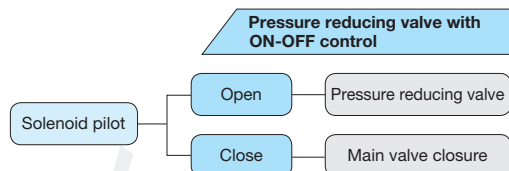


# CP-2000 Series

<combination valve>

Need to use pressure reducing valves, solenoid valves, temperature regulators or its combination for a specific purpose, with large space and great cost for installation . . . Have you ever imagined it may be helpful if a single valve combines such functions? Yoshitake CP-2000 Series integrates such functions into a single valve to realize space reduction, cost saving and controllability of plural valves without efforts.

## ■CP-2001



CP-2001 flanged type

|                             |                                                                  |                   |
|-----------------------------|------------------------------------------------------------------|-------------------|
| Application                 | Steam                                                            |                   |
| Inlet pressure              | 0.1-1.0 MPa                                                      |                   |
| Reduced pressure            | 0.02-0.15 MPa<br>0.1-0.85 MPa                                    |                   |
| Maximum temperature         | 183°C                                                            |                   |
| Actuation of solenoid valve | Normally closed                                                  |                   |
| Rated voltage               | AC 100 V, 50 / 60 Hz available<br>AC 200 V, 50 / 60 Hz available |                   |
| Connection                  | JIS Rc screwed<br>JIS 10K flanged                                |                   |
| Material                    | Main valve body                                                  | Ductile cast iron |
|                             | Main valve, valve seat                                           | Stainless steel   |
|                             | Diaphragm                                                        | Stainless steel   |
| Nominal size                | Screwed: 15A-50A<br>Flanged: 15A-100A                            |                   |

· Please contact us for other specifications.

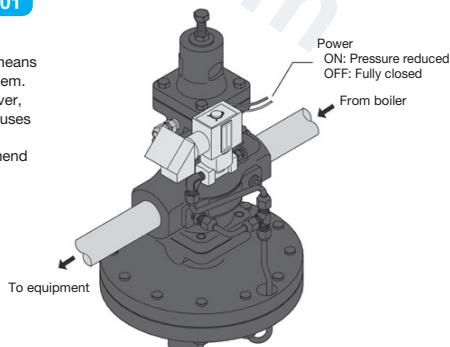
## Reliable ON-OFF system by the CP-2001

### ■CP-2001

Steam is usually supplied only when required. This means that steam is controlled as a batch (intermittent) system. Steam ON/OFF is switched by solenoid valve, however, rapid opening/closing operation of solenoid valve causes various problems to other devices such as pressure reducing valve. To solve such problems, we recommend CP-2001.

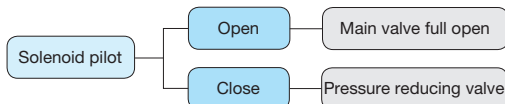
#### <Control example>

|                    |                                                 |
|--------------------|-------------------------------------------------|
| Solenoid valve ON  | $P_1 = 1.0 \text{ MPa}$ $P_2 = 0.2 \text{ MPa}$ |
| Solenoid valve OFF | $P_1 = 1.0 \text{ MPa}$ $P_2 = 0 \text{ MPa}$   |



## ■CP-2002

## Pressure reducing valve and full-open valve



|                             |                        |                                                                  |
|-----------------------------|------------------------|------------------------------------------------------------------|
| Application                 |                        | Steam                                                            |
| Inlet pressure              |                        | 0.1-1.0 MPa                                                      |
| Reduced pressure            |                        | 0.02-0.15 MPa<br>0.1-0.85 MPa                                    |
| Maximum temperature         |                        | 183°C                                                            |
| Actuation of solenoid valve |                        | Normally closed                                                  |
| Rated voltage               |                        | AC 100 V, 50 / 60 Hz available<br>AC 200 V, 50 / 60 Hz available |
| Connection                  |                        | JIS Rc screwed<br>JIS 10K flanged                                |
| Material                    | Main valve body        | Ductile cast iron                                                |
|                             | Main valve, valve seat | Stainless steel                                                  |
|                             | Diaphragm              | Stainless steel                                                  |
| Nominal size                |                        | Screwed: 15A-50A<br>Flanged: 15A-100A                            |

· Please contact us for other specifications.



CP-2002 Flanged type

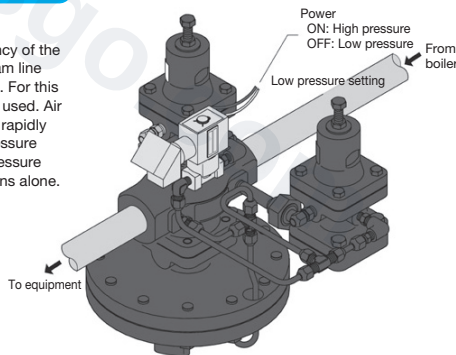
## Quicker startup feasible with the CP-2003

## ■CP-2003

In order to increase the performance and efficiency of the system and to save energy, a high-pressure steam line and a low-pressure steam line are used together. For this purpose two or more pressure valves have been used. Air is discharged with low-pressure steam and then rapidly raised to the intended temperature with high-pressure steam, and regular operation begins with low-pressure steam. Our CP-2003 can perform these operations alone.

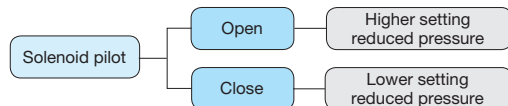
<Control example>

|                    |                          |                          |
|--------------------|--------------------------|--------------------------|
| Solenoid valve ON  | P <sub>1</sub> = 1.0 MPa | P <sub>2</sub> = 0.5 MPa |
| Solenoid valve OFF | P <sub>1</sub> = 1.0 MPa | P <sub>2</sub> = 0.2 MPa |



## ■CP-2003

## Two-point switching of reduced pressure



|                             |                                                                  |                   |
|-----------------------------|------------------------------------------------------------------|-------------------|
| Application                 | Steam                                                            |                   |
| Inlet pressure              | 0.1-1.0 MPa                                                      |                   |
| Reduced pressure            | 0.02-0.15 MPa<br>0.1-0.85 MPa                                    |                   |
| Maximum temperature         | 183°C                                                            |                   |
| Actuation of solenoid valve | Normally closed                                                  |                   |
| Rated voltage               | AC 100 V, 50 / 60 Hz available<br>AC 200 V, 50 / 60 Hz available |                   |
| Connection                  | JIS Rc screwed<br>JIS 10K flanged                                |                   |
| Material                    | Main valve body                                                  | Ductile cast iron |
|                             | Main valve, valve seat                                           | Stainless steel   |
|                             | Diaphragm                                                        | Stainless steel   |
| Nominal size                | Screwed: 15A-50A<br>Flanged: 15A-100A                            |                   |

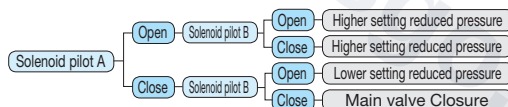
· Please contact us for other specifications.



CP-2003 Flanged type

## ■CP-2004

## Switching of reduced pressure with ON-OFF control



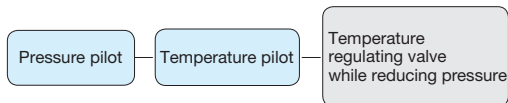
|                             |                                                                  |                   |
|-----------------------------|------------------------------------------------------------------|-------------------|
| Application                 | Steam                                                            |                   |
| Inlet pressure              | 0.1-1.0 MPa                                                      |                   |
| Reduced pressure            | 0.02-0.15 MPa<br>0.1-0.85 MPa                                    |                   |
| Maximum temperature         | 183°C                                                            |                   |
| Actuation of solenoid valve | Normally closed                                                  |                   |
| Rated voltage               | AC 100 V, 50 / 60 Hz available<br>AC 200 V, 50 / 60 Hz available |                   |
| Connection                  | JIS Rc screwed<br>JIS 10K flanged                                |                   |
| Material                    | Main valve body                                                  | Ductile cast iron |
|                             | Main valve, valve seat                                           | Stainless steel   |
|                             | Diaphragm                                                        | Stainless steel   |
| Nominal size                | Screwed: 15A-50A<br>Flanged: 15A-100A                            |                   |

· Please contact us for other specifications.



CP-2004 Flanged type

## ■CP-2005

Temperature regulating valve  
with pressure control

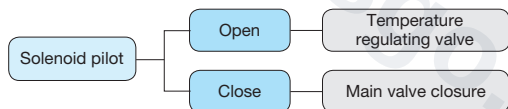
|                              |                        |                                       |
|------------------------------|------------------------|---------------------------------------|
| Application                  | Heating fluid          | Steam                                 |
|                              | Heated fluid           | Water, Oil, Liquid                    |
| Inlet pressure               |                        | 0.1-2.0 MPa                           |
| Reduced pressure             |                        | 0.02-0.15 MPa<br>0.1-1.4 MPa          |
| Maximum temperature          |                        | 220°C                                 |
| Bulb maximum pressure        |                        | 1.0 MPa                               |
| Temperature adjustment range |                        | -8 ~ 183°C                            |
| Connection                   |                        | JIS Rc screwed<br>JIS 10K/20K flanged |
| Material                     | Main valve body        | Ductile cast iron                     |
|                              | Main valve, valve seat | Stainless steel                       |
|                              | Diaphragm              | Stainless steel                       |
| Nominal size                 |                        | Screwed: 15A-50A<br>Flanged: 15A-100A |

- Standard sensor length is 2M.
- Please contact us for other specifications.



CP-2005 Flanged type

## ■CP-2006

Temperature regulating valve  
with ON-OFF control

|                              |                        |                                                                  |
|------------------------------|------------------------|------------------------------------------------------------------|
| Application                  | Heating fluid          | Steam                                                            |
|                              | Heated fluid           | Water, Oil, Liquid                                               |
| Maximum pressure             |                        | 1.0 MPa                                                          |
| Maximum temperature          |                        | 183°C                                                            |
| Actuation of solenoid valve  |                        | Normally closed                                                  |
| Rated voltage                |                        | AC 100 V, 50 / 60 Hz available<br>AC 200 V, 50 / 60 Hz available |
| Bulb maximum pressure        |                        | 1.0 MPa                                                          |
| Temperature adjustment range |                        | -8 ~ 183°C                                                       |
| Connection                   |                        | JIS Rc screwed<br>JIS 10K flanged                                |
| Material                     | Body                   | Ductile cast iron                                                |
|                              | Main valve, valve seat | Stainless steel                                                  |
|                              | Diaphragm              | Stainless steel                                                  |
| Nominal size                 |                        | Screwed: 15A-50A<br>Flanged: 15A-100A                            |

- Standard sensor length is 2M.
- Please contact us for other specifications.



CP-2006 Flanged type