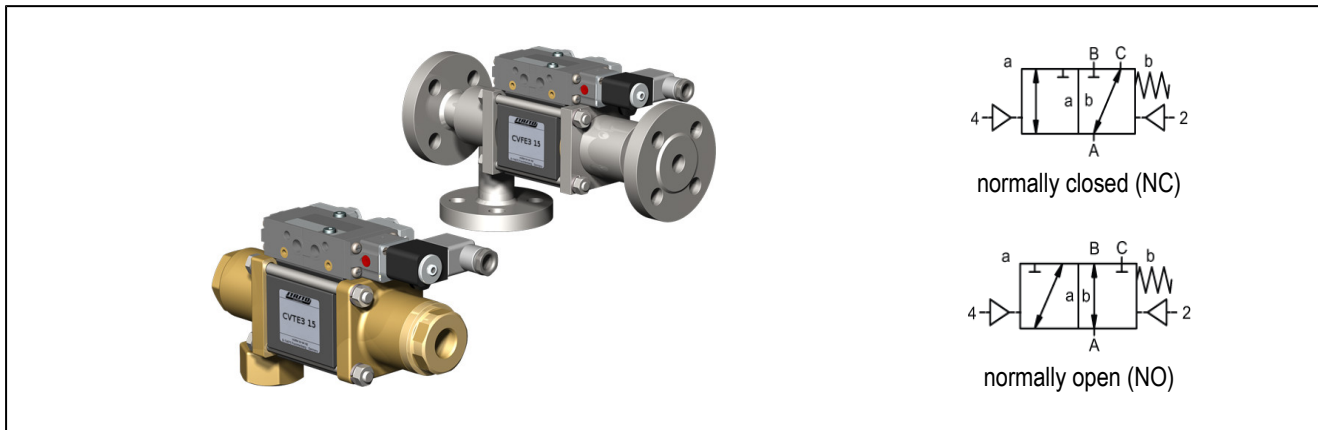


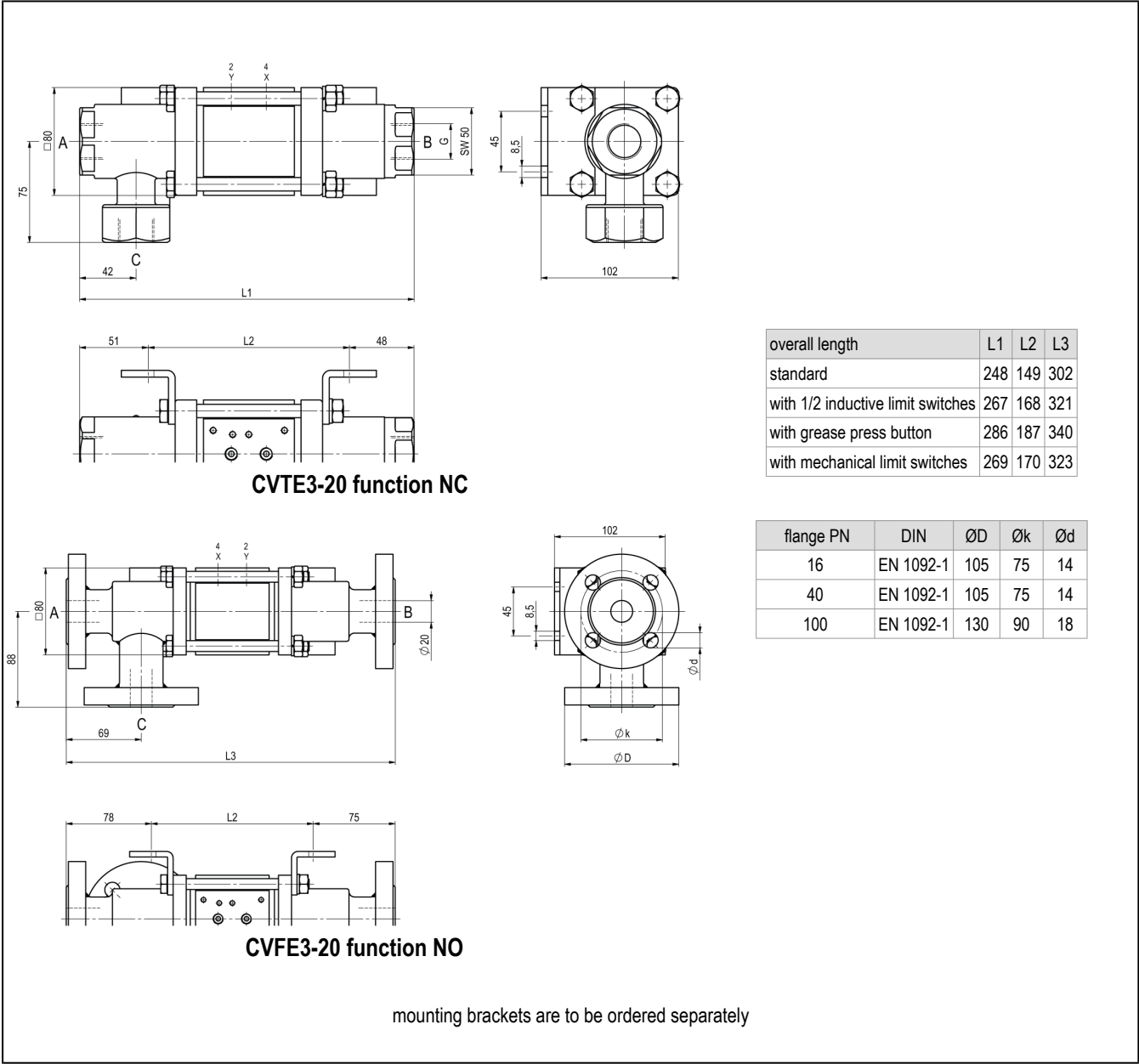
## 3/2-way coaxial valve - externally controlled, DN20 series CVTE3/CVFE3-20



|                           |                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type designation          | CVTE3-20, CVFE3-20, with pilot valve CVTE3-P-20, CVFE3-P-20                                                                                                                                                                                                                                                                       |
| design                    | 3/2-way-coaxial valve, externally controlled, normally closed or normally open                                                                                                                                                                                                                                                    |
| mode of operation         | pressure balanced, with spring return, not free of overlapping                                                                                                                                                                                                                                                                    |
| nominal diameter          | DN 20mm                                                                                                                                                                                                                                                                                                                           |
| connection                | CVTE3: G3/4"...G11/4", CVFE3: flange PN16/40/100, special flanges and -threads on request                                                                                                                                                                                                                                         |
| pressure range            | 0-16, 0-40, 0-64 or 0-100bar, A → B max. 100bar / B → A max. 16bar / A → C max. 100bar / C → A max. 100bar                                                                                                                                                                                                                        |
| back pressure             | P2 > P1, see pressure range                                                                                                                                                                                                                                                                                                       |
| materials                 | optional body brass, nickel plated brass, steel nickel plated, zinc plated steel, nonferrous free or stainless steel<br>valve seat plastic on metal, sealing materials PTFE, NBR, FPM, CR, EPDM<br>the indications of material of the remarks exclusively refer to the valve connection parts coming into contact with the medium |
| media                     | gaseous - liquid - contaminated - highly viscous - gelatinous - pasty                                                                                                                                                                                                                                                             |
| flow direction            | see pressure range                                                                                                                                                                                                                                                                                                                |
| type of fixing            | installed into rigid pipework, mounting bracket on request                                                                                                                                                                                                                                                                        |
| mounting position         | any                                                                                                                                                                                                                                                                                                                               |
| vacuum leakage rate       | $< 10^{-6} \text{ mbar} \cdot \text{l} \cdot \text{s}^{-1}$                                                                                                                                                                                                                                                                       |
| kv value                  | 8,3m³/h                                                                                                                                                                                                                                                                                                                           |
| operations                | 200/min.                                                                                                                                                                                                                                                                                                                          |
| switching time            | open 50-3000ms, close 50-3000ms                                                                                                                                                                                                                                                                                                   |
| damping                   | open/close: by throttling the pilot valve                                                                                                                                                                                                                                                                                         |
| medium temperature        | with flanged pilot valve to +60°C (pilot valve outside of temperature range of max. medium-temperature 160°C)                                                                                                                                                                                                                     |
| ambient temperature       | with flanged pilot valve to +50°C                                                                                                                                                                                                                                                                                                 |
| manual emergency override | via pilot valve                                                                                                                                                                                                                                                                                                                   |
| certifications            | on request LR/GL/EN10204                                                                                                                                                                                                                                                                                                          |
| weight                    | CVTE3 5,8kg, CVFE3 7,2kg                                                                                                                                                                                                                                                                                                          |
| options                   | vacuum-test with certificate, limit switch inductive (NO contact PNP- Icomatic/Balluf), limit switch inductive NAMUR (+ switch amplifier), limit switch mechanical (change-over contact), purge connections, drain connections                                                                                                    |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type of current                 | AC and DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| standard voltage                | 230V/40-60Hz, 24VDC, acceptable voltage tolerance $\pm 10\%$                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| special voltage                 | on request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| power consumption               | DC: 4,8W (2,5W on request), AC: inrush power 11,0VA, holding power 8,5VA                                                                                                                                                                                                                                                                                                                                                                                                                      |
| duty cycle                      | 100% (continuous operation)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| protection class                | IP65 (IP54) according to DIN 40050 with correctly mounted connector (protection against the penetration of dust and jet water)                                                                                                                                                                                                                                                                                                                                                                |
| scope of supply                 | with connector acc. to EN175301-803-form B (previous DIN43650) respectively industrial form - cable inlet M16x1,5                                                                                                                                                                                                                                                                                                                                                                             |
| optional                        | connector acc. to DESINA, connector acc. to VDMA                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| additional features             | connector with integrated LED and VDR                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| explosion protection            | Eex m II T5, power consumption 24VDC: 3,25W, 230VAC: 2,90W                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>pneumatically controlled</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| control pressure range          | 4-10bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| air requirement                 | 11,0cm <sup>3</sup> /stroke                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| switching speed                 | main valve can be adjusted by throttles on the pilot valve                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| control                         | preferably via a 5/2-way pilot valve                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| connection diagramme            | co-ax/NAMUR, (ISO 1 on request)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| control ports                   | 2/4: G1/8" (G1/4" on request)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>hydraulically controlled</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| control pressure range          | 10-30bar/30-60bar                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| control                         | preferably via a 4/2-way pilot valve                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| control ports                   | X/Y: G1/4" (NPT 1/4 on request)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| order data                      | nominal diameter, connection, NC/NO function, operating pressure, flow rate, medium, medium temperature, ambient temperature, nominal voltage, nominal voltage limit switch, control, pressure connection A, B, or C                                                                                                                                                                                                                                                                          |
| direction for use               | the valves technical design is based on media and application, which may lead to deviations from the general information on the data sheet in terms of design, sealing materials and characteristics. if order or application information is inexact or incomplete, there is a risk of the incorrect design of valves for the intended use. This can have the effect that the physical and / or chemical properties of the used materials or seals for the intended purpose are insufficient. |

dimensions



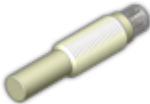
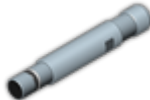
pilot valves

|                                                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>pilot valve ABS56<br/>5/2-way valve NAMUR, electro-pneumatic,<br/>G1/4, with exhaust throttle,<br/>p = 4 - 10bar</p> |  <p>pilot valve<br/>5/2-way valve NAMUR, electro-pneumatic,<br/>G1/8, with exhaust throttle,<br/>p = 4 - 10bar</p> |  <p>pilot valve<br/>5/2-way valve ISO 1, electro-pneumatic,<br/>G1/4, p = 4 - 10bar</p> |  <p>pilot valve<br/>5/2-way valve co-ax, electro-pneumatic,<br/>G1/4, p = 4 - 10bar</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## electrical connection

|                                                                                                                               |                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>electrical connection<br/>coil M12x1</p> |  <p>electrical connection<br/>B type connector DIN EN 175301-803<br/>respectively industrial form</p> |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## limit switch

|                                                                                                                                                                          |                                                                                                                                               |                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|  <p>Icomatic plastic design<br/>M12x1, DC 10 - 60V<br/>AC 15 - 250V<br/>-25...+85°C</p> |  <p>Balluff metal<br/>M12x1, DC 10 - 30V<br/>-25...+70°C</p> |  <p>Honeywell<br/>change-over contact</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|

illustrations are for information only and are non-binding  
all designs, configurations, measurements and materials are subject to change without prior notice