



## 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

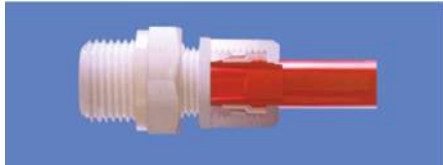
PVDF removable compression fittings

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.

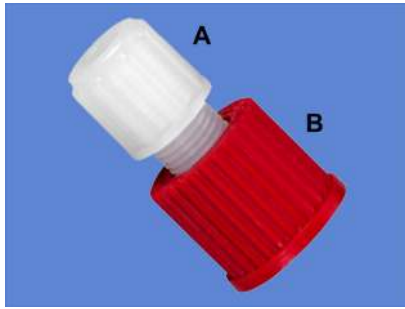
#### NOTICE

##### 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 to +140 °C

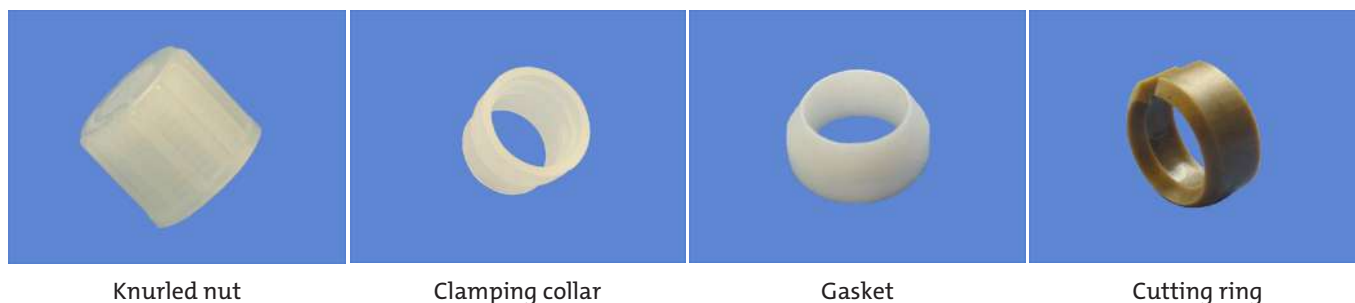
Medium temperature	< 50	60	70	80	90	100	110	120	130	140	°C
	< 122	140	158	176	194	212	230	248	266	284	°F
Max. pressure	6	5	4.5	4	3.5	3	2.5	2.5	2	1	bar
	87	72.5	65.25	58	51	43.5	36.25	36.25	29	14.5	psi

**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**

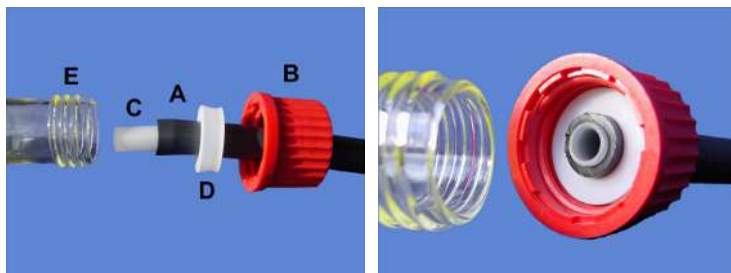
	A (hose)	PVDF knurled nut	PVDF clamping collar
<b>metric</b>	DN 4/6	4350213	9008925
	DN 5/8	4350214	4350219
	DN 6/8	4350214	4350219
	DN 8/12	4350215	4350220
	DN 10/12	4350215	4350220
<b>US</b>	1/4" - 1/8"	43712022	43712024
	1/4" - 1/6"	43712022	43712024
	3/8" - 1/4"	43712023	43712025

**Connection principle 1C – Material: PFA**

	A (hose)	PVDF knurled nut	PTFE gasket	PEEK cutting ring
<b>metric</b>	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
<b>US</b>	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

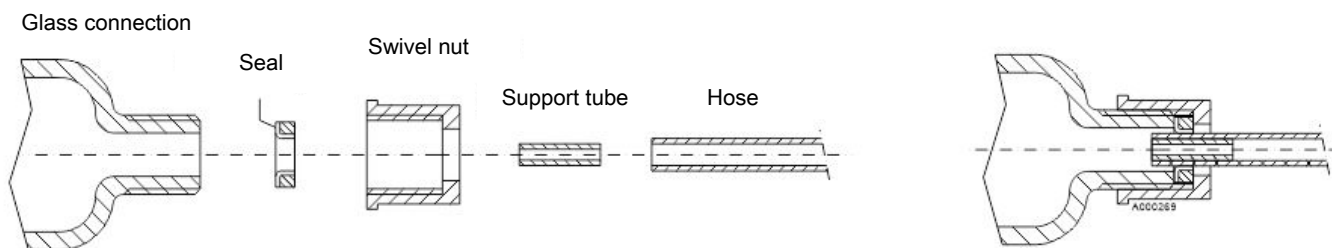
When using hoses with simple swivel nuts and seals, support tubes must be used, as the hose will otherwise deform and not seal. The size must be determined based on the inside diameter of the hose, which is approximately the outside diameter of the support tube.



- 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
<b>Fittings metric</b>	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
<b>Fittings US</b>	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

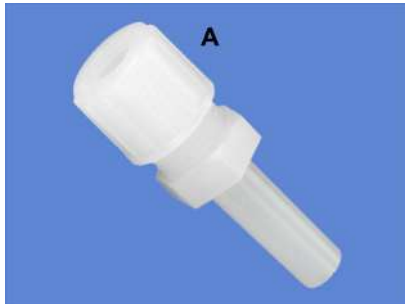
Medium temperature	< 100	110	120	130	140	°C
	< 212	230	248	266	284	°F
max. pressure	3	2.5	2.5	2	1	bar
	43.5	36.25	36.25	29	14.5	psi

**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

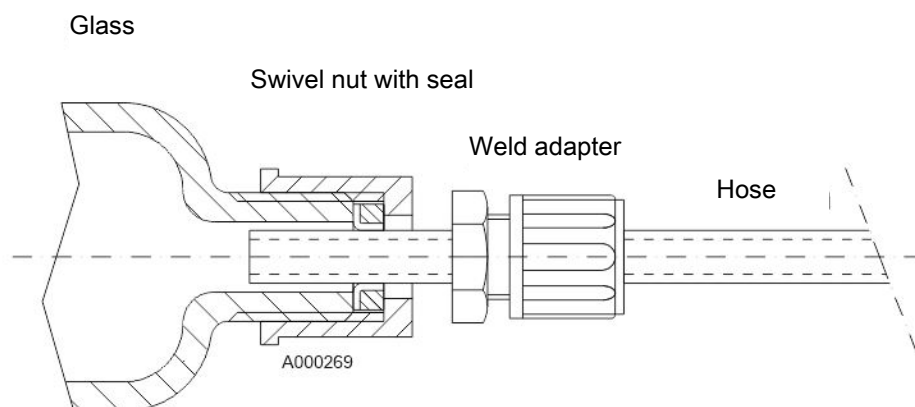
**Elbow fittings with hose connection for GL seals**



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

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!