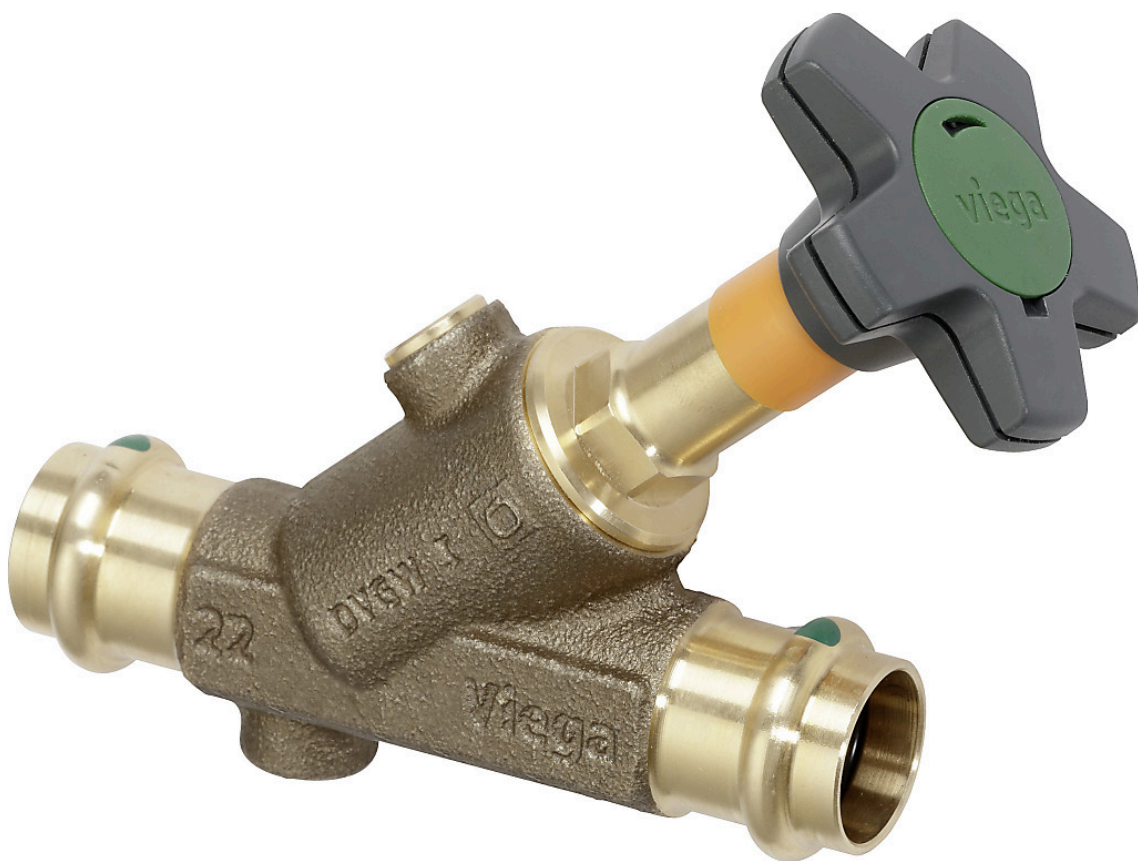


**Easytop system valves**  
Submittal Package



# Table of contents

1	Product group description_____	3
2	Areas of application_____	5
3	Certificates_____	23
4	Legal notices_____	26
5	Imprint_____	27

## Product group description

System valves made of stainless steel, gunmetal or silicon bronze and accessories for potable water and heating installations. Can be combined directly with numerous Viega press connector systems. Other combinations with connections to G and Rp thread, as well as flange adapters.

### **Slanted seat valves (free flow valves)**

Valve casing and top made of stainless steel or silicon bronze, valve seat made of stainless steel, with spindle transmission and open/closed position display, handwheel with green/red interchangeable media marking, with drain plug.

### **KRV valves (combined free flow valves with backflow preventer)**

Valve casing and top made of stainless steel or silicon bronze, valve seat made of stainless steel, with spindle transmission and open/closed position display, handwheel with green/red interchangeable media marking, with test connection, with drain plug.

### **Backflow preventers**

Valve casing and top made of stainless steel or silicon bronze, valve seat made of stainless steel, with test connection, with drain plug.

### **Extraction valves**

For sampling cold potable water (PWC) and hot potable water (PWH/PWH-C).

1-piece model consisting of: gunmetal extraction valve, stainless steel outlet pipe, rotatable/flammable, base unit rotatable through 360°, removable handle.

### **Circulation regulation valves**

Thermostatic regulation valves for the hydraulic line or storey calibration, casing and water contacting parts made of silicon bronze, control range 40 to 65 °C, blockable, with drain plug.

Static regulation valve for the hydraulic circuit balancing, casing and water contacting parts made of silicon bronze.

### **Ball valves**

Valve casing made of stainless steel, gunmetal or silicon bronze, ball made of stainless steel, maintenance-free selector shaft (Viega recommends to open and close the ball valve completely every six months), actuating lever with green/red interchangeable media marking, with drain plug.

### **Free-flow valves**

Valve casing and top made of silicon bronze.

### **Concealed straight seat valves**

Valve casing and top made of silicon bronze, with bare brickwork protection.

### **Concealed domestic water meter units**

Valve casing and top made of silicon bronze, with upper part, valve seat and valve plate unit made of stainless steel, with site protection, with connection for Coax G2 measuring capsule (not included in scope of delivery), with blind flange.

Models optionally sound and heat insulated or as a 1-piece and 2-piece version.

### **Marking**

Manufacturer, pipe dimension, batch, green dot on press end, interchangeable green, red or blue media marking

**Press connector material**

Gunmetal: CC499K

Silicon bronze: CC246E / CW246E

Stainless steel 1.4401

This product description contains important information on choice of product and system, mounting, commissioning as well as intended use and, if required, on maintenance measures. This information on products, their features and application techniques is based on currently valid standards in Europe (e.g. EN) and/or in Germany (e.g. DIN/DVGW). Some passages in the text may refer to technical regulations in Europe/Germany. These should be considered as recommendations for other countries where no corresponding national requirements exist. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this product description: The information herein is not binding for other countries and regions and should be understood as recommendation.

# Areas of application

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1,2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration $\leq 25$ mg/m <sup>3</sup> d12–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Coarse vacuum</b> P (absolute) = 1hPa	max. operating temperature	70 °C / 158 °F
<b>Krypton</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F

**System name:** Easytop **Sealing element:** threaded connection

**System name:** Easytop **Sealing element:** threaded connection

Areas of application	Properties	Values
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration $\leq 25$ mg/m <sup>3</sup> d12–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12–108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** threaded connection

Areas of application	Properties	Values
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Coarse vacuum</b> P (absolute) = 1hPa	max. operating temperature	70 °C / 158 °F
<b>Krypton</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0-7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F

**System name:** Easytop **Sealing element:** threaded connection

Areas of application	Properties	Values
<b>Cooling water (closed circuit)</b>	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration <= 25 mg/m <sup>3</sup> d12-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** threaded connection

Areas of application	Properties	Values
<b>Carbon monoxide</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> Argon + carbon dioxide (example Corgon) d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
----------------------	------------	--------

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration $\leq 25$ mg/m <sup>3</sup> d12–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0–108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12–108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Coarse vacuum</b> P (absolute) = 1hPa	max. operating temperature	70 °C / 158 °F
<b>Krypton</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0-7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Cooling water (closed circuit)</b>	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration <= 25 mg/m <sup>3</sup> d12-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Carbon monoxide</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> Argon + carbon dioxide (example Corgon) d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi

**System name: Easytop Sealing element: EPDM**

Areas of application	Properties	Values
<b>Cooling water (closed circuit)</b>	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propanediol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F

**System name: Easytop Sealing element: EPDM**

Areas of application	Properties	Values
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propandiol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration <= 25 mg/m <sup>3</sup> d12-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Coarse vacuum</b> P (absolute) = 1hPa	max. operating temperature	70 °C / 158 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Krypton</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0-7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propandiol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration <= 25 mg/m <sup>3</sup> d12-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> stainless steel components not permitted d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon monoxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> Argon + carbon dioxide (example Corgon) d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F

**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Forming gas (dry/inert gas)</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F

**System name: Easytop Sealing element: EPDM**

Areas of application	Properties	Values
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propandiol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie corrosion protection for non-alloyed steel pipes in accordance with AGI Q151	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from vapour without impurities	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Potable water</b> pH-value $\geq 7.4$ pH-value 7.0–7.4 with TOC max. 1.5 mg/l requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Treated water (non-potable water)</b> open system fully deionised deionised demineralised distilled	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Cooling water (closed circuit)</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	105 °C / 221 °F
<b>Well water</b> requirements acc. to PWO	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	80 °C / 176 °F
<b>Heating systems</b> in accordance with DIN EN 12 828	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	105 °C / 221 °F








**System name:** Easytop **Sealing element:** EPDM











Areas of application	Properties	Values
<b>Air conditioning systems</b> Antifrogen N / Clariant Antifrogen L / Clariant Antifrogen Sol (solar installations) / Clariant Ethylene glycol (Ethane-1,2-diol) propylene glycol (1.2-propandiol) Tyfoxit / Tyforop Chemie Tyfocor / Tyforop Chemie	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	min. operating temperature	-25 °C / -13 °F
	max. operating temperature	110 °C / 230 °F
<b>Palm oil heating</b>	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	90 °C / 194 °F
<b>Compressed air</b> oil concentration <= 25 mg/m <sup>3</sup> d12-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Argon</b> d64.0-108.0	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> carbon dioxide + oxygen dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> downstream of the vaporiser d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrogen</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Hydrogen</b> d12-108.0	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> dry d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Carbon dioxide</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Coarse vacuum</b> P (absolute) = 1hPa	max. operating temperature	70 °C / 158 °F
<b>Forming gas (dry/inert gas)</b> Argon + carbon dioxide (example Corgon) d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Forming gas (dry/inert gas)</b> d64.0-108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Nitrous oxide (laughing gas)</b> d12-54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F





**System name:** Easytop **Sealing element:** EPDM

Areas of application	Properties	Values
<b>Nitrous oxide (laughing gas)</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Krypton</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Neon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Xenon</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d12–54	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	60 °C / 140 °F
<b>Synthetic air</b> d64.0–108.0	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Urea solution</b> max. concentration 40 %	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	40 °C / 104 °F
<b>Ethanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Methanol</b>	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	25 °C / 77 °F
<b>Condensate</b> from gas-powered calorific value devices, not from oil-powered calorific value devices	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Condensate</b> from vapour	max. operating pressure	1.6 MPa / 16 bar / 232.1 psi
	max. operating temperature	110 °C / 230 °F
<b>Caustic soda</b> 50 % aqueous solution	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	60 °C / 140 °F
<b>Acetone</b> liquid	max. operating pressure	0.5 MPa / 5 bar / 72.5 psi
	min. operating temperature	-10 °C / 14 °F
	max. operating temperature	40 °C / 104 °F
<b>Fermenter heating</b> substrate temperature 65 °C	max. operating pressure	1 MPa / 10 bar / 145 psi
	max. operating temperature	105 °C / 221 °F

# Certificates

AMTEC	<b>AMTEC Certificate</b> Megapress S, steel ball valve type 4375.8
AMTEC	<b>AMTEC Certificate</b> Easytop, model 2370
BELGAQUA	<b>BELGAQUA Certificate</b> Easytop
BELGAQUA	<b>BELGAQUA Certificate</b> Easytop Inox
	<b>DVGW type examination certificate</b> Easytop Circulation control valve
	<b>DVGW type examination certificate</b> Easytop-ball valve
	<b>DVGW type examination certificate</b> Easytop-CRV-slanted seat valve
	<b>DVGW type examination certificate</b> Easytop circulation valve S/E thermostatic
	<b>DVGW type examination certificate</b> Easytop-slanted seat valve
	<b>DVGW type examination certificate</b> Easytop-backflow preventer
	<b>DVGW type examination certificate</b> Easytop-sampling valve

	<p><b>DVGW type examination certificate</b> Easytop-free-flow valve</p>
	<p><b>DVGW type examination certificate</b> Easytop Concealed straight seat valve</p>
	<p><b>DVGW type examination certificate</b> Easytop Inox-ball valve</p>
	<p><b>DVGW type examination certificate</b> Easytop Inox-ball valve</p>
	<p><b>DVGW type examination certificate</b> Easytop Inox-CRV- slanted seat valve</p>
	<p><b>DVGW type examination certificate</b> Easytop Inox-backflow preventer</p>
	<p><b>DVGW type examination certificate</b> Easytop Inox-slanted seat valve</p>
	<p><b>DVGW type examination certificate</b> Easytop XL-CRV slanted seat valve</p>
	<p><b>DVGW type examination certificate</b> Easytop XL-slanted seat valve</p>
	<p><b>DVGW type examination certificate</b> Easytop XL-backflow preventer</p>
<p>I.E.S.T. S.R.L.</p>	<p><b>EITS Technical Approval</b> Easytop</p>

	<p><b>EMI certificate</b> Profipress, Sanpress, Easytop, Sanpress Inox, Pexfit Pro Fosta, Smartpress, gunmetal threaded fittings</p>
	<p><b>EMI Certificate of Constancy of Performance</b> Easytop, Smartpress/Pexfit Pro fittings</p>
	<p><b>ETA Certificate</b> Easytop</p>
<p>MPA NRW</p>	<p><b>General building supervision certificate</b> Free-flow valve</p>
	<p><b>KIWA Product certificate</b> Easytop, Easytop Inox</p>

## Legal notices

The liability period for our products within the scope of our liability insurance covers a period of 5 years from date of installation and ends at the latest 10 years after delivery by Viega.

Within this period, we are liable for design defect, faulty material, manufacturing defect and failure to instruct for which we are responsible. The validity of the warranty is subject to correct handling of the products in accordance with our current assembly instructions and technical documentation as well as adherence to the recognized standards of technology. The warranty does not apply in cases of incorrect and non-professional installation.

The Viega system tools such as press tools, press jaws, press rings, Steptec punches, pipe cutters, calibrating tools etc. are subject to a two-year warranty period from date of purchase at the wholesaler.

# Imprint

## **Viega GmbH & Co. KG**

Viega Platz 1

57439 Attendorn

Germany

Phone: +49/2722/61-0

Fax: +49/2722/61-1566

The Viega GmbH & Co. KG is represented by the general partners: Viega Management B.V. (Managing directors: Michael Klenz, Sebastian Lelgemann) and Viega Management GmbH (Managing directors: Michael Klenz, Sebastian Lelgemann)

The Submittal Package contains non-binding information that is being provided to you. All contents in the Submittal Package have been compiled with the greatest possible care and attention. Despite this, we are unable to guarantee that the information is up to date, accurate and complete. Placing an order does not automatically render the Submittal Package part of the contract.