

# C

## PRESSURE CONTROLS

Valve Type	Graphic Symbols	Max. Operating Pressure MPa	Max. Flow L/min													Page
			1	2	3	5	10	20	30	50	100	200	300	500	1000	
Remote Control Relief Valves		25	DT/DG 01													C-3
Direct Type Relief Valves		21	DT/DG 02													C-5
Pilot Operated Relief Valves		25	BT/BG 03 06 10													C-7
Low Noise Type Pilot Operated Relief Valves		25	S-BG 03 06 10													C-11
Relief Valves (High Pressure Type)		35	B3G 03 06													C-14
Solenoid Controlled Relief Valves		25	BST/BSG 03 06 10													C-17
Solenoid Controlled Relief Valves (High Pressure Type)		35	B3SG 03 06													C-22
H/HC Type Pressure Control Valves		21	HT/HG HCT/HCG 03 06 10 HF16 HCF16													C-25
Pres. Reducing Valves Pres. Reducing and Check Valves		21	RT/RG RCT/RCG 03 06 10 RF RCF 16													C-36
Pressure Reducing and Relieving Valves		03 : 14 06 : 25	RBG 03 06													C-43
Brake Valves		25	UBGR 03 06 10													C-47
Unloading Relief Valves		21	BUCG 06 10													C-47
Semiconductor Type Pressure Switches		35	JT-02													C-48
Pressure Monitoring System		20 35														C-50

## Hydraulic Fluids

### Fluid Types

Any type of hydraulic fluids listed in the table below can be used.  
Use any type of fluids, no change in specifications.

Petroleum base oils	Use fluids equivalent to ISO VG 32 or VG 46.
Synthetic fluids	Use phosphate ester or polyol ester fluid. When phosphate ester fluid is used, prefix "F-" to the model number because the special seals (fluororubber) are required to be used.
Water containing fluids	Use water-glycol fluid.

Note: For use with hydraulic fluids other than those listed above, please consult your Yuken representatives in advance.  
Standard model of Semiconductor Type Pressure Switches can use with phosphate ester and W/O emulsion type fluids.

### Recommended Fluid Viscosity and Temperature

Use under conditions where the viscosity and temperature of the hydraulic fluid remain in the ranges indicated in the following table.

Name	Viscosity	Temperature
Remote Control Relief Valves Direct Type Relief Valves Pilot Operated Relief Valves Low Noise Type Pilot Operated Relief Valves Relief Valves Solenoid Controlled Relief Valves*	H Type Pressure Control Valves HC Type Pressure Control Valves Pressure Reducing Valves Pressure Reducing and Check Valves Pressure Reducing and Relieving Valves	15 - 400 mm <sup>2</sup> /s  -15 - +70°C
Semiconductor Type Pressure Switches	15 - 400 mm <sup>2</sup> /s	-20 - +70°C

★ If the valve is provided with a vent restrictor (ex. : A-BSG/B3SG), the viscosity range should be 15 - 200 mm<sup>2</sup>/s.

### Control of Contamination

Due caution must be paid to maintaining control over contamination of the hydraulic fluids which may otherwise lead to breakdowns and shorten the life of the valves. Please maintain the degree of contamination within NAS 1638-Grade 12. Use 25 μm or finer line filter.

## Instructions

### Drain Piping

It is necessary to connect the drain port directly to the reservoir with a back pressure close to the atmospheric pressure.  
If neglect this process, there is the risks that system pressure will increase unlimitedly and occur serious accident.

## Interchangeability in Installation between Current and New Design

Model change has been made on the following products.

Name	Model Numbers		Mounting Interchangeability	Major Changes	Page
	Current	New			
Solenoid Controlled Relief Valve	BS * -03,-47	BS * -03,-48	Yes	<ul style="list-style-type: none"> <li>● Pilot valves (DSG-01) have been changed in the design numbers 70.</li> <li>● There are no changes in specifications and mounting dimensions.</li> </ul>	—
	BS * -06,-47	BS * -06,-48			
	BS * -10,-47	BS * -10,-48			