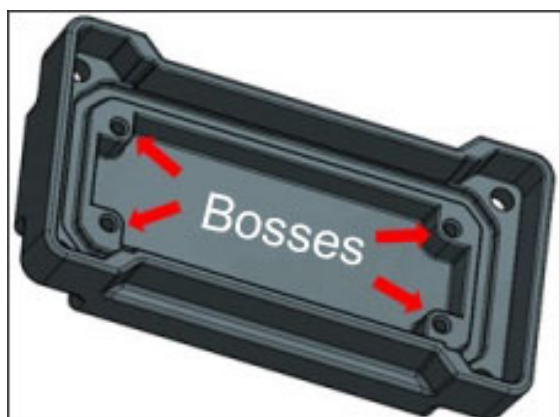


NOTICE

AWN • AWP • AWNS Series - End Panel Changes to Panel Construction

- Change : Removal of internal end panel bosses.
- Purpose : To allow for wider / larger available internal space.

Current (Old) Construction



New Construction



■ Affected series / models :

AWN series		AWP series		AWNS series
AWN7-7-8□□□	AWN11-6-15□□□	AWP7-7-8□□	AWP11-6-15□□	AWNS66-66-●●□□□
AWN7-7-11□□□	AWN11-6-19□□□	AWP7-7-11□□	AWP11-6-19□□	AWNS81-46-●●□□□
AWN7-7-15□□□	AWN11-6-24□□□	AWP7-7-15□□	AWP11-6-24□□	AWNS86-86-●●□□□
AWN7-7-20□□□	AWN12-8-11□□□	AWP7-7-20□□	AWP12-8-11□□	AWNS106-56-●●□□□
AWN7-7-25□□□	AWN12-8-14□□□	AWP7-7-25□□	AWP12-8-14□□	AWNS120-71-●●□□□
AWN8-5-9□□□	AWN12-8-17□□□	AWP8-5-9□□	AWP12-8-17□□	AWNS156-81-●●□□□
AWN8-5-12□□□	AWN12-8-22□□□	AWP8-5-12□□	AWP12-8-22□□	AWNS206-81-●●□□□
AWN8-5-14□□□	AWN16-9-14□□□	AWP8-5-14□□	AWP16-9-14□□	
AWN8-5-18□□□	AWN16-9-18□□□	AWP8-5-18□□	AWP16-9-18□□	
AWN9-9-10□□□	AWN16-9-23□□□	AWP9-9-10□□	AWP16-9-23□□	
AWN9-9-13□□□	AWN16-9-28□□□	AWP9-9-13□□	AWP16-9-28□□	
AWN9-9-17□□□	AWN21-9-17□□□	AWP9-9-17□□	AWP21-9-17□□	
AWN9-9-22□□□	AWN21-9-21□□□	AWP9-9-22□□	AWP21-9-21□□	
AWN9-9-28□□□	AWN21-9-26□□□	AWP9-9-28□□	AWP21-9-26□□	
AWN11-6-11□□□	AWN21-9-31□□□	AWP11-6-11□□	AWP21-9-31□□	

◆ All end panels (standard / EMC shielded, all colors) for models listed above will be affected.

- Effective date : Once present inventory has run out / been depleted.
- Note 1 : No changes to item product number, color, finish, or pricing.
- Note 2 : No changes to production location.

- ★ If required, kindly request for updated drawings of the new end panel construction type.
- ★ Panel types will not be mixed for a same batch order.

AW·AWN·AWP IP67 ALUMINIUM ENCLOSURE

AW·AWN·AWP series are highly functional aluminium enclosures which are IP67 rated with heat dissipating heat-sink fins.

34 sizes available. Standard, Flanged, Shielding, and Silicone protector types are available.

Suitable for LED power supply, industrial camera, controller or measuring instrument where waterproof and cooling performance are crucial.

APPLICATION EXAMPLE

LIQUID LEVEL SENSOR

Product by Watty Corporation (Japan)



HEAVY DUTY PORTABLE HARDNESS TESTER

Product by DEMEQ (Argentina)

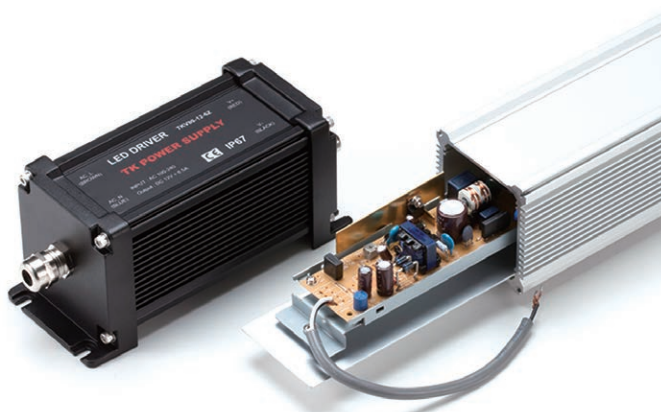


RADIO-CONTROLLED ELECTRONIC EXPLODER

Product by CODETEL (France)



OUTDOOR LED POWER SUPPLY



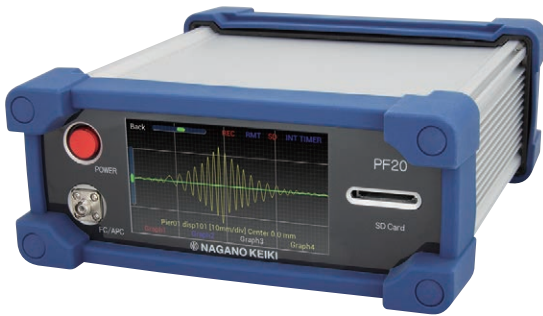
OPTICAL PHASE INTERROGATOR (OPI) DEVELOPMENT KIT

Product by Broadcom Limited (USA)



FBG DATA LOGGER

Product by NAGANO KEIKI (Japan)



DATA LOGGER with 3G MODEM REPORT FUNCTION

Product by mSolution (Hong Kong)



PIN HOLE DETECTOR

Product by SANKO ELECTRONIC LABORATORY (Japan)



PD ANNUNCIATOR

Product by ndb Technologies (Canada)



DC CONVERTER



CUSTOM LENGTH AVAILABLE

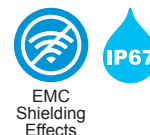
Flexible frame length from 50mm to 700mm in 1mm intervals.

No minimum order quantity and short lead time for small quantity order.



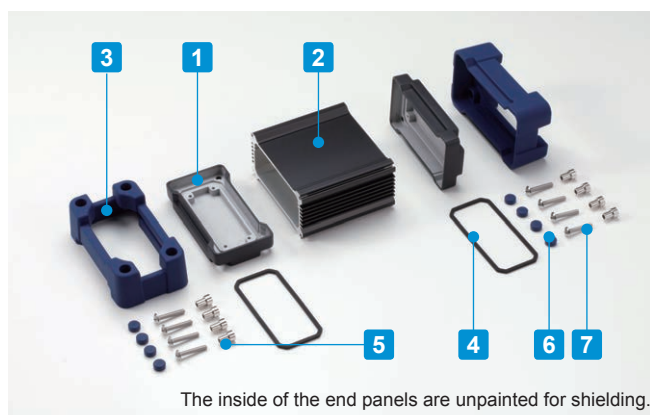
AWP SERIES

IP67 ALUMINIUM ENCLOSURE with SILICONE PROTECTOR



Technical Data

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

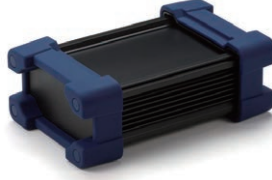


- Strong impact resistant enclosure with tough silicone boot protectors.
- Specifically designed with heat dissipation effect, EMC shielding and IP67 rating.
- PCB or chassis can be horizontally mounted by sliding into an inner-grooved body frame.
- Available in 30 sizes and 8 different color combinations. Selectable from a total of 240 different combinations.
- Suitable for measuring instruments, industrial control box, industrial camera housing, etc.

Components

No.	Part name	Pcs	Material	Color / Finish
1	End panel	2	Diecast aluminium ADC12	Silver • Black / Painted (unfinished inside)
2	Body frame	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized
3	Protector	2	Silicone	Black • Gray • Navy • Yellow
4	Conductive gasket	2	Conductive silicone	Black
5	Spacer	8	Brass	Nickel plated
6	Blind cap	8	Silicone	Black • Gray • Navy • Yellow
7	Screw	8	Stainless steel	Unfinished

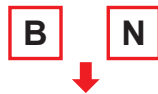
Color Type

Code	S B Silver / Black	S G Silver / Gray	S N Silver / Navy	S Y Silver / Yellow
Color				
Code	B B Black / Black	B G Black / Gray	B N Black / Navy	B Y Black / Yellow
Color				

Ordering Number

For example, in case of ordering AWP7-7-8 size, Black enclosure and Navy silicone protector.

Product no. : AWP7-7-8



Put a color code SB, SG, SN, SY, BB, BG, BN or BY.

- ※ Thermal resistance test condition
- Ambient air cooling
- Heat-sink fins are set perpendicular to the ground with temperature at 60°C.
- Anodized aluminium extrusion
- Heat source is applied on the opposite side (inner side) of the fins.

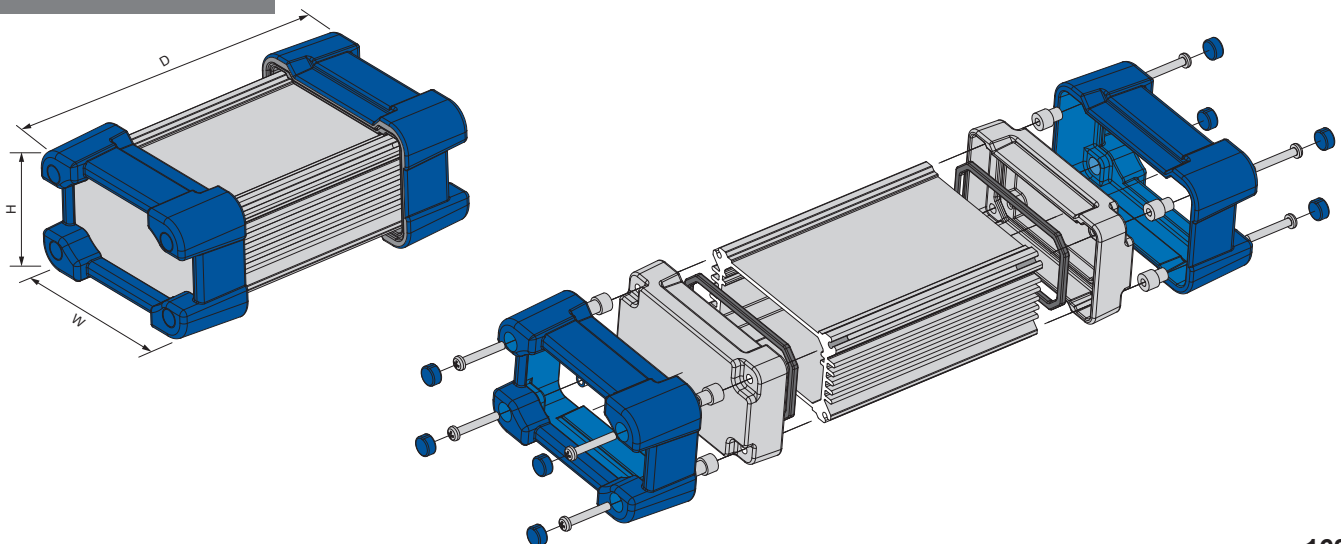
Product no. / Dimensions

Product no.	W	H	D	※ Thermal resistance rate (°C/W)	Weight (g)
AWP 7-7- 8 □□	72.4(65.8)	73.6(65.8)	104 (80)	4.41	363.5
AWP 7-7-11 □□	72.4(65.8)	73.6(65.8)	134(110)	3.5	419
AWP 7-7-15 □□	72.4(65.8)	73.6(65.8)	174(150)	2.83	493.5
AWP 7-7-20 □□	72.4(65.8)	73.6(65.8)	224(200)	2.33	586
AWP 7-7-25 □□	72.4(65.8)	73.6(65.8)	274(250)	2.02	679
AWP 8-5- 9 □□	87.4(80.8)	53.6(45.8)	114 (90)	5.97	353.5
AWP 8-5-12 □□	87.4(80.8)	53.6(45.8)	139(115)	5.01	394.5
AWP 8-5-14 □□	87.4(80.8)	53.6(45.8)	164(140)	4.37	436
AWP 8-5-18 □□	87.4(80.8)	53.6(45.8)	199(175)	3.76	493.5
AWP 9-9-10 □□	93.9(86.3)	95.1(86.3)	130(100)	3.1	693
AWP 9-9-13 □□	93.9(86.3)	95.1(86.3)	155(125)	2.63	766
AWP 9-9-17 □□	93.9(86.3)	95.1(86.3)	200(170)	2.12	897
AWP 9-9-22 □□	93.9(86.3)	95.1(86.3)	250(220)	1.79	1,043
AWP 9-9-28 □□	93.9(86.3)	95.1(86.3)	305(275)	1.54	1,203.5
AWP11-6-11 □□	113.9(106.3)	65.1(56.3)	140(110)	4.52	652.5
AWP11-6-15 □□	113.9(106.3)	65.1(56.3)	180(150)	3.62	751.5
AWP11-6-19 □□	113.9(106.3)	65.1(56.3)	220(190)	3.08	850
AWP11-6-24 □□	113.9(106.3)	65.1(56.3)	270(240)	2.64	973
AWP12-8-11 □□	127.6(120)	80.1(71.3)	135(105)	3.6	778.5
AWP12-8-14 □□	127.6(120)	80.1(71.3)	170(140)	2.93	885
AWP12-8-17 □□	127.6(120)	80.1(71.3)	209.5(179.5)	2.47	1,004.5
AWP12-8-22 □□	127.6(120)	80.1(71.3)	245(215)	2.18	1,112
AWP16-9-14 □□	163.9(156.3)	90.1(81.3)	165(135)	2.64	1,094
AWP16-9-18 □□	163.9(156.3)	90.1(81.3)	205(175)	2.2	1,240.5
AWP16-9-23 □□	163.9(156.3)	90.1(81.3)	255(225)	1.86	1,424
AWP16-9-28 □□	163.9(156.3)	90.1(81.3)	305(275)	1.63	1,607.5
AWP21-9-17 □□	213.9(206.3)	90.1(81.3)	202(170)	2.3	1,571.5
AWP21-9-21 □□	213.9(206.3)	90.1(81.3)	242(210)	1.99	1,742
AWP21-9-26 □□	213.9(206.3)	90.1(81.3)	292(260)	1.72	1,955.5
AWP21-9-31 □□	213.9(206.3)	90.1(81.3)	342(310)	1.54	2,168.5

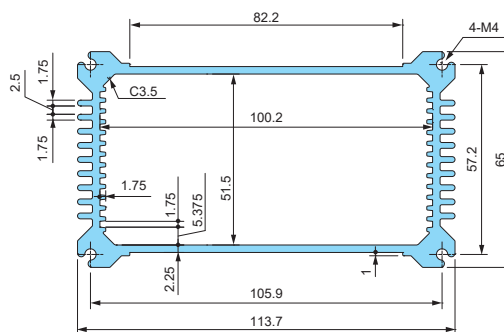
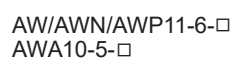
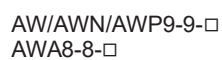
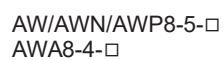
■ () value = enclosure dimension.

AWP dimensions

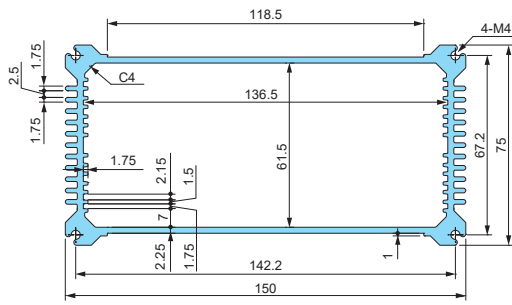
■ DXF/DWG/PDF drawings available on our website.



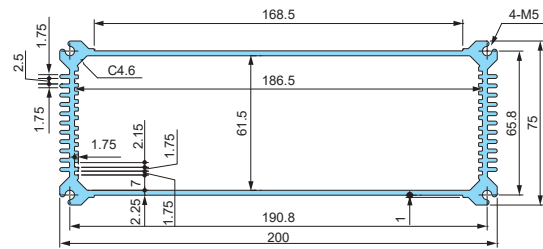
AW/AWN5-4-□
AWA5-3-□



AW/AWN/AWP16-9-□
AWA15-8-□



AW/AWN/AWP21-9-□
AWA20-8-□



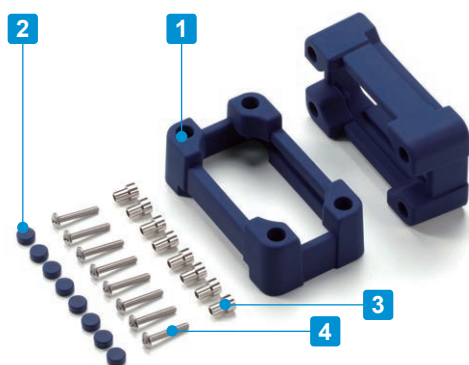
※ Thermal resistance test condition

- Ambient air cooling
- Heat-sink fins are set perpendicular to the ground with temperature at 60°C.
- Anodized aluminium extrusion
- Heat source is applied on the opposite side (inner side) of the fins.

Product no.				Frame	※Thermal resistance rate (°C/W)
AW 5-4- 7	AWN 5-4- 7	—	AWA 5-3- 5	49.2	11.2
AW 5-4- 9	AWN 5-4- 9	—	AWA 5-3- 7	69.2	9.18
AW 5-4-11	AWN 5-4-11	—	AWA 5-3-10	94.2	7.64
AW 5-4-14	AWN 5-4-14	—	AWA 5-3-12	119.2	6.63
AW 7-7- 8	AWN 7-7- 8	AWP 7-7- 8	AWA 6-6- 7	64	4.41
AW 7-7-11	AWN 7-7-11	AWP 7-7-11	AWA 6-6-10	94	3.5
AW 7-7-15	AWN 7-7-15	AWP 7-7-15	AWA 6-6-14	134	2.83
AW 7-7-20	AWN 7-7-20	AWP 7-7-20	AWA 6-6-19	184	2.33
AW 7-7-25	AWN 7-7-25	AWP 7-7-25	AWA 6-6-24	234	2.02
AW 8-5- 9	AWN 8-5- 9	AWP 8-5- 9	AWA 8-4- 8	74	5.97
AW 8-5-12	AWN 8-5-12	AWP 8-5-12	AWA 8-4-10	99	5.01
AW 8-5-14	AWN 8-5-14	AWP 8-5-14	AWA 8-4-13	124	4.37
AW 8-5-18	AWN 8-5-18	AWP 8-5-18	AWA 8-4-16	159	3.76
AW 9-9-10	AWN 9-9-10	AWP 9-9-10	AWA 8-8- 9	81	3.1
AW 9-9-13	AWN 9-9-13	AWP 9-9-13	AWA 8-8-11	106	2.63
AW 9-9-17	AWN 9-9-17	AWP 9-9-17	AWA 8-8-16	151	2.12
AW 9-9-22	AWN 9-9-22	AWP 9-9-22	AWA 8-8-21	201	1.79
AW 9-9-28	AWN 9-9-28	AWP 9-9-28	AWA 8-8-26	256	1.54
AW11-6-11	AWN11-6-11	AWP11-6-11	AWA10-5-10	90.6	4.52
AW11-6-15	AWN11-6-15	AWP11-6-15	AWA10-5-14	130.6	3.62
AW11-6-19	AWN11-6-19	AWP11-6-19	AWA10-5-18	170.6	3.08
AW11-6-24	AWN11-6-24	AWP11-6-24	AWA10-5-23	220.6	2.64
AW12-8-11	AWN12-8-11	AWP12-8-11	AWA12-7- 9	85.6	3.6
AW12-8-14	AWN12-8-14	AWP12-8-14	AWA12-7-12	120.6	2.93
AW12-8-17	AWN12-8-17	AWP12-8-17	AWA12-7-17	160.1	2.47
AW12-8-22	AWN12-8-22	AWP12-8-22	AWA12-7-20	195.6	2.18
AW16-9-14	AWN16-9-14	AWP16-9-14	AWA15-5-12	115.6	2.64
AW16-9-18	AWN16-9-18	AWP16-9-18	AWA15-8-16	155.6	2.2
AW16-9-23	AWN16-9-23	AWP16-9-23	AWA15-8-21	205.6	1.86
AW16-9-28	AWN16-9-28	AWP16-9-28	AWA15-8-26	255.6	1.63
AW21-9-17	AWN21-9-17	AWP21-9-17	AWA20-8-15	147.8	2.3
AW21-9-21	AWN21-9-21	AWP21-9-21	AWA20-8-19	187.8	1.99
AW21-9-26	AWN21-9-26	AWP21-9-26	AWA20-8-24	237.8	1.72
AW21-9-31	AWN21-9-31	AWP21-9-31	AWA20-8-29	287.8	1.54

AWSP SERIES

SILICONE PROTECTOR

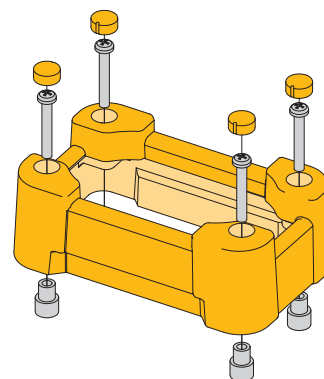
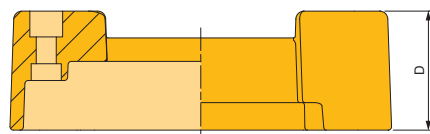
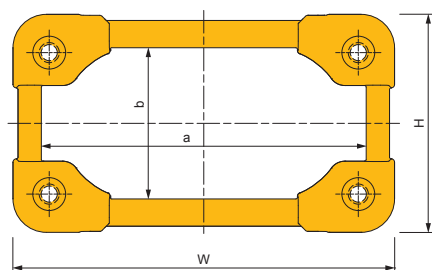
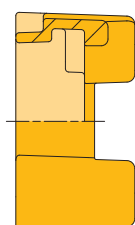


Color Type

Code	[B] Black	[G] Gray	[N] Navy	[Y] Yellow
Color				

- Silicone protector for AWN series.
- Protect switches and/or connectors on end panels from impact when dropped, etc.

AWSP dimensions



Components

No.	Part name	Pcs	Material	Color / Finish
1	Protector	2	Silicone	Black • Gray • Navy • Yellow
2	Blind cap	8	Silicone	Black • Gray • Navy • Yellow
3	Spacer	8	Brass	Nickel plated
4	Screw	8	Stainless steel	Unfinished

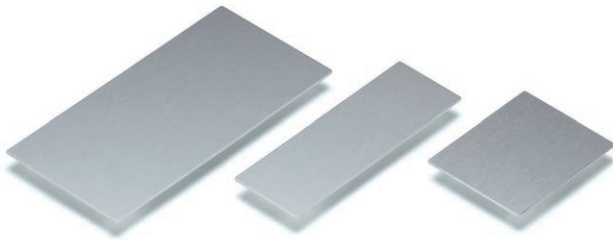
Product no. / Dimensions

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

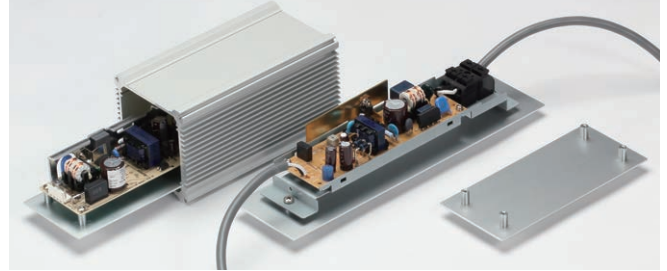
Product no.	W	H	D	a	b	Screw size	Suitable enclosure	Weight (g)
AWSP 7-7□	72.4	73.6	31	58.4	56.6	M3	AWN 7-7-□	99
AWSP 8-5□	87.4	53.6	31	73.4	36.6	M3	AWN 8-5-□	100.5
AWSP 9-9□	93.9	95.1	35.5	76.9	75.1	M4	AWN 9-9-□	184.5
AWSP11-6□	113.9	65.1	35.5	96.9	45.1	M4	AWN11-6-□	186
AWSP12-8□	127.6	80.1	35.5	110.6	60.1	M4	AWN12-8-□	201
AWSP16-9□	163.9	90.1	35.5	145.9	69.1	M4	AWN16-9-□	235
AWSP21-9□	213.9	90.1	39.5	192.9	66.1	M5	AWN21-9-□	333

AWC SERIES

ALUMINIUM MOUNTING PLATE



APPLICATION EXAMPLE

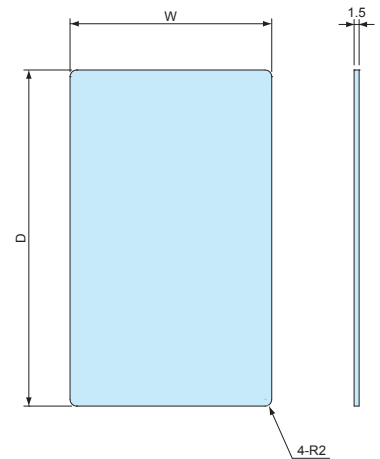


- Material: Aluminium A1050P t=1.5 / Silver anodized
- Mounting plate for AW, AWN, AWP, and AWA series enclosures.
- Utilize for mounting PCB, power supply, terminal blocks, etc.

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

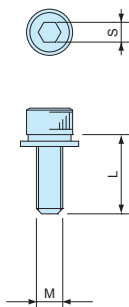
Product no. / Dimensions

Product no.	W	D	Suitable enclosure
AWC 5- 7	38.9	49.2	AW • AWN 5-4-7 • AWA 5-3-5
AWC 5- 9	38.9	69.2	AW • AWN 5-4-9 • AWA 5-3-7
AWC 5-11	38.9	94.2	AW • AWN 5-4-11 • AWA 5-3-10
AWC 5-14	38.9	119.2	AW • AWN 5-4-14 • AWA 5-3-12
AWC 7- 8	47	64	AW • AWN • AWP 7-7-8 • AWA 6-6- 7
AWC 7-11	47	94	AW • AWN • AWP 7-7-11 • AWA 6-6-10
AWC 7-15	47	134	AW • AWN • AWP 7-7-15 • AWA 6-6-14
AWC 7-20	47	184	AW • AWN • AWP 7-7-20 • AWA 6-6-19
AWC 7-25	47	234	AW • AWN • AWP 7-7-25 • AWA 6-6-24
AWC 8- 9	61.8	74	AW • AWN • AWP 8-5-9 • AWA 8-4-8
AWC 8-12	61.8	99	AW • AWN • AWP 8-5-12 • AWA 8-4-10
AWC 8-14	61.8	124	AW • AWN • AWP 8-5-14 • AWA 8-4-13
AWC 8-18	61.8	159	AW • AWN • AWP 8-5-18 • AWA 8-4-16
AWC 9-10	66.5	81	AW • AWN • AWP 9-9-10 • AWA 8-8-9
AWC 9-13	66.5	106	AW • AWN • AWP 9-9-13 • AWA 8-8-11
AWC 9-17	66.5	151	AW • AWN • AWP 9-9-17 • AWA 8-8-16
AWC 9-22	66.5	201	AW • AWN • AWP 9-9-22 • AWA 8-8-21
AWC 9-28	66.5	256	AW • AWN • AWP 9-9-28 • AWA 8-8-26
AWC11-11	86.5	90.6	AW • AWN • AWP11-6-11 • AWA10-5-10
AWC11-15	86.5	130.6	AW • AWN • AWP11-6-15 • AWA10-5-14
AWC11-19	86.5	170.6	AW • AWN • AWP11-6-19 • AWA10-5-18
AWC11-24	86.5	220.6	AW • AWN • AWP11-6-24 • AWA10-5-23
AWC12-11	100.2	85.6	AW • AWN • AWP12-8-11 • AWA12-7-9
AWC12-14	100.2	120.6	AW • AWN • AWP12-8-14 • AWA12-7-12
AWC12-17	100.2	160.1	AW • AWN • AWP12-8-17 • AWA12-7-17
AWC12-22	100.2	195.6	AW • AWN • AWP12-8-22 • AWA12-7-20
AWC16-14	136.3	115.6	AW • AWN • AWP16-9-14 • AWA15-8-12
AWC16-18	136.3	155.6	AW • AWN • AWP16-9-18 • AWA15-8-16
AWC16-23	136.3	205.6	AW • AWN • AWP16-9-23 • AWA15-8-21
AWC16-28	136.3	255.6	AW • AWN • AWP16-9-28 • AWA15-8-26
AWC21-17	186.1	147.8	AW • AWN • AWP21-9-17 • AWA20-8-15
AWC21-21	186.1	187.8	AW • AWN • AWP21-9-21 • AWA20-8-19
AWC21-26	186.1	237.8	AW • AWN • AWP21-9-26 • AWA20-8-24
AWC21-31	186.1	287.8	AW • AWN • AWP21-9-31 • AWA20-8-29



HCS SERIES

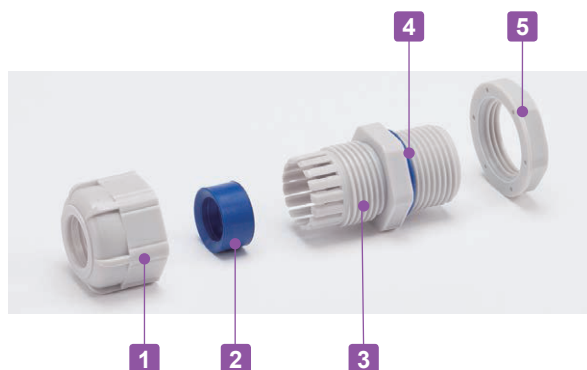
HEXAGON SOCKET HEAD SCREW



- Hexagon socket head screws for fastening the end panels of AW and AWN enclosures.
- Utilize for tamper-resistance functionality or for an elegant sleek look.

Product no. / Dimensions

Product no.	M	L	S	Material	Pack of
HCS3-12S	3	12	2.5	Stainless steel	8
HCS4-12S	4	12	3	Stainless steel	8
HCS5-12S	5	12	4	Stainless steel	8



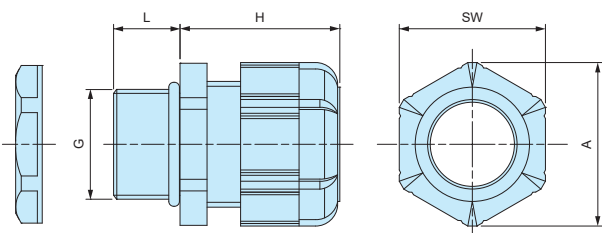
- Weatherproof cable gland equipped with high ultraviolet and degradation resistant silicone sealing insert and O-ring.
- Recommended to use outdoors where waterproofing is critical.

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	Nut	PA66 UL94V-2

RMW dimensions



Technical Data

Protection class: IP67
Operating temperature: -20°C ~ +80°C

- DXF/DWG/PDF drawings available on our website.
 - Lock nut is not included for RMW10S-6.
- Please drill a proper thread hole into the enclosure for installation.

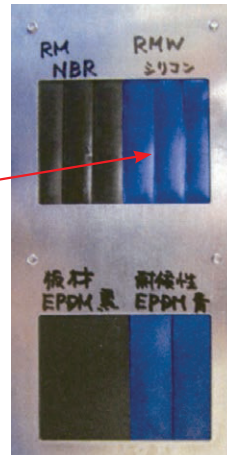
Product no. / Dimensions

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	11.8	13.5	1
RMW8L-4B	RMW8L-4S	M8×1.25	Φ8.2	2.5	4	13	19.5	11.8	13.5	1
RMW10S-6B	RMW10S-6S	M10×1.5	—	3	6	8	20.5	13	14.4	1
RMW10L-6B	RMW10L-6S	M10×1.5	Φ10.2	3	6	13	20.5	13	14.4	1
RMW12S-7B	RMW12S-7S	M12×1.5	Φ12.2	3.5	7	9	20.5	16	17.6	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	21	1
RMW16L-8B	RMW16L-8S	M16×1.5	Φ16.2	4	8	15	24	19	21	1
RMW20S-12B	RMW20S-12S	M20×1.5	Φ20.2	6	12	10	29	24	26.2	1
RMW20L-12B	RMW20L-12S	M20×1.5	Φ20.2	6	12	15	28.5	24	26.2	1
RMW25L-17B	RMW25L-17S	M25×1.5	Φ25.2	11	17	15	35	33	36.2	1
RMW32L-21B	RMW32L-21S	M32×1.5	Φ32.3	13	21	15	38	36	39.5	1
RMW40L-27B	RMW40L-27S	M40×1.5	Φ40.3	18	27	18	43.5	45.7	50.5	1
RMW50L-38B	RMW50L-38S	M50×1.5	Φ50.4	27	38	20	50.5	60	66.5	1
RMW8L-2.5B-P	RMW8L-2.5S-P	M8×1.25	Φ 8.2	1	2.5	13	19.5	11.8	13.5	100
RMW8L-4B-P	RMW8L-4S-P	M8×1.25	Φ 8.2	2.5	4	13	19.5	11.8	13.5	100
RMW10L-6B-P	RMW10L-6S-P	M10×1.5	Φ10.2	3	6	13	20.5	13	14.4	100
RMW12S-7B-P	RMW12S-7S-P	M12×1.5	Φ12.2	3.5	7	9	20.5	16	17.6	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	21	100
RMW16L-8B-P	RMW16L-8S-P	M16×1.5	Φ16.2	4	8	15	24	19	21	100
RMW20S-12B-P	RMW20S-12S-P	M20×1.5	Φ20.2	6	12	10	29	24	26.2	100
RMW20L-12B-P	RMW20L-12S-P	M20×1.5	Φ20.2	6	12	15	28.5	24	26.2	100
RMW25L-17B-P	RMW25L-17S-P	M25×1.5	Φ25.2	11	17	15	35	33	36.2	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 for comparison purposes.



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 : 180W/m² at 300-400nm

Black Panel Temperature : 63±3°C Humidity Range : 50±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 : 1296MJ/m²

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

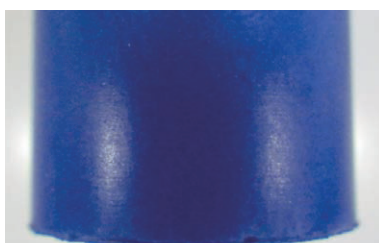


After

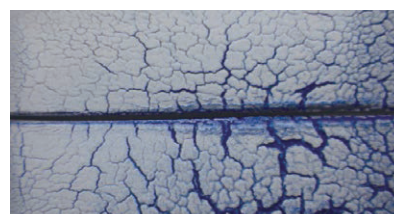


EPDM material from weatherproof cable gland of another manufacturer : Cracked, color drastically faded and powder appeared on the surface.

Before

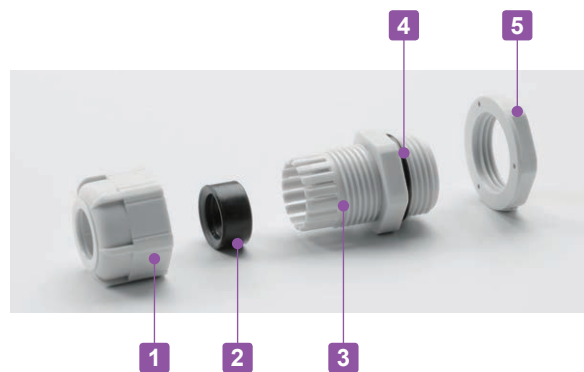


After



RM SERIES

POLYAMIDE CABLE GLAND



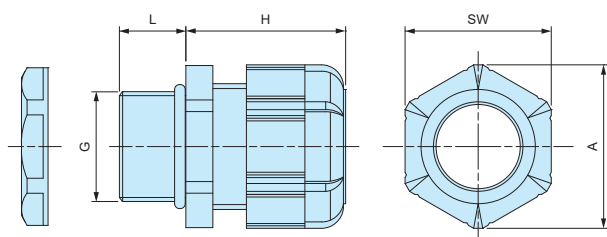
- Low cost cable glands made from polyamide material.
- Wide selection, for M8 ~ M63, suitable for $\Phi 1\text{mm} \sim \Phi 44\text{ mm}$ cable.
- High oil resistant NBR rubber sealing and O-ring.
- IP67 protection class.

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



Technical Data

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

- 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 a proper thread hole into the enclosure for installation.

Product no. / Dimensions

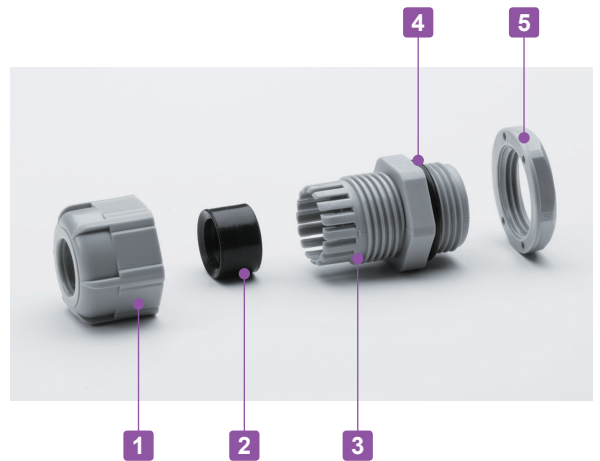
Product no.		G		Cable range		L	H Max	SW	A	Pack of
● Black	● Light gray	Thread size	Mounting hole	Min	Max					
RM8S-2.5B	RM8S-2.5S	M8×1.25	—	1	2.5	7.5	19.5	11.8	13.5	1
RM8L-2.5B	RM8L-2.5S	M8×1.25	$\Phi 8.2$	1	2.5	13	19.5	11.8	13.5	1
RM8S-4B	RM8S-4S	M8×1.25	—	2.5	4	7.5	19.5	11.8	13.5	1
RM8L-4B	RM8L-4S	M8×1.25	$\Phi 8.2$	2.5	4	13	19.5	11.8	13.5	1
RM10S-6B	RM10S-6S	M10×1.5	—	3	6	8	20.5	13	14.4	1
RM10L-6B	RM10L-6S	M10×1.5	$\Phi 10.2$	3	6	13	20.5	13	14.4	1
RM12S-7B	RM12S-7S	M12×1.5	$\Phi 12.2$	3.5	7	9	20.5	16	17.6	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	21	1
RM16L-8B	RM16L-8S	M16×1.5	$\Phi 16.2$	4	8	15	24	19	21	1
RM20S-12B	RM20S-12S	M20×1.5	$\Phi 20.2$	6	12	10	29	24	26.2	1
RM20L-12B	RM20L-12S	M20×1.5	$\Phi 20.2$	6	12	15	28.5	24	26.2	1
RM25L-17B	RM25L-17S	M25×1.5	$\Phi 25.2$	11	17	15	35	33	36.2	1
RM32L-21B	RM32L-21S	M32×1.5	$\Phi 32.3$	13	21	15	38	36	39.5	1
RM40L-27B	RM40L-27S	M40×1.5	$\Phi 40.3$	18	27	18	43.5	45.7	50.5	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
RM8L-2.5B-P	RM8L-2.5S-P	M8×1.25	$\Phi 8.2$	1	2.5	13	19.5	11.8	13.5	100
RM8L-4B-P	RM8L-4S-P	M8×1.25	$\Phi 8.2$	2.5	4	13	19.5	11.8	13.5	100
RM10L-6B-P	RM10L-6S-P	M10×1.5	$\Phi 10.2$	3	6	13	20.5	13	14.4	100
RM12S-7B-P	RM12S-7S-P	M12×1.5	$\Phi 12.2$	3.5	7	9	20.5	16	17.6	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	21	100
RM16L-8B-P	RM16L-8S-P	M16×1.5	$\Phi 16.2$	4	8	15	24	19	21	100
RM20S-12B-P	RM20S-12S-P	M20×1.5	$\Phi 20.2$	6	12	10	29	24	26.2	100
RM20L-12B-P	RM20L-12S-P	M20×1.5	$\Phi 20.2$	6	12	15	28.5	24	26.2	100
RM25L-17B-P	RM25L-17S-P	M25×1.5	$\Phi 25.2$	11	17	15	35	33	36.2	100

RPG SERIES

POLYAMIDE CABLE GLAND

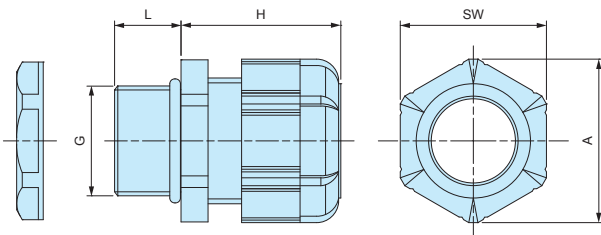


IP67



- Inexpensive cable glands made from polyamide material with PG threading.
- High oil resistant NBR rubber sealing and O-ring.
- IP67 protection class.

RPG dimensions



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

Components

■ PA = Polyamide

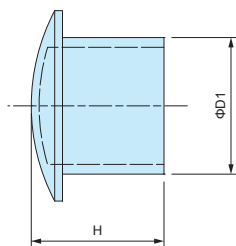
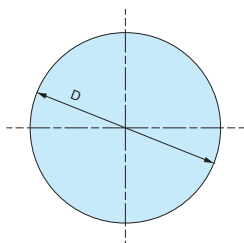
No.	Part name	Material
1	Cap	PA66 UL94V-2
2	Sealing insert	NBR
3	Connector	PA66 UL94V-2
4	O-Ring	NBR
5	Lock-nut	PA66 UL94V-2

Technical Data

Protection class: IP67
Operating temperature: -20°C ~ +80°C

Product no. / Dimensions

Product no.		G			Cable range		L	H Max	SW	A	Pack of
● Black	● Gray	Thread size	Thread dia.	Mounting hole	Min	Max					
RPG7-7B	RPG7-7G	PG7	12.5	Φ12.7	3	7	9	20.5	16	17.7	1
RPG9-8B	RPG9-8G	PG9	15.2	Φ15.4	4	8	9	23.5	19	21	1
RPG11-10B	RPG11-10G	PG11	18.6	Φ18.8	5	10	9	26	22	24	1
RPG13.5-11B	RPG13.5-11G	PG13.5	20.4	Φ20.6	6	11	10	29	24	26.4	1
RPG16-14B	RPG16-14G	PG16	22.5	Φ22.7	8	14	10	30	26.7	29.5	1
RPG21-18B	RPG21-18G	PG21	28.3	Φ28.5	13	18	12	35	33	36.5	1
RPG29-25B	RPG29-25G	PG29	37	Φ37.2	18	25	12	41.5	42	46.5	1

SP SERIES**SEALING PLUG****SP dimensions**

■ Material : Nylon

- Sealing plug for cable glands when not in use.
- Maintain a waterproof seal when plugged into the sealing insert on cable glands.

Product no. / Dimensions

Product no.	D	D1	H	Suitable cable glands	Pack of
SP-12	10.2	6	15.5	RMW12, RM12, RMW16, RM16, RPG7, RPG9	10
SP-16	15.6	9.5	15.5	RMW20, RM20, RPG11, RPG13.5	10
SP-20	19.6	13.5	16.5	RPG16	10
SP-25	24.4	17.5	17	RMW25, RM25, RMW32, RM32, RPG21	5
SP-40	32.5	24.5	17.5	RMW40, RM40, RPG29	5
SP-50	47.2	38.9	17.6	RMW50, RM50	5



- 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.

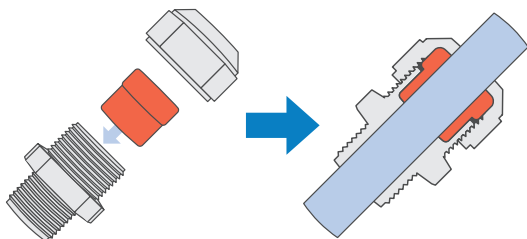
Technical Data

Protection class: IP68 1bar / 30min
 Operating temperature: -20°C ~ $+100^{\circ}\text{C}$
 Compliant with EN50262 Ver. A

AG Series

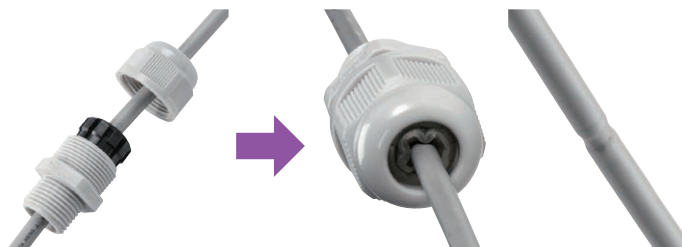
Thicker sealing insert evenly hold a cable by having a larger holding area.

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 a proper thread hole into the enclosure for installation.

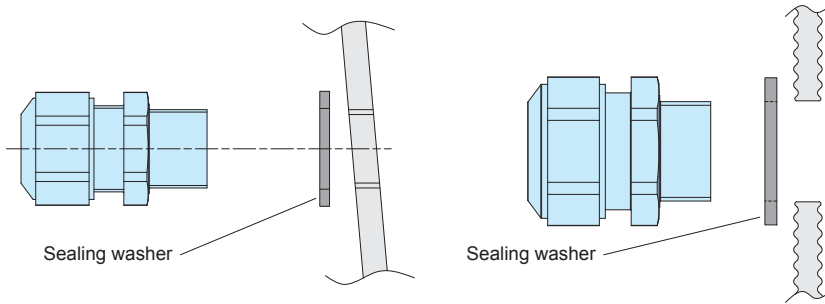
- Proper tightening torque varies by each cable diameter. Tighten the cap until top of the sealing insert forms a small bead between the cap and the cable.



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

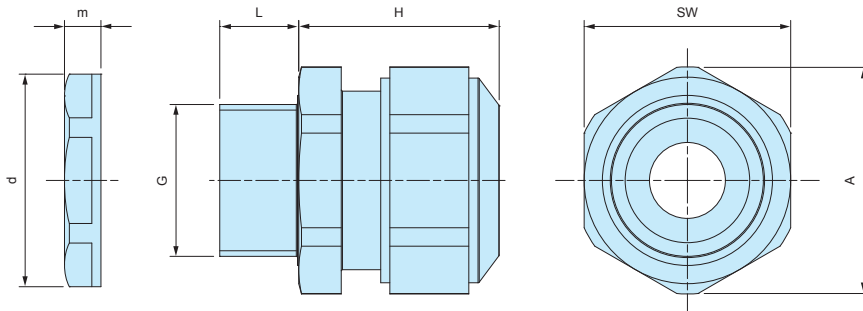
■ An optional sealing washer is required when installing on an uneven surface. (See page AGP-1 for more information on the optional sealing washer)

Waterproof rib



AG dimensions

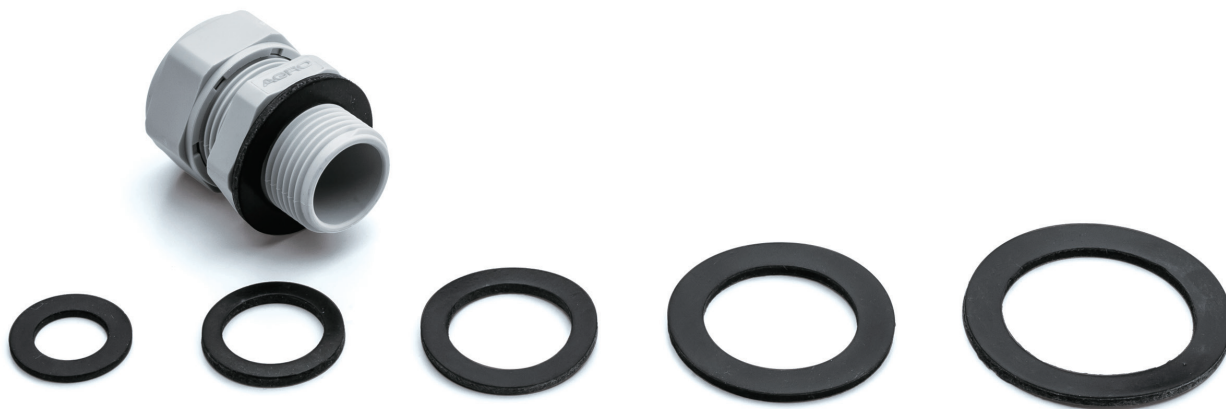
■ DXF/DWG/PDF drawings available on our website.



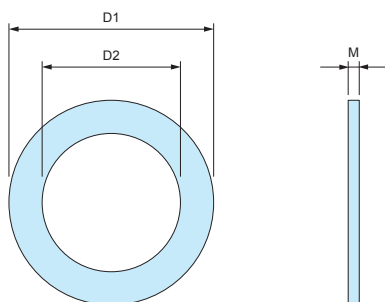
■ Lock nut is not included for M8 and M10 sizes.
Please drill a proper thread hole into the enclosure for installation.

Product no. / Dimensions

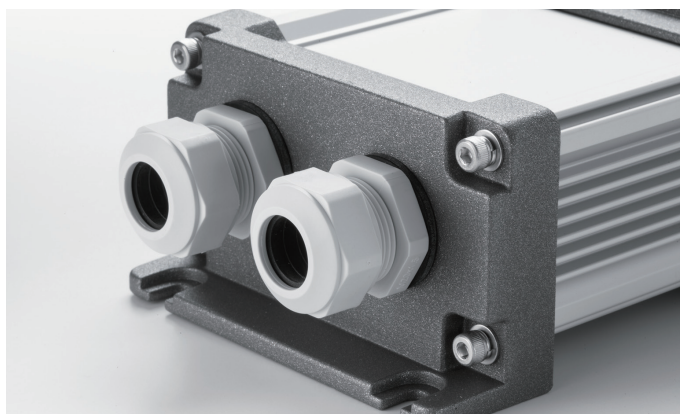
Product no.		G		Cable range		L	H Max	SW	A	d	m	Pack of
● Black	● Light gray	Thread size	Mounting hole	Min	Max							
AG8-3.5B	AG8-3.5S	M8×1.0	—	2.5	3.5	10	17	12	13.2	—	—	1
AG8-5B	AG8-5S	M8×1.0	—	3.5	4.7	10	17	12	13.2	—	—	1
AG10-6B	AG10-6S	M10×1.0	—	4	6	10	19	15	16.5	—	—	1
AG12-5B	AG12-5S	M12×1.5	Φ12.2	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

AGP SERIES**SEALING WASHER for AG • AGSP**

- Sealing washer for AG series.
- Made from oil resistant NBR material.
- Use in the case of installation on a rough or uneven surfaces.
- Selectable in 7 sizes (from M12 to M50)
- Sealing washer is not necessary for installation on flat surfaces.

AGP Dimensions

- Material : NBR

**Product no. / Dimensions**

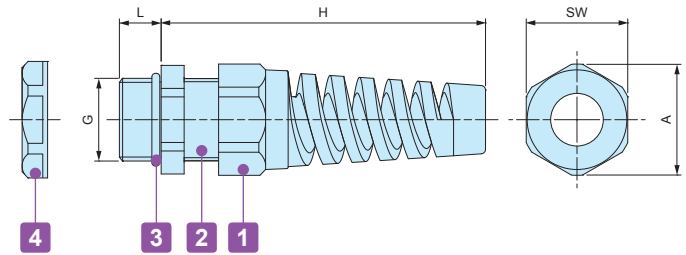
Product no.	D1	D2	M	Suitable cable gland	Pack of
AGP-12	20	12	1.6	AG12	10
AGP-16	23.5	16.5	2.0	AG16	10
AGP-20	29	20	2.0	AG20	10
AGP-25	37	25	2.0	AG25	10
AGP-32	44	32	2.2	AG32	5
AGP-40	52	40	2.2	AG40	5
AGP-50	64	50	3.1	AG50	5

RSP SERIES

STRAIN RELIEF CABLE GLAND



RSP dimensions



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

Technical Data

Protection class : IP67
Temperature range -20°C ~ +80°C

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. / Dimensions

Product no.		G		Cable range		L	H Max	SW	A	Pack of
● Black	● Light gray	Thread size	Mounting hole	Min	Max					
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

AGM SERIES

METAL CABLE GLAND

IP68



- High water protection IP68 (1bar / 30min) metal cable gland.
- Wide selection, for M6 ~ M50 and PG7 ~ PG16.
Suitable for $\Phi 2$ mm ~ $\Phi 42$ mm cable.

Technical Data

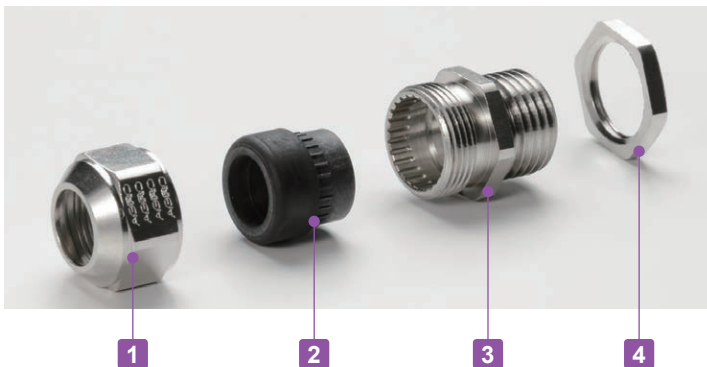
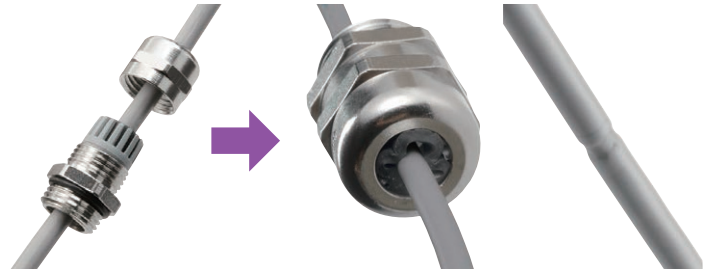
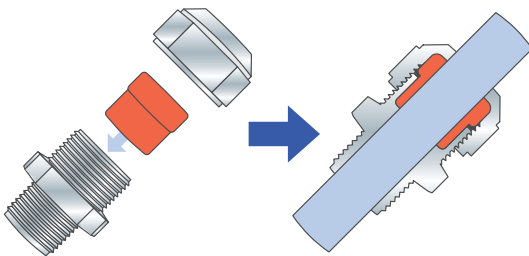
Protection class: IP68 1bar / 30min
 Operating temperature: -40°C ~ +100°C
 Compliant with EN50262 Ver. A

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.



- Proper 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.

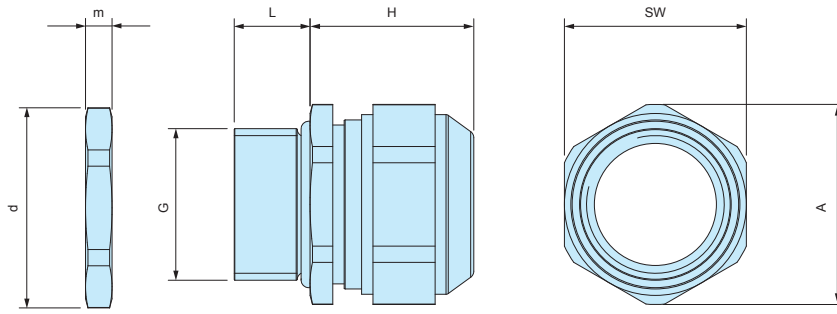


Components

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. / Dimensions

Product no.	G			Cable range		L	H Max	SW	A	d	m	Pack of
	Thread size	Thread outer dia.	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
AGM7PG-5	PG7	12.5	Φ12.7	3.5	5.0	6	17	15	16.5	16.5	3	1
AGM9PG-6	PG9	15.2	Φ15.4	4.5	6.0	6	20	18	20	20	3	1
AGM11PG-8.5	PG11	18.6	Φ18.8	5.5	8.5	6	21	21	23	23.5	3	1
AGM13PG-11	PG13	20.4	Φ20.6	8.0	11.0	6	21	24	26.5	25.5	3	1
AGM16PG-14.5	PG16	22.5	Φ22.7	11	14.5	6	23	24	26.5	29	3	1

AGE SERIES

EMC SHIELDED CABLE GLAND



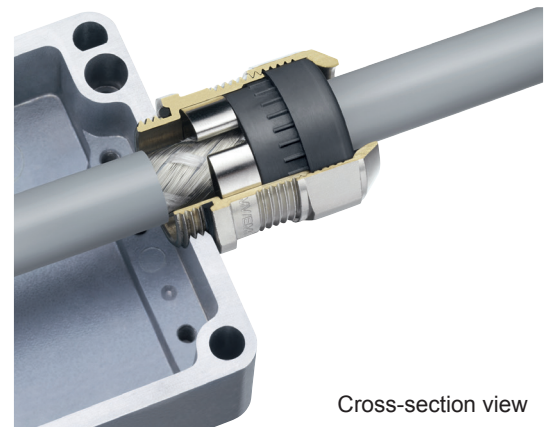
- Optimal contact spring provides excellent shield contact and the smallest possible transfer impedance.
- Clawed lock nut makes a good EMC shield contact possible on conductive enclosures.
- Shape of the contact spring not only allows for a large clamping range to the shield but also enables easy and 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
20m depth immersion in 30 minutes
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

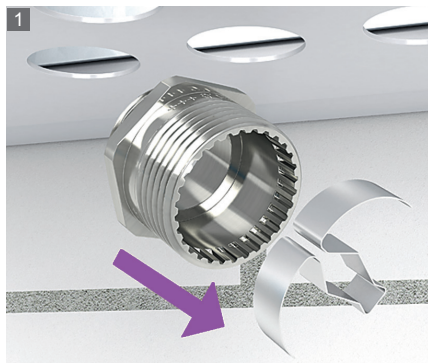


Cross-section view

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



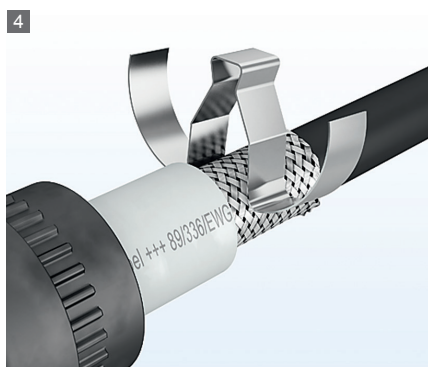
Remove the contact spring from the connector.



Install the connector onto the enclosure.



Strip the cable.



Clip the contact spring on the shielded cable.



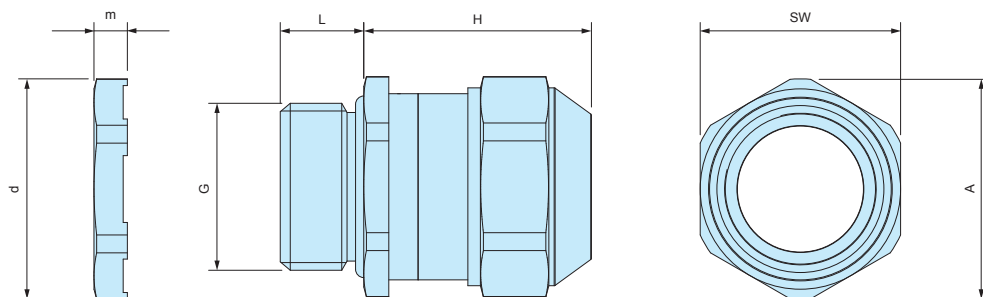
Pass the cable through the Sealing insert and cap.



Tighten the cap to complete.

AGE dimensions

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



Product no. / Dimensions

Product no.	G		Cable range		L	H 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



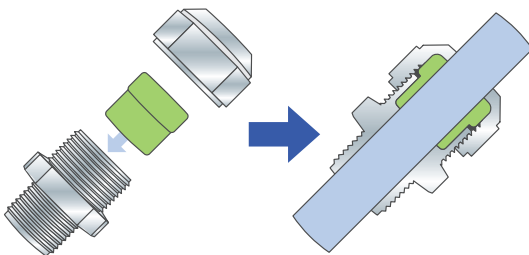
- Heat resistant sealing insert made of FPM material. Resistant up to 200°C
- IP68 1bar / 30min high performance waterproof cable gland.

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

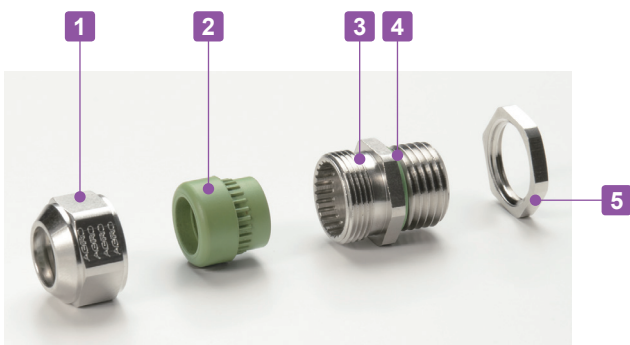
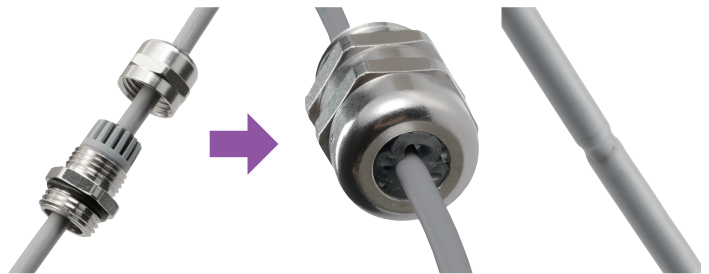
AGH series

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

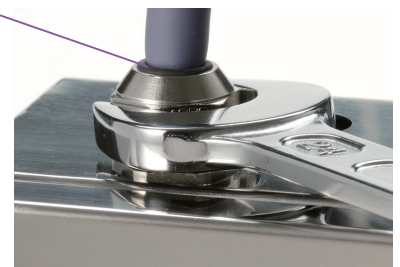


Conventional cable gland

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.

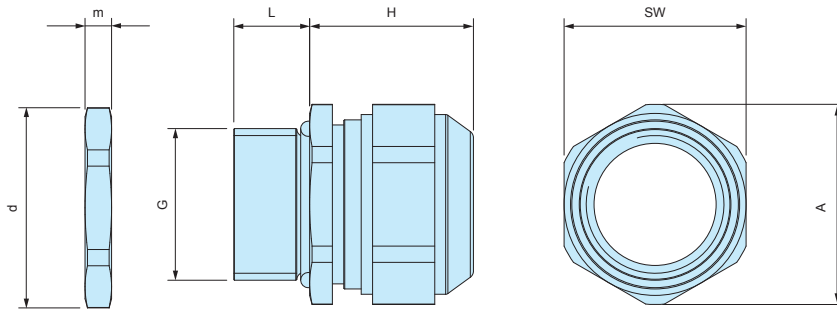


Components

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.

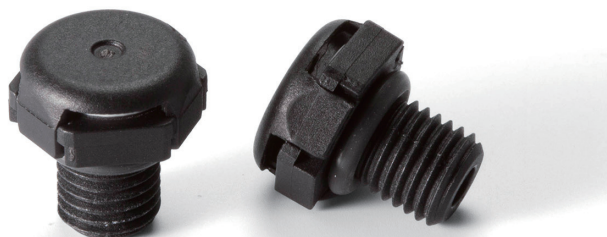


Product no. / Dimensions

Product no.	G		Cable range		L	H 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

PMF-6B

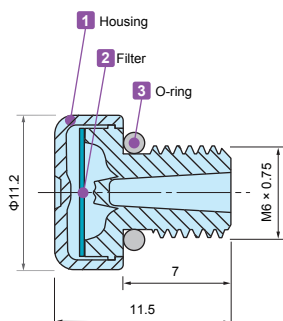
SMALL PROTECTIVE VENT



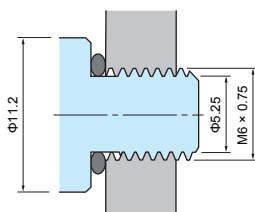
Application example

- Small and screw-in protective vent suitable for compact, and hand-held type devices.
- IP68 protection class (water depth 2 meters / 60 mins) and $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ operating temperature range allows it to be used in various environments.
- Suitable for enclosures with capacities of 2.0 litres or under.
- For outdoor use, installation on the side of the enclosure unit is recommended.

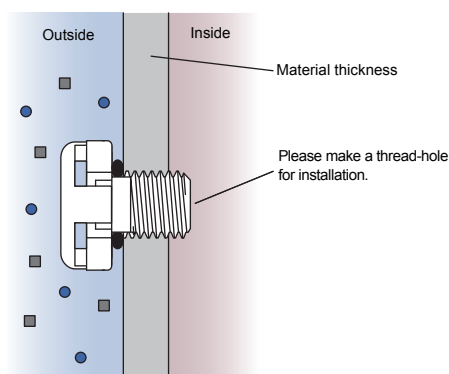
PMF-6B dimensions



Hole milling drawings



Installation drawings



Technical Data

Airflow	300ml / min ($\text{dp} = 7 \text{ kPa}$)
Recommended Torque	0.2 ~ 0.4 N • m
Certifications	IEC60529 (Protection class test) : IP66 • IP67 • IP68 IEC60068-2-1, 2, 14 (Heat resistance test) : $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ IEC60068-2-78 (Humidity test) : $85^{\circ}\text{C} \cdot 85\% \text{ humidity} \cdot 1000 \text{ hours}$ IEC60068-2-64 (Vibration test) UL94V-0 (Flame-resistant) • UL746C f1

Product no. / Dimensions

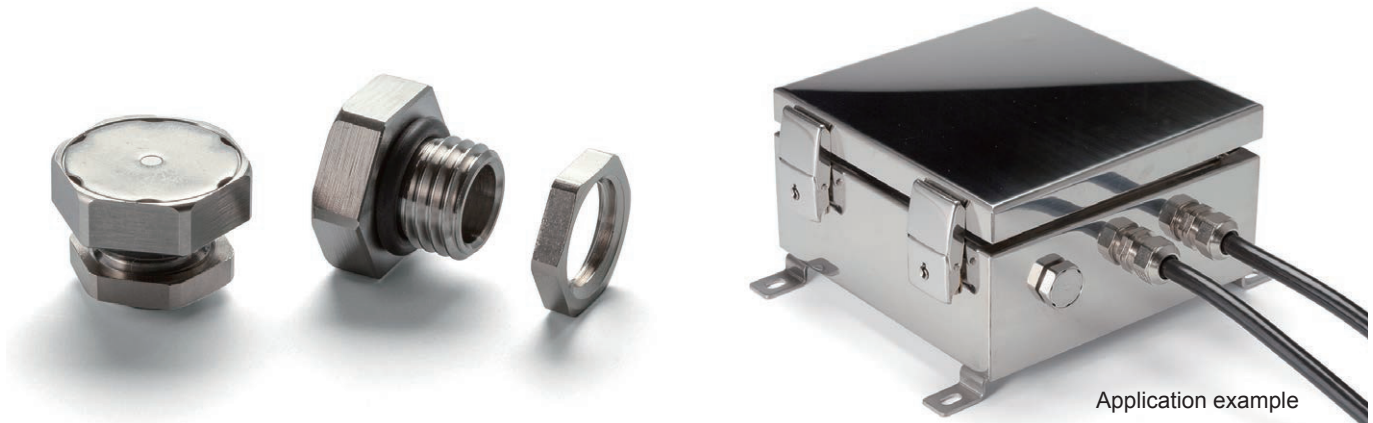
Product no.	Material			G	
● Black	1 Housing	2 Filter	3 O-ring	Thread size	Mount hole
PMF-6B	PA6 (Body) • PA66 (Cap)	PTFE	Silicone	M6 x 0.75	—

PMF-12M

STAINLESS STEEL PROTECTIVE VENT

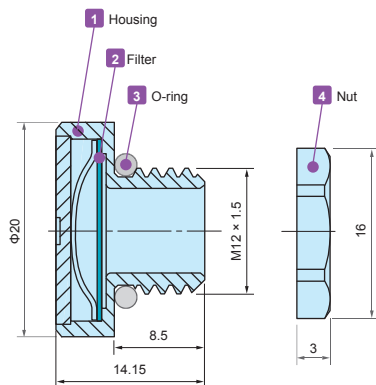
★ ★ NEW

IP68 IP69K

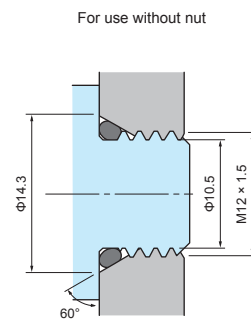


- Stainless steel protective vent for superior durability and chemical resistance.
- IP68 protection class (water depth 2 meters / 60 mins) and $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ operating temperature range allows it to be used in various environments.
- Suitable for enclosures with capacities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

PMF-12M dimensions

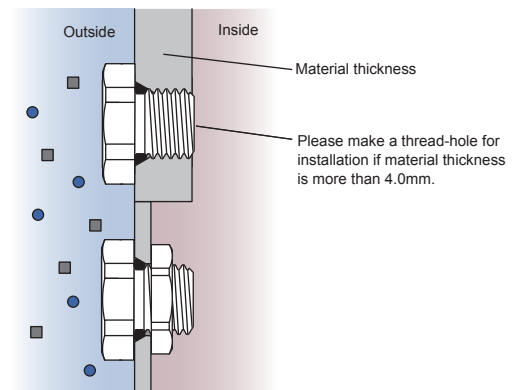


Hole milling drawings



- While $\Phi 12.2\text{mm}$ 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 IEC60068-2-1, 2, 14 (Heat resistance test) : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ IEC60068-2-78 (Humidity test) : $85^{\circ}\text{C} \cdot 85\%$ humidity • 1000 hours IEC60068-2-64 (Vibration test)

Product no. / Dimensions

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	$\Phi 12.2$	15

PMF SERIES

PROTECTIVE VENT

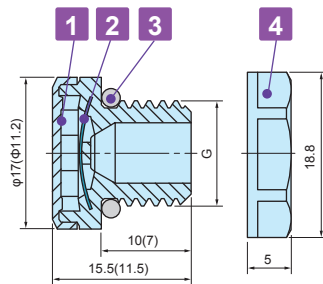


Application example

- Protective vents prevents the ingress of a variety of contaminants, such as water, dust and other particulates while allowing water vapor molecules to diffuse through the microporous membrane.
- Equalize pressure and reduce condensation by allowing airflow into and out of sealed enclosures.
- With an IP68 protection class (water depth 2 meters / 60 mins) and -40°C ~ +125°C operating temperature range, it can be used in harsh environmental conditions.
- PMF-6B works up to 2 liters capacity enclosures. Whereas, PMF-12 models work for up to 5 liters and PMF-12HS models work for up to 50 liters.
- For outdoor use, more efficient to install on the side(s).
- Recommended to use for industrial, electric, electronics purpose only.

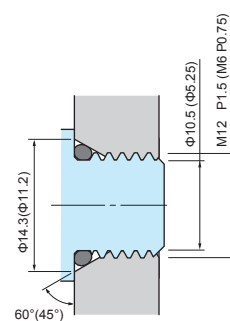
PMF dimensions

- Drawings below are reference examples only.
DXF/DWG/PDF drawings available on our website.



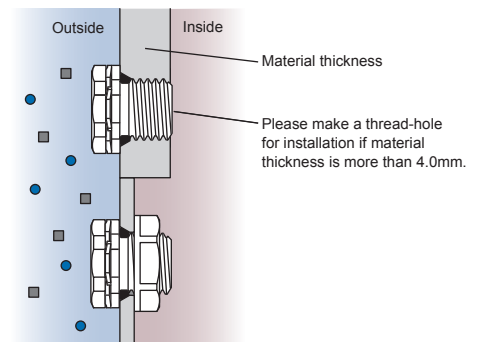
() values are for PMF-6B.
Lock nut is not available for PMF-6B.

Hole milling drawings



- While $\Phi 12.2\text{mm}$ 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, and $\Phi 12.2\text{mm}$ through-hole is sufficient.

Technical Data

Product no.	PMF-6B	PMF-12	PMF-12HA
Airflow	300ml / min (dp = 7 kPa)	450ml / min (dp = 7 kPa)	4000ml / min (dp = 7 kPa)
Recommended Torque	0.2 ~ 0.4 N · m	0.6 ~ 0.8 N · m	0.6 ~ 0.8 N · m
Certifications	IEC60529 (Protection class test): IP66 • IP67 • IP68 • IP69K (Not for PMF-6B) IEC60068-2-1, 2, 14 (Heat resistance test): -40°C ~ +125°C (~+150°C for PMF-6B) IEC60068-2-78 (Humidity test): 85°C • 85% humidity • 1000 hours IEC60068-2-64 (Vibration test) (PMF-6B only) UL94V-0 (Flame-resistant) • UL746C f1		

Product no. / Dimensions

Product no.		Material				G		Nut SW
● Light gray	● Black	1 Housing	2 Filter	3 O-ring	4 Lock nut	Thread size	Mount hole	
—	NEW PMF-6B	PA6 (Body) PA66 (Cap)	PTFE	Silicone	n/a	M6 x 0.75	—	—
PMF-12S	PMF-12B	PA6	PTFE	Silicone	PA6 (UL94V-2)	M12 x 1.5	$\Phi 12.2$	17
PMF-12HAS	PMF-12HAB	PA6	PTFE	Silicone	PA6 (UL94V-2)	M12 x 1.5	$\Phi 12.2$	17