

DOUBLE ACTING PRESSURE RELIEF VALVES 2SVD(B)

GENERAL DESCRIPTION

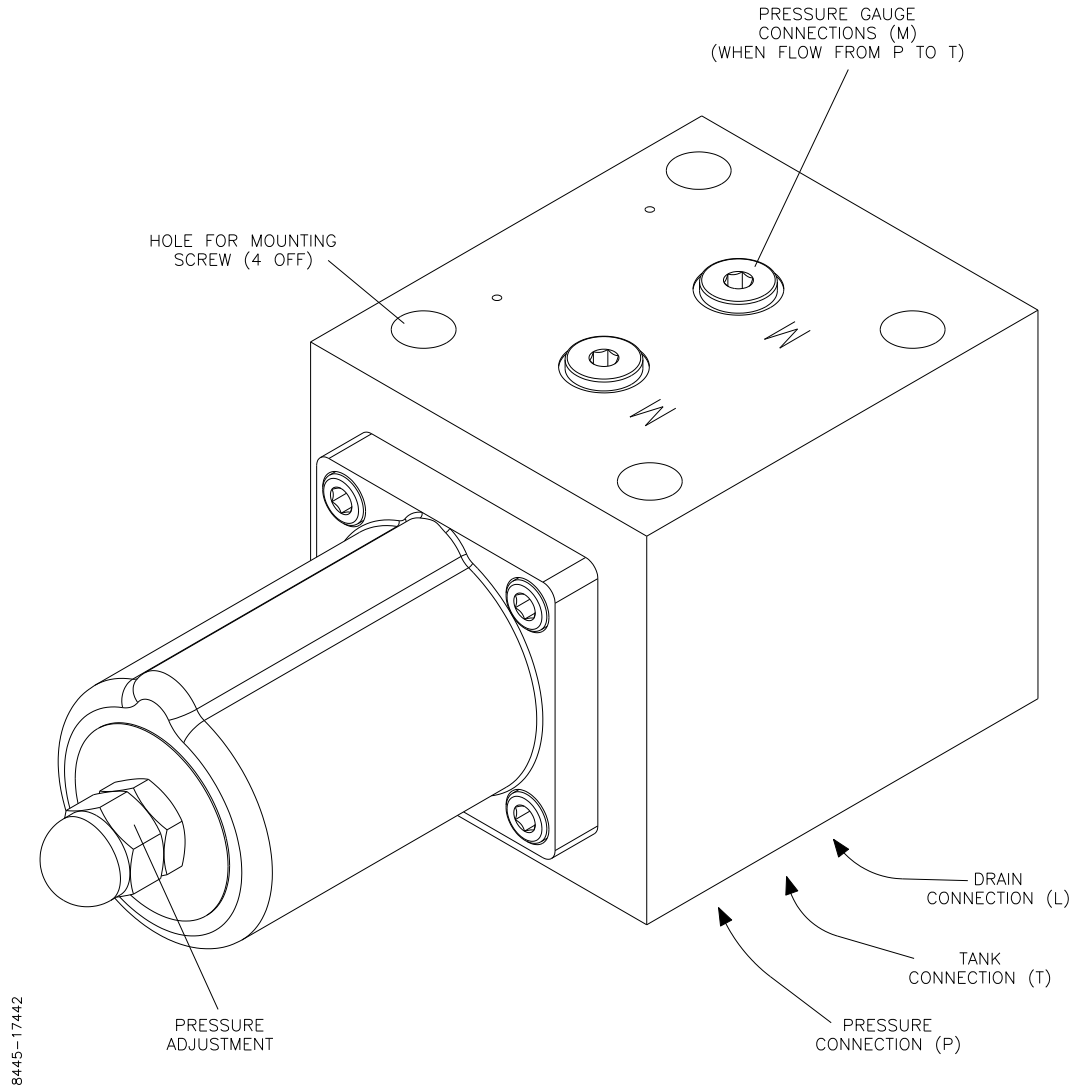


Figure 1 2SVDB General Arrangement

The Double acting Pressure Relief Valves 2SVD(B) are seawater resistant valves for limiting of the pressure in hydraulic systems. The valves have the following characteristics:

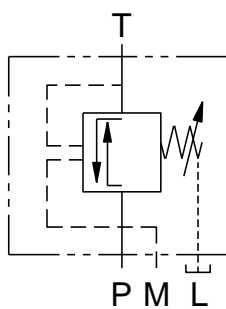
- Double acting valve. Opens both from P→T and T→P.
- Delivered with threaded connections, or for gasket mounting to a sub plate or valve unit.
- Two adjustable pressure ranges are available.
- Delivered with flow capacity up to 300 l/min.
- The valves can be delivered with flange for panel mounting.

For more details about types and options, please refer to section 'Modular Code'.

MODULAR CODE

Options	Remarks	Design Code	Fill in
<i>Mounting</i>			2SVD
Threads			
SUB Plate		B	
<i>Pressure ranges</i>			
5 – 50 bar		1	
5 – 175 bar		3	
50 – 350 bar		4	
<i>Size</i>			
10 mm	35 l/min	2	
15 mm	75 l/min	3	
20 mm	125 l/min	4	
30 mm	300 l/min	6	
<i>Adjustment</i>			
Knob		R	
<i>Alternative Mounting</i>			
Pnael mounted		P	
<i>Drain</i>			
External drain connection	No options	L	L

In example a 2SVD valve with sub plate, 0-175 bar, 300 l/min flow and knob will have modular code: **2SVDB36RL**.



2SVD**L

DIMENSIONS

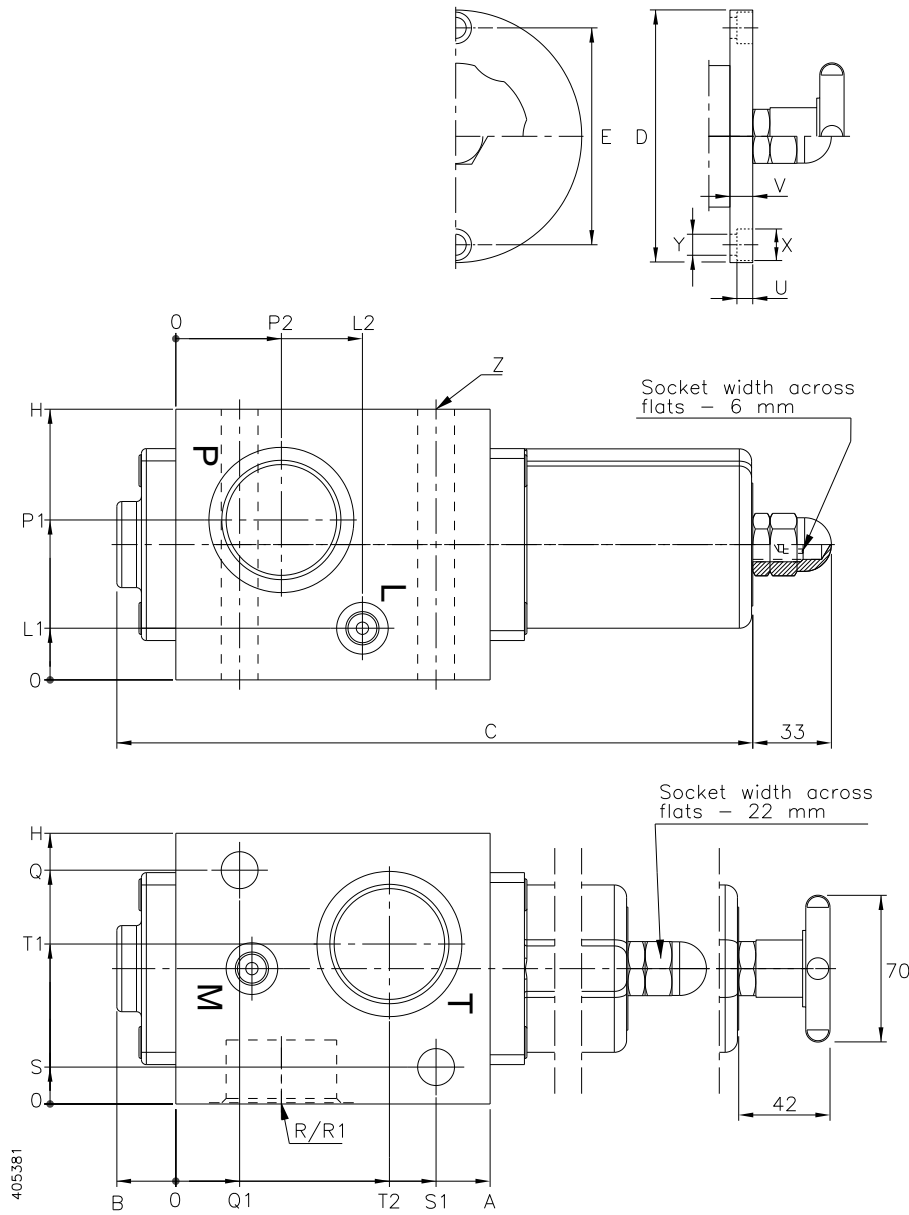


Figure 2 2SVD Dimensions

2SVD:

Size [mm]	A	B	C	D	E	H	L1	L2	P1	P2	Q
10	70.5	24	179	100	82	60	12	39.5	42	25	52
15	87.5	24	219	140	120	80	13	48.5	55	30.5	70
20	87.5	24	219	140	120	80	13	48.5	55	30.5	70
30	128	24	259	165	140	110	21	76	65	43	95
	Q1	S	S1	T1	T2	U	V	X	Y	Z	
10	17.5	8	55.5	42	48	5.5	12	14	9	9	
15	23.5	10	68.5	55	57.5	10	14	17	11	11	
20	23.5	10	68.5	55	57.5	10	14	17	11	11	
30	26	15	106	65	87	14	14	23	15	15	

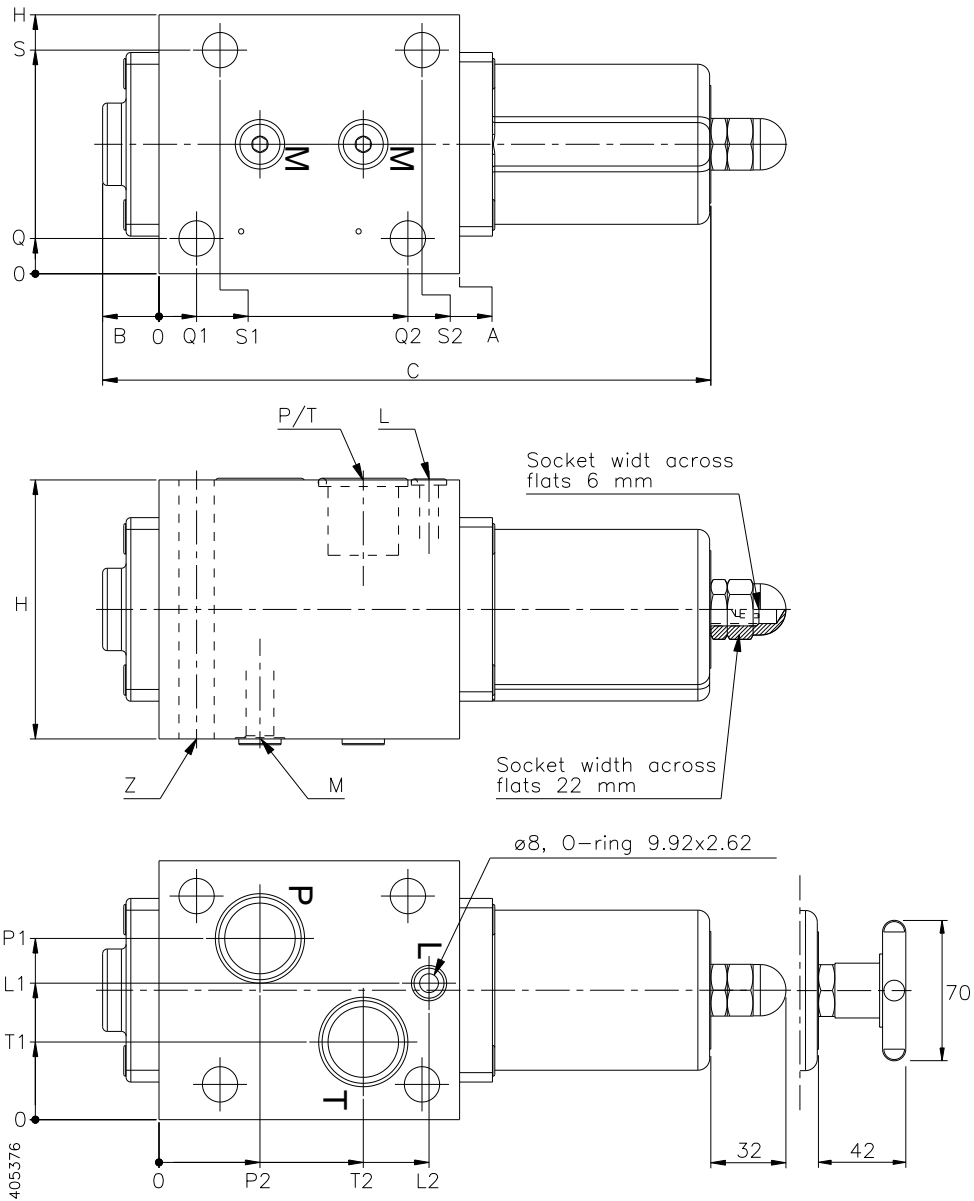
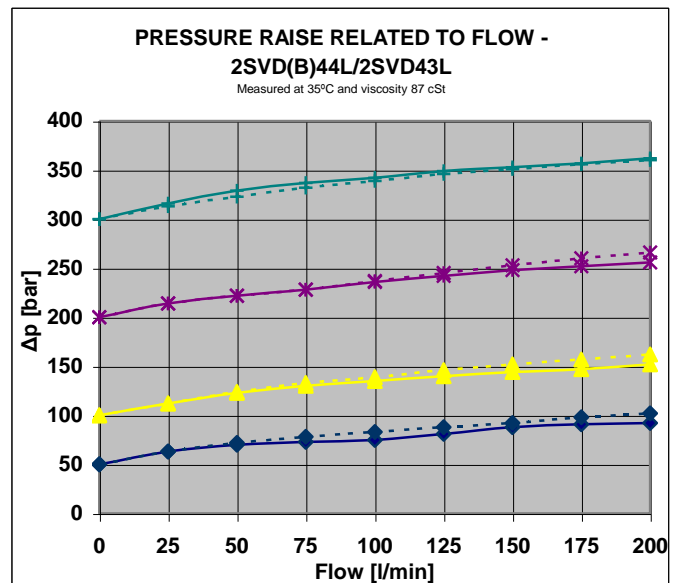
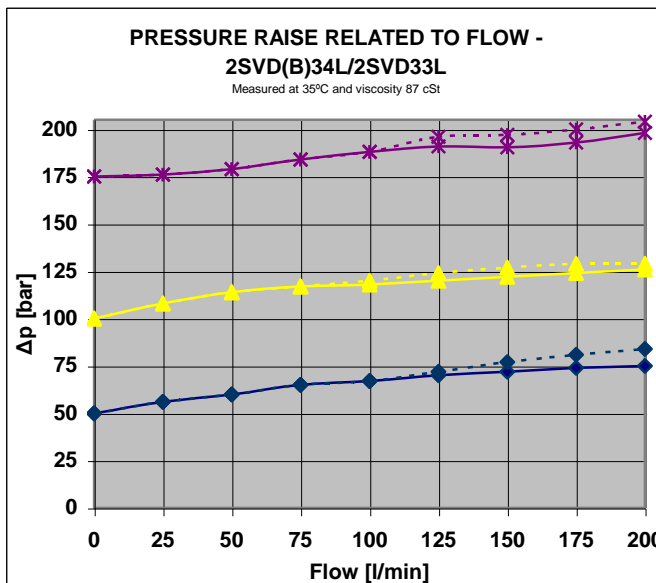
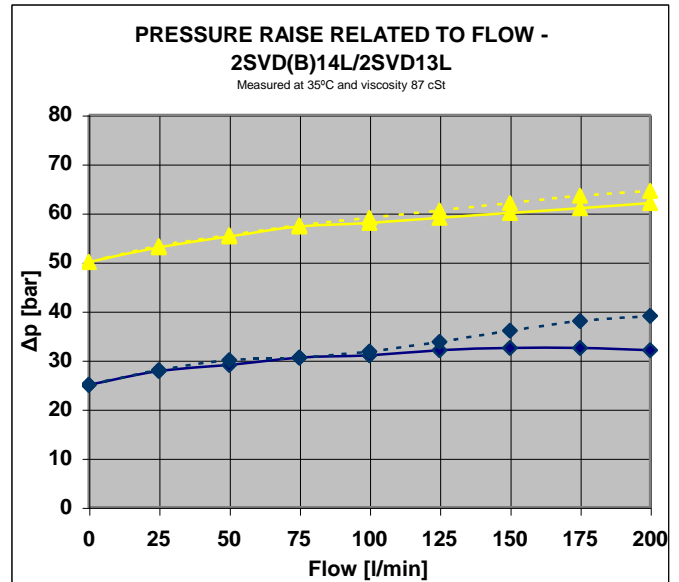
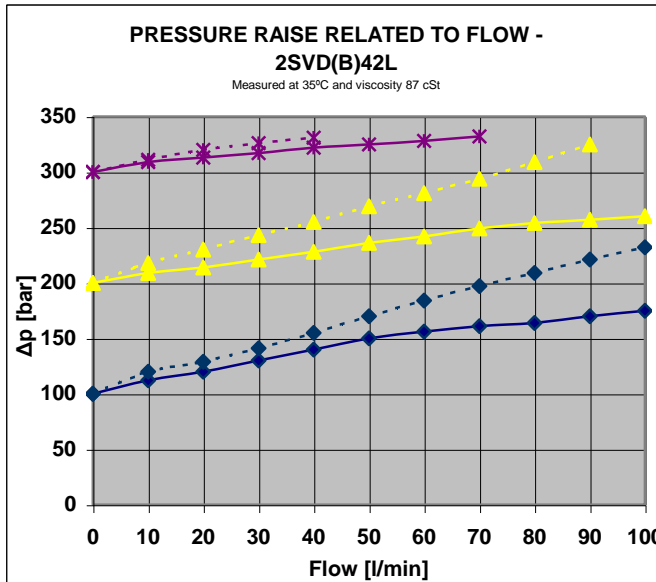
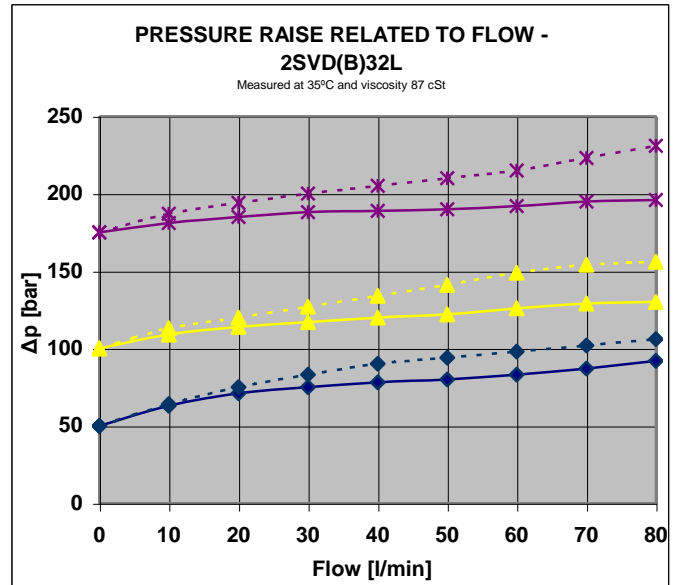
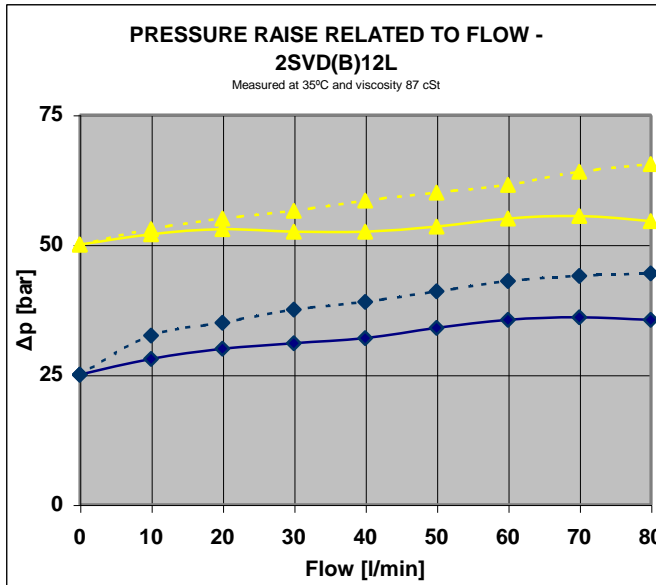


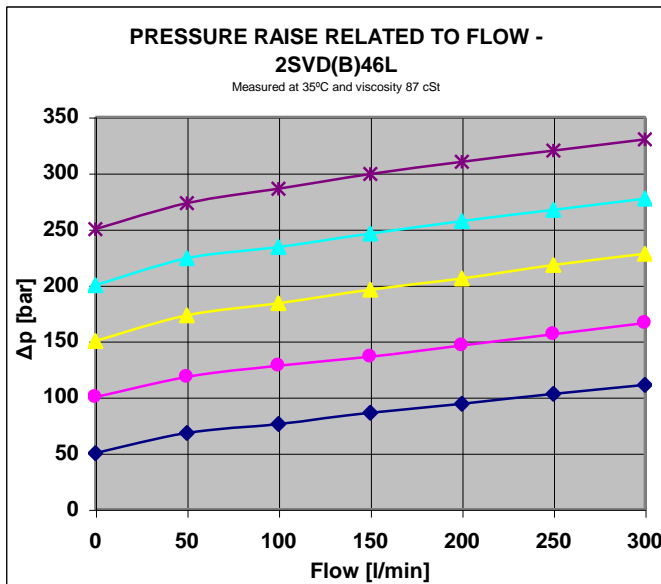
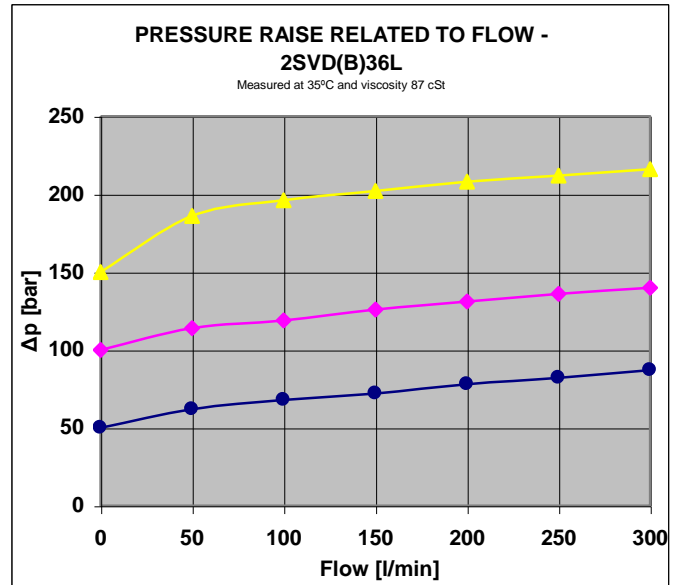
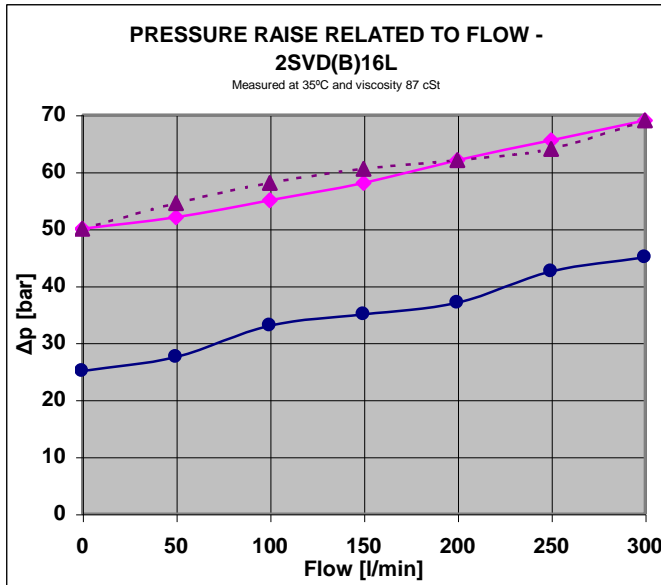
Figure 3 2SVDB Dimensions

2SVDB:

Size [mm]	A	B	C	H	L1	L2	P1	P2	Q
10	70.5	24	179	60	33	61	42	25	8
20	87.5	24	219	80	43	76	55	30.5	10
30	128	24	259	110	58	115	77	43	15
	Q1	Q2	S	S1	S2	T1	T2	Z	
10	-	55.5	52	17.5	-	18	48	9	
20	15.5	68.5	70	23.5	72.5	25	57.5	9	
30	16	106	95	26	112	33	87	15	

PRESSURE RAISE





TECHNICAL DATA

Description	Symbol	Data
Max. operating pressure in port P, A, B, T	P_{max}	350 bar
Max. pressure in port L (always in use)	P_{max}	30 bar
Directional valve pilot pressure	P_{max}	8-30 bar
Test Pressure	P	420 bar
Hydraulic fluid		Mineral oils for hydraulic system
Viscosity range:	ν	10 to 350 mm ² /s (cST)
Viscosity index:	VI	> 120
Filtration, recommended filter with $\beta_{20} \geq 100$		Class 9 according to NAS 1638, 18/15 according to ISO 4406
Fluid temperature range:	T	-20°C to + 70°C
Ambient temperature range	T	-20°C to + 50°C
Standard Body Material		EN-GJS-400-15 (GGG 40)
Standard O-rings		Nitrile shore 70

Flow and Weights:

Size	Max. Flow	Weight
10 mm	35 l/min	2.5 kg
15 mm	75 l/min	5.4 kg
20 mm	125 l/min	5.4 kg
30 mm	300 l/min	11.4 kg



Interfaces:

Size	Description	Data
2SVD:		
	<i>Threaded Connections</i>	<i>Screws</i>
		<i>Tightening Torque [Nm]</i>
10 mm	½” BSPP	2 off M 8 – DIN931
15 mm	¾” BSPP	2 off M 10 – DIN931
20 mm	1” BSPP	2 off M 10 – DIN931
30 mm	1 ½” BSPP	2 off M 16 – DIN931
2SVDB:		
	<i>Screws:</i>	<i>Tightening Torque [Nm]</i>
10 mm	4 off M 8 x 70– DIN 931	19.6
15 mm	4 off M 8 x 90 – DIN 931	19.6
20 mm	4 off M 8 x 90 – DIN 931	19.6
30 mm	4 off M 14 x 130 – DIN 931	58.8
	<i>O-rings:</i>	<i>Size [mm]:</i>
10 mm	2 off 1 off	11.91 x 2.62 9.92 x 2.62
15 mm	2 off 1 off	22,20 x 3.0 9.92 x 2.62
20 mm	2 off 1 off	22,20 x 3.0 9.92 x 2.62
30 mm	2 off 1 off	31.34 x 3.53 9.92 x 2.62



INSTALLATION

The Double acting Pressure Relief Valves 2SVD are installed to the pipeline with threaded connections and mounted to a bracket or similar with 2 screws. The 2SVDB valves are installed with 4 off screws to a SUB plate or valve unit. Please refer to section 'Interfaces' for details about connections and screws.

OPERATION

Pressure adjustment

Install a pressure gauge to the valve, and turn the hexagon screw or hand wheel until the requested pressure is achieved. A cap nut protects the hexagon screw.

MAINTENANCE

Check the valve for proper function. Visually check the valve and if required, paint unpainted (damaged) areas.

STORAGE

If storage longer than 6 months is expected, the valve must be kept in a dry room, free from dust and protected against sudden large temperature variations. For storage longer than 12 months, the valve must be filled with inhibition oil. Before use check all visible seals and flush with clean oil.

MARKING

Inlets and outlets are marked, refer to figure in section 'General Description'.