## YUKEN

## Proportional Electro-Hydraulic Pilot Relief Valves

The valve can be used as a pilot valve of the Proportional Electro-Hydraulic Control Valves.

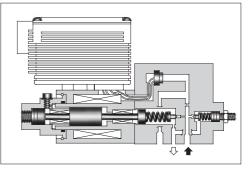
The valve can also be used as a relief valve for the hydraulic system where a small flow rate and continuous pressure control are required.

| Specifications                          |  |
|---|--|
| Model Numbers<br>Description            | EHDG-01*   |
| Max. Operating Pres.                    | 24.5 MPa (3550 PSI)  |
| Max. Flow                               | 2 L/min (.53 U.S.GPM)  |
| Min. Flow                               | 0.3 L/min (.08 U.S.GPM)  |
| Pressure Adjustment Range               | Refer to Model Number Designation  |
| Coil Resistance                         | 10 Ω   |
| Hysteresis                              | 3% (1%) ★1 or less   |
| Repeatability                           | $1\%^{\star 2}$ or less  |
| Frequency Response                      | B: 10 (27) Hz *1<br>C: 10 (27) Hz *1<br>H: 12 (27) Hz *1<br>(-90 degree)                             |
| Supply Electric Power                   | 24 V DC<br>(21 to 28 V DC Included Ripple)   |
| Power Input (Max.)                      | 28 W   |
| Input Signal                            | B: 6.9 MPa (1000 PSI) / 5 V DC<br>C: 15.7 MPa (2275 PSI) / 5 V DC<br>H: 24.5 MPa (3550 PSI) / 5 V DC |
| Input Impedance                         | 10 k Ω   |
| Alarm Signal Output<br>(Open Collector) | Voltage: Max. 30 V DC<br>Current: Max. 40 mA   |
| Pressure Signal Output                  | B: 5 V DC / 6.9 MPa (1000 PSI)<br>C: 5 V DC / 15.7 MPa (2275 PSI)<br>H: 5 V DC / 24.5 MPa (3550 PSI) |
| Ambient Temperature                     | 0 - 50°C (32 - 122°F)<br>(With Circulated Air)   |

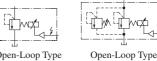
 $\star$  1. The value in ( ) is for the closed-loop type.

 $\star$ 2. The repeatability of the value is obtained by having it tested independently on the conditions similar to its original testing.





## Graphic Symbols



Open-Loop Type

| <br>1 |
|-------|

Open-Loop Type Open-Loop Type with Safety Valve & Sensor



with Sensor

Closed-Loop Type

with Safety Valve

4 

F-V -PN EHD G -01 -B -S -1 T15 M10 -50 Applicable Pres. Adj. Range MPa (PSI) Special Series Type of Valve Control Safety P-Line T-Line P-B Line Design **Seals** Mounting Valve Orifice Orifice Number Size Control Orifice Туре Number None: None: Open-F: For general None: Loop Special EHD : **B**: 0.5 - 6.9 use Without Seals for Propor-(70 - 1000) S: Safety **V** : PN : T15 tional G: Phosphate Open-Valve Without T13 C: 1 - 15.7 Electro-Sub-plate Vent 01 50 Ester Type Loop (145 - 2275) Orifice T11 Hydraulic Control of M10: Mounting Fluid 1 · with (Standard) Pilot Relief With Standard **H**: 1.2 - 24.5 Sensor (Omit if Relief Valve Orifice (175 - 3550) Safety not L : (Omit if not Valve Valve Closedrequired) required) Loop\*

 $\star$  1. For closed-loop models, specify applicable control code "V" even though the valve may not be used as vent control of relief valve.

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★ 2. Standard of T-line Orifice.

Pres. Adj. Range B:T15, C:T13, H:T11.



## Model Number Designation

<sup>4</sup> ∄₩⊄ -**F**/⁄^ Closed-Loop Type

with Safety Valve