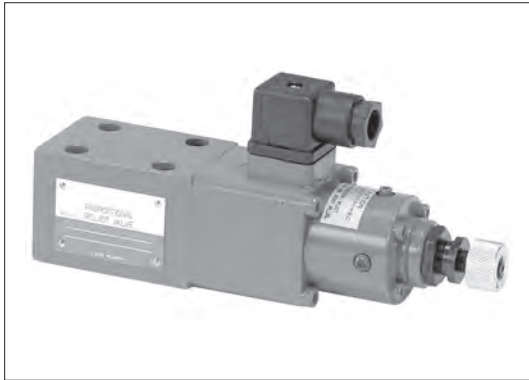
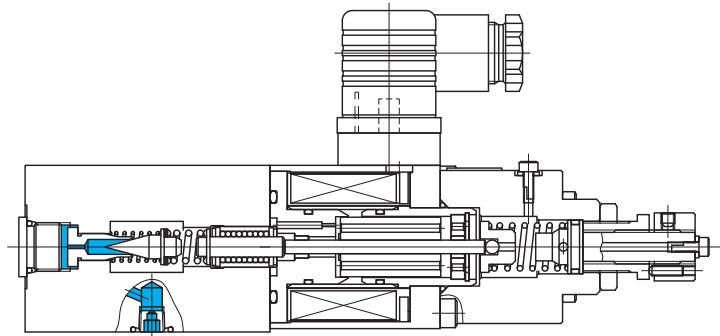
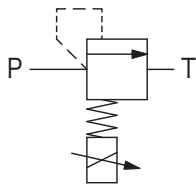


Proportional solenoid relief valves (direct operated type) EPCG2-01



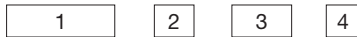
Functional Symbol



The EPCG2-01 utilizes a proportional solenoid actuator to provide proportional control of hydraulic circuit pressure. The valve provides pressure control proportional to input current by connecting with small flow hydraulic systems, pilot operated pressure control valves or variable displacement pumps.

Model Code

EPCG2-01-210-11



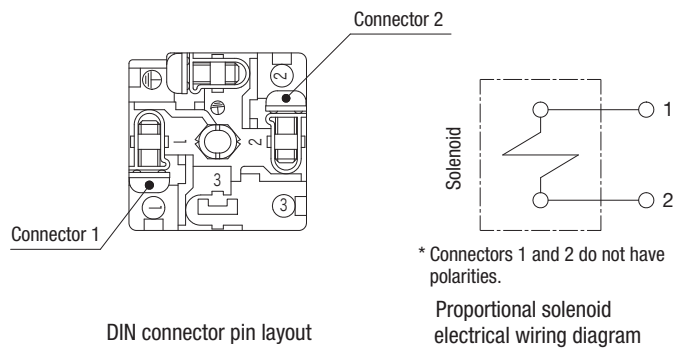
- 1 Proportional solenoid relief valve
- 2 Size

- 3 Pressure adjustment range
Refer to "Specifications".
- 4 Design no.

Specifications

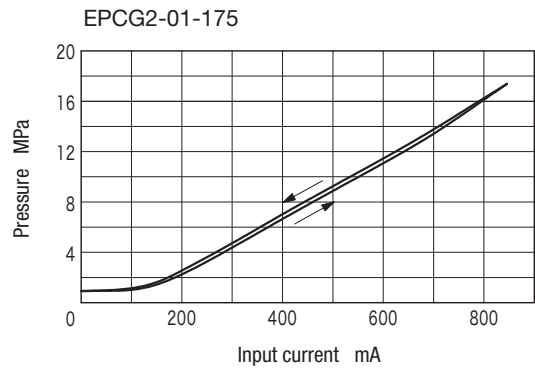
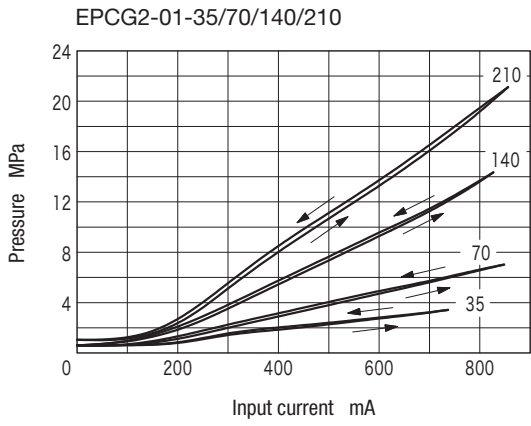
Model Code		EPCG2	
Size		01	
Max. working pressure		MPa	21
Flow range		L/min	0.3~1.5
Max. adjustable pressure	Pressure adjustment range code	MPa	35
			70
			140
			175
			210
Rated current		A	1
Coil resistance		Ω	14
Hysteresis		Less than 3%*	
Repeatability		Less than 1%*	
Weight		kg	2.5

Note: * indicates the value when using controller P-X-20 or equivalent.

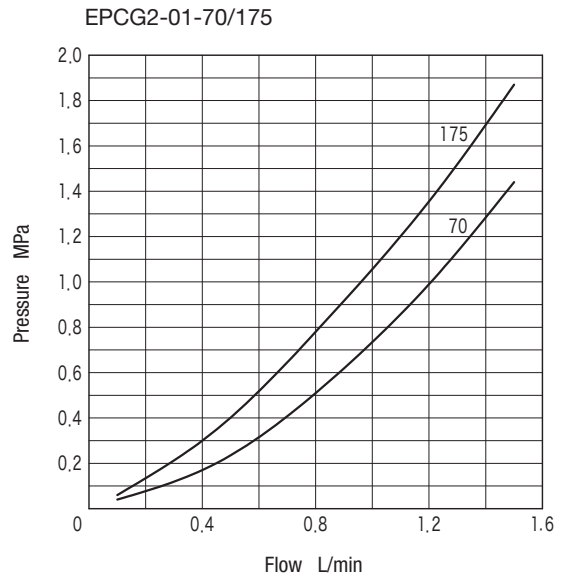
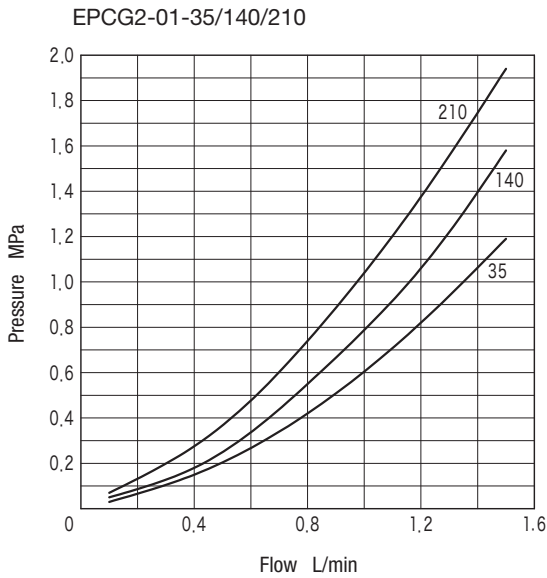


Characteristics Curve (at 20 mm²/s) (typical examples)

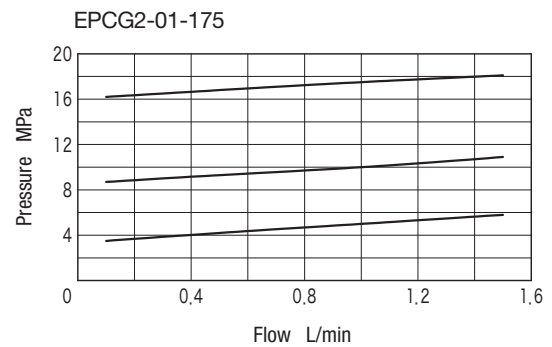
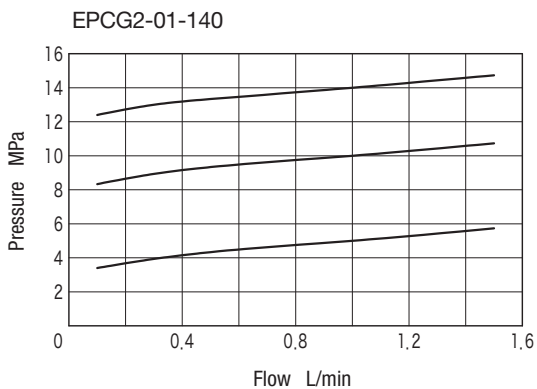
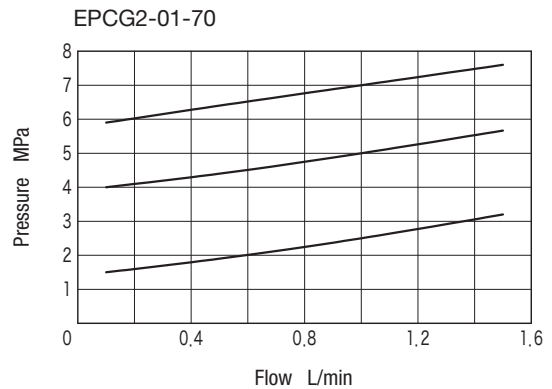
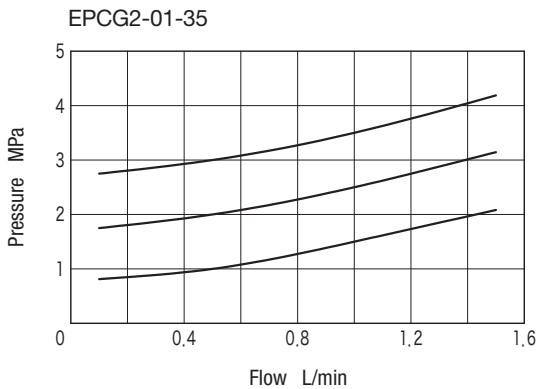
Input Current–Pressure Characteristics



Minimum Control Pressure



Flow–Pressure Characteristics

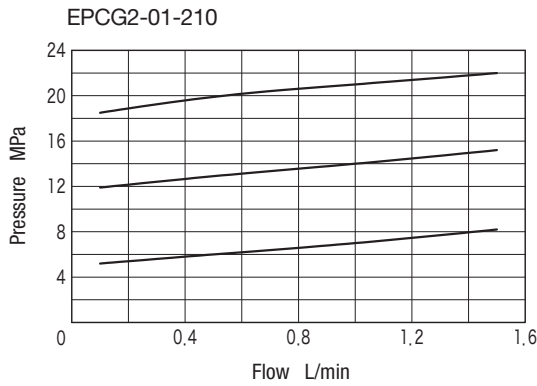


Proportional Solenoid Control Valves

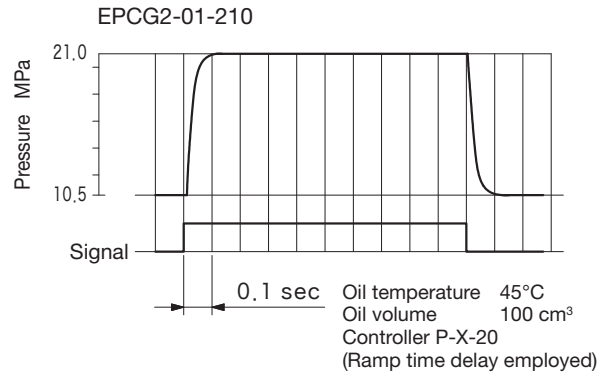
J
1-2

Characteristics Curve (at 20 mm²/s) (typical examples)

Flow-Pressure Characteristics



Step Response Characteristics



Notes on Operation

- Air bleed
For stable pressure control, loosen the air bleed plug and bleed air completely out of the valve prior to use.
- Manual adjustment
In case there is no input current to the solenoid during initial adjustment or electric malfunction, pressure may be set manually with the pressure adjustment knob. Return knob to counterclockwise direction upon electro-magnetic control.
- Minimum control flow
Pressure setting may be unstable in the case of low flow. Maintain minimum flows above the 0.3 L/min.
- T port piping
Allowable back pressure is 0.2 MPa. T port piping should be directly returned to tank. Ensure that end of the piping is always below the fluid level.

Mounting Bolts (JIS B 1176, Strength Class 12.9)

Hex Socket Bolts	Qty
M5 × 50	4

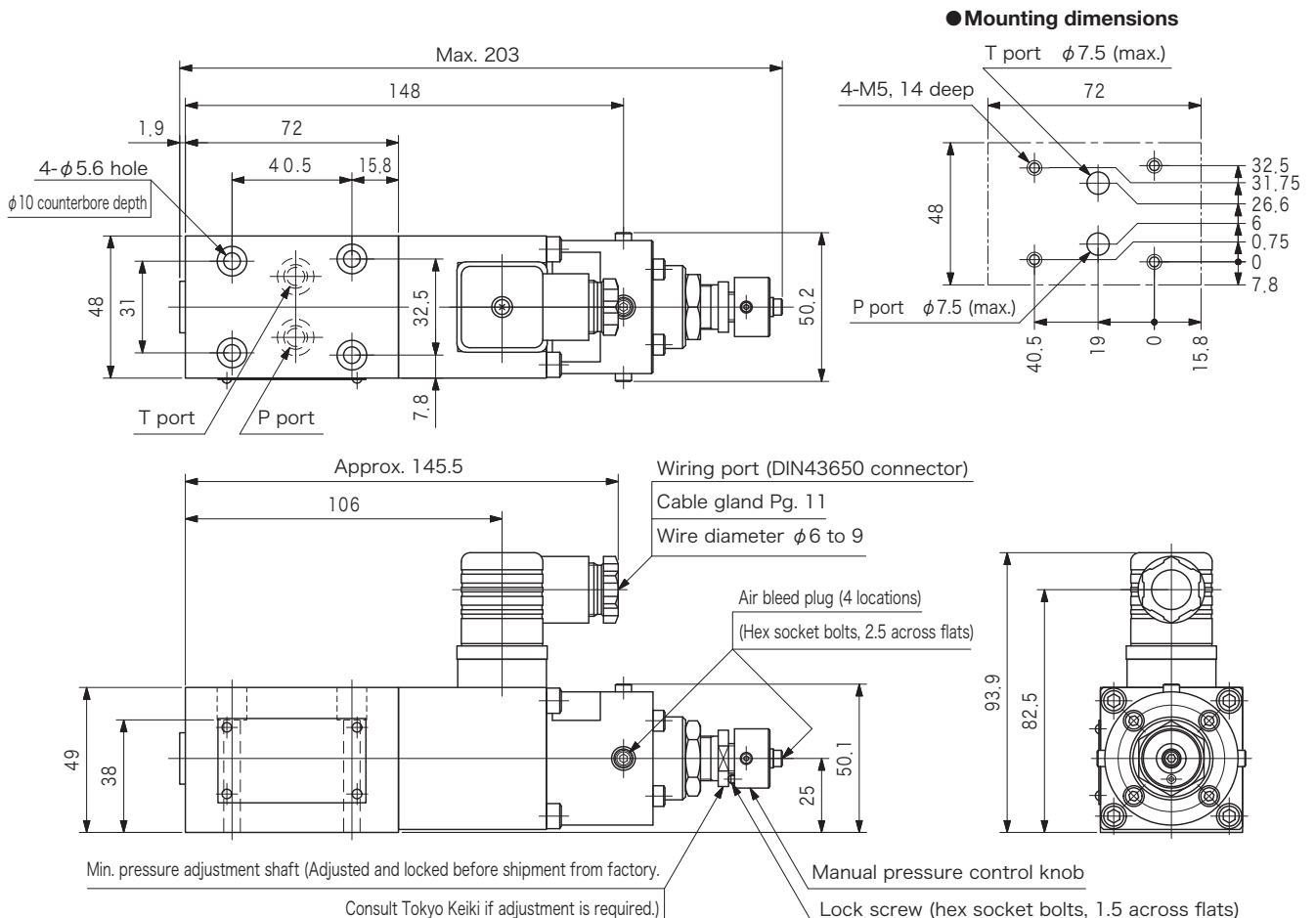
- Mounting bolts must be ordered separately.
- Tightening torque of mounting bolts: 7 to 8 N·m

Subplate

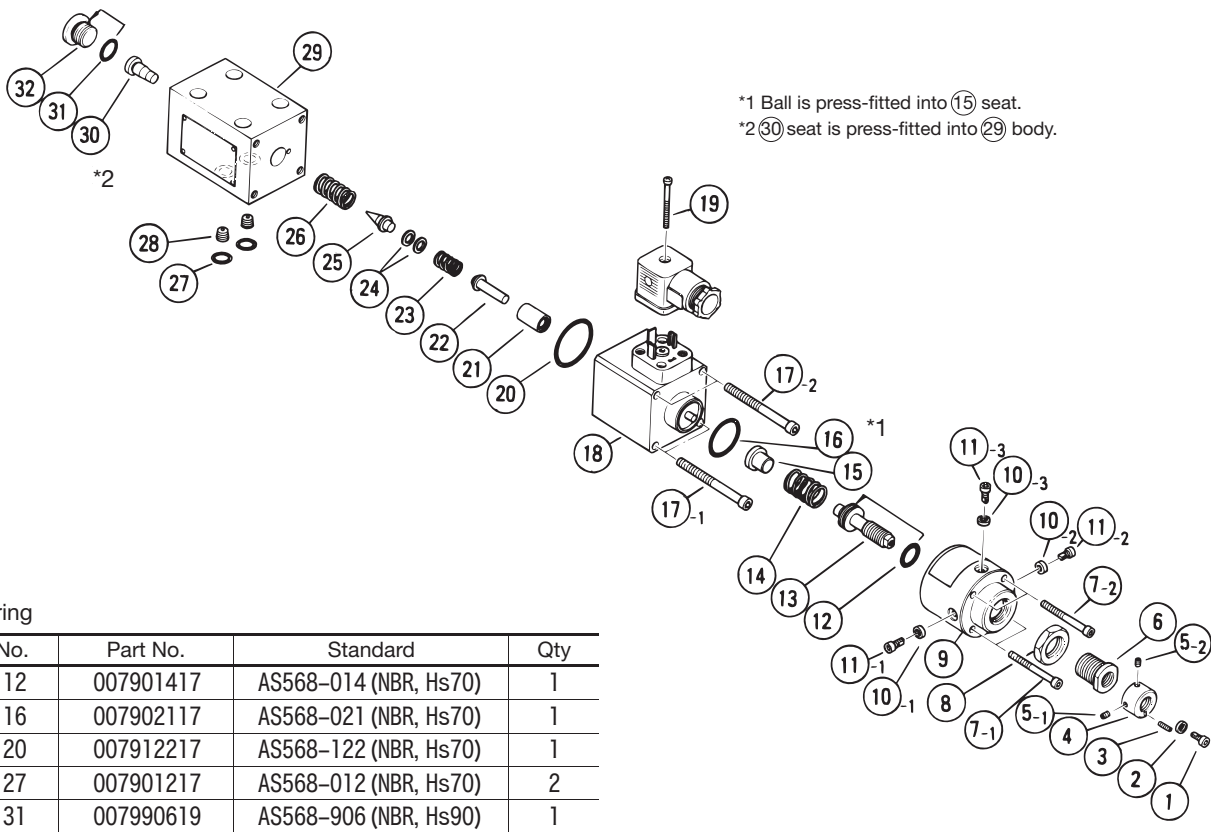
Subplate Model Code		Connection Port Dia. Rc
Side Piping	DGMS-3-1E-10-T-JA-J	3/8
Bottom Piping	DGVM-3-10-T-JA-J	

- Subplate must be ordered separately.
- Mounting bolts are not included.
- See page R6-6 for dimensions.

Dimensions



Construction



O-ring

No.	Part No.	Standard	Qty
12	007901417	AS568-014 (NBR, Hs70)	1
16	007902117	AS568-021 (NBR, Hs70)	1
20	007912217	AS568-122 (NBR, Hs70)	1
27	007901217	AS568-012 (NBR, Hs70)	2
31	007990619	AS568-906 (NBR, Hs90)	1