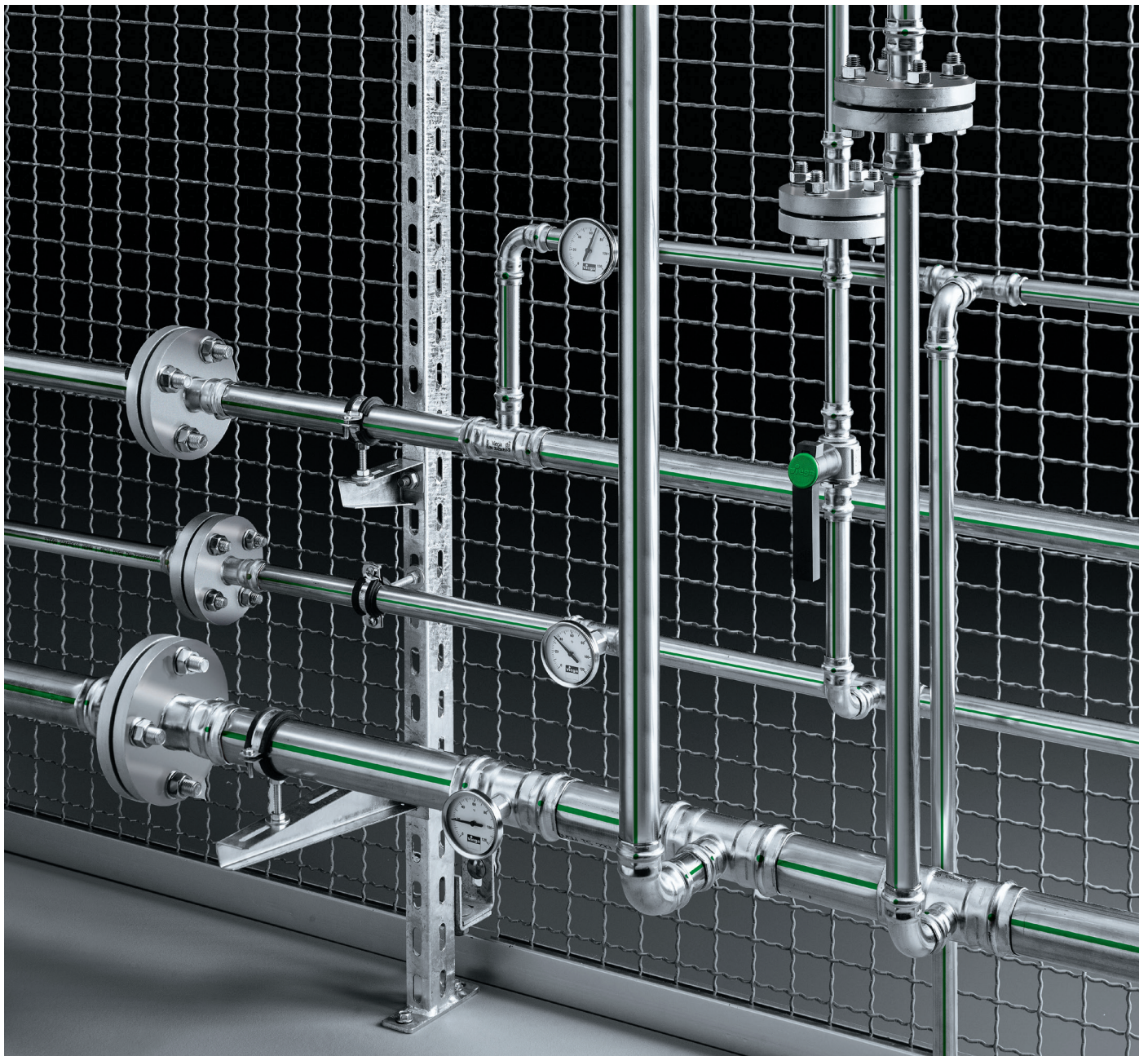


Information for planning and execution

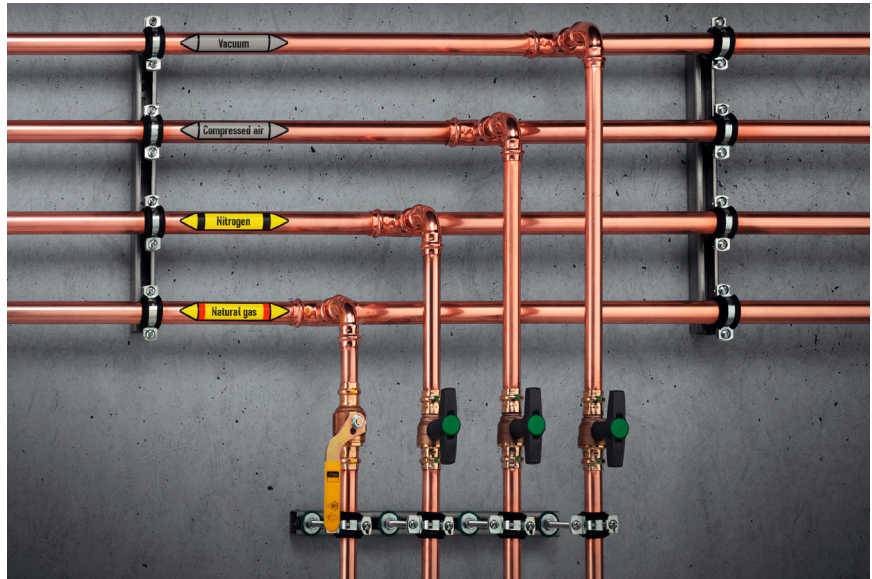
Fields of applications for metal installation systems



viega

Table of contents

1	Categorisation of technical gases in accordance with EU Directive 2014/68/EU (Pressure Equipment Directive (PED))	6
2	Pipes and press connectors – transported media	7
2.1	Waters, frost and corrosion protection, heat carriers	7
2.2	Oils	8
2.3	Compressed air assigned to the purity classes according to ISO 8573-1:2010-04	9
2.4	Gases	11
2.5	Special media - Examined and approved	13
3	Valves – transported media	14
3.1	Waters, frost and corrosion protection, heat carriers	14
3.2	Oils	15
3.3	Gases	16
3.4	Special media - Examined and approved	18
4	Appendix – Form	19
4.1	Inquiry regarding material durability	19



For many years, Viega press connecting technology with the Sanpress, Sanpress Inox, Prestabo and Profipress systems has proved its worth for use in drinking water and building services installations. Increasingly often, it is now used in industrial systems with special operating conditions in terms of pressure, temperature, and concentration of the transported media, requiring careful selection of the pipe and sealing materials.

This brochure intends to help with this selection. In special cases, please contact our Service Center to discuss whether your application is in compliance with the "intended use" of a system. For inquiries via fax, please use the annexed checklist.



Viega piping systems with press connectors cannot be used for piping systems in the food industry as well as for water used in the manufacture of pharmaceutical products (Aqua valde purificata) or for injection purposes (Aqua ad iniectionabilia).

The contents of this product information are not binding. We reserve the right to changes reflecting new insights and technical progress.

Conversion Bar/Pascal

bar	mbar	Pa	kPa	hPa	MPa
1	1000	100000	100	1000	0.1
0.001	1	100	0.1	1	0.0001
0.01	10	1000	1	10	0.001
0.1	100	10000	10	100	0.01

Sealing elements – Technical data

Sealing element - short name	Technical designation	Viega press connector system application	Colour
EPDM	Ethylene propylene diene rubber	Sanpress Inox/ Sanpress/Profipress/ Megapress	black
HNBR	Acrylonitrile butadiene rubber	Sanpress Inox G/ Profipress G/ Megapress G	yellow
FKM	Fluor rubber	Sanpress Inox/ Sanpress/Profipress/ Megapress S	black

1 Categorisation of technical gases in accordance with EU Directive 2014/68/EU (Pressure Equipment Directive (PED))

with the aid of (EC) Regulation No. 1272/2008 (CLP regulation (classification, labelling, packaging))

Group 2 (fluids that cannot be categorised in Group 1)

Gas	Type	H200 codes
Helium	Noble gas	280
Neon	Noble gas	280
Argon	Noble gas	280
Krypton	Noble gas	280
Xenon	Noble gas	280
Nitrogen	Inert gas	280
Forming gas, dry/inert gas	Inert gas	280
Carbon dioxide	Others	280
Synthetic air	Others	280
Coarse vacuum	Vacuum	n/a

Group 1 (hazardous fluids)

Gas	Type	Information	H200 codes
Acetylene	Fuel gas	Unstable alkyne ³⁾	220 / 230 / 280
Hydrogen	Fuel gas	Fuel gas in its simplest form	220 / 280
Methane	Fuel gas	Alkane ¹⁾	220 / 280
Ethane	Fuel gas	Alkane	220 / 280
Propane	Fuel gas	Alkane	220 / 280
Butane	Fuel gas	Alkane	220 / 280
Ethene (ethylene)	Fuel gas	Alkene ²⁾	220 / 280
Propene (propylene)	Fuel gas	Alkene	220 / 280
Liquid gas (LPG)	Fuel gas	Mixture of gases	220 / 280
Natural gas	Fuel gas	Mixture of gases	220 / 280
Carbon monoxide	Oxidising gas		270 / 280
Laughing gas	Oxidising gas		270 / 280
Oxygen	Oxidising gas		270 / 280
Carbogen	Oxidising gas		270 / 280

¹⁾ aliphatic saturated hydrocarbon

²⁾ aliphatic unsaturated hydrocarbon with double bond

³⁾ aliphatic unsaturated hydrocarbon with triple bond

H200 codes	Physical hazards
H220	Extremely flammable gas
H230 (= EUH006)	May react explosively even in the absence of air
H270	May cause or intensify fire: oxidizer
H280	Contains gas under pressure; may explode if heated

H sets	Types of hazard
H200	Physical hazards
H300	Health hazards
H400	Environmental hazards

2 Pipes and press connectors – transported media

2.1 Waters, frost and corrosion protection, heat carriers

System name		Profipress		Profipress S		Sanpress					Tempo-nox		Prestabo		Mega-press	Mega-press S	Sea-press
		1.4520 stainless steel	1.4520 copper	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4520 stainless steel	galvanised steel	hot dip galvanised	steel thick-walled		
Medium	Comment	Sealing element		Connector material		Pipe material		Pmax [MPa]		Tmax [°C]							
Drinking water	According to DIN 1988-200 and EN 806-2 material selection according to DIN EN 12502-1 ¹⁸⁾	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4520 stainless steel	galvanised steel	hot dip galvanised	steel thick-walled	EPDM	FKM	CuNiFe
Treated water (no drinking water)	Fully desalinated, deionised, demineralised, distilled (open system)	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	gunmetal Silicon bronze	galvanised steel	steel zinc-nickel plated	EPDM	FKM	CuNiFe
Cooling water, closed circuit	Open systems available on request	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	gunmetal Silicon bronze	galvanised steel	steel zinc-nickel plated	EPDM	FKM	CuNiFe
Vapour	Low pressure steam units	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	gunmetal Silicon bronze	galvanised steel	steel zinc-nickel plated	EPDM	FKM	CuNiFe
Well water	Requirements in acc. with DWO	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	gunmetal Silicon bronze	galvanised steel	steel zinc-nickel plated	EPDM	FKM	CuNiFe
Pump hot water heating systems	in acc. with DIN EN 12 828	EPDM	FKM	1.4520 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	1.4401 stainless steel	1.4521 stainless steel	gunmetal Silicon bronze	galvanised steel	steel zinc-nickel plated	EPDM	FKM	CuNiFe

Product/manufacture	1)	2)	3)	7)	10)	11)	10)	11)	10)	11)	10)	11)	10)	11)	10)	11)	10)	11)
Antifrogen N / Clariant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Antifrogen L / Clariant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Antifrogen Sol (solar installations) / Clariant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ethylene glycol (Ethan-1,2-diol)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Propylene glycol (1,2-Propandiol)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tyfoxit / Tyforop-Chemie	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tyfocor (L) / Tyforop-Chemie	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TEMPER®	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Antifrogen KF / Clariant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Glysofor KF / Wittig	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

1) sealing elements replaced for FKM
 2) without additives
 3) corrosion protection acc. to AGI Q151
 7) corrosion protection for the pipes acc. to AGI Q151; thanks to their zinc-nickel coating, the Megapress connectors do not require any corrosion protection
 11) The use of Sanpress and Sanpress Inox press connectors is recommended. When using Profipress press connectors made of copper the connection points between pipe and press connector have to be protected with a corrosion prevention agent.
 12) Resistance < 1 MΩ · cm (at 25 °C)
 8) following coordination with the Attendorn factory
 9) only applicable for Megapress silicon bronze adapter, model 4213.2
 10) for operating temperatures of -5 °C to +140 °C
 18) Temperature up to max. 95 °C over a period of max. 60 min

2.2 Oils

Medium	Comment	P _{max} [MPa]	T _{max} [°C]	System name		Profipress		Sanpress		Profi-press G		Sanpress	Tempo-inox	Prestabo	Mega-press	Mega-press S	Mega-press G	Sea-press
				Profi-press	Sanpress	Profipress	Sanpress	Profipress G	Sanpress	Tempo-inox	Prestabo	Mega-press	Mega-press S	Mega-press G	Sea-press			
Mineral oils SAE	15–108 mm / 3/8–4 inch	1.6	70	copper	1.4521, 1.4520, 1.4401, stainless steel	1.4521, 1.4520, 1.4401, stainless steel	1.4401, 1.4520, stainless steel	stainless steel 1.4401	stainless steel 1.4520	steel galvanised	steel thick-walled	CuNiFe						
Fuel oil acc. to DIN 51603-1 Diesel acc. to DIN EN 590	according to TRbF (German Technical Regulations for Flammable Liquids) 12–54 mm / 1/2–2 inch	0.5	40	copper gunmetal Silicon bronze	1.4521, 1.4520, stainless steel	1.4521, 1.4520, stainless steel	gunmetal Silicon bronze	stainless steel	stainless steel	steel galvanised	steel zinc-nickel plated	CuNiFe						
Palm oil				EPDM	EPDM	EPDM	HNBR	HNBR	EPDM	EPDM	FKM	HNBR	EPDM					
Rapeseed oil								4)				8)						
Soy oil			70					4)				8)						
Sunflower oil		1.0						4)				8)						
Biodiesel	EN 14214				1.4521, 1.4520, stainless steel	1.4521, 1.4520, stainless steel		4)				1)						
Palm oil heating			90		1.4521, 1.4520, stainless steel	1.4521, 1.4520, stainless steel		4)				1)						

¹⁾ sealing elements replaced for FKM

⁴⁾ in connection with Viega stainless steel pipe 1.4521, 1.4520 and 1.4401

⁸⁾ following coordination with the Attendorn factory

2.3 Compressed air assigned to the purity classes according to ISO 8573-1:2010-04

system name	pipe material	Sealing element ¹²⁾	T _{max} [°C]	Solid particles ¹³⁾										Residual moisture content class										Oil content class				
				0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4
Profipress	Copper pipe acc. to DIN EN 1057	EPDM		○										○										○				
		FKM		○										○										○				
		HNBR		○										○										○				
Sanpress	1.4401 model 2203/2203XL	EPDM		○										○										○				
		FKM ¹⁵⁾		○										○										○				
	EPDM	○										○										○						
	FKM ¹⁵⁾	○										○										○						
	EPDM	○										○										○						
	FKM ¹⁵⁾	○										○										○						
Sanpress Inox	1.4401 model 2203/2203XL	EPDM	1.6	○										○										○				
		FKM ¹⁵⁾		○										○										○				
	EPDM	○										○										○						
	FKM ¹⁵⁾	○										○										○						
	EPDM	○										○										○						
	FKM ¹⁵⁾	○										○										○						
Sanpress Inox G	1.4401 model 2203/2203XL	EPDM		○										○										○				
		FKM ¹⁵⁾		○										○										○				
	HNBR	○										○										○						
	EPDM	○										○										○						
	EPDM	○										○										○						
	EPDM	○										○										○						
Sanpress Inox LF	1.4521 model 2205/2205XL	EPDM		○										○										○				
		EPDM		○										○										○				
		EPDM		○										○										○				
Sanpress Inox LF	1.4520 model 2204/2204XL	EPDM		○										○										○				
		EPDM		○										○										○				
		EPDM		○										○										○				

✓ = For use

✗ = Not for use

○ = Conditional use, consultation with the Service Center required

¹²⁾ EPDM sealing element for oil concentrations < 25 mg/m³
¹³⁾ Recommendation for classes 1 to 3: Flush the line before commissioning

¹⁵⁾ The EPDM factory-fitted sealing element can be exchanged for a FKM sealing element on-site

system name	pipe material	Sealing element ¹²⁾	p _{max} [MPa]	T _{max} [°C]	Solid particles ¹³⁾										Residual moisture content class										Oil content class									
					0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Seapress	Copper nickel wrought alloy to DIN 86019 WL 2.1972.11 or WL 2.1972.22	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		FKM ¹⁵⁾			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Temponox	1.4520 model 2204/2204XL	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		FKM ¹⁵⁾			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Prestabo	Externally galvanised model 1103/1103XL	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		FKM ¹⁵⁾			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
	EPDM				0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
	FKM ¹⁵⁾				0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Prestabo LF	Externally and internally galvanised model 1106/1106XL	EPDM		1,6	0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		FKM ¹⁵⁾			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Prestabo LF	Externally galvanised model 1103/1103XL	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Megapress	Steel pipes according to DIN EN 10255	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		FKM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Megapress S	DIN EN 10220	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
Megapress G	DIN EN 10216-1 DIN EN 10217-1	EPDM			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				
		HNBR			0	1	2	3	4	5	6	7	X	0	1	2	3	4	5	6	7	8	9	X	0	1	2	3	4	X				

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¹²⁾EPDM sealing element for oil concentrations < 25 mg/m³

¹³⁾Recommendation for classes 1 to 3: Flush the line before commissioning

¹⁵⁾The EPDM factory-fitted sealing element can be exchanged for a FKM sealing element on-site

2.5 Special media - Examined and approved

System name		Profipress		Sanpress			Profi-press G		Sanpress Inox G		Tempo-nox		Prestabo		Mega-press		Mega-press S		Mega-press G		Sea-press	
System name	pipe material	Profipress	Sanpress	Profi-press G	Sanpress Inox G	Tempo-nox	Prestabo	Mega-press	Mega-press S	Mega-press G	Sea-press											
Medium	Comment	P_{max} [MPa]	T_{max} [°C]	1.4520	1.4521	1.4520	1.4401	1.4521	1.4521	1.4401	Stainless steel 1.4520	Stainless steel 1.4520	steel galvanised	steel thick-walled	steel zinc-nickel plated	CuNiFe						
Urea solution	Max. concentration 40 %	1.0	40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ethanol			25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Methanol	Cautions: toxic! from gas-powered calorific value devices, not from oil-powered calorific value devices!	1.6	105	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Condensate				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Condensate	of vapour			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Glycerine triacetate		0.1	20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Caustic soda	30 % aqueous solution	1.0	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Caustic soda	50 % aqueous solution			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acetone	Liquid	0.5	-10 to 40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammoniac	Medium free from CO ₂ + H ₂ O Cautions: toxic!	0.2	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Biogas – before bio-gas treatment	45–70 % CH ₄ / 20–45 % CO ₂ / H ₂ S < 30 mg/m ³	0.5	70																			
Biogas – after biogas treatment	according to G260 and G262																					
Fermenter heating	Substrate temperature 65 °C	1.0	105																			

* Purity requirements acc. to DIN EN 437 available on request

⁵⁾ in case of HTR (higher thermal resistance) requirement, max. permitted operating pressure $p_{max} = 0.1$ MPa

⁶⁾ without contamination

⁸⁾ following coordination with the Attendorm factory

3 Valves – transported media

3.1 Waters, frost and corrosion protection, heat carriers

Product name		Easytop ball valve	Free-flow valve	Easytop Inox ball valve	Profipress G gas ball valve	Gas ball valve
Model no.		2275, 2275LF, 2275.2LF, 2275.3, 2275.4, 2275.10	2278	2375	2670, 2671, 2671.3	G2101
Press connector material		gunmetal Silicon bronze		stainless steel	gunmetal Silicon bronze	brass
Seal		EPDM	EPDM	EPDM	HNBR	
Medium		P_{max} [MPa]	T_{max} [°C]			
Drinking water	Requirement acc. to DWO ¹⁸⁾	1.0	80	✓	✓	✓
Treated water (no drinking water)	Fully desalinated, deionised, demineralised, distilled (open system)			✓		
Cooling water, closed circuit	Open systems available on request	1.6	≥-25	✓	✓	✓
Well water	Requirements in acc. with DWO		80	✓	✓	✓
Pump hot water heating systems	in acc. with DIN EN 12 828		105	✓	✓	✓

Product/manufacturer		Anti-freeze / corrosion protection / cold and heat carrier					
Antifrogen N / Clariant		✓	✓	✓	✓	✓	✓
Antifrogen L / Clariant		✓	✓	✓	✓	✓	✓
Antifrogen Sol (solar installations) / Clariant		✓	✓	✓	✓	✓	✓
Ethylene glycol (Ethan-1.2-dio)		✓	✓	✓	✓	✓	✓
Propylene glycol (1.2-Propandiol)		✓	✓	✓	✓	✓	✓
Tyfoxit / Tyforop-Chemie		✓	✓	✓	✓	✓	✓
Tyfofor (L) / Tyforop-Chemie		✓	✓	✓	✓	✓	✓
TEMPER® Antifrogen KF / Clariant Glysofor KF / Wittig		✓	✓	✓	✓	✓	✓
Potassium Acetate / - formiat brine							✓

¹⁸⁾ Temperature up to max. 95 °C over a period of max. 60 min

3.2 Oils

Medium	Comment	Product name					
		Easytop ball valve	Free-flow valve	Easytop Inox ball valve	Profipress G gas ball valve	Gas ball valve	
		Model no.	Press connector material	Seal	P_{max} [MPa]	T_{max} [°C]	
Mineral oils SAE		2275, 2275LF, 2275.2LF, 2275.3, 2275.4, 2275.10	gunmetal Silicon bronze	EPDM	1.6		✓
Palm oil						70	✓
Rapeseed oil							✓
Soy oil							✓
Sunflower oil							✓
Palm oil heating	Valves not in palm oil					90	✓

3.3 Gases

Product name		Easytop ball valve		Free-flow valve		Easytop inox ball valve		Profipress G gas ball valve		Gas ball valve	
		Model no.	2275, 2275LF, 2275.2LF, 2275.3, 2275.4, 2275.10	2275.1, 2275.2, 2275.5, 2275.6	2278	2375	2670, 2671, 2671.3	G2101			
Press connector material		gunmetal Silicon bronze		gunmetal Silicon bronze		stainless steel		gunmetal Silicon bronze		brass	
Seal		EPDM		EPDM		EPDM		HNBR			
Medium		Comment	p_{max} [MPa]	T_{max} [°C]							
Compressed air	Oil concentration ≤ 25 mg/m ³ 12–54 mm	✓	1.6		✓	✓	✓	✓	✓	✓	✓
	64–108 mm	✓			✓	✓	✓	✓	✓	✓	✓
Natural gas Liquid gases, propane, butane, methane	Oil concentration ≥ 25 mg/m ³ 12–54 mm		0.5							✓ ⁵⁾	✓ ⁵⁾
	64–108 mm										✓ ⁵⁾
Argon	12–54 mm	✓	1.6	60	✓	✓	✓	✓	✓	✓	✓
	64–108 mm	✓	1.0		✓	✓	✓	✓	✓	✓	✓
Carbogen	CO ₂ + O ₂ dry 12–54 mm	✓	1.6	60	✓	✓	✓	✓	✓	✓	✓
	64–108 mm	✓	1.0		✓	✓	✓	✓	✓	✓	✓
Nitrogen – N ₂	Downstream of the vaporiser 12–54 mm	✓	1.6		✓	✓	✓	✓	✓	✓	✓
	64–108 mm	✓	1.0		✓	✓	✓	✓	✓	✓	✓
Hydrogen – H ₂	12–108 mm	✓	0.5		✓	✓	✓	✓	✓	✓	✓
	dry 12–54 mm	✓	1.6		✓	✓	✓	✓	✓	✓	✓
Carbon dioxide – CO ₂	64–108 mm	✓	1.0		✓	✓	✓	✓	✓	✓	✓
	Stainless steel parts not permitted 12–54 mm	✓	1.6		✓	✓	✓	✓	✓	✓	✓
Carbon monoxide – CO	12–54 mm	✓	1.6		✓	✓	✓	✓	✓	✓	✓
	64–108 mm	✓	1.0		✓	✓	✓	✓	✓	✓	✓

* Purity requirements acc. to DIN EN 437 available on request

⁵⁾ in case of HTR (higher thermal resistance) requirement, max. permitted operating pressure $p_{max} = 0.1$ MPa

Medium		Comment	p _{abs} ^{max} [MPa]	T _{oper} ^{max} [°C]	Product name		Easytop ball valve		Free-flow valve	Easytop Inox ball valve	Profipress G gas ball valve	Gas ball valve
					Model no.	Press connector material	Seal	Easytop ball valve	Easytop ball valve	Easytop ball valve	Easytop ball valve	Easytop ball valve
Coarse vacuum	P _{abs} = 1hPa			70		2275, 2275LF, 2275.2LF, 2275.3, 2275.4, 2275.10	gunmetal Silicon bronze	2278	2375	2670, 2671, 2671.3	G2101	
Forming gas, dry/inert gas	Ar + CO ₂ (e.g. argon)	15–54 mm	1.6				✓		✓	✓	✓	
		64–108 mm	1.0				✓		✓	✓	✓	
Nitrous oxide (laughing gas)		12–54 mm	1.6						✓			
		64–108 mm	1.0						✓			
Ethane		12–54 mm	1.6							✓	✓	
		64–108 mm	1.0							✓	✓	
Ethene (ethylene)		12–54 mm	1.6							✓	✓	
		64–108 mm	1.0							✓	✓	
Helium		15–54 mm	1.6	60						✓	✓	
		64–108 mm	1.0							✓	✓	
Krypton		15–54 mm	1.6				✓		✓			
		64–108 mm	1.0									
Neon		15–54 mm	1.6				✓		✓			
		64–108 mm	1.0									
Xenon		15–54 mm	1.6				✓		✓			
		64–108 mm	1.0									
Synthetic air		12–54 mm	1.6				✓		✓		✓	
		64–108 mm	1.0								✓	

* Purity requirements acc. to DIN EN 437 available on request

3.4 Special media - Examined and approved

Product name		Easytop ball valve		Free-flow valve	Easytop Inox ball valve	Profipress G gas ball valve	Gas ball valve
		2275, 2275LF, 2275.2LF, 2275.3, 2275.4, 2275.10	2275.1, 2275.2, 2275.5, 2275.6	2278	2375	2670, 2671, 2671.3	G2101
Press connector material		gunmetal Silicon bronze			stainless steel	gunmetal Silicon bronze	brass
Seal		EPDM		EPDM	EPDM	HNBR	
Special media*		P _{max} [MPa]	T _{max} [°C]				
Medium	Comment						
Urea solution	Max. concentration 40 %	1.0	40		✓		
Ethanol			25	✓	✓		
Methanol	Caution: toxic!				✓		
Condensate	from gas-powered calorific value devices, not from oil-powered calorific value devices!	1.6	110		✓		
Condensate	of vapour			✓ ⁶⁾	✓ ⁶⁾		
Caustic soda	50% aqueous solution	1.0	60		✓		
Acetone	liquid		-10 to 40	✓	✓		
Biogas – after biogas treatment	according to G260 and G262	0.5	70			✓ ⁵⁾	✓ ⁵⁾
Fermenter heating	Substrate temperature 65 °C outside of the fermenter	1.0	105	✓	✓		

* Purity requirements acc. to DIN EN 437 available on request

⁵⁾ in case of HTR (higher thermal resistance) requirement, max. permitted operating pressure p_{max} = 0.1 MPa

⁶⁾ without contamination

4 Appendix – Form

4.1 Inquiry regarding material durability

Inquiry regarding material durability


Global Service & Consulting-Team Application

Phone +49 (0) 2722 61 5666

material-request@viega.com

Customer		Building project	
Customer no.			
Customer/company*		Customer/company*	
Contact persons*		Contact persons	
Street*		Street	
Postal code/town*		Postal code/town	
Country*		Country	
Phone*		Phone	
Email*		Email	
		Potential*	

Information about the installation system	
Planned system*	
Dimension*	

Information about the medium			
Supplier/manufacturer*			
Trade name/designation*			
Application/function*			
Concentration of the medium*			
Other components			
	Time interval (Sec.)	Duration of the condition	
max. temp.*			
min. temp.*			
max. pressure*			
min. pressure*			
max. pH value			
min. pH value			

Information about the system				
Function of the complete system				
Installation site*	<input type="checkbox"/> Indoor	<input type="checkbox"/> Outdoor		
Type of installation*	<input type="checkbox"/> open	<input type="checkbox"/> closed		
Stagnation*	<input type="checkbox"/> yes	<input type="checkbox"/> no		
Ambient conditions*	<input type="checkbox"/> Interior spaces	<input type="checkbox"/> Country air	<input type="checkbox"/> City air	<input type="checkbox"/> Sea air
	<input type="checkbox"/> Industrial air	<input type="checkbox"/> Other:		
desired service life*	<input type="checkbox"/> < 1 year	<input type="checkbox"/> 1–5 years	<input type="checkbox"/> 5–10 years	<input type="checkbox"/> > 10 years

Free text field

*) Mandatory fields



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