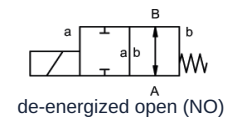
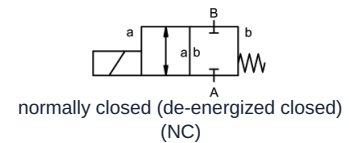
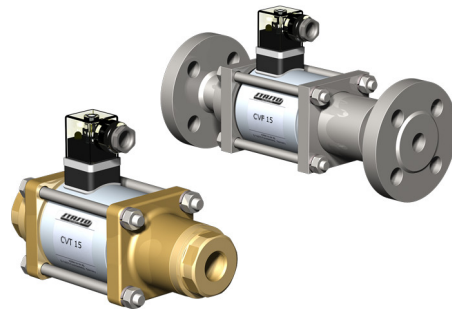


## 2/2-Way coaxial solenoid valve - direct-acting Series CVT/CVF-20



|                     |                                                                                                                                                                                                                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design type         | 2/2-way coaxial solenoid valve, direct-acting, normally closed (de-energized closed) or de-energized open                                                                                                                                                                                                                       |
| Mode of operation   | pressure-relieved, with spring return                                                                                                                                                                                                                                                                                           |
| Nominal size        | DN 20mm                                                                                                                                                                                                                                                                                                                         |
| Connection          | CVT: G3/4"...G11/4"<br>CVF: Flanges PN16/40/100<br>Special flanges and threads on request                                                                                                                                                                                                                                       |
| Pressure range      | 0...16, 0...40, 0...63 or 0...100bar, > 100bar on request                                                                                                                                                                                                                                                                       |
| Back pressure       | P2 > P1, available (max. 16bar)                                                                                                                                                                                                                                                                                                 |
| Materials           | optional brass body, Nickel-plated brass, Nickel-plated steel, Galvanized steel, non-ferrous metal-free or Stainless steel<br>Valve seat Plastic on metal, Sealing materials NBR, PTFE, FKM, CR, EPDM<br>The material specifications of the versions refer exclusively to the valve connection parts in contact with the medium |
| Media               | gaseous - liquid - high-viscosity - gelatinous - contaminated                                                                                                                                                                                                                                                                   |
| Flow direction      | A → B, according to marking, (Special version alternating max. 16bar)                                                                                                                                                                                                                                                           |
| Mounting type       | Installation in rigid piping system, Mounting bracket on request                                                                                                                                                                                                                                                                |
| Mounting position   | any                                                                                                                                                                                                                                                                                                                             |
| Vacuum Leakage rate | < 10 <sup>-6</sup> mbar*l*s <sup>-1</sup>                                                                                                                                                                                                                                                                                       |
| Kv value            | 7,4m <sup>3</sup> /h                                                                                                                                                                                                                                                                                                            |
| Switching cycles    | 150/min.                                                                                                                                                                                                                                                                                                                        |
| Switching time      | ON 110ms, CLOSED 110ms                                                                                                                                                                                                                                                                                                          |
| Medium temperature  | -20...+110°C (Special version -40...+160°C)                                                                                                                                                                                                                                                                                     |
| Ambient temperature | -20...+80°C                                                                                                                                                                                                                                                                                                                     |
| Approvals           | on request LR/GL/EN10204                                                                                                                                                                                                                                                                                                        |
| Weight              | CVT 5,5kg, CVF 7,5kg                                                                                                                                                                                                                                                                                                            |
| Options             | Vacuum tests with certificate, Limit switch inductive (Normally closed (NC) PNP- Icomatic/Balluff), Limit switch inductive NAMUR (+ Switching amplifier), Limit switch mechanical (Changeover contact), Version ATEX, cushioned closing, Manual emergency override, Version TÜV, Version DVGW                                   |

|                  |                                                             |
|------------------|-------------------------------------------------------------|
| Voltage type     | AC and DC voltage                                           |
| Standard voltage | 230VAC/40-60Hz, 24VDC, Permissible voltage fluctuation ±10% |
| Special voltages | on request                                                  |



|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solenoid system      | DC DC solenoid, AC DC solenoid with integrated rectifier (above 100°C with separate rectifier)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Insulation class     | H 180°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Current consumption  | N-coil 24VDC 1,56A, 230VAC 0,16A, H-coil 24VDC 2,24A, 230VAC 0,28A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Duty cycle           | 100% duty cycle (continuous operation)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Degree of protection | IP65 according to EN 60529 with correctly mounted device connector (protection against dust ingress and water jets)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Scope of delivery    | incl. device socket according to EN175301-803 Form A (formerly DIN43650)-Cable entry M16x1,5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| optional             | Device connector according to DESINA, connector according to vdma, Terminal box M16x1,5 on request                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Additional equipment | Illuminated connector with varistor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ordering information | Nominal size, Connection, Function NC/NO, Operating pressure, Flow rate, Medium, Medium temperature, Ambient temperature, Rated voltage, Rated voltage Limit switch                                                                                                                                                                                                                                                                                                                                                                                                         |
| Application note     | The technical design of the valves is media- and application-specific, which may result in deviations from the general specifications stated in the data sheet with regard to version, sealing materials and characteristic values. In the event of inaccurate or incomplete ordering information or application data, there is a risk of incorrect technical sizing of the valves for the intended application purpose. This may result in the physical and/or chemical properties of the materials or seals used being insufficient for the intended application purpose. |

### Dimensions

| Installation lengths                                                                                               | L1  | L2  | L3  |
|--------------------------------------------------------------------------------------------------------------------|-----|-----|-----|
| Standard, ATEX Zones 2, 22                                                                                         | 216 | 148 | 269 |
| ATEX Zones 1, 21                                                                                                   | 215 | 158 | 269 |
| Standard, ATEX Zones 2, 22<br>with 1/2 inductive limit switches                                                    | 259 | 192 | 313 |
| ATEX Zones 1, 21<br>with 1/2 inductive limit switches                                                              | 259 | 202 | 313 |
| Standard, ATEX Zones 2, 22<br>Manual emergency actuation version<br>(Hd)<br>Hood with 1/2 inductive limit switches | 259 | 192 | 313 |
| ATEX Zones 1, 21<br>Manual emergency actuation version<br>(Hd)<br>Hood with 1/2 inductive limit switches           | 259 | 202 | 313 |
| with mechanical limit switches                                                                                     | 259 | 192 | 313 |

| Flange PN | DIN       | ØD  | Øk | Ød |
|-----------|-----------|-----|----|----|
| 16        | EN 1092-1 | 105 | 75 | 14 |
| 40        | EN 1092-1 | 105 | 75 | 14 |
| 100       | EN 1092-1 | 130 | 90 | 18 |

Mounting brackets must be ordered separately

### Electrical connections

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| M12x1 DESINA / VDMA                                                                 | DIN EN 175301-803                                                                   | Terminal box                                                                         | Form A connector<br>DIN EN 175301-803                                                 |

## Limit switch



Icomatic Plastic version  
M12x1, DC 10 - 60V  
AC 15 - 250V  
-25...+85°C



Balluff Metal version  
M12x1, DC 10 - 30V  
-25...+70°C



Honeywell  
Changeover contact

Illustrations non-binding

Design, dimensional and material changes reserved

[Armatures](#) / [Special armatures](#) / [Coaxial valves](#) / [2/2-way-coaxial solenoid valves Series CVT.../CVF...](#) / [\[CVT-20...\] 2/2-way-coaxial solenoid valves CVT-20...](#)

