

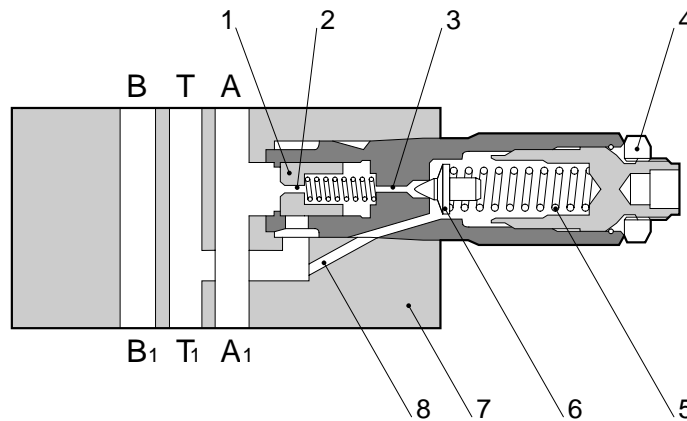
Size 6 & 10 up to 315 bar up to 60 and 100 L/min	Pressure Relief Valve (Pilot Operated) Sandwich Plate Valve Type S-(2)RB6 & S-(2)RB10, Series 10	Data Sheet S-1003/10.98 GB
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Features

- ◇ Pilot operated relief valve.
- ◇ Used in vertical stacking assemblies.
- ◇ Two pressure ranges.
- ◇ Five circuit options
- ◇ One or two pressure relief cartridges.
- ◇ Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121H.



Type S-(2)RB10



Functional Description

Type S-(2)RB6/S-(2)RB10 Series 10 Pressure Relief Valves are pilot controlled valves of sandwich plate design. The valves provide pressure limitation within a hydraulic system.


The valves basically comprise a spool (1), a spool orifice (2), a pilot poppet orifice (3), an adjustment element (4), a pressure spring (5), a pilot poppet (6), a housing (7) and a port T channel (8).

When there is no flow the valve is closed. Pressure in port A acts on the spool (1). At the same time pressure is passed through the spool orifice (2) onto the spring loaded side spool (1) and via the pilot poppet orifice (3) to the pilot poppet (6).

If the pressure in port A rises above the value set on the pressure spring (5), the pilot poppet (6) opens. Fluid flows from the spring loaded side spool (1), the pilot poppet orifice (3) and channel (8) into port T. The resulting pressure drop moves the spool (1) causing the connection A→T to open while the pressure set at pressure spring (5) is maintained.

Pilot oil from the two spring chambers is returned externally via port T.



Model S-[2]RB6 & S-(2)RB10	Page 1.5	Data Sheet S-1003/10.98	
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Ordering Code – Pressure Relief Valve, (Pilot Operated)

S RB 6 10 A 4 / 315 V

Sandwich Plate Design

Pressure Relief Valve, Pilot Operated

RB: With one pressure relief valve
 2RB: With two pressure relief valves

Size
 6, 10

Series Number
 10

Suitable Oil

No Code: Mineral Oil
 V: Phosphate Ester
 W: Fatty Acid Ester, Water Glycol

Pressure Adjustable, Maximum Setting

100: 100 bar
 315: 315 bar

Adjusting Element

4: Sleeve with Hexagon, without Protective Cap

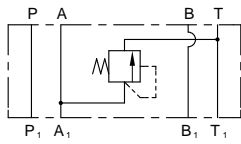
Relief Function Port

	Code	Relief Port	Relief Function From → to
RB	A	Port A	A→T
	B	Port B	B→T
	P	Port P	P→T
2RB	E	Port A	A→T
		Port B	B→T
	F	Port A	A→B
		Port B	B→A

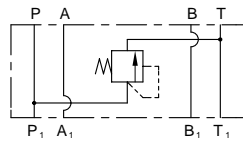


Kawasaki
 Hydraulic Products

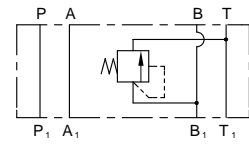
Symbol



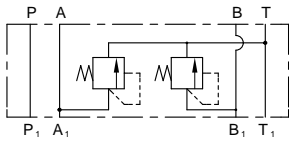
S-RB6-10-A



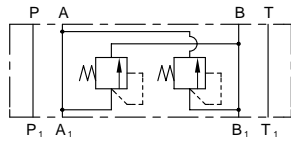
S-RB6-10-P



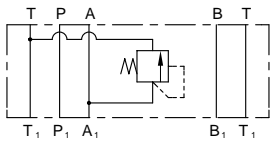
S-RB6-10-B



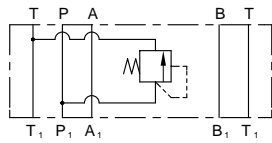
S-2RB6-10-E



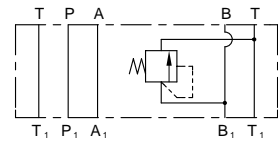
S-2RB6-10-F



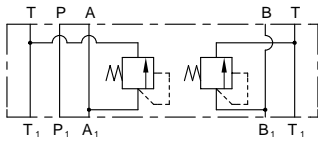
S-RB10-10-A



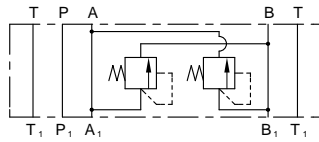
S-RB10-10-P



S-RB10-10-B



S-2RB10-10-E



S-2RB10-10-F

NOTE:

P₁, A₁, B₁ and T₁ show ports on the sub-plate side
and P, A, B and T show ports on the directional control valve.

Technical Data

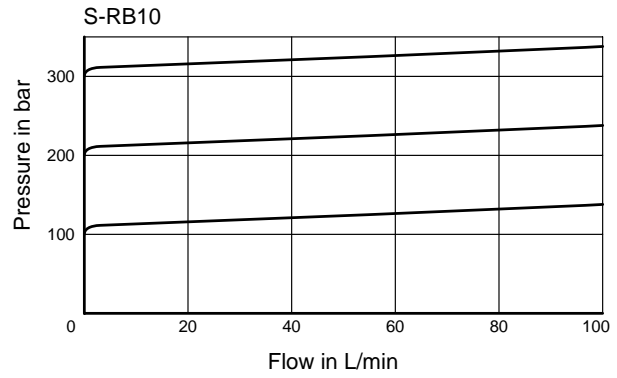
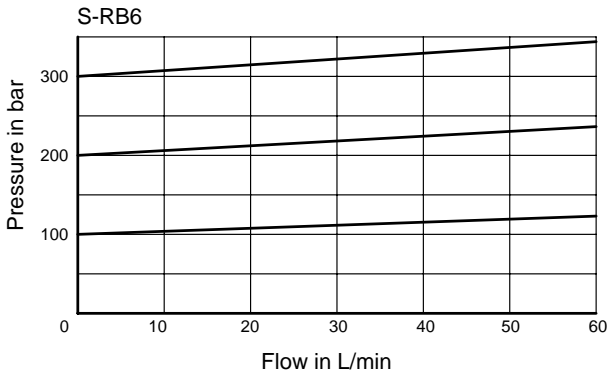
For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	2.8 to 380cSt
Maximum Flow	60 L/min - S-(2)RB6; 100 L/min - S-(2)RB10
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 Class 9. Kawasaki recommend that a filter with a minimum retention rate of $\beta_{10} \geq 75$ is used.
Pressure Adjustable, Max. Setting	Up to 100 bar; or up to 315 bar
Weight	Type S-(2)RB6 - 1.2 kg; Type S-(2)RB10 - 2.5 kg Type S-RB6 - 1.0 kg, Type S-RB10 - 2.0 kg

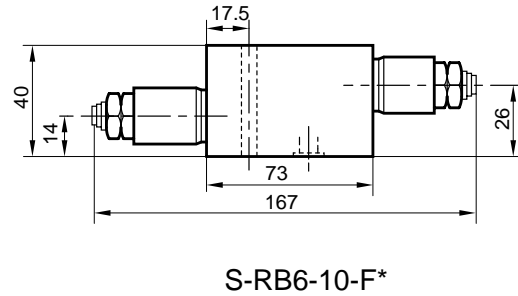
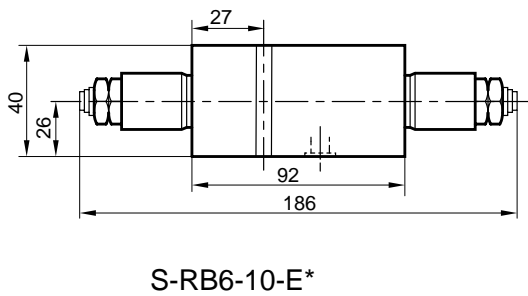
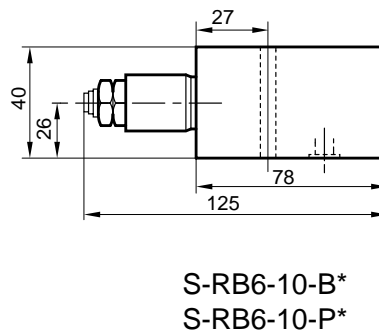
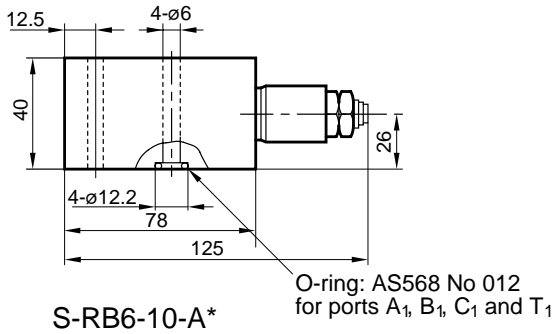
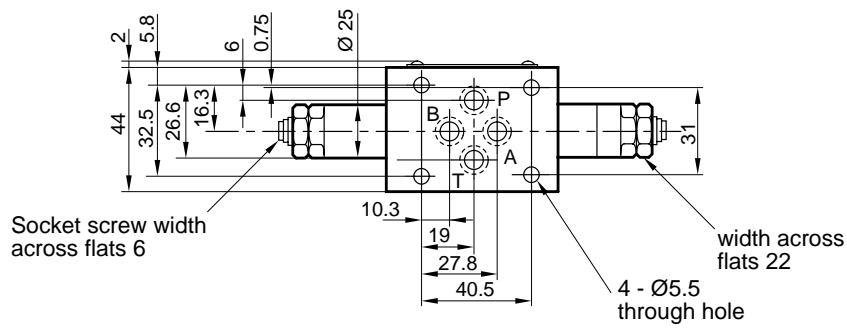


Characteristic Curves

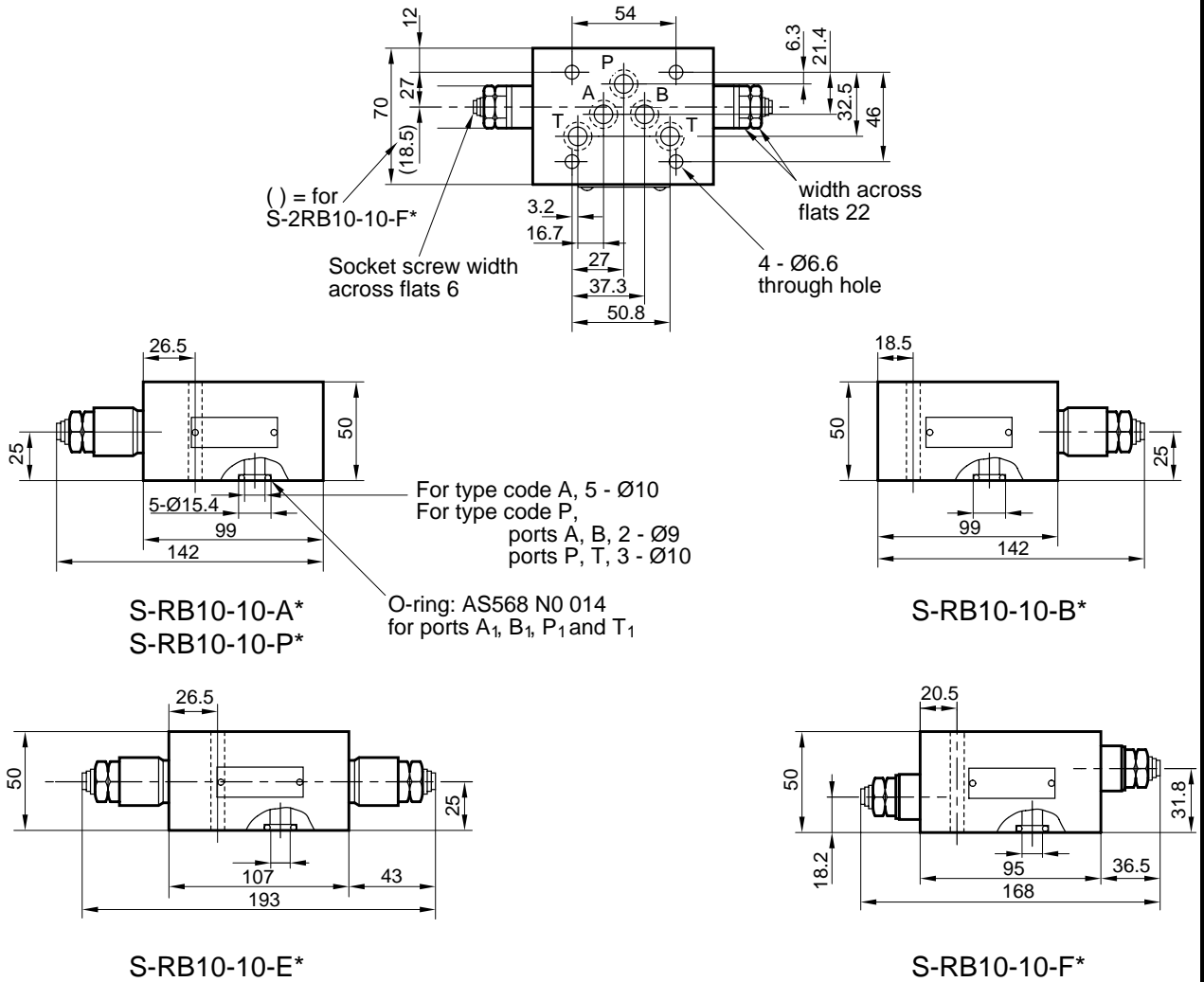
Measured at $v = 36cSt$ and $t = 50^{\circ}C$



Unit Dimensions - Type S-[2]RB6 (dimensions in mm)



Unit Dimensions for Types S-[2]RB10 (dimensions in mm)



KAWASAKI PRECISION MACHINERY (UK) LTD
Ernesettle, Plymouth, Devon, PL5 2SA, England
Tel: +44 1752 364394 Fax: +44 1752 364816
E Mail: info@kpm-uk.co.uk

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Model
S-[2]RB6 & S-(2)RB10

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