HDP88 Differential Pressure Control

Introduction:

Adjustable different pressure control.

Applicable for controlling the breakage of cool water.

Used not only in fluoride refrigeration, but also in air and Liquid (liquid temperature is: – 45 ℃ to 120 ℃).

Reliable conversion functions.

Easy for installation, suitable for various conditions

Used as the oil pressure protection device for the helical-lobe refrigeration compressor for high working pressure.

Applications:

HDP88 differential pressure control is normally used in gas or liquid system to control the pressure difference between the gas/liquid pipeline and the circuit. A typical application is to install the controller in the bypass pipeline near the system pump. When the system pressure difference increases and exceeds pre-set pressure, the control valve will open and more liquid/gas goes through the side valve, which will reduce the pressure differential between these two pipes of the water system. On the opposite, the pressure differential will increase between these two pipes of the water system.

Performance:

Easy for installation

The set point can be determined quickly through the direct-reading scale.

The pressure difference setting can be changed without moving the cover.

Electrical parameter:

Switch connection ratings: 5amp 125/250VAC 1/4 H.P., 125VAC Fine Silver Contacts

The micro switch has follow standard:

Technical parameter: (HDP88B)

Adjustable range: 0.06MPa ~ 0.35MPa (factory set: 0.1Mpa).

Burst Pressure: 1.7Mpa

Temperature: ≤85℃

Repeatability: ≤1.5%

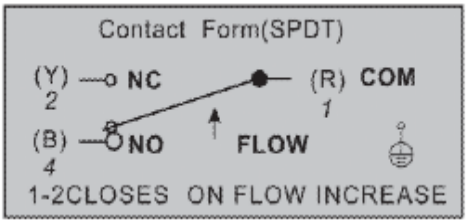
Setting accuracy: ≤5%

Life of switch: ≥ 50 thousands times

Max.△P: 0.2bar

Operating differential pressure: 0.02Mpa (fixed)

Wiring:



" 1" connector- red wire

" 2" connector- yellow wire

" 4" connector- blue wire

Type and specification:

Unit: Mpa

Type	Range		MOP
	Min	Max	
HDP88A	0.01	0.06	1.00
HDP88B	0.06	0.35	1.70
HDP88D	0.20	1.20	3.00

Connection and installation:

Connection:

Here are two modes:

one mode is to screw the nut of the control with a outside micrometer of φ6×1 red copper pipe () at the horn where the pipe extend to 90° .

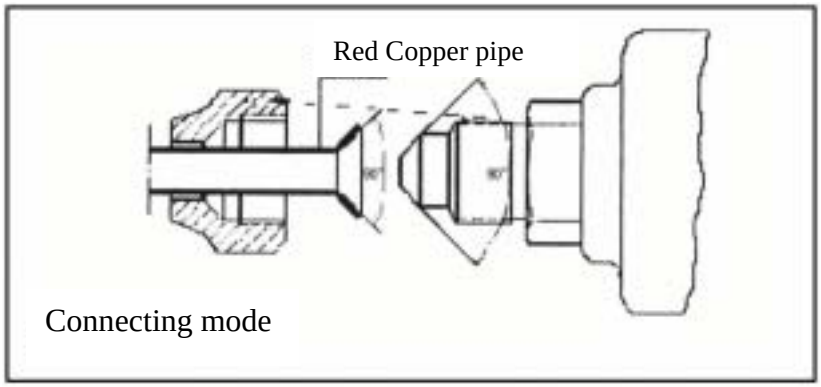
Another mode is connect the control with the capillary at the outside micrometer of φ3,long for 1m.(The mode should be referred before order), the detail information shown in fig.

Installation:

Here are two modes:

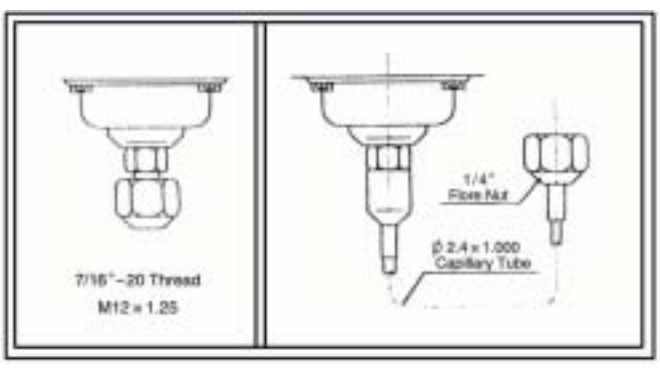
One mode is to install with the 4 M4 tap hole behind the control.

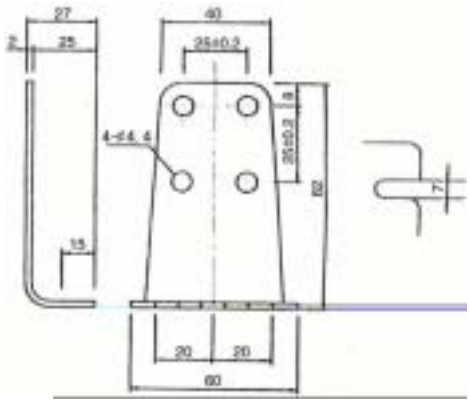
Another mode is to use the all-purpose installation accessory (see the shown fig.)



Connecting mode

Size for accessories





Standard

Special requirements

Operational description:

Installation:

- If it is connected in the capillary mode, avoid turning or twisting of the capillary
- If the controller is used in the refrigerating system with ammonia as the medium, controller should be made of stainless steel bellows
- Before connecting with the controller, ensure all the pipelines are clean .
- Don’t install the controller in any equipment with the workload exceeding the rated value of its appliances.
- The ultra long capillary must be coiled and fixed appropriately in order to prevent the vibration. The capillary is permitted to be little relaxed, to prevent the capillary from cracked due to the violent vibration..
- When the pipes are connected, two pieces of 10in wrenches must be used simultaneously on the nut of the controller and the connector to make it tight, to avoid destroying the components of the controller.

Wiring: when preparing to wire, ensure to cut off the power supply for preventing electric shock and damage of the equipment.

Adjusting: when moving the adjustable knob clockwise, the value of differential pressure will fall. Otherwise, the value will rise.

Caution!

Risk of the incorrect installation!

The pressure at the HP (high pressure terminal) of the differential pressure controller must be larger than the pressure at the LP (low pressure terminal). Otherwise, the controller will be ineffective. The installation must be correct. HP – LP = DIFF (differential pressure). The product is to be installed by technicians only. In the event of damages due to the non-observance of these instructions, improper operation or use of the switch for purposes for which it is not intended, the warranty becomes null and void. We shall not be held liable for resultant consequential damages. Your cooperation is highly appreciated!