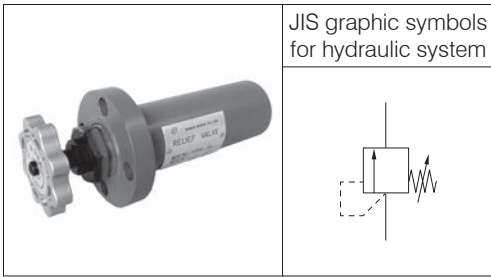


## Direct Operated Relief Valve



### Features

- As the override pressure is small, this valve has almost equivalent performance to a pilot operated type.
- The vibration proof structure prevents chattering even in the high pressure range.

### Nomenclature

※ - **HDRIR** - ※ **02** - ※  
1    2    3    4    5

**1 Applicable fluid code**

No designation: Petroleum-based hydraulic fluid, water-glycol hydraulic fluid  
 F: Phosphate ester hydraulic fluid

**2 Model No.**

HDRIR: H series direct operated relief valve

**3 Connections**

G: Gasket mount type  
 T: Screw connection type

**4 Nominal diameter**

02: ¼

**5 Pressure adjustment range**

1: 0.9 to 7 MPa { 9 to 70 kgf/cm<sup>2</sup> }  
 3: 3.5 to 21 MPa { 35 to 210 kgf/cm<sup>2</sup> }

### Specifications

Model code	Nominal diameter	Pressure adjustment range MPa {kgf/cm <sup>2</sup> }	Maximum flow rate L/min	Mass kg
HDRIR-G02-1	¼	0.9 to 7 { 9 to 70 }	12	2.6
HDRIR-G02-3		3.5 to 21 { 35 to 210 }		
HDRIR-T02-1		0.9 to 7 { 9 to 70 }		1.8
HDRIR-T02-3		3.5 to 21 { 35 to 210 }		

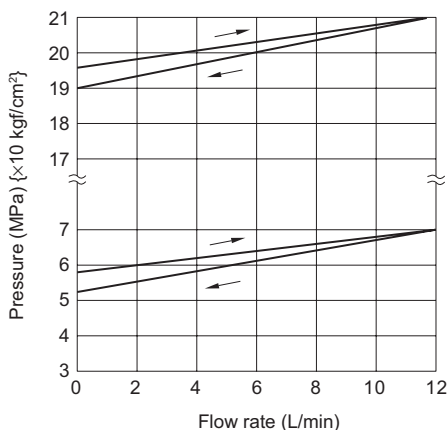
Model code	Pressure change MPa {kgf/cm <sup>2</sup> } per handle revolution
HDRIR-※02-1	1.9 {19}/revolution
HDRIR-※02-3	5.3 {53}/revolution

### Handling

- Directly connect the tank piping of the valve to the tank without merging it with other tank piping.
- These valves can be used for remotely controlling pilot operated pressure control valves with a nominal diameter of 2 or larger. Since excessive internal volume of the pilot piping may lead to vibration, use steel pipes with an inner diameter of 4 mm maximum and with thick walls for this piping.
- The valves (gasket mount type) do not come with bolts or O-rings. To fit them to direct manifolds, use O-rings conforming to JIS B 2401 1B P18 and M10 × 30 bolts (tightening torque: 50 to 60 N · m {500 to 600 kgf · cm}).

### Performance curves (viscosity: 32 mm<sup>2</sup>/s {cSt})

Flow rate - Pressure characteristics



Pressure drop characteristics (with the handle fully open)

