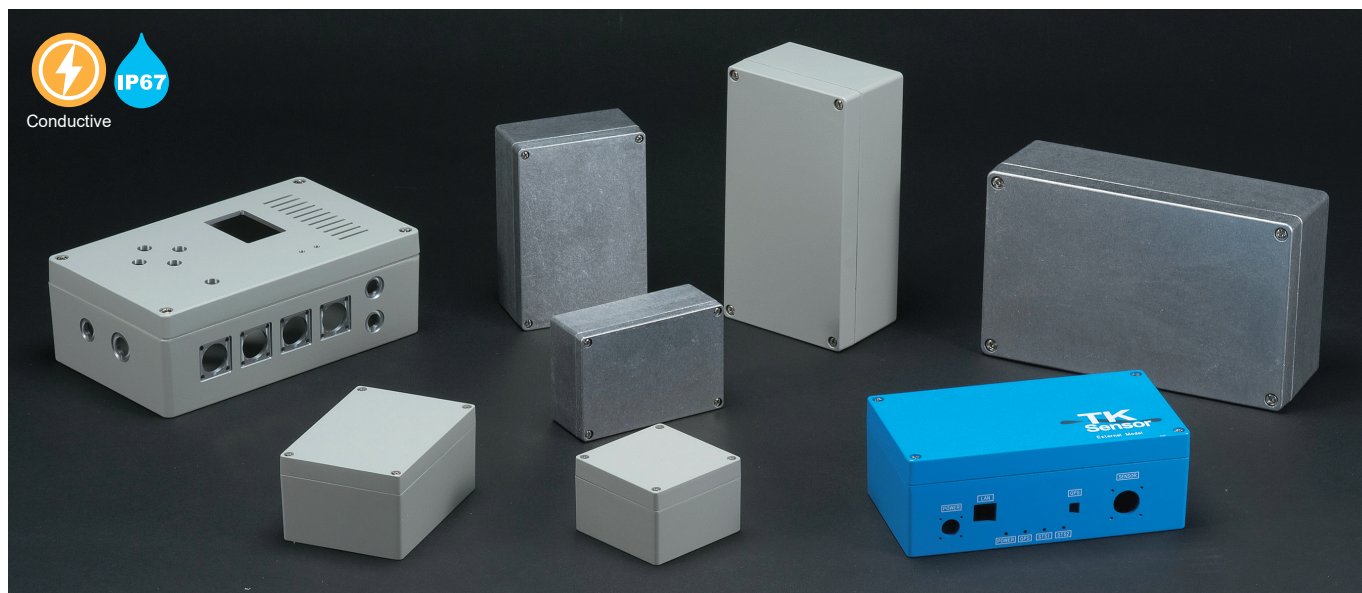
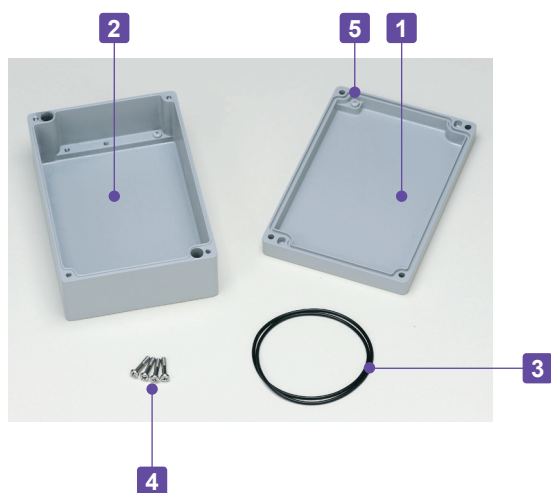


**BDN** series**IP67 DIECAST ALUMINIUM BOX****Technical Data**

Protection class : IP67  
 Operating temperature : -40°C ~ +105°C  
 Recommended torque : 1.0N • m (10kgf • cm)



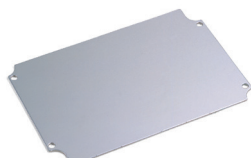
- 8 different sizes available for both light gray powder coated and unfinished models.
- O-ring gasket is good for maintaining both waterproof and dustproof functionality.
- Shock resistant diecast aluminium box.
- Conductivity can be achieved by utilization of the contact between the unfinished inner surfaces (only applicable to "N" type).

**Components**

| No. | Part name      | Pcs | Material                | Color / Finish                                    |
|-----|----------------|-----|-------------------------|---------------------------------------------------|
| 1   | Top cover      | 1   | Diecast aluminium ADC12 | Light gray / Powder coated • Natural / Unfinished |
| 2   | Base           | 1   | Diecast aluminium ADC12 | Light gray / Powder coated • Natural / Unfinished |
| 3   | O-ring gasket  | 1   | Silicone                | Black                                             |
| 4   | Screw          | 4   | Stainless steel         | Unfinished                                        |
| 5   | Earthing screw | 2   | Steel M4-5 pan head     | Nickel plated                                     |

**Accessories (Optional parts)**

Wall mounting bracket CK series  
See website



Mounting plate FTB series  
See website



Pole mounting bracket SSK series  
See website



DIN Rail FDR series  
See page 100

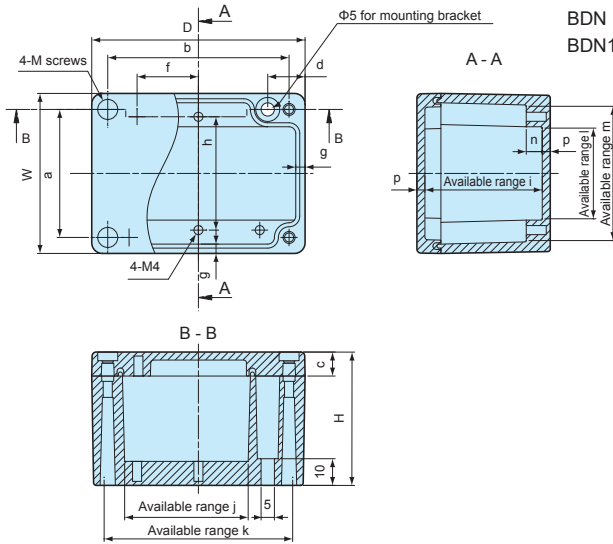


Cable gland  
See page 181 ~ 193

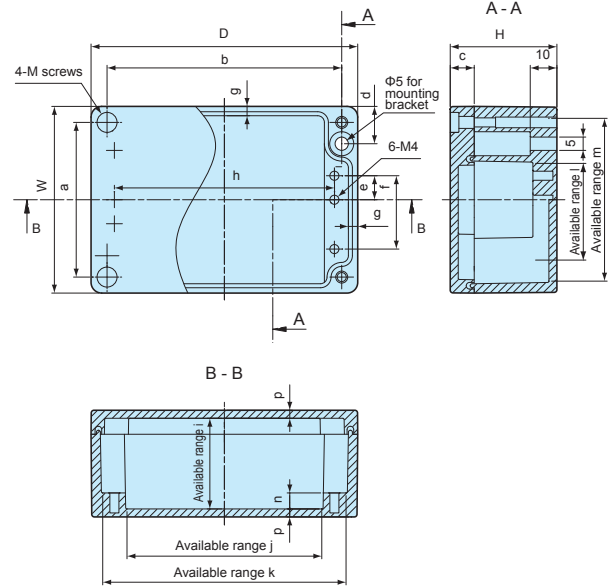
## BDN dimensions

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

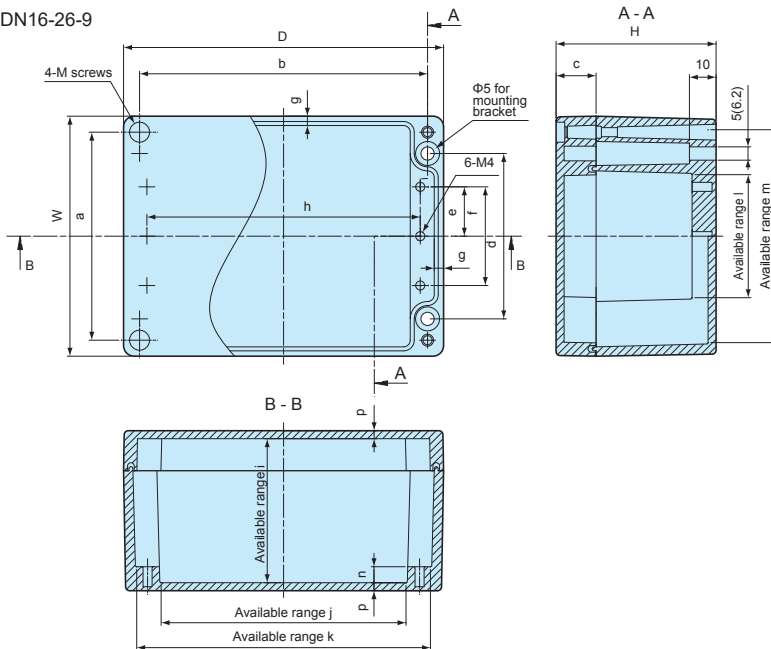
BDN 6-8-5



BDN 7-10-4  
BDN 9-13-5  
BDN11-16-6



BDN 9- 9-6  
BDN10-14-7  
BDN12-22-8  
BDN16-26-9



※Dimension in ( ) = BDN12-22-8  
BDN16-26-9

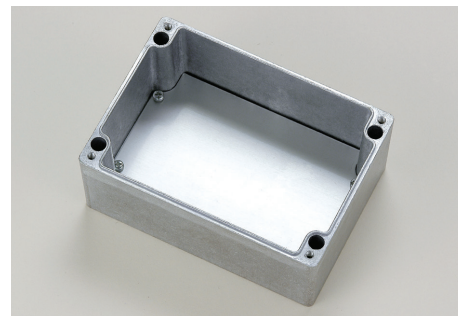
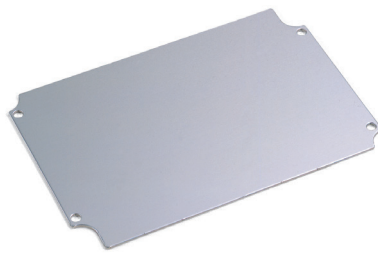
### Product no. / Details

| Product no.  |                      | Dimensions |       |    |     |     |    | Weight (g) |
|--------------|----------------------|------------|-------|----|-----|-----|----|------------|
| ● Light gray | ● Natural Conductive | W          | D     | H  | a   | b   | c  |            |
| BDN 6- 8-5G  | BDN 6- 8-5N          | 60         | 80    | 50 | 48  | 68  | 9  | 240        |
| BDN 7-10-4G  | BDN 7-10-4N          | 70         | 100   | 40 | 58  | 88  | 9  | 250        |
| BDN 9- 9-6G  | BDN 9- 9-6N          | 90         | 90    | 60 | 78  | 78  | 15 | 395        |
| BDN 9-13-5G  | BDN 9-13-5N          | 90         | 130   | 50 | 78  | 118 | 9  | 420        |
| BDN10-14-7G  | BDN10-14-7N          | 100        | 140   | 70 | 88  | 128 | 15 | 635        |
| BDN11-16-6G  | BDN11-16-6N          | 110        | 160   | 60 | 98  | 148 | 15 | 640        |
| BDN12-22-8G  | BDN12-22-8N          | 120        | 220.5 | 80 | 105 | 205 | 20 | 1,155      |
| BDN16-26-9G  | BDN16-26-9N          | 160        | 260   | 90 | 140 | 240 | 20 | 2,145      |

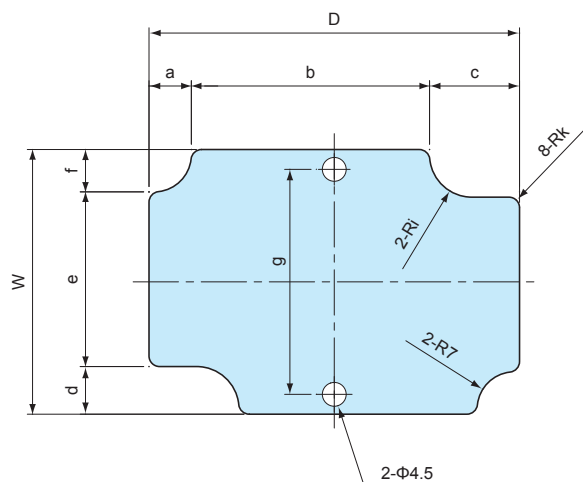
| Product no.  |                      | Dimensions |      |      |     |       |    |       |       |      |       |   |   |    |
|--------------|----------------------|------------|------|------|-----|-------|----|-------|-------|------|-------|---|---|----|
| ● Light gray | ● Natural Conductive | d          | e    | f    | g   | h     | i  | j     | k     | ℓ    | m     | n | p | M  |
| BDN 6- 8-5G  | BDN 6- 8-5N          | 14         | —    | 23   | 3.5 | 42.5  | 44 | 45    | 71    | 33   | 51    | 6 | 3 | M4 |
| BDN 7-10-4G  | BDN 7-10-4N          | 14         | 11   | 31   | 3   | 85    | 34 | 75    | 92.5  | 38   | 62.5  | 6 | 3 | M4 |
| BDN 9- 9-6G  | BDN 9- 9-6N          | 62         | 18.5 | 37   | 3.5 | 72    | 54 | 62.5  | 80.7  | 46.7 | 80.5  | 6 | 3 | M4 |
| BDN 9-13-5G  | BDN 9-13-5N          | 14         | 19   | 47.5 | 3.5 | 112.5 | 44 | 102.7 | 120.9 | 55.9 | 80.7  | 6 | 3 | M4 |
| BDN10-14-7G  | BDN10-14-7N          | 72         | 24   | 48   | 3.5 | 121   | 64 | 111   | 130   | 56   | 90    | 6 | 3 | M4 |
| BDN11-16-6G  | BDN11-16-6N          | 14         | 29   | 67.5 | 3.5 | 142.5 | 54 | 132.5 | 150.7 | 75.7 | 100.5 | 6 | 3 | M4 |
| BDN12-22-8G  | BDN12-22-8N          | 84.6       | 28   | 56   | 3.9 | 196   | 74 | 183   | 206   | 62   | 105   | 6 | 3 | M5 |
| BDN16-26-9G  | BDN16-26-9N          | 110        | 36   | 72   | 4.8 | 230   | 82 | 216   | 247   | 87   | 146   | 9 | 4 | M6 |

## FTB SERIES

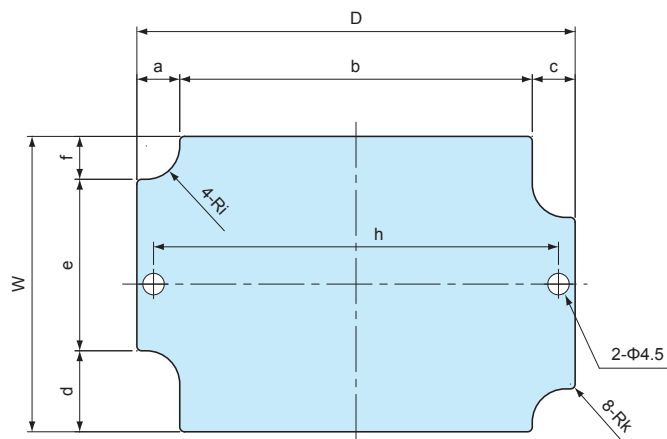
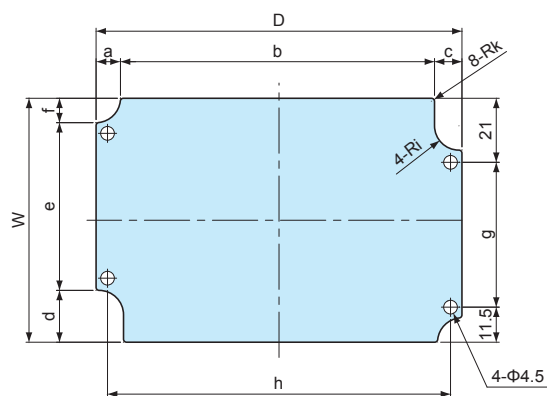
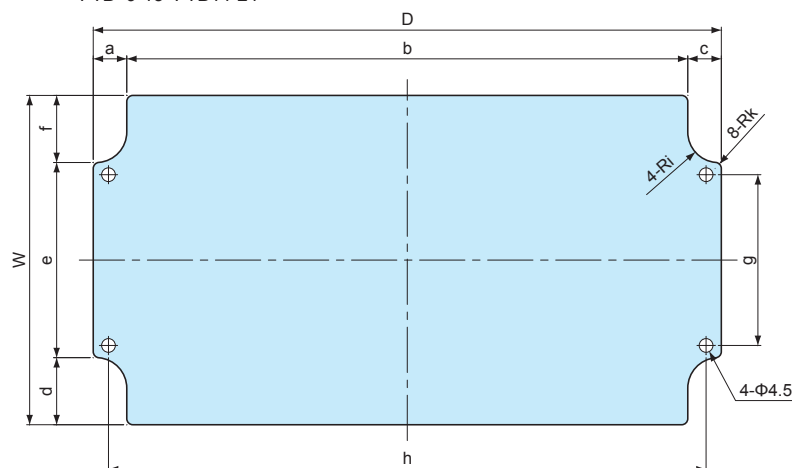
## MOUNTING PLATE for BDN



FTB 5-7



FTB 6-9

FTB 8-12  
FTB10-15FTB 8- 8 FTB10-20  
FTB 9-13 FTB14-24

## Components

| Part name              | Pcs  | Material                 | Color / Finish     |
|------------------------|------|--------------------------|--------------------|
| MOUNTING PLATE for BDN | 1    | Aluminium A1100P t = 1.5 | Silver anodized    |
| screw                  | 2or4 | steel                    | Trivalent chromate |

## Product no. / Dimensions

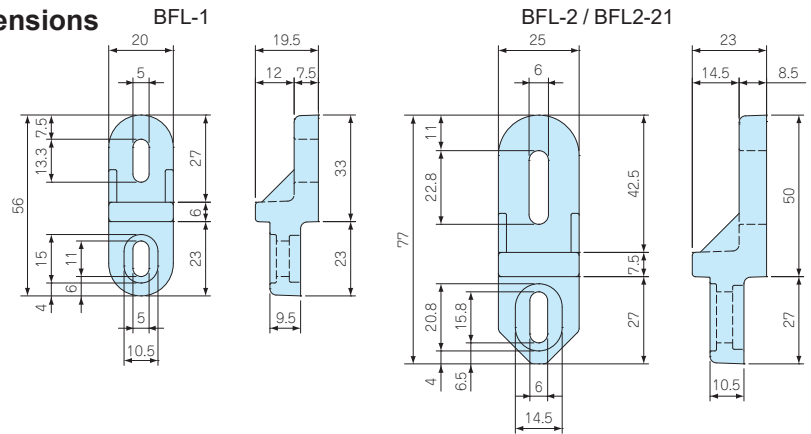
| Product no. | Suitable box | W   | D   | a  | b   | c  | d  | e  | f  | g    | h     | i   | k |
|-------------|--------------|-----|-----|----|-----|----|----|----|----|------|-------|-----|---|
| FTB 5- 7    | BDN 6- 8-5   | 50  | 70  | 8  | 45  | 17 | 9  | 33 | 8  | 42.5 | -     | 8   | 2 |
| FTB 6- 9    | BDN 7-10-4   | 62  | 92  | 9  | 74  | 9  | 17 | 36 | 9  | -    | 85    | 7   | 1 |
| FTB 8- 8    | BDN 9- 9-6   | 80  | 80  | 9  | 62  | 9  | 17 | 46 | 17 | 37   | 72.5  | 8   | 2 |
| FTB 8-12    | BDN 9-13-5   | 80  | 120 | 8  | 103 | 9  | 17 | 55 | 8  | 47.5 | 112.5 | 8   | 1 |
| FTB 9-13    | BDN10-14-7   | 89  | 129 | 9  | 111 | 9  | 17 | 55 | 17 | 48   | 121   | 8.5 | 2 |
| FTB10-15    | BDN11-16-6   | 100 | 150 | 8  | 133 | 9  | 17 | 75 | 8  | 67.5 | 142.5 | 8   | 1 |
| FTB10-20    | BDN12-22-8   | 108 | 206 | 11 | 184 | 11 | 22 | 64 | 22 | 56   | 196   | 10  | 2 |
| FTB14-24    | BDN16-26-9   | 144 | 244 | 15 | 214 | 15 | 30 | 84 | 30 | 72   | 230   | 12  | 3 |

**BFL** series**PLASTIC MOUNTING BRACKET**

Color G

Color S

- 2 different colored types to match box colors.
- Tough and strong glass fiber filled polycarbonate.

**BFL dimensions****Color Type**

| Code | Color      | Suitable models    |
|------|------------|--------------------|
| G    | White gray | BCAP • BCAR        |
| S    | Light gray | BCPC • BCPK • BCPR |

**Components**

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

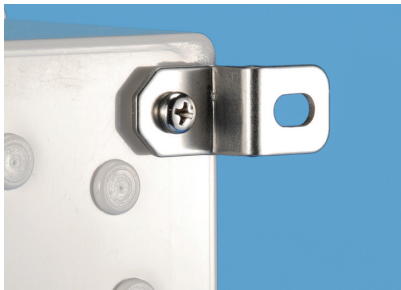
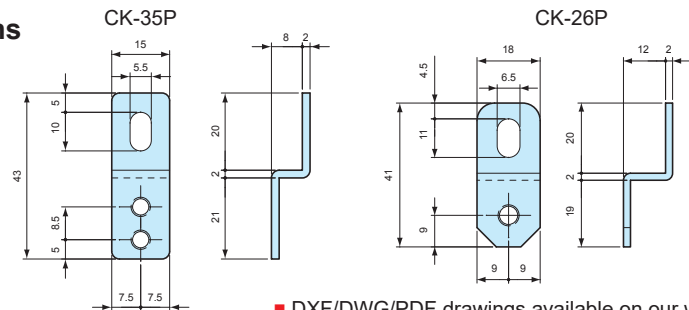
| Part name        | Pcs | Material / Finish                      |
|------------------|-----|----------------------------------------|
| Mounting bracket | 4   | Glass fiber filled polycarbonate • ABS |
| Screw            | 4   | Stainless steel / Unfinished           |

**Product no. / Details**

| Product no. | Suitable models                                                                               | Screw                        |
|-------------|-----------------------------------------------------------------------------------------------|------------------------------|
| BFL-1□      | BCAP • R, BCPC • K • R 0912, 1015, 1121, 1126, 1315, 1318, 1621, 1626, 1722, 1727, 212113     | Self-tapping M4-12 bind head |
| BFL-2□      | BCAP • R, BCPC • K • R 1928, 2030, 2535, 2828, 2838, 3030, 3040, 3535, 3545, 4050, 4060, 5060 | M5-12 bind head              |
| BFL-2-21□   | BCAP • R, BCPC • K • R 212110                                                                 | Self-tapping M4-12 bind head |

■ Please suffix color code at the end of the product number.

\*Not suitable for BCAP1515 models. Use CK-35P (Stainless steel) instead.

**CK** series**STAINLESS STEEL MOUNTING BRACKET****CK dimensions****Components**

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

| Part name        | Pcs | Material               | Finish        |
|------------------|-----|------------------------|---------------|
| Mounting bracket | 4   | Stainless steel SUS304 | Barrel finish |
| Screw            | 4   | Stainless steel        | Unfinished    |

**Product no. / Details**

| Product no. | Suitable models                                                                               | Screw                       |
|-------------|-----------------------------------------------------------------------------------------------|-----------------------------|
| CK-35P      | BCAP • R, BCPC • K • R 0912, 1015, 1121, 1126, 1315, 1318, 1515, 1621, 1626, 1722, 1727, 2121 | Self-tapping M4-10 pan head |
| CK-26P      | BCAP • R, BCPC • K • R 1928, 2030, 2535, 2828, 2838, 3030, 3040, 3535, 3545, 4050, 4060       | M5-10 pan head              |

**MT** series**PCB MOUNTING SCREW**

- PCB mounting screws for inner bosses of BCAP • BCAR • BCPC • BCPK • BCPR series.

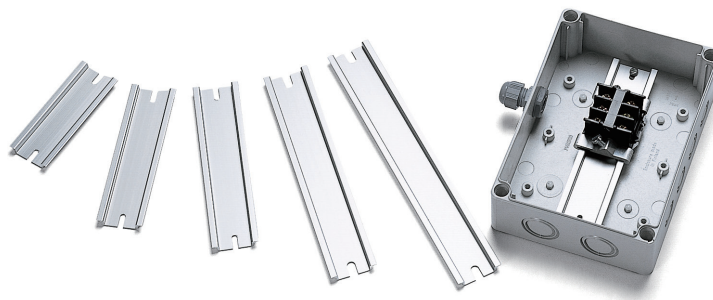
**Product no. / Details**

| Product no. | Screw details               | Material | Finish             | Pack of |
|-------------|-----------------------------|----------|--------------------|---------|
| MT4-8T      | Self-tapping M4-8 bind head | Steel    | Trivalent chromate | 20      |
| MT5-8T      | Self-tapping M5-8 bind head | Steel    | Trivalent chromate | 20      |

**Product no. / Details**

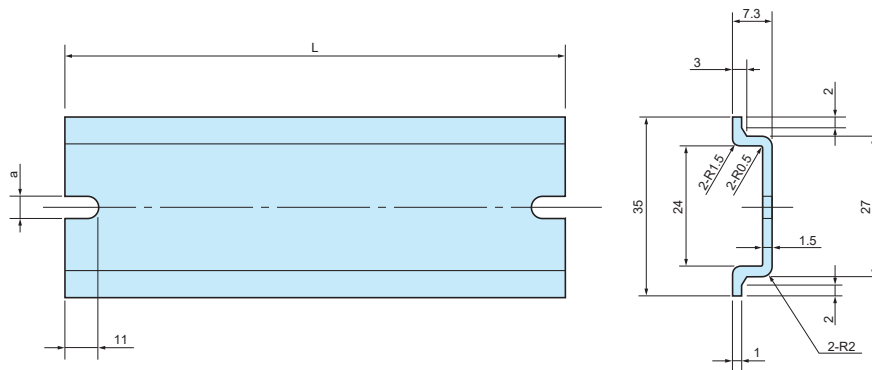
| Product no. | Suitable models                                                                                     | Recommended torque |
|-------------|-----------------------------------------------------------------------------------------------------|--------------------|
| MT4-8T      | BCAP • R, BCPC • K • R 0912, 1015, 1121, 1126, 1315, 1318, 1515, 1621, 1626, 1722, 1727, 1928, 2121 | 0.7N • m           |
| MT5-8T      | BCAP • R, BCPC • K • R 2030, 2535, 2828, 2838, 3030, 3040, 3535, 3545, 4050, 4060, 5060, 5070, 6080 | 1.4N • m           |



**FDR** series**DIN RAIL**

Application example

- DIN Rail for installation of terminals, relays, or switches inside enclosures.
- Suitable for DIN Rail types of various manufacturers.

**Product no. / Details**

| Product no.        | L   | a   | Matching boss pitch | Weight |
|--------------------|-----|-----|---------------------|--------|
| FDR- 50            | 50  | 4.2 | 32 ~ 42             | 8.6    |
| FDR- 57            | 57  | 4.2 | 39 ~ 49             | 9.5    |
| FDR- 66            | 66  | 4.2 | 48 ~ 58             | 10     |
| FDR- 77            | 77  | 4.2 | 59 ~ 69             | 12     |
| FDR- 80            | 80  | 4.2 | 62 ~ 72             | 13     |
| FDR- 87            | 87  | 4.2 | 69 ~ 79             | 14     |
| FDR- 92            | 92  | 4.2 | 74 ~ 84             | 15     |
| FDR-100            | 100 | 4.2 | 82 ~ 92             | 17.8   |
| FDR-106            | 106 | 4.2 | 88 ~ 98             | 19     |
| FDR-110            | 110 | 4.2 | 92 ~ 102            | 20     |
| FDR-120            | 120 | 4.2 | 102 ~ 112           | 21     |
| FDR-128            | 128 | 4.2 | 110 ~ 120           | 23     |
| FDR-137            | 137 | 4.2 | 119 ~ 129           | 24     |
| FDR-142            | 142 | 4.2 | 124 ~ 134           | 25     |
| FDR-146            | 146 | 4.2 | 128 ~ 138           | 26     |
| FDR-150            | 150 | 4.2 | 132 ~ 142           | 25.8   |
| FDR-168            | 168 | 4.2 | 150 ~ 160           | 30     |
| FDR-170            | 170 | 4.2 | 152 ~ 162           | 30     |
| FDR-186            | 186 | 4.2 | 168 ~ 178           | 32     |
| FDR-202            | 202 | 4.2 | 184 ~ 194           | 37     |
| FDR-205            | 205 | 4.2 | 187 ~ 197           | 36     |
| FDR-223            | 223 | 4.2 | 205 ~ 215           | 39.3   |
| FDR-226            | 226 | 4.2 | 208 ~ 218           | 39     |
| FDR-235            | 235 | 4.2 | 217 ~ 227           | 42     |
| FDR-242            | 242 | 4.2 | 224 ~ 234           | 43     |
| FDR-249            | 249 | 4.2 | 231 ~ 241           | 43     |
| FDR-283            | 283 | 4.2 | 265 ~ 275           | 49     |
| FDR-300            | 300 | 4.2 | 282 ~ 292           | 52     |
| <b>NEW</b> FDR-314 | 314 | 4.2 | 296 ~ 306           | 51.5   |
| FDR-350            | 350 | 4.2 | 332 ~ 342           | 60     |
| FDR-400            | 400 | 4.2 | 382 ~ 392           | 69     |
| FDR-450            | 450 | 4.2 | 432 ~ 442           | 78     |
| FDR-550            | 550 | 4.2 | 532 ~ 542           | 94     |

| Product no.         | L     | a   | Matching boss pitch | Weight |
|---------------------|-------|-----|---------------------|--------|
| <b>NEW</b> FDR-B106 | 106   | 6.5 | 90 ~ 96             | 17.5   |
| FDR-B124            | 124   | 6.5 | 108 ~ 114           | 21.4   |
| FDR-B142            | 142   | 6.5 | 126 ~ 132           | 24     |
| FDR-B160            | 160   | 6.5 | 144 ~ 150           | 28     |
| FDR-B165            | 165   | 6.5 | 149 ~ 155           | 28     |
| FDR-B176            | 176   | 6.5 | 160 ~ 166           | 30     |
| FDR-B183            | 183   | 6.5 | 167 ~ 173           | 30     |
| FDR-B196            | 196   | 6.5 | 180 ~ 186           | 33     |
| FDR-B223            | 223   | 6.5 | 207 ~ 213           | 37     |
| FDR-B256            | 256   | 6.5 | 240 ~ 246           | 43     |
| FDR-B260            | 260   | 6.5 | 244 ~ 250           | 45     |
| <b>NEW</b> FDR-B276 | 276   | 6.5 | 260 ~ 266           | 47.5   |
| FDR-B303            | 303   | 6.5 | 287 ~ 293           | 52     |
| <b>NEW</b> FDR-B327 | 327   | 6.5 | 311 ~ 317           | 56.2   |
| FDR-B338            | 338   | 6.5 | 322 ~ 328           | 57     |
| FDR-B360            | 360   | 6.5 | 344 ~ 350           | 63     |
| FDR-B376            | 376   | 6.5 | 360 ~ 366           | 64     |
| FDR-B383            | 383   | 6.5 | 367 ~ 373           | 65     |
| FDR-B463            | 463   | 6.5 | 447 ~ 453           | 87     |
| FDR-1000            | 1,000 | —   | —                   | 169.5  |

- Material / Finish: A6063S-T5 / Silver anodized
- FDR-1000 does not have mounting holes.

## SSK SERIES

## POLE MOUNTING BRACKET

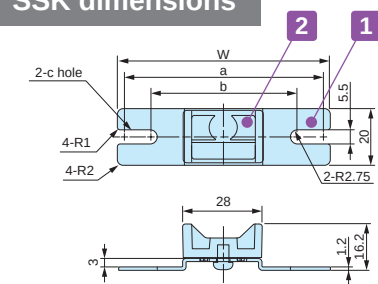


- Stainless steel pole mounting bracket for SPCM • SPCP and BCAL • BCAS series.
- Easy pole mount with the use of SSK-B mounting screw and PKB mounting belt.
- DXF/DWG/PDF drawings available on our website.
- SSK-P models includes plastic mounting brackets.

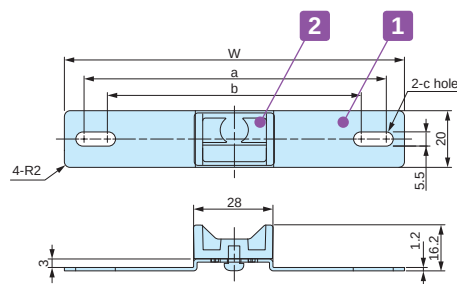


PKB series

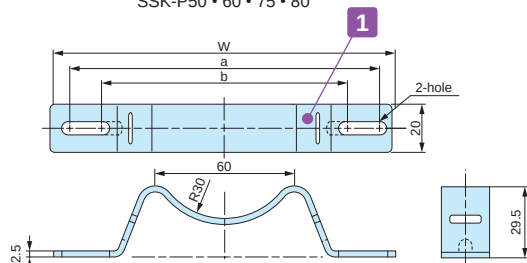
## SSK dimensions



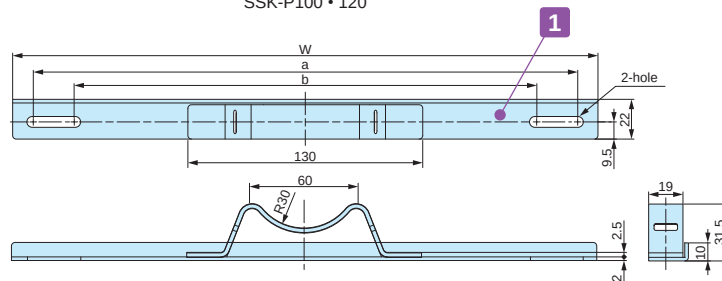
SSK-P50 • 60 • 75 • 80



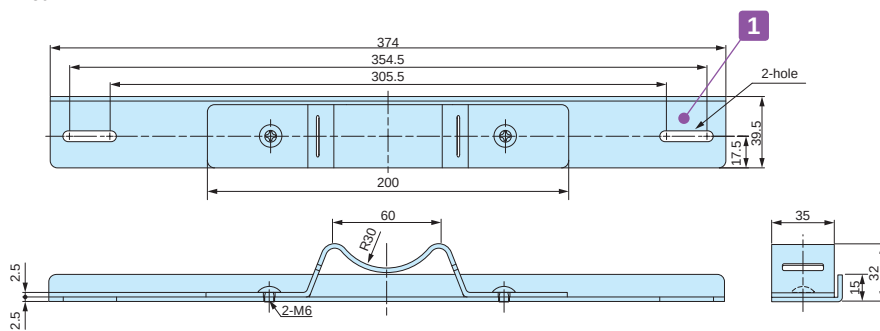
SSK-P100 • 120



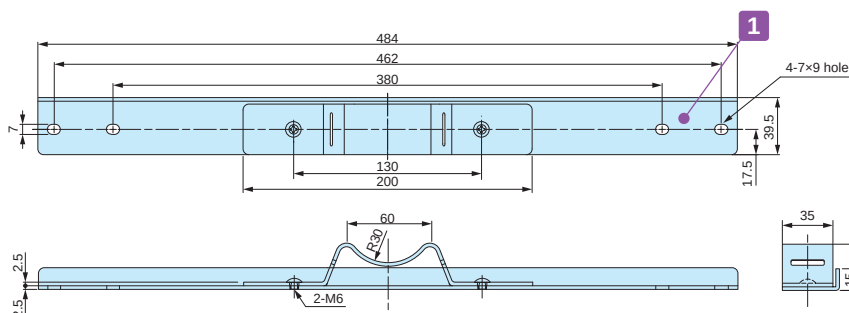
SSK-160 ~ 250



SSK-280 ~ 350



SSK-400



SSK-530

## Components

| No. | Part name                           | Pcs | Material               | Color / Finish |
|-----|-------------------------------------|-----|------------------------|----------------|
| 1   | Bracket                             | 2   | Stainless steel SUS304 | Barrel finish  |
| 2   | Plastic bracket (SSK-P models only) | 2   | ASA UL94HB             | White gray     |

■ Screws included with SSK brackets are for BCAP • BCAR • BCPK • BCPR series use only. For other series, please utilize SSK-B screw set.

## Product no. / Dimensions

| Product no. | W   | a     | b     | c        | Suitable mounting belt | Pack of |
|-------------|-----|-------|-------|----------|------------------------|---------|
| SSK-P50     | 50  | 44.5  | 37.5  | 5.5× 9   | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-P60     | 60  | 54.5  | 47.5  | 5.5× 9   | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-P75     | 75  | 69.5  | 55.5  | 5.5×12.5 | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-P80     | 80  | 74.5  | 64.5  | 5.5×10.5 | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-P100    | 100 | 88.1  | 76.5  | 5.5×11.3 | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-P120    | 120 | 106.5 | 88.5  | 5.5×14.5 | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-160     | 142 | 129.5 | 106.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-170     | 152 | 142.3 | 101   | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-200     | 174 | 161.5 | 112.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-210     | 192 | 180.5 | 131.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-250     | 230 | 215.5 | 166.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-280     | 260 | 244.5 | 195.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-300     | 280 | 264.5 | 215.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-350     | 324 | 302.5 | 253.5 | —        | PKB-10PM, 10P PKB-10S  | 2       |
| SSK-400     | 374 | 354.5 | 305.5 | —        | PKB-20S                | 2       |
| SSK-530     | 484 | 462   | 380   | 7×9      | PKB-20S                | 2       |

## SSK-B SERIES

## MOUNTING SCREW SET for SSK



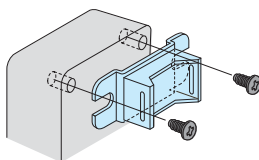
- Mounting screw set for use with SSK pole mounting bracket.
- See chart on page SSK-3 for appropriate bracket/screw/box combination.
- Material / Finish : Stainless steel / Unfinished.

## Product no. / Dimensions

| Product no. | Included screws         | Suitable box        | Pcs |
|-------------|-------------------------|---------------------|-----|
| SSK-B4-15N  | M4-15 Pan head with nut | BCAS060905 ~ 212310 | 4   |
| SSK-B4-25N  | M4-25 Pan head with nut | SPCP • SPCM series  | 4   |
| SSK-B5-10   | M5-10 Pan head          | BCAL series         | 4   |

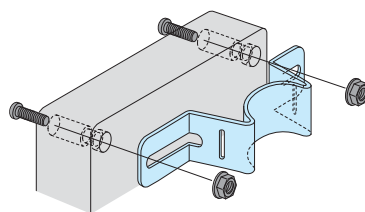
## ■ Installation Example

BCAS050604, 050605



Use screws included with SSK-P

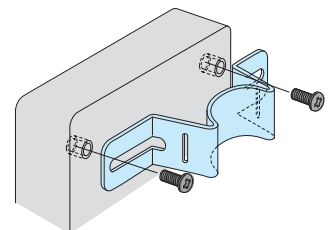
M4 / M5 Pan head with nut fastening



SSK-B4-15N

SSK-B4-25N

Pan head screw into insert nut



SSK-B5-10

## POLE MOUNTING BRACKET / SCREW SET MATCHING CHART

## SPCM • SPCP series

| Box Product no. |                                                            | SSK Product no. |                  | Screw set Product no. |
|-----------------|------------------------------------------------------------|-----------------|------------------|-----------------------|
|                 |                                                            | Vertical mount  | Horizontal mount |                       |
| SPCP<br>SPCM    | 081304, 081305<br>081306, 081308<br>081310, 081313         | SSK-P75         | SSK-160          | SSK-B4-25N            |
|                 | 101004, 101006                                             | SSK-P100        | SSK-P100         | SSK-B4-25N            |
|                 | 131304, 131305<br>131306, 131308<br>131310, 131313         | SSK-160         | SSK-160          | SSK-B4-25N            |
|                 | 131804, 131805<br>131806, 131808<br>131810, 131813, 131815 | SSK-160         | SSK-200          | SSK-B4-25N            |
|                 | 181808, 181810<br>181813, 181815                           | SSK-200         | SSK-200          | SSK-B4-25N            |
|                 | 182508, 182510, 182515                                     | SSK-200         | SSK-280          | SSK-B4-25N            |
|                 |                                                            |                 |                  |                       |
|                 |                                                            |                 |                  |                       |

## BCAL series

| Box Product no. |                | SSK Product no. |                  | Screw set Product no. |
|-----------------|----------------|-----------------|------------------|-----------------------|
|                 |                | Vertical mount  | Horizontal mount |                       |
| BCAL            | 191913 ※       | SSK-P120        | SSK-200          | SSK-B5-10             |
|                 | 192813, 192818 | SSK-200         | SSK-250          | SSK-B5-10             |
|                 | 193813, 193818 | SSK-200         | SSK-350          | SSK-B5-10             |
|                 | 282813         | SSK-250         | SSK-280          | SSK-B5-10             |
|                 | 283413         | SSK-280         | SSK-280          | SSK-B5-10             |
|                 | 283813, 283818 | SSK-280         | SSK-350          | SSK-B5-10             |
|                 | 285613         | SSK-280         | SSK-530          | SSK-B5-10             |
|                 | 385618         | SSK-400         | SSK-530          | SSK-B5-10             |

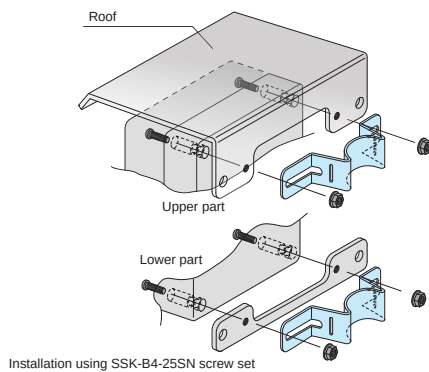
※Use screws included with SSK bracket for vertical mount

## BCAS series

| Box Product no. |                                          | SSK Product no. |                  | Screw set Product no.                |
|-----------------|------------------------------------------|-----------------|------------------|--------------------------------------|
|                 |                                          | Vertical mount  | Horizontal mount |                                      |
| BCAS            | 050604, 050605                           | SSK-P50         | SSK-P60          | Use screws included with SSK bracket |
|                 | 060905                                   | SSK-P60         | SSK-P100         | SSK-B4-15N                           |
|                 | 071005 ※                                 | SSK-P75         | SSK-P100         | SSK-B4-15N                           |
|                 | 080806                                   | SSK-P75         | SSK-P75          | SSK-B4-15N                           |
|                 | 081104, 081107<br>081108, 081110         | SSK-P75         | SSK-P120         | SSK-B4-15N                           |
|                 | 081307, 081308                           | SSK-P75         | SSK-160          | SSK-B4-15N                           |
|                 | 081807, 081808                           | SSK-P75         | SSK-210          | SSK-B4-15N                           |
|                 | 082507, 082508                           | SSK-P75         | SSK-280          | SSK-B4-15N                           |
|                 | 101007, 101010                           | SSK-P100        | SSK-P100         | SSK-B4-15N                           |
|                 | 101807                                   | SSK-P100        | SSK-210          | SSK-B4-15N                           |
|                 | 102007                                   | SSK-P100        | SSK-250          | SSK-B4-15N                           |
|                 | 102307                                   | SSK-P100        | SSK-250          | SSK-B4-15N                           |
|                 | 121207, 121210                           | SSK-P120        | SSK-200          | SSK-B4-15N                           |
|                 | 141709                                   | SSK-160         | SSK-200          | SSK-B4-15N                           |
|                 | 142309                                   | SSK-160         | SSK-250          | SSK-B4-15N                           |
|                 | 151507, 151510                           | SSK-170         | SSK-170          | SSK-B4-15N                           |
|                 | 152004, 152007<br>152020, 152013, 152016 | SSK-170         | SSK-250          | SSK-B4-15N                           |
|                 | 152510, 152513                           | SSK-170         | SSK-280          | SSK-B4-15N                           |
|                 | 161607                                   | SSK-170         | SSK-170          | SSK-B4-15N                           |
|                 | 202010, 202013<br>202016, 202019         | SSK-250         | SSK-250          | SSK-B4-15N                           |
|                 | 212310                                   | SSK-250         | SSK-250          | SSK-B4-15N                           |
|                 |                                          |                 |                  |                                      |
|                 |                                          |                 |                  |                                      |
|                 |                                          |                 |                  |                                      |
|                 |                                          |                 |                  |                                      |
|                 |                                          |                 |                  |                                      |
|                 |                                          |                 |                  |                                      |

※Use screws included with SSK bracket for vertical mount

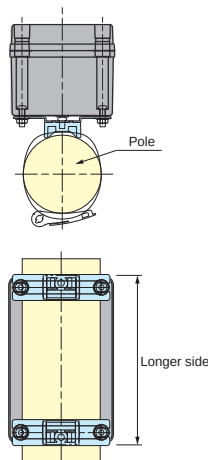
- For installation of SR series outdoor roof on SPCM • SPCP series  
SR series (For SPCM • SPCP - see page SPCM • SPCM-ACC-2)



- Select SSK bracket depending on mounting type (Vertical or Horizontal).

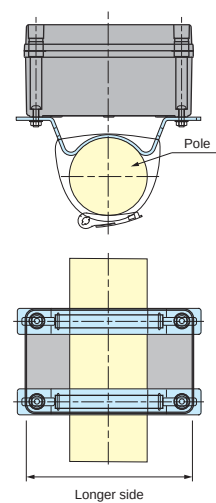
## Vertical mount

(Longer vertical side)



## Horizontal mount

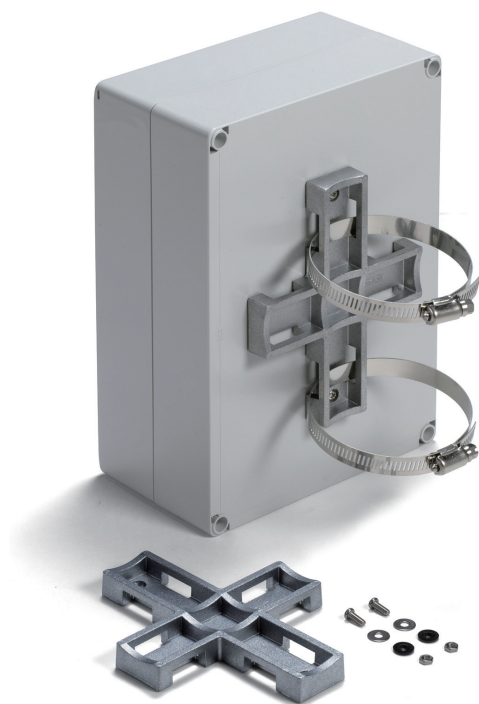
(Longer horizontal side)





## WGMB-2SW

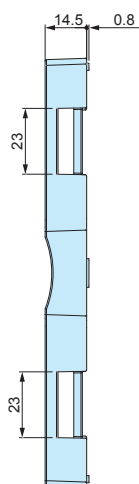
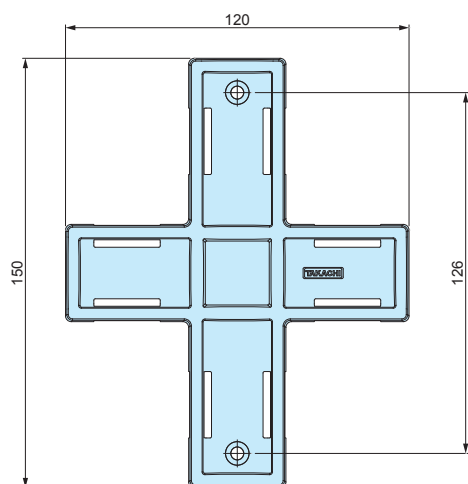
## POLE MOUNTING BRACKET



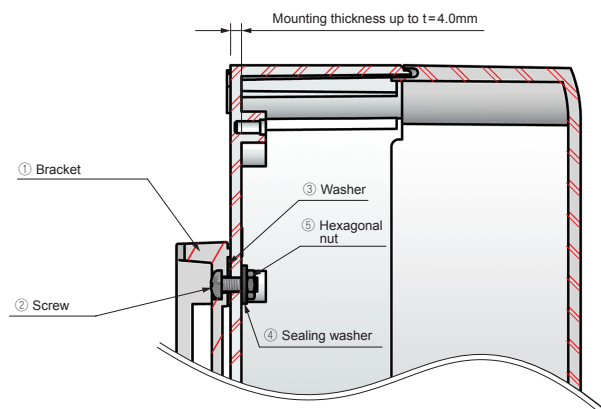
- Pole mount bracket made from robust diecast aluminium.
- Bracket can be mounted on both vertically, and horizontally.
- Sealing washers enables the installation to have a protection class equivalent to IPX7, X5.
- Hole milling on enclosures is required when installing mounting bracket.
- Pole mount is possible with the use of SNB or PKB series mounting belt. (See page 323 ~ 324)
- Installation can be done on a variety of enclosures made from plastic, diecast aluminium or stainless steel.

## WGMB-2SW dimensions

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



## Installation example



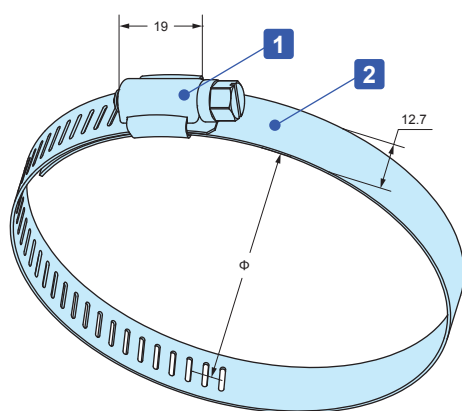
## Components

| No. | Part name                    | Pcs | Material                | Color / Finish       |
|-----|------------------------------|-----|-------------------------|----------------------|
| 1   | Bracket                      | 1   | Diecast aluminium ADC12 | Natural / Shot blast |
| 2   | Screw (Pan head M4-10)       | 2   | Stainless steel         | Unfinished           |
| 3   | Washer                       | 2   | Stainless steel         | Unfinished           |
| 4   | Sealing washer               | 2   | NBR, SPCC               | Black                |
| 5   | Hexagonal nut (M4-JIS Type3) | 2   | Stainless steel         | Unfinished           |

## Product no. / Details

| Product no. | Mounting thickness | Recommended torque   | Weight (g) |
|-------------|--------------------|----------------------|------------|
| WGMB-2SW    | Up to t=4.0mm      | 0.45N • m ~ 0.5N • m | 130        |

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

**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 |

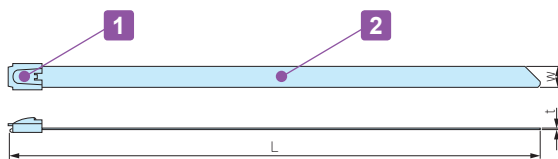
**Product no. / Details**

| 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        |

**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 |

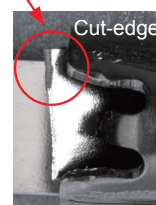
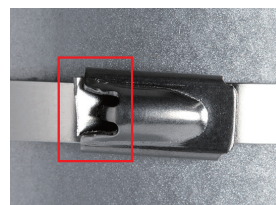
**Product no. / Details**

| 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

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

PKB-10PM, 10P



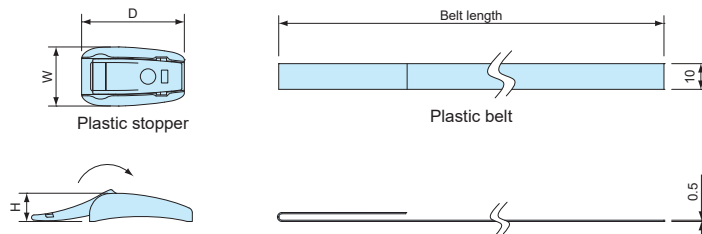
PKB-10S, 20S

- 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.

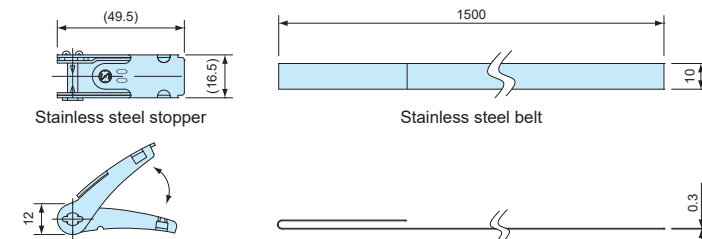
**PKB dimensions**

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

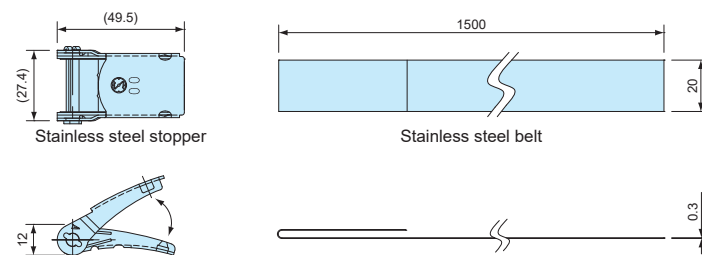
PKB-10PM, 10P



PKB-10S



PKB-20S

**Components**

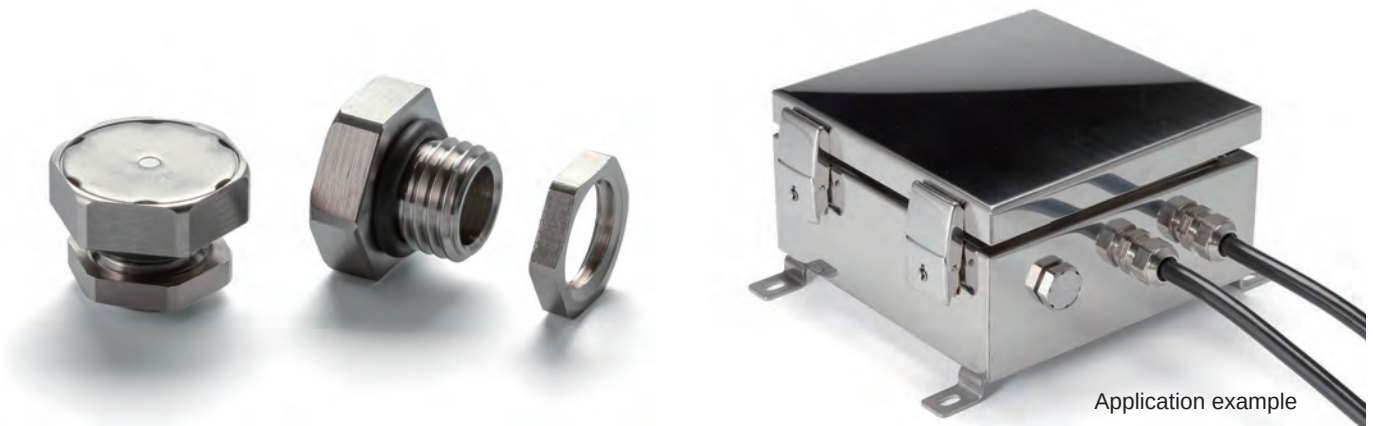
| Part name | Material                     | Color / Finish                |
|-----------|------------------------------|-------------------------------|
| Stopper   | Stainless steel SUS304 • POM | Barrel finish • Black         |
| Belt      | Stainless steel SUS430 • PET | Bright annealed finish •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

## PMF-12M

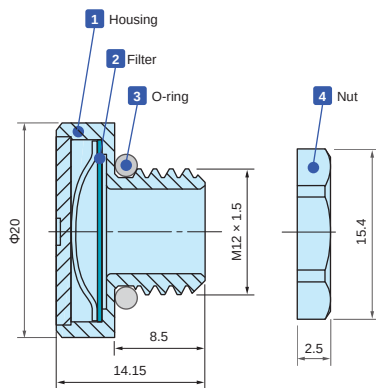
## STAINLESS STEEL PROTECTIVE VENT



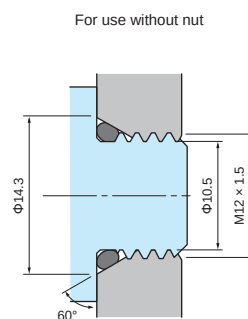
Application example

- Stainless steel protective vent for superior durability and chemical resistance.
- IP68 protection class (water depth 2 meters / 60 mins) and -40°C ~ +125°C operating temperature range allows it to be used in various environments.
- Suitable for enclosures with capacities of 20 litres or under.
- For outdoor use, installation on the side of the enclosure unit is recommended.

## PMF-12M dimensions

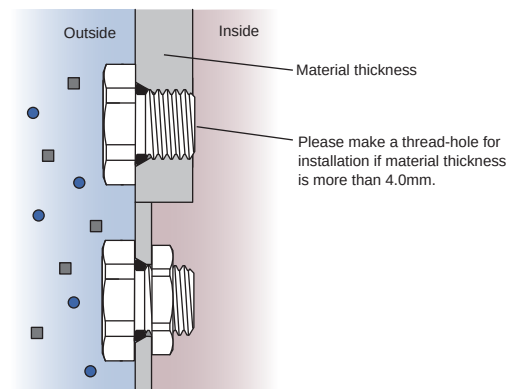


## Hole milling drawings



- While Φ12.2mm through-hole is sufficient for installation, 60° angle tapered hole is recommended to prevent deformation of the O-ring.

## Installation drawings



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

## Technical Data

|                    |                                                                                                                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Airflow            | 1600ml / min (dp = 7 kPa)                                                                                                                                                                                                          |
| Recommended Torque | 0.6 ~ 1.2 N • m                                                                                                                                                                                                                    |
| Certifications     | IEC60529 (Protection class test) : IP66 • IP67 • IP68 • IP69K<br>IEC60068-2-1, 2, 14 (Heat resistance test) : -40°C ~ +125°C<br>IEC60068-2-78 (Humidity test) : 85°C • 85% humidity • 1000 hours<br>IEC60068-2-64 (Vibration test) |

## Product no. / Details

| Product no. | Material        |          |          |                       | G           |            | Nut SW |
|-------------|-----------------|----------|----------|-----------------------|-------------|------------|--------|
| ● Metallic  | 1 Housing       | 2 Filter | 3 O-ring | 4 Nut                 | Thread size | Mount hole |        |
| PMF-12M     | Stainless steel | PTFE     | Silicone | Brass • Nickel plated | M12 x 1.5   | Φ12.2      | 14     |

## PMF series

## PROTECTIVE VENT

## Pressure Equalization / Ventilation



Application Example

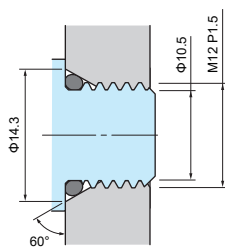
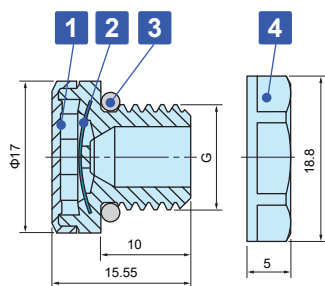
- Protective vent protects the enclosure from deformation by equalizing internal and external pressure differences, as well as venting the gas generated within the enclosure.
- IP68 protection class (water depth 2 meters / 60 mins) with an operating temperature range  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  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

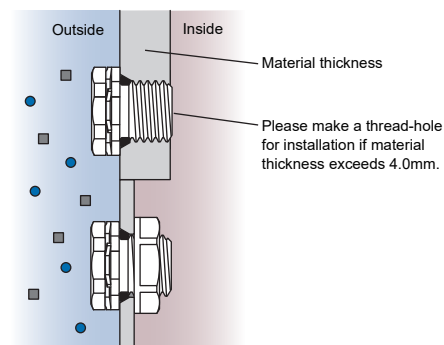
## Hole milling drawings

## 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       |





- Economical metal cable gland.
- Equivalent to IP67 protection class.
- Wide selection available from M12 ~ M32.

## Technical Data

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

\*In-house test

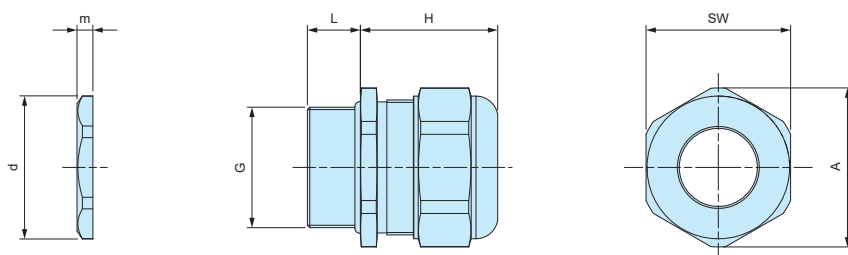


## Components

| No. | Part name      | Material | Color / Finish |
|-----|----------------|----------|----------------|
| 1   | Cap            | Brass    | Nickel plated  |
| 2   | Sealing Insert | TPE      | Black          |
| 3   | Connector      | Brass    | Nickel plated  |
| —   | O-ring         | NBR      | Black          |
| 4   | Lock Nut       | Brass    | Nickel plated  |

## RMC dimensions

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



## Product no. / Details

| Product no. | G           |               | Cable range |      | L  | H<br>Max | SW | A    | d    | m   | Pack of |
|-------------|-------------|---------------|-------------|------|----|----------|----|------|------|-----|---------|
|             | Thread size | Mounting hole | Min         | Max  |    |          |    |      |      |     |         |
| RMC12-6.5   | M12×1.5     | Φ12.2         | 5           | 6.5  | 10 | 18       | 15 | 16.5 | 15.4 | 2.5 | 1       |
| RMC12-7.5   | M12×1.5     | Φ12.2         | 6.5         | 7.5  | 10 | 18       | 15 | 16.5 | 15.4 | 2.5 | 1       |
| RMC16-8     | M16×1.5     | Φ16.2         | 6.5         | 8    | 10 | 23       | 18 | 19.7 | 19.7 | 2.8 | 1       |
| RMC16-10.5  | M16×1.5     | Φ16.2         | 8           | 10.5 | 10 | 23       | 18 | 19.7 | 19.7 | 2.8 | 1       |
| RMC20-11    | M20×1.5     | Φ20.2         | 9.5         | 11   | 10 | 23.5     | 24 | 26.4 | 24.2 | 3.2 | 1       |
| RMC20-14.5  | M20×1.5     | Φ20.2         | 11          | 14.5 | 10 | 23.5     | 24 | 26.4 | 24.2 | 3.2 | 1       |
| RMC25-16    | M25×1.5     | Φ25.2         | 14          | 16   | 11 | 28.5     | 30 | 33   | 29.7 | 3.3 | 1       |
| RMC25-19    | M25×1.5     | Φ25.2         | 16          | 19   | 11 | 28.5     | 30 | 33   | 29.7 | 3.3 | 1       |
| RMC32-21    | M32×1.5     | Φ32.3         | 18          | 21   | 13 | 30.5     | 36 | 39.6 | 37.4 | 3.5 | 1       |
| RMC32-25.5  | M32×1.5     | Φ32.3         | 21          | 25.5 | 13 | 30.5     | 36 | 39.6 | 37.4 | 3.5 | 1       |

IP68



- High water protection IP68 (1bar / 30min) metal cable gland.
- Wide selection, for M6 ~ M50.  
Suitable for  $\Phi 2$  mm ~  $\Phi 42$  mm cable.

## Technical Data

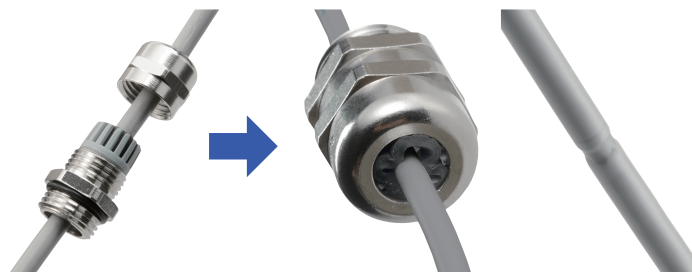
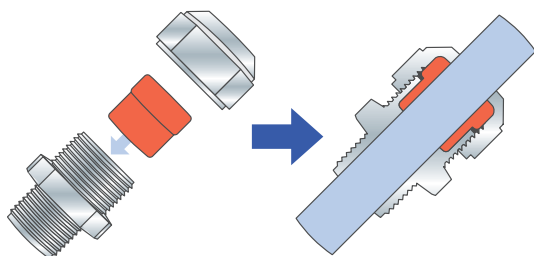
Protection class : IP68 1bar / 30min  
 Operating temperature : -40°C ~ +100°C  
 Compliant with EN50262 Ver. A

## AGM series

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

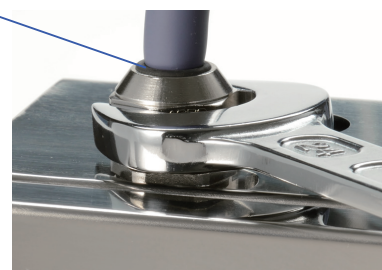
## Lamellar insert type

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



- 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.

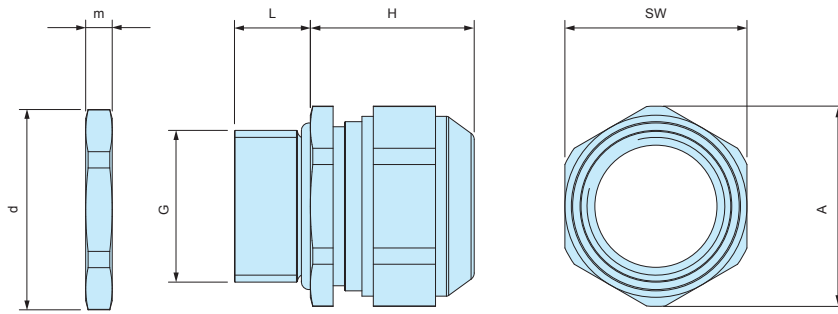


## Components

| No. | Part name      | Material | Color / Finish |
|-----|----------------|----------|----------------|
| 1   | Cap            | Brass    | Nickel plated  |
| 2   | Sealing insert | TPE      | Black          |
| 3   | Connector      | Brass    | Nickel plated  |
| -   | O-ring         | NBR      | Black          |
| 4   | Lock nut       | Brass    | Nickel plated  |

## AGM dimensions

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



## Product no. / Details

| Product no. | G           |               | Cable range |      | L  | H<br>Max | SW | A    | d    | m   | Pack<br>of |
|-------------|-------------|---------------|-------------|------|----|----------|----|------|------|-----|------------|
|             | Thread size | Mounting hole | Min         | Max  |    |          |    |      |      |     |            |
| AGM6-2.5    | M6×1.0      | Φ6.2          | 2           | 2.5  | 8  | 12       | 8  | 9    | 10   | 2.8 | 1          |
| AGM6-3      | M6×1.0      | Φ6.2          | 2.5         | 3.0  | 8  | 12       | 8  | 9    | 10   | 2.8 | 1          |
| AGM6-3.5    | M6×1.0      | Φ6.2          | 3.0         | 3.5  | 8  | 12       | 8  | 9    | 10   | 2.8 | 1          |
| AGM8-5      | M8×1.25     | Φ8.2          | 3.5         | 4.7  | 10 | 14       | 11 | 12   | 12   | 3   | 1          |
| AGM10-6     | M10×1.5     | Φ10.2         | 4.0         | 6.0  | 10 | 15       | 13 | 14.3 | 14   | 2.8 | 1          |
| AGM12-8     | M12×1.5     | Φ12.2         | 6.5         | 8.0  | 10 | 17       | 15 | 16.5 | 16.5 | 2.8 | 1          |
| AGM16-10.5  | M16×1.5     | Φ16.2         | 8.0         | 10.5 | 10 | 21       | 18 | 20   | 21   | 3   | 1          |
| AGM20-15    | M20×1.5     | Φ20.2         | 11.0        | 15.0 | 10 | 23       | 24 | 26.5 | 26.5 | 3.5 | 1          |
| AGM25-20    | M25×1.5     | Φ25.2         | 16.0        | 20.0 | 11 | 28       | 30 | 33   | 33   | 4   | 1          |
| AGM32-25.5  | M32×1.5     | Φ32.3         | 21.0        | 25.5 | 13 | 29.5     | 36 | 39.5 | 39.5 | 4   | 1          |
| AGM40-28.5  | M40×1.5     | Φ40.3         | 24.0        | 28.5 | 13 | 32       | 46 | 50.7 | 51   | 5   | 1          |
| AGM40-33    | M40×1.5     | Φ40.3         | 28.5        | 33.0 | 13 | 32       | 46 | 50.7 | 51   | 5   | 1          |
| AGM50-37    | M50×1.5     | Φ50.4         | 33.0        | 37.0 | 14 | 34       | 55 | 59.7 | 60   | 5.5 | 1          |
| AGM50-42    | M50×1.5     | Φ50.4         | 37.0        | 42.0 | 14 | 34       | 55 | 59.7 | 60   | 5.5 | 1          |



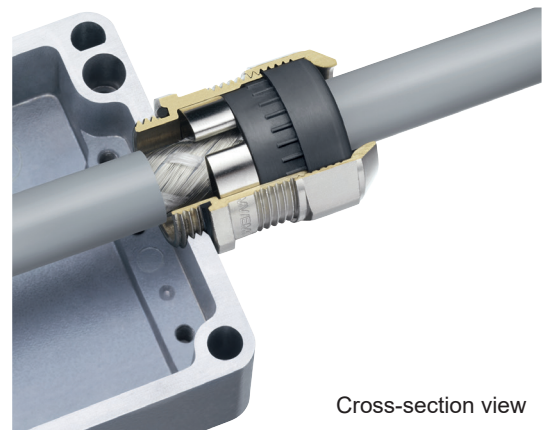
- Optimal contact spring provides excellent shield contact and the smallest possible transfer impedance.
- Clawed lock nut makes a good EMC shield contact possible on conductive enclosures.
- Shape of the contact spring not only allows for a large clamping range to the shield but also enables easy and faster installation and re-installation.
- 2-piece detachable sealing inserts can be adapted to the wider existing cable diameter on site.  
(AGE12 available only with 1-piece sealing insert)

## Technical Data

Protection class : IP68 2bar / 30min, IP69K  
 Operating temperature : -60°C ~ +100°C  
 Compliant with IEC62444 Var. A

## Cable Range

| No.        | Sealing insert type |               |
|------------|---------------------|---------------|
|            | Assembled           | Detached      |
| AGE16-10.5 | Φ 6 ~ Φ 7.5         | Φ 7.5 ~ Φ10.5 |
| AGE20-15   | Φ 8 ~ Φ10.5         | Φ10.5 ~ Φ15   |
| AGE25-20   | Φ12.5 ~ Φ15         | Φ15 ~ Φ20     |
| AGE32-25   | Φ17 ~ Φ20           | Φ20 ~ Φ25     |



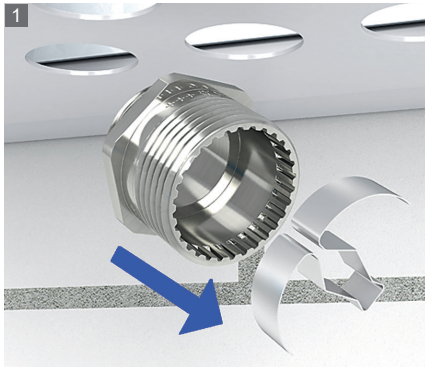
Cross-section view

## Components

| No. | Part name      | Material        | Color / Finish |
|-----|----------------|-----------------|----------------|
| 1   | Cap            | Brass           | Nickel plated  |
| 2   | Sealing insert | TPE             | Black          |
| 3   | Connector      | Brass           | Nickel plated  |
| 4   | Contact spring | Stainless steel | Unfinished     |
| -   | O-Ring         | NBR             | Black          |
| 5   | Lock-nut       | Brass           | Nickel plated  |



## INSTALLATION Instruction



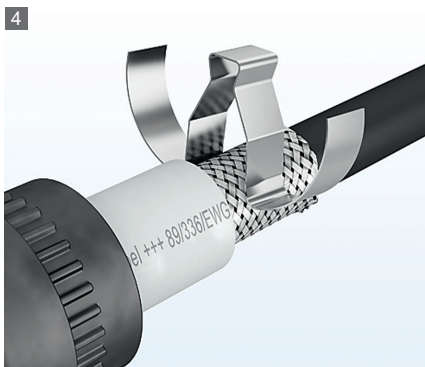
Remove the contact spring from the connector.



Install the connector onto the enclosure.



Strip the cable.



Clip the contact spring on the shielded cable.



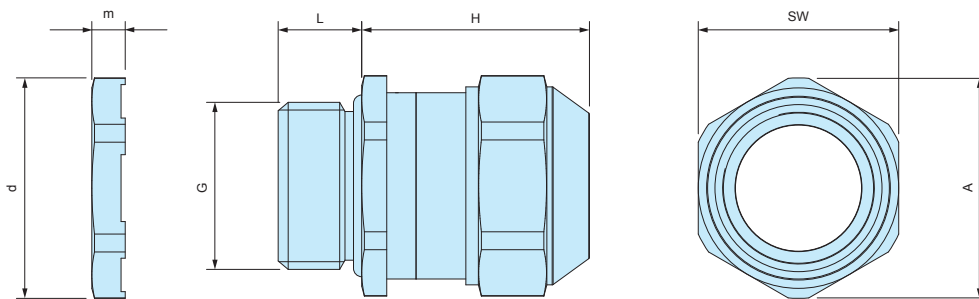
Pass the cable through the sealing insert and cap.



Tighten the cap to complete.

## AGE dimensions

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



## Product no. / Details

| Product no. | G           |               | Cable range |      | L  | H<br>Max | SW | A    | d    | m   | Pack of |
|-------------|-------------|---------------|-------------|------|----|----------|----|------|------|-----|---------|
|             | Thread size | Mounting hole | Min         | Max  |    |          |    |      |      |     |         |
| AGE12-5     | M12×1.5     | Φ12.2         | 3.5         | 5.0  | 10 | 22       | 15 | 16.5 | 16.5 | 3.5 | 1       |
| AGE12-6.5   | M12×1.5     | Φ12.2         | 5.0         | 6.5  | 10 | 22       | 15 | 16.5 | 16.5 | 3.5 | 1       |
| AGE16-10.5  | M16×1.5     | Φ16.2         | 6.0         | 10.5 | 10 | 25       | 18 | 20   | 21   | 3.5 | 1       |
| AGE20-15    | M20×1.5     | Φ20.2         | 8.0         | 15.0 | 10 | 27       | 24 | 26.5 | 26.5 | 4   | 1       |
| AGE25-20    | M25×1.5     | Φ25.2         | 12.5        | 20.0 | 11 | 33       | 30 | 33   | 33   | 4   | 1       |
| AGE32-25    | M32×1.5     | Φ32.3         | 17.0        | 25.0 | 13 | 34       | 36 | 39.5 | 39.5 | 5   | 1       |

## AGH SERIES

## HEAT RESISTANT METAL CABLE GLAND



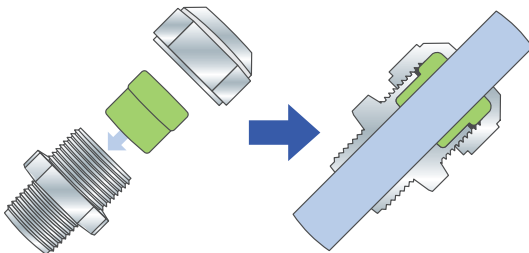
- Heat resistant sealing insert made of FPM material. Resistant up to 200°C
- IP68 1bar / 30min high performance waterproof cable gland.

## Technical Data

Protection class : Protection class IP68 1bar / 30min  
 10m depth immersion in 30 minutes  
 Operating temperature : -40°C ~ +200°C  
 Compliant with EN50262 Var. A

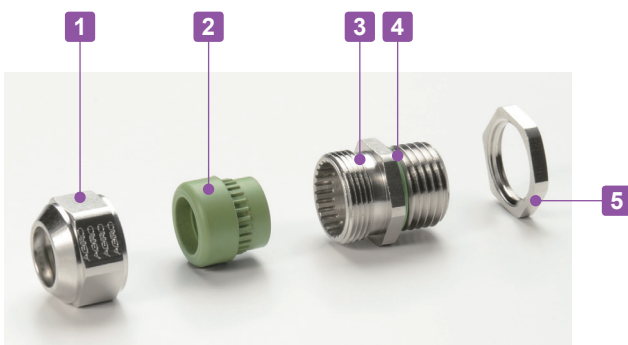
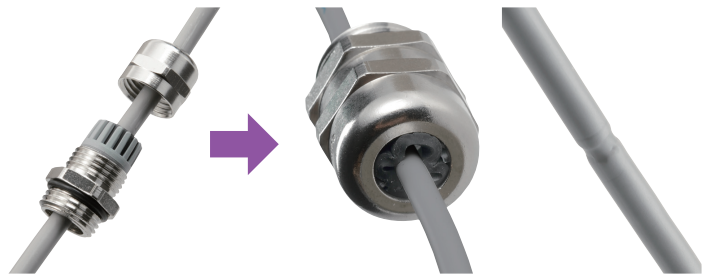
## AGH series

Thicker sealing insert evenly clasp onto the cable by having a larger area.  
 Remains durable even after repeated tightening / loosening.

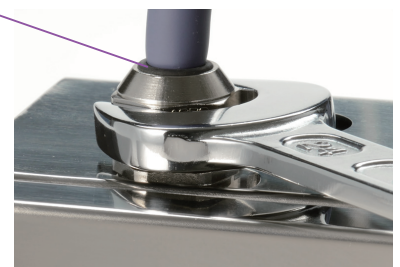


## Conventional cable gland

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



- Tightening torque varies depending on the cable diameter.  
 Tighten until the sealing insert protrudes slightly from the cap.



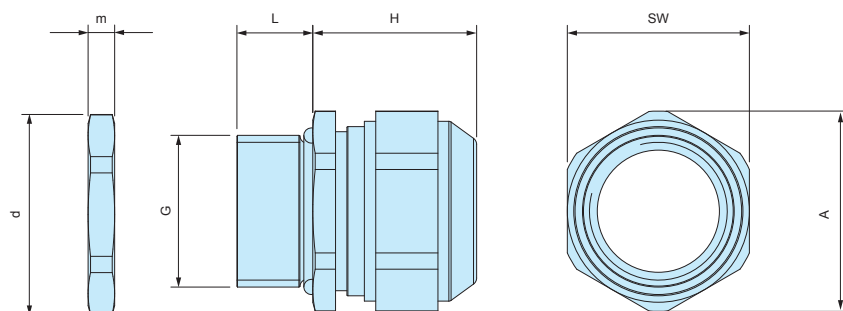
## Components

| No. | Part name      | Material | Color / Finish |
|-----|----------------|----------|----------------|
| 1   | Cap            | Brass    | Nickel plated  |
| 2   | Sealing insert | FPM      | Green          |
| 3   | Connector      | Brass    | Nickel plated  |
| 4   | O-Ring         | FPM      | Green          |
| 5   | Lock-nut       | Brass    | Nickel plated  |



## AGH dimensions

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



### Product no. / Dimensions

| Product no. | G           |               | Cable range |      | L  | H<br>Max | SW | A    | d    | m   | Pack of |
|-------------|-------------|---------------|-------------|------|----|----------|----|------|------|-----|---------|
|             | Thread size | Mounting hole | Min         | Max  |    |          |    |      |      |     |         |
| AGH10-6     | M10×1.5     | Φ10.2         | 4.0         | 6.0  | 10 | 15       | 13 | 14.3 | 14.2 | 3   | 1       |
| AGH12-8     | M12×1.5     | Φ12.2         | 6.5         | 8.0  | 10 | 17       | 15 | 16.5 | 16.5 | 3   | 1       |
| AGH16-10.5  | M16×1.5     | Φ16.2         | 8.0         | 10.5 | 10 | 20       | 18 | 20   | 21   | 3   | 1       |
| AGH20-15    | M20×1.5     | Φ20.2         | 11.0        | 15.0 | 10 | 23       | 24 | 26.5 | 26.3 | 3.5 | 1       |
| AGH25-20    | M25×1.5     | Φ25.2         | 16.0        | 20.0 | 11 | 27       | 30 | 33   | 33   | 4   | 1       |
| AGH32-25.5  | M32×1.5     | Φ32.3         | 21.0        | 25.5 | 13 | 28.5     | 36 | 39.7 | 39.7 | 4   | 1       |



- Torque wrench with interchangeable head.
- Suitable for the tightening of cable glands requiring a specific torque.
- Open end interchangeable head (spanner head) TWE series available separately.
- Spanner head is not included.

## Product no. / Details

| Product no. | Length | Torque range (N · m) | Increments (N · m) |
|-------------|--------|----------------------|--------------------|
| TWH0.5-5    | 215    | 0.5 ~ 5.0            | 0.05               |

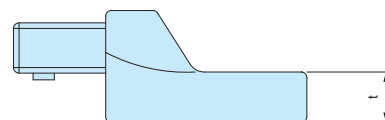
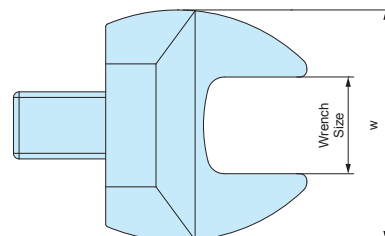
## Notes

The torque wrench is not subject to RoHS regulations.

Since it is an OEM product and not a JIS-compliant product, no calibration services or inspection reports, etc. are provided.

When tightening, proceed first with a low value (half of the reference) of the recommended torque, and set the appropriate tightening torque for the cable and mounting part that will be tightened thereafter.

Please read the operation manual (refer to TAKACHI website) before use to ensure correct and safe usage of the product.



- Dedicated open end interchangeable head for TWH series.
- Various interchangeable heads are available to fit a range of cable gland sizes.

## Product no. / Details

| Product no. | Wrench size | w  | t  |
|-------------|-------------|----|----|
| TWE- 8      | 8           | 27 | 6  |
| TWE- 9      | 9           | 27 | 6  |
| TWE-11      | 11          | 27 | 6  |
| TWE-12      | 12          | 30 | 6  |
| TWE-13      | 13          | 31 | 6  |
| TWE-15      | 15          | 40 | 9  |
| TWE-16      | 16          | 40 | 9  |
| TWE-17      | 17          | 41 | 9  |
| TWE-18      | 18          | 42 | 9  |
| TWE-19      | 19          | 42 | 10 |
| TWE-21      | 21          | 47 | 10 |

| Product no. | Wrench size | w  | t  |
|-------------|-------------|----|----|
| TWE-22      | 22          | 52 | 10 |
| TWE-23      | 23          | 53 | 11 |
| TWE-24      | 24          | 55 | 11 |
| TWE-27      | 27          | 58 | 13 |
| TWE-29      | 29          | 58 | 13 |
| TWE-30      | 30          | 65 | 14 |
| TWE-32      | 32          | 65 | 14 |
| TWE-33      | 33          | 65 | 14 |
| TWE-34      | 34          | 70 | 15 |
| TWE-36      | 36          | 72 | 15 |

Note: These open end head is not subject to RoHS regulations.

# Suitable TWE model

## RM • RMW series

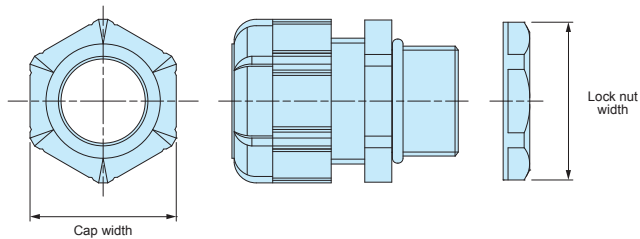
| Product no.    | Cap width | Suitable model | Lock nut width | Suitable model |
|----------------|-----------|----------------|----------------|----------------|
| RM8S-2.5       | 11.8      | TWE-12         | —              | n/a            |
| RM • RMW8L-2.5 | 11.8      | TWE-12         | 12.6           | TWE-13         |
| RM8S-4         | 11.8      | TWE-12         | —              | n/a            |
| RM • RMW8L-4   | 11.8      | TWE-12         | 12.6           | TWE-13         |
| RM • RMW10S-6  | 13        | TWE-13         | —              | n/a            |
| RM • RMW10L-6  | 13        | TWE-13         | 14.8           | TWE-15         |
| RM • RMW12S-7  | 16        | TWE-16         | 17             | TWE-17         |
| RM • RMW12L-7  | 16        | TWE-16         | 17             | TWE-17         |
| RM • RMW16S-8  | 19        | TWE-19         | 22             | TWE-22         |
| RM • RMW16L-8  | 19        | TWE-19         | 22             | TWE-22         |
| RM • RMW20S-12 | 24        | TWE-24         | 26.2           | n/a            |
| RM • RMW20L-12 | 24        | TWE-24         | 26.2           | n/a            |
| RM • RMW25L-17 | 33        | TWE-33         | 32.6           | n/a            |
| RM • RMW32L-21 | 36        | TWE-36         | 40.3           | n/a            |
| RM • RMW40L-27 | 45.7      | n/a            | 51             | n/a            |
| RM • RMW50L-38 | 60        | n/a            | 61.2           | n/a            |
| RM63L-44       | 68        | n/a            | 73.4           | n/a            |

## RPG series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| RPG7-7      | 16        | TWE-16         | 18.7           | TWE-19         |
| RPG9-8      | 19        | TWE-19         | 21.8           | TWE-22         |
| RPG11-10    | 22        | TWE-22         | 23.7           | TWE-24         |
| RPG13.5-11  | 24        | TWE-24         | 27             | TWE-27         |
| RPG16-14    | 26.7      | TWE-27         | 29.8           | TWE-30         |
| RPG21-18    | 33        | n/a            | 35.8           | TWE-36         |
| RPG29-25    | 42        | n/a            | 45.8           | n/a            |

## RSP series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| RSP12-6     | 16        | TWE-16         | 17             | TWE-17         |
| RSP16-8     | 19.5      | n/a            | 22             | TWE-22         |
| RSP20-11    | 24        | TWE-24         | 26.2           | n/a            |
| RSP25-16    | 33        | TWE-33         | 32.6           | n/a            |



Note 1) ""n/a"" indicates no suitable spanner head size and torque value available.

Note 2) Dimensions of Cap and Lock nut width are in mm.

## AG series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| AG8-3.5     | 12        | TWE-12         | —              | n/a            |
| AG8-5       | 12        | TWE-12         | —              | n/a            |
| AG10-6      | 15        | TWE-15         | —              | n/a            |
| AG12-5      | 17        | TWE-17         | 17             | TWE-17         |
| AG12-6.5    | 17        | TWE-17         | 17             | TWE-17         |
| AG12-8      | 17        | TWE-17         | 17             | TWE-17         |
| AG16-10     | 21        | TWE-21         | 22             | TWE-22         |
| AG20-15     | 27        | TWE-27         | 27             | TWE-27         |
| AG25-16     | 34        | TWE-34         | 33             | TWE-33         |
| AG25-20     | 34        | TWE-34         | 33             | TWE-33         |
| AG32-25.5   | 41        | n/a            | 42             | n/a            |
| AG40-28.5   | 50        | n/a            | 48             | n/a            |
| AG40-33     | 50        | n/a            | 48             | n/a            |
| AG50-37     | 60        | n/a            | 59             | n/a            |
| AG50-42     | 60        | n/a            | 59             | n/a            |

## AGM series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| AGM6-2.5    | 8         | TWE-8          | 9              | TWE- 9         |
| AGM6-3      | 8         | TWE-8          | 9              | TWE- 9         |
| AGM6-3.5    | 8         | TWE-8          | 9              | TWE- 9         |
| AGM8-5      | 11        | TWE-11         | 11             | TWE-11         |
| AGM10-6     | 13        | TWE-13         | 13             | TWE-13         |
| AGM12-8     | 15        | TWE-15         | 15             | TWE-15         |
| AGM16-10.5  | 18        | TWE-18         | 19             | TWE-19         |
| AGM20-15    | 24        | TWE-24         | 24             | TWE-24         |
| AGM25-20    | 30        | TWE-30         | 30             | TWE-30         |
| AGM32-25.5  | 36        | TWE-36         | 36             | TWE-36         |
| AGM40-28.5  | 46        | n/a            | 51             | n/a            |
| AGM40-33    | 46        | n/a            | 51             | n/a            |
| AGM50-37    | 55        | n/a            | 60             | n/a            |
| AGM50-42    | 55        | n/a            | 60             | n/a            |

## AGE series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| AGE12-5     | 15        | TWE-15         | 15             | TWE-15         |
| AGE12-6.5   | 15        | TWE-15         | 15             | TWE-15         |
| AGE16-10.5  | 18        | TWE-18         | 19             | TWE-19         |
| AGE20-15    | 24        | TWE-24         | 24             | TWE-24         |
| AGE25-20    | 30        | TWE-30         | 30             | TWE-30         |
| AGE32-25    | 36        | n/a            | 36             | n/a            |

## AGH series

| Product no. | Cap width | Suitable model | Lock nut width | Suitable model |
|-------------|-----------|----------------|----------------|----------------|
| AGH10-6     | 13        | TWE-13         | 13             | TWE-13         |
| AGH12-8     | 15        | TWE-15         | 15             | TWE-15         |
| AGH16-10.5  | 18        | TWE-18         | 19             | TWE-19         |
| AGH20-15    | 24        | TWE-24         | 24             | TWE-24         |
| AGH25-20    | 30        | TWE-30         | 30             | TWE-30         |
| AGH32-25.5  | 36        | TWE-36         | 36             | TWE-36         |