

D-11.10 a

Stacking Pressure Relief Valve, 10 mm Seated Pilot Stage, Spool-type Main Stage

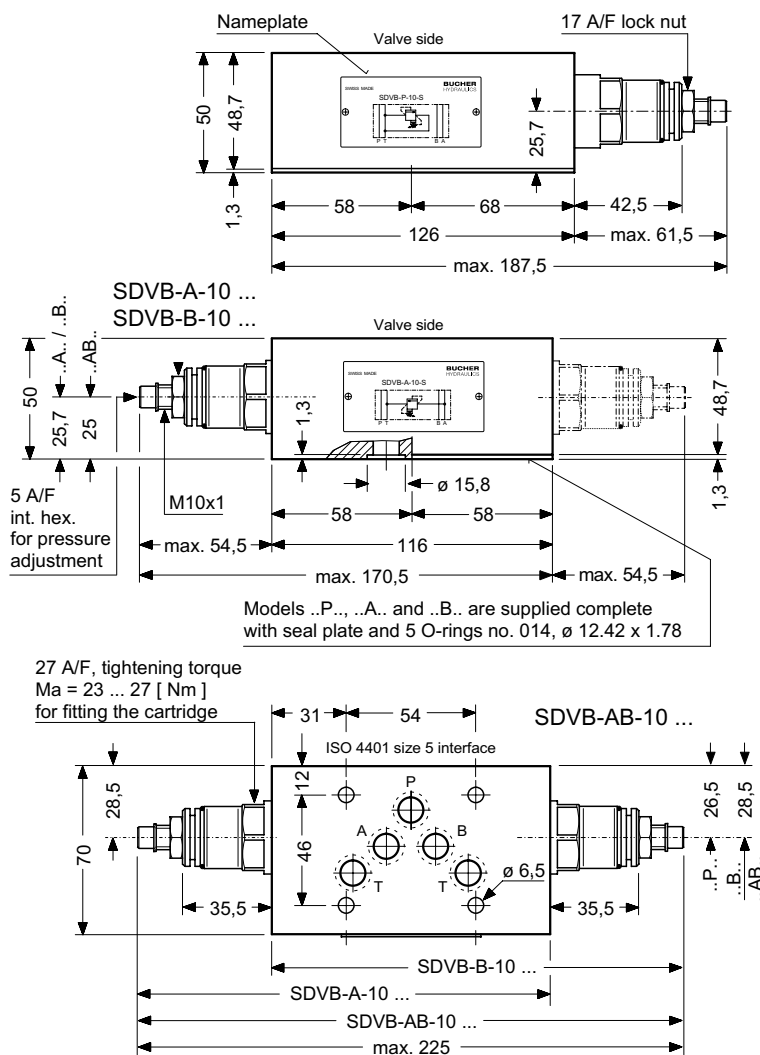
Series SDVB ...

140 l/min, 350 bar

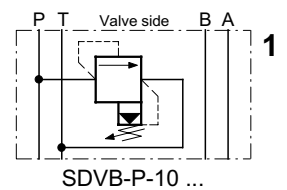
- With two-stage 10 mm pressure relief cartridge DVPA-1-10 ... (see data sheet D-4.31)
- 350 bar, 140 l/min on all ports
- Optionally available with hand knob or lockable hand knob adjuster
- Also available with solenoid controlled two-pressure cartridge WUVPB-1...-10
- Mounting interface to ISO 4401 CETOP R35H size 5 NFPA D05, DIN 24 340 A10



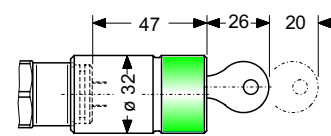
DIMENSIONS



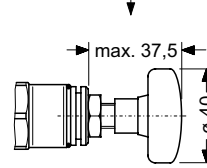
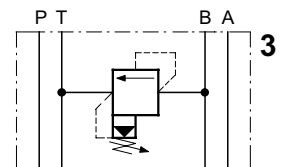
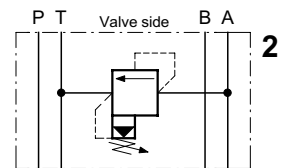
SYMBOLS



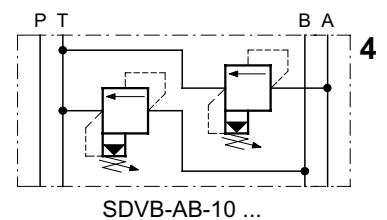
OPTIONS



Adjuster style Z4 Lockable hand knob type 2H complies with Volkswagen Factory Specification BV 1.09 (factory option only)



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



DESCRIPTION

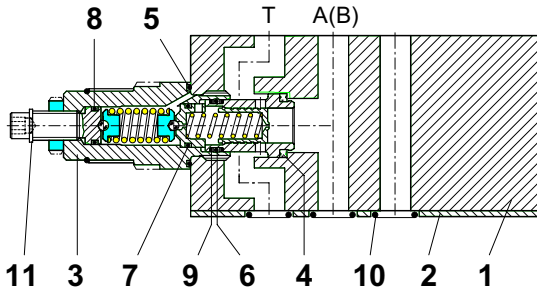
Series SDVB...-10 stack valves are used for independent pressure relief in the P-, A-, B- or A- and B- lines. They are equipped with the two-stage pressure relief cartridge type DVPA-1-10... as shown on data sheet D-4.31. When closed, the valves shut off the relief path with spool-type leakage (see

PERFORMANCE DATA). Turning model SDVB-A-10... upside down about its short axis produces the SDVB-B-10... function and vice versa. The side-mounted nameplate indicates the correct orientation for the required function. The screw-in design of the cartridge val-

ve provides for straight-forward, trouble-free maintenance. Interface sealing on models ..P.. / ..A.. / ..B.. is by means of a seal plate and 5 O-rings whereas on model ..AB.. it is by means of O-rings which are retained in counterbores in the valve body (no seal plate).

SCHEMATIC SECTION

showing the relevant ports
Ex. SDVB-A-10 ...



SDVB - P - 10 ...
SDVB - A - 10 ... / SDVB - B - 10 ...
SDVB - AB - 10 ...

COMPONENTS / SERVICE PARTS

It.	Qty.	Description			
1	1	Stacking body	48,7 x 70 x 116 type FB2-10		
	-	1	Stacking body	48,7 x 70 x 116 type F2-10	
	-	-	1	Stacking body	50 x 70 x 116 type J2-10
2	1	1	Seal plate	type DB-10	
3	1	1	2	Pressure relief cartridge	type DVPA-1-10 ...
	1	1	1	Seal kit no. DS-219, comprising *):	
4	1	1	2*)	Seal	ø 22,1 x 16,5 x 2,5
5	1	1	2*)	O-ring no. 021	ø 23,52 x 1,78 N90
6	1	1	2*)	O-ring	ø 14 x 2 N90
7	1	1	2*)	O-ring no. 013	ø 10,82 x 1,78 N90
8	1	1	2*)	O-ring no. 012	ø 9,25 x 1,78 N90
9	2	2	4*)	Backup ring	ø 13,7 x 1,4 x 1,15 FI 0751
10	5	5	5*)	O-ring no. 014	ø 12,42 x 1,78 N90
11	1	1	2*)	Snap ring	ø 9 type SS

*) = part of seal kit no. DS-219
▲ = available as service part

TO ORDER SERVICE PARTS, STATE:

- complete unit model code from the nameplate, including the design number
- data sheet number, including issue date
- part item number from above list
- part description from above list
- quantity required

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

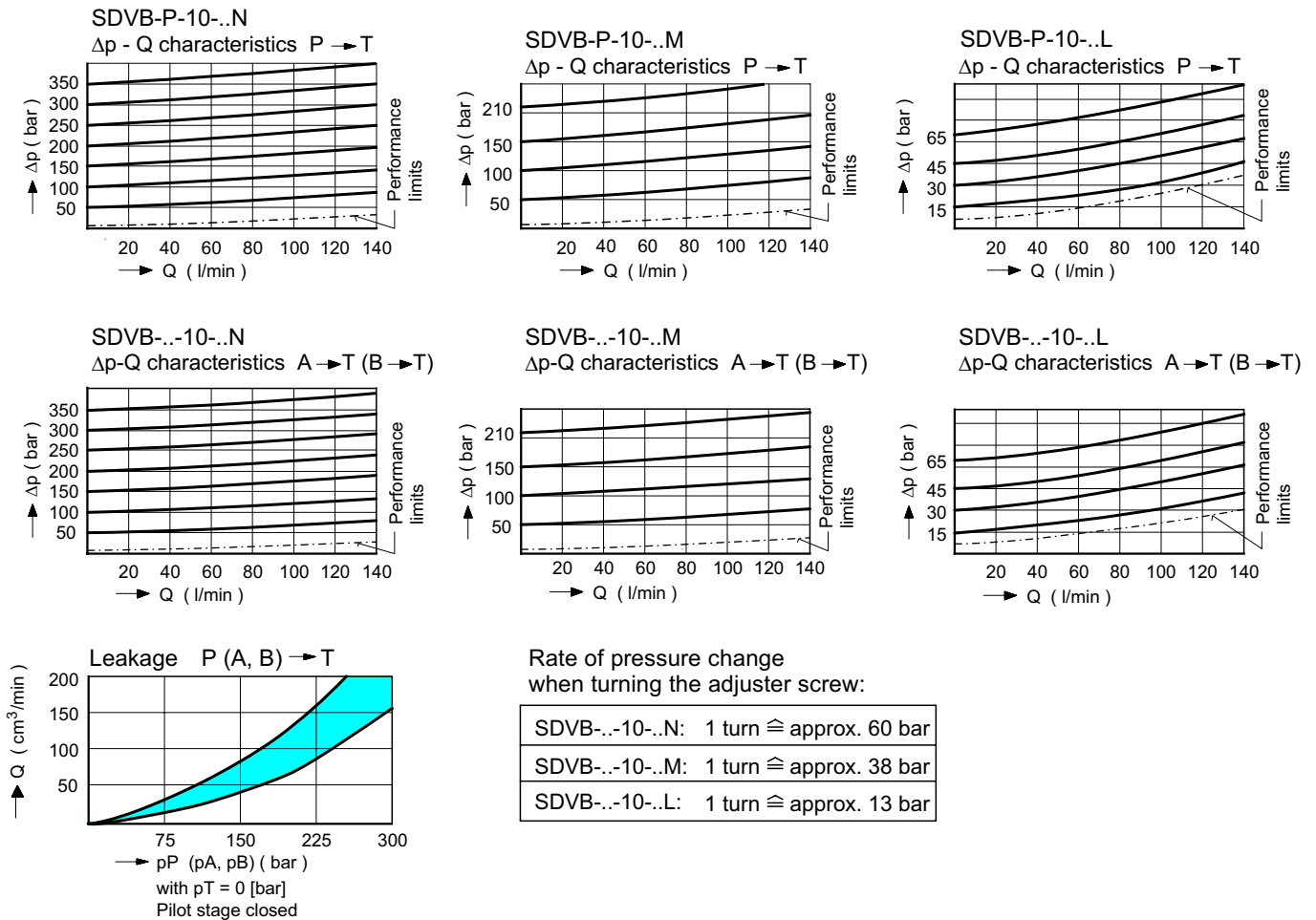
should be thoroughly oiled or greased before fitting them to the valve. Use the correct tightening torque when fitting the cartridge.

MAIN CHARACTERISTICS

Type	stacking pressure relief valve
Design	two-stage, seated pilot, sliding spool
Mounting method	stack mounting
Size	ISO 4401 size 5 interface
Mass	SDVB - P-10 ... = 3,2 kg SDVB - A-10 ... / - B-10 ... = 3,0 kg SDVB - AB-10 ... = 3,7 kg
Mounting attitude	unrestricted
Flow direction	see symbols
Operating pressure	... 350 bar in P, A, B and T
Pressure adjustment range	pressure range N = 10 ... 350 bar pressure range M = 10 ... 210 bar pressure range L = 10 ... 65 bar
Fluids	hydraulic oils HL and HLP to DIN 51 524 other fluids - contact BHFRU
Min. fluid cleanliness	18/14 to ISO 4406 / CETOP RP70H 8 ... 9 to NAS 1638
Fluid temperature range	- 25° ... +80° C
Ambient temperature	- 25° ... +80° C
Viscosity range	10 ... 650 cSt recommended 15 ... 250 cSt
Flow range Q	1 ... 140 l/min (see performance data)

PERFORMANCE DATA

Measured with oil viscosity 33 cSt



MODEL CODE KEY

- S = stacking valve
- D = pressure relief function
- V = two-stage
- A ... Q = standard model per current data sheet
- Z ... R = special features by arrangement
- P = function from P to T
- A = function from A to T
- B = function from B to T
- AB = function from A and B to T
- 10 = ISO 4401 size 5 interface
- S = with hex. skt. screw adjuster (standard)
- H = with hand knob adjuster
- Z = with lockable hand knob adjuster type Z4
- N = pressure range 10 ... 350 bar (**Normal**)
- M = pressure range 10 ... 210 bar (**Medium**)
- L = pressure range 10 ... 65 bar (**Light**)
- (blank) = Nitrile seals (standard)
- V = Viton seals
- Special seals by arrangement

Ex. **S D V B - A - 10 - S N _**

RELATED DATA SHEETS

Old no.: New no.:

i - 00	400-P-010'101-D-00	Table of interface equivalents
i - 41	400-P-059'101-D-00	DIN 24 340 size A10 interface
D - 4.31	400-P-280'101-D-00	Two-stage pressure relief cartridge, 10 mm, series DVPA-1-10 ...
G - 45	400-P-810'901-D-00	Seal plate type DB-10