

Pressure Control Valve

■ Electromagnetic Proportional Relief Valve (PRV-12B/13B)

- The first electromagnetic proportional relief valve for 70 MPa in Japan. Since the pressure can be set freely by current control and it is fed back by the incorporated pressure sensor, a stable pressure can be obtained even when the oil temperature changes.
- The pressure can be controlled externally using a program set station.
- Can be used by stacking to Esperblock.
- Requires AC 100 V (50/60 Hz) power supply.

■ Specification

Type	Flow range (L/min)	Control range (MPa)	Rated current (A)	Precision (FS)	Allowable back pressure (MPa)	Hydraulic oil temperature (°C)	Ambient temperature (°C)	Bolt insert length	Approximate weight (kg)
PRV-12B	0.25~1.0	5~70	1	±2.5%	2	10~60	0~40	100	5.5
PRV-13B	0.8~3.0								

⚠ Instructions for use:

- The precision will vary if the valve is used beyond the specified flow range. The valve must be used within the specified range.
- The valve should be used within the specified hydraulic oil temperature range. (It is recommended to use an oil cooler.)
- When a proportional relief valve is mounted, the air vent must face upward.
- The proportional relief valve must always be used with an inline filter.
- The pitches for the mounting ports and bolt holes are the same as those of Esperblock. (See P. 132.)

■ Exclusive Controller (ECR-1B12/1B13)

■ Specification

Input signal	Monitor output (V)	Maximum output current (A)	Dither frequency (Hz)	Power supply used	Maximum power consumption	Operating conditions	Approximate weight (kg)
Volume control : 5 – 10 kΩ Control by voltage : 0 – 5 V	5	1	100	AC 100V 50/60Hz	100VA	Temperature : 0 – 40 °C Humidity : 30 – 85%	1.4

⚠ Instructions for use:

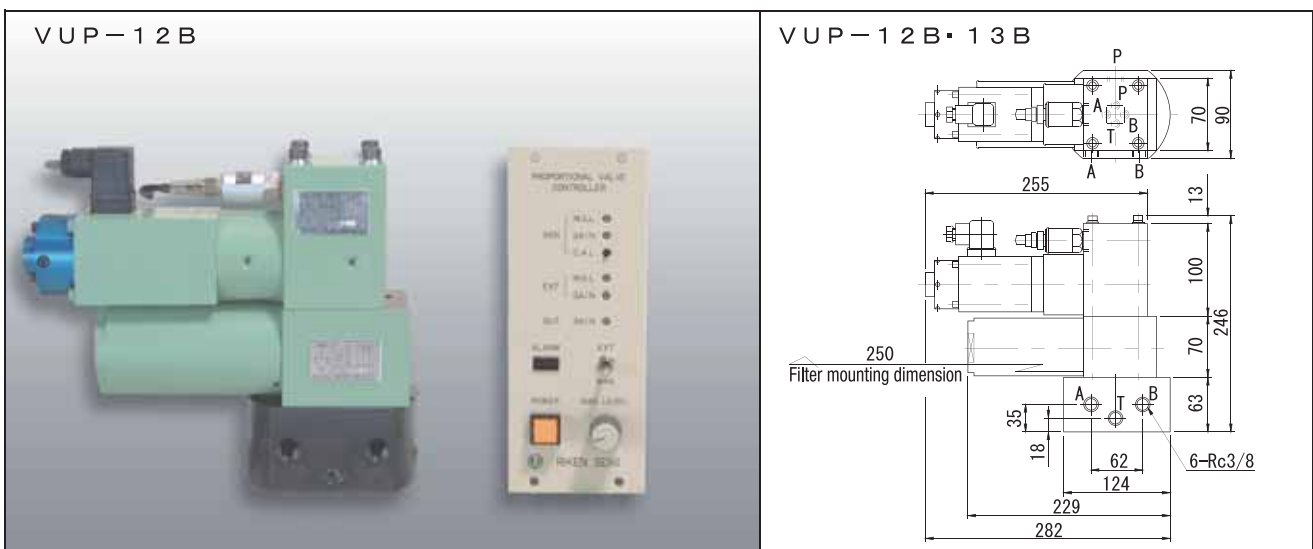
When the power of the controller is turned on, the hydraulic oil must be always put in the proportional relief valve. (The pump must be actuated.)

■ Electromagnetic Proportional Relief Valve Unit (VUP-12B/13B)

■ Structure

Type	Details	Electromagnetic proportional relief valve	Inline filter	Sub-plate	Controller	Connecting cord	Approximate weight (kg)
VUP-12B		PRV-12B	MIF-31	MPS-31	ECR-1B12	5 m x 2	19.0
VUP-13B		PRV-13B			ECR-1B13		

※See P. 140 for the details of MIF-31/MPS-31.



Hydraulic Valves