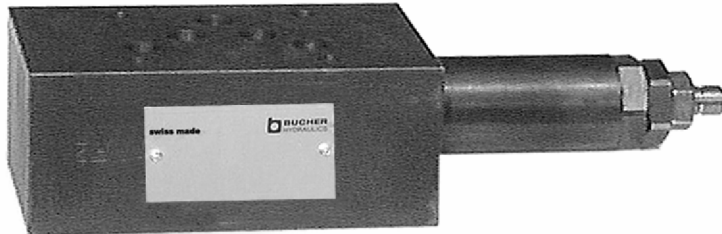


Stacking Sequence and Preload Valve, 10 mm with integral Bypass Check Valve Direct Acting Seat Valve Design, Series SDDB-3 ...



- 350 bar, 100 l/min
- With direct acting, zero leakage 10 mm pressure relief cartridge DDPB-3D-10...
- 350 bar, 100 l/min on all ports
- Pilot stage is drained to port T
- Mounting interface to ISO 4401 / CETOP RP35H size5, NFPA D05, DIN 24 340 A10

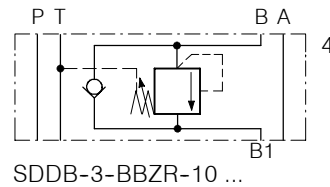
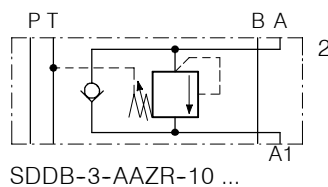
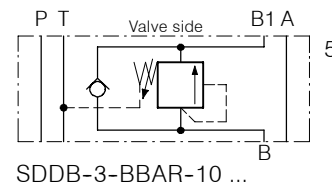
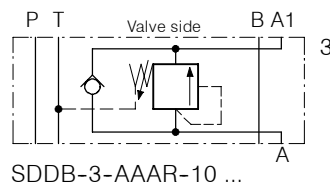
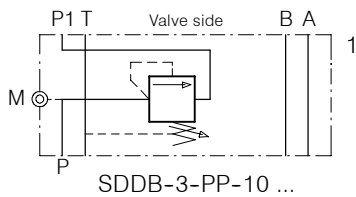
1. Description

Series SDDB-3-...-10 stack valves are used for sequence-, preload- and loadholding functions. They are equipped with the direct acting pressure relief cartridge type DDPB-3D-10... . The valves close with virtually zero leakage and their fast response suits them for pressure relief-, cross-line relief and preload functions. The pilot stage 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-AA... and SDDB-3-BB... 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 graphs). Turning model ...-AAZR-... upside down about its short axis produces the ...-BBAR-...

function and vice versa. Turning model ...-AAAR-... upside down about its short axis produces the ...-BBZR-... 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 is by means of a seal plate and 5 O-rings.

2. Symbols



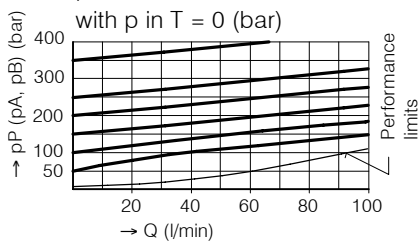
3. Main characteristics

Designation		Stacking pressure sequence valve
Design		direct acting, seat type
Mounting method		stack mounting
Size		ISO 4401 size 5 interface
Weight	kg	3,05
Mounting attitude		unrestricted
Flow direction		see symbols
Operating pressure range	bar	... 350 in P, T, A and B
Adjustment ranges	bar	pressure range N = 180 ... 350 pressure range M = 080 ... 240 pressure range L = 010 ... 100
Flow rate, Q _{max}	l/min	100, see performance limits
Fluids		HL and HLP hydraulic oils to DIN 51 524; for other fluids, please consult BUCHER
Fluid temperature range	°C	-25 ... +80
Ambient temperature	°C	-25 ... +80
Viscosity range	mm ² /s (cSt)	10 ... 650, recommended 15 ... 250
Minimum fluid cleanliness level		18/14 to ISO 4406 / CETOP RP70H; 8 ... 9 to NAS 1638

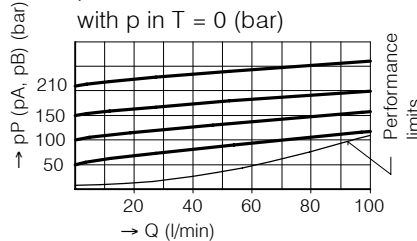
4. Performance graphs

Measured with oil viscosity 33 mm²/s (cSt)

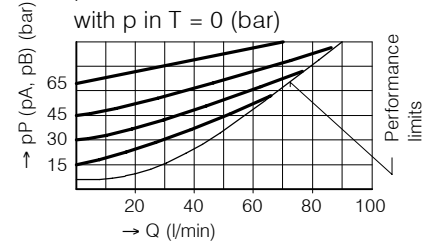
SDDB-3 ...-10-SN
p-Q characteristics
with p in T = 0 (bar)



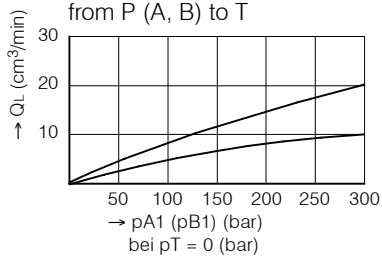
SDDB-3 ...-10-SM
p-Q characteristics
with p in T = 0 (bar)



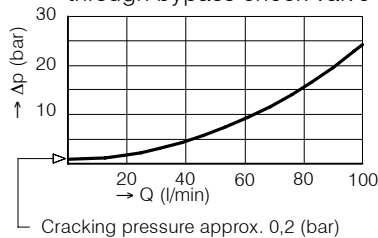
SDDB-3 ...-10-SL
p-Q characteristics
with p in T = 0 (bar)



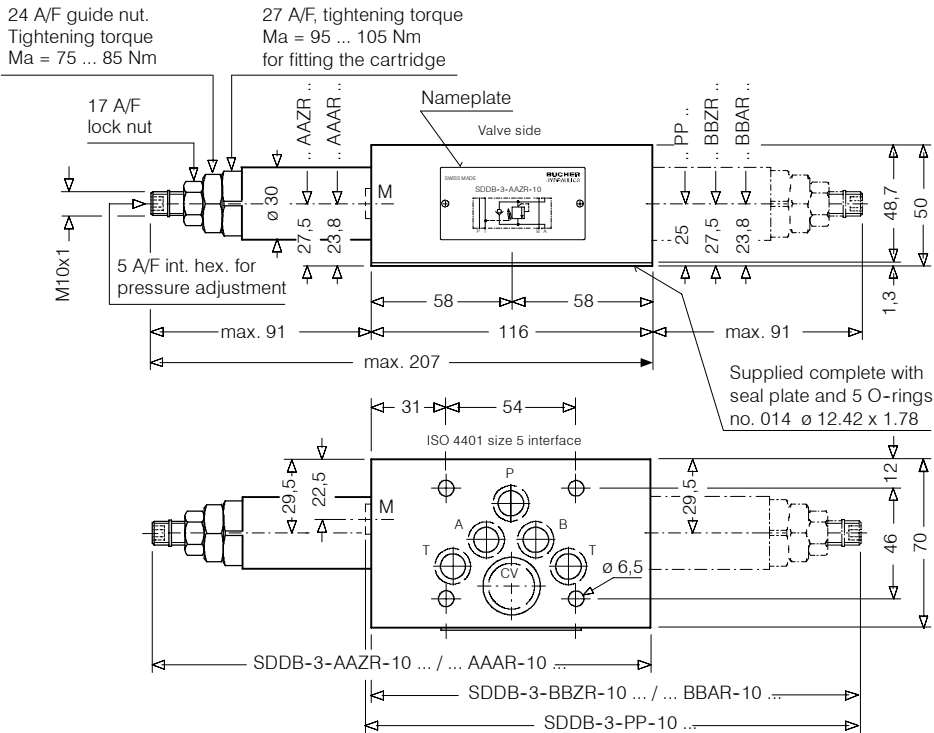
Leakage Q_L
from P (A, B) to T



Δp-Q characteristics A1 → A, B1 → B
through bypass check valve

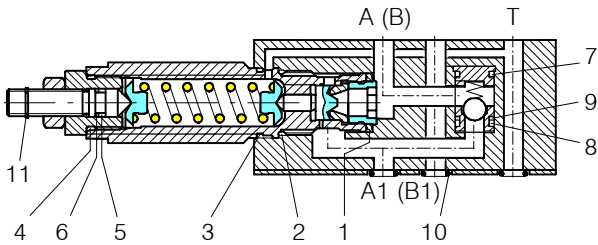


5. Dimensions



6. Schematic section

showing the relevant ports
Ex. SDDDB-3-AAZR-10 ...



Seal kit no. DS-222, comprising *):

Itm.	Qty.	Qty.	Description	Size
1	1	1*)	Seal	Ø 22,1 x 16,1 x 2,5
2	1	1*)	O-ring	Ø 21 x 2 N75
3	1	1*)	O-ring no. 020	Ø 21,95 x 1,78 N90
4	1	1*)	O-ring no. 017	Ø 17,17 x 1,78 N90
5	1	1*)	O-ring no. 011	Ø 7,65 x 1,78 N90
6	1	1*)	Backup ring	Ø 9,0/6,1 x 1,4 FI0751
7	-	1*)	O-ring no. 018	Ø 18,77 x 1,78 N90
8	-	1*)	O-ring no. 016	Ø 15,60 x 1,78 N90
9	-	1*)	Backup ring	Ø 15,3/1,5 x 1,4 FI0751
10	5	5*)	O-ring no. 014	Ø 12,42 x 1,78 N90
11	1	1*)	Snap ring	Ø 9 type SS

SDDDB-3-AAAR/BBZR/AAZR/BBAR-10
 SDDDB-3-PP-10 ...

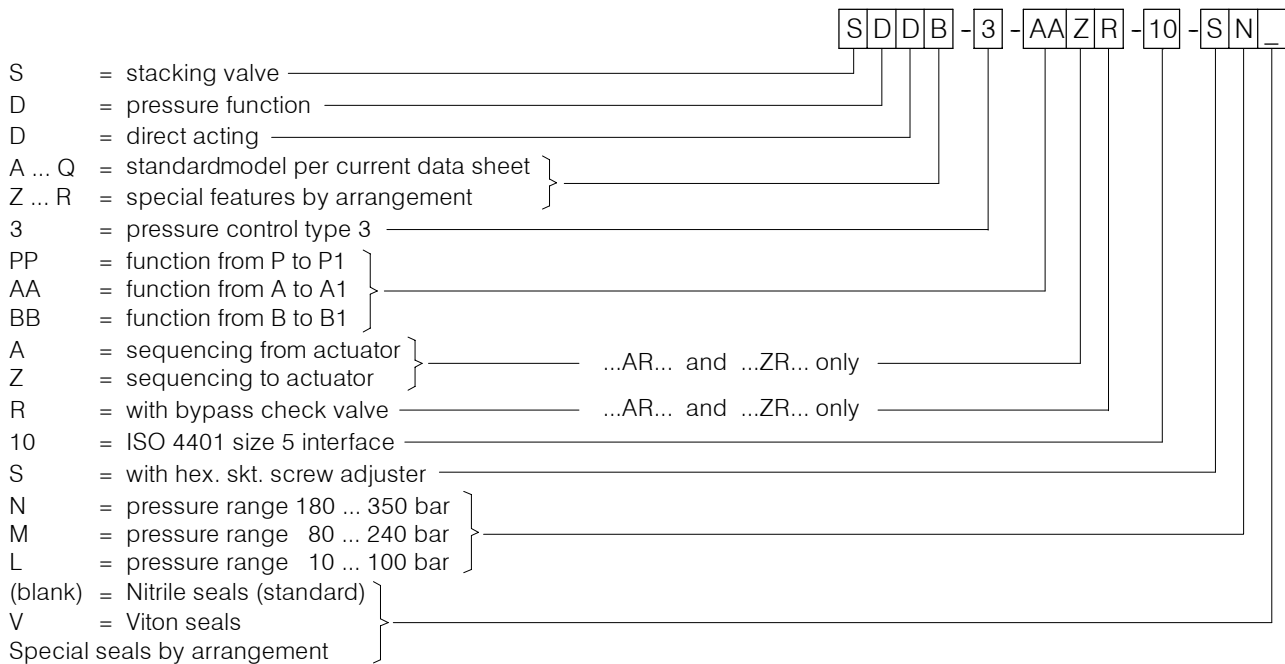
7. Installation and servicing

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. Ordering code



9. Related data sheets

Old no.	New no.	
i-00	400-P-010101-E	Table of interface equivalents
i-41	400-P-050101-E	DIN 24 340 size A10 interface
D-3.32A	400-P-270201-E	Direct acting pressure relief cartridge, 10 mm, series DDPB-3D-10 ...
G-45	400-P-810801-E	Seal plate type DB-10

info.ch@bucherhydraulics.com

www.bucherhydraulics.com

© 2015 by Bucher Hydraulics AG Frutigen, CH-3714 Frutigen

All rights reserved.

Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.