Installation and Instruction

SAGINOMIYA SISAKUSHO.INC.

Installation and Instruction

A. Failure to read and follow all instructions carefully before installing or operating this solenoid valve could cause personal injury and/or property damage. Save these instructions for future use.

B. NOTE FOR SAFETY

Warning

- When removing the solenoid coil from the valve body, be sure to cut out the power supply as the coil may burn.
- Do not apply different voltage from the voltage marked on the coil label. It may cause burning or failure.
- While power is on, do not touch the housing cover as personal injury may be caused.
- (Coil heats up to 90℃)
- Do not apply excess force and/or any impact to the coil as it may cause valve failure, burn-out and leakage trouble due to deformation.
- Do not heat up the solenoid coil as the coil might be burnout.
- Do not put any inflammable thing around the coil as it could cause fire due to the coil heat.

C. SPECIFICATIONS

In the following specification, there is a case different from indication of a product. Note: SI unit {Metric unit}

- Min Bursting Press. 3.3 MPa [33.7 kgf/cm²] (81, 82)
- Airtight Pressure 3.3 MPa [33.7 kgf/cm²] (81, 82)
- Max Working Press. 3.3 MPa [33.7 kgf/cm²] (81, 82)
- Max Operating Press Diff. 2.60 MPa [26.7 kgf/cm²] (81, 82)
- Min Operating Press Diff. 2.70 MPa [27.7 kgf/cm²] (81, 82)

- Ambient Humidity 95% or less
- Fluid Fluorinated Refrigerant (Please contact Saginomiya when other kind of refrigerant is used.)
- Fluid Temp. -30 to +120℃
- Ambient Temp. -30 to +50℃
- As explained in NOTE FOR SAFETY, coil may burn out at an abnormal condition. Use a suitable fuse.
- To keep temperature of coil less than 130℃ taking ambient temperature, fluid temperature and exoergic of coil into consideration.
- Install coil place where do not splash with rain and drop water from condenser piping.
- Do not use coil under the freezing condition.
- Operation voltage may rise when internal part of the body is filled with “Liquid refrigerant” or in case there is too much “Oil”. Please confirm before using product.
- Re manufacture the product based on the specifications described in this drawing. Please check the safety and validity in the product design in consideration that the product is conformed to the system or not when using.

D. FEATURE AND PRODUCT

- These are Solenoid Valves for Refrigerant circuit in various Refrigeration and Air conditioning equipment and conform to Refrigeration Safety Regulations.
- These valves are small solenoid valves of the normally closed and the pilot operated type.

E. VALVE SELECTION

- Selecting most suitable valve for the equipment is important for better control.
- Refer to the above mentioned brief specifications of this Solenoid Valve.

F. INSTALLATION

- Before Installation:
  - Make sure that the supply voltage conforms to the voltage marked on the label. It may cause burning or malfunction if incorrect voltage is supplied.
  - Do not carry the valve with holding the lead wire only as it may cause coil burn-out.
  - Be careful to scratch flared part and or brazing point as it might cause leakage trouble.
  - Remove any foreign material or dust in the pipe as it may cause failure of the solenoid valve.
  - Mounting position should be in the following range.
  - Check the direction of the fluid when install it. Install it as shown in the figure below so that the direction of the arrow may become the same.
  - Be careful that water does not enter into the pipe. (Freeze up and Corrosion may cause to malfunction.)
  - Special attention is required not to apply excessive force of compression, tension or torsion against the valve body as it may cause malfunction.
  - Do not carry the valve with holding the lead wire only as it may cause coil burn-out.
  - Grounding is required at a suitable position on the unit.
  - Check the direction of the fluid when install it. Install it as shown in the figure below so that the direction of the arrow may become the same.
  - Do not carry the valve with holding the lead wire only as it may cause coil burn-out.

- After connecting the Pipes, make air tight test.
- Do not install a check valve at the inlet side as it may cause liquid sealing condition on the pipe inside and may cause damage due to excessive pressure.
- To be sure to cool the body while soldering the tubes in order to keep the body temp under 200℃Soldering must be carried out with the coil removed. It may cause valve leakage or malfunction.
- Prior to solder the tubes, fill inside the valve with inactive gas (such as nitrogen or carbonic dioxide) in order to avoid the generation of oxidescales. It may cause valve leakage or malfunction.

- Selecting most suitable valve for the equipment is important for better control.
- Refer to the above mentioned brief specifications of this Solenoid Valve.

- Warranty described in this paragraph means the warranty for the Product itself and does not include warranty for any consequential damage arising out of or occasioned by a defect or failure of the Product.