



- 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

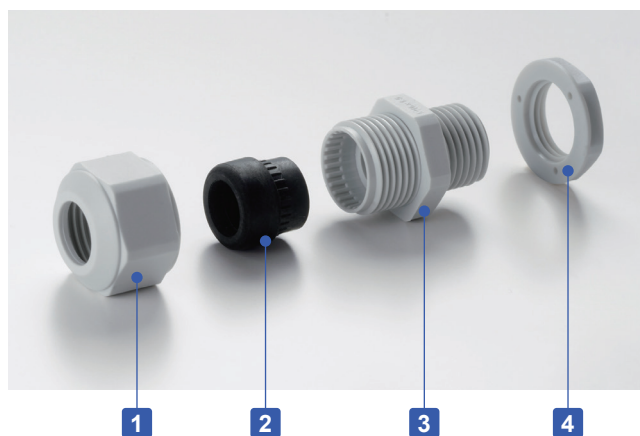
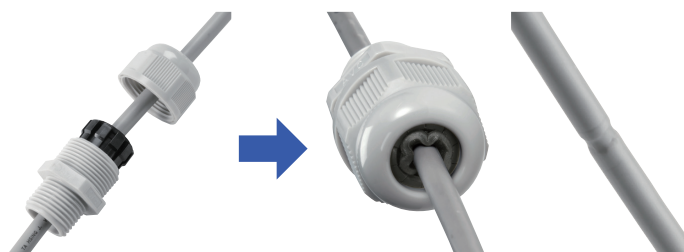
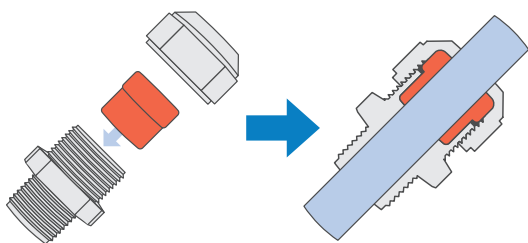
Protection class : IP68 1bar / 30min
 Operating temperature : -20°C ~ $+100^{\circ}\text{C}$
 Compliant with EN50262 Ver. A

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 an appropriate thread hole into the enclosure for installation.

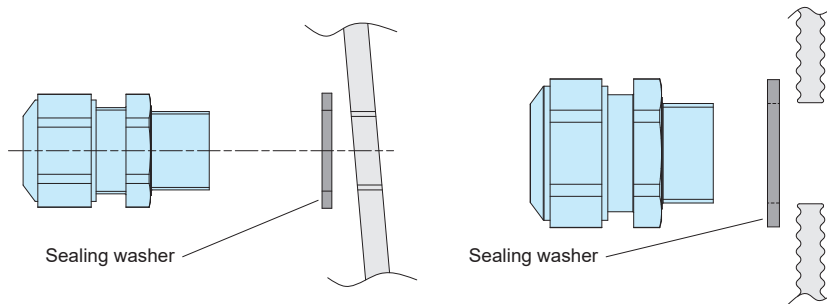
- Appropriate tightening torque varies by each cable diameter. Tighten the cap until top of the sealing insert forms a small bead between the cap and the cable.



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

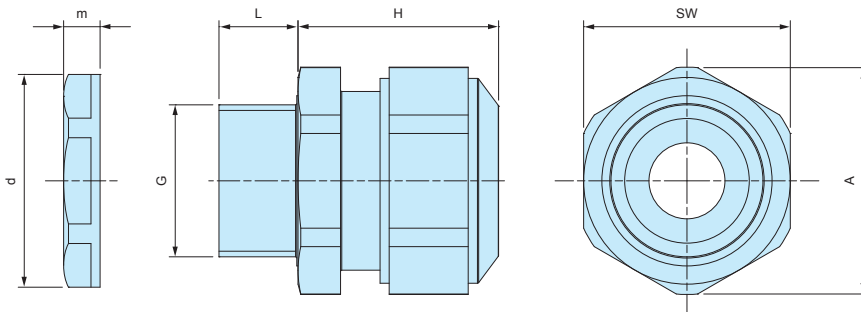
■ An optional sealing washer is required when installing on an uneven surface. (See website for more information on the optional sealing washer AGP series)

Waterproof rib



AG dimensions

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

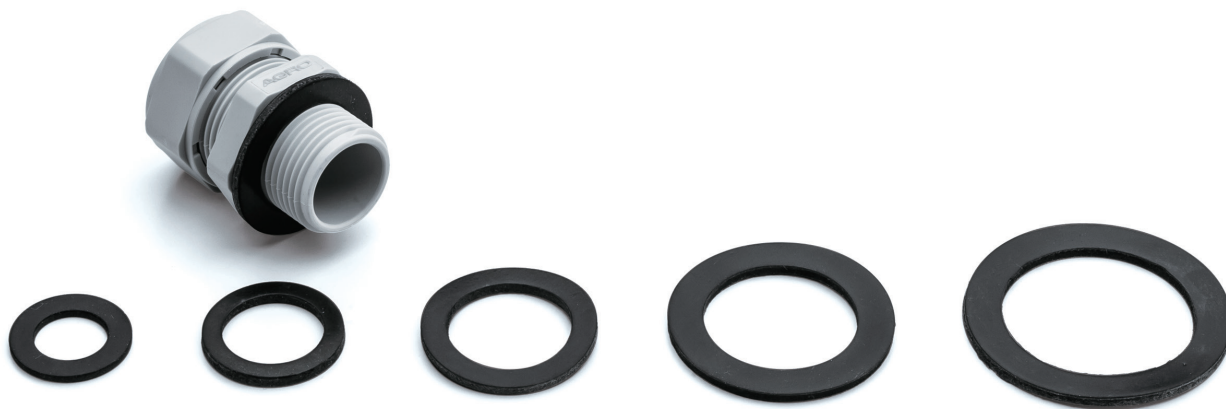


■ Lock nut is not included for M8 and M10 sizes.

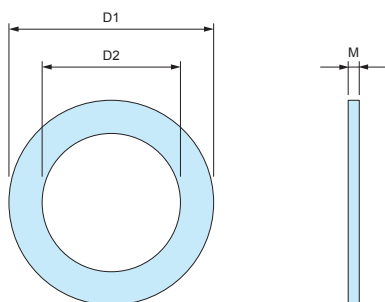
Please drill an appropriate thread hole into the enclosure for installation.

Product no. / Details

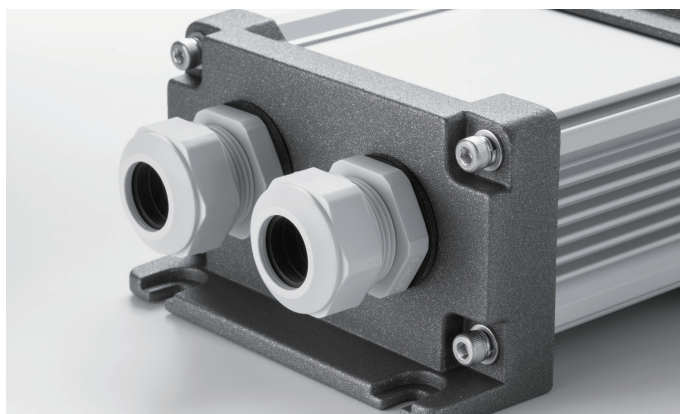
Product no.		G		Cable range		L	H Max	SW	A	d	m	Pack of
● Black	● Light gray	Thread size	Mounting hole	Min	Max							
AG8-3.5B	AG8-3.5S	M8×1.0	—	2.5	3.5	10	17	12	13.2	—	—	1
AG8-5B	AG8-5S	M8×1.0	—	3.5	4.7	10	17	12	13.2	—	—	1
AG10-6B	AG10-6S	M10×1.0	—	4	6	10	19	15	16.5	—	—	1
AG12-5B	AG12-5S	M12×1.5	Φ12.2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



- 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

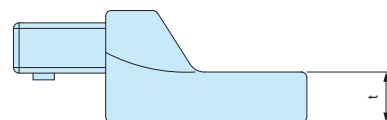
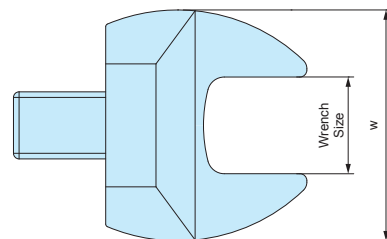
Notes

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

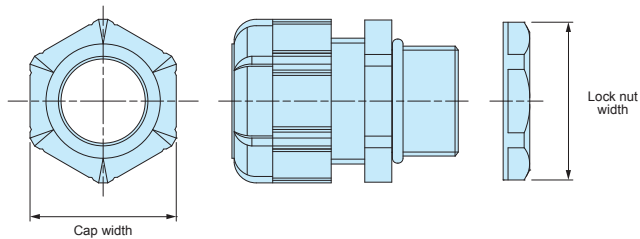
Product no.	Cap width	Suitable model	Lock nut width	Suitable model
RM8S-2.5	11.8	TWE-12	–	n/a
RM • RMW8L-2.5	11.8	TWE-12	12.6	TWE-13
RM8S-4	11.8	TWE-12	–	n/a
RM • RMW8L-4	11.8	TWE-12	12.6	TWE-13
RM • RMW10S-6	13	TWE-13	–	n/a
RM • RMW10L-6	13	TWE-13	14.8	TWE-15
RM • RMW12S-7	16	TWE-16	17	TWE-17
RM • RMW12L-7	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

TWH0.5-5 Torque Wrench Operation Manual

1 For Safety Use

Safety Precautions

Please read this manual carefully before use while following operation instructions.

The manufacturer / retailer etc. will not be are not liable for any personal injuries, damage to the product, or other property damage, etc. caused by improper use.

Warnings



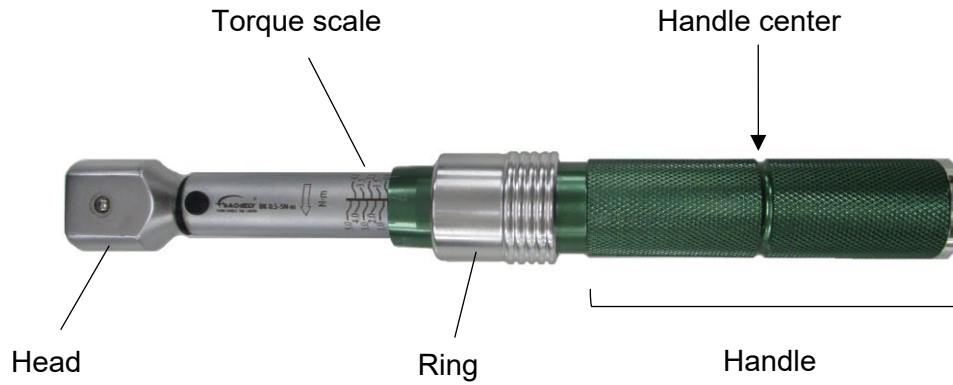
- Do not use beyond the maximum torque value. This may cause damage and injury.
- Do not use the torque wrench as a hammer or lever, or applying strong impact.
- Do not modify or disassemble the torque wrench. These may cause strength or accuracy problems, which may lead to accidents and injuries.
- Before use, check for damage, cracks, rust, or deformation. These may cause damage and injury.
- Do not use the torque wrench to loosen nuts or caps as it is a precision instrument.
- Do not operate the torque wrench with oily or greasy hands. This may cause your hands to slip while tightening, leading to accidents or injuries.
- Wear safety glasses or other eye protection while using.
- Be careful not to hit your hands or elbows on surrounding objects when working with a torque wrench.
- Do not use the torque wrench underwater or in the sea.
- When working on elevated platforms, take measures to prevent torque wrenches from falling.

Cautions



- Set the torque before each use.
- Do not lower the scale below the minimum.
- Do not use it outside of the torque scale range.
- Every time before setting the torque, ensure that the handle lock is in the unlock position first before rotating the handle.
- Grip the center of the handle to tighten. Gripping the edge of the handle may cause incorrect torque value.
- Tighten slowly while applying minimal force. Otherwise applied torque value may be incorrect.
- Stop tightening after hearing, or feeling a clicking sound or sensation. Further tightening may result in overtorque.
- Do not use parts such as a pipe to extend the handle.
- Do not drop the torque wrench or apply strong impact.
- Do not use in high temperature and humid environments.
- After use, set the torque wrench to the minimum value.
- After use, remove dirt, dust, mud, oil, water, etc. before storing.
- Store in a dry place when not in use for an extended period of time.

2 Components



3 How to use

① Push and hold the ring down to unlock.	② Turn the handle.
 A blue arrow points downwards towards the green ring, indicating the action to push it down.	 Two blue curved arrows indicate the handle is being rotated. Text: · Turn the handle while the ring is in the unlock position.
③ Adjust to required torque.	④ Release the ring.
 A red arrow points to the green ring, which is being rotated to align the '0' mark on the scale with the 'N·m' label.	 A blue arrow points upwards towards the green ring, indicating the action to release it. Text: · The ring will spring back to its original (lock) position.

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