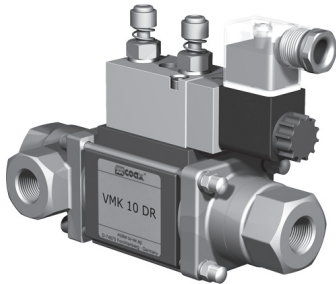


# coaxial valve

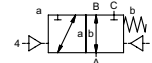
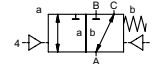
## type VMK 10 DR


### 5-VMK 10 DR

valve type with pilot valve



**3/2 way valve**  
**pressure range** PN 0-64 bar  
**orifice** DN 10 mm  
**connection** thread  
**function** valve normally closed (A ► B)  
**symbol** **NC**  
  
**valve** normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① brass ②  
 ③ brass, nickel plated ⑤  
 ④ ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

#### details needed for main valve


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


#### details needed for pneumatic actuation

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

#### details needed for hydraulic actuation

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

|                      | general specifications  | options   |
|----------------------|---|---|
| ports                | VMK threads G 1/4 - G 3/4   | special threads   |
| function             | NC  | NO  |
| pressure range       | bar 0-16/0-40/0-64<br>A ⇒ B max.64 / B ⇒ A max.16 / A ⇒ C max.64 / C ⇒ A max.64 |   |
| Kv value             | m³/h 2,5  |   |
| vacuum               | leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                             |   |
| pressure-vacuum      | P <sub>1</sub> ⇒ P <sub>2</sub>   | pressure side max. 64 bar<br>vacuum side leak rate upon request         |
| back pressure        | P <sub>2</sub> > P <sub>1</sub> see pressure range                              |   |
| media                | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated        |   |
| abrasive media       |   | upon request  |
| damping              | opening by throttles on pilot valve   |   |
| flow direction       | closing see pressure range  |   |
| switching cycles     | 1/min 680   |   |
| switching time       | ms opening 30-3000 closing 50-3000  |   |
| media temperature    | °C direct mounted pilot valve 60  | remote mounted pilot valve outside temperature range of media max.160°C |
| ambient temperature  | °C direct mounted pilot valve 50  |   |
| flush ports          |   |   |
| leak ports           |   |   |
| limit switches       |   | inductive   |
| manual override      | via pilot valve   |   |
| approvals            |   | LR/GL/WAZ   |
| mounting             |   | mounting brackets   |
| weight               | kg VMK 1,8  |   |
| additional equipment |   | upon request  |

|                       | electrical specifications  | options                                |
|-----------------------|--|--|
| nominal voltage       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                       | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| power consumption     | DC 4,8 W   | 2,5 W                                  |
|                       | AC pick up 11,0 VA holding 8,5 VA  |  |
| protection            | IP 65 (P54) acc. DIN 40 050  |  |
| energized duty rating | ED 100%  |  |
| connection            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| additional equipment  | illuminated plug with varistor   |  |
| optional              | connector acc. DESINA  | connector acc. VDMA                    |
| max. temperature      | M12x1 media 60°C   |  |
|                       | ambient 50°C   |  |
| explosion proof       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                       | power consumption  | alternating current 230 V 50 Hz 2,90 W |

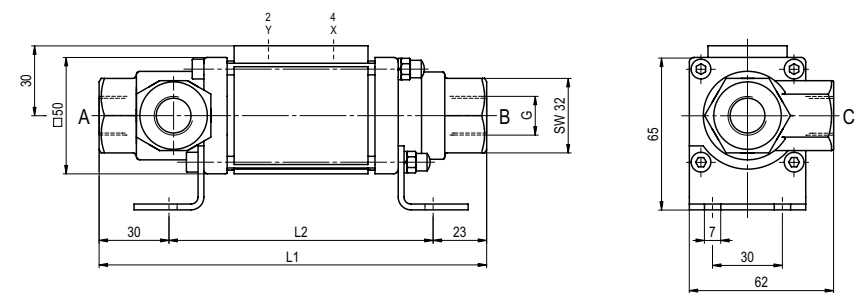
|                          | pneumatic specifications                              | options |
|--------------------------|---|---------|
| actuation pressure range | bar 4-10  |         |
| air consumption          | cm³/stroke 7  |         |
| cycle speed              | main valve speed variable by throttles on pilot valve |         |
| control                  | preferably 5/2-way pilot valve                        |         |
| pilot valve interface    | standard / NAMUR                                      |         |
| actuator ports           | 2/4 G 1/8   |         |

|                          | hydraulic specifications         | options |
|--------------------------|----------------------------------|---------|
| actuation pressure range | bar 4-10                         |         |
| control                  | preferably 4/2-way control valve |         |
| actuator ports           | X/Y G 1/8                        |         |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VMK 10 DR**

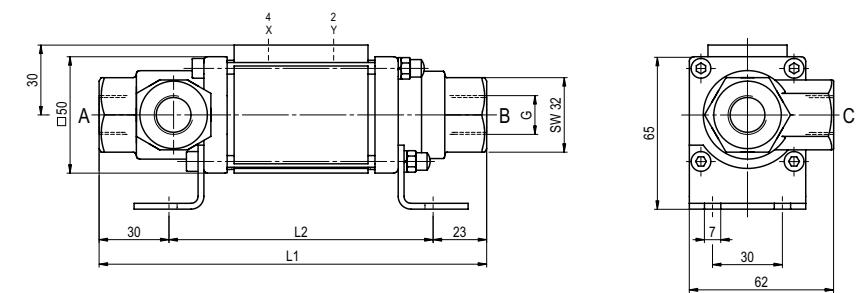
function: **NC**  
closed when not energized (A ► B)



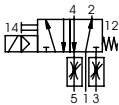
| constructive length               | L <sub>1</sub> | L <sub>2</sub> |
|-----------------------------------|----------------|----------------|
| standard                          | 166,5          | 113,5          |
| with 1/2 inductive limit switches | 186,5          | 133,5          |

type **VMK 10 DR**

function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



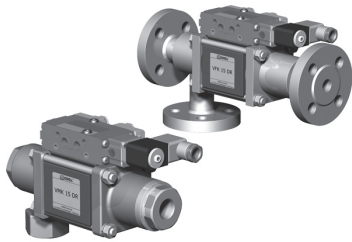
5/2-way-pilot valve  
flow rate 350 l/min  
pressure range 3-10 bar G 1/8

**5-VMK 15 DR****5-VFK 15 DR**

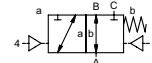
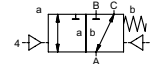
valve type with pilot valve


# coaxial valve

## type VMK 15 DR VFK 15 DR



**3/2 way valve**  
**pressure range** PN 0-100 bar  
**orifice** DN 15 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B) symbol **NC**  
 valve normally open (A ► B) symbol **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① brass ② steel, galvanized  
 ③ brass, nickel plated ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

**general specifications**

|                             |  |  |
|-----------------------------|--|--|
| <b>ports</b>                | VMK threads G 3/8 - G 3/4                                    | <b>options</b> special threads   |
|                             | VFK flanges PN 16/40/100                                     | special flanges  |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-16/0-40/0-64/0-100                                     |  |
|                             | A ► B max.100 / B ► A max.16 / A ► C max.100 / C ► A max.100 |  |
| <b>Kv value</b>             | m³/h 5,6   |  |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ► P <sub>2</sub>                              | pressure side max. 100 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>                              | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              |  |  |
| <b>opening</b>              |  |  |
| <b>closing</b>              | by throttles on pilot valve                                  |  |
| <b>flow direction</b>       |  | see pressure range   |
| <b>switching cycles</b>     | 1/min 200  |  |
| <b>switching time</b>       | ms opening 50-3000 closing 50-3000                           |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60                             | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50                             |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      | via pilot valve  |  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VMK 4,5 VFK 5,3   |  |
| <b>additional equipment</b> |  | upon request   |

**electrical specifications**

|                              |  |  |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

**pneumatic specifications**

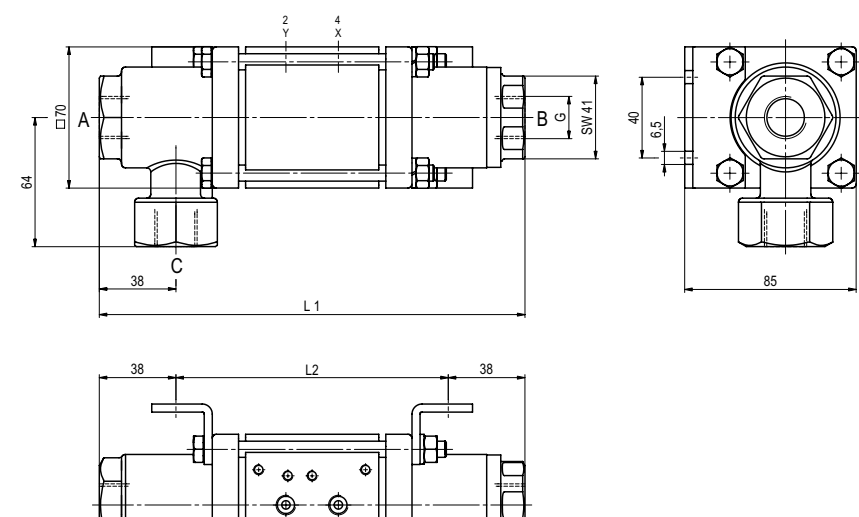
|                                 |   |       |
|---------------------------------|---|-------|
| <b>actuation pressure range</b> | bar 4-10  |       |
| <b>air consumption</b>          | cm³/stroke 11   |       |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |       |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |       |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1 |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4 |

**hydraulic specifications**

|                                 |                                  |         |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

type **VMK 15 DR**

function: **NC**  
closed when not energized (A ► B)

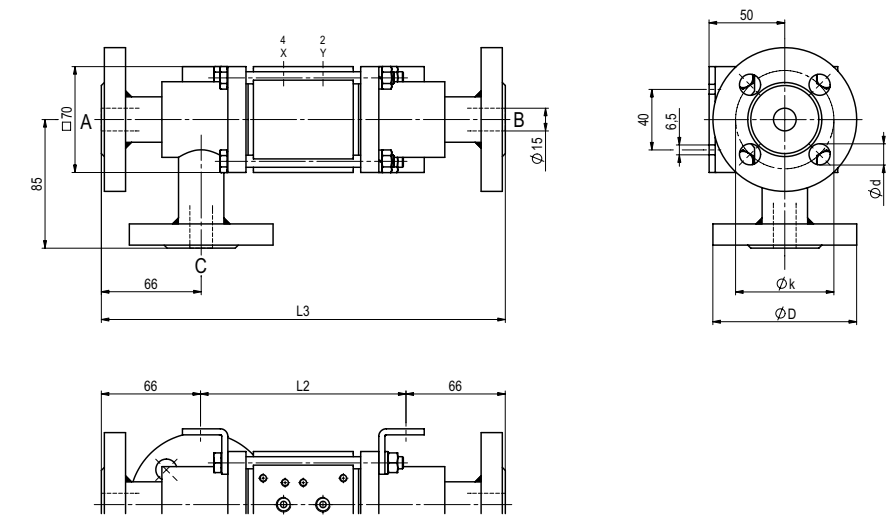


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 211            | 135            | 267            |
| with 1/2 inductive limit switches  | 237            | 161            | 293            |
| with force-feed lubrication nipple | 244            | 168            | 300            |
| with mechanical limit switches     | 237            | 161            | 293            |

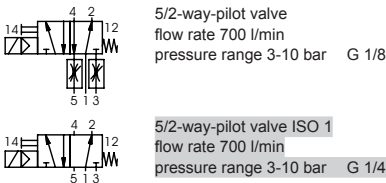
| flanges PN | DIN  | øD  | øk | ød |
|------------|------|-----|----|----|
| 16         | 2633 | 95  | 65 | 14 |
| 40         | 2635 | 95  | 65 | 14 |
| 100        | 2637 | 105 | 75 | 14 |

type **VFK 15 DR**

function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)

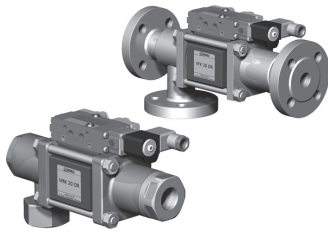


**5-VMK 20 DR****5-VFK 20 DR**

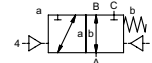
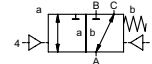
valve type with pilot valve


# coaxial valve

## type VMK 20 DR VFK 20 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 20 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B) symbol **NC**  
 valve normally open (A ► B) symbol **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① brass ② steel, galvanized  
 ③ brass, nickel plated ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

**general specifications**

|                             |  |  |
|-----------------------------|--|--|
| <b>ports</b>                | VMK threads G 3/4 - G 1 1/4                                  | <b>options</b> special threads   |
|                             | VFK flanges PN 16/40/100                                     | special flanges  |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-16/0-40/0-64/0-100                                     |  |
|                             | A ► B max.100 / B ► A max.16 / A ► C max.100 / C ► A max.100 |  |
| <b>Kv value</b>             | m³/h 8,3   |  |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P1 ► P2  | pressure side max. 100 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P2 > P1  | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              |  |  |
| <b>opening</b>              |  |  |
| <b>closing</b>              | by throttles on pilot valve                                  |  |
| <b>flow direction</b>       |  | see pressure range   |
| <b>switching cycles</b>     | 1/min 200  |  |
| <b>switching time</b>       | ms opening 50-3000 closing 50-3000                           |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60                             | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50                             |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      | via pilot valve  |  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VMK 5,8 VFK 7,2   |  |
| <b>additional equipment</b> |  | upon request   |

**electrical specifications**

|                              |  |  |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

**pneumatic specifications**

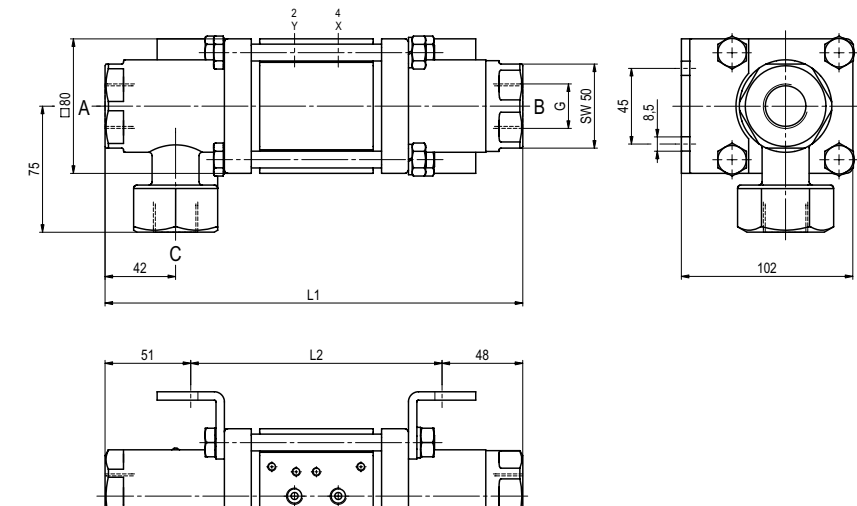
|                                 |   |       |
|---------------------------------|---|-------|
| <b>actuation pressure range</b> | bar 4-10  |       |
| <b>air consumption</b>          | cm³/stroke 11   |       |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |       |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |       |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1 |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4 |

**hydraulic specifications**

|                                 |                                  |         |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

type **VMK 20 DR**

function: **NC**  
closed when not energized (A ► B)

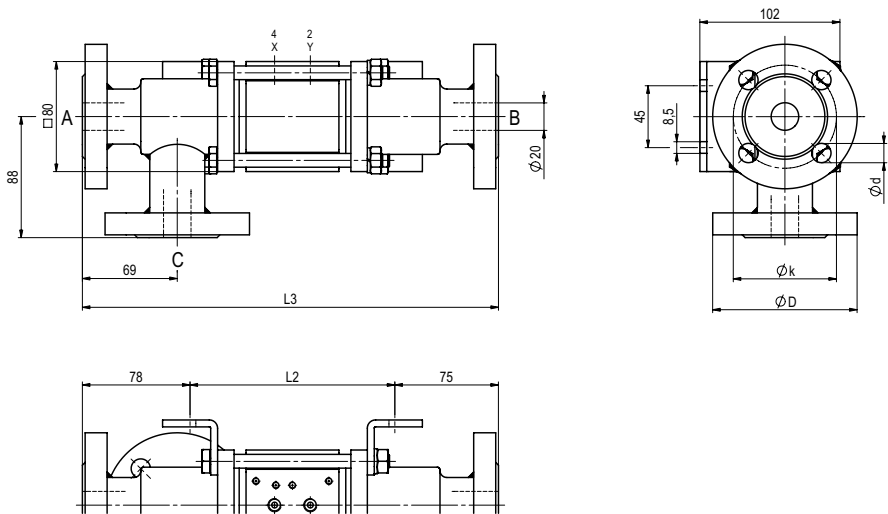


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 248            | 149            | 302            |
| with 1/2 inductive limit switches  | 267            | 168            | 321            |
| with force-feed lubrication nipple | 286            | 187            | 340            |
| with mechanical limit switches     | 269            | 170            | 323            |

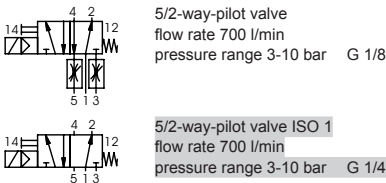
| flanges PN | DIN  | øD  | øk | ød |
|------------|------|-----|----|----|
| 16         | 2633 | 105 | 75 | 14 |
| 40         | 2635 | 105 | 75 | 14 |
| 100        | 2637 | 130 | 90 | 18 |

type **VFK 20 DR**

function: **NO**  
open when not energized (A ► B)



**pneumatic actuation (separately)**

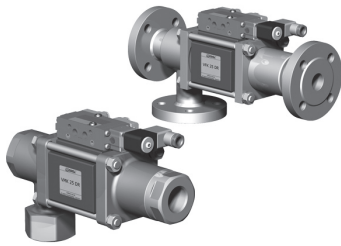


**5-VMK 25 DR****5-VFK 25 DR**

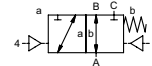
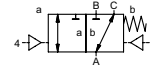
valve type with pilot valve


# coaxial valve

## type VMK 25 DR VFK 25 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 25 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B) symbol **NC**  
 valve normally open (A ► B) symbol **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① brass ② steel, galvanized  
 ③ brass, nickel plated ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

**general specifications**

|                             |  |  |
|-----------------------------|--|--|
| <b>ports</b>                | VMK threads G 1 - G 1 1/2                                    | <b>options</b> special threads   |
|                             | VFK flanges PN 16/40/100                                     | special flanges  |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-16/0-40/0-64/0-100                                     |  |
|                             | A ⇒ B max.100 / B ⇒ A max.16 / A ⇒ C max.100 / C ⇒ A max.100 |  |
| <b>Kv value</b>             | m³/h 13,3  |  |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇒ P <sub>2</sub>                              | pressure side max. 100 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>                              | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              |  |  |
| <b>opening</b>              |  |  |
| <b>closing</b>              | by throttles on pilot valve                                  |  |
| <b>flow direction</b>       | see pressure range   |  |
| <b>switching cycles</b>     | 1/min 200  |  |
| <b>switching time</b>       | ms opening 50-3000 closing 50-3000                           |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60                             | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50                             |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      | via pilot valve  |  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VMK 8,0 VFK 9,6   |  |
| <b>additional equipment</b> |  | upon request   |

**electrical specifications**

|                              |  |  |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

**pneumatic specifications**

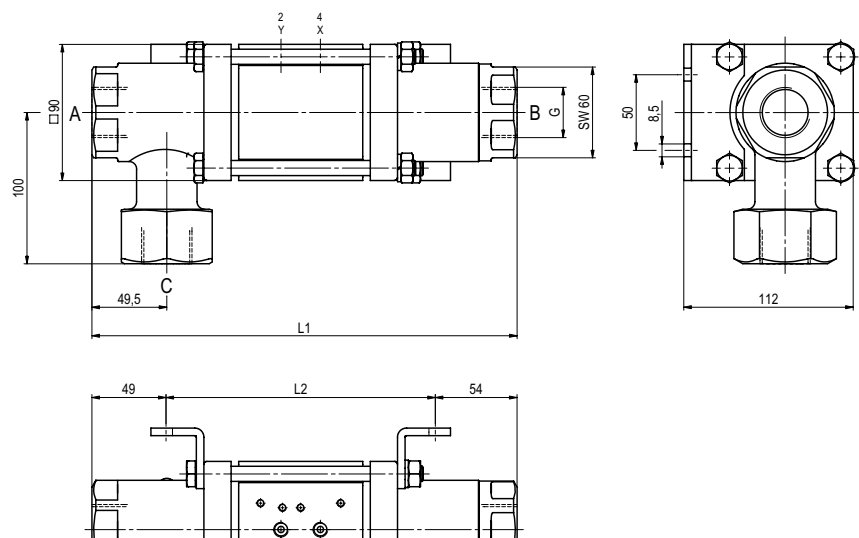
|                                 |   |       |
|---------------------------------|---|-------|
| <b>actuation pressure range</b> | bar 4-10  |       |
| <b>air consumption</b>          | cm³/stroke 18   |       |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |       |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |       |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1 |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4 |

**hydraulic specifications**

|                                 |                                  |         |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

type **VMK 25 DR**

function: **NC**  
closed when not energized (A ► B)

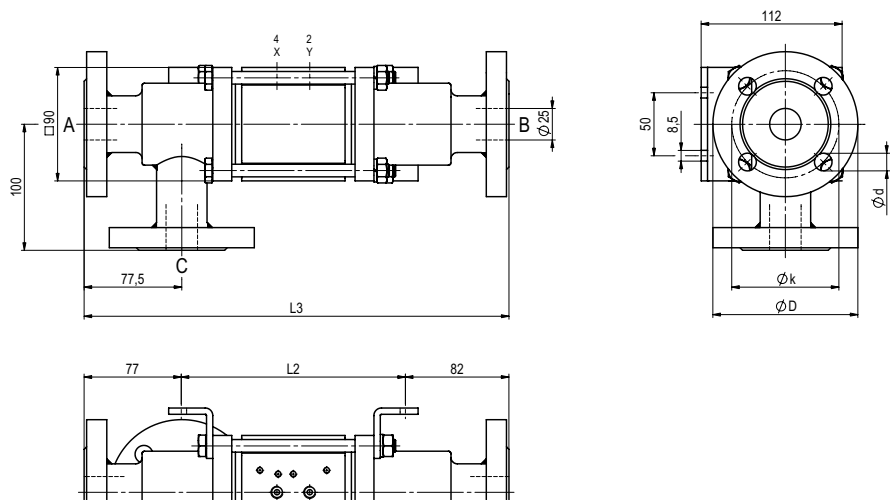


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 281            | 178            | 337            |
| with 1/2 inductive limit switches  | 295            | 192            | 351            |
| with force-feed lubrication nipple | 311            | 208            | 367            |
| with mechanical limit switches     | 305            | 202            | 361            |

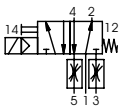
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 115 | 85  | 14 |
| 40         | 2635 | 115 | 85  | 14 |
| 100        | 2637 | 140 | 100 | 18 |

type **VFK 25 DR**

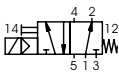
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

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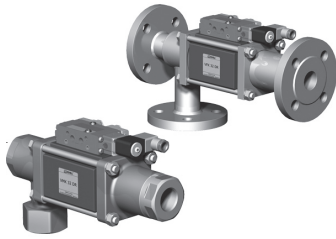
**5-VMK 32 DR****5-VFK 32 DR**

valve type with pilot valve

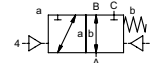
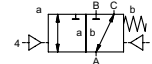
# coaxial valve


## type VMK 32 DR

## VFK 32 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 32 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B) **NC**  
 valve normally open (A ► B) **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① brass ② steel, galvanized  
 ③ brass, nickel plated ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

| general specifications      |  | options  |
|-----------------------------|--|--|
| <b>ports</b>                | VMK threads G 1 1/4 - G 1 1/2<br>VFK flanges PN 16/40/100                                | special threads<br>special flanges                                       |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-16/0-40/0-64/0-100<br>A ⇒ B max.100 / B ⇒ A max.16 / A ⇒ C max.100 / C ⇒ A max.100 |  |
| <b>Kv value</b>             | m³/h 18,9  |  |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇒ P <sub>2</sub>  | pressure side max. 100 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>  | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              |  |  |
| <b>opening</b>              |  |  |
| <b>closing</b>              | by throttles on pilot valve  |  |
| <b>flow direction</b>       | see pressure range   |  |
| <b>switching cycles</b>     | 1/min 150  |  |
| <b>switching time</b>       | ms opening 100-3000 closing 100-3000   |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50   |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      | via pilot valve  |  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VMK 8,5 VFK 10,2  |  |
| <b>additional equipment</b> |  | upon request   |

| electrical specifications    |  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

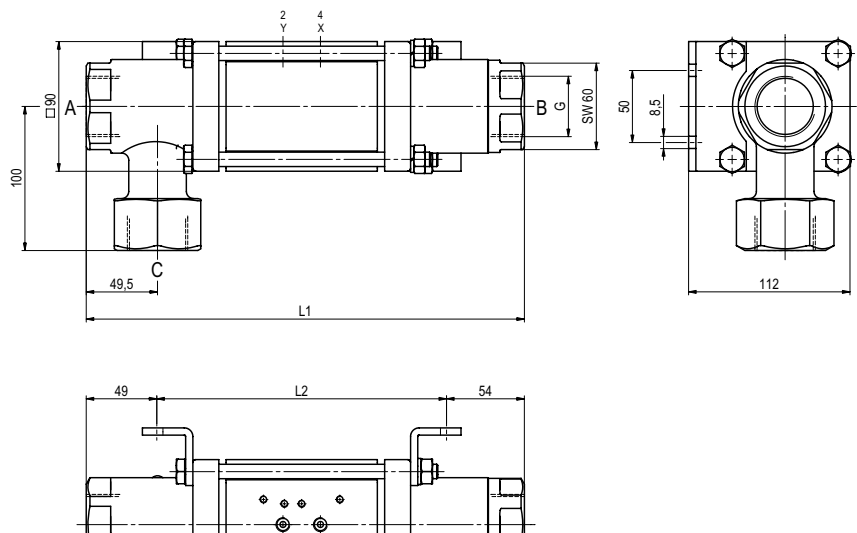
| pneumatic specifications        |   | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 23   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1   |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4   |

| hydraulic specifications        |                                  | options |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VMK 32 DR**

function: **NC**  
closed when not energized (A ► B)

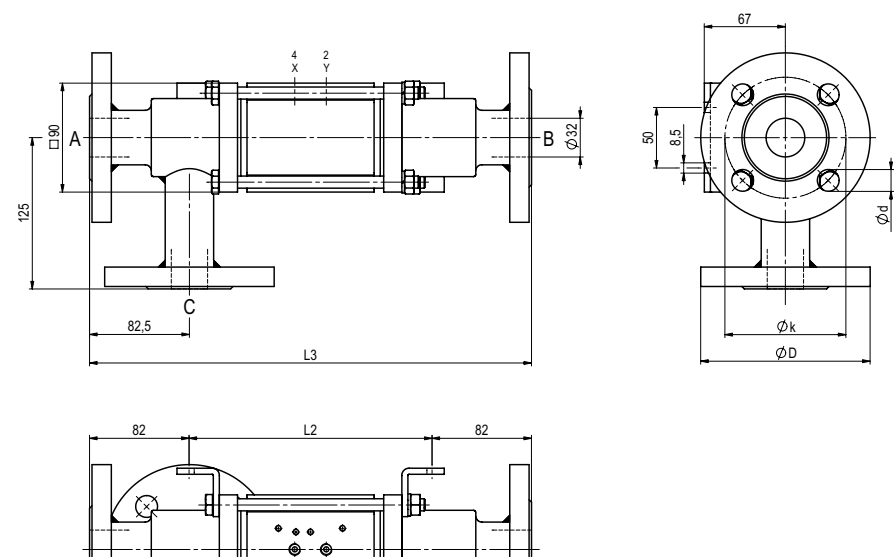


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 304            | 201            | 365            |
| with 1/2 inductive limit switches  | 311            | 208            | 372            |
| with force-feed lubrication nipple | 341            | 238            | 402            |
| with mechanical limit switches     | 339            | 236            | 400            |

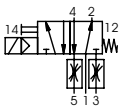
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 140 | 100 | 18 |
| 40         | 2635 | 140 | 100 | 18 |
| 100        | 2637 | 155 | 110 | 22 |

type **VFK 32 DR**

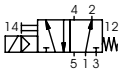
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

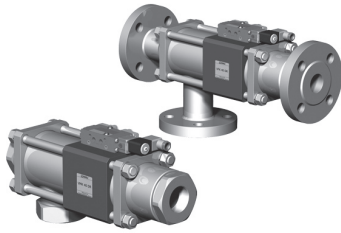
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**5-VMK 40 DR****5-VFK 40 DR**

valve type with pilot valve

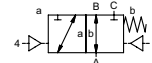
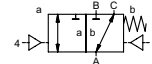
# coaxial valve


## type VMK 40 DR VFK 40 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 40 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

| general specifications      |   | options   |
|-----------------------------|---|---|
| <b>ports</b>                | VMK threads G 1 1/2 - G 2   | special threads   |
|                             | VFK flanges PN 100  | special flanges   |
| <b>function</b>             | NC  | NO  |
| <b>pressure range</b>       | bar 0-64/0-100  | > 100 bar   |
|                             | A ⇒ B max.100 / B ⇒ A max.16 / A ⇒ C max.100 / C ⇒ A max.100          |   |
| <b>Kv value</b>             | m³/h 31,0   |   |
| <b>leak rate</b>            |   | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                               |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇒ P <sub>2</sub>                                       | pressure side max. 100 bar<br>vacuum side leak rate upon request        |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>                                       | see pressure range  |
| <b>media</b>                | gaseous - liquid - highly viscous - gelatinous - pasty - contaminated |   |
| <b>abrasive media</b>       |   | version available   |
| <b>damping</b>              | opening   |   |
|                             | closing by throttles on pilot valve                                   |   |
| <b>flow direction</b>       | see pressure range  |   |
| <b>switching cycles</b>     | 1/min 150   |   |
| <b>switching time</b>       | ms opening 100-3000 closing 100-3000                                  |   |
| <b>media temperature</b>    | °C direct mounted pilot valve 60                                      | remote mounted pilot valve outside temperature range of media max.160°C |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50                                      |   |
| <b>flush ports</b>          |   | available   |
| <b>leak ports</b>           |   | available   |
| <b>limit switches</b>       |   | inductive/mechanical upon request                                       |
| <b>manual override</b>      | via pilot valve   |   |
| <b>approvals</b>            |   | LR/GL/WAZ   |
| <b>mounting</b>             |   | mounting brackets   |
| <b>weight</b>               | kg VMK 18,5 VFK 26,5  |   |
| <b>additional equipment</b> |   | upon request  |

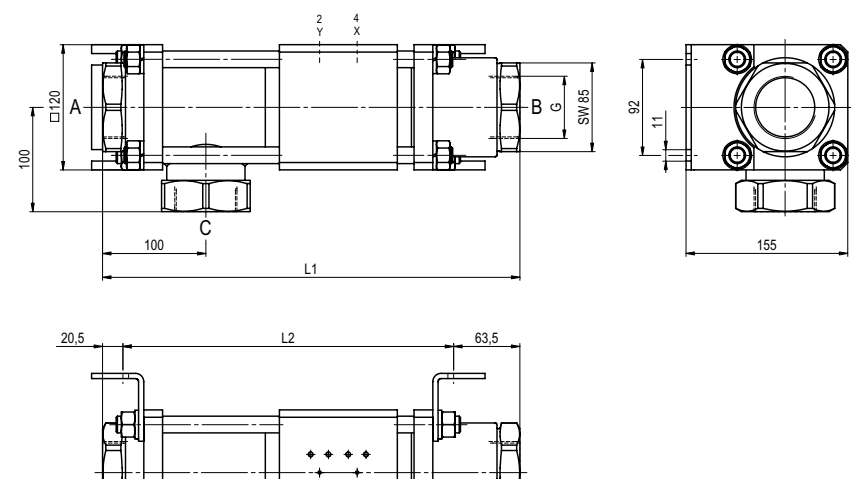
| electrical specifications    |  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

| pneumatic specifications        |   | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 65   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1   |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4   |

| hydraulic specifications        |                                  | options |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

type **VMK 40 DR**

function: **NC**  
closed when not energized (A ► B)

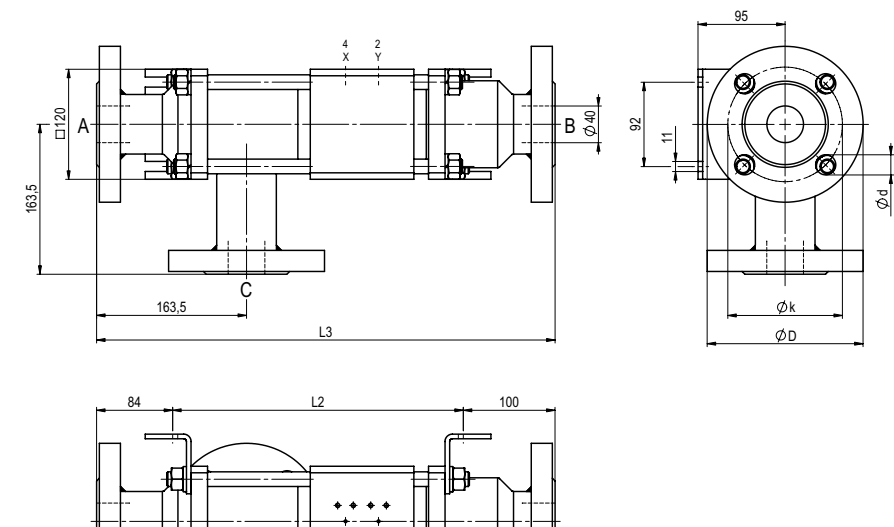


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 400            | 316            | 500            |
| with 1/2 inductive limit switches  | 400            | 316            | 500            |
| with force-feed lubrication nipple | 400            | 316            | 500            |
| with mechanical limit switches     | -              | -              | -              |

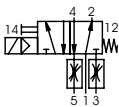
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 100        | 2637 | 170 | 125 | 22 |

type **VFK 40 DR**

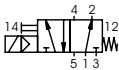
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

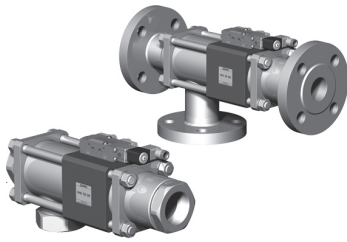
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**5-VMK 50 DR****5-VFK 50 DR**

valve type with pilot valve

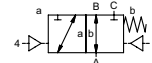
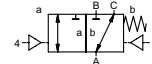
# coaxial valve


## type VMK 50 DR VFK 50 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 50 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

| general specifications      |  | options  |
|-----------------------------|--|--|
| <b>ports</b>                | VMK threads G 2<br>VFK flanges PN 64/100                                       | special threads<br>special flanges                                       |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-64/0-100<br>A ⇒ B max.100 / B ⇒ A max.16 / A ⇒ C max.100 / C ⇒ A max.100 | > 100 bar  |
| <b>Kv value</b>             | m³/h 43,0  |  |
| <b>vacuum</b>               | leak rate  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇒ P <sub>2</sub>  | pressure side max. 100 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>  | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              | opening<br>closing   | by throttles on pilot valve  |
| <b>flow direction</b>       |  | see pressure range   |
| <b>switching cycles</b>     | 1/min 100  |  |
| <b>switching time</b>       | ms opening 150-3000 closing 150-3000   |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50   |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      |  | via pilot valve  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VMK 19,5 VFK 31,4   |  |
| <b>additional equipment</b> |  | upon request   |

| electrical specifications    |  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

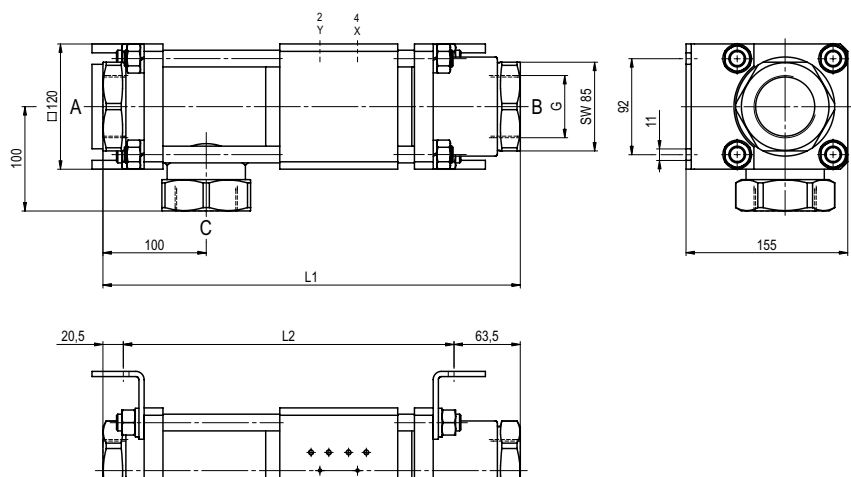
| pneumatic specifications        |   | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 65   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1   |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4   |

| hydraulic specifications        |                                  | options |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VMK 50 DR**

function: **NC**  
closed when not energized (A ► B)

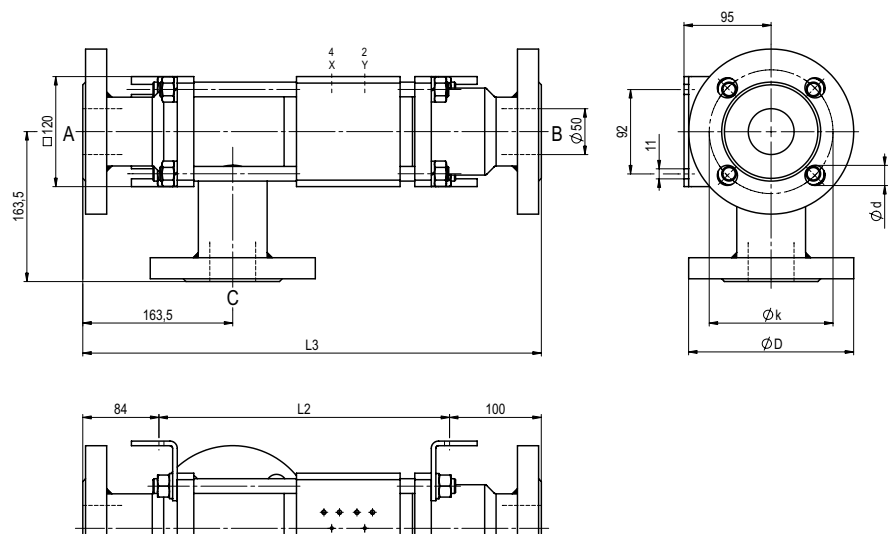


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 400            | 316            | 500            |
| with 1/2 inductive limit switches  | 400            | 316            | 500            |
| with force-feed lubrication nipple | 400            | 316            | 500            |
| with mechanical limit switches     | -              | -              | -              |

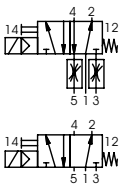
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 64         | 2636 | 180 | 135 | 22 |
| 100        | 2637 | 195 | 145 | 26 |

type **VFK 50 DR**

function: **NO**  
open when not energized (A ► B)



**pneumatic actuation (separately)**



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8

5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

Rights reserved to make technical alterations • Not responsible for printing errors • Detailed drawings can be obtained upon request

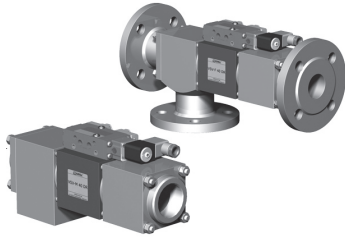
**5-VSV-M 40 DR****5-VSV-F 40 DR**

valve type with pilot valve

# coaxial valve

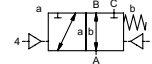
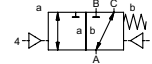
## type VSV-M 40 DR


## VSV-F 40 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-40 bar  
**orifice** DN 40 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

| general specifications      |   | options   |
|-----------------------------|---|---|
| <b>ports</b>                | VSV-M threads G 1 1/2 - G 2   | special threads   |
|                             | VSV-F flanges PN 16/40  | special flanges   |
| <b>function</b>             | NC  | NO  |
| <b>pressure range</b>       | bar 0-16/0-40   |   |
|                             | A ► B max.40 / B ► A max.16 / A ► C max.40 / C ► A max.40             |   |
| <b>Kv value</b>             | m³/h 29,1   |   |
| <b>vacuum</b>               | leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                   |   |
| <b>pressure-vacuum</b>      | P1 ► P2   | pressure side max. 40 bar   |
|                             |   | vacuum side leak rate upon request                                      |
| <b>back pressure</b>        | P2 > P1 see pressure range  |   |
| <b>media</b>                | gaseous - liquid - highly viscous - gelatinous - pasty - contaminated |   |
| <b>abrasive media</b>       |   | version available   |
| <b>damping</b>              | opening by throttles on pilot valve                                   |   |
|                             | closing see pressure range  |   |
| <b>flow direction</b>       | see pressure range  |   |
| <b>switching cycles</b>     | 1/min 150   |   |
| <b>switching time</b>       | ms opening 100-3000 closing 100-3000                                  |   |
| <b>media temperature</b>    | °C direct mounted pilot valve 60                                      | remote mounted pilot valve outside temperature range of media max.160°C |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50                                      |   |
| <b>flush ports</b>          |   | available   |
| <b>leak ports</b>           |   | available   |
| <b>limit switches</b>       |   | inductive/mechanical upon request                                       |
| <b>manual override</b>      | via pilot valve   |   |
| <b>approvals</b>            |   | LR/GL/WAZ   |
| <b>mounting</b>             |   | mounting brackets   |
| <b>weight</b>               | kg VSV-M 8,9 VSV-F 11,6   |   |
| <b>additional equipment</b> |   | upon request  |

| electrical specifications    |  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

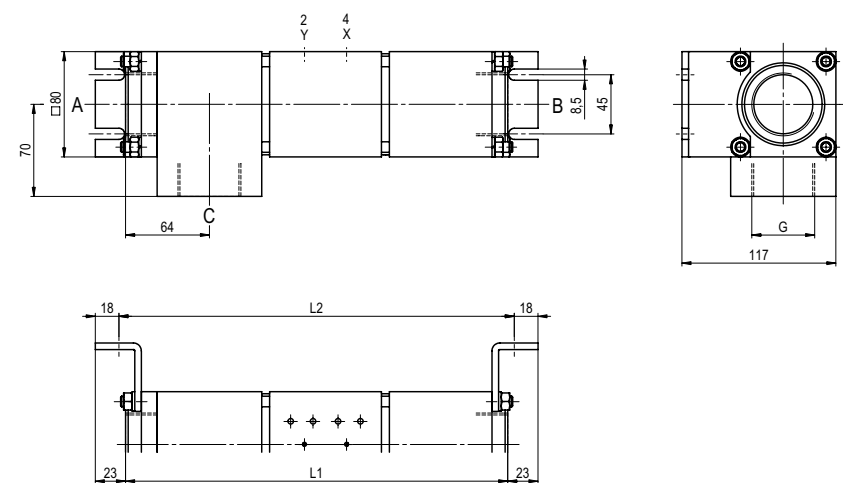
| pneumatic specifications        |   | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 34   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1   |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4   |

| hydraulic specifications        |                                  | options |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VSV-M 40 DR**

function: **NC**  
closed when not energized (A ► B)

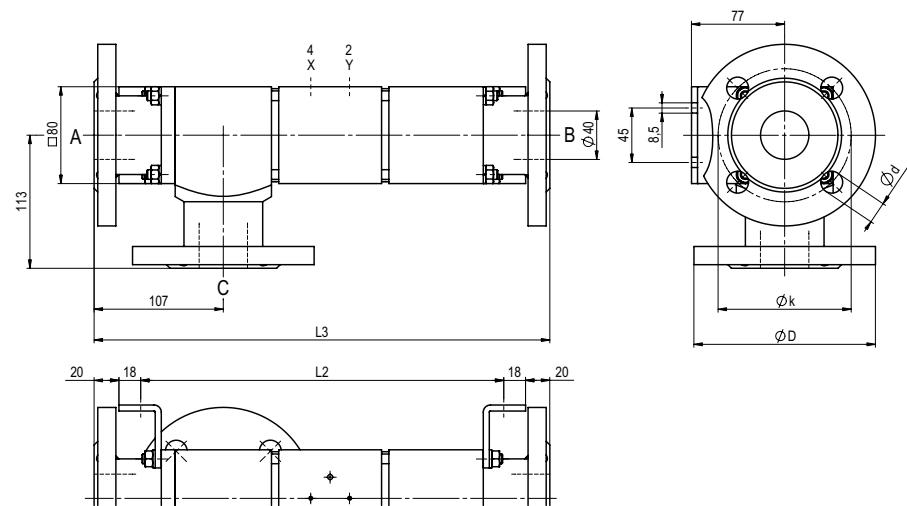


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 291            | 301            | 377            |
| with 1/2 inductive limit switches  | 338            | 348            | 424            |
| with force-feed lubrication nipple | -              | -              | -              |
| with mechanical limit switches     | -              | -              | -              |

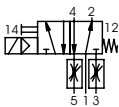
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 150 | 110 | 18 |
| 40         | 2635 | 150 | 110 | 18 |

type **VSV-F 40 DR**

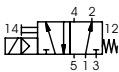
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

Rights reserved to make technical alterations • Not responsible for printing errors • Detailed drawings can be obtained upon request

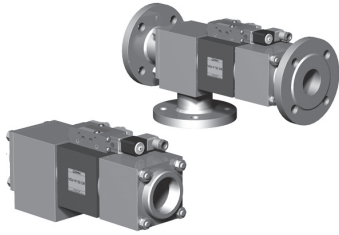
**5-VSV-M 50 DR****5-VSV-F 50 DR**

valve type with pilot valve

# coaxial valve

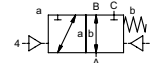
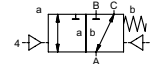
## type VSV-M 50 DR


## VSV-F 50 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-40 bar  
**orifice** DN 50 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

| general specifications      |  | options  |
|-----------------------------|--|--|
| <b>ports</b>                | VSV-M threads G 2<br>VSV-F flanges PN 16/40                                | special threads<br>special flanges                                       |
| <b>function</b>             | NC   | NO   |
| <b>pressure range</b>       | bar 0-16/0-40<br>A ► B max.40 / B ► A max.16 / A ► C max.40 / C ► A max.40 |  |
| <b>Kv value</b>             | m³/h 43,0  |  |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar•l•s <sup>-1</sup>                                |
| <b>pressure-vacuum</b>      | P1 ► P2  | pressure side max. 40 bar<br>vacuum side leak rate upon request          |
| <b>back pressure</b>        | P2 > P1  | see pressure range   |
| <b>media</b>                |  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |
| <b>abrasive media</b>       |  | version available  |
| <b>damping</b>              | opening<br>closing   | by throttles on pilot valve  |
| <b>flow direction</b>       |  | see pressure range   |
| <b>switching cycles</b>     | 1/min 100  |  |
| <b>switching time</b>       | ms opening 150-3000 closing 150-3000                                       |  |
| <b>media temperature</b>    | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C  |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50   |  |
| <b>flush ports</b>          |  | available  |
| <b>leak ports</b>           |  | available  |
| <b>limit switches</b>       |  | inductive/mechanical upon request  |
| <b>manual override</b>      |  | via pilot valve  |
| <b>approvals</b>            |  | LR/GL/WAZ  |
| <b>mounting</b>             |  | mounting brackets  |
| <b>weight</b>               | kg VSV-M 19,2 VSV-F 23,6   |  |
| <b>additional equipment</b> |  | upon request   |

| electrical specifications    |  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

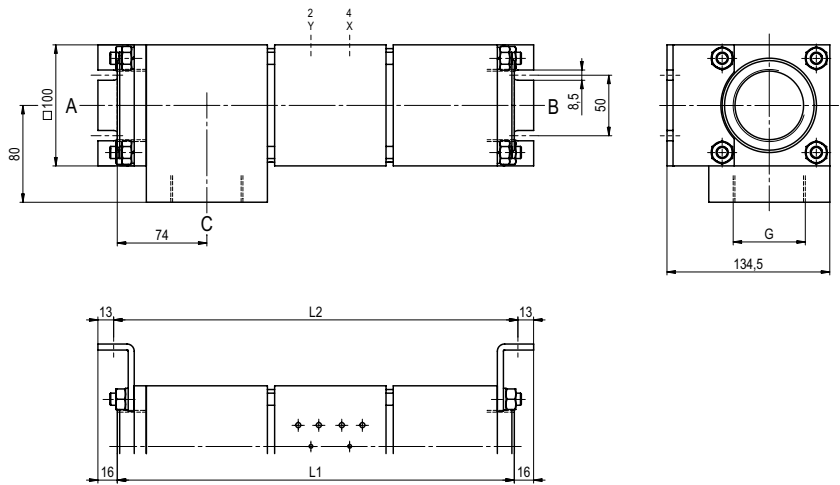
| pneumatic specifications        |   | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 65   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>pilot valve interface</b>    | co-ax / NAMUR   | ISO 1   |
| <b>actuator ports</b>           | 2/4 G 1/8   | G 1/4   |

| hydraulic specifications        |                                  | options |
|---------------------------------|----------------------------------|---------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |         |
| <b>control</b>                  | preferably 4/2-way control valve |         |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4 |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VSV-M 50 DR**

function: **NC**  
closed when not energized (A ► B)

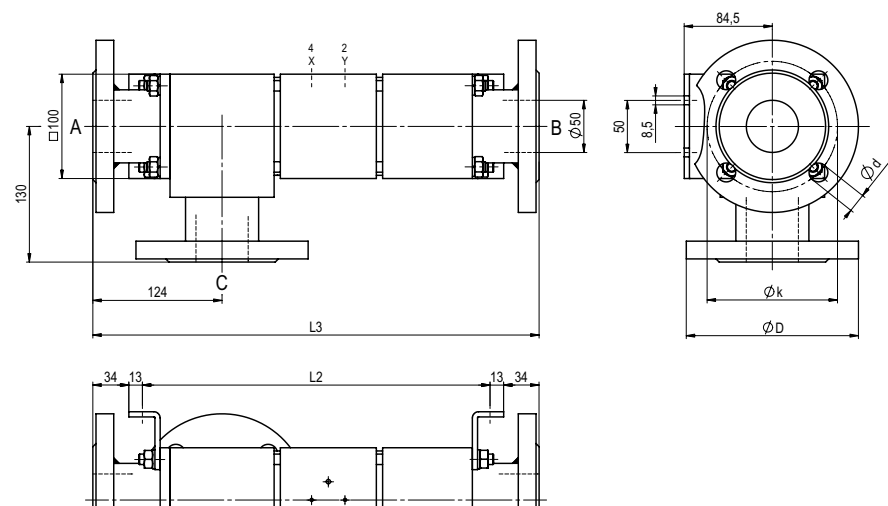


| constructive length                | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> |
|------------------------------------|----------------|----------------|----------------|
| standard                           | 328            | 334            | 428            |
| with 1/2 inductive limit switches  | 354            | 360            | 454            |
| with force-feed lubrication nipple | -              | -              | -              |
| with mechanical limit switches     | -              | -              | -              |

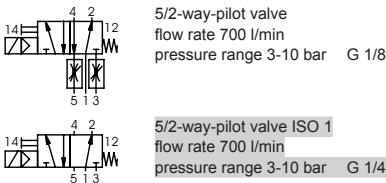
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 165 | 125 | 18 |
| 40         | 2635 | 165 | 125 | 18 |

type **VSV-F 50 DR**

function: **NO**  
open when not energized (A ► B)



**pneumatic actuation (separately)**

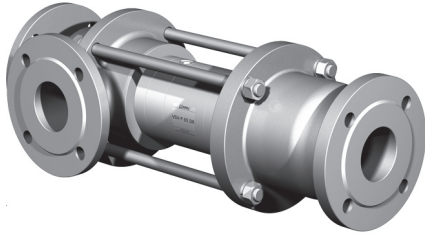


**5-VSV-F 65 DR**

valve type with pilot valve

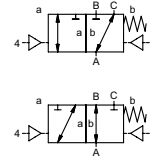
# coaxial valve


## type VSV-F 65 DR



**3/2 way valve**  
**pressure range** PN 0-40 bar  
**orifice** DN 65 mm  
**connection** flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① aluminium ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

|                             | general specifications   | options   |
|-----------------------------|--|---|
| <b>ports</b>                | VSV-F flanges PN 16/40   |   |
| <b>function</b>             | NC   | special flanges   |
| <b>pressure range</b>       | bar 0-16/0-40<br>A ⇒ B max.40 / B ⇒ A max.16 / A ⇒ C max.40 / C ⇒ A max.40 | NO<br>> 40 bar upon request   |
| <b>Kv value</b>             | m³/h 68,0  |   |
| <b>leak rate</b>            |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                               |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇒ P <sub>2</sub>  | pressure side max. 40 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>  | see pressure range  |
| <b>media</b>                | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated   |   |
| <b>abrasive media</b>       |  | version available   |
| <b>damping</b>              | opening<br>closing   | by throttles on pilot valve   |
| <b>flow direction</b>       | see pressure range   |   |
| <b>switching cycles</b>     | 1/min 50   |   |
| <b>switching time</b>       | ms opening 200-3000 closing 200-3000                                       |   |
| <b>media temperature</b>    | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50   |   |
| <b>flush ports</b>          |  | available   |
| <b>leak ports</b>           |  | available   |
| <b>limit switches</b>       |  | inductive/mechanical upon request                                       |
| <b>manual override</b>      | via pilot valve  |   |
| <b>approvals</b>            |  | LR/GL/WAZ   |
| <b>mounting</b>             |  |   |
| <b>weight</b>               | kg VSV-F 24,0  |   |
| <b>additional equipment</b> |  | upon request  |

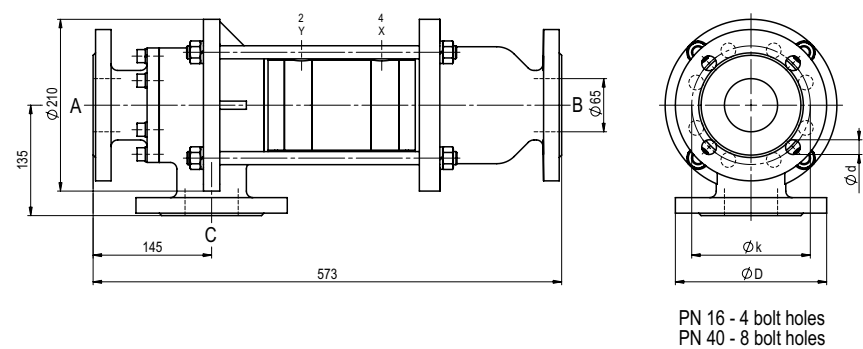
|                              | electrical specifications  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

|                                 | pneumatic specifications                              | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 50   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>actuator ports</b>           | 2/4 G 1/4   | G 3/8   |

|                                 | hydraulic specifications         | options      |
|---------------------------------|----------------------------------|--------------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |              |
| <b>by media</b>                 |                                  | upon request |
| <b>control</b>                  | preferably 4/2-way control valve |              |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4      |

type **VSV-F 65 DR**

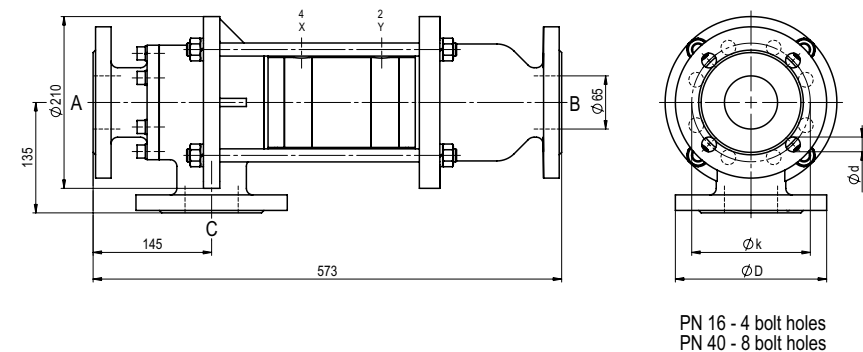
function: **NC**  
closed when not energized (A ► B)



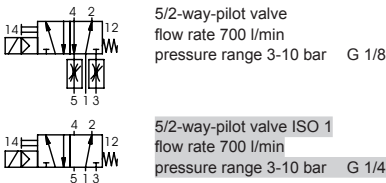
| flanges PN | DIN  | $\varnothing D$ | $\varnothing k$ | $\varnothing d$ |
|------------|------|-----------------|-----------------|-----------------|
| 16         | 2633 | 185             | 145             | 18              |
| 40         | 2635 | 185             | 145             | 18              |

type **VSV-F 65 DR**

function: **NO**  
open when not energized (A ► B)



**pneumatic actuation (separately)**

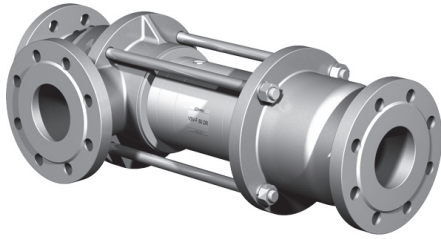


**5-VSV-F 80 DR**

valve type with pilot valve

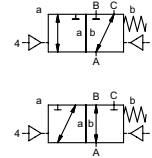
# coaxial valve


## type VSV-F 80 DR



**3/2 way valve**  
**pressure range** PN 0-40 bar  
**orifice** DN 80 mm  
**connection** flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over  
**body materials** ① aluminium ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

|                             | general specifications   | options   |
|-----------------------------|--|---|
| <b>ports</b>                | VSV-F flanges PN 16/40   |   |
| <b>function</b>             | NC   | special flanges<br>NO   |
| <b>pressure range</b>       | bar 0-16/0-40<br>A ► B max.40 / B ► A max.16 / A ► C max.40 / C ► A max.40 |   |
| <b>Kv value</b>             | m³/h 90,0  |   |
| <b>vacuum</b>               | leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                        |   |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ► P <sub>2</sub>  | pressure side max. 40 bar<br>vacuum side leak rate upon request         |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub> see pressure range                         |   |
| <b>media</b>                | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated   |   |
| <b>abrasive media</b>       |  | version available   |
| <b>damping</b>              | opening by throttles on pilot valve  |   |
| <b>flow direction</b>       | closing see pressure range   |   |
| <b>switching cycles</b>     | 1/min 50   |   |
| <b>switching time</b>       | ms opening 250-3000 closing 250-3000                                       |   |
| <b>media temperature</b>    | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C |
| <b>ambient temperature</b>  | °C direct mounted pilot valve 50   |   |
| <b>flush ports</b>          |  | available   |
| <b>leak ports</b>           |  | available   |
| <b>limit switches</b>       |  | inductive/mechanical upon request                                       |
| <b>manual override</b>      | via pilot valve  |   |
| <b>approvals</b>            |  | LR/GL/WAZ   |
| <b>mounting</b>             |  |   |
| <b>weight</b>               | kg VSV-F 26,8  |   |
| <b>additional equipment</b> |  | upon request  |

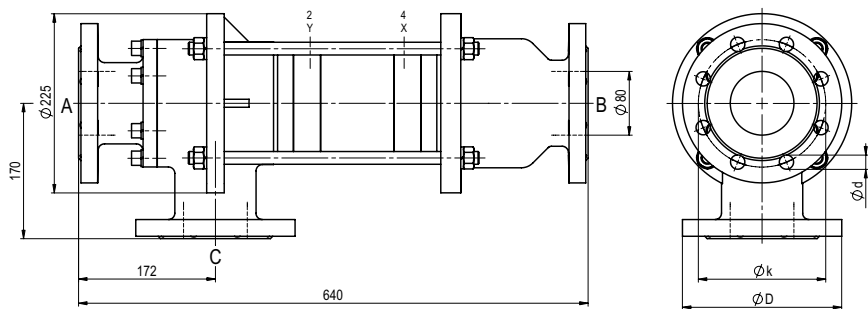
|                              | electrical specifications  | options                                |
|------------------------------|--|--|
| <b>nominal voltage</b>       | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                              | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| <b>power consumption</b>     | DC 4,8 W   | 2,5 W                                  |
|                              | AC pick up 11,0 VA holding 8,5 VA  |  |
| <b>protection</b>            | IP 65 (P54) acc. DIN 40 050  |  |
| <b>energized duty rating</b> | ED 100%  |  |
| <b>connection</b>            | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| <b>additional equipment</b>  | illuminated plug with varistor   |  |
| <b>optional</b>              | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| <b>max. temperature</b>      | media 60°C   |  |
|                              | ambient 50°C   |  |
| <b>explosion proof</b>       | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                              | power consumption  | alternating current 230 V 50 Hz 2,90 W |

|                                 | pneumatic specifications                              | options |
|---------------------------------|---|---------|
| <b>actuation pressure range</b> | bar 4-10  |         |
| <b>air consumption</b>          | cm³/stroke 75   |         |
| <b>cycle speed</b>              | main valve speed variable by throttles on pilot valve |         |
| <b>control</b>                  | preferably 5/2-way pilot valve                        |         |
| <b>actuator ports</b>           | 2/4 G 1/4   | G 3/8   |

|                                 | hydraulic specifications         | options      |
|---------------------------------|----------------------------------|--------------|
| <b>actuation pressure range</b> | bar 10-30 / 30-60                |              |
| <b>by media</b>                 |                                  | upon request |
| <b>control</b>                  | preferably 4/2-way control valve |              |
| <b>actuator ports</b>           | X/Y G 1/4                        | NPT 1/4      |

type **VSV-F 80 DR**

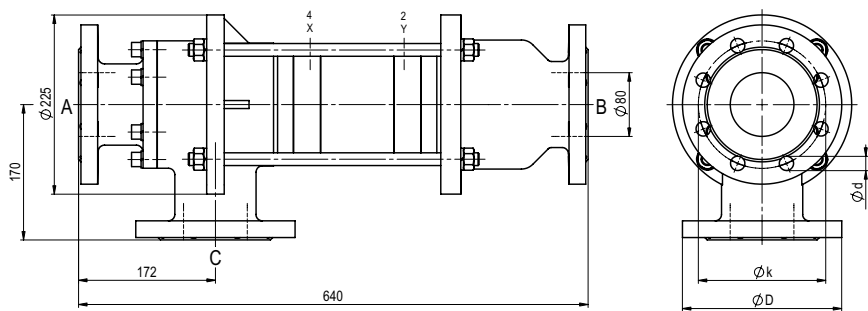
function: **NC**  
closed when not energized (A ►B)



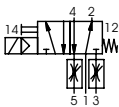
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 200 | 160 | 18 |
| 40         | 2635 | 200 | 160 | 18 |

type **VSV-F 80 DR**

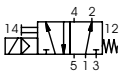
function: **NO**  
open when not energized (A ►B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

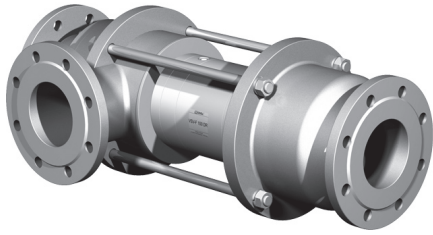
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**5-VSV-F 100 DR**

valve type with pilot valve

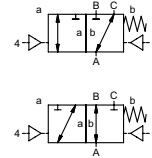
# coaxial valve


## type VSV-F 100 DR



**3/2 way valve**  
**pressure range** PN 0-40 bar  
**orifice** DN 100 mm  
**connection** flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials**

|                        |                            |
|------------------------|----------------------------|
| ①                      | ② steel, galvanized        |
| ③                      | ⑤ without non-ferr. metals |
| ④ steel, nickel plated | ⑥ stainless steel          |

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

| general specifications |  | options   |
|------------------------|--|---|
| ports                  | VSV-F flanges PN 16/40   |   |
| function               | NC   | special flanges<br>NO   |
| pressure range         | bar 0-16/0-40<br>A ⇒ B max.40 / B ⇒ A max.16 / A ⇒ C max.40 / C ⇒ A max.40 |   |
| Kv value               | m³/h 140,0   |   |
| vacuum                 | leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                        |   |
| pressure-vacuum        | P <sub>1</sub> ⇒ P <sub>2</sub>  | pressure side max. 40 bar<br>vacuum side leak rate upon request         |
| back pressure          | P <sub>2</sub> > P <sub>1</sub> see pressure range                         |   |
| media                  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated   |   |
| abrasive media         |  | version available   |
| damping                | opening by throttles on pilot valve  |   |
| flow direction         | closing see pressure range   |   |
| switching cycles       | 1/min 40   |   |
| switching time         | ms opening 300-3000 closing 300-3000                                       |   |
| media temperature      | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C |
| ambient temperature    | °C direct mounted pilot valve 50   |   |
| flush ports            |  | available   |
| leak ports             |  | available   |
| limit switches         |  | inductive/mechanical upon request                                       |
| manual override        | via pilot valve  |   |
| approvals              |  | LR/GL/WAZ   |
| mounting               |  |   |
| weight                 | kg VSV-F 46,5  |   |
| additional equipment   |  | upon request  |

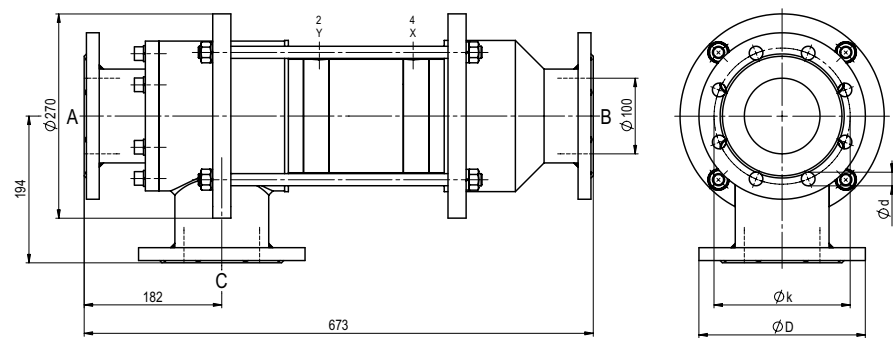
| electrical specifications |  | options                                |
|---------------------------|--|--|
| nominal voltage           | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                           | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| power consumption         | DC 4,8 W   | 2,5 W                                  |
|                           | AC pick up 11,0 VA holding 8,5 VA  |  |
| protection                | IP 65 (P54) acc. DIN 40 050  |  |
| energized duty rating     | ED 100%  |  |
| connection                | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| additional equipment      | illuminated plug with varistor   |  |
| optional                  | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| max. temperature          | media 60°C   |  |
|                           | ambient 50°C   |  |
| explosion proof           | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                           | power consumption  | alternating current 230 V 50 Hz 2,90 W |

| pneumatic specifications |   | options |
|--------------------------|---|---------|
| actuation pressure range | bar 4-10  |         |
| air consumption          | cm³/stroke 135  |         |
| cycle speed              | main valve speed variable by throttles on pilot valve |         |
| control                  | preferably 5/2-way pilot valve                        |         |
| actuator ports           | 2/4 G 1/4   | G 3/8   |

| hydraulic specifications |                                  | options      |
|--------------------------|----------------------------------|--------------|
| actuation pressure range | bar 10-30 / 30-60                |              |
| by media                 |                                  | upon request |
| control                  | preferably 4/2-way control valve |              |
| actuator ports           | X/Y G 1/4                        | NPT 1/4      |

type **VSV-F 100 DR**

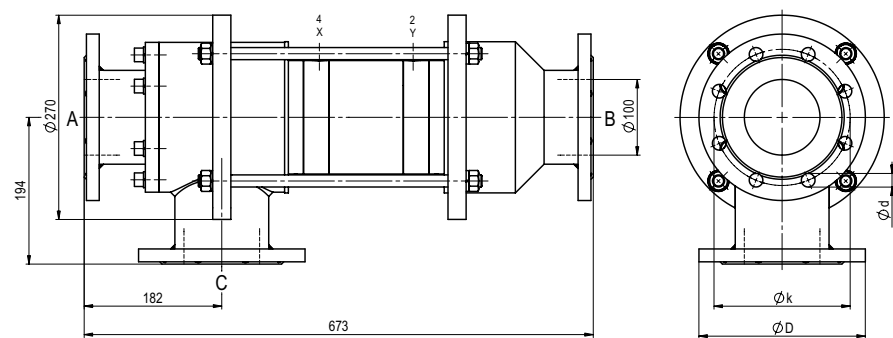
function: **NC**  
closed when not energized (A ► B)



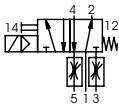
| flanges PN | DIN  | øD  | øk  | ød |
|------------|------|-----|-----|----|
| 16         | 2633 | 220 | 180 | 18 |
| 40         | 2635 | 235 | 190 | 22 |

type **VSV-F 100 DR**

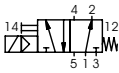
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

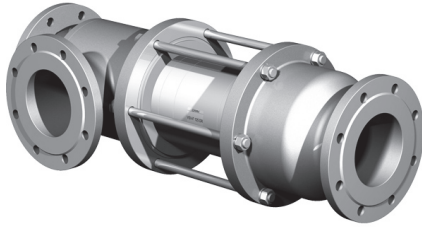
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**5-VSV-F 125 DR**

valve type with pilot valve

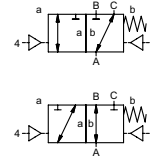
# coaxial valve


## type VSV-F 125 DR



**3/2 way valve**  
**pressure range** PN 0-16 bar  
**orifice** DN 125 mm  
**connection** flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials** ① ② steel, galvanized  
 ③ ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

| general specifications |  | options   |
|------------------------|--|---|
| ports                  | VSV-F flanges PN 16  | special flanges   |
| function               | NC   | NO  |
| pressure range         | bar 0-16<br>A ⇒ B max.16 / B ⇒ A max.16 / A ⇒ C max.16 / C ⇒ A max.16    |   |
| Kv value               | m³/h 198,0   |   |
| leak rate              |  | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                               |
| pressure-vacuum        | P1 ⇒ P2  | pressure side max. 16 bar<br>vacuum side leak rate upon request         |
| back pressure          | P2 > P1  | see pressure range  |
| media                  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |   |
| abrasive media         |  | version available   |
| damping                | opening<br>closing   | by throttles on pilot valve   |
| flow direction         |  | see pressure range  |
| switching cycles       | 1/min 30   |   |
| switching time         | ms opening 400-3000 closing 400-3000                                     |   |
| media temperature      | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C |
| ambient temperature    | °C direct mounted pilot valve 50   |   |
| flush ports            |  | available   |
| leak ports             |  | available   |
| limit switches         |  | inductive/mechanical upon request                                       |
| manual override        | via pilot valve  |   |
| approvals              |  | LR/GL/WAZ   |
| mounting               |  |   |
| weight                 | kg VSV-F 68,5  |   |
| additional equipment   |  | upon request  |

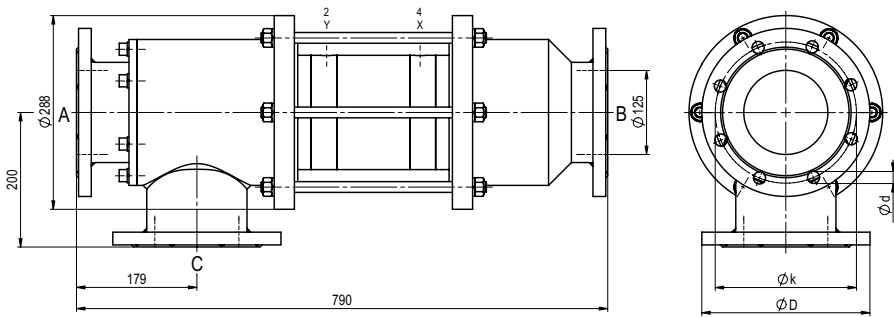
| electrical specifications |  | options                                |
|---------------------------|--|--|
| nominal voltage           | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                           | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| power consumption         | DC 4,8 W   | 2,5 W                                  |
|                           | AC pick up 11,0 VA holding 8,5 VA  |  |
| protection                | IP 65 (P54) acc. DIN 40 050  |  |
| energized duty rating     | ED 100%  |  |
| connection                | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| additional equipment      | illuminated plug with varistor   |  |
| optional                  | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| max. temperature          | media 60°C   |  |
|                           | ambient 50°C   |  |
| explosion proof           | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                           | power consumption  | alternating current 230 V 50 Hz 2,90 W |

| pneumatic specifications |   | options |
|--------------------------|---|---------|
| actuation pressure range | bar 4-10  |         |
| air consumption          | cm³/stroke 275  |         |
| cycle speed              | main valve speed variable by throttles on pilot valve |         |
| control                  | preferably 5/2-way pilot valve                        |         |
| actuator ports           | 2/4 G 1/4   | G 3/8   |

| hydraulic specifications |                                  | options      |
|--------------------------|----------------------------------|--------------|
| actuation pressure range | bar 10-30 / 30-60                |              |
| by media                 |                                  | upon request |
| control                  | preferably 4/2-way control valve |              |
| actuator ports           | X/Y G 1/4                        | NPT 1/4      |

type **VSV-F 125 DR**

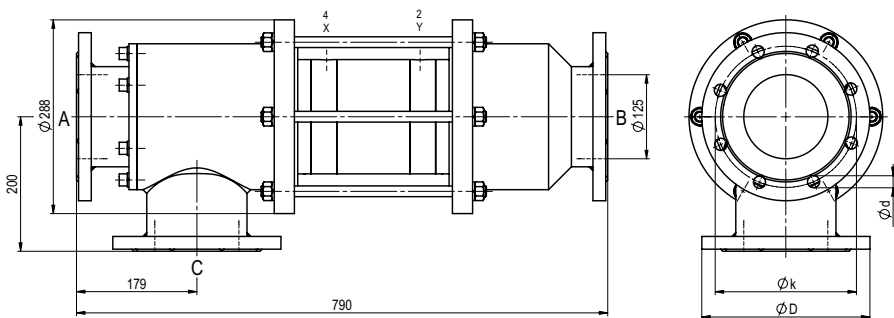
function: **NC**  
closed when not energized (A ► B)



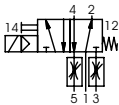
| flanges PN | DIN  | $\phi D$ | $\phi k$ | $\phi d$ |
|------------|------|----------|----------|----------|
| 16         | 2633 | 250      | 210      | 18       |

type **VSV-F 125 DR**

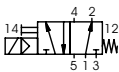
function: **NO**  
open when not energized (A ► B)



pneumatic actuation (separately)



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

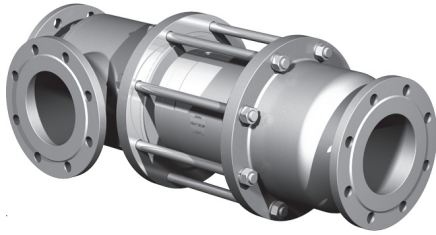
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**5-VSV-F 150 DR**

valve type with pilot valve

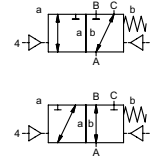
# coaxial valve


## type VSV-F 150 DR



**3/2 way valve**  
**pressure range** PN 0-16 bar  
**orifice** DN 150 mm  
**connection** flange  
**function** valve normally closed (A ► B)  
**symbol** **NC**

valve normally open (A ► B)  
**symbol** **NO**



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, intersecting switch-over

**body materials**

|                        |                            |
|------------------------|----------------------------|
| ①                      | ② steel, galvanized        |
| ③                      | ⑤ without non-ferr. metals |
| ④ steel, nickel plated | ⑥ stainless steel          |

**valve seat** synthetic resin on metal

**seal materials** NBR PTFE, FPM, CR, EPDM

**details needed for main valve**


- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation


**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

| general specifications |  | options   |
|------------------------|--|---|
| ports                  | VSV-F flanges PN 16  | special flanges   |
| function               | NC   | NO  |
| pressure range         | bar 0-16<br>A ► B max.16 / B ► A max.16 / A ► C max.16 / C ► A max.16    |   |
| Kv value               | m³/h 274,0   |   |
| vacuum                 | leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                      |   |
| pressure-vacuum        | P1 ► P2  | pressure side max. 16 bar<br>vacuum side leak rate upon request         |
| back pressure          | P2 > P1 see pressure range   |   |
| media                  | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated |   |
| abrasive media         |  | version available   |
| damping                | opening by throttles on pilot valve                                      |   |
| flow direction         | closing see pressure range   |   |
| switching cycles       | 1/min 20   |   |
| switching time         | ms opening 600-3000 closing 600-3000                                     |   |
| media temperature      | °C direct mounted pilot valve 60   | remote mounted pilot valve outside temperature range of media max.160°C |
| ambient temperature    | °C direct mounted pilot valve 50   |   |
| flush ports            |  | available   |
| leak ports             |  | available   |
| limit switches         |  | inductive/mechanical upon request                                       |
| manual override        | via pilot valve  |   |
| approvals              |  | LR/GL/WAZ   |
| mounting               |  |   |
| weight                 | kg VSV-F 97,0  |   |
| additional equipment   |  | upon request  |

| electrical specifications |  | options                                |
|---------------------------|--|--|
| nominal voltage           | U <sub>n</sub> DC 24V  | special voltage upon request           |
|                           | U <sub>n</sub> AC 230V 50 Hz   | special voltage upon request           |
| power consumption         | DC 4,8 W   | 2,5 W                                  |
|                           | AC pick up 11,0 VA holding 8,5 VA  |  |
| protection                | IP 65 (P54) acc. DIN 40 050  |  |
| energized duty rating     | ED 100%  |  |
| connection                | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm |  |
| additional equipment      | illuminated plug with varistor   |  |
| optional                  | M12x1 connector acc. DESINA  | connector acc. VDMA                    |
| max. temperature          | media 60°C   |  |
|                           | ambient 50°C   |  |
| explosion proof           | EEx m II T5 nominal voltage U <sub>n</sub>                                   | direct current 24 V 3,25 W             |
|                           | power consumption  | alternating current 230 V 50 Hz 2,90 W |

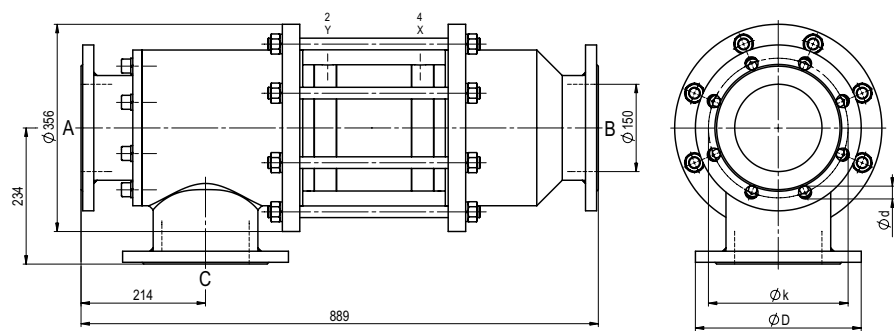
| pneumatic specifications |   | options |
|--------------------------|---|---------|
| actuation pressure range | bar 4-10  |         |
| air consumption          | cm³/stroke 550  |         |
| cycle speed              | main valve speed variable by throttles on pilot valve |         |
| control                  | preferably 5/2-way pilot valve                        |         |
| actuator ports           | 2/4 G 1/4   | G 3/8   |

| hydraulic specifications |                                  | options      |
|--------------------------|----------------------------------|--------------|
| actuation pressure range | bar 10-30 / 30-60                |              |
| by media                 |                                  | upon request |
| control                  | preferably 4/2-way control valve |              |
| actuator ports           | X/Y G 1/4                        | NPT 1/4      |

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

type **VSV-F 150 DR**

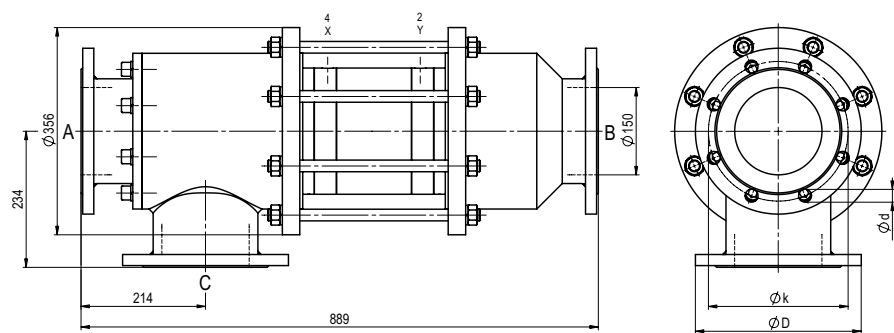
function: **NC**  
closed when not energized (A ► B)



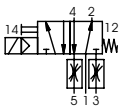
| flanges PN | DIN  | $\varnothing D$ | $\varnothing k$ | $\varnothing d$ |
|------------|------|-----------------|-----------------|-----------------|
| 16         | 2633 | 285             | 240             | 22              |

type **VSV-F 150 DR**

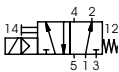
function: **NO**  
open when not energized (A ► B)



**pneumatic actuation (separately)**



5/2-way-pilot valve  
flow rate 700 l/min  
pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1  
flow rate 700 l/min  
pressure range 3-10 bar G 1/4

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

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