

# **SEWON** Hydraulics

# —— Hydraulic Fluids ——

# 1. Fluid Types

Any type of hydraulic fluid, listed in the table below can be used.

Petroleum based oil	Use fluids equivalent to ISO VG32 or VG46.
Synthetic fluids	Use phosphate ester or polyol ester fluid. When phosphate ester fluid is to be used, prefix "F-" to the model number because a special seal (fluororubber) will be used.
Water containing fluids	Use water - glycol fluid.

Note: For use with hydraulic fluids other than those listed above, please consult your SEWON representatives in acvance.

# 2. 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	H Type Presure Control Valves		
Direct Type Relief Valves	HC Type Pressure Control Valves		
Pilot Operated Relief Valves	Pressure Reducing Valves	$15\sim400 \text{mm}^2/\text{s}\{cSt\}$	-15~+70℃
Low Noise Type Pilot Operated Relief	Valves Pressure Reducing and Check Valves		
Solenoid Controlled Relief Valves	Pressure Reducing and Relieving Valves		

<sup>\*</sup> If the valve is provided with a vent ristrictor (ex.: A-BSG-03), the viscosity range should be 15-200cSt (80-900 SSU).

### 3. 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 valve. Please maintain the degree of contamination within NAS 1638-Grade 11. Use  $25\mu$ m or finer line filter.

# 4. Drain Piping

Drain port must be connected directly to the tank in condition back pressure is lower than the atmospheric pressure. That line pressure can be increased infinitely can be caused a serious accident.

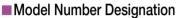
# **PRESSURE CONTROLS**

# ■ Remote Control Relief Valves

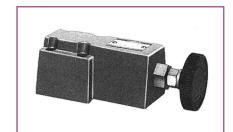
This valve is used as a remote control valve for pilot operated type pressure control valves.

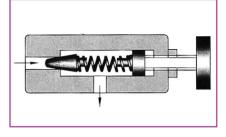
# ■ Ratings

	Model Numbers		Max. Operating Pres.	Mass kg	
	Threaded Connections	Sub-Plate Mounting	MPa{kgf/cm²}	DT type	DG type
•	DT-01-22	DG-01-22	25{255}	1.6	1.4



		or 2 congination		
D		T	-01	-22
	Series Number	Type of Mounting	Valve Size	Design Number
	D: Remote Control Relief Valves	T: Threaded Connections  G: Sub-Platr Mounting	01	22 (Standard) 2230 (Low Press. Control)





**KS Graphic Symbol** 



# Remote Control F

# Attachment

# Mounting bolt

Valve Model Numbers	Socket Head Cap Screw
DG-01	M5 ×45L 4Pcs.

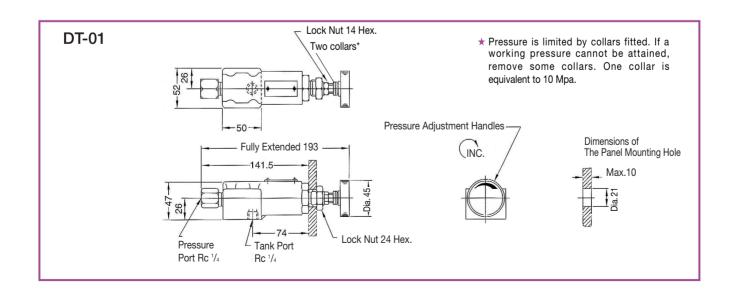
# ■Sub-Plate

Valve Model	Sub-Plate	Piping	Mass
Numbers	Model Numbers	Size	kg
DG-01	DGM-02-20	Rc1/4	

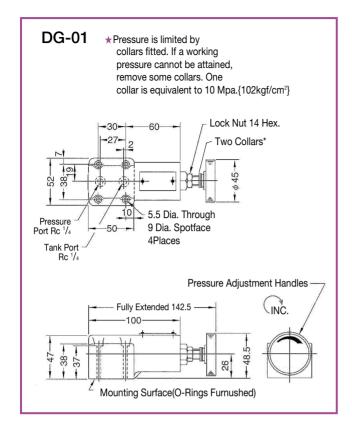
• Sub-plates are available. Specify sub-plate model from the table above. When sub-plate are not used, the mounting surface should have a good machined finish.

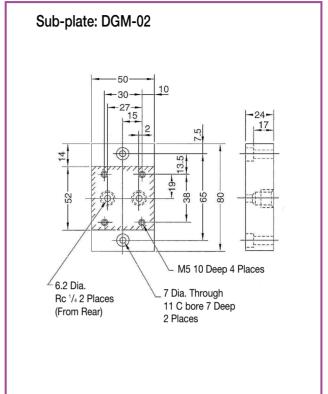
# ■Instructions

- To adjust the pressure, loosen the lock nut and turn the handle slowly clockwisd for higher pressures or anti-clockwise for lower pressures.
- After adjustments, do not forget to tighten the lock nut.
- If the internal volume of the vent line is too large, chatterting is likely to occur.
- Piping of the tank line should not be connected to any tank line of the other valves, but connected directly to the tank.



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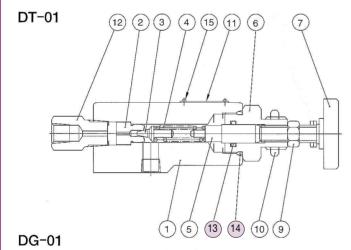




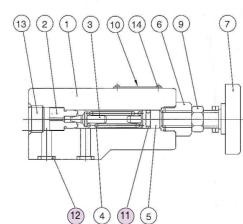
# CAUTION -

When making replacement of seals, please do it carefully after reading through the relevant instructions in the Operator's Manual.

# ■List of Seals



Item	Name of Parts	Part Numbers	Qty
13	O-Ring	JIS B 2401 -1A-P12	1
14	O-Ring	JIS B 2401 -1B-P22.4	1



Item	Name of Parts	Part Numbers	Qty
11	O-Ring	JIS B 2401 -1A-P9	1
12	O-Ring	JIS B 2401 -1B-P9	2

# ■ Direct Type Relief Valves

This valve is used in a hydraulic circuit to prevent damage due to over pressure and to adjust the maximum circuit pressure of small capacity.

# ■ Ratings

Model Numbers		Max. Operating	Pres. Adj. Range	Max. Flow l/min	Mass kg	
Threaded Connections	Sub-Plate Mounting	Pressure MPa{kgf/cm²} MPa{kgf/cm²}	DT type		DG type	
DT-02- **-22	DG-02- **-22	21 {214}	*	16	1.5	1.5

<sup>★</sup>Refer to the Model Number Designation.

# ■ Model Number Designation

D	Т	-02	-B	-22
Series Number	Type of Mounting	Valve Size	Pres. Adj. Range	Design Number
D: Direct Type	T: Threaded Connections	02	B: ★~7 {★~71.4} C:3.5~14 {35.7~143}	22
D 11 077.1	G: Sub-Plate Mounting	Sub-Plate 02		22

<sup>★</sup>Refer to the Minimum Adjustment Pressure Characteristics.

### Instructions

- To adjust the pressure, loosen the lock nut and turn the handle slowly clockwise for higher pressures or anti-clockwise for lower pressures. After adjustments, do not forget to tighten the lock nut.
- Piping of the tank line should not be connected any tank line of the other valves, but connected directly to the tank.

### Attachment

# Mounting bolts

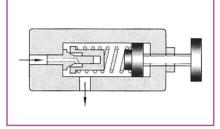
Valves Model Numbers	Socket Head Cap Screw
DG-02	M5 ×45L ····· 4Pcs.

# ■Sub-Plate

Valves Model	Sub-Plate	Piping	Mass
Numbers	Model Numbers	Size	kg
DG-02	DGM-02-20	Rc1/4	0.7

- Sub-plates are available. Specify sub-plate model from the table above. When sub-plates are not used, the mounting surface should have a good machined finish.
- The sub-plates are those for remote control relief valves. For dimensions, see page C-4.

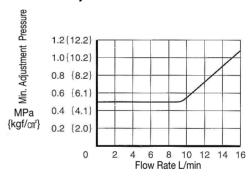




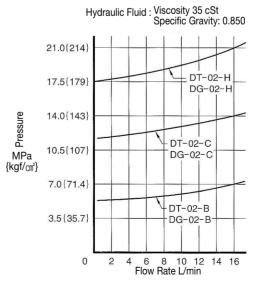
**KS Graphic Symbol** 



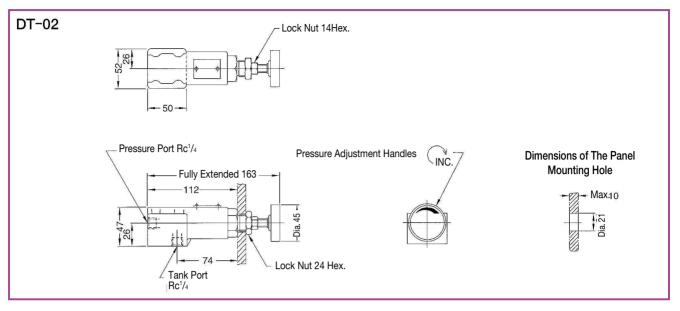
# ■Min. Adjustment Pressure

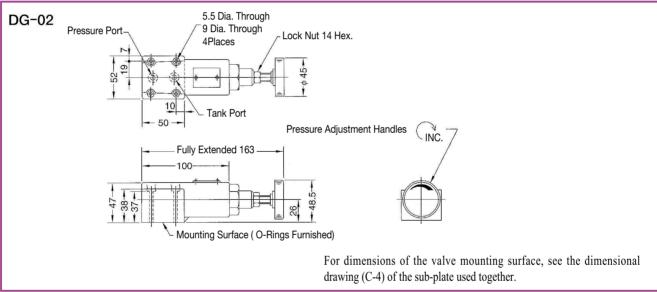


# ■ Nominal Override Characteristics



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—— <u>/!</u>\caution —

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