

DUAL PRESSURE CONTROLS

Type DNS

GENERAL DESCRIPTION

- For use with fluorinated refrigerants as well as with air and water. (Allowable Fluid Temp.: -20 to 120°C)
- Various contact functions are available.
- Available drip proof enclosure for marine application or explosion proof enclosure for special application.
- Mounting bracket is supplied as standard.
- IP44 with upper lid (option).
- Stainless steel models are available upon request.

CE mark applicable (available upon request)

UL recognized (available upon request)



SPECIFICATIONS

- Fluid temperature: -20 to 120°C
- Ambient temperature: -20 to 70°C

TYPE NUMBER SELECTION

Automatic reset type

Unit: MPa (kgf/cm²)

| Catalog No. | Pressure Side | Range | | Differential | | Factory Setting Off | Factory Setting On | Max. Working Pressure | Contact Function | Wt. (kg) |
|------------------|---------------|-----------------|---------|-------------------------------------|---------|---------------------|--------------------|-----------------------|------------------|----------|
| | | Min. | Max. | Min. | Max. | | | | | |
| DNS-D304X | Low Side | -0.06 {-50cmHg} | 0.4 {4} | 0.04 {0.4} | 0.2 {2} | 0.1 {1} | 0.2 {2} | 1.5 {15} | Diagram 1 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Approx. 0.4 fixed {Approx. 4 fixed} | | 2 {20} | 1.6 {16} | 3.3 {33} | | |
| DNS-D306X | Low Side | -0.06 {-50cmHg} | 0.6 {6} | 0.06 {0.6} | 0.4 {4} | 0.2 {2} | 0.3 {3} | 1.5 {15} | Diagram 3 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Approx. 0.4 fixed {Approx. 4 fixed} | | 2 {20} | 1.6 {16} | 3.3 {33} | | |
| DNS-D604X | Low Side | -0.06 {-50cmHg} | 0.4 {4} | 0.04 {0.4} | 0.2 {2} | 0.1 {1} | 0.2 {2} | 1.5 {15} | Diagram 3 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Approx. 0.4 fixed {Approx. 4 fixed} | | 2 {20} | 1.6 {16} | 3.3 {33} | | |
| DNS-D606X | Low Side | -0.06 {-50cmHg} | 0.6 {6} | 0.06 {0.6} | 0.4 {4} | 0.2 {2} | 0.3 {3} | 1.5 {15} | Diagram 3 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Approx. 0.4 fixed {Approx. 4 fixed} | | 2 {20} | 1.6 {16} | 3.3 {33} | | |

Manual reset type

Unit: MPa (kgf/cm²)

| Catalog No. | Pressure Side | Range | | Differential | | Factory Setting Off | Factory Setting On | Max. Working Pressure | Contact Function | Wt. (kg) |
|--------------------|---------------|-----------------|---------|--|---------|---------------------|--------------------|-----------------------|------------------|----------|
| | | Min. | Max. | Min. | Max. | | | | | |
| DNS-D304XM | Low Side | -0.06 {-50cmHg} | 0.4 {4} | 0.04 {0.4} | 0.2 {2} | 0.1 {1} | 0.2 {2} | 1.5 {15} | Diagram 2 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Automatic operation on pressure increase, and manual reset on pressure decrease ≈2 | | 2 {20} | manual reset | 3.3 {33} | | |
| DNS-D306XM | Low Side | -0.06 {-50cmHg} | 0.6 {6} | 0.06 {0.6} | 0.4 {4} | 0.2 {2} | 0.3 {3} | 1.5 {15} | Diagram 4 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Automatic operation on pressure increase, and manual reset on pressure decrease ≈2 | | 2 {20} | manual reset | 3.3 {33} | | |
| DNS-D604XM | Low Side | -0.06 {-50cmHg} | 0.4 {4} | 0.04 {0.4} | 0.2 {2} | 0.1 {1} | 0.2 {2} | 1.5 {15} | Diagram 4 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Automatic operation on pressure increase, and manual reset on pressure decrease ≈2 | | 2 {20} | manual reset | 3.3 {33} | | |
| DNS-D606XM | Low Side | -0.06 {-50cmHg} | 0.6 {6} | 0.06 {0.6} | 0.4 {4} | 0.2 {2} | 0.3 {3} | 1.5 {15} | Diagram 5 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Automatic operation on pressure increase, and manual reset on pressure decrease ≈2 | | 2 {20} | manual reset | 3.3 {33} | | |
| DNS-D606XMM | Low Side | -0.06 {-50cmHg} | 0.6 {6} | Automatic operation on pressure decrease, and manual reset on pressure increase ≈1 | | 0.2 {2} | 1.5 {15} | 3.3 {33} | Diagram 5 | 0.49 |
| | High Side | 0.8 {8} | 3 {30} | Automatic operation on pressure increase, and manual reset on pressure decrease ≈2 | | 2 {20} | | | | |

• Enclosure: IP20

※1 Please press the reset button after the pressure increased about 0.1 MPa or more.

• Drip Proof Models: Available upon request.

※2 Please press the reset button after the pressure decreased about 0.7 MPa or less.

(Refer to Pages 49, 50.)

ELECTRICAL RATINGS

| Rated Current (A) | Rated Voltage (V) | Power Factor ($\cos \phi$) | 125/250V. AC |
|-----------------------|-------------------|------------------------------|--------------|
| Non-Inductive Current | | 1 | 12 |
| Inductive Current | Full Load | 0.75 | |
| | Inrush Current | — | 72 |

Minimum contact capacity: 50mA

CONTACT FUNCTIONS

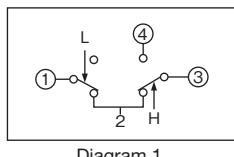


Diagram 1

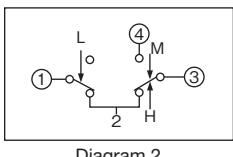


Diagram 2

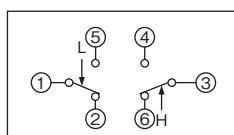


Diagram 3

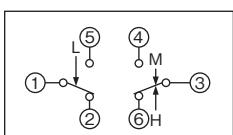


Diagram 4

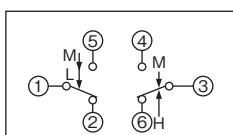
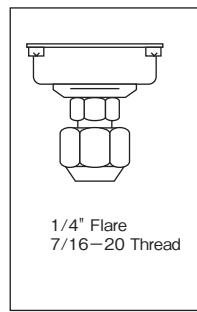


Diagram 5

↑ L: Operating direction on press. increase at Low Press. Side
↑ H: Operating direction on press. increase at High Press. Side
↓ M: Operating direction on manual reset

PRESSURE CONNECTIONS



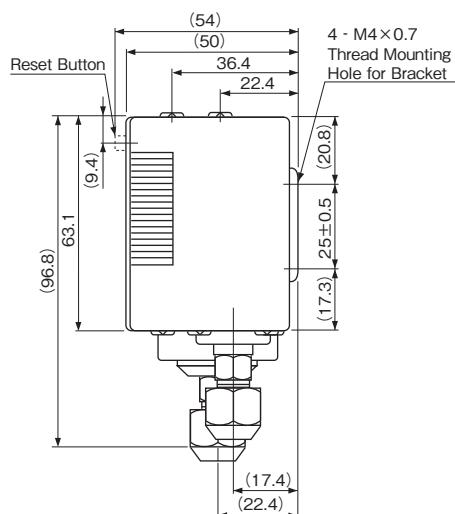
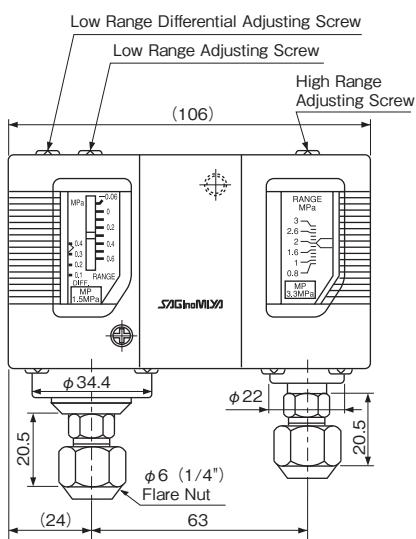
1/4" Flare
7/16-20 Thread

Standard

Refer to Pages 45, 46

DIMENSIONS

Standard Model



Unit: mm