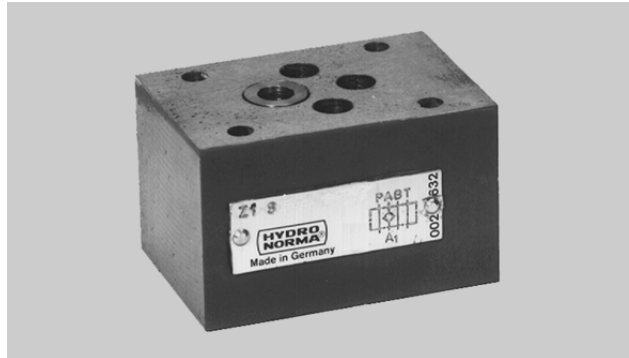


MANNESMANN REXROTH	Check Valve Sandwich Plate Model Z1 S 6			RA 21 533/06.98 Replaces: 05.94
	Size 6	... 4600 PSI (315 bar)	... 10.6 GPM (40 L/min)	

- Sandwich plate design for use in vertical stacking assemblies
- Leakfree closure of one or two service ports, as required
- Porting pattern to ISO 4401-3, NFPA T3.5.1M R1 and ANSI B93.7 D 03
- Eight different check variations
- Various cracking pressure (see ordering code)

K 3202/11



Model Z1 S 6...-/V

Functional description

Models Z1S6.. are direct operated check valves in a sandwich plate design. They consist of housing (1) and check valve cartridge(s) (2). These check valves are poppet/seat type valves which provide leakfree closure in one direction and free flow in the other. The stroke of poppet (3) is limited by spring retainer (4). Compression spring (5) assists closing poppet (3) and holds the poppet seated.

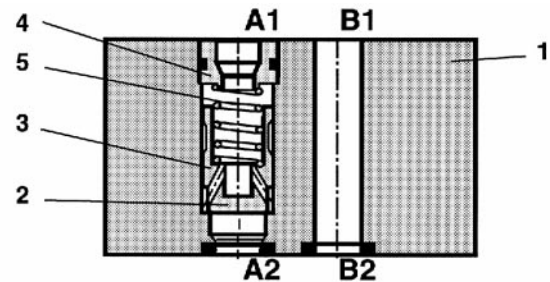
Model Z1 S6...-3X/...V (with metal seat)

These models have a metal seal between the poppet (3) and the housing (1) and are best suited for: operating pressures above 1450 PSI (100 bar) and fluid velocities exceeding 13 ft/s (4 m/s).

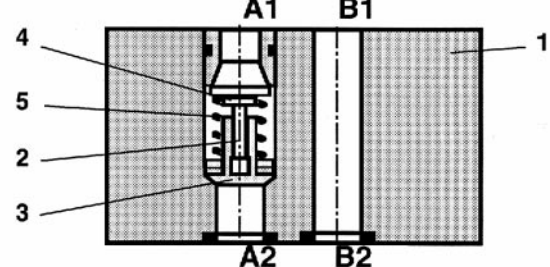
Model Z1 S6..1-2X/W4 V (with soft seal seat)

These models have a soft seal ring between the poppet (3) and the housing (1) which seals leakfree, even at low operating pressure. These valves are designed for operating pressures less than 1450 PSI (100 bar) and fluid velocities less than 13 ft/s (4m/s).

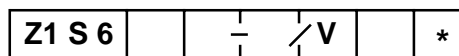
Model Z1 S 6A.-3X/V



Model Z1 S 6A1-2X/VW4



Ordering code



Leakfree closure in port(s):

- A (A1 + A2) = A
- B (B1 + B2) = B
- A (A2 + A1) = C
- B (B2 + B1) = D
- A and B (A2 + A1) and (B2 + B1) = E
- P and T (P1 + P2) and (T2 + T1) = F
- P (P1 + P2) = P
- T (T2 + T1) = T

(For symbols see page 2)

- Cracking pressure 7 PSI (0.5 bar) = 1
- Cracking pressure 45 PSI (3.0 bar) = 2*
- Cracking pressure 75 PSI (5.0 bar) = 3*

* (not with soft seal seat "W4")

Further details to be written in clear text

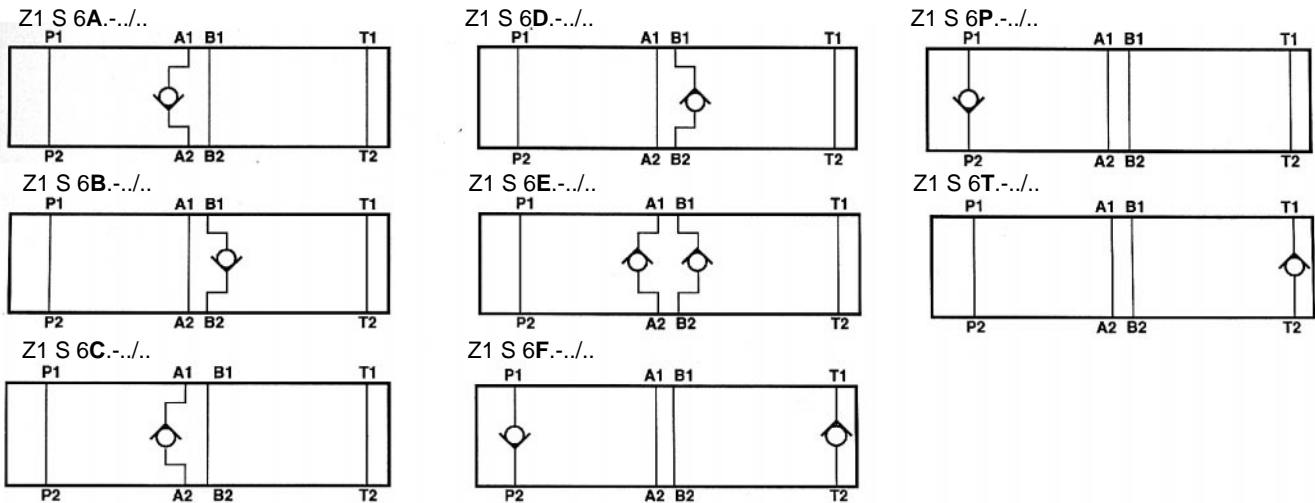
no code = Metal seal
W4 = soft seat (cracking pressure model 1 only)

V = FPM seals, suitable for
Petroleum oils (HM, HL, HLP)
Phosphate ester fluids (HFD-R)

2X = Series 2X (model with soft seal seat)
(20 - 29; externally interchangeable)

3X = Series 3X (model with metal seat)
(30 - 39; externally interchangeable)

Symbols (Codes: 1 = valve side, 2 = subplate side)



Technical data

Hydraulic fluid: Petroleum oils (HM, HL, HLP)
Phosphate ester fluids (HFD-R)

Fluid temperature range: - 4 ... 176 °F (- 20 ... 80°C)

Viscosity range: 35 ... 2320 SUS (2.8 ... 500 mm²/s)

Maximum degree of fluid contamination Class 18/15 according to ISO 4406. Therefore, we recommend a filter with a retention rate of $\beta_{10} \geq 75$.

Operating pressure: ... 4570 PSI (315 bar)

Cracking pressure: Model Z1 S6..-3X/V 7 PSI (0.5 bar)
45 PSI (3 bar)
75 PSI (5 bar)
Model Z1 S6..1-2X/VW4 7 PSI (0.5 bar)

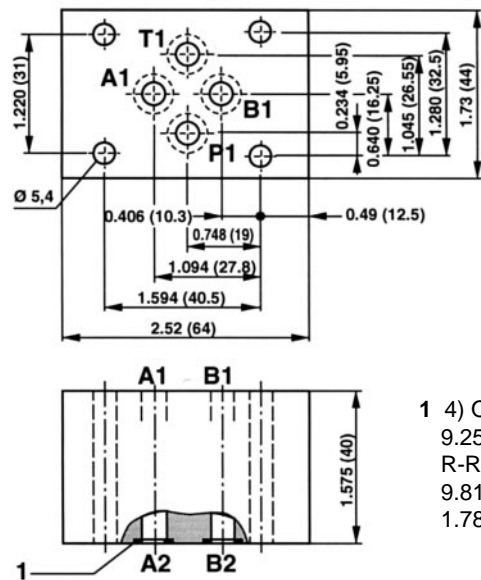
Oil velocity: Model Z1 S6..-3X/V > 13 ft/s (4 m/s)
Model Z1 S6..1-2X/VW4 < 13 ft/s (4 m/s)

Flow: 10.6 GPM (40 L/min)

Weight (approx.): 1.8 lbs (0.8 kg)

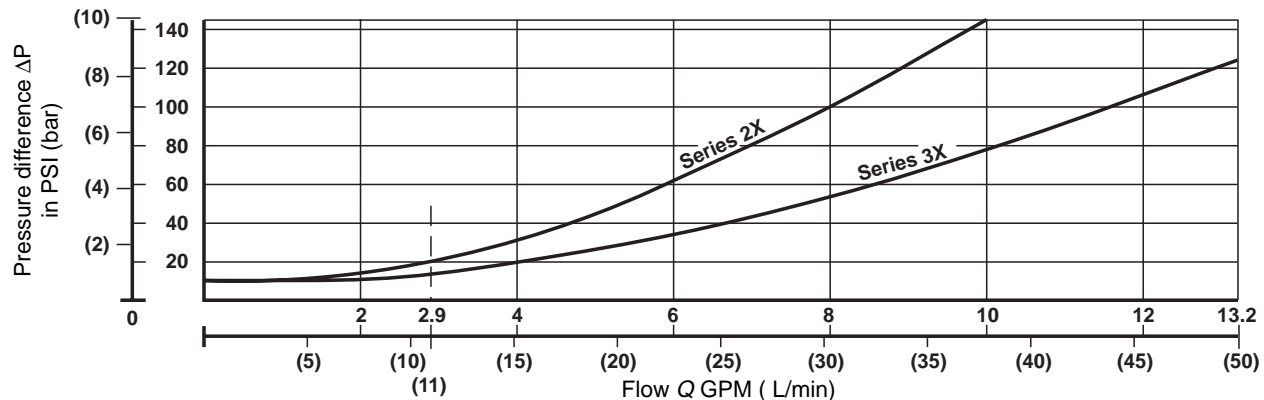
(For applications outside these parameters, please consult us!)

Unit dimensions: dim. in inches (millimeters)



- 1 4) O-Rings
9.25 mm x 1.78 mm
- R-Rings
9.81 mm x 1.5 mm x
1.78 mm

Performance Curves, measured at $v = 190$ SUS (41 mm²/s) and $t = 122$ °F (50 °C)



— valve limit for soft seat model Z1 S 6..1-2X/W4..



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