

## Stacking Cross-Line Relief Valve, size 3 Seated Pilot Stage, Spool-type Main Stage Series SDVB- ...S ...



- 80 l/min, 315 bar
- with two-stage 10 mm pressure relief cartridge DVPA-1-10...
- 315 bar, 80 l/min on all ports
- In single cartridge versions (symbols 1 and 2) a cavity blanking plug is inserted in the opposite side
- Optionally available with hand knob, or lockable hand knob, adjuster
- Also available with solenoid controlled two-pressure cartridge WUVPB-1 ...-10
- ISO 4401 CETOP RP35H size 3, NFPA D03, DIN 24 340 A6 interface

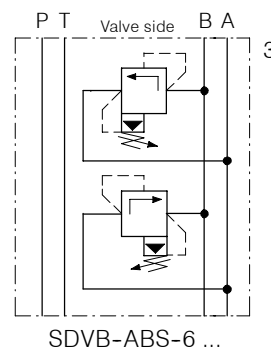
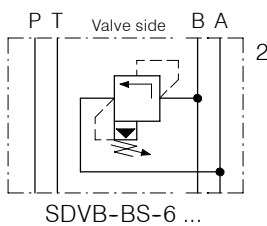
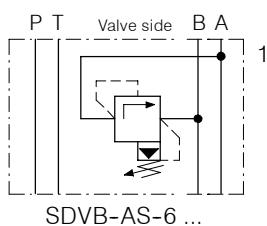
### 1. Description

The valves protect A and/or B against pressure peaks, relieving such peaks to B and/or A ('cross-line'). They are equipped with the two-stage pressure relief cartridge type DVPA-1-10... as

shown on data sheet D-4.31. When closed, the valves shut off the relief path with spool-type leakage (see performance data) and they are rated for the full ISO size 3 flow rate. The

screw-in design of the cartridge valve provides for straight-forward, trouble-free maintenance. Interface sealing is by means of O-rings which are retained in counter-bores in the valve body.

### 2. Symbols



### 3. Characteristics

Type		stacking cross-line relief valve
Design		two-stage, sliding spool
Mounting method		stack mounting
Size		ISO 4401 size 3 interface
Mass	kg	SDVB-AS / -BS-6 = 2,05; SDVB-ABS-6 = 2,15
Mounting attitude		unrestricted
Flow direction		see symbols
Operating pressure in P, A, B and T	bar	315
Adjustment ranges	bar	pressure range N = 010 ... 315 pressure range M = 010 ... 210 pressure range L = 010 ... 065
Flow rate Qmax	l/min	80, see performance limits
Fluids		Hydraulic oils HL and HLP to DIN 51 524, other fluids contact BUCHER
Fluid temperature range	°C	-25 ... + 80
Ambient temperature	°C	-25 ... + 80

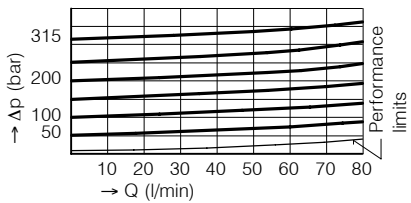
Viscosity range	cSt	10 ... 650, recommended 15 ... 250
Minimum fluid cleanliness		18/14 to ISO 4406 /CETOP RP70H 8 ... 9 to NAS 1638

## 4. Performance graphs

Oil viscosity 33 cSt

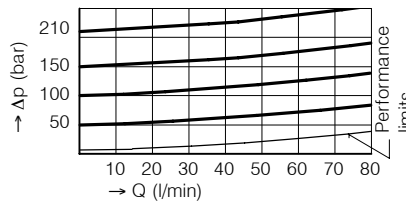
SDVB-ABS (-AS, -BS) -6-..N

$\Delta p$ -Q characteristics A  $\Rightarrow$  B, B  $\Rightarrow$  A



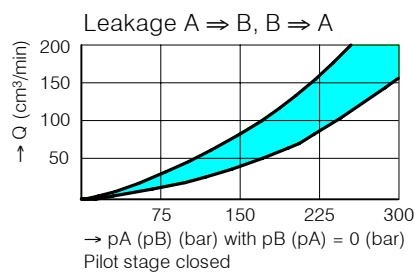
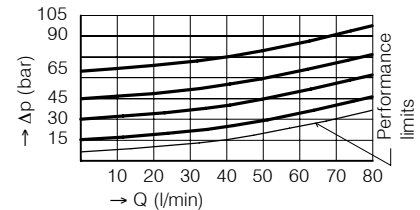
SDVB-ABS (-AS, -BS) -6-..M

$\Delta p$ -Q characteristics A  $\Rightarrow$  B, B  $\Rightarrow$  A



SDVB-ABS (-AS, -BS) -6-..L

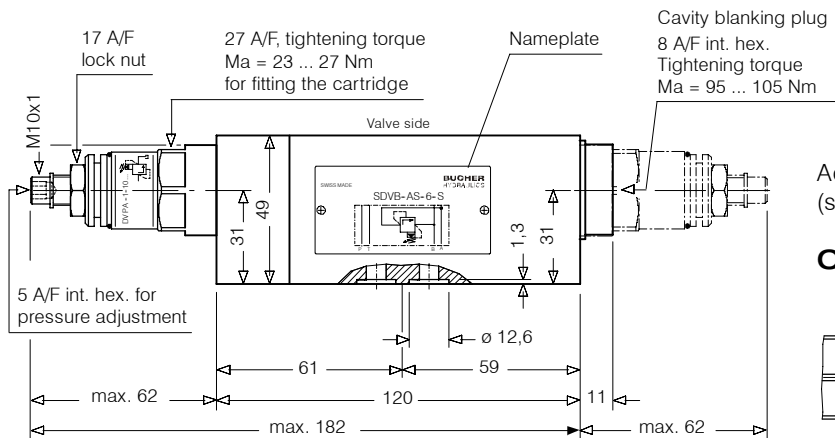
$\Delta p$ -Q characteristics A  $\Rightarrow$  B, B  $\Rightarrow$  A



Rate of pressure change when turning the adjusting screw:

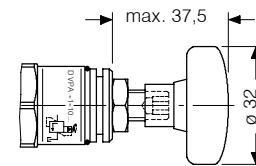
SDVB-..-6-..N: 1 turn	$\cong$ approx. 60 (bar)
SDVB-..-6-..M: 1 turn	$\cong$ approx. 38 (bar)
SDVB-..-6-..L: 1 turn	$\cong$ approx. 13 (bar)

## 5. Dimensions

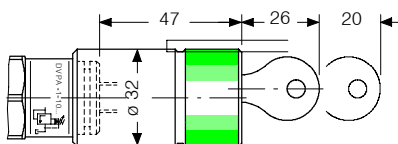


Adjuster style S (standard)

### OPTIONS

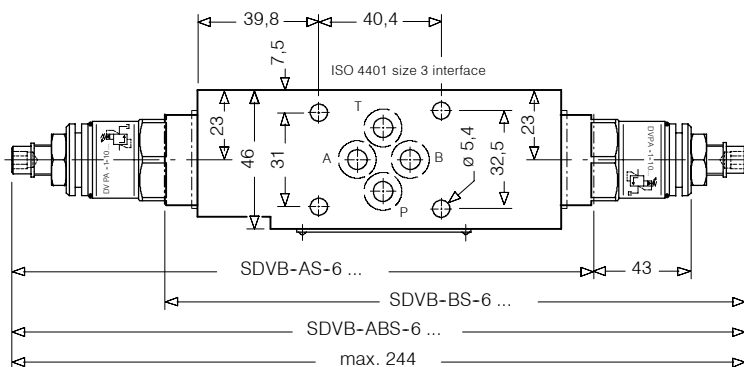


Adjuster style H Hand knob (can be fitted later by user)



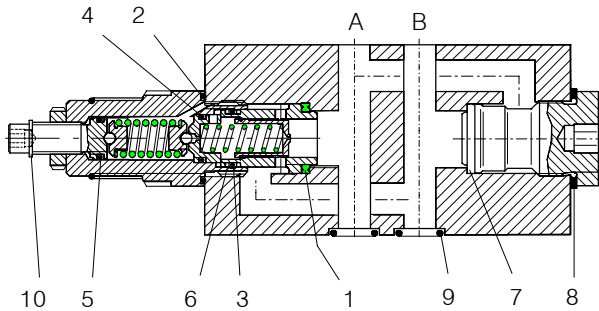
Adjuster style Z4

Lockable hand knob type 2H complies with Volkswagen Factory Specification BV 1.09 (factory option only)



## 6. Schematic section

showing the relevant ports  
Ex. SDVB-AS-6 ...



Seal kit no. DS-259, comprising:

Itm.	Qty.	Qty.	Description	Size
1	1	2	Seal	∅ 22.1/16.5x2.5
2	1	2	O-ring no. 021	∅ 23.52x1.78 N90
3	1	2	O-ring	∅ 14.00x2.00 N90
4	1	2	O-ring no. 013	∅ 10.82x1.78 N90
5	1	2	O-ring n. 012	∅ 9.25x1.78 N90
6	2	4	Backup ring	∅ 13,7X1,4X1,15
7	1	-	Usit-Ring	∅ 24.7/32,0x2,0
8	4	4	O-ring no. 012	∅ 9.25x1.78 N90
9	1	2	Snap ring	∅ 9 Typ SS

SDVB-ABS-6 ...  
SDVB-AS-6.../SDVB-BS-6...

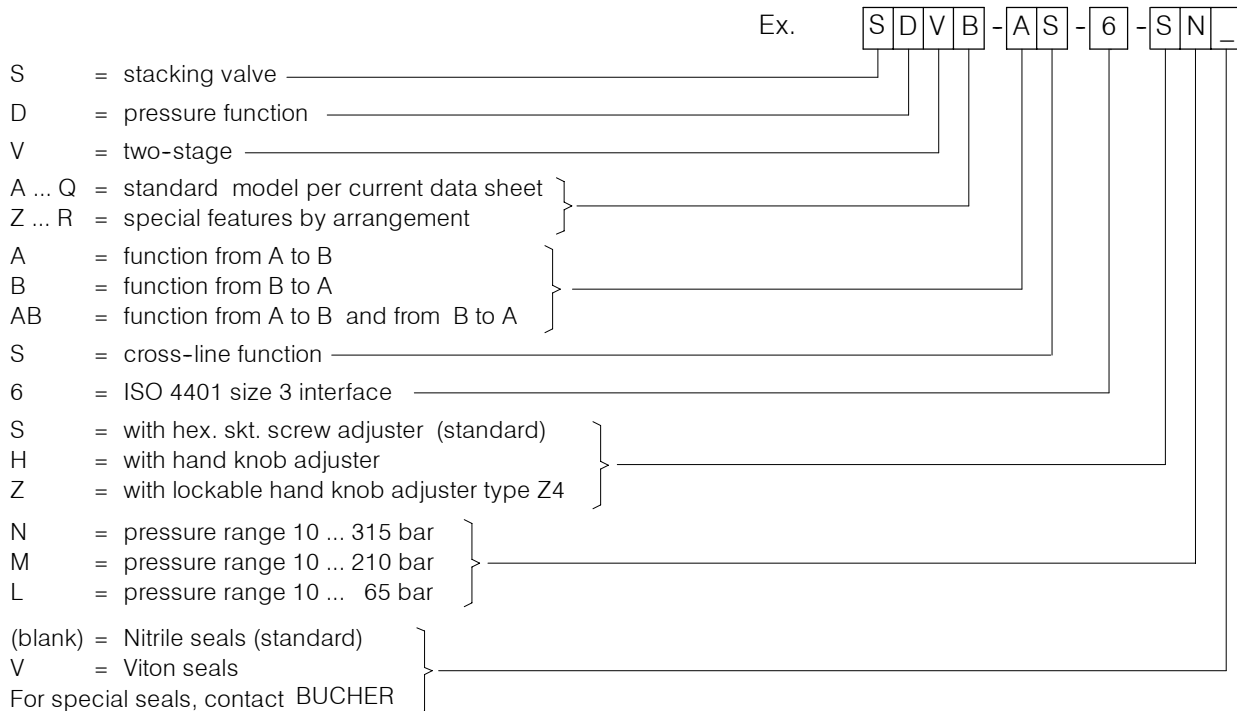
## 7. Installation and servicing

All installation and servicing must be carried out with care, and by qualified personnel only. At installation, be sure to mount the valve with the correct

faces contacting the adjacent units and with all interface connections lining up properly. When changing seals, the new seals should be thoroughly oiled or

greased before fitting them to the valve. Use the correct tightening torques when fitting the cartridge and cavity blanking plugs.

## 8. Model code key



## 9. Related data sheets

Old no.	New no.	
i-00	400-P-010101-E	Table of interface equivalents
i-31	400-P-030501-E	DIN 24 340 size A6 interface
D-4.31	400-P-280101-E	Two-stage pressure relief cartridge, 10 mm, series DVPA-1-10 ...

[info.ch@bucherhydraulics.com](mailto:info.ch@bucherhydraulics.com)

[www.bucherhydraulics.com](http://www.bucherhydraulics.com)

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