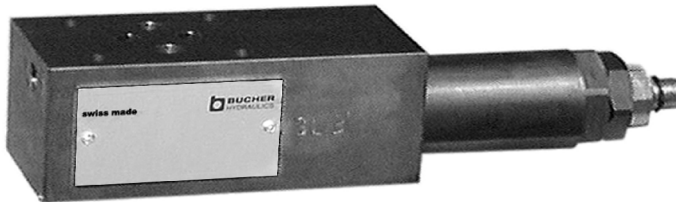


# Stacking Sequence and Preload Valve, size 3 with integral Bypass Check Valve Direct Acting Seat Valve Design, Series SDDB-3 ...



- 80 l/min, 350 bar
- With direct acting, zero leakage, 10 mm pressure relief cartridge DDPB-3D-10...
- 350 bar, 80 l/min on all ports for ..PP-6
- 315 bar, 80 l/min on all ports for ..AR-6
- Cartridge spring chamber is drained to port T
- ISO 4401/CETOP R35H size 3, NFPA D03, DIN 24 340 A6 interface

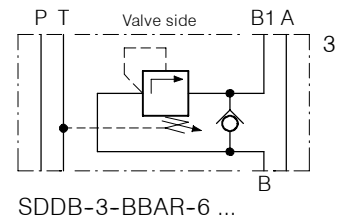
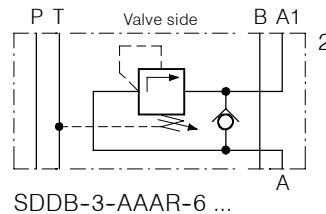
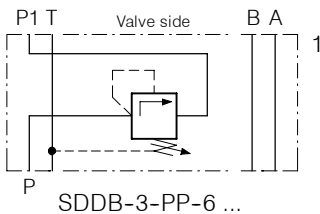
## 1. Description

Series SDDB-3-...-6 stack valves are used for sequence-, preload- and load-holding functions. They are equipped with the direct acting pressure relief cartridge type DDPB-3D-10... The valves close with virtually zero leakage; their fast response also suits them for cross-line relief duties in service lines. The spring

chamber of the cartridge is drained to port T - the pressure setting is therefore unaffected by fluctuations of the secondary pressure in P1, A1 or B1. The bypass check valve in models SDDB-3-AAAR-6... and SDDB-3-BBAR-6... allows reverse flow from A1 to A, or B1 to B. Used as sequence

valves, rising pressure results in an insignificant increase in the leakage to T (see Performance Data). 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 counterbores in the valve body.

## 2. Symbols



## 3. Characteristics

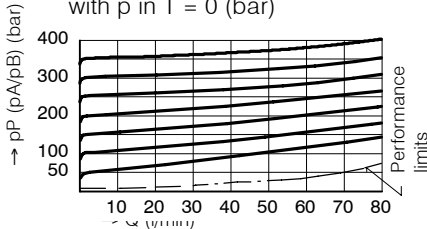
Type		stacking pressure sequence valve
Design		direct acting, seat type
Mounting method		stack mounting
Size		ISO 4401 size 3 interface
Mass	kg	SDDB-3-PP-6 ... = 1,60; ..AAAR.. / ..BBAR.. = 1,75
Mounting attitude		unrestricted
Flow direction		see symbols
Operating pressure in P, A, B and T	bar	..PP-6..: ... 350 ..AR-6..: ... 315
Adjustment ranges	bar	pressure range N = 180 ... 350 / 315 pressure range M = 080 ... 240 pressure range L = 010 ... 100
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

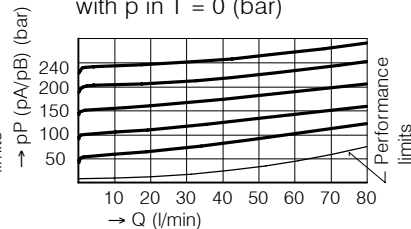
## 4. Performance graphs

Oil viscosity 33 cSt

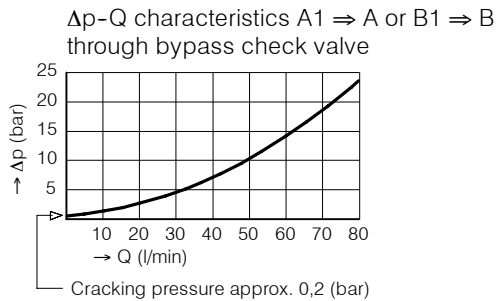
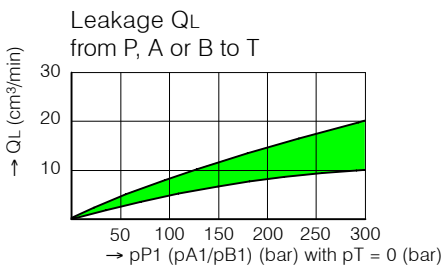
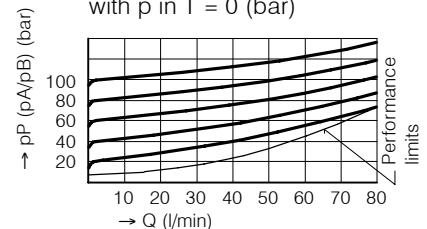
SDDB-...-6-SN  
p-Q characteristics  
P ⇒ P1 (A ⇒ A1 / B ⇒ B1)  
with p in T = 0 (bar)



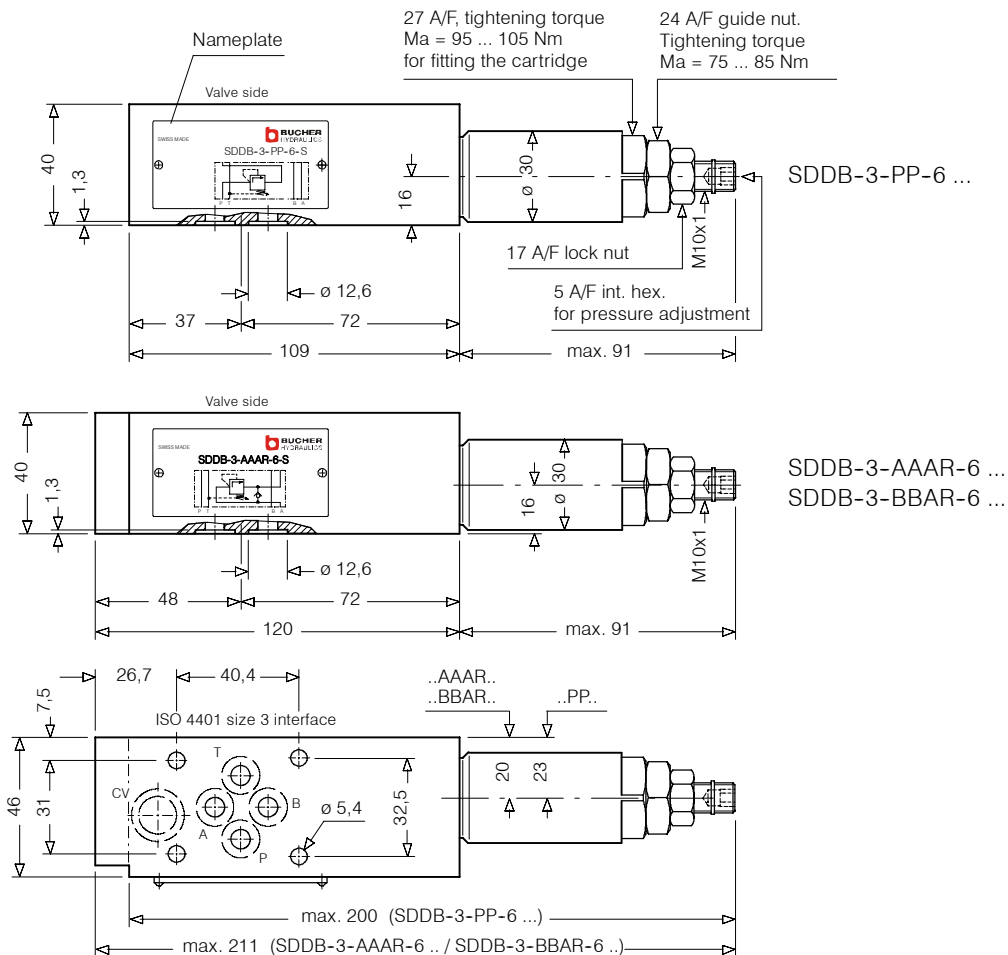
SDDB-...-6-SM  
p-Q characteristics  
P ⇒ P1 (A ⇒ A1 / B ⇒ B1)  
with p in T = 0 (bar)



SDDB-...-6-SL  
p-Q characteristics  
P ⇒ P1 (A ⇒ A1 / B ⇒ B1)  
with p in T = 0 (bar)

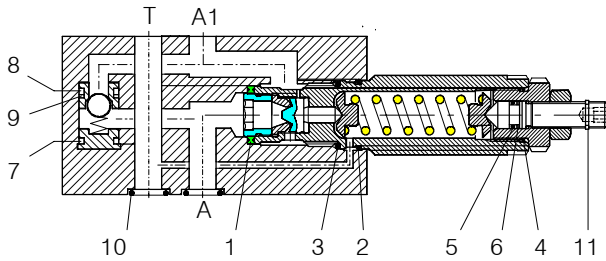


## 5. Dimensions



## 6. Schematic section

showing the relevant ports  
Ex. SDDB-3-AAAR-6 ...



Seal kit no. DS-258, comprising:

Itm.	Qty.	Qty.	Description	Size
1	1	1	Seal	Ø 22.1/16.1x2.5
2	1	1	O-ring no. 020	Ø 21.95x1.78 N90
3	1	1	O-ring	Ø 21.00x2.00 N75
4	1	1	O-ring no. 017	Ø 17.17x1.78 N90
5	1	1	O-ring no. 011	Ø 7.65x1.78 N90
6	1	1	Backup ring	Ø 6,1x1,45x1,4
7	-	1	O-ring no. 015	Ø 14.00x1.78 N90
8	-	1	O-ring no. 012	Ø 9.25x1.78 N90
9	-	1	Backup ring	Ø 7,6x1,5x1,4
10	4	4	O-ring no. 012	Ø 9.25x1.78 N90
11	1	1	Snap ring	Ø 9 Typ SS

SDDB-3-BBAR-6 .../SDDB-3-AAAR-6 ...  
SDDB-3-PP-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

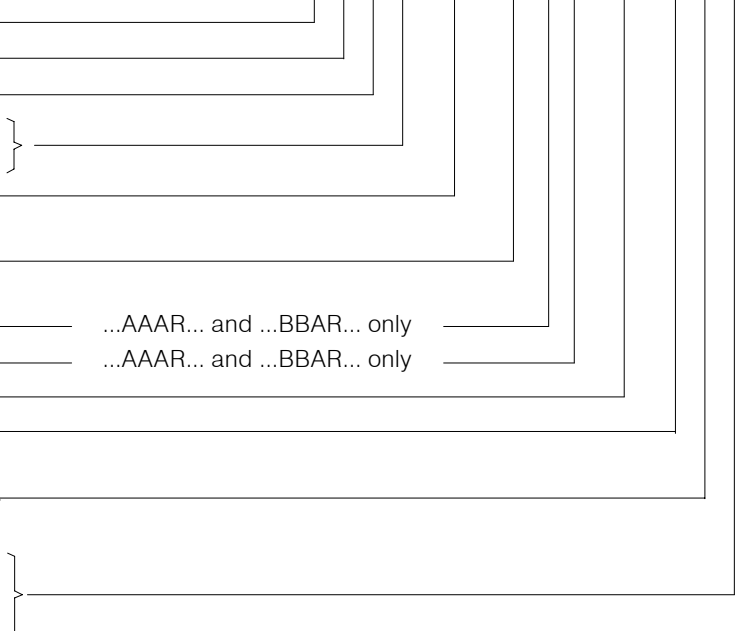
greased before fitting them to the valve. Use the correct tightening torques when fitting the cartridge and guide nut.

## 8. Model code key

Ex. 

S	D	D	B	-	3	-	A	A	R	-	6	-	S	N	_
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- S = stacking valve
  - D = pressure function
  - D = direct acting
  - A ... Q = standard model per current data sheet
  - Z ... R = special features by arrangement
  - 3 = pressure control type 3
  - PP = function from P to P1
  - AA = function from A to A1
  - BB = function from B to B1
  - A = sequencing from actuator
  - R = with bypass check valve
  - 6 = ISO 4401 size 3 interface
  - S = with hex. skt. screw adjuster
  - N = pressure range 180 ... 350/315 bar
  - M = pressure range 80 ... 240 bar
  - L = pressure range 10 ... 100 bar
  - (blank) = Nitrile seals (standard)
  - V = Viton seals
- For special seals, contact BUCHER



## 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-3.32	400-P-270201-E	Direct acting pressure relief cartridge, 10 mm, series DDPB-3D-10 ...

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