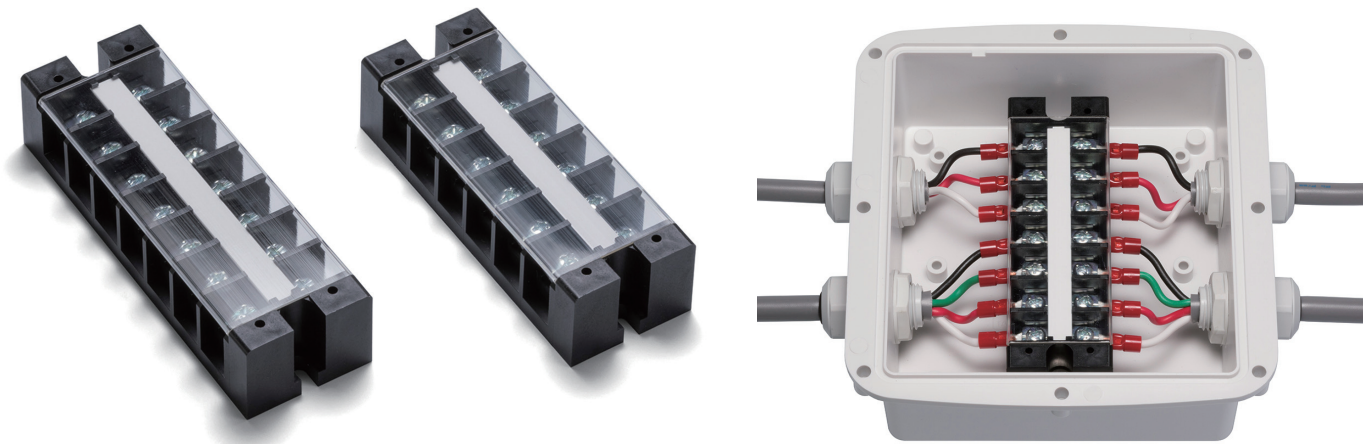
Vertical mounting



Suitable model

| Product no.       |                      | Pole mounting bracket product no. |                | Screw type         |
|-------------------|----------------------|-----------------------------------|----------------|--------------------|
|                   |                      | For vertical                      | For horizontal |                    |
| WG<br>WGPC<br>WGV | 25-33- 9<br>25-33-12 | SSK-250                           | SSK-300        | Use included screw |
|                   | 30-33- 9<br>30-33-13 | SSK-300                           | SSK-300        |                    |
|                   | 28-40-10<br>28-40-15 | SSK-280                           | SSK-400        |                    |
|                   |                      |                                   |                |                    |

\* See page 205 for details.

**WTB** series**TERMINAL BLOCK for WG • WGPC • WGV****FW2**

- Compatible terminal blocks for WG • WGPC • WGV series.
- Not suitable for WG • WGPC • WGV25-33-□ ~ 28-40-□.

**Components**

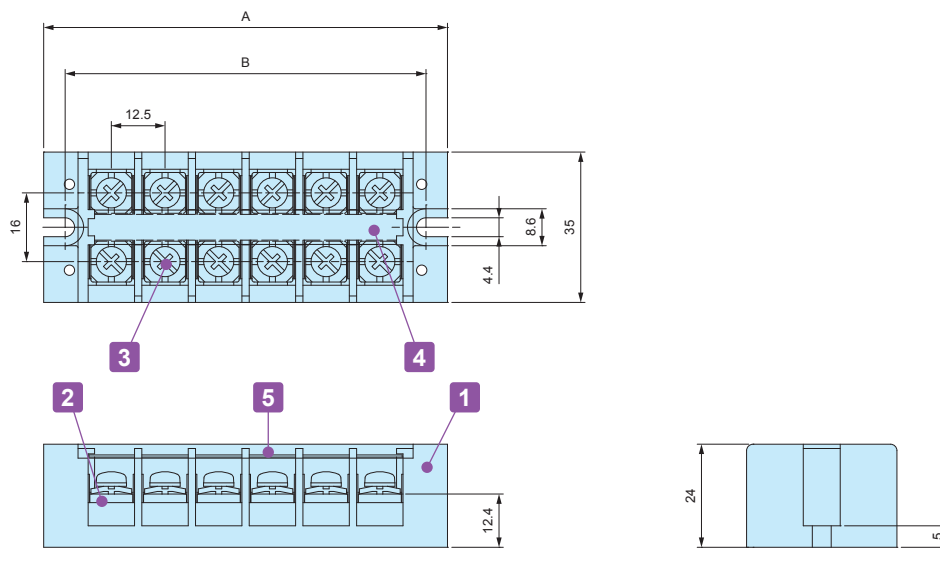
| No. | Part name                  | Pcs   | Material              | Color or Finish    |
|-----|----------------------------|-------|-----------------------|--------------------|
| 1   | Base                       | 1     | PBT UL94V-0           | Black              |
| 2   | Conductive plate           | 1     | Brass                 | Nickel plated      |
| 3   | Terminal screw (M4-10)     | 2 x P | Steel                 | Trivalent chromate |
| 4   | Symbol board               | 1     | PET                   | White              |
| 5   | Cover                      | 1     | Polycarbonate UL94V-0 | Transparent        |
| —   | Screw (Bind tapping M4-10) | 2     | Steel                 | Trivalent chromate |

**Specification**

- Electrical Rating 600V • 35A
- Insulation Resistance DC500V 1000MΩ ~
- Withstand Voltage AC2500V (Tested for 1 min.)
- Rising Temp. 30°C or less
- Operating Temp. Range -40°C ~ +90°C
- Storage Temp. Range -40°C ~ +90°C

**WTB dimensions**

- DXF/DWG/PDF drawings available on our website.

**Product no. / Details**

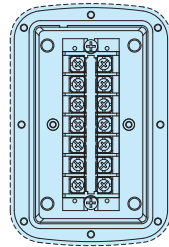
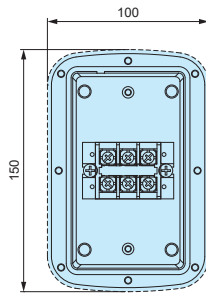
| Product no.    | P (Number of poles) | A     | B     | Suitable models                                              |
|----------------|---------------------|-------|-------|--------------------------------------------------------------|
| WTB-240- 3P-FB | 3                   | 56.5  | 46.5  | WG • WGPC • WGV10-15-□ (W direction)                         |
| WTB-240- 6P-FB | 6                   | 94.0  | 84.0  | WG • WGPC • WGV15-16-□, WG • WGPC • WGV15-21-□ (W direction) |
| WTB-240- 7P-FB | 7                   | 106.5 | 96.5  | WG • WGPC • WGV10-15-□, WG • WGPC • WGV15-16-□ (D direction) |
| WTB-240-10P-FB | 10                  | 144.0 | 134.0 | WG • WGPC • WGV17-25-□ (W direction)                         |
| WTB-240-12P-FB | 12                  | 169.0 | 159.0 | WG • WGPC • WGV15-21-□ (D direction)                         |
|                |                     |       |       | WG • WGPC • WGV23-25-□ (W direction)                         |
|                |                     |       |       | WG • WGPC • WGV17-25-□, WG • WGPC • WGV23-25-□ (D direction) |

## WTB mounting layout

**WG • WGPC • WGV10-15-□**

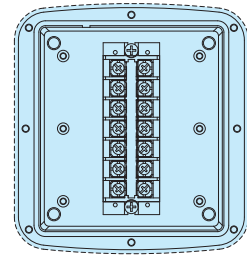
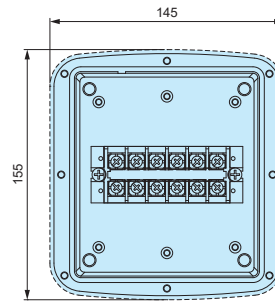
WTB-240-3P

WTB-240-7P

**WG • WGPC • WGV15-16-□**

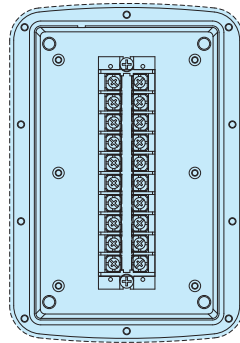
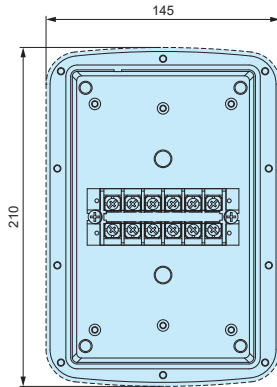
WTB-240-6P

WTB-240-7P

**WG • WGPC • WGV15-21-□**

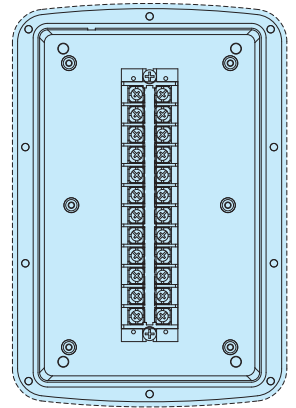
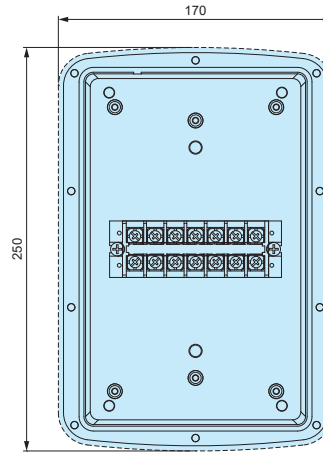
WTB-240-6P

WTB-240-10P

**WG • WGPC • WGV17-25-□**

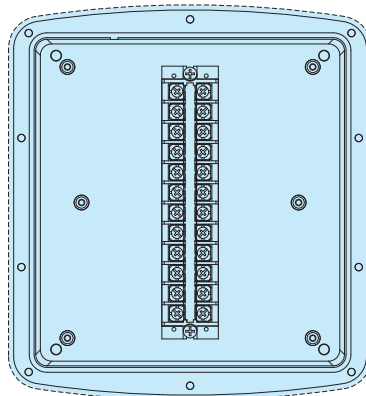
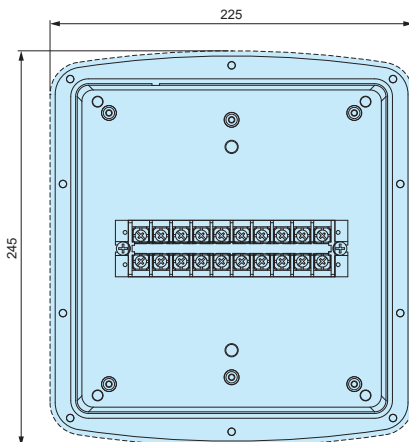
WTB-240-7P

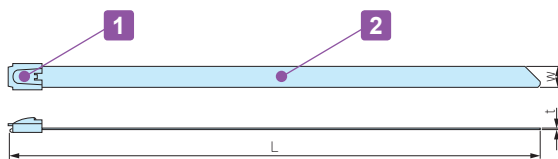
WTB-240-12P

**WG • WGPC • WGV23-25-□**

WTB-240-10P

WTB-240-12P



**SCT** series**STAINLESS STEEL TIES for POLE MOUNTING**

- Corrosion resistant stainless steel (SUS304) cable tie.
- Can be used to bundle cables or mounting enclosures to poles.
- Self-locking bracket allows easy mounting / cable bundling.
- Designed for one time use only (not reusable).

- Suitable for easy mounting.
- Wear gloves or other protections while installation.

**Components**

| No. | Part name | Pcs | Material               | Finish   |
|-----|-----------|-----|------------------------|----------|
| 1   | Bracket   | 1   | Stainless steel SUS304 | Polished |
| 2   | Strap     | 1   | Stainless steel SUS304 | Polished |

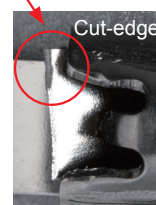
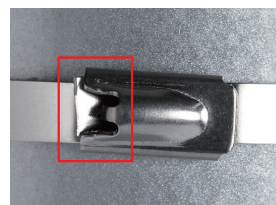
**Product no. / Details**

| Product no.  | W   | L     | t    | Pack of |
|--------------|-----|-------|------|---------|
| SCT 4.6- 100 | 4.6 | 100   | 0.25 | 10      |
| SCT 4.6- 150 | 4.6 | 150   | 0.25 | 10      |
| SCT 4.6- 200 | 4.6 | 200   | 0.25 | 10      |
| SCT 4.6- 300 | 4.6 | 300   | 0.25 | 10      |
| SCT 4.6- 500 | 4.6 | 500   | 0.25 | 2       |
| SCT 4.6-1000 | 4.6 | 1,000 | 0.25 | 2       |
| SCT 4.6-1500 | 4.6 | 1,500 | 0.25 | 2       |
| SCT 7.9- 100 | 7.9 | 100   | 0.25 | 10      |
| SCT 7.9- 150 | 7.9 | 150   | 0.25 | 10      |
| SCT 7.9- 200 | 7.9 | 200   | 0.25 | 10      |
| SCT 7.9- 300 | 7.9 | 300   | 0.25 | 10      |
| SCT 7.9- 500 | 7.9 | 500   | 0.25 | 2       |
| SCT 7.9-1000 | 7.9 | 1,000 | 0.25 | 2       |
| SCT 7.9-1500 | 7.9 | 1,500 | 0.25 | 2       |

**G3388****TIGHTEN GUN for SCT**

- Tool for cutting and tightening stainless steel strap.

\*Be careful of the sharp cut-edge of strap.

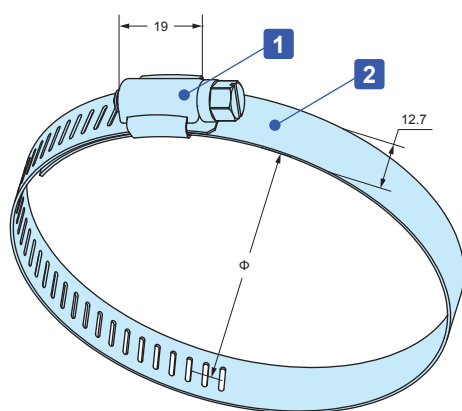


Note: Tighten gun is not subject to RoHS regulations.

Product no.

G3388

**SCT • G3388**

**SNB** series**STAINLESS STEEL POLE MOUNTING STRAP****SNB dimensions**

- Corrosion resistant stainless steel (SUS304) belt clamp.
- It can be installed securely by tightening the screw.
- 8 mm nut driver (box driver) is recommended for tightening.  
Flat-bladed screwdrivers can also be used.

**Components**

| No. | Part name | Pcs | Material               | Finish   |
|-----|-----------|-----|------------------------|----------|
| 1   | Bracket   | 1   | Stainless steel SUS304 | Polished |
| 2   | Strap     | 1   | Stainless steel SUS304 | Polished |

**Product no. / Details**

| Product no. | Applicable diameter (Φ) | Strap width | Strap thickness | Recommended torque<br>N · m | Weight (g) | Pack of |
|-------------|-------------------------|-------------|-----------------|-----------------------------|------------|---------|
| SNB 52- 76  | 52 ~ 76                 | 12.7        | 0.6             | 0.7 ~ 1.0                   | 27.5       | 1       |
| SNB 72- 95  | 72 ~ 95                 | 12.7        | 0.6             | 0.7 ~ 1.0                   | 30         | 1       |
| SNB 91-114  | 91 ~ 114                | 12.7        | 0.6             | 0.7 ~ 1.0                   | 34.5       | 1       |
| SNB105-127  | 105 ~ 127               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 37.5       | 1       |
| SNB117-140  | 117 ~ 140               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 39.5       | 1       |
| SNB130-153  | 130 ~ 153               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 41.5       | 1       |
| SNB142-165  | 142 ~ 165               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 43.5       | 1       |
| SNB155-178  | 155 ~ 178               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 46.5       | 1       |
| SNB168-191  | 168 ~ 191               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 49         | 1       |
| SNB181-204  | 181 ~ 204               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 51         | 1       |
| SNB194-217  | 194 ~ 217               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 52.5       | 1       |
| SNB207-230  | 207 ~ 230               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 57         | 1       |
| SNB220-243  | 220 ~ 243               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 59.5       | 1       |
| SNB233-256  | 233 ~ 256               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 62.5       | 1       |
| SNB246-269  | 246 ~ 269               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 64         | 1       |
| SNB259-282  | 259 ~ 282               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 67.5       | 1       |
| SNB272-295  | 272 ~ 295               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 70         | 1       |
| SNB285-308  | 285 ~ 308               | 12.7        | 0.6             | 0.7 ~ 1.0                   | 71         | 1       |

■ Recommended torque listed is for reference only; actual may differ. Assemble after testing torque.

**SNB Strap required**

| Suitable series | Suitable models |         |         |         |         |         | Required |
|-----------------|-----------------|---------|---------|---------|---------|---------|----------|
| SSK series      | SSK-S1          | SSK-160 | SSK-170 | SSK-200 | SSK-210 | SSK-250 | 2        |
|                 | SSK-280         | SSK-300 | SSK-350 | SSK-400 | SSK-530 |         |          |
| WGMB series     | WGMB-1W         |         |         |         |         |         | 1        |

**PKB** series**POLE MOUNTING BELT**

PKB-10PM, 10P



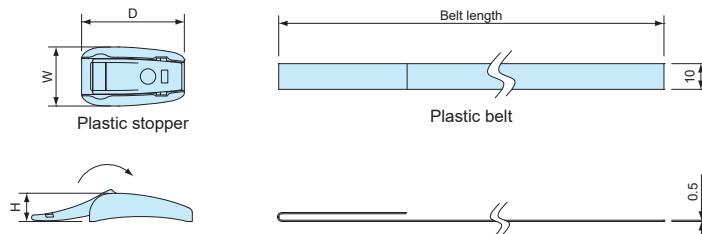
PKB-10S, 20S

- Pole mounting belt for attachment of enclosures with suitable pole mount brackets or construction onto poles.
- Designed for one time use only (not reusable).
- Strong stainless steel clamping type and easy installation plastic type are available.

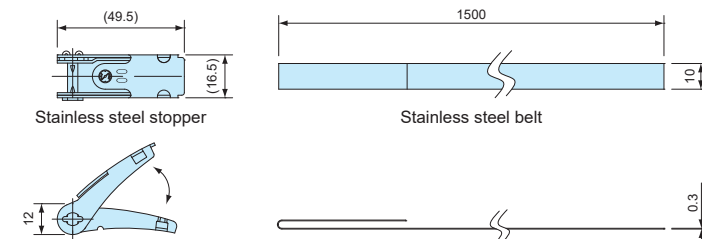
**PKB dimensions**

■ DXF/DWG/PDF drawings available on our website.

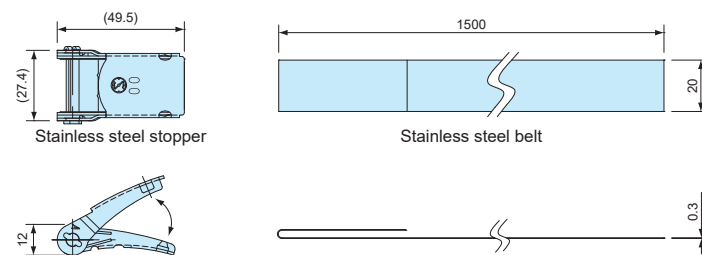
PKB-10PM, 10P



PKB-10S



PKB-20S

**Components**

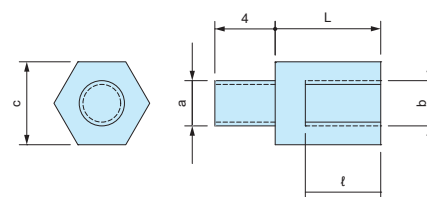
| Part name | Material                     | Color / Finish                |
|-----------|------------------------------|-------------------------------|
| Stopper   | Stainless steel SUS304 • POM | Barrel finish • Black         |
| Belt      | Stainless steel SUS430 • PET | Bright annealed finish • Gray |

**Product no. / Details**

| Product no. | W  | D  | H  | Belt length | Belt material          | Tensile strength (horizontal) | Weight (g) | Pack of |
|-------------|----|----|----|-------------|------------------------|-------------------------------|------------|---------|
| PKB-10PM    | 23 | 24 | 11 | 500 mm      | PET                    | 0.8kN                         | 14         | 2       |
| PKB-10P     | 23 | 40 | 11 | 1,500 mm    | PET                    | 1.3kN                         | 31.8       | 2       |
| PKB-10S     | —  | —  | —  | 1,500 mm    | Stainless steel SUS304 | 1.4kN                         | 101.6      | 2       |
| PKB-20S     | —  | —  | —  | 1,500 mm    | Stainless steel SUS430 | 2.9kN                         | 182.2      | 2       |

## TPS series

## TAPPING STANDOFF



■ Tapping screw head allows for easy installation onto existing enclosure boss mount.

■ DXF/DWG/PDF drawings available on our website.

■ 4 different sizes available : M2.3, M2.6, M3 and M4 size.

## Product no. / Details

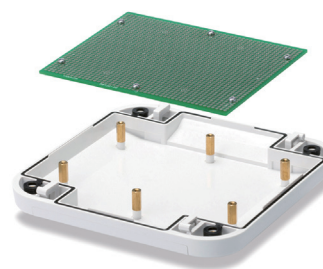
■ Material / Finish : Brass / Unfinished

| Product no. | Screw size (a) | Screw size (b) | c   | L  | ℓ  | Weight (g) | Pack of | Suitable models                                                                                                                                                         |
|-------------|----------------|----------------|-----|----|----|------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TPS-M2.3-4  | 2.3            | M2.3           | 5   | 4  | 3  | 0.7        | 4       | WH series • PFE series<br>LC • LCE • LCS • LCT series<br>PF • PFF series (M2.3 boss models)<br>TW • TWN • TWF series (M2.3 boss models)<br>WP series (M2.3 boss models) |
| TPS-M2.3-5  | 2.3            | M2.3           | 5   | 5  | 3  | 0.9        | 4       |                                                                                                                                                                         |
| TPS-M2.3-6  | 2.3            | M2.3           | 5   | 6  | 4  | 1          | 4       |                                                                                                                                                                         |
| TPS-M2.3-7  | 2.3            | M2.3           | 5   | 7  | 5  | 1.2        | 4       |                                                                                                                                                                         |
| TPS-M2.3-8  | 2.3            | M2.3           | 5   | 8  | 6  | 1.3        | 4       |                                                                                                                                                                         |
| TPS-M2.3-10 | 2.3            | M2.3           | 5   | 10 | 6  | 1.7        | 4       |                                                                                                                                                                         |
| TPS-M2.3-12 | 2.3            | M2.3           | 5   | 12 | 6  | 2          | 4       | PF • PFF series (M2.6 boss models)<br>WP series (M2.6 boss models)                                                                                                      |
| TPS-M2.6-4  | 2.6            | M2.6           | 5   | 4  | 3  | 0.7        | 4       |                                                                                                                                                                         |
| TPS-M2.6-5  | 2.6            | M2.6           | 5   | 5  | 3  | 0.8        | 4       |                                                                                                                                                                         |
| TPS-M2.6-7  | 2.6            | M2.6           | 5   | 7  | 5  | 1.1        | 4       |                                                                                                                                                                         |
| TPS-M2.6-10 | 2.6            | M2.6           | 5   | 10 | 6  | 1.6        | 4       | SU • OP<br>TWS • TW • TWN • TWF series (M3 boss models)                                                                                                                 |
| TPS-M2.6-12 | 2.6            | M2.6           | 5   | 12 | 6  | 2          | 4       |                                                                                                                                                                         |
| TPS-M3-4    | 3              | M3             | 5.5 | 4  | 3  | 0.8        | 4       |                                                                                                                                                                         |
| TPS-M3-5    | 3              | M3             | 5.5 | 5  | 3  | 1.1        | 4       |                                                                                                                                                                         |
| TPS-M3-6    | 3              | M3             | 5.5 | 6  | 4  | 1.2        | 4       |                                                                                                                                                                         |
| TPS-M3-7    | 3              | M3             | 5.5 | 7  | 5  | 1.3        | 4       |                                                                                                                                                                         |
| TPS-M3-8    | 3              | M3             | 5.5 | 8  | 5  | 1.6        | 4       | BCAS • BCAP • BCPC • BCPK series (M4 boss models)<br>BCAR • BCPR series (M4 boss models)<br>SPCP • SPCM • WG • WGV • WGPC                                               |
| TPS-M3-10   | 3              | M3             | 5.5 | 10 | 6  | 1.9        | 4       |                                                                                                                                                                         |
| TPS-M3-12   | 3              | M3             | 5.5 | 12 | 6  | 2.3        | 4       |                                                                                                                                                                         |
| TPS-M4-6    | 4              | M4             | 7   | 6  | 4  | 2          | 4       |                                                                                                                                                                         |
| TPS-M4-10   | 4              | M4             | 7   | 10 | 6  | 3.1        | 4       |                                                                                                                                                                         |
| TPS-M4-15   | 4              | M4             | 7   | 15 | 8  | 4.7        | 4       |                                                                                                                                                                         |
| TPS-M4-20   | 4              | M4             | 7   | 20 | 10 | 6.5        | 4       |                                                                                                                                                                         |



■ Please use a suitable sized socket driver to both secure and loosen the tapping standoff.

## Installation example



## MT series

## PCB MOUNTING SCREWS for TPS



■ Pan head PCB mounting Screws for TPS tapping standoffs.

## Product no. / Details

| Product no. | M   | L | Material | Finish             | Pack of |
|-------------|-----|---|----------|--------------------|---------|
| MT2.3-4     | 2.3 | 4 | Steel    | Trivalent chromate | 20      |
| MT2.3-6     | 2.3 | 6 | Steel    | Trivalent chromate | 20      |
| MT2.6-4     | 2.6 | 4 | Steel    | Trivalent chromate | 20      |
| NEW MT2.6-6 | 2.6 | 6 | Steel    | Trivalent chromate | 20      |
| MT3-4       | 3   | 4 | Steel    | Trivalent chromate | 20      |
| NEW MT3-6   | 3   | 6 | Steel    | Trivalent chromate | 20      |
| NEW MT4-4   | 4   | 4 | Steel    | Trivalent chromate | 20      |
| NEW MT4-6   | 4   | 6 | Steel    | Trivalent chromate | 20      |

## PMF series

## PROTECTIVE VENT

## Pressure Equalization / Ventilation



Application Example

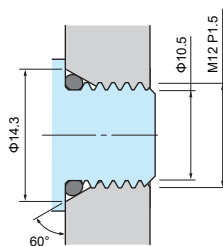
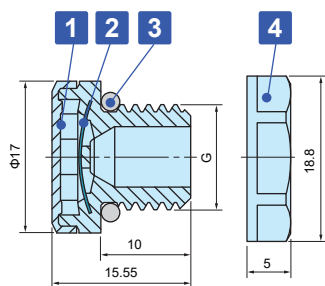
- Protective vent protects the enclosure from deformation by equalizing internal and external pressure differences, as well as venting the gas generated within the enclosure.
- IP68 protection class (water depth 2 meters / 60 mins) with an operating temperature range  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  allows them to be used in harsh environments.
- PMF-12 and PMF-12HS models are suitable for up to 5 and 50 liters respectively.
- Recommended to be installed at the sides of the enclosure.
- Use in industrial and electrical / electronic products only; not suitable to be used in medical, food and beverage, and cosmetic industries and related industrial equipment.

## PMF dimensions

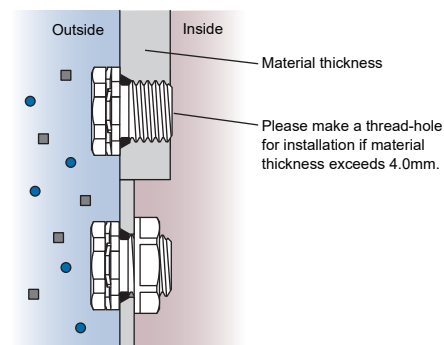
## Hole milling drawings

## Installation drawings

- DXF/DWG/PDF drawings available on our website.



- Recommended for prevention of O-ring deformation during tightening.  
If tightened with a lock nut, a standard through-hole is sufficient for installation.



- If used with a lock nut, material thickness should not exceed 4.0mm.

## Technical Data

| Product no.        | PMF-12                                                                                                                                                                                                                                                                                                                                                                                                          | PMF-12HA                  |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Airflow            | 450ml / min (dp = 7kPa)                                                                                                                                                                                                                                                                                                                                                                                         | 4,000ml / min (dp = 7kPa) |
| Recommended torque | 0.6 ~ 0.8N · m                                                                                                                                                                                                                                                                                                                                                                                                  | 0.6 ~ 0.8N · m            |
| Certifications     | IEC60529 (Protection class test) : IP65 • IP66 • IP67 • IP68 • IP69K<br>IEC60068-2-1, 2, 14 (Heat resistance test) : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$<br>IEC60068-2-78 (Humidity test) : $85^{\circ}\text{C} \cdot 85\%$ humidity • 1,000 hours<br>IEC60068-2-11, 52 (Salt spray test) IEC60068-2-64 (Vibration test)<br>GR-3108-CORE (Corrosive gas test) UL94V-0 (Flame-resistant) • UL746C f1 |                           |

## Product no. / Details

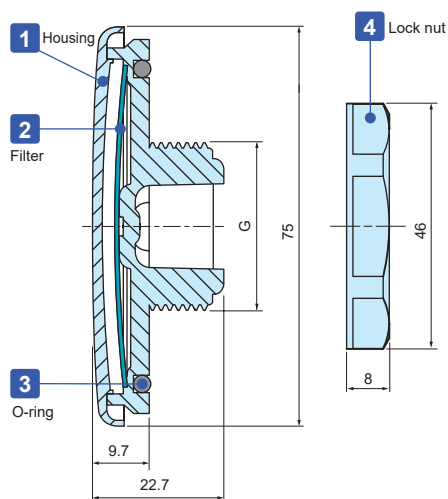
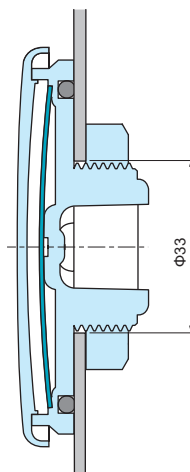
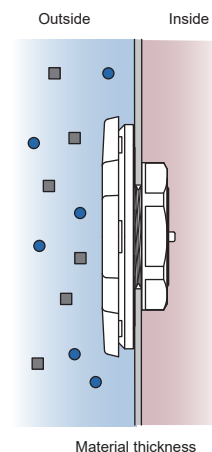
| Product no.  |           | Material  |          |          |                | G           |            | Lock nut |
|--------------|-----------|-----------|----------|----------|----------------|-------------|------------|----------|
| ● Light gray | ● Black   | 1 Housing | 2 Filter | 3 O-ring | 4 Lock nut     | Thread size | Mount hole | SW       |
| PMF-12S      | PMF-12B   | PA66 / 6  | PTFE     | Silicone | PA66 (UL94V-2) | M12 x P1.5  | Φ12.2      | 17       |
| PMF-12HAS    | PMF-12HAB | PA66 / 6  | PTFE     | Silicone | PA66 (UL94V-2) | M12 x P1.5  | Φ12.2      | 17       |

**PMF-32S****LARGE PROTECTIVE VENT****Pressure Equalization / Ventilation**

Application Example

- Maintains exceptionally high airflow in extra-large enclosures with volumes of up to 200 liters in an outdoor environment.
- Protective vent protects the enclosure from deformation by equalizing internal and external pressure differences, as well as venting the gas generated within the enclosure.
- Simple and flat design allows it to be used on a wide variety of enclosure types.
- IP68 protection class rated (water depth 2 meters / 60 mins) with an operating temperature range of  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  allows it to be used in harsh environments.
- Compliant with Solar industry testing IEC62108 standards.
- Recommended to be installed at the sides of the enclosure.
- Use in industrial and electrical / electronic products only; not suitable to be used in medical, food and beverage, and cosmetic industries and related industrial equipment.

■ DXF/DWG/PDF drawings available on our website.

**PMF-32 dimensions****Hole milling drawings****Installation drawings**

■ If used with a lock nut, material thickness should not exceed 5.0mm.

**Technical Data**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Airflow</b>            | 16ℓ / min (dp = 1.2kPa)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Recommended torque</b> | 5 N · m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Certifications</b>     | IEC529, 2nd (Protection class test) : IP66 • IP67 • IP68 • IP69K<br>IEC60068-2-1, 2, 14 (Heat resistance test) : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$<br>IEC60068-2-78 (Humidity test) : $85^{\circ}\text{C}$ • 85% humidity • 1,000 hours<br>IEC60068-2-11, 52 (Salt spray test) IEC60068-2-64 (Vibration test)<br>IEC62108, 10.8 • 9 (Solar industry test) : Freezing • High temperature tes • Hail impact test<br>GR-3108-CORE (Corrosive gas test) UL94V-0 (Flame-resistant) • UL746C f1 |

**Product no. / Details**

| Product no. | Material      |          |          |            | G           |                 |            | Lock nut SW |
|-------------|---------------|----------|----------|------------|-------------|-----------------|------------|-------------|
|             | 1 Housing     | 2 Filter | 3 O-ring | 4 Lock nut | Thread size | Thread diameter | Mount hole |             |
| PMF-32S     | Polycarbonate | PTFE     | Silicone | PA66       | M32 x P1.5  | Φ32             | Φ33        | 41.5        |

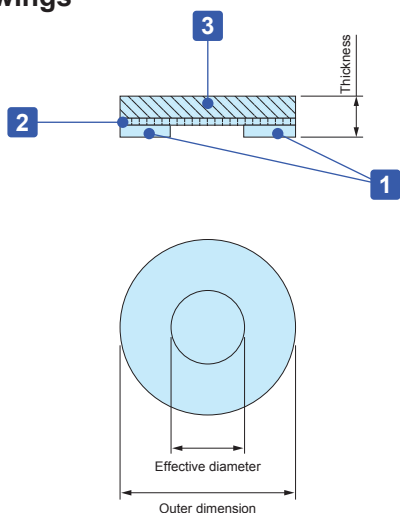
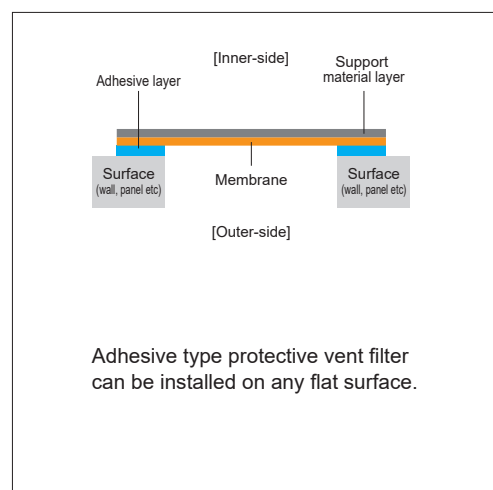
**VE8** series**ADHESIVE PROTECTIVE VENT FILTER****Technical Data**

Protection class : Dustproof IP6X  
 Waterproof IPX4, IPX7  
 Airflow: 3,300ml/min/cm<sup>2</sup> (at 7Kpa)  
 Operating temperature: -40°C ~ +100°C

- Vent filter protects the enclosure from deformation by equalizing internal and external pressure differences, as well as venting the gas generated within the enclosure.
- Allows water vapor molecules to diffuse through the microporous membrane.
- Highly water and oil repellent membrane protects electronic components from water, corrosive liquids, salts and dust.
- Easy installation adhesive filter.
- Recommended to be adhered onto flat plastic or metallic surfaces.

**CAUTION**

- Install only on the inner surface of the case / box with the membrane and adhesive side facing outwards.
- An initial period of 24 hours is required for the adhesive to properly bond to the surface. Avoid using the vent filter with a heavy load.
- Please do not adhere onto the top-side of enclosures. Rain water etc. will collect on the filter, which will weaken the adhesive seal and prevent proper ventilation.
- After degreasing and cleaning, adhere the filter without touching the center part of the vent filter.
- Use in industrial and electrical / electronic products only; not suitable to be used in medical, food and beverage, and cosmetic industries and related industrial equipment.

**VE8 drawings****Installation drawings****Components**

| No. | Part name        | Material                                | Color       |
|-----|------------------|-----------------------------------------|-------------|
| 1   | Adhesive         | Acrylic adhesive                        | Transparent |
|     |                  | Silicon adhesive (VE82029S, VE82029S-S) |             |
| 2   | Filter           | ePTFE (Oil-repellent type)              | White       |
| 3   | Support material | Polyester fabric                        | White       |

**Product no. / Details**

| Product no. | Outer dimension (Φ-mm) | Effective diameter (Φ-mm) | Thickness (mm) | Sales unit         |
|-------------|------------------------|---------------------------|----------------|--------------------|
| VE80308     | 7.6                    | 3.3                       | 0.26           | 8 pcs (per pack)   |
| VE80814     | 14.0                   | 8.0                       | 0.26           | 4 pcs (per pack)   |
| VE81221     | 21.5                   | 12.5                      | 0.26           | 4 pcs (per pack)   |
| VE82029S    | 29.0                   | 20.0                      | 0.35           | 2 pcs (per pack)   |
| VE80308-S   | 7.6                    | 3.3                       | 0.26           | 96 pcs (per sheet) |
| VE80814-S   | 14.0                   | 8.0                       | 0.26           | 56 pcs (per sheet) |
| VE81221-S   | 21.5                   | 12.5                      | 0.26           | 20 pcs (per sheet) |
| VE82029S-S  | 29.0                   | 20.0                      | 0.35           | 10 pcs (per sheet) |



- Weatherproof cable gland equipped with high ultraviolet and degradation resistant silicone sealing insert and O-ring.
- Recommended to use outdoors where waterproofing is critical.
- Protection class equivalent to IP67.

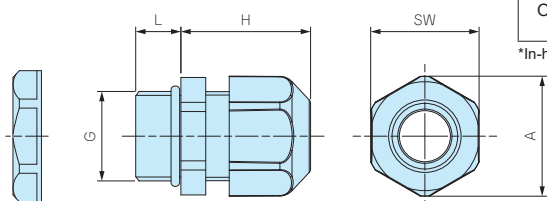
## Components

■ PA = Polyamide

| No. | Part name      | Material     |
|-----|----------------|--------------|
| 1   | Cap            | PA66 UL94V-2 |
| 2   | Sealing insert | Silicone     |
| 3   | Connector      | PA66 UL94V-2 |
| 4   | O-ring         | Silicone     |
| 5   | Lock nut       | PA66 UL94V-2 |

## RMW dimensions

- DXF/DWG/PDF drawings available on our website.



## Technical Data

Protection class: Equivalent to IP67\*  
Operating temperature: -20°C ~ +80°C

\*In-house test

- Lock nut is not included for RMW10S-6.
- Please drill a proper thread hole into the enclosure for installation.

## Cap design varies by size



RMW40 or smaller



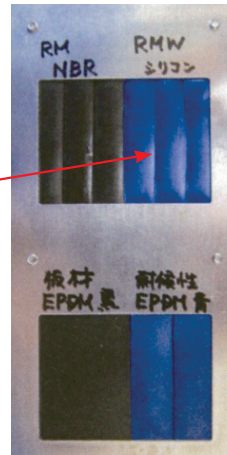
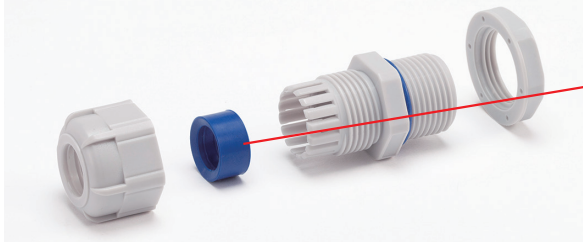
RMW50

## Product no. / Details

| Product no.  |              | G           |               | Cable range |     | L    | H Max | SW   | A    | Pack of |
|--------------|--------------|-------------|---------------|-------------|-----|------|-------|------|------|---------|
| ● Black      | ● Light gray | Thread size | Mounting hole | Min         | Max |      |       |      |      |         |
| RMW8L-2.5B   | RMW8L-2.5S   | M8×1.25     | Φ8.2          | 1           | 2.5 | 13   | 19.5  | 12   | 13.6 | 1       |
| RMW8L-4B     | RMW8L-4S     | M8×1.25     | Φ8.2          | 2.5         | 4   | 13   | 19.5  | 12   | 13.6 | 1       |
| RMW10S-6B    | RMW10S-6S    | M10×1.5     | —             | 3           | 6   | 8    | 20.5  | 13   | 14.6 | 1       |
| RMW10L-6B    | RMW10L-6S    | M10×1.5     | Φ10.2         | 3           | 6   | 13   | 20.5  | 13   | 14.6 | 1       |
| RMW12S-7B    | RMW12S-7S    | M12×1.5     | Φ12.2         | 3.5         | 7   | 9    | 20.5  | 16   | 17.7 | 1       |
| RMW12L-7B    | RMW12L-7S    | M12×1.5     | Φ12.2         | 3.5         | 7   | 14.5 | 20.5  | 16   | 17.7 | 1       |
| RMW16S-8B    | RMW16S-8S    | M16×1.5     | Φ16.2         | 4           | 8   | 9    | 23.5  | 19.2 | 21.3 | 1       |
| RMW16L-8B    | RMW16L-8S    | M16×1.5     | Φ16.2         | 4           | 8   | 15   | 24    | 19.2 | 21.3 | 1       |
| RMW20S-12B   | RMW20S-12S   | M20×1.5     | Φ20.2         | 6           | 12  | 10   | 29    | 24.3 | 26.8 | 1       |
| RMW20L-12B   | RMW20L-12S   | M20×1.5     | Φ20.2         | 6           | 12  | 15   | 28.5  | 24.3 | 26.8 | 1       |
| RMW25L-17B   | RMW25L-17S   | M25×1.5     | Φ25.2         | 11          | 17  | 15   | 35    | 33.3 | 36.8 | 1       |
| RMW32L-21B   | RMW32L-21S   | M32×1.5     | Φ32.3         | 13          | 21  | 15   | 38    | 36.1 | 39.8 | 1       |
| RMW40L-27B   | RMW40L-27S   | M40×1.5     | Φ40.3         | 18          | 27  | 18   | 43.5  | 46.1 | 51.2 | 1       |
| RMW50L-38B   | RMW50L-38S   | M50×1.5     | Φ50.4         | 27          | 38  | 20   | 50.5  | 60   | 66.5 | 1       |
| RMW10L-6B-P  | RMW10L-6S-P  | M10×1.5     | Φ10.2         | 3           | 6   | 13   | 20.5  | 13   | 14.6 | 100     |
| RMW12S-7B-P  | RMW12S-7S-P  | M12×1.5     | Φ12.2         | 3.5         | 7   | 9    | 20.5  | 16   | 17.7 | 100     |
| RMW12L-7B-P  | RMW12L-7S-P  | M12×1.5     | Φ12.2         | 3.5         | 7   | 14.5 | 20.5  | 16   | 17.7 | 100     |
| RMW16S-8B-P  | RMW16S-8S-P  | M16×1.5     | Φ16.2         | 4           | 8   | 9    | 23.5  | 19.2 | 21.3 | 100     |
| RMW16L-8B-P  | RMW16L-8S-P  | M16×1.5     | Φ16.2         | 4           | 8   | 15   | 24    | 19.2 | 21.3 | 100     |
| RMW20S-12B-P | RMW20S-12S-P | M20×1.5     | Φ20.2         | 6           | 12  | 10   | 29    | 24.3 | 26.8 | 100     |
| RMW20L-12B-P | RMW20L-12S-P | M20×1.5     | Φ20.2         | 6           | 12  | 15   | 28.5  | 24.3 | 26.8 | 100     |

# RMW series silicone sealing insert weatherproof test report

Object: Cut into a piece of the silicone sealing insert from RMW series and attach it onto an aluminium plate.  
For comparison, NBR sealing insert from our RM and EPDM sealing insert from another manufacturer is also attached.



Before



After

## Testing conditions

**Equipment :** 7.5kW Super Xenon Weather Meter SX75 (Suga Test Instruments Co., Ltd.- <http://www.sugatest.co.jp/english/>)  
**Conditions :** JIS B7754 : 1991

Testing with an authorized Xenon arc lamp weathering test equipment under the conditions denoted below.

Irradiance :  $180\text{W/m}^2$  at 300-400nm

Black Panel Temperature :  $63\pm 3^\circ\text{C}$  Humidity Range :  $50\pm 10\%$

Cycle Conditions : 120 minutes cycle (18 minutes irradiation + water spray - 102 minutes irradiation)

2,000 hours (equivalent to a period of 4 years under natural conditions)

**Time period :**

**Total radiant exposure :**  $1296\text{MJ/m}^2$

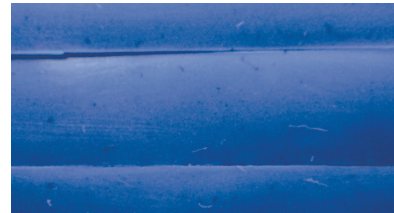
## Test result (visual / touch inspection)

**Silicone sealing insert material :** No cracks, no gloss transition, no powder - no appearance change at all. Flexibility remains unchanged.

Before



After

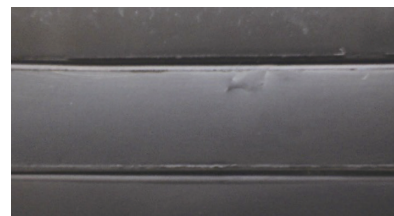


**NBR material from our RM series :** Lost glossiness on the surface and material is stiffened.

Before

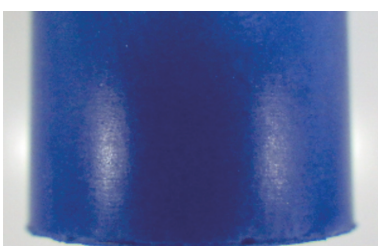


After

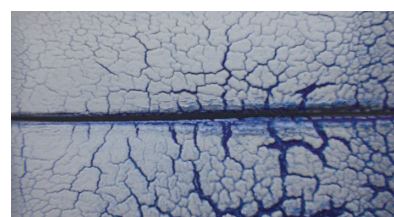


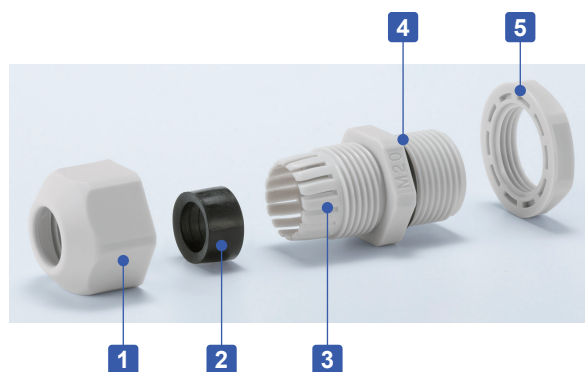
**EPDM material from weatherproof cable gland of another manufacturer :** Cracked, color drastically faded and powder appeared on the surface.

Before



After





- Low cost cable glands made from polyamide material.
- Wide selection, for M8 ~ M63, suitable for  $\Phi 1\text{mm} \sim \Phi 44\text{ mm}$  cable.
- High oil resistant NBR rubber sealing and O-ring.
- Protection class equivalent to IP67.

## Technical Data

Protection class: Equivalent to IP67\*  
Operating temperature:  $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$

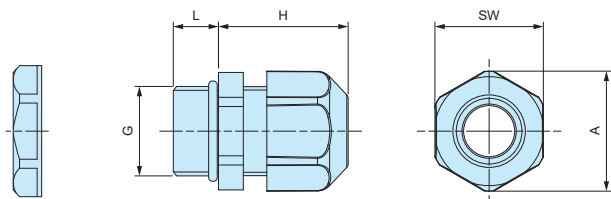
\*In-house test

## Components

■ PA = Polyamide

| No. | Part name      | Material     |
|-----|----------------|--------------|
| 1   | Cap            | PA66 UL94V-2 |
| 2   | Sealing insert | NBR          |
| 3   | Connector      | PA66 UL94V-2 |
| 4   | O-ring         | NBR          |
| 5   | Lock nut       | PA66 UL94V-2 |

## RM dimensions ■ DXF/DWG/PDF drawings available on our website.



- Lock nut is not included for RM8S-2.5, 8S-4, and 10S-6 models.

Please drill an appropriate thread hole into the enclosure for installation.

## Cap design varies by size



## Product no. / Details

| Product no. |              | G           |               | Cable range |     | L    | H Max | SW   | A    | Pack of |
|-------------|--------------|-------------|---------------|-------------|-----|------|-------|------|------|---------|
| ● Black     | ● Light gray | Thread size | Mounting hole | Min         | Max |      |       |      |      |         |
| RM8S-2.5B   | RM8S-2.5S    | M8×1.25     | —             | 1           | 2.5 | 7.5  | 19.5  | 12   | 13.6 | 1       |
| RM8L-2.5B   | RM8L-2.5S    | M8×1.25     | $\Phi 8.2$    | 1           | 2.5 | 13   | 19.5  | 12   | 13.6 | 1       |
| RM8S-4B     | RM8S-4S      | M8×1.25     | —             | 2.5         | 4   | 7.5  | 19.5  | 12   | 13.6 | 1       |
| RM8L-4B     | RM8L-4S      | M8×1.25     | $\Phi 8.2$    | 2.5         | 4   | 13   | 19.5  | 12   | 13.6 | 1       |
| RM10S-6B    | RM10S-6S     | M10×1.5     | —             | 3           | 6   | 8    | 20.5  | 13   | 14.6 | 1       |
| RM10L-6B    | RM10L-6S     | M10×1.5     | $\Phi 10.2$   | 3           | 6   | 13   | 20.5  | 13   | 14.6 | 1       |
| RM12S-7B    | RM12S-7S     | M12×1.5     | $\Phi 12.2$   | 3.5         | 7   | 9    | 20.5  | 16   | 17.7 | 1       |
| RM12L-7B    | RM12L-7S     | M12×1.5     | $\Phi 12.2$   | 3.5         | 7   | 14.5 | 20.5  | 16   | 17.7 | 1       |
| RM16S-8B    | RM16S-8S     | M16×1.5     | $\Phi 16.2$   | 4           | 8   | 9    | 23.5  | 19.2 | 21.3 | 1       |
| RM16L-8B    | RM16L-8S     | M16×1.5     | $\Phi 16.2$   | 4           | 8   | 15   | 24    | 19.2 | 21.3 | 1       |
| RM20S-12B   | RM20S-12S    | M20×1.5     | $\Phi 20.2$   | 6           | 12  | 10   | 29    | 24.3 | 26.8 | 1       |
| RM20L-12B   | RM20L-12S    | M20×1.5     | $\Phi 20.2$   | 6           | 12  | 15   | 28.5  | 24.3 | 26.8 | 1       |
| RM25L-17B   | RM25L-17S    | M25×1.5     | $\Phi 25.2$   | 11          | 17  | 15   | 35    | 33.3 | 36.8 | 1       |
| RM32L-21B   | RM32L-21S    | M32×1.5     | $\Phi 32.3$   | 13          | 21  | 15   | 38    | 36.1 | 39.8 | 1       |
| RM40L-27B   | RM40L-27S    | M40×1.5     | $\Phi 40.3$   | 18          | 27  | 18   | 43.5  | 46.1 | 51.2 | 1       |
| RM50L-38B   | RM50L-38S    | M50×1.5     | $\Phi 50.4$   | 27          | 38  | 20   | 50.5  | 60   | 66.5 | 1       |
| RM63L-44B   | RM63L-44S    | M63×1.5     | $\Phi 63.4$   | 37          | 44  | 20   | 53    | 68   | 75.5 | 1       |
| RM10L-6B-P  | RM10L-6S-P   | M10×1.5     | $\Phi 10.2$   | 3           | 6   | 13   | 20.5  | 13   | 14.6 | 100     |
| RM12S-7B-P  | RM12S-7S-P   | M12×1.5     | $\Phi 12.2$   | 3.5         | 7   | 9    | 20.5  | 16   | 17.7 | 100     |
| RM12L-7B-P  | RM12L-7S-P   | M12×1.5     | $\Phi 12.2$   | 3.5         | 7   | 14.5 | 20.5  | 16   | 17.7 | 100     |
| RM16S-8B-P  | RM16S-8S-P   | M16×1.5     | $\Phi 16.2$   | 4           | 8   | 9    | 23.5  | 19.2 | 21.3 | 100     |
| RM16L-8B-P  | RM16L-8S-P   | M16×1.5     | $\Phi 16.2$   | 4           | 8   | 15   | 24    | 19.2 | 21.3 | 100     |
| RM20S-12B-P | RM20S-12S-P  | M20×1.5     | $\Phi 20.2$   | 6           | 12  | 10   | 29    | 24.3 | 26.8 | 100     |
| RM20L-12B-P | RM20L-12S-P  | M20×1.5     | $\Phi 20.2$   | 6           | 12  | 15   | 28.5  | 24.3 | 26.8 | 100     |
| RM25L-17B-P | RM25L-17S-P  | M25×1.5     | $\Phi 25.2$   | 11          | 17  | 15   | 35    | 33.3 | 36.8 | 100     |

**RSP** series**STRAIN RELIEF CABLE GLAND**

- A total of 14 models available for selection.
- Strain relief cap protects cables by preventing it from bending beyond its limit and breaking.
- Economical price but high waterproofing capability equivalent to IP67.

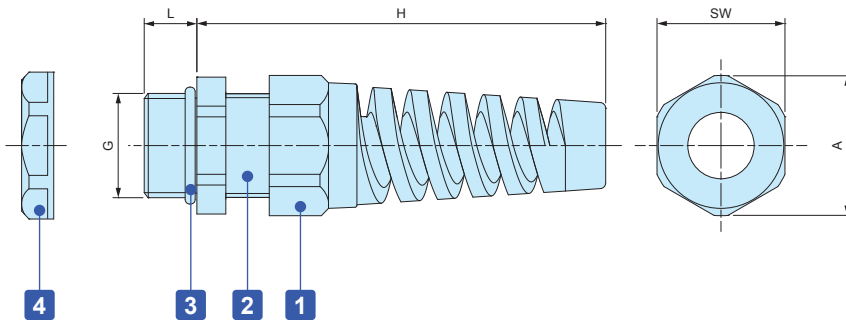
**Technical Data**

Protection class : Equivalent to IP67\*  
 Operating temperature : -20°C ~ +80°C

\*In-house test

**RSP dimensions**

■ DXF/DWG/PDF drawings available on our website.

**Components**

■ PA = Polyamide

| No. | Part name         | Material     |
|-----|-------------------|--------------|
| 1   | Strain relief cap | PA66 UL94V-2 |
| -   | Sealing insert    | NBR          |
| 2   | Connector         | PA66 UL94V-2 |
| 3   | O-ring            | NBR          |
| 4   | Lock nut          | PA66 UL94V-2 |

**Product no. / Details**

| Product no. |              | G           |               | Cable range |     | L    | H   | SW   | A    | Pack of |
|-------------|--------------|-------------|---------------|-------------|-----|------|-----|------|------|---------|
| ● Black     | ● Light gray | Thread size | Mounting hole | Min         | Max |      |     |      |      |         |
| RSP 8-2.5B  | RSP 8-2.5S   | M 8×1.25    | Φ 8.2         | 1           | 2.5 | 10.5 | 48  | 12.1 | 13.8 | 1       |
| RSP 8-4B    | RSP 8-4S     | M 8×1.25    | Φ 8.2         | 2.5         | 4   | 10.5 | 48  | 12.1 | 13.8 | 1       |
| RSP10-6B    | RSP10-6S     | M10×1.5     | Φ10.2         | 3           | 6   | 12.2 | 54  | 13.1 | 14.5 | 1       |
| RSP12-6B    | RSP12-6S     | M12×1.5     | Φ12.2         | 3.5         | 6   | 9    | 62  | 16   | 17   | 1       |
| RSP16-8B    | RSP16-8S     | M16×1.5     | Φ16.2         | 4           | 8   | 9    | 69  | 19.5 | 21   | 1       |
| RSP20-11B   | RSP20-11S    | M20×1.5     | Φ20.2         | 6           | 11  | 10   | 82  | 24   | 26   | 1       |
| RSP25-16B   | RSP25-16S    | M25×1.5     | Φ25.2         | 11          | 16  | 12   | 102 | 33   | 36   | 1       |



- High water protection IP68 (1bar / 30min) polyamide cable gland.
- Wide selection, for M8 ~ M50, suitable for  $\Phi 2.5\text{mm}$  ~  $\Phi 42\text{ mm}$  cable.
- Super tough and superior heat resistant PA6GF (glass fiber filled PA6) material on cap and connector.
- Safer halogen free, eco-friendly product.

## Technical Data

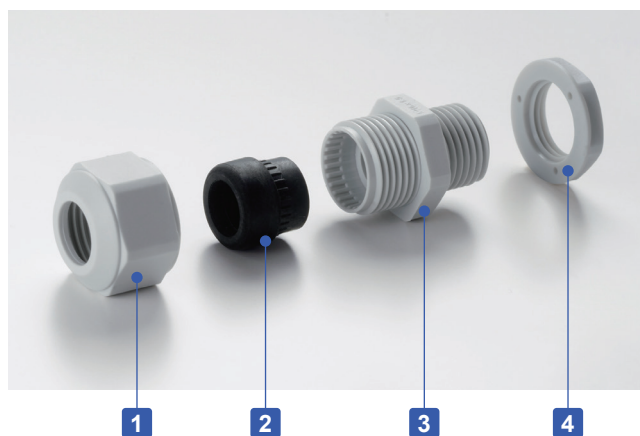
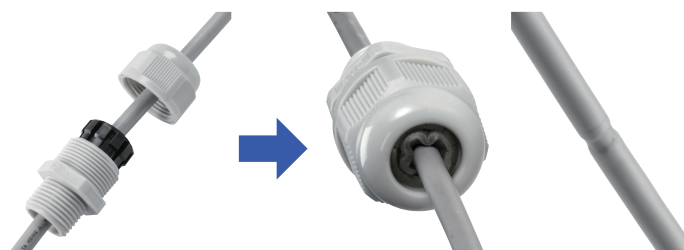
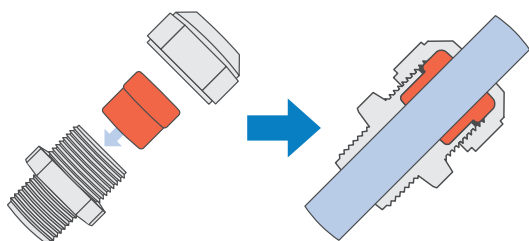
Protection class: IP68 1bar / 30min  
 Operating temperature: -20°C ~ +100°C  
 Compliant with EN50262 Ver. A

## AG series

Thicker sealing insert evenly hold a cable by having a larger holding area.  
 Remains durable even after repeated tightening / loosening.

## Lamellar insert type

If over-tightened, it can cause the rubber bush or cable to deform, which can allow water to seep in.



## Components

■ PA6GF = Polyamide6 Glass Fiber Filled

| No. | Part name      | Material |
|-----|----------------|----------|
| 1   | Cap            | PA6GF    |
| 2   | Sealing insert | TPE      |
| 3   | Connector      | PA6GF    |
| 4   | Lock nut       | PA6      |

■ Lock nut is not included for M8 and M10 sizes.

Please drill an appropriate thread hole into the enclosure for installation.

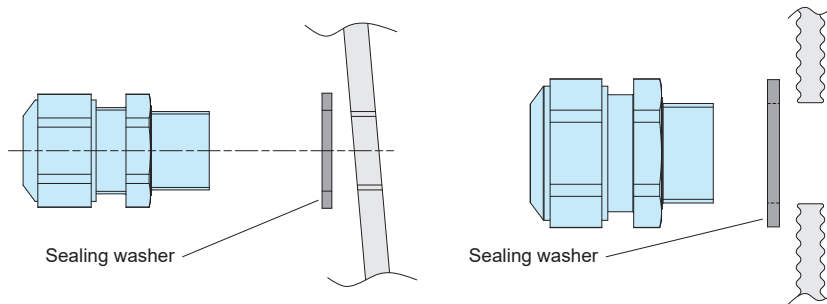
- Appropriate tightening torque varies by each cable diameter. Tighten the cap until top of the sealing insert forms a small bead between the cap and the cable.



■ No optional sealing washer is required when installing on an even surface because of the built-in waterproof rib.

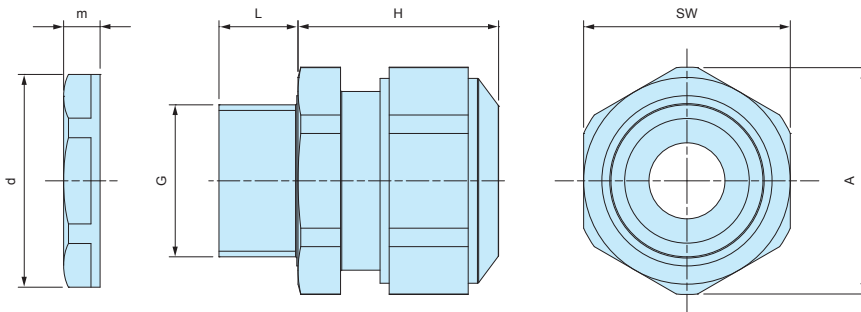
■ An optional sealing washer is required when installing on an uneven surface. (See website for more information on the optional sealing washer)

Waterproof rib



## AG dimensions

■ DXF/DWG/PDF drawings available on our website.



■ Lock nut is not included for M8 and M10 sizes.

Please drill an appropriate thread hole into the enclosure for installation.

## Product no. / Details

| Product no. |              | G           |               | Cable range |      | L  | H<br>Max | SW | A    | d    | m   | Pack of |
|-------------|--------------|-------------|---------------|-------------|------|----|----------|----|------|------|-----|---------|
| ● Black     | ● Light gray | Thread size | Mounting hole | Min         | Max  |    |          |    |      |      |     |         |
| AG8-3.5B    | AG8-3.5S     | M8×1.0      | —             | 2.5         | 3.5  | 10 | 17       | 12 | 13.2 | —    | —   | 1       |
| AG8-5B      | AG8-5S       | M8×1.0      | —             | 3.5         | 4.7  | 10 | 17       | 12 | 13.2 | —    | —   | 1       |
| AG10-6B     | AG10-6S      | M10×1.0     | —             | 4           | 6    | 10 | 19       | 15 | 16.5 | —    | —   | 1       |
| AG12-5B     | AG12-5S      | M12×1.5     | Φ12.2         | 3.5         | 4.7  | 12 | 23.5     | 17 | 18.7 | 18.8 | 5   | 1       |
| AG12-6.5B   | AG12-6.5S    | M12×1.5     | Φ12.2         | 5           | 6.5  | 12 | 23       | 17 | 18.7 | 18.8 | 5   | 1       |
| AG12-8B     | AG12-8S      | M12×1.5     | Φ12.2         | 6.5         | 7.8  | 12 | 23       | 17 | 18.7 | 18.8 | 5   | 1       |
| AG16-10B    | AG16-10S     | M16×1.5     | Φ16.2         | 8           | 10   | 12 | 26       | 21 | 23.1 | 24.3 | 5   | 1       |
| AG20-15B    | AG20-15S     | M20×1.5     | Φ20.2         | 11          | 15   | 13 | 27       | 27 | 29.7 | 29   | 6   | 1       |
| AG25-16B    | AG25-16S     | M25×1.5     | Φ25.2         | 12.5        | 16   | 13 | 34       | 34 | 37.4 | 36   | 6.7 | 1       |
| AG25-20B    | AG25-20S     | M25×1.5     | Φ25.2         | 16          | 20   | 13 | 34       | 34 | 37.4 | 36   | 6.7 | 1       |
| AG32-25.5B  | AG32-25.5S   | M32×1.5     | Φ32.3         | 21          | 25.5 | 15 | 36       | 41 | 45.6 | 46   | 8   | 1       |
| AG40-28.5B  | AG40-28.5S   | M40×1.5     | Φ40.3         | 24          | 28.5 | 15 | 41       | 50 | 55.4 | 53.5 | 9   | 1       |
| AG40-33B    | AG40-33S     | M40×1.5     | Φ40.3         | 28.5        | 33   | 15 | 41       | 50 | 55.4 | 53.5 | 9   | 1       |
| AG50-37B    | AG50-37S     | M50×1.5     | Φ50.4         | 33          | 37   | 16 | 45       | 60 | 65.5 | 66   | 9.6 | 1       |
| AG50-42B    | AG50-42S     | M50×1.5     | Φ50.4         | 37          | 42   | 16 | 45       | 60 | 65.5 | 66   | 9.6 | 1       |