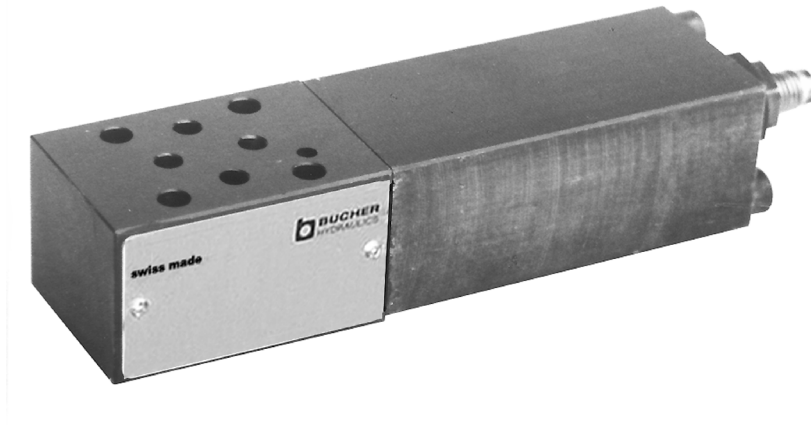


Stacking 3-Way Pressure Reducing Valve, size 2 Direct Acting Series SDRA ...



- 250 bar, 25 l/min
- Direct acting, spool type
- 3-way function
- Low internal leakage
- Functional parts in side-mounted body
- 5 pressure ranges
- User-modifiable to hand knob or lockable hand knob adjustment
- with ISO 4401-02-01 interface

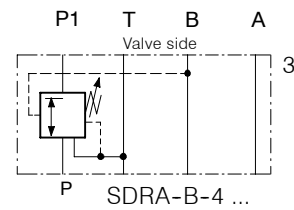
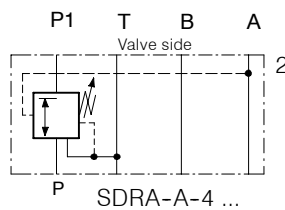
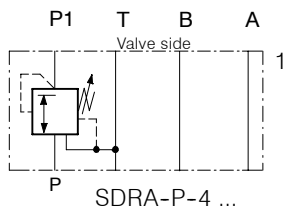
1. Description

Series SDRA-4 units are stack mounting valves which provide a 3-way pressure reducing function in the P, A or B lines. The reduced pressure on the secondary side (P1) is held constant regardless of higher fluctuations in the

primary side (P). If external forces cause the secondary pressure to rise above the valve setting, the 3-way reducing valve then begins to function as a secondary relief valve. The $\varnothing 3$ mm location pin on the actuator face of the

valve prevents incorrect mounting. Valves are shipped as standard with screw adjustment. Alternatively, they can be supplied with adjustment by hand knob, or lockable hand knob.

2. Symbols



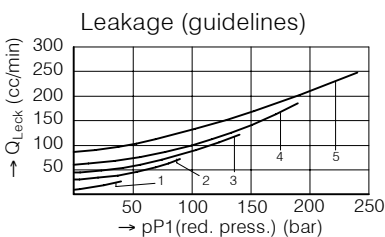
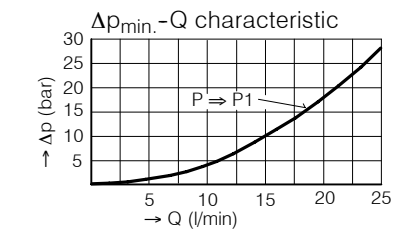
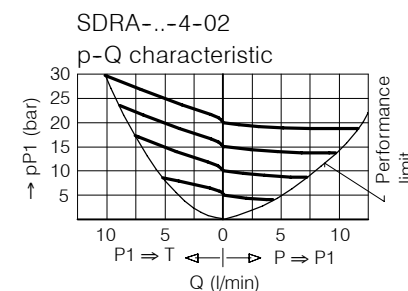
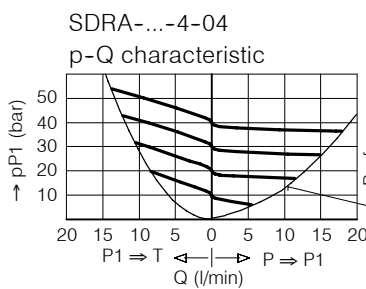
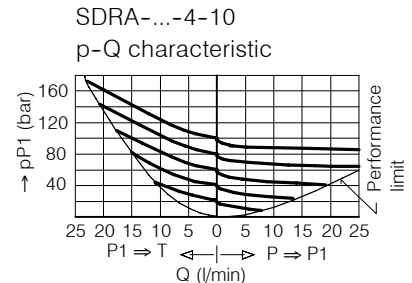
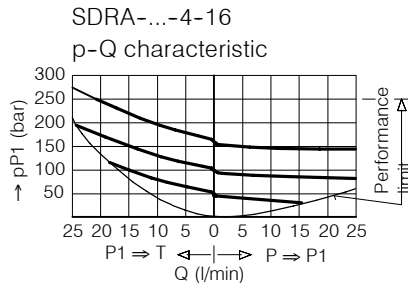
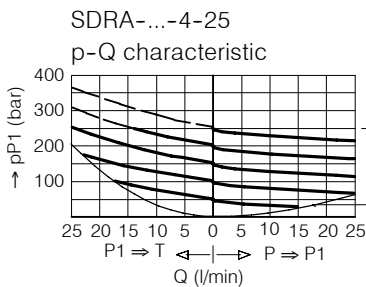
3. Main characteristics

Designation		3-way pressure reducing slice valve
Design		direct acting spool valve
Mounting method		stack mounting
Size		ISO 4401-02-01 interface
Weight	kg	0,88
Mounting attitude		unrestricted
Flow direction		see symbols
Operating pressure range	bar	... 250 in P, A and B; ... 160 in T
Adjustment ranges	bar	code 25 = ... 250 code 16 = ... 160 code 10 = ... 100 code 04 = ... 040 code 02 = ... 020
Flow rate, Q max.	l/min	25
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)

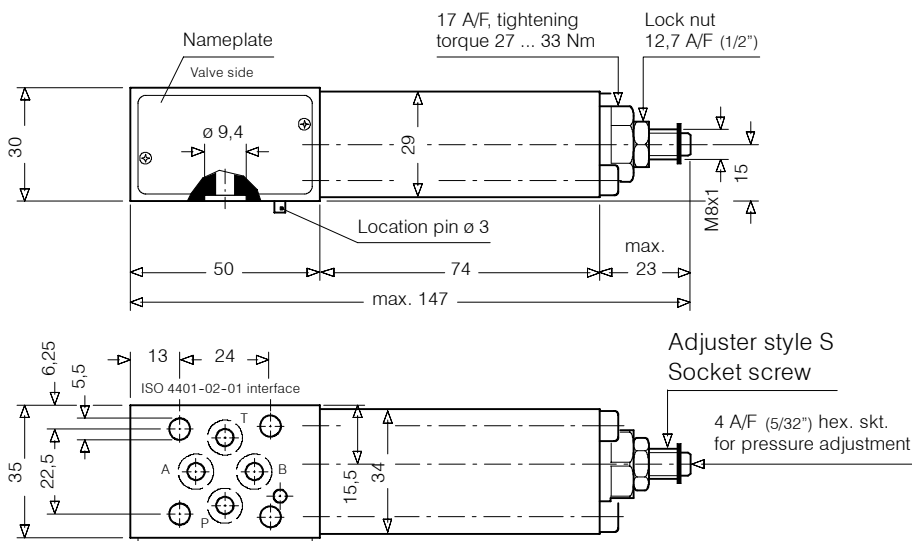


- Curve 1: inlet pressure pP = 50 bar
- Curve 2: inlet pressure pP = 100 bar
- Curve 3: inlet pressure pP = 150 bar
- Curve 4: inlet pressure pP = 200 bar
- Curve 5: inlet pressure pP = 250 bar

Rate of pressure change when turning the adjusting screw:

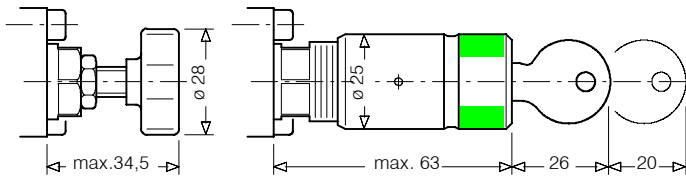
SDRA-...-4-..25: 1 turn	≅ app. 45 bar
SDRA-...-4-..16: 1 turn	≅ app. 30 bar
SDRA-...-4-..10: 1 turn	≅ app. 20 bar
SDRA-...-4-..04: 1 turn	≅ app. 8 bar
SDRA-...-4-..02: 1 turn	≅ app. 3 bar

5. Dimensions



Adjuster styles / OPTIONAL

Conversion kit for styles S, H and Z5 - see related data sheets

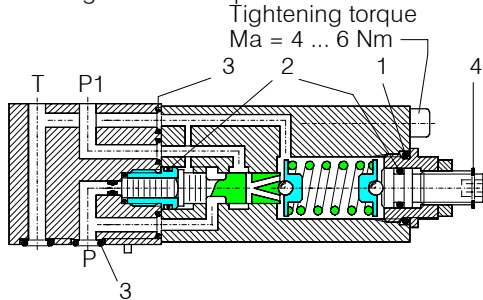


Adjuster style H
Hand knob

Adjuster style Z5, lockable hand type 2H.
Complies with Volkswagen factory specification BV 1.09

6. Schematic section

showing the relevant ports



Seal kit no. DS-213, comprising:

Itm.	Qty.	Description	Size
1	1	O-ring no. 016	Ø 15,60 X 1,78 N90
2	2	O-ring no. 009	Ø 5,28 x 1,78 N90
3	7	O-ring no. 010	Ø 6,07 x 1,78 N90
4	1	Snap ring	Type SS Ø 7

SDRA-A/-B/-P-4

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 the correct way up.

Do not confuse the flat surface (directional valve side) and the surface with O-ring counter-bores (actuator side). 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 threaded housing and cap screws.

8. Ordering code

Ex. **S DR A - A - 4 - 25 - S - - 1**

S = stacking valve
 DR = pressure reducing function
 A ... Q = standard model per current data sheet
 Z ... R = special features, pls. consult BUCHER
 P = function in P1
 A = function in A
 B = function in B
 4 = ISO 4401-02-02 interface
 25 = pressure range ... 250 bar
 16 = pressure range ... 160 bar
 10 = pressure range ... 100 bar
 04 = pressure range ... 40 bar
 02 = pressure range ... 20 bar

1 ... 9 = design number (omit when ordering)
 (Blank) = Nitrile seals (standard)
 V = Viton seals
 For special seals, please consult BUCHER
 S = with hex. skt. screw adjuster(standard)
 H = with hand knob type H
 Z = with lockable hand knob adjuster type Z5

9. Related data sheets

Old no.	New no.	
i - 17.00	400-P-015101-E	Procedure for changing the Adjuster Style
i - 30	400-P-030101-E	ISO 4401-02-01 interface

info.ch@bucherhydraulics.com

www.bucherhydraulics.com

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