

<p>Size 6 & 10 up to 315 bar up to 30 and 45 L/min</p>	<p>Pressure Reducing Valve Direct Acting Sandwich Plate Valve Type S-PRD6 & S-PRD10, Series 10</p>	<p>Data Sheet S-1004/10.98 GB</p>
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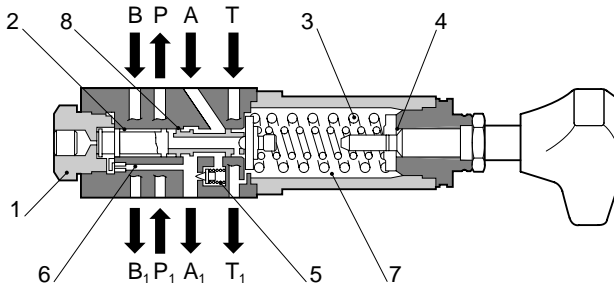
Features

- ◇ Direct operated reducing valve.
- ◇ Used in vertical stacking assemblies.
- ◇ Four pressure ranges.
- ◇ Optional check valve.
- ◇ Three adjustment elements:
 - Rotary knob.
 - Set screw with hexagon and protective cap.
 - Lockable rotary knob with scale.



Type S-PRD6

- ◇ Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121H.



Functional Description

Type S-PRD6 and S-PRD10 Series 10 Pressure Reducing Valves are direct operated valves of sandwich plate design, that provide pressure reduction with a pressure relief function on the secondary side.


The valves basically comprise a pressure gauge connection (1), a control spool (2), a compression spring (3), a pressure adjustment element (4), a check valve (optional) (5), a control line (6), a spring chamber (7) and a control land (8).

When the pressure in port A₁ exceeds the pressure level set at compression spring (3), the control spool (2) moves into the control position and holds the pressure constant in port A₁ at the set pressure.

Control and pilot oil are taken from port A₁ via control line (6).

If the pressure still increases, the control spool (2) moves further towards the compression spring (3), causing a flow path from A₁ to the tank to be opened via control land (8) on the control spool (2) to prevent further rise in pressure.

The spring chamber (7) is drained to the tank externally via port T (Y). For free return flow from port A₁ to A an optional check valve (5) can be fitted. A pressure gauge connection (1) permits the secondary pressure to be monitored.

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Ordering Code – Pressure Reducing Valve (Direct Acting)

S PRD 6 10 P 1 / 25 Y C V

Sandwich Plate Design

Pressure Reducing Valve, Direct Acting

Size
6, 10

Series Number
10

Pressure Reduction Port
A: Port A
P: Port P

Adjustment Element

- 1: Rotary Knob
- 2: Set Screw with Hexagon and Protective Cap
- 3: Lockable Rotary Knob with Scale

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

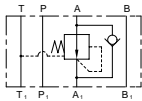
Reverse Free Flow Check Valve
No code: No Reverse Check Valve
C: With Reverse Check Valve (only for Type A)

Pilot Oil Supply Drain line
Y: Internally pilot, externally drained

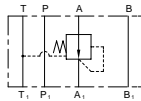
Adjustable Pressure Range

Code	Size 6 Range	Size 10 Range
25	5 to 25 bar	5 to 25 bar
75	20 to 75 bar	10 to 75 bar
150	65 to 150 bar	20 to 150 bar
210	80 to 210 bar	20 to 210 bar

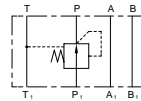
Symbols



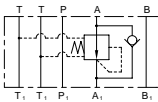
S-PRD6-10-A*/YC



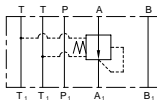
S-PRD6-10-A*/Y



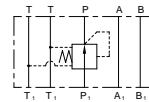
S-PRD6-10-P*/Y



S-PRD10-10-A*/YC



S-PRD10-10-A*/Y



S-PRD10-10-P*/Y

Note: P₁, A₁, B₁ and T₁ show ports on the sub-plate side.



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S-PRD6 & S-PRD10

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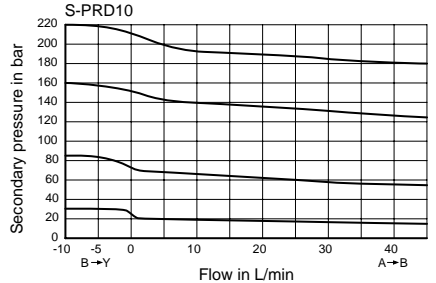
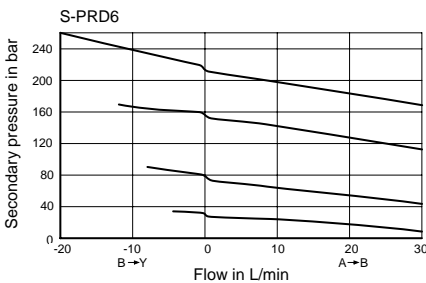
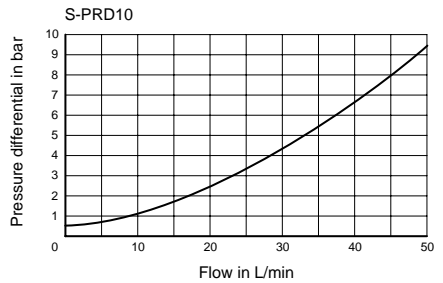
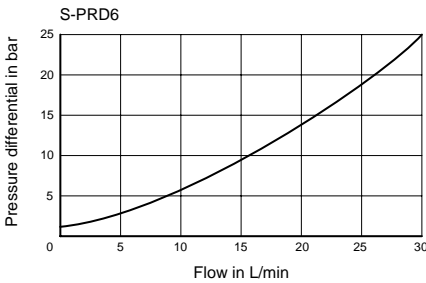
Technical Data

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

Maximum Operating Pressure Port P	315 bar
Maximum Secondary Pressure Port A	25 bar, or 75 bar, or 150 bar, or 210 bar
Maximum Back Pressure Ports T (Y)	60 bar (Size 6 valve) 15 bar (Size 10 valve)
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
Max. flow	30 L/min - S-PRD6 45 L/min - S-PRD10
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.
Weight	1.2 kg - S-PRD6 3 kg - S-PRD10

Characteristic Curves

Measure at $v = 36cSt$ and $t = 50^\circ C$

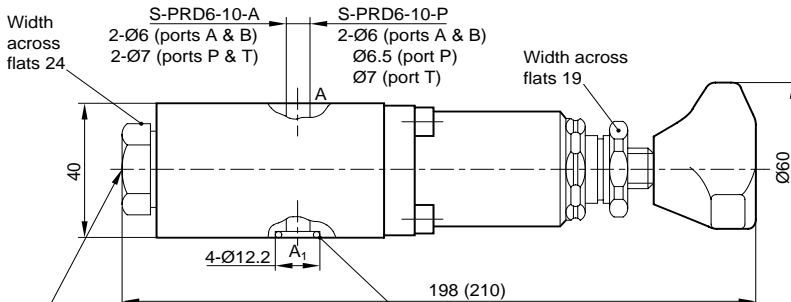
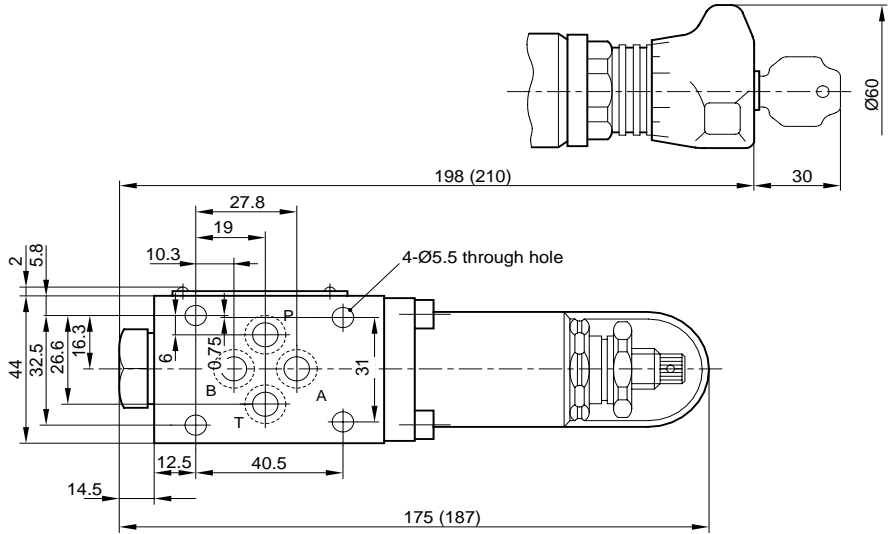


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Unit Dimensions –Type S-PRD6-10 (dimensions in mm)



Pressure gauge port.
Remove plug to measure the pressure at port P. (Rc1/4)

O-ring: AS568 No 012
(for ports A₁, B₁, P₁ and T₁)

Note:
Dimensions in () are for valve S-PRD6-10-A
others are for S-PRD6-10-P

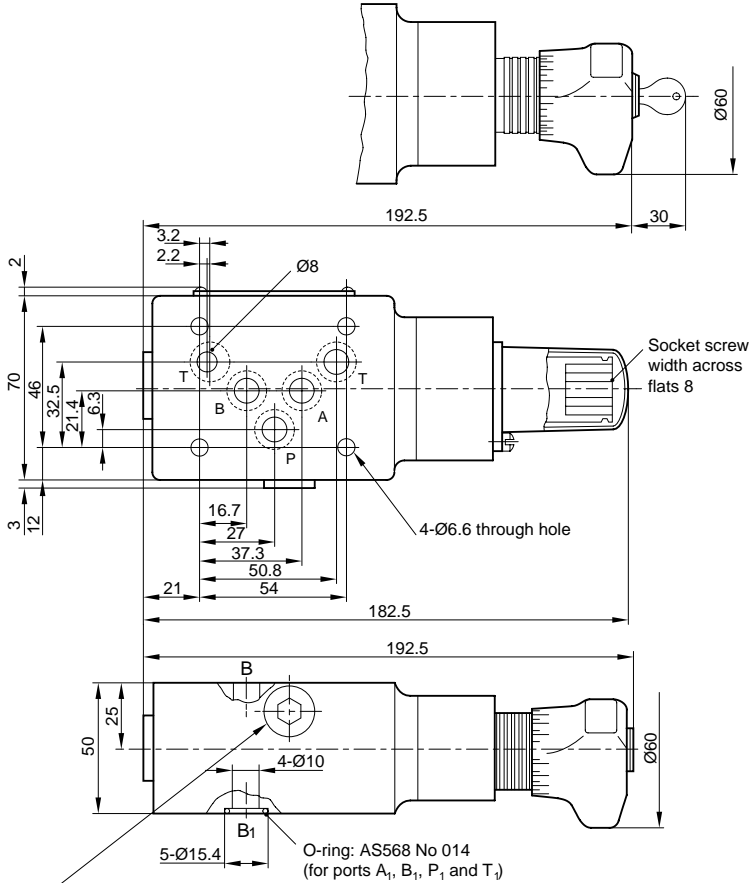


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Unit Dimensions –Type S-PRD10-10 (dimensions in mm)



Pressure gauge port (S-PRD10-10-P only)
Remove plug to measure the pressure at port P (G1/4)

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