2/2 Way Coaxial Valve
CX06 to CX09 pilot operated

Switching function

NC (normally closed)

NO (normally open)

Model code
(also example order)

<table>
<thead>
<tr>
<th>Type</th>
<th>Type code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX06</td>
<td>CX06</td>
<td>CX06 series</td>
</tr>
<tr>
<td>CX07</td>
<td>CX07</td>
<td>CX07 series</td>
</tr>
<tr>
<td>CX08</td>
<td>CX08</td>
<td>CX08 series</td>
</tr>
<tr>
<td>CX09</td>
<td>CX09</td>
<td>CX09 series</td>
</tr>
</tbody>
</table>

Ways

2/2 = The number of ways

Control

F = External pilot

Switching function

C = NC - normally closed
O = NO - normally open

Body material

1 = Free from non-ferrous materials
2 = Brass (standard)
3 = Brass, nickel-plated
4 = 1.4305
5 = 1.4571

Nominal size

10 = DN 10
15 = DN 15
20 = DN 20
25 = DN 25
32 = DN 32
40 = DN 40
50 = DN 50

Pressure range

064 = CX06 > 0 - 64 bar
100 = CX07 > 0 - 100 bar
120 = CX07 > 0 - 120 bar
160 = CX08 > 0 - 160 bar
200 = CX09 > 0 - 200 bar

Connection

014 = G⅛ - DN 10
038 = G¼ - DN 10, DN 15
012 = G⅜ - DN 15, DN 20, DN 25
100 = G1 - DN 20, DN 25, DN 32
114 = G1¼ - DN 25, DN 32
112 = G1½ - DN 32, DN 40
200 = G2 - DN 50

Option

PV ... = Pilot valve (... acc. to accessories)

Order data

- Nominal size
- Connection
- Function NC/NO
- Operating pressure
- Flow rate
- Medium
- Medium temperature
- Ambient temperature
- Nominal voltage

*optional
## Technical specifications

### Control
- 2/2 way valve, pilot operated

### Nominal size
- DN 10 to DN 50

### Pressure range (see table)
- CX06 – 2/2: DN 10 to DN 50, PN 0 to PN 64
- CX07 – 2/2: DN 10 to DN 25, PN 0 to PN 120
- CX08 – 2/2: DN 32 to DN 50, PN 0 to PN 100
- CX09 – 2/2: DN 10 to DN 25, PN 0 to PN 160

### Connections (see table)
- Threaded sleeve
- Flange on request

### Body material
- Sleeve version: Brass, nickel-coated brass, 1.4305, 1.4571
- Flange version: on request

### Material of seals
- Static: FKM
- Dynamic: FKM / CX06, PTFE / CX07, CX08 & CX09
- Seat seal: PTFE

### Back pressure resistant
- Up to 16 bar

### Media
- Gaseous, liquid, contaminated

### Direction of flow
- P → A
- A → P
- As marked
- Max. 16 bar

### Temperature of medium
- -10 °C to +100 °C

### Ambient temperature
- -10 °C to +50 °C

### Actuating part
- Double acting piston with return spring

### Mounting position
- In any position

### Limit switch
- Magnetic field sensor

### Fixing
- Mounting bracket

### Pneumatic part (option pilot valve)

#### Control
- 5/2-way pilot valve*

#### Mounting pattern
- Namur

#### Control pressure
- 3 to 8 bar

#### Air requirement
- approx. 7 cm³ / stroke

#### Pilot ports 2+4
- G⅛ at DN 10
- G⅛ at DN 15 to DN 50

#### Switching speed
- CX valve can be smoothly adjusted by adjusting the supply to the pilot valve

#### Switching times
- Open / close 50 – 1000 ms
- Depending on control pressure, pilot valve and exhaust air throttle

### Electrical part (option pilot valve)

#### Nominal voltage
- DC: 24 V
- AC: 230 V 40-60 Hz

#### Electrical part
- DC: DC magnet
- AC: DC magnet with integrated rectifier

#### Connection
- Connector plug to industry standard type B
- Connector plug to DESINA M12x1 *
- Illuminated plug with varistor *

#### Voltage tolerance
- + / - 10% to VDE 0580

#### Duty cycle
- 100% duty cycle

#### Protection class
- IP 65 when fitted with connector plug

On request we would be happy to discuss your requirements for further options and accessories. *optional
### Designation

<table>
<thead>
<tr>
<th>DN [mm]</th>
<th>Pressure [bar]</th>
<th>Connection</th>
<th>Kv value [m³/h]</th>
<th>Weight [kg]</th>
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<tbody>
<tr>
<td></td>
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</table>

**CX06**

<table>
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<th>DN [mm]</th>
<th>Pressure [bar]</th>
<th>Connection</th>
<th>Kv value [m³/h]</th>
<th>Weight [kg]</th>
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<tbody>
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<td>CX06</td>
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<td>0 – 64</td>
<td>G½, G¾, G½</td>
<td>2.7</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0 – 64</td>
<td>G¾, G½, G¾</td>
<td>7.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0 – 64</td>
<td>G¾, G½, G½</td>
<td>9.4</td>
<td>4.0</td>
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<tr>
<td></td>
<td>25</td>
<td>0 – 64</td>
<td>G½, G¹, G⅘</td>
<td>14.5</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>0 – 64</td>
<td>G¹, G⅘, G⅘</td>
<td>20.0</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>0 – 64</td>
<td>G⅘</td>
<td>45.7</td>
<td>11.7</td>
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<tr>
<td></td>
<td>50</td>
<td>0 – 64</td>
<td>G⅘</td>
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<td>11.7</td>
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**CX07**

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<th>DN [mm]</th>
<th>Pressure [bar]</th>
<th>Connection</th>
<th>Kv value [m³/h]</th>
<th>Weight [kg]</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>0 – 120</td>
<td>G¾, G¾, G½</td>
<td>2.7</td>
<td>1.6</td>
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<tr>
<td></td>
<td>15</td>
<td>0 – 120</td>
<td>G¾, G¾, G½</td>
<td>7.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0 – 120</td>
<td>G¾, G¾, G½</td>
<td>9.4</td>
<td>4.0</td>
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<tr>
<td></td>
<td>25</td>
<td>0 – 120</td>
<td>G½, G¹, G⅘</td>
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<tr>
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<td>G¹, G⅘, G⅘</td>
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<td>0 – 100</td>
<td>G⅘</td>
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<td>11.7</td>
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<tr>
<td></td>
<td>50</td>
<td>0 – 100</td>
<td>G⅘</td>
<td>47.2</td>
<td>11.7</td>
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</table>

**CX08**

<table>
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<tr>
<th>Designation</th>
<th>DN [mm]</th>
<th>Pressure [bar]</th>
<th>Connection</th>
<th>Kv value [m³/h]</th>
<th>Weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>0 – 160</td>
<td>G¼, G¾, G½</td>
<td>2.7</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0 – 160</td>
<td>G¾, G¾, G½</td>
<td>7.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0 – 160</td>
<td>G¾, G¾, G½</td>
<td>9.4</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>0 – 160</td>
<td>G½, G¹, G⅘</td>
<td>14.5</td>
<td>5.3</td>
</tr>
</tbody>
</table>

**CX09**

<table>
<thead>
<tr>
<th>Designation</th>
<th>DN [mm]</th>
<th>Pressure [bar]</th>
<th>Connection</th>
<th>Kv value [m³/h]</th>
<th>Weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>0 – 200</td>
<td>G¾, G¾, G¾</td>
<td>7.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

*NOTE:* Inserting a maintenance unit upstream will increase the service life of the unit.

---

### Sectional drawing

**CX06 - CX08**

![CX06 - CX08 Sectional Drawing](image)

**CX09**

![CX09 Sectional Drawing](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>Designation</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connecting block</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Valve seat</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Piston / control tube</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Actuating plate</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Guide disc</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Spring</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>PTFE rod seal</td>
<td>2</td>
</tr>
</tbody>
</table>
### Dimensions

**CX06 - CX08**

- Threaded holes for angle bracket
- Pilot port G1/4
- Mounting pattern to Namur

<table>
<thead>
<tr>
<th>DN</th>
<th>G</th>
<th>SW</th>
<th>A₁ [mm]</th>
<th>A₂ [mm]</th>
<th>B [mm]</th>
<th>C</th>
<th>D [mm]</th>
<th>E [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>G⅓, G¼, G½</td>
<td>32</td>
<td>84</td>
<td>–</td>
<td>159.5</td>
<td>M4</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>15</td>
<td>G⅔, G¾, G½</td>
<td>41</td>
<td>100</td>
<td>–</td>
<td>184</td>
<td>M5</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>20</td>
<td>G⅓, G¼, G½</td>
<td>46</td>
<td>108</td>
<td>–</td>
<td>215</td>
<td>M5</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>25</td>
<td>G⅓, G1, G1¼</td>
<td>55</td>
<td>121</td>
<td>–</td>
<td>246</td>
<td>M5</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>32</td>
<td>G1, G1¼, G1½</td>
<td>60</td>
<td>122</td>
<td>50</td>
<td>269</td>
<td>M6</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>40</td>
<td>G1½</td>
<td>75</td>
<td>131</td>
<td>60</td>
<td>304</td>
<td>M6</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>50</td>
<td>G2</td>
<td>75</td>
<td>131</td>
<td>60</td>
<td>304</td>
<td>M6</td>
<td>55</td>
<td>110</td>
</tr>
</tbody>
</table>

**CX09**

- Threaded holes for angle bracket
- Pilot port G1/4
- Mounting pattern to Namur

<table>
<thead>
<tr>
<th>DN</th>
<th>G</th>
<th>SW</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>C</th>
<th>D [mm]</th>
<th>E [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>G⅓, G¼, G¾</td>
<td>50</td>
<td>100</td>
<td>184</td>
<td>M5</td>
<td>35</td>
<td>70</td>
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</tbody>
</table>
### Accessories

#### Mounting bracket mechanical option = HW

<table>
<thead>
<tr>
<th>DN</th>
<th>F [mm]</th>
<th>H [mm]</th>
<th>J [mm]</th>
<th>K [mm]</th>
<th>L [mm]</th>
<th>M [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>23.5</td>
<td>30</td>
<td>7</td>
<td>50</td>
<td>113</td>
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<tr>
<td>15</td>
<td>10.5</td>
<td>22.5</td>
<td>45</td>
<td>7</td>
<td>70</td>
<td>139</td>
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<td>20</td>
<td>15.3</td>
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<td>149</td>
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<td>8.5</td>
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<td>178</td>
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<td>37</td>
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<td>195</td>
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<tr>
<td>40</td>
<td>6</td>
<td>40</td>
<td>98</td>
<td>6.5</td>
<td>130</td>
<td>224</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
<td>40</td>
<td>98</td>
<td>6.5</td>
<td>130</td>
<td>224</td>
</tr>
</tbody>
</table>

#### 5/2-way pilot valve = PV (Namur)
- For flange-mounting connection on side
  - 24V DC
  - 230V 50Hz
- For flange-mounting connection on top
  - 24V DC
  - 230V 50Hz
- For flange-mounting connection on top
  - Solenoid M12x1
  - 24V DC
  - 230V 50Hz

#### Exhaust air throttle = DR
- G1/8
- G1/4

#### Silencer of sinter bronze = SD
- G1/8
- G1/4

#### Plug with LED electrical option = LED

#### Plug with power reduction
- 24V DC
- Type A
- Electrical option = LS

#### Explosion proof
- II 2G Ex m II T4
- II 3D IP65 T130 ºC
- Electrical option = EX

**Note:**
Operating pressure is reduced by 20% in Ex specification.

*On request we would be happy to discuss your requirements for further options and accessories.*

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**NOTE**
The information in this brochure relates to the operating conditions and applications described.
For applications and operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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