



PVDF and PFA hose and pipe fittings for glass connections

The fittings are used to connect plastic tubes and pipes to glass fittings, for example in glass heat exchangers or glass condensate traps. We further offer types with hose fittings integrated in the swivel nut and types to insert and secure in existing glass fittings.

You will further find seals required for using the selected plug-in fittings with your existing glass fittings.

Hoses can also be connected to glass connections without fittings by using a support tube and secured with the seal. These support tubes are also listed in this data sheet.

Glass fittings GL14, GL18 and GL25

PVDF removable compression fittings

Metric hose and pipe sizes; standard: DN 4/6, DN 5/8, DN 6/8, DN 8/12 and DN 10/12

US hose and pipe sizes; standard: 1/4" - 1/8", 1/4" - 1/6", 3/8" - 1/4" and 1/2" - 3/8"

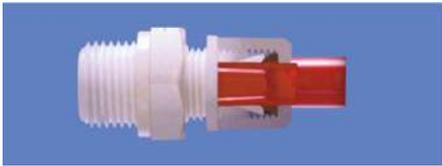


General Data



PVDF version (preferably for flexible hoses)

With PVDF fittings the hose slides over a cylindrical connection piece and secured with a clamping collar and the knurled nut



PFA version (preferably for less flexible hoses)

With PFA fittings the rigid tube slides over a cylindrical connection piece. When tightening the knurled nut, the gasket will seal the connection and a cutting ring secure it.

All fittings with cylindrical female threads have a gasket strip, omitting washers and gaskets during installation. The thermo-plastic material can be considered self-sealing

NOTICE

Use in explosive areas (additional notices)



The products do not fall under Directive 2014/34/EU. However, they do meet the fundamental safety requirements of Directive 2014/34/EU and are therefore suitable for use in explosive areas (Zone 1, Group II C).

NOTICE

Electrostatic charge (sparking)



Always clean (wipe) plastic housing parts and decals with a damp cloth. Keep the gas flow free from particles and drops.

WARNING

Gas emanation



Protect the equipment from external blows (shockproof installation). Risk of fatal injury and explosion hazard from gas leaks due to improper use. Close the shut-off valve (if applicable) to the process or switch off the process for maintenance. Protect yourself from hot and toxic gases. Wear gloves and face shield. Emergent gas can also be explosive. Run lines outside the work and traffic area.

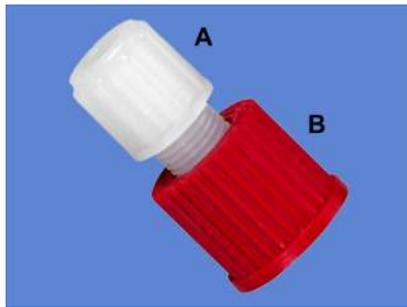
NOTICE

Maximum surface temperature



Please note the ignition temperatures of explosive gases as well as the maximum surface temperatures per the applicable directives and standards.

Glass fittings with hose connection (O-ring)



A: Hose connection
B: Glass threaded connection

| | A | B | Item no. PVDF | Item no. PFA |
|----------------------------|-------------|----------|---------------|--------------|
| Screw connections (metric) | DN 4/6 | GL 14 | 43715001 | 43715011 |
| | | GL 18 | 43715002 | 43715012 |
| | | GL 25 | 43715003 | 43715013 |
| | DN 5/8 | GL 18 | 43715004 | - |
| | DN 6/8 | GL 18 | 43715005 | 43715014 |
| | | GL 25 | 43715006 | 43715015 |
| | DN 8/12 | GL 25 | 4550299 | 43715016 |
| DN 10/12 | GL 25 | 43715007 | 43715017 | |
| Screw connections (US) | 1/4" - 1/8" | GL 14 | 43715008 | 43715018 |
| | 1/4" - 1/6" | GL 14 | 43715009 | 43715019 |
| | 1/2" - 3/8" | GL 25 | 43715010 | 43715020 |

Approved pressure varies by medium temperature

Materials in contact with media: PVDF or PFA, Viton
Max. medium temperature: -30 °C bis +140 °C (-22 °F to +284 °F)

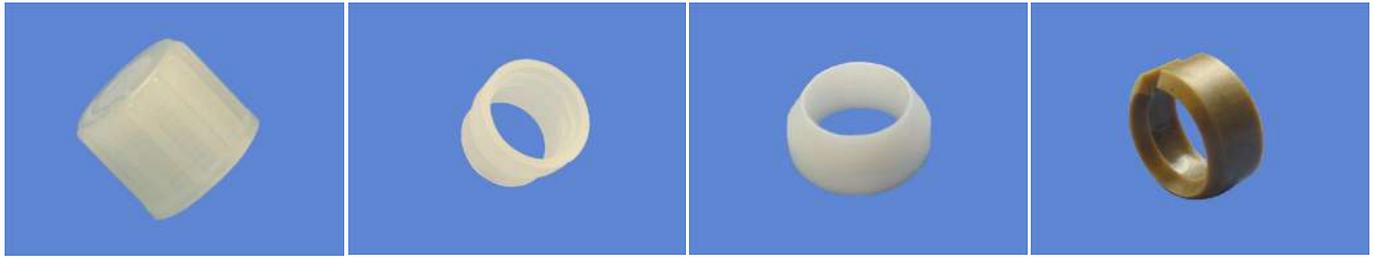
| | | | | | | | | | | | |
|--------------------|-------|------|-------|-----|-----|------|-------|-------|-----|------|-----|
| Medium temperature | < 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | °C |
| | < 122 | 140 | 158 | 176 | 194 | 212 | 230 | 248 | 266 | 284 | °F |
| Max. pressure | 6 | 5 | 4.5 | 4 | 3.5 | 3 | 2.5 | 2.5 | 2 | 1 | bar |
| | 87 | 72.5 | 65.25 | 58 | 51 | 43.5 | 36.25 | 36.25 | 29 | 14.5 | psi |

NOTICE



The actual permissible pressures of these fittings are determined by the approved pressure ratios of the connected glass receptacle!

Small parts (replacement)



Knurled nut

Clamping collar

Gasket

Cutting ring

Connection principle 1A – Material: PVDF

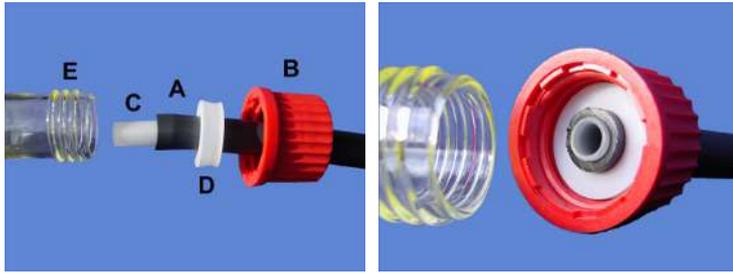
| | A (hose) | PVDF knurled nut | PVDF clamping collar |
|---------------|-------------|------------------|----------------------|
| metric | DN 4/6 | 4350213 | 9008925 |
| | DN 5/8 | 4350214 | 4350219 |
| | DN 6/8 | 4350214 | 4350219 |
| | DN 8/12 | 4350215 | 4350220 |
| | DN 10/12 | 4350215 | 4350220 |
| US | 1/4" - 1/8" | 43712022 | 43712024 |
| | 1/4" - 1/6" | 43712022 | 43712024 |
| | 3/8" - 1/4" | 43712023 | 43712025 |

Connection principle 1C – Material: PFA

| | A (hose) | PVDF knurled nut | PTFE gasket | PEEK cutting ring |
|---------------|-------------|------------------|-------------|-------------------|
| metric | DN 4/6 | 4350213 | 43712026 | 43712031 |
| | DN 5/8 | 4350214 | 43712027 | 43712032 |
| | DN 6/8 | 4350214 | 43712027 | 43712032 |
| | DN 8/12 | 4350215 | 43712028 | 43712033 |
| | DN 10/12 | 4350215 | 43712028 | 43712033 |
| US | 1/4" - 1/8" | 43712022 | 43712029 | 43712034 |
| | 1/4" - 1/6" | 43712022 | 43712029 | 43712034 |
| | 3/8" - 1/4" | 43712023 | 43712030 | 43712035 |

Glass fittings with hose connection

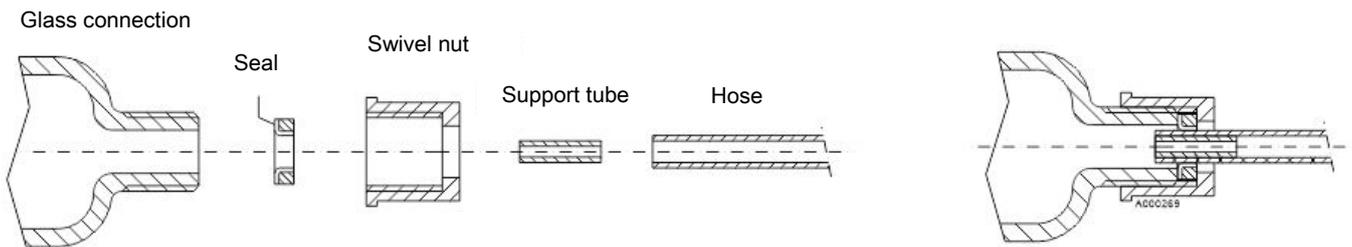
When using hoses with simple swivel nuts and seals, support tubes must be used, as the hose will otherwise deform and not seal. The size must be determined based on the inside diameter of the hose, which is approximately the outside diameter of the support tube.



- A: Hose
- B: Swivel nut for glass thread
- C: Support tubes for hoses
- D: Silicone seal with PTFE sleeve at one end
- Di: Seal inside diameter

| | A | E | Di | B Swivel nut | D Silicone seal with sleeve at one end | C Support tubes for hoses |
|----------------------------|---------------|-------|----|-----------------|---|---------------------------------|
| Fittings metric | DN 4/6 | GL 14 | 6 | 45100132 | 45100134E | 4445014 |
| | DN 5/8 | GL 18 | 8 | 45100140 | 45100138E | 4445012 |
| | DN 5/8 | GL 25 | 8 | 45100133 | 45100137E | 4445012 |
| | DN 6/8 | GL 18 | 8 | 45100140 | 45100138E | 4510273 |
| | DN 8/10 | GL 18 | 10 | 45100140 | 45100141E | 4445013 |
| | DN 8/12 | GL 25 | 12 | 45100133 | 45100135E | 4445013 |
| | DN 10/12 | GL 25 | 12 | 45100133 | 45100135E | 4445010 |
| Fittings US | 1/4" - 1/8" | GL 14 | 6 | 45100132 | 45100134E | 4445014 |
| | 1/4" - 1/6" | GL 14 | 6 | 45100132 | 45100134E | 4445014 |
| | 5/16" - 3/16" | GL 18 | 8 | 45100140 | 45100138E | 4445012 |
| | 5/16" - 3/16" | GL 25 | 8 | 45100133 | 45100137E | 4445012 |
| | 3/8" - 1/4" | GL 18 | 10 | 45100140 | 45100141E | 4445015 |
| | 3/8" - 1/4" | GL 25 | 10 | 45100133 | 451001352E | 4445015 |
| | 1/2" - 3/8" | GL 25 | 12 | 45100133 | 45100135E | 4445016 |

Connection principle



Approved pressure varies by medium temperature

Materials in contact with media: PTFE

Max. medium temperature: -30 °C to +140 °C (-22 °F to +284 °F)

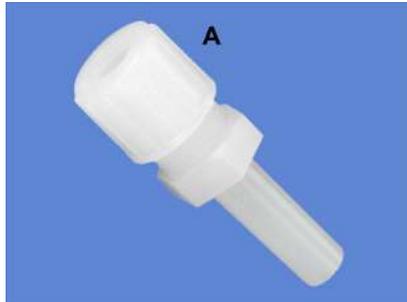
| | | | | | | |
|--------------------|-------|-------|-------|-----|------|-----|
| Medium temperature | < 100 | 110 | 120 | 130 | 140 | °C |
| | < 212 | 230 | 248 | 266 | 284 | °F |
| max. pressure | 3 | 2.5 | 2.5 | 2 | 1 | bar |
| | 43.5 | 36.25 | 36.25 | 29 | 14.5 | psi |

NOTICE



The actual permissible pressures of these fittings are determined by the approved pressure ratios of the connected glass receptacle!

Straight screw connections with hose connection for GL seals



A: Hose connection
 B: Glass threaded connection
 Di: Seal inside diameter

| | A | B | Di | Item no. PVDF | Item no. PFA |
|----------------------------|-------------|------------|----|---------------|--------------|
| Screw connections (metric) | DN 5/8 | GL 18 | 8 | 43716001 | - |
| | DN 8/10 | GL 25 | 10 | 43716007 | - |
| | DN 8/12 | GL 25 | 12 | 43716002 | - |
| | DN 10/12 | GL 25 | 12 | 43716003 | 43716005 |
| Screw connections (US) | 1/4" - 1/8" | GL 18 / 25 | 8 | 43716004 | - |
| | 3/8" - 1/4" | GL 18 / 25 | 8 | - | 43716006 |

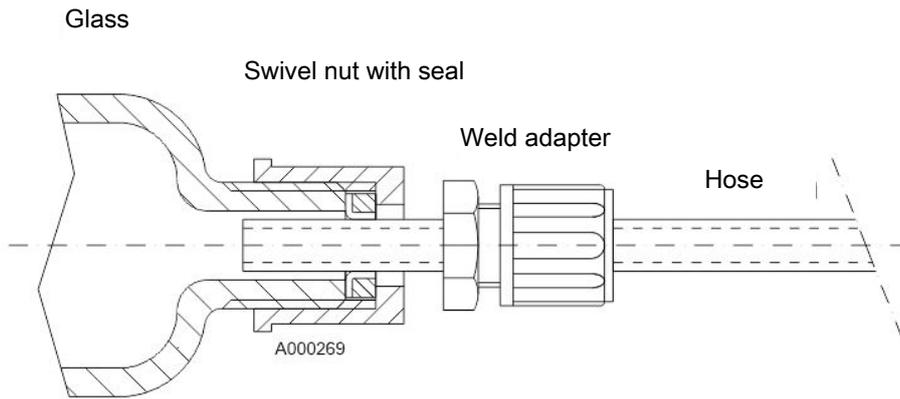
Elbow fittings with hose connection for GL seals



A: Hose connection
 B: Glass threaded connection
 Di: Seal inside diameter

| | A | B | Di | Item no. PVDF | Item no. PFA |
|----------------------------|-------------|------------|----|---------------|--------------|
| Screw connections (metric) | DN 4/6 | GL 14 | 6 | 43717001 | 43717007 |
| | | GL 18 / 25 | 8 | 43717002 | - |
| | DN 6/8 | GL 14 | 6 | 43717003 | - |
| | | GL 18 / 25 | 8 | 43717004 | 13717008 |
| | DN 8/12 | GL 18 / 25 | 12 | 43717005 | - |
| | DN 10/12 | GL 18 / 25 | 12 | 43717006 | 43717009 |
| Screw connections (US) | 1/4" - 1/6" | GL 18 / 25 | - | - | 43717010 |
| | 3/8" - 1/4" | GL 18 / 25 | 8 | - | 43717011 |

Connection principle



Approved pressure varies by medium temperature

Materials in contact with media: PVDF or PFA, PTFE

Medium temperature max.: -30 °C to +140 °C (-22 °F to +284 °F)

| | | | | | | |
|--------------------|-------|-------|-------|-----|------|-----|
| Medium temperature | < 100 | 110 | 120 | 130 | 140 | °C |
| | < 212 | 230 | 248 | 266 | 284 | °F |
| max. pressure | 3 | 2.5 | 2.5 | 2 | 1 | bar |
| | 43.5 | 36.25 | 36.25 | 29 | 14.5 | psi |

NOTICE



The actual permissible pressures of these fittings are determined by the approved pressure ratios of the connected glass receptacle!