

PFA ball valve type FK13



description:

Flange ball valve spheroidal graphite cast iron with steel handle, ball in PFA. Ideal for pipeline systems.

features:

- suitable for aggressive **gaseous & liquid media**
- one-piece PFA lining
- the integrated stand
- TA-Luft
- Blowout proof selector shaft
- Epoxy coating according to ISO 12944-5 C2M
- Leakage-free operation due to large ball sealing rings
- Patented technology
- No deposits or residues from medium

connection:

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150, DN200

construction:

full port design

pressure:

0 – 16 bar

temperature

-20°C bis +200°C

design:

body:

lining:

face-to-face:

ball material:

sealing surface:

flange connection:

top flange:

pressure test:

Two-piece ball valve with full port design spheroidal graphite cast iron 5.3103 epoxy coating color blue (RAL 5005)

PFA

EN 558, Row 1

ASME B16.10 Class 150, Row 18/19

PFA

DIN EN 1092-1

acc. to EN 1092-1 PN10-16 (DN15 to DN150)

acc. to EN 1092-1 PN10 (DN200)

ASME B16.5, Class 150

DIN ISO 5211

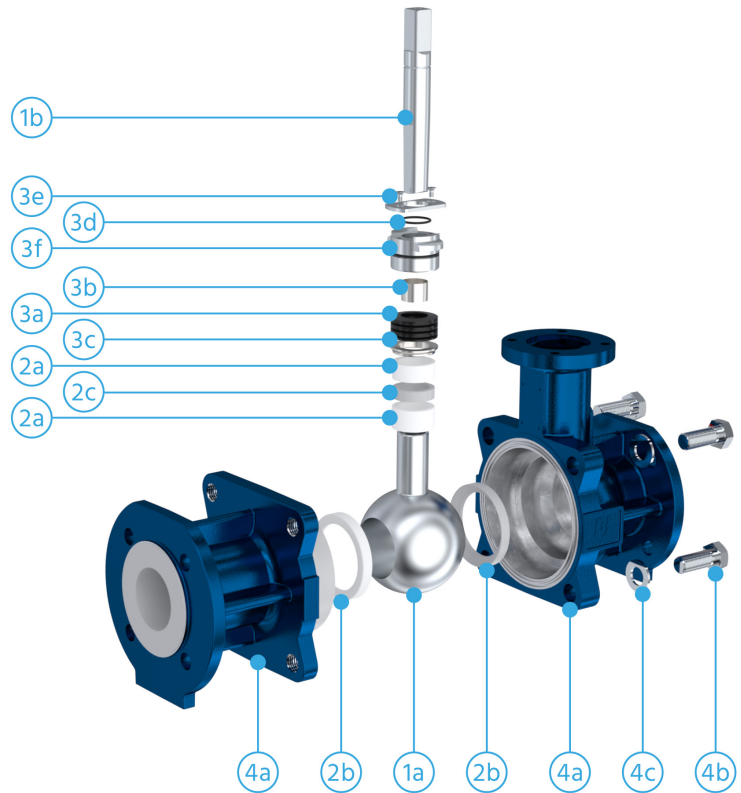
EN 12266-1

Standards:

- Top flange acc. to ISO 5211
- PED 2014/68/EU
- Pressure test acc. to EN12266-1
- Face-to-face length acc. to EN558, Row 1
- Face-to-face length acc. to ASME B16.10, Class 150, Row 18/19
- TA-Luft, ISO 15848-1
- FDA 1935/2004
- ATEX 2014/34/EU

Material description:

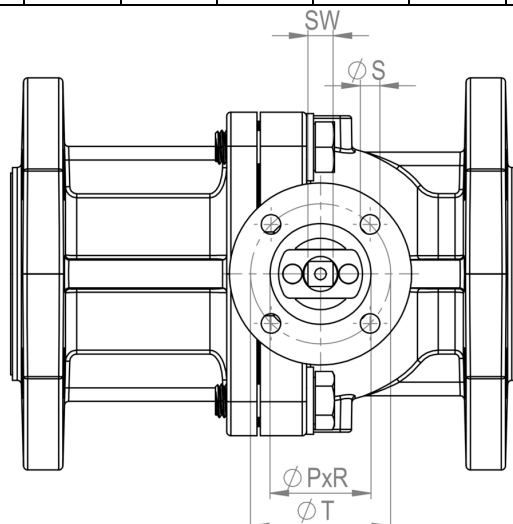
| no. | part | material |
|-----|------------------------|-----------------|
| 1a | ball | PFA |
| 1b | stem | 1.4404 |
| 2a | chevron seals | PTFE |
| 2b | ball seals | PTFE |
| 2c | spacer | PTFE |
| 3a | belleville springs | carbon steel |
| 3b | shaft bushing | PTFE / steel |
| 3c | pusher | 1.4301 |
| 3d | spring-lock washer | 1.4301 |
| 3e | locking plate & screws | 1.4404 |
| 3f | bayonet coupling | 1.4404 |
| 4a | valve body | 5.3103 |
| 4b | body bolts | stainless steel |
| 4c | washers | stainless steel |



Dimensions:

Stem end:

| DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 150 | 200 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SW | 9 | 9 | 9 | 9 | 17 | 17 | 22 | 22 | 22 | 27 | 27 |
| øU | 12 | 12 | 12 | 12 | 22 | 22 | 28 | 28 | 28 | 36 | 36 |
| ISO | F05 | F05 | F05 | F05 | F07 | F07 | F10 | F10 | F10 | F12 | F12 |
| øT | 50 | 50 | 50 | 50 | 70 | 70 | 102 | 102 | 102 | 125 | 125 |
| øS | 4x7 | 4x7 | 4x7 | 4x7 | 4x9 | 4x9 | 4x11 | 4x11 | 4x11 | 4x13 | 4x13 |
| øPxR | 36x3.5 | 36x3.5 | 36x3.5 | 36x3.5 | 56x3.5 | 56x3.5 | 71x3.5 | 71x3.5 | 71x3.5 | 86x3.5 | 86x3.5 |

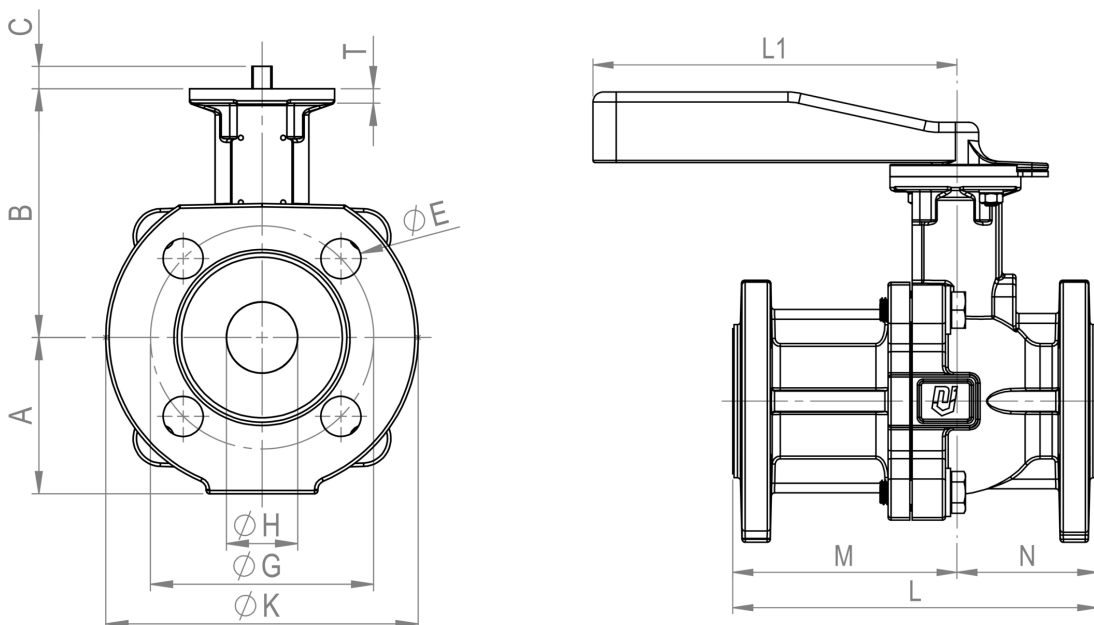


Dimensions:

PN10-16*

| DN [inch] | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 5" | 6" | 8" |
|------------------|------|-------|-------|--------|--------|------|--------|------|------|------|-------|------|
| øH | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| L | 130 | 150 | 160 | 180 | 200 | 230 | 290 | 310 | 350 | 400 | 480 | 600 |
| øG | 65 | 75 | 85 | 100 | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295 |
| øE | 4x14 | 4x14 | 4x18 | 4x18 | 4x18 | 4x18 | 8x18 | 8x18 | 8x18 | 8x18 | 8x22 | 8x22 |
| øK | 95 | 105 | 115 | 140 | 150 | 165 | 185 | 200 | 220 | 250 | 285 | 340 |
| M | 76 | 91 | 98.5 | - | 121 | 144 | - | 185 | 205 | - | 270 | - |
| N | 54 | 59 | 61.5 | - | 79 | 86 | - | 125 | 145 | - | 210 | - |
| A | 50 | 52.5 | 57.5 | - | 75 | 82.5 | - | 105 | 122 | - | 157 | - |
| B | 103 | 105.5 | 107.5 | - | 151.5 | 156 | - | 197 | 214 | - | 281.5 | - |
| C D4 | 10 | 10 | 10 | 10 | 19 | 19 | 24 | 24 | 24 | 24 | 29 | 29 |
| MOT [Nm]3 | 18 | 18 | 18 | 18 | 78 | 78 | 120 | 120 | 168 | 204 | 240 | 360 |
| MAST [Nm] | 50 | 50 | 50 | 50 | 166 | 166 | 359 | 359 | 359 | 359 | 665 | 665 |
| kg | 3.9 | 4.8 | 5.4 | - | 11.8 | 15.2 | - | 28 | 39.7 | - | 76.7 | - |

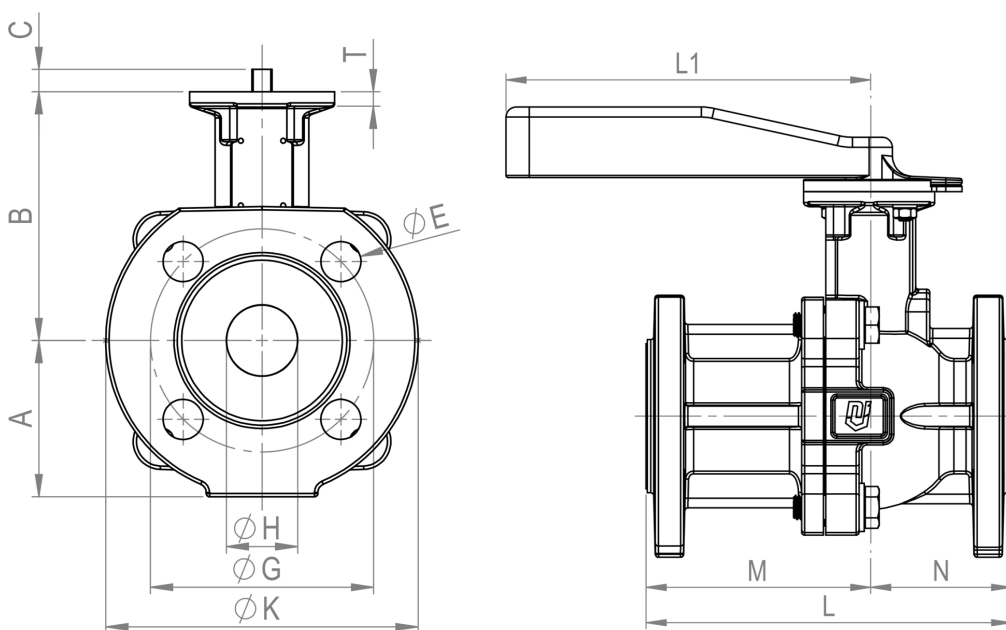
*flange DN200 acc. to EN 1092-1 PN10



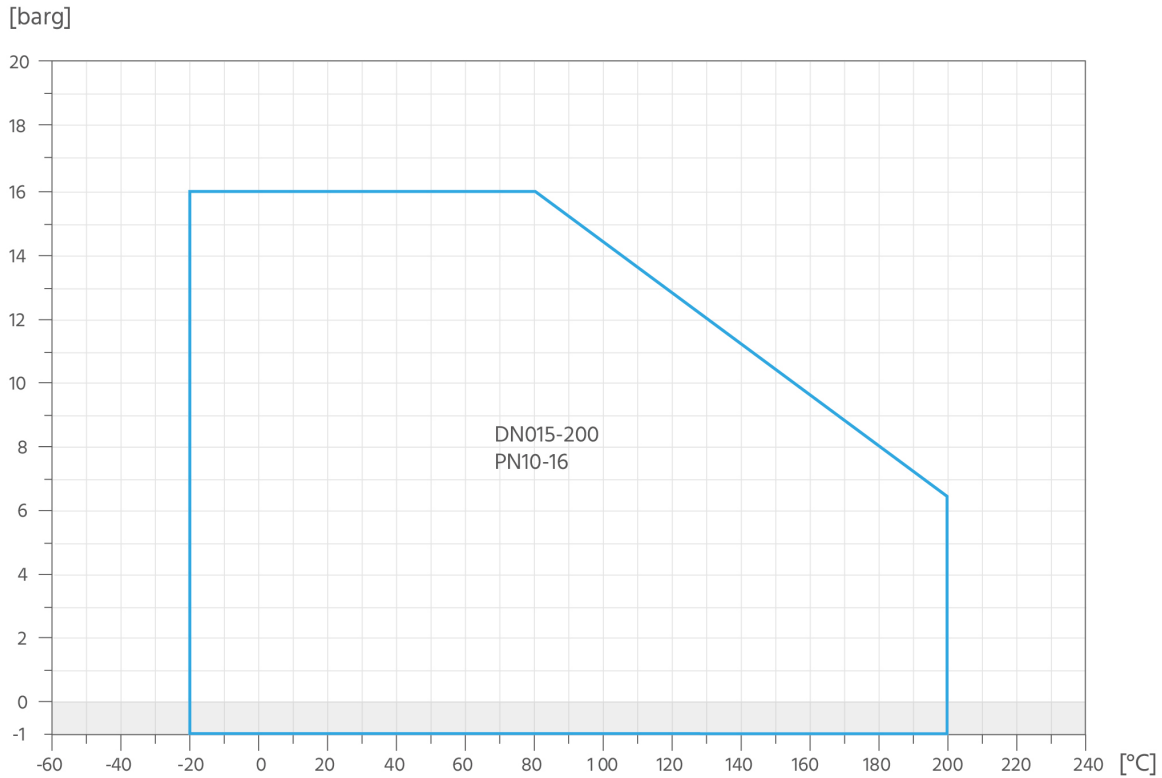
Dimensions:

ANSI

| DN [inch] | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 5" | 6" | 8" |
|-------------------|------------|------------|------------|------------|------------|------------|--------|-------|-------|------------|------------|------------|
| øH | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| L | 108 | 117 | 127 | 140 | 165 | 165 | 190 | 203 | 229 | 210 | 267 | 457 |
| øG | 60.3 | 69.9 | 79.4 | 88.9 | 98.4 | 98.4 | 139.7 | 152.4 | 190.5 | 215.9 | 241.3 | 298.4 |
| øE | 4x 15.9 | 4x 15.9 | 4x 15.9 | 4x 15.9 | 4x 15.9 | 4x 15.9 | 4x 19 | 4x 19 | 8x 19 | 8x 22.2 | 8x 22.2 | 8x 22.2 |
| øK | 90 | 100 | 110 | 115 | 125 | 125 | 180 | 190 | 230 | 255 | 280 | 345 |
| M | 58.5 | 62 | 66.5 | 73 | 86 | 86 | 100 | 104.5 | 117.5 | 109 | 129.5 | 152 |
| N | 49.5 | 55 | 60.5 | 67 | 79 | 79 | 90 | 98.5 | 111.5 | 101 | 137.5 | 140 |
| A | 50 | 52.5 | 57.5 | 61 | 75 | 75 | 95 | 105 | 121 | 135 | 157 | 182 |
| B | 103 | 105.5 | 107.5 | 115 | 151 | 151 | 182 | 197 | 214 | 239 | 281.5 | 285 |
| C D4 | 10 | 10 | 10 | 10 | 19 | 19 | 24 | 24 | 24 | 24 | 29 | 29 |
| MOT [Nm]3 | 40 | 40 | 40 | 32.5 | 208 | 208 | 447 | 447 | 447 | 447 | 878 | 878 |
| MAST [Nm]4 | 50 | 50 | 50 | 24.6 | 166 | 166 | 359 | 359 | 359 | 359 | 665 | 665 |
| kg | 3.5 | 4.1 | 4.8 | | 9.9 | 13.5 | | 25.1 | 35.9 | | 59.9 | |



pressure-temperature diagram:

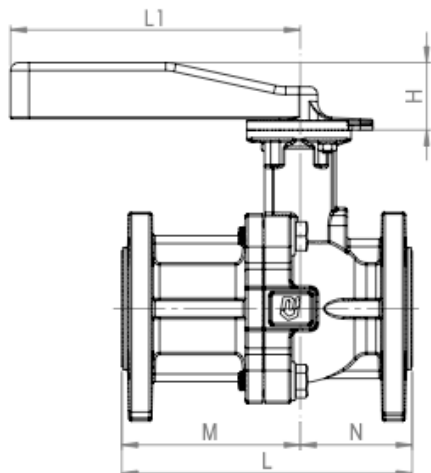


KV-Values [m³/h]:

| opening angle | DN | | | | | | | | | | | |
|---------------|------|-----|------|-----|------|------|-----|-------|-------|------|-------|------|
| | 15 | 20 | 25 | 32* | 40 | 50 | 65* | 80 | 100 | 125* | 150 | 200* |
| 0° | 0 | 0 | 0 | - | 0 | 0 | - | 0 | 0 | - | 0 | - |
| 10° | 0 | 0 | 0 | - | 0 | 0 | - | 0.7 | 0.8 | - | 8.2 | - |
| 20° | 0 | 0 | 0 | - | 0 | 1.3 | - | 5.4 | 11.8 | - | 38.7 | - |
| 30° | 0 | 0 | 0.5 | - | 1.5 | 5.4 | - | 18.3 | 30.3 | - | 87.8 | - |
| 40° | 0.05 | 0.2 | 1.6 | - | 5.2 | 12.2 | - | 37 | 61.3 | - | 158.6 | - |
| 50° | 0.2 | 0.8 | 3.9 | - | 11.4 | 23.3 | - | 66.7 | 107.2 | - | 267.6 | - |
| 60° | 0.7 | 2 | 7.9 | - | 22.2 | 40.8 | - | 112 | 182.7 | - | 429.6 | - |
| 70° | 1.8 | 4 | 13.9 | - | 38 | 65 | - | 170.8 | 284.4 | - | 651.2 | - |
| 80° | 3.4 | 6.1 | 19.2 | - | 51.6 | 85.8 | - | 218.4 | 386 | - | 782.6 | - |
| 90° | 3.8 | 7 | 20.8 | - | 57.3 | 93 | - | 237.3 | 392 | - | 847.2 | - |

*Calculations for these flow rates are pending

Handlever:



| Material | |
|--------------|-----------------|
| grip | stainless steel |
| ratchet disc | stainless steel |

| DN (mm) | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 |
|----------------------|-------|-------|-------|--------|--------|-------|--------|-----|-----|-----|
| DN (inch) | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 5" |
| C_h | 46 | 46 | 46 | 46 | 55 | 55 | 55 | 55 | 55 | 55 |
| Q | 232.5 | 232.5 | 232.5 | 232.5 | 272.5 | 272.5 | 350 | 350 | 350 | 350 |
| V | 65 | 65 | 65 | 65 | 90 | 90 | 125 | 125 | 125 | 125 |
| kg | 1 | 1 | 1 | 1 | 1.5 | 1.5 | 2.7 | 2.7 | 2.7 | 2.7 |

article number:

| Type | Flange | Actuator | Lining | Size |
|-------------|-----------------------------------|---|----------------|---|
| FK13 | 00 – PN10-16* 01 – ANSI | 0 – handlever** 1 – gear box 6 – without | 0 – PFA | 03 – DN15 1/2" 04 – DN20 3/4" 05 – DN25 1" 06 – DN32 1 1/4" 07 – DN40 1 1/2" 08 – DN50 2" 09 – DN65 10 – DN80 11 – DN100 12 – DN125 13 – DN150 14 – DN200 |

example no. FK13010005:

FK13 | **01** | **0** | **0** | **05**

Flange ball valve made of spheroidal graphite cast iron

flange: ANSI
lining: PFA
Size: DN25

* from DN200 flange PN10

**only up to nominal size DN125

Image similar, subject change without notice.