

- With direct acting, zero leakage, 10 mm pressure relief cartridge DDPB-1C-10... (see data sheet D-3.31 A)
- 350 bar, 100 l/min on all ports
- ISO 4401 / CETOP R35H size 5  
NFPA D05, DIN 24 340 A10 interface

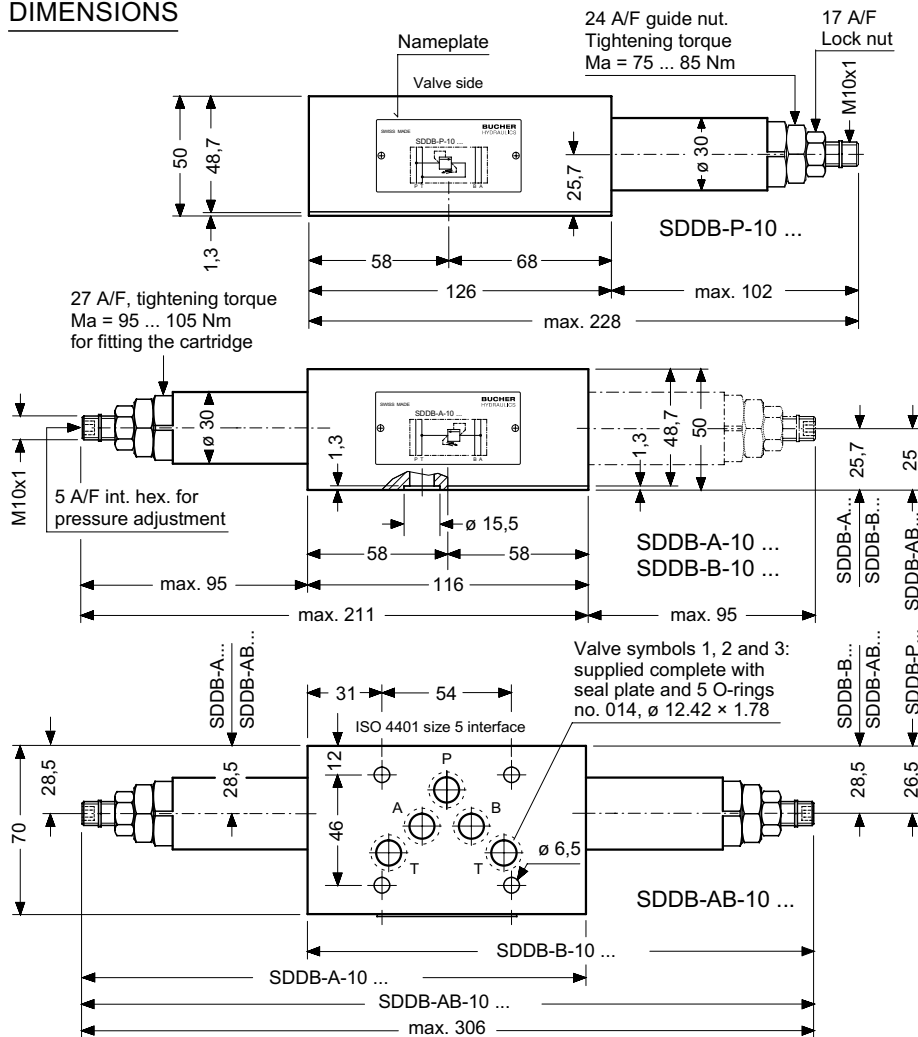
## D - 10.10 a

### Stacking Pressure Relief Valve, size 5 Direct Acting Seat Valve Design

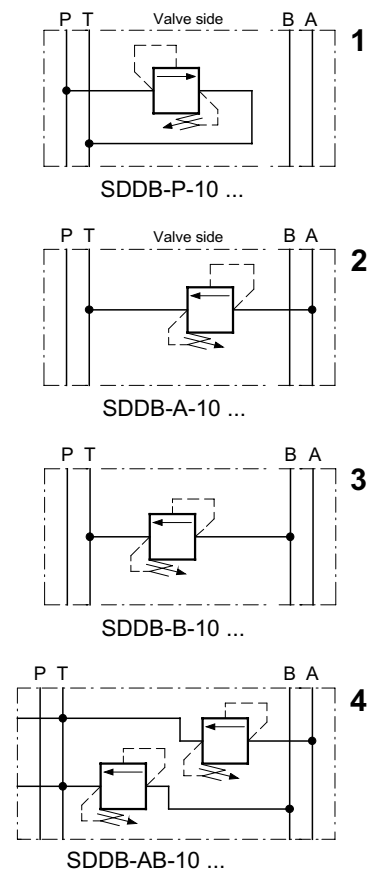
Series Sddb ...  
100 l/min, 350 bar



#### DIMENSIONS



#### SYMBOLS



The Sddb-AB-10... valve has counterbores in the body to retain the 5 O-rings no. 014 (i.e. no seal plate).  
Body stack height is 50 mm.

#### DESCRIPTION

Series Sddb...-10 stack valves are used for independent pressure relief in the P-, A-, B- or A- and B- lines.

They are equipped with the direct acting pressure relief cartridge type DDPB-1C-10... as shown on data sheet D-3.31A.

The valves close with virtually zero leakage and thanks to their fast response they are particularly suitable for pressure relief duties in supply lines, for cross-line relief in service lines and for preload functions.

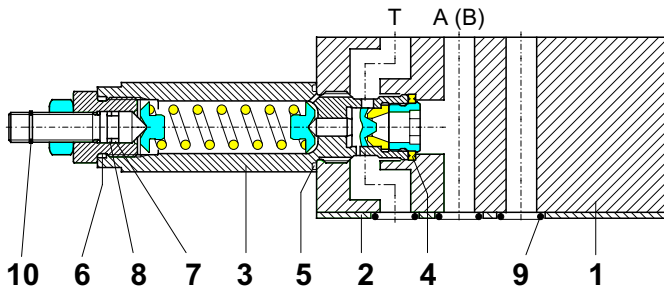
Turning model Sddb-A-10... upside down about its short axis produces the Sddb-B-10... function, and vice versa. The side-mounted nameplate shows the correct orientation for the required function.

The screw-in design of the cartridge valve 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. SDDB-A-10....



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

## COMPONENTS / SERVICE PARTS

lt.	Qty.	Description			
1	1	-	-	Stacking body	50 x 70 x 126 type FB2-10
	-	1	-	Stacking body	50 x 70 x 116 type F2-10
	-	-	1	Stacking body	48,7 x 70 x 116 type J2-10
2	1	1	-	Seal plate	type DB-10
3	1	1	2	Pressure relief cartridge	type DDPB-1C-10-S ...
	1	1	1	Seal kit no. DS-223, comprising *):	
4	1	1	2*)	Seal	ø 22,1 x 16,1 x 2,5
5	1	1	2*)	O-ring no. 021	ø 23,52 x 1,78 N90
6	1	1	2*)	O-ring no. 017	ø 17,17 x 1,78 N90
7	1	1	2*)	O-ring no. 011	ø 7,65 x 1,78 N90
8	1	1	2*)	Backup ring	ø 9,0 / 6,1 x 1,4
9	5	5	5*)	O-ring no. 014	ø 12,42 x 1,78 N90
10	1	1	2*)	Snap ring	ø 9 type SS

\*) = part of seal kit no. DS-223  
▲ = 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.

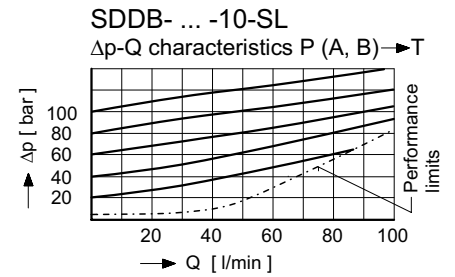
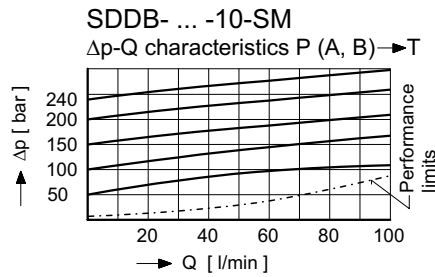
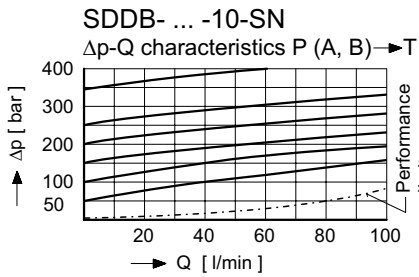
Use the correct tightening torques when fitting the cartridge and guide nut.

## MAIN CHARACTERISTICS

Type	stacking pressure relief valve
Design	direct acting, seat type
Mounting method	stack mounting
Size	ISO 4401 size 5 interface
Mass	SDDB - P - 10 ... = 3,25 kg SDDB - A / -B - 10 ... = 3,05 kg SDDB - AB - 10 ... = 3,70 kg
Mounting attitude	unrestricted
Flow direction	see symbols
Operating pressure	... 350 bar in P, A, B and T
Pressure adjustment range	pressure range N = 180 ... 350 bar pressure range M = 80 ... 240 bar pressure range L = 10 ... 100 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 rate Q max.	100 l/min (see performance limits)

## PERFORMANCE DATA

Measured with oil viscosity 33 cSt



## MODEL CODE KEY

- S = stacking valve
- D = pressure function
- D = direct acting
- 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
- N = pressure range 180 ... 350 bar
- M = pressure range 80 ... 240 bar
- L = pressure range 10 ... 100 bar
- (blank) = Nitrile seals (standard)
- V = Viton seals
- Special seals by arrangement

Ex.

S D D 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-050'101-D-00	DIN 24 340 size A10 interface
D - 3.31 A	400-P-270'101-D-00	Direct acting pressure relief cartridge, 10 mm, series DDPB-1C-10...
G - 45	400-P-810'901-D-00	Seal plate type DB-10

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