

Three views of a vertical stainless steel pipe assembly. Each view shows a handwheel valve at the top, a vertical pipe section with a flange, and a 45-degree elbow at the bottom. The elbow has a green label with the text '45°' and '1/2"'. The pipe has a green label with the text '1/2"'. The handwheel valve has a green label with the text '1/2"'. The pipe is made of stainless steel and has a polished finish.

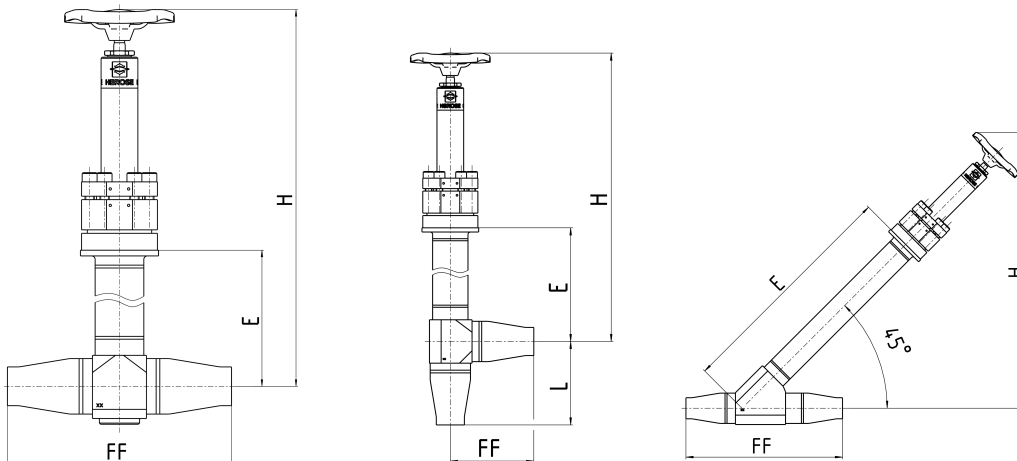
Technical drawing of a mechanical assembly in cross-section, labeled with numbers 1 through 21 and letters B, G, M, a, RA. The drawing shows a vertical shaft with various components including a top flange (20), a central shaft (5), and a bottom flange (1). Dimensions B, G, M, a, and RA are indicated.



Edition 2025-04



### Body types



### Straight body

| Nominal size      | DN                | 10   | 15   | 20   | 25   | 32   | 40   | 50    |
|-------------------|-------------------|------|------|------|------|------|------|-------|
| Face-to-face dim. | FF                | 150  | 150  | 195  | 195  | 235  | 235  | 280   |
| Height            | H                 | 535  | 535  | 535  | 535  | 690  | 690  | 775   |
| Length            | E                 | 325  | 325  | 325  | 325  | 445  | 445  | 525   |
| Kvs-value         | m <sup>3</sup> /h | 3.4  | 4.4  | 9.8  | 12.3 | 25.8 | 28.3 | 44.0  |
| Kvs-value*        | m <sup>3</sup> /h | 3.4  | 4.4  | 9.5  | 12.0 | 25.8 | 28.3 | 44.0  |
| Cv-value          | gal/min           | 4.0  | 5.1  | 11.4 | 14.3 | 30.0 | 32.9 | 51.2  |
| Cv-value*         | gal/min           | 4.0  | 5.1  | 11.0 | 14.0 | 30.0 | 32.9 | 51.2  |
| Weight            | ca. kg            | 3.71 | 3.73 | 4.49 | 4.53 | 9.30 | 9.33 | 13.13 |

\* with bellow

### Body angle type

| Nominal size      | DN                | 10   | 15   | 20   | 25   | 32   | 40   | 50    |
|-------------------|-------------------|------|------|------|------|------|------|-------|
| Face-to-face dim. | FF                | 80   | 80   | 100  | 100  | 120  | 120  | 140   |
| Height            | H                 | 535  | 535  | 535  | 535  | 690  | 690  | 775   |
| Length            | E                 | 325  | 325  | 325  | 325  | 445  | 445  | 525   |
| Length            | L                 | 80   | 80   | 100  | 100  | 120  | 120  | 140   |
| Kvs-value         | m <sup>3</sup> /h | 4.7  | 5.7  | 19.8 | 22.3 | 41.1 | 43.6 | 80.0  |
| Kvs-value*        | m <sup>3</sup> /h | 4.7  | 5.7  | 16.5 | 19.0 | 33.3 | 35.8 | 63.0  |
| Cv-value          | gal/min           | 5.5  | 6.6  | 23.0 | 25.9 | 47.8 | 50.7 | 93.0  |
| Cv-value*         | gal/min           | 5.5  | 6.6  | 19.2 | 22.1 | 38.7 | 41.6 | 73.3  |
| Weight            | ca. kg            | 3.69 | 3.70 | 4.41 | 4.45 | 8.91 | 8.94 | 12.73 |

\* with bellow

### Body Y type

| Nominal size      | DN                | 10   | 15   | 20   | 25   | 32   | 40   | 50    |
|-------------------|-------------------|------|------|------|------|------|------|-------|
| Face-to-face dim. | FF                | 185  | 185  | 250  | 250  | 285  | 285  | 340   |
| Height            | H                 | 430  | 430  | 440  | 440  | 570  | 570  | 640   |
| Length            | E                 | 365  | 365  | 370  | 370  | 505  | 505  | 600   |
| Kvs-value         | m <sup>3</sup> /h | 4.2  | 5.2  | 11.9 | 14.4 | 34.4 | 36.9 | 69.8  |
| Kvs-value*        | m <sup>3</sup> /h | 4.2  | 5.2  | 7.7  | 10.2 | 28.6 | 31.1 | 35.0  |
| Cv-value          | gal/min           | 4.9  | 6.0  | 13.8 | 16.7 | 40.0 | 42.9 | 81.2  |
| Cv-value*         | gal/min           | 4.9  | 6.0  | 9.0  | 11.9 | 33.3 | 36.2 | 40.7  |
| Weight            | ca. kg            | 3.70 | 3.71 | 4.39 | 4.42 | 9.22 | 9.18 | 12.62 |

\* with bellow

# Globe Valves

## Type 11C01 - Globe Valve FullX



### Top-Entry Cryogenic-Globe Valves, casted body, up to PN50 A002 series

Stainless steel body and topwork,  
"live loaded" gland packing  
"cleaned and degreased for oxygen service"

Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

#### Available options:

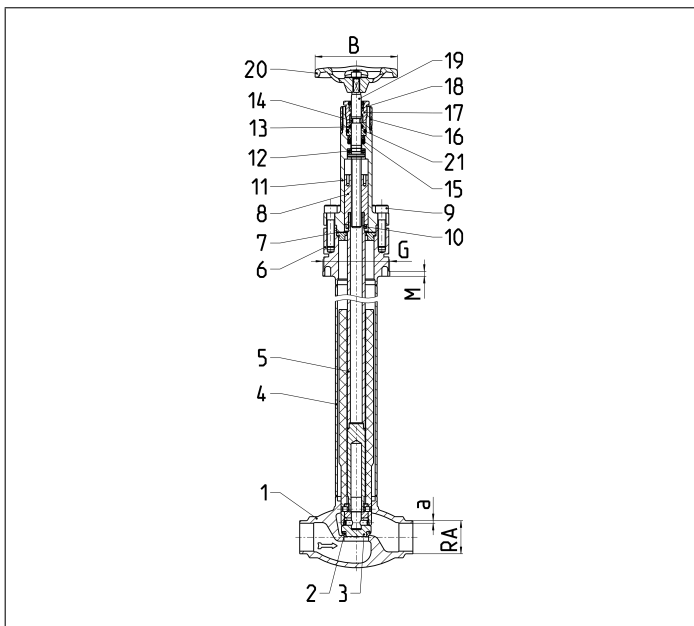
- Bellow, top position
- Bellow, bottom position
- Bellow monitoring
- Check function
- Control function
- Throttle function
- Purge port
- on request only:
- Further connection types

#### Applications:

Approved for hydrogen, air gases, vapours and cryogenic liquefied gases incl. LNG.  
Working temperature: -255°C / -427°F (18K) up to +80°C / +176°F (353K)



| Materials          | DIN EN                     | ASTM              |
|--------------------|----------------------------|-------------------|
| 1 Body             | 1.4409                     | A 351 CF3M        |
| 2 Valve Seal       | PCTFE                      |                   |
| 3 Disc             | 1.4571                     | A 313 Grade 316TI |
| 4 Tube             | 1.4571                     | A 313 Grade 316TI |
| 5 Hollow stem      | 1.4571                     | A 313 Grade 316TI |
| 6 Flange           | 1.4404                     | A 276 Grade 316L  |
| 7 Bonnet gasket    | PTFE / Elektrocarbon (25%) |                   |
| 8 Bushing          | CW452K                     | B 159 UNS C51900  |
| 9 Bolt             | A4-70                      | A 194 B8M         |
| 10 Nut             | 1.4404                     | A 276 Grade 316L  |
| 11 Head piece      | 1.4404                     | A 276 Grade 316L  |
| 12 Ball bearing    | 1.4125                     | 440C              |
| 13 Sliding bushing | CW452K                     | B 159 UNS C51900  |
| 14 Stem ring       | CW452K                     | B 159 UNS C51900  |
| 15 Gasket          | PTFE / Elektrocarbon (25%) |                   |
| 16 Cap             | PVC                        |                   |
| 17 Gland bolt      | 1.4404                     | A 276 Grade 316L  |
| 18 Wiper           | PEEK                       |                   |
| 19 Stem            | 1.4404                     | A 276 Grade 316L  |
| 20 Handwheel       | 1.4409                     | A 351 CF3M        |
| 21 O-ring          | FPM (VITON)                |                   |

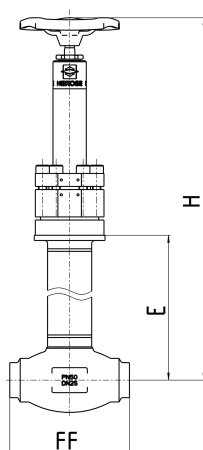


| Nominal size            | DN | 10   | 15   | 20   | 25   | 32   | 40   | 50   |
|-------------------------|----|------|------|------|------|------|------|------|
| Collar-Ø                | G  | 68.0 | 68.0 | 68.0 | 68.0 | 84.4 | 84.4 | 100  |
| Length                  | M  | 5    | 5    | 5    | 5    | 5    | 5    | 5    |
| Handwheel-Ø             | B  | 100  | 100  | 100  | 100  | 125  | 125  | 125  |
| Outside pipe-Ø ISO      | Ra | 13.5 | 21.3 | 26.9 | 33.7 | 42.4 | 48.3 | 60.3 |
| Wall thickness pipe ISO | a  | 1.6  | 2.0  | 2.0  | 2.6  | 2.6  | 2.6  | 2.6  |
| Pipe-Ø ASTM A312        |    | S10  |      |      |      |      |      |      |

Dimensions in mm.



### Body types



### Straight body

| Nominal size      | DN                | 10   | 15   | 20   | 25   | 32   | 40   | 50    |
|-------------------|-------------------|------|------|------|------|------|------|-------|
| Face-to-face dim. | FF                | 85   | 85   | 115  | 115  | 130  | 130  | 155   |
| Height            | H                 | 535  | 535  | 535  | 535  | 690  | 690  | 775   |
| Length            | E                 | 325  | 325  | 325  | 325  | 445  | 445  | 525   |
| Kvs-value         | m <sup>3</sup> /h | 2.4  | 3.8  | 10.0 | 13.3 | 16.0 | 25.0 | 46.0  |
| Kvs-value*        | m <sup>3</sup> /h | 3.4  | 4.4  | 9.5  | 12.0 | 25.8 | 28.3 | 44.0  |
| Cv-value          | gal/min           | 2.8  | 4.4  | 11.6 | 15.4 | 18.5 | 28.9 | 53.2  |
| Cv-value*         | gal/min           | 4.0  | 5.1  | 11.0 | 14.0 | 30.0 | 32.9 | 51.2  |
| Weight            | ca. kg            | 3.70 | 3.71 | 4.39 | 4.42 | 9.22 | 9.18 | 12.62 |

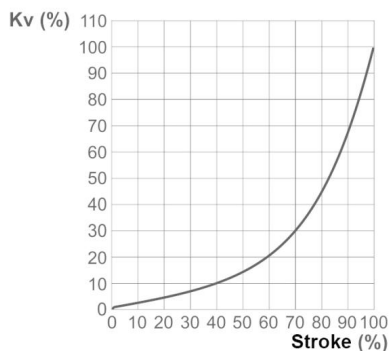
\* with bellow

**Flow coefficient for Control Valves - Control characteristic equal percentage Kvs-Value in m<sup>3</sup>/h, Cv-Value in gal/min. These figures refer to measurements for the flow direction.**

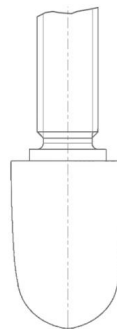
### Type 11C01 control function - A001 and A002 series

| DN | Kvs<br>[m <sup>3</sup> /h] | Cv<br>[gal/min] | Stroke<br>[mm] |
|----|----------------------------|-----------------|----------------|
| 10 | 1.0                        | 1.2             | 10             |
| 15 | 3.5                        | 4.1             | 10             |
| 20 | 4.0                        | 4.7             | 10             |
| 25 | 6.3                        | 7.3             | 10             |
| 32 | 10.0                       | 11.6            | 20             |
| 40 | 19.0                       | 22.1            | 20             |
| 50 | 30.0                       | 34.9            | 20             |

Ideal inherent equal percentage characteristic curve acc. to DIN IEC 60534 Part 2-4



Sample drawing cone, control characteristic equal percentage





### Configurable options

For configurable types, the HEROSE part number consists as follows:

| Type   | Series | Dimension code | Option codes    |
|--------|--------|----------------|-----------------|
| 11C01. | A001.  | 0250.          | CBQ-KCZ-YWF-CBG |
| 1      | 2      | 3              | 4 up to 7       |

| Selection of the type |                                                                               | Type  |                   |
|-----------------------|-------------------------------------------------------------------------------|-------|-------------------|
| 1                     | Product group                                                                 |       |                   |
|                       | <table><tr><th>Type</th><td>Globe Valve FullX</td><td>11C01</td></tr></table> | Type  | Globe Valve FullX |
| Type                  | Globe Valve FullX                                                             | 11C01 |                   |

|   |                         |                   |      |                               |        |
|---|-------------------------|-------------------|------|-------------------------------|--------|
| 2 | Selection of the series |                   |      |                               | Series |
|   | Series                  | forged steel body | PN63 | manual (handwheel)            | A001   |
|   |                         | casted body       | PN50 | actuated (diaphragm / piston) | A002   |

| Selection of the nominal size |               | Dimension code |      |
|-------------------------------|---------------|----------------|------|
| 3                             | Nominal sizes | DN10           | 0100 |
|                               |               | DN15           | 0150 |
|                               |               | DN20           | 0200 |
|                               |               | DN25           | 0250 |
|                               |               | DN32           | 0320 |
|                               |               | DN40           | 0400 |
|                               |               | DN50           | 0500 |

|   |            |                 |     |
|---|------------|-----------------|-----|
| 4 | Body types | Body angle type | CBQ |
|   |            | Straight body   | HJC |
|   |            | Body Y type     | PYU |

|   |               |                            |     |
|---|---------------|----------------------------|-----|
| 5 | Disc function | lockable function          | KCZ |
|   |               | lockable check function    | JDA |
|   |               | lockable control function  | SWX |
|   |               | lockable throttle function | WVV |

| 6 | Bellow options | Bellow       | Bellow position | Bellow monitoring | Dimension bellow monitoring | Series |
|---|----------------|--------------|-----------------|-------------------|-----------------------------|--------|
|   |                | not selected | not selected    | not selected      | not selected                | LYV    |
|   |                | selected     | top             | not selected      | not selected                | MUR    |
|   |                | selected     | bottom          | not selected      | not selected                | FYX    |
|   |                | selected     | top             | selected          | DIN EN ISO 8434-1-WDS-S6    | GXD    |
|   |                | selected     | bottom          | selected          | DIN EN ISO 8434-1-WDS-S6    | XHA    |

|   |            |                |     |
|---|------------|----------------|-----|
| 7 | Purge port | w/o purge port | CBG |
|   |            | with NPT 1/8"  | EPH |
|   |            | with VCR 1/4"  | ANK |