

Mounting supplies

- A A drill adaptor(s)
- B A tube copper grease
- C A white pencil
- D A special drill can
- E EPDM glue
- F EPDM sealing strip
- G Fix accessories*

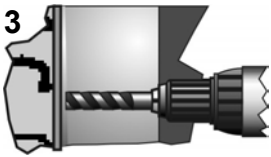


Chemical anchor capsules and turn moments

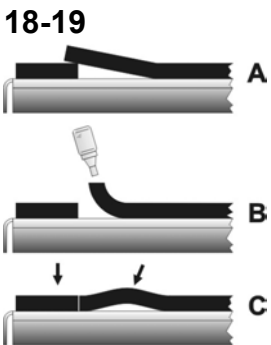
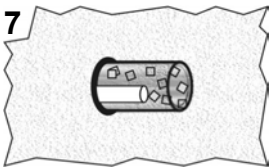
Type	Bore hole Ø mm	Deep mm	max. Nm
M 8	10	80	10
M 10	12	90	20
M 12	14	110	40
M 16	18	125	80

Specified cure end temperature time in the bore hole

Temp. °C	Mines	Hours
20 tot >	10	
10 tot 20	20	
0 tot 10		1
- 5 tot 0		5



- Fix : *1 - Concrete with chemical anchors. Description below.
*2 - Wood with through hole studs. Holes 2 mm larger than stud diameter.
*3 - Wood with coach screws.



- 1 **Check : The concrete for firmness, flatness and level. Max. tolerance 2 mm per meter.**
- 2 Install the fitting level in front of the bore/intake.
- 3 Pilot drill the mounting holes at either side of the top face.
- 4 Remove the fitting.
- 5 Drill the mounting holes to the recommended depth.
- 6 Clean the fixing holes.
- 7 Fit the chemical anchor capsules.
- 8 Apply copper grease to **the nut side** of the studs.
- 9 Insert the studs using a hammer drill with attachment fitted.
- 10 **Remove !** any excessive chemical mixture around the studs.
- 11 Allow the chemical anchors to cure for the specified time.
- 12 Install the fitting.
- 13 Fasten the nuts by hand.
- 14 Pilot drill all other mounting holes.
- 15 **See more at points 4 up to and including 11.**
- 16 Make sure the fixing surfaces are clean and dry.
- 17 Mark the centre lines of the mounting holes on the flange using a white pencil.
- 18 Apply sealing strip to the frame flange , first at the bottom across the full width, then with over-lengths (A) on the left and right hand sides.
- 19 Apply a generous amount of adhesive to the mating faces (B) of the sealing strip. Press them firmly against the strip. (C)
- 20 Using the drill bush supplied, drill attachment holes in sealing strip.
- 21 Install the fitting.
- 22 Locate the washers and the spring washers over the studs.
- 23 Tighten the nuts to the correct loading.
- 24 **Verify product is functioning correctly.**
- 40 Fit to wood *2 : Install the product level in front of the opening. Pilot drill the mounting holes. Remove the fitting. Drill the Ø 12 mm mounting through holes. **See more at points 16 up to and including 24.**
- 60 Fit to wood *3 : Install the product level in front of the opening. Pilot drill the mounting holes. Remove the fitting. Pre-drill the Ø 7 mm mounting holes. **See more at points 16 up to and including 21.** Screw the M10 coach screws in.
- 90 Tube connections ; - Thermal welding joint.
- Double socket for an HDPE pipe or a uPVC pipe.
- Conical tube end for a concrete pipe or a SPIROsol pipe using socket cement.
- HDPE flange with flange drilling PN10.

- V Trash screen/Debris trap : Available as an option.

General

All parts are designed by KWT engineers and typically produced and tested at the company's own plant. Bought-in goods are often manufactured to **KWT's** drawings and specifications ; any dies are owned by **KWT**. That means that it is almost always possible to repair or replace any part even after 10 years.

Storage requirements

- Store fittings under stable conditions, dust-free, frost-free and avoid wide variations in temperature.

Safety

- Provide the construction site with protection.
- Statutory and local regulations must be complied with.
- Use only approved equipment and have them commissioned or operated by trained staff.
- Wear appropriate, approved and statutory and locally determined Personal Protective Equipment (PPE).
- Always use the right tool.

Take care...

- of body parts becoming trapped.
- not to fall or slip on the site.
- of electrical wiring during assembly and servicing.
- of electrocution.
- Report unsafe situations and defects immediately to the responsible persons.

Assembly

- Only qualified staff should assemble the fitting.
- The assembly site must be clean, dry and gas-free.
- You must not stand under the fitting during lifting.

Use

- Allowing the fitting to be operated by an untrained person is dangerous for the operator and people in the vicinity and may result in damage to other objects.

The fittings are made of durable materials like

SS 304, SS 316, (stainless steel), HDPE (high-density polyethylene), POM (polyacetal) and bronze.

It is recommended that you regularly operate your fitting completely up and down and check it is working properly based on the degree of contamination, aggressive environment and the number of movements made by the movable parts.

After the fitting is in place it is recommended that periodic visual inspections be conducted, taking into account the following points and conducting maintenance where needed. (Double check that the power to the motor is switched off when servicing motor operation.)

- Movable (rotating) and closable parts.
- Piles of sand in front of or behind the fitting.
- Piles of waste in front of or between the movable parts (branches, reeds, plastic etc), ice.
- The operating torque. Torque loading must **never** exceed the maximum permitted operating torque.
- Too much play on movable parts.
- Leaks in the seals.
- Electromotors and reducers.
- Solar panels and locks.

Points for attention

- Replace the rubber seal if damaged.
- Replace both spindle and spindle wire block if either needs replacing due to wear and tear.

Greasing

The use of a highly adhesive, spun grease is recommended.

* *Recommended: Fin Grease LS2 van Interflon.*

- Thoroughly clean the parts and remove old grease before use.
- Grease bronze spindle wire block through block-mounted grease nipple.
- Apply a thin layer of grease for open greasing (metal on metal).
- **Never grease** the **POM** (polyacetal) wire block, only clean it.

Troubleshooting

DEFECT	CAUSE	REMEDY
1 Leak between frame and mounting face	1a Mounting face not level. 1b Rubber seal not affixed properly. 1c MS Polymer kit bead not applied properly.	1a Level wall to NEN 6722, Dec 2002, Art 16.2 1b Replace sealing rubber in accordance with Assembly instructions. 1c Replace MS Polymer kit in accordance with Assembly instructions.
2 Leak between frame and bolt / valve	2a Rubber seal damaged. 2b Dirt between rubber seal and bolt. 2c Rubber seal does not touch plate. 2d Change of application specification.	2a Replace sealing rubber. 2b Remove dirt. 2c Check to see if frame warped or misshaped underground. 2d Contact your supplier.
3 Torque loading is too high.	3a Wall not level. 3b Spindle/wire block dirty or damaged. 3c Dirt between seal and bolt. 3d Spindle extension : consoles not in line. 3e Adjusting bolt too tight.	3a Level wall to NEN 6722, Dec 2002, Art 16.2 3b Clean or replace spindle/wire block. (in event of wear and tear, replace both). 3c Remove dirt. 3d Replace consoles in accordance with Assembly instructions. 3e Loosen adjusting bolts.
4 Rubber seal is damaged.	4a Exterior mechanical damage. 4b Wear and tear	4a Remove the cause of the damage. 4b Replace sealing rubber.

Contact our service department if you have any queries or problems with your **KWT** fittings.