PNEUMATIC CONTROL VALVE
FOR STEAM
PN-COS/PN-COSR

Improve Process Steam Control
and Steam Quality*

*PN-COS only
PN-COS
5 Functions in 1

Superior Stability

Employing the self adjusting pressure reducing valve COSPECT enables PN-COS to respond instantaneously to any fluctuations in primary pressure and flow rate by automatically absorbing them. So it is capable of maintaining a constant supply of steam at a stable secondary pressure.

Use as a Control Valve

Combining with a controller and an electro-pneumatic transducer enables automatic PID operation. While primarily for pressure control, temperature control, etc. is possible depending on conditions. Because control operation is pneumatic, and the electro-pneumatic transducer can be installed in a separate location, PN-COS can be used in high temperature / humidity environments or hazardous areas.

Use as a Pressure Reducing Valve

With the structure of a pilot operated pressure reducing valve, PN-COS can be combined with an air regulator* to set secondary pressure remotely. Also, two point pressure setting is possible using motive air and the internal Adjustment Screw. Steam supply will be maintained even with motive air cut off.

* with relief

3 Features Improving Steam Quality

Strainer

A 100 mesh screen captures large rust and scale particles. Trouble-causing foreign matter is not allowed to penetrate into the interior of the control valve or the steam using equipment.

Cyclone Separator

An SCE* Separator with 98% separation efficiency removes entrained condensate and small particles of scale, to deliver dry steam.

Steam Trap

A built-in free float steam trap continuously discharges the separated condensate and small particles of scale.

Like the PN-COS, the PN-COSR* has the dual functions of a control valve and a pressure reducing valve with a great price to performance value, ideal for applications where dry steam is already being supplied through use of a separator, etc.

* Does not include strainer, separator or steam trap functions.

PN-COSR

Dual Functions

Control Valve

Pressure Reducing Valve

PN-COS-16

PN-COSR-16

15,20,25,
40,50

Cast Iron

Flanged

1.6 MPaG

220 °C

Within 10 to 84% of primary pressure, but with a minimum pressure of 0.03 MPaG.

Maximum pressure : [Motive air pressure - 0.1] MPaG

0.07 to 0.85 MPaG

5% of rated flow rate

Separated secondary pressure : 0.1 MPaG to 1.6 MPaG

Specifications

Model

Size

Body Material

Connection

Max. Operating Pressure

Max. Operating Temp.

Primary Pressure Range

Adjustable Pressure Range

Differential Pressure

Minimum Adjustable Flow Rate

Required Motive Air Pressure**

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* Major internal parts are Stainless Steel. Full product details (capacities, etc.) are included in the specification data sheet (SDS).

**Use only oil free air filtered to 5 µm for motive air supply.

CAUTION

To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.

Local regulations may restrict the use of this product to below the conditions quoted.

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