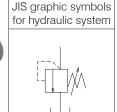
# PRESSURE CONTROL VALVES

# **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

#### **Nomenclature**









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: 1/4

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		Maximum flow rate L/min	Mass kg
HDRIR-G02-1	1/4	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}		

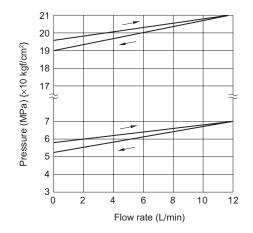
Model code	Pressure change MPa {kgf/cm²} per handle revolution
HDRIR-*02-1	1.9 {19}/revolution
HDRIR-*02-3	5.3 {53}/revolution

## Handling

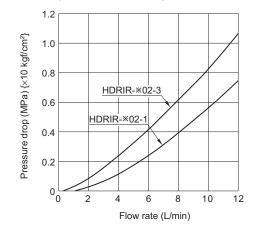
- Directly connect the tank piping of the valve to the tank without merging it with other tank piping.
- These valves can be used for remotely controlling pilot operated pressure control valves with a nominal diameter of 2 or larger. Since excessive internal volume of the pilot piping may lead to vibration, 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)



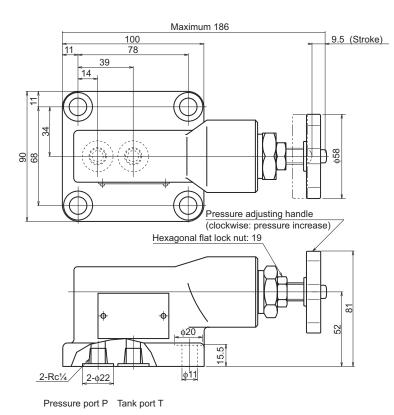
#### http://www.daikinpmc.com/en/

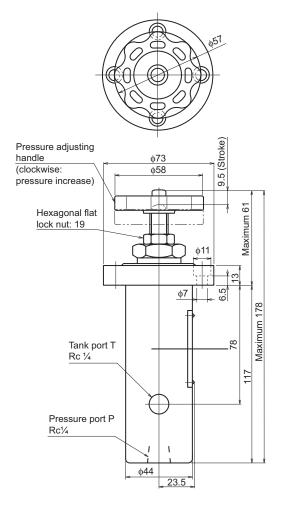
For latest information, PDF catalogs and operation manuals

## **External dimension diagram**

HDRIR-G02

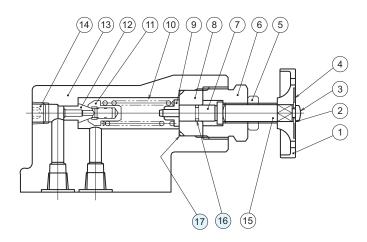
HDRIR-T02





## Sectional structural diagram

HDRIR-G02



#### Sealing part table

Part No.	Name	Quantity	Part specifications		
Fait No.		Quantity	HDRIR-G02	HDRIR-T02	
16	O-ring	1	JIS B 2401 1AP7	JIS B 2401 1AP7	
17	O-ring	1	JIS B 2401 1AG25	JIS B 2401 1AG25	