

Read all instructions thoroughly

INSTRUCTION

DUAL PRESSURE SWITCH "TYPE DNS"



PREFACE

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

NOTE FOR SAFETY

⚠ WARNING

Do not open a cover during power on. Otherwise fingers may touch to alive parts and cause of electric shock.
 Make sure to power off the Product before wiring. It will be cause of electric shock.
 Do not drop water on the Product. Water drip will touch to the alive parts makes earth circuit and electric shock accident may result.
 Use the attached screws(M4×0.7×8 with washer) when installing a main body.
 In case of missing the attached screws, use a screw with insert depth of less than 5mm. Otherwise the screw will touch to the alive parts and may cause electric shock or malfunction.

MOUNTING

Standard bracket is regularly supplied. Controls may be mounted to wall surface or panel board by 4 mounting holes provided in the back of the case (M4×0.7). Before and during installation, be careful about the below Caution, otherwise it may cause failure or defect.

CAUTION

Do not move any screw or parts other than adjusting screws and terminal screws.
 Do not drop the Product.
 Do not paint the Product.
 Be sure to remove dust or other foreign particles in the pipes before connecting the Product to the pipe.
 When connecting pipes to the element, be sure to use two spanners at the hexagonal portion of bellows element in order to avoid deformation of the element.

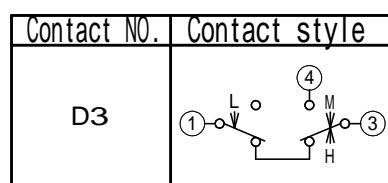
MOUNTING CONDITIONS

The operation of the Product should follow the below conditions, otherwise it will be cause of malfunction or performance decrement.
 In case of using to exceed the below conditions, contact the Company.
 Install the Product where vibration is less than 9.8m/s².
 Use the Product with the below temperature ranges.
 Ambient temperature: -20 to 70 Fluid temperature: -20 to 120
 Use the Product with fluid which does not corrode the bellows cap(copper alloy).
 In case of usage with any corrosive fluid and steam, use the model with Stainless Steel bellows.
 Use the Product within the Maximum working pressure range. And, install the Product where no pressure pulsation, excessive pressure fluctuation or pressure hummer generates.

WIRING

Electrical wires should be connected to the terminal screws of micro switch according to a particular application. Refer to the wiring diagrams for the details, and be careful about the below points.
 Use the Product within the electrical ratings.
 Use the fixed terminal screw(M4×0.7×6).

WIRING DIAGRAM



L Low Pressure Side: Operating direction on pressure increase.
 H High Pressure Side: Operating direction on pressure increase.
 M : Operating direction on manual reset. (TYPE:M)

ELECTRICAL RATINGS

Terminals	Small Current (TYPE:0D)		Medium Current (TYPE:1D)		Large Current (TYPE:2D)	
	1-3	3-4	1-3	3-4	1-3	3-4
AC Voltage	120V 240V	120V 240V	120V 240V	120V 240V	120V 240V	120V 240V
Full Load	0.075A	0.075A	10A	10A	8A 20A 17A	16A 8A
Locked Rotor	0.075A	0.075A	60A	60A	48A 120A 102A	96A 48A

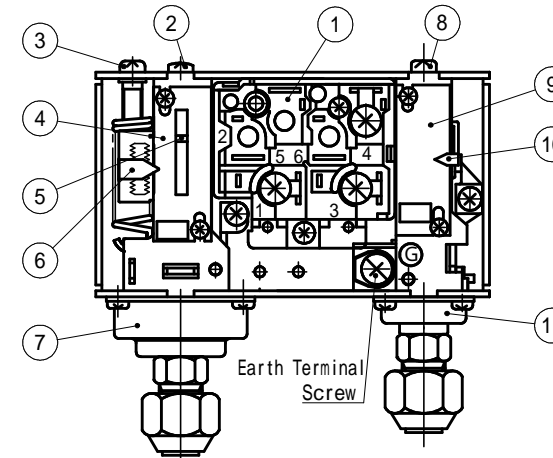
OPERATION/ADJUSTMENT

LOW PRESSURE SIDE

Firstly, set the operation value with the range adjusting screw while pressure is rising. Then, set the operation value with the differential adjusting screw while pressure is decreasing. With turning the range adjusting screw to counterclockwise, the setting pressure rises. With turning the differential adjusting screw to clockwise, the differential enlarges. By turning these two adjusting screws, the desired setting pressure and differential are obtained.

HIGH PRESSURE SIDE

Set the operation value with the range adjusting screw while pressure is rising. With turning the High Pressure range adjusting screw to clockwise, the setting pressure rises and the returning pressure also rise alongside.
 Note : In case of the manual reset series, the contact operates automatically at the pressure rising. At the pressure decreasing, the contact should be manually reset.



11	High Pressure Bellows cover
10	High Pressure Range pointer
9	High Pressure Scale plate
8	High Pressure Range Adjusting Screw
7	Low Pressure Bellows cover
6	Differential pointer
5	Low Pressure Range pointer
4	Low Pressure Scale plate
3	Differential Adjusting Screw
2	Range Adjusting Screw
1	Micro Switch
No.	PART NAME

OPERATION CHECK

Install and calibrate the product correctly and then check its operation to confirm correct function of the whole system when using..

LIMIT ON APPLICATION

The Product is not designed nor manufactured for an use in such equipment or system that is intended to be used under such circumstances that may affect human life. For application requiring extreme high reliability, please contact the Company first.

SCOPE OF WARRANTY

Unless otherwise agreed by the parties, warranty period of the product shall be one year after date of delivery to Buyer. In case of failure attributable to the Company within such period, the product shall be repaired or replaced without charge, provided that any one of followings are out of the warranty:

- ① Improper handling or application by user.
- ② Modification or repair by other than Company.
- ③ Any failure to be caused by acts of God, fire, storm or the like, war, riot, or the like and other causes beyond the control of the Company.

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.



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