PRESSURE RELIEF VALVE SV 811L

4.5 up to 45.0 bar



Spring loaded, direct acting pressure relief valve for hydrogen-powered motor vehicles according to the European Regulation (EC) No. 79/2009, as implemented by Regulation (EC) No. 406/2010.

Benefits

- type-approval from Federal Motor Transport Authority according to Regulation (EC) 79/2009 and (EC) 406/2010
- individual opening pressure from 4.5 up to 45.0 bar
- TÜV-certification of pressure setting
- stainless steel 1.4404
- compact size for easy, problem free installation
- range of inlet connections
- adapter for connection to ventilation pipe

Approvals

Manufactured and certified according to Commission Regulation (EU) No. 406/2010 Annex IV, Part 3

Company certified according to ISO 9001 and PED 2014/68/EU Module H CE-marked according to:

- PED 2014/68/EU

Type-approval

Opening pressure

Width across flats

Drill hole (d₀)

Temperature

Burst pressure

of housing

Gases

Material

Weight

range

Adapter

- type-approval from Federal Motor Transport Authority

SV811L < 30 bar no type-approval is required according to Regulation (EC) No. 79/2009 Appendix I b

> > 30 bar e1 00 0006

4.5 up to 45.0 bar

hydrogen housing and metal turned parts made of stainless steel 1.4404,

pressure spring made of stainless steel 1.4310, valve seal EPDM

27 mm

approx. 360 g

6.0 mm

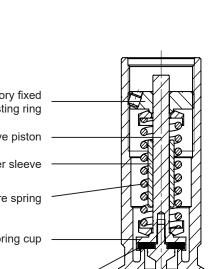
-40 °C/-40 °F up to max. +85 °C/+185 °F

for connection to ventilation pipe

at the outlet 900 bar

heavy duty version

(Model ŠV811) 1 600 bar



factory fixed	
adjusting ring	
valve piston	
finder sleeve	
pressure spring	
spring cup	
seal	
housing	
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PRESSURE RELIEF VALVE SV 811L



4.5 up to 45.0 bar

Flow capacity for hydrogen at 23 °C / 73.4 °F (valid only for atmospheric back pressure) SV811L

Opening pressure	[bar]	4.5	5	6		8	9	10	11	12	13	14
Volume flow	[m³/h]	194	216	259	302	345	388	431	474	517	560	603
Opening pressure	[bar]	15	16	17	18	19	20	21	22	23	24	25
Volume flow	[m³/h]	646	689	732	914	964	1 015	1 065	1 116	1 166	1 216	1 267
Opening pressure	[bar]	26	27	28	29	30	31	32	33	34	35	36
Volume flow	[m³/h]	1 312	1 362	1 412	1 462	1 512	1 562	1 612	1 662	1 712	1 762	1 812
Opening pressure	[bar]	37	38	39	40	41	42	43	44	45		
Volume flow	[m³/h]	1 862	1 912	1 962	2 011	2 161	2 211	2 261	2 210	2 260		

Type / Variants / Versions

Overall lenght [mm]	Inlet male thread	Outlet female thread	Drill hole d₀[mm] SV811L		
SV811L	(M)	(F)			
95.2	11/16-16 UNF-2A				
96.0	9/16-18 UNF-2A		6.0		
96.5	G 1/4; 1/4" NPT				
	G 3/8; 3/8" NPT				
	M16 x 1.5	M24 x 1			
96.8	13/16-16 UNF-2A				
101.5	G 1/2; 1/2" NPT				
	G 3/4; 3/4" NPT				
	M20 x 1.5				

We recommend to check once a year whether the pressure relief valve still opens at the required response pressure (opening pressure) and is tight closed afterwards.

Service life is 3 years.