

Specifications

Body material: BRASS ALLOY CW510L (Lead Free)

Finishing: Sand blasted

Operating temperature range: -10 to 185 degrees Celsius

SRP/F

Diaphragm safety valve with female/female connections.

Set pressure as required, up to 8 bar. Size 1/2" and 3/4". EC PED, ACS, WRAS



Solar version
SRP/FS 1/2"

Name	Size	Code
SRP/F 1/2"		
SRP/F 1/2 0,5	Ø 1/2" x 0,5 bar	0399
SRP/F 1/2 1,5	Ø 1/2" x 1,5 bar	0043
SRP/F 1/2 1,8	Ø 1/2" x 1,8 bar	0293
SRP/F 1/2 2	Ø 1/2" x 2 bar	0044
SRP/F 1/2 2,5	Ø 1/2" x 2,5 bar	0045
SRP/F 1/2 3	Ø 1/2" x 3 bar	0046
SRP/F 1/2 3,5	Ø 1/2" x 3,5 bar	0285
SRP/F 1/2 4	Ø 1/2" x 4 bar	0047
SRP/F 1/2 5	Ø 1/2" x 5 bar	0048
SRP/F 1/2 6	Ø 1/2" x 6 bar	0049
SRP/F 1/2 7	Ø 1/2" x 7 bar	0050
SRP/F 1/2 8	Ø 1/2" x 8 bar	0051
SRP/F 3/4"		
SRP/F 3/4 1,5	Ø 3/4" x 1,5 bar	0053
SRP/F 3/4 1,8	Ø 3/4" x 1,8 bar	0294
SRP/F 3/4 2	Ø 3/4" x 2 bar	0054
SRP/F 3/4 2,5	Ø 3/4" x 2,5 bar	0055
SRP/F 3/4 3	Ø 3/4" x 3 bar	0056
SRP/F 3/4 3,5	Ø 3/4" x 3,5 bar	0289
SRP/F 3/4 4	Ø 3/4" x 4 bar	0057
SRP/F 3/4 4,5	Ø 3/4" x 4,5 bar	0081
SRP/F 3/4 5	Ø 3/4" x 5 bar	0058
SRP/F 3/4 5,5	Ø 3/4" x 5,5 bar	0589
SRP/F 3/4 6	Ø 3/4" x 6 bar	0059
SRP/F 3/4 7	Ø 3/4" x 7 bar	0060
SRP/F 3/4 8	Ø 3/4" x 8 bar	0061

Composition

CW511L is a free cutting and forging brass in the form of rod. The alloy has very good dezincification resistance and good machinability. The alloy is lead free and is approved according to the 4MS list, use for drinking water applications, product groups B-D. The alloy is also approved by Kiwa Sverige AB according to Type approval 1303 for components with contact with drinking water.

CW511L AquaNordic®	Cu	Zn	Pb	Sn	Fe
	62,5-63,5%	Rest	<0,1%	≤0,1%	≤0,1%
	Al	Ni	As	Mn	Other*
	≤0,05%	≤0,1%	0,02-0,08%	≤0,01%	<0,02%

*According to 4MS

Dezincification resistance

The alloy is dezincification resistant, according to ISO 6509 and AS 2345-2006, Appendix C.

Heat treatment

Stress-relief annealing. Temperature 330-350°C. Time 1-2 hours. Stress-relief annealing should be carried out after all cold working which gives a high risk for residual stresses in the material. A heat treatment may also be justified after machining. Heat treatment eliminates the risk of stress corrosion cracking caused by internal stresses.

Soft annealing (Dezincification resistance annealing). Temperature 500-550°C. Time 1-2 hours.

Mechanical properties

Nordic Brass Gusum quality of AquaNordic® rod, meets and exceeds the quality demands, with 15-30%, defined in the CW511L standards. To give an idea of the mechanical properties some empirical values, according to the material condition "M" in the EN standard, are listed below. These values are to be considered as guideline values for the delivered material.

Property	Value	Unit
Rm, Tensile strength	>330	MPa
Rp02, Yield strength	~240	MPa
A5, Fracture elongation	>40	%
Brinell hardness	~95	HB

Corrosion resistance

Copper is a relatively noble metal. Copper and its alloys therefore show little tendency to react with the environment. As a result of this, the copper materials generally have good corrosion resistance. However, corrosion may occur under disadvantageous unfavorable conditions. The type of corrosion which may occur depends on both the environment and the composition of the alloy.