

SECTION 4
Steel ball valves
Reduced bore

BROEN
BALLOMAX®

Designed to last

Steel ball valve - DN 15 - 20, PN 40

Type 61101 / 64101 - Reduced bore



Female x Welding (long weldingend)

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

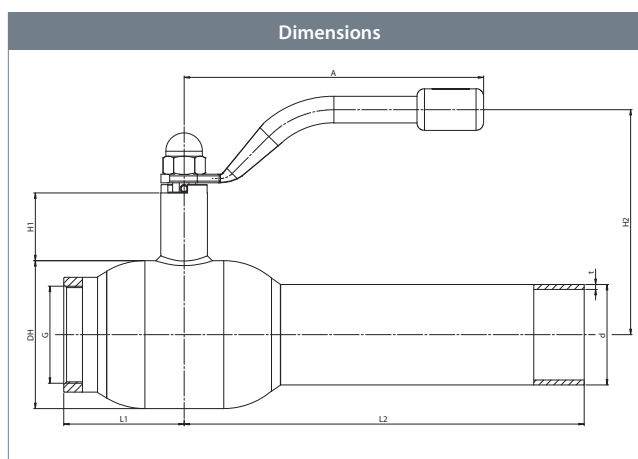
Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|----|-----------------|------|-----|---------------|----------------------|----|----|------|-----|-----|----|-----|-----|
| | | | | | G | DH | L1 | d | t | L2 | H1 | H2 | A |
| 15 | 61101015S391801 | 10 | 8 | 0.7 | ½" | 38 | 33 | 21.3 | 2.0 | 187 | 50 | 116 | 140 |
| 20 | 64101020S667101 | 15 | 15 | 0.8 | ¾" | 42 | 38 | 26.9 | 2.3 | 189 | 47 | 115 | 140 |

Steel ball valve - DN 15 - 20, PN 40

Type 61101 / 64101 - **Reduced bore**



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 3 | Female | Steel - S355J2 / 1.0570 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 21 | Cap nut | Steel - galvanized |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------------------|------------|---|
| | 66050010 000 - yellow | DN 15 - 20 | T-handles in three different colors - yellow, blue and red. Factory fitted T-handle on request. |
| | 66050010 003 - blue | | |
| | 66050010 004 - red | | |
| | 203245 | DN 15 - 20 | ISO-flange. |
| | 66160010 000 | DN 15 - 20 | Hexagon for insertion key. |

Steel ball valve - DN 65 - 150, PN 25

Type 64102 - Reduced bore

Welding × Welding

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN Ballomax® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

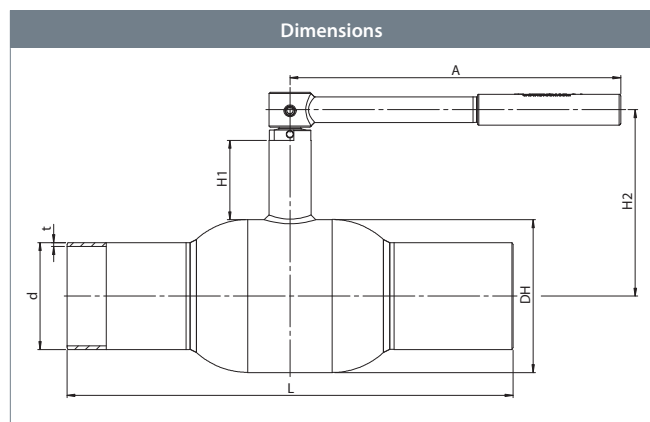
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

ISO-flange can be mounted on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | |
|-----|--------------|------|------|---------------|----------------------|-------|-----|-----|-----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | A |
| 65 | 64102065 010 | 50 | 180 | 5.0 | 108 | 76.1 | 2.9 | 360 | 66 | 144 | 275 |
| 80 | 64102080 010 | 65 | 288 | 6.5 | 127 | 88.9 | 3.2 | 370 | 66 | 154 | 275 |
| 100 | 64102100 010 | 85 | 470 | 9.8 | 152 | 114.3 | 3.6 | 390 | 81 | 193 | 365 |
| 125 | 64102125 010 | 100 | 699 | 12.4 | 178 | 139.7 | 3.6 | 390 | 91 | 211 | 365 |
| 150 | 64102150 010 | 125 | 1046 | 21.1 | 219 | 168.3 | 4.0 | 390 | 101 | 249 | 650 |

Steel ball valve - DN 65 - 150, PN 25

Type 64102 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|------------|-------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |

Steel ball valve - DN 65 - 100, PN 25

Type 64902 - **Reduced bore** - FLOWOPTIMIZED

Welding × Welding

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

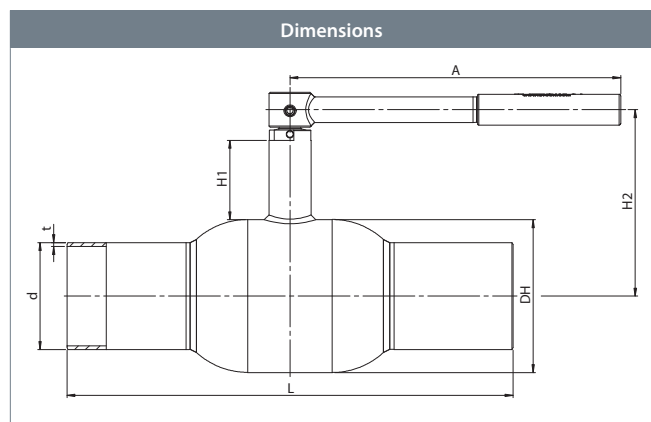
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

ISO-flange can be mounted on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | |
|-----|--------------|------|-----|---------------|----------------------|-------|-----|-----|----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | A |
| 65 | 64902065 010 | 50 | 180 | 5.0 | 108 | 76.1 | 2.9 | 360 | 66 | 144 | 275 |
| 80 | 64902080 010 | 65 | 288 | 6.5 | 127 | 88.9 | 3.2 | 370 | 66 | 154 | 275 |
| 100 | 64902100 010 | 85 | 470 | 9.8 | 152 | 114.3 | 3.6 | 390 | 81 | 193 | 365 |

Steel ball valve - DN 65 - 100, PN 25

Type 64902 - **Reduced bore** - FLOWOPTIMIZED



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|------------|-------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |

Steel ball valve - DN 125 - 200, PN 25

Type 61102 - Reduced bore

Welding × Welding with ISO-flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

The following operating devices are available on request:

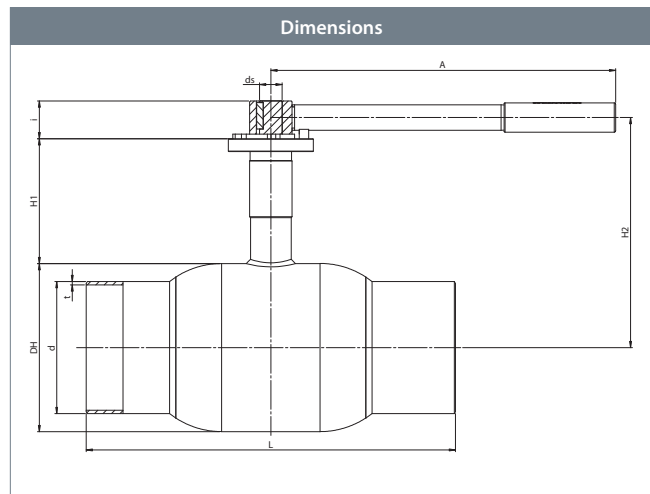
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | | |
|-----|--------------|------|------|---------------|----------------------|-------|-----|-----|-----|-----|----|----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | ds | i | A | ISO |
| 125 | 61102125 010 | 100 | 699 | 14.3 | 178 | 139.7 | 3.6 | 390 | 132 | 221 | 24 | 40 | 365 | F07 |
| 150 | 61102150 010 | 125 | 1046 | 26.0 | 219 | 168.3 | 4.0 | 390 | 135 | 245 | 30 | 50 | 650 | F10 |
| 200 | 61102200 010 | 150 | 1500 | 43.4 | 267 | 219.1 | 4.5 | 390 | 155 | 289 | 30 | 60 | 900 | F12 |

Steel ball valve - DN 125 - 200, PN 25

Type 61102 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2 / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel / 1.4305 / EN 10088-3 |
| | 19 | Stop pin (Unbraco) | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 24 | Pin | Steel - hardenat |
| | 25 | Friction gasket | PTFE 20% Carbon |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600584 | DN 125 | BROEN-Gear. |
| | 600585 | DN 150 | |
| | 600586 | DN 200 | |

Steel ball valve - DN 125 - 200, PN 25

Type 61102 - Reduced bore

Welding × Welding with ISO-flange and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

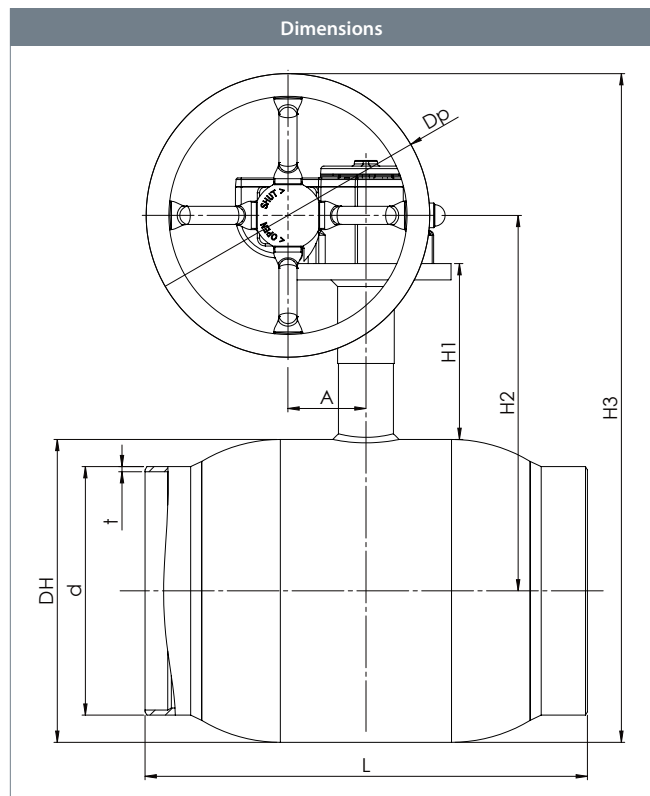
Eco-friendly protection finish against corrosion.

Operation

Optional column extension.

Approvals and certificates

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| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|------|---------------|----------------------|-------|-----|-----|-----|-----|-----|-----|----|
| | | | | | DH | d | t | L | H1 | H2 | H3 | Dp | A |
| 125 | 6110225125 480 | 100 | 699 | 18.8 | 178 | 139.7 | 3.6 | 390 | 132 | 255 | 424 | 160 | 53 |
| 150 | 6110225150 480 | 125 | 1046 | 34.8 | 219 | 168.3 | 4.0 | 390 | 135 | 287 | 522 | 250 | 69 |
| 200 | 6110225200 480 | 150 | 1500 | 52.3 | 267 | 219.1 | 4.5 | 390 | 155 | 331 | 590 | 250 | 69 |

Steel ball valve - DN 125 - 200, PN 25

Type 61102 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|-----------------|--|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 22 | Bearing | Steel - PTFE |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |
| 25 | Friction gasket | PTFE 20% Carbon | |
| 30 | Circlip | Steel | |
| 47 | Gear | - | |

Steel ball valve - DN 250 - 500, PN 25

Type 85002 - Reduced bore

Welding × Welding with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

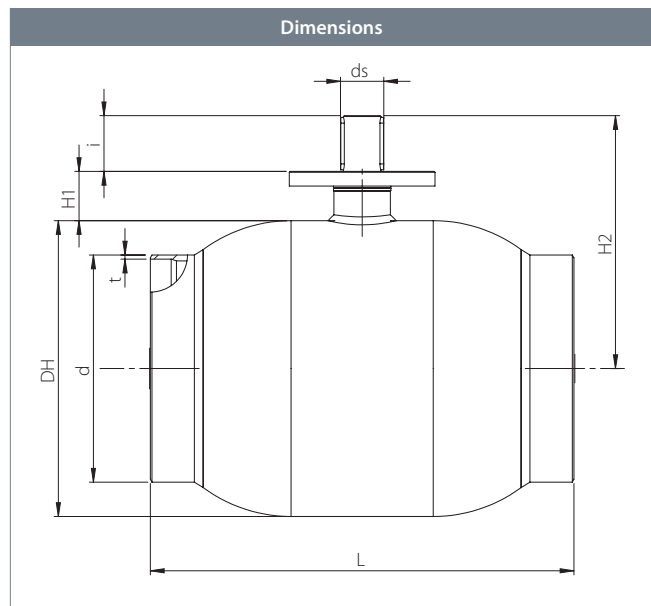
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-----|----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8500225250 000 | 200 | 3200 | 66 | 356 | 273.0 | 5.0 | 509 | 59 | 304 | 45 | 67 | F14 |
| 300 | 8500225300 000 | 250 | 4700 | 107 | 457 | 323.9 | 5.6 | 586 | 70 | 382 | 50 | 84 | F16 |
| 350 | 8500225350 000 | 250 | 5500 | 125 | 457 | 355.6 | 5.6 | 662 | 70 | 382 | 50 | 84 | F16 |
| 400 | 8500225400 000* | 305 | 10600 | 187 | 508 | 406.4 | 6.3 | 734 | 83 | 437 | 60 | 100 | F16 |
| 500 | 8500225500 000* | 380 | 18150 | 368 | 660 | 508.0 | 6.3 | 889 | 105 | 547 | 80 | 112 | F30 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25



Type 85002 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85002 - Reduced bore

Welding × Welding with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

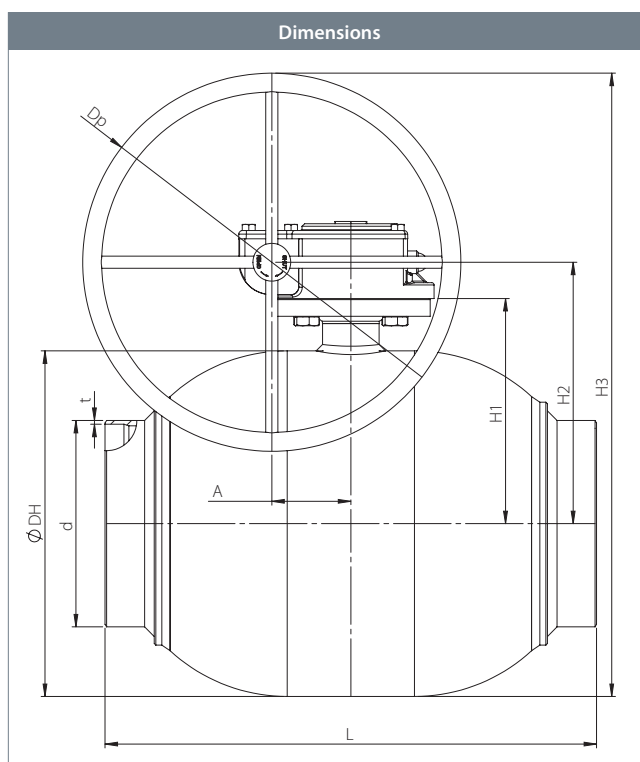
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-----|-------|-----|-------|
| | | | | | DH | d | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8500225250 480 | 200 | 3200 | 68.5 | 356 | 273.0 | 5.0 | 509 | 59 | 275 | 500.0 | 450 | 68.8 |
| 300 | 8500225300 480 | 250 | 4700 | 111.9 | 457 | 323.9 | 5.6 | 586 | 70 | 346 | 596.0 | 500 | 104.5 |
| 350 | 8500225350 480 | 250 | 5500 | 130.6 | 457 | 355.6 | 5.6 | 662 | 70 | 346 | 596.0 | 500 | 104.5 |
| 400 | 8500225400 480* | 305 | 10600 | 197.2 | 508 | 406.4 | 6.3 | 736 | 83 | 387 | 566.5 | 350 | 130.0 |
| 500 | 8500225500 480* | 400 | 18150 | 435.9 | 660 | 508.0 | 6.3 | 889 | 105 | 494 | 719.0 | 450 | 182.0 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25

Type 85002 - Reduced bore



| Technical drawing | Material description | | |
|-------------------|----------------------|---------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |

Steel ball valve - DN 250 - 500, PN 25

Type 85012 - Reduced bore

Welding × Welding with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

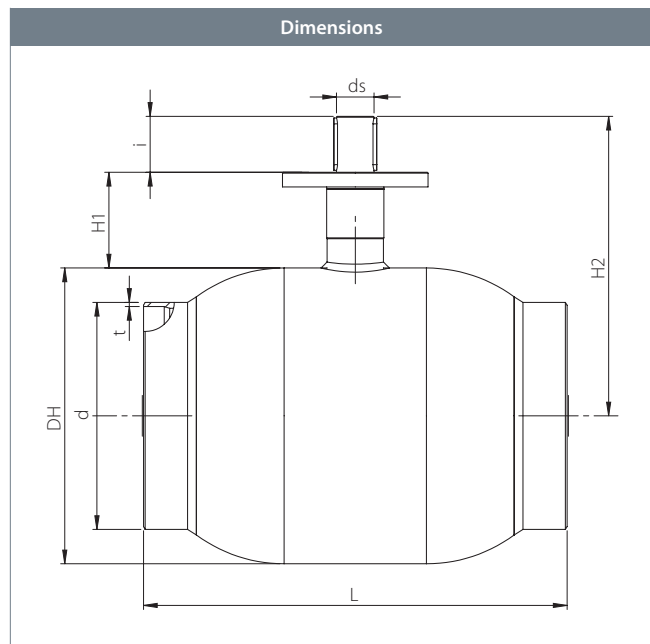
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-------|----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8501225250 000 | 200 | 3200 | 68.0 | 356 | 273.0 | 5.0 | 509 | 115 | 349.8 | 45 | 67 | F14 |
| 300 | 8501225300 000 | 250 | 4700 | 108.9 | 457 | 323.9 | 5.6 | 586 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8501225350 000 | 250 | 5500 | 127.8 | 457 | 355.6 | 5.6 | 662 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | 8501225400 000* | 305 | 10600 | 192.2 | 508 | 406.4 | 6.3 | 734 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | 8501225500 000* | 400 | 18150 | 374.0 | 660 | 508.0 | 6.3 | 889 | 180 | 622.0 | 80 | 112 | F30 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25

Type 85012 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85012 - Reduced bore

Welding × Welding with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

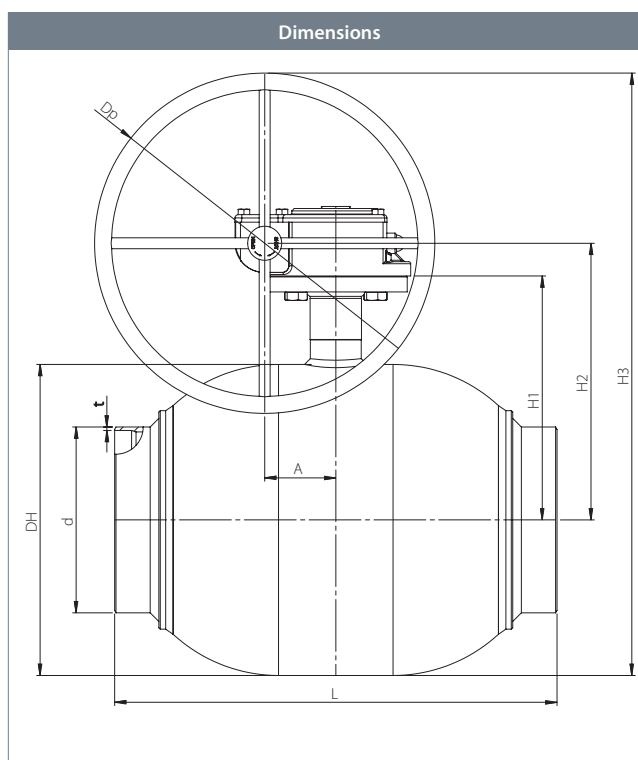
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-----|-----|-----|-------|
| | | | | | DH | d | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8501225250 480 | 200 | 3200 | 70.1 | 356 | 273.0 | 5.0 | 509 | 115 | 330 | 555 | 450 | 68.8 |
| 300 | 8501225300 480 | 250 | 4700 | 114.0 | 457 | 323.9 | 5.6 | 586 | 130 | 407 | 657 | 500 | 104.5 |
| 350 | 8501225350 480 | 250 | 5500 | 132.7 | 457 | 355.6 | 5.6 | 662 | 130 | 407 | 657 | 500 | 104.5 |
| 400 | 8501225400 480* | 305 | 10600 | 200.6 | 508 | 406.4 | 6.3 | 736 | 155 | 460 | 639 | 350 | 130.0 |
| 500 | 8501225500 480* | 400 | 18150 | 442.2 | 660 | 508.0 | 6.3 | 889 | 180 | 569 | 794 | 450 | 182.0 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25

Type 85012 - Reduced bore



| Technical drawing | Material description | | |
|-------------------|----------------------|---------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |

Steel ball valve - DN 250 - 500, PN 25

Type 85112 - **Reduced bore** - FLOWOPTIMIZED

Welding × Welding with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

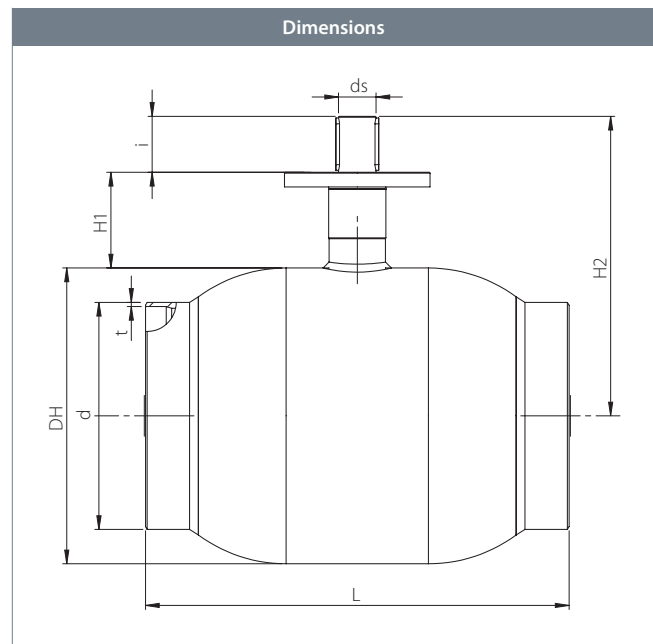
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-------|----|-----|-----|
| | | | | | DH | d | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8511225250 000 | 200 | 5300 | 69.8 | 356 | 273.0 | 5.0 | 509 | 115 | 349.8 | 45 | 67 | F14 |
| 300 | 8511225300 000 | 250 | 8200 | 111.7 | 457 | 323.9 | 5.6 | 586 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8511225350 000 | 250 | 8900 | 130.6 | 457 | 355.6 | 5.6 | 662 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | 8511225400 000 | 305 | 13700 | 194.0 | 508 | 406.4 | 6.3 | 734 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | 8511225500 000 | 400 | 20300 | 376.4 | 660 | 508.0 | 6.3 | 889 | 180 | 622.0 | 80 | 112 | F30 |

Steel ball valve - DN 250 - 500, PN 25

Type 85112 - **Reduced bore** - FLOWOPTIMIZED



| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |
| 54 | Flowguides | Steel | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85112 - **Reduced bore** - FLOWOPTIMIZED

Welding × Welding with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

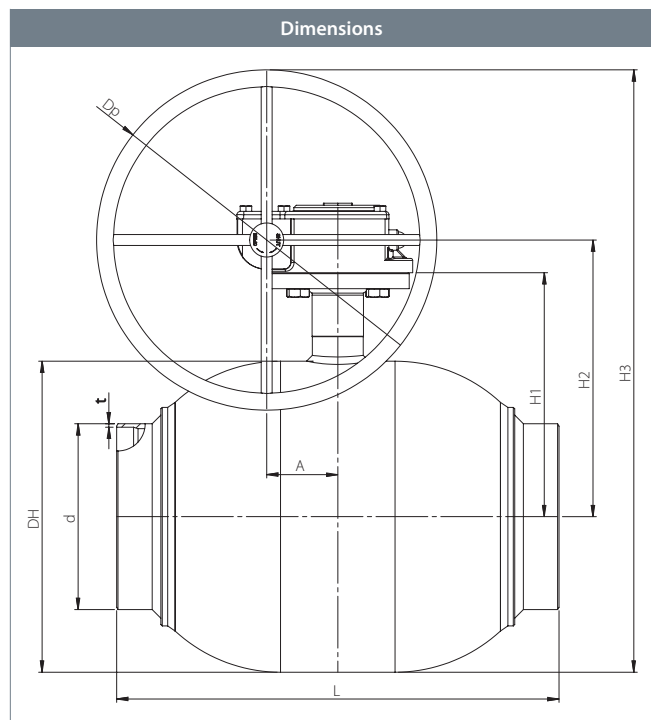
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-------|-----|-----|-----|-----|-----|-----|-------|
| | | | | | DH | d | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8511225250 480 | 200 | 5300 | 72.7 | 356 | 273.0 | 5.0 | 509 | 115 | 330 | 555 | 450 | 68.8 |
| 300 | 8511225300 480 | 250 | 8200 | 116.6 | 457 | 323.9 | 5.6 | 586 | 130 | 407 | 657 | 500 | 104.5 |
| 350 | 8511225350 480 | 250 | 8900 | 135.3 | 457 | 355.6 | 5.6 | 662 | 130 | 407 | 657 | 500 | 104.5 |
| 400 | 8511225400 480 | 305 | 13700 | 203.2 | 508 | 406.4 | 6.3 | 736 | 155 | 464 | 639 | 350 | 130.0 |
| 500 | 8511225500 480 | 400 | 20300 | 444.8 | 660 | 508.0 | 6.3 | 889 | 180 | 569 | 794 | 450 | 182.0 |

Steel ball valve - DN 250 - 500, PN 25

Type 85112 - **Reduced bore** - FLOWOPTIMIZED



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 54 | Flowguides | Steel |

Steel ball valve - DN 20 - 50, PN 40

Type 64104 - Reduced bore

Flange × Welding

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

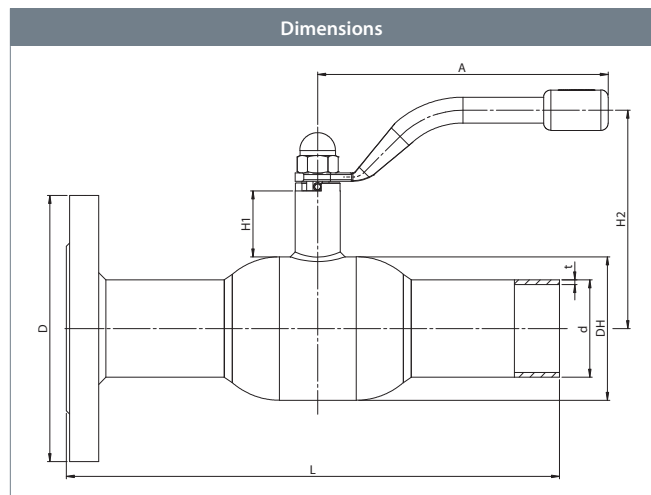
Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | |
|----|-----------------|------|-----|---------------|----------------------|-----|------|-----|-------|----|-------|-----|
| | | | | | DH | D | d | t | L | H1 | H2 | A |
| 20 | 64104020S356700 | 15 | 15 | 1.8 | 42.0 | 105 | 26.9 | 2.3 | 235.0 | 47 | 116.0 | 140 |
| 25 | 64104025S271000 | 20 | 27 | 2.4 | 51.0 | 115 | 33.7 | 2.6 | 235.0 | 47 | 119.5 | 140 |
| 32 | 64104032S271100 | 25 | 40 | 3.3 | 57.0 | 140 | 42.4 | 2.6 | 265.0 | 48 | 124.0 | 140 |
| 40 | 64104040S271200 | 32 | 69 | 4.4 | 76.1 | 150 | 48.3 | 2.6 | 265.0 | 41 | 129.0 | 180 |
| 50 | 64104050S271300 | 40 | 110 | 5.5 | 88.9 | 165 | 60.3 | 2.9 | 306.0 | 41 | 135.0 | 180 |

Steel ball valve - DN 20 - 50, PN 40

Type 64104 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 21 | Cap nut | Steel - galvanized |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------------------|------------|---|
| | 66050010 000 - yellow | DN 20 - 32 | T-handles in three different colors - yellow, blue and red. Factory fitted T-handle on request. |
| | 66050010 003 - blue | | |
| | 66050010 004 - red | | |
| | 66050040 000 - yellow | DN 40 - 50 | |
| | 66050040 003 - blue | | |
| | 66050040 004 - red | | |
| | 203245 | DN 20 - 32 | ISO-flange. |
| | 208245 | DN 40 - 50 | |
| | 66160010 000 | DN 20 - 32 | Hexagon for insertion key. |
| | 66160040 000 | DN 40 - 50 | |

Steel ball valve - DN 65 - 100, PN 25

Type 64104 - Reduced bore

Flange × Welding

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

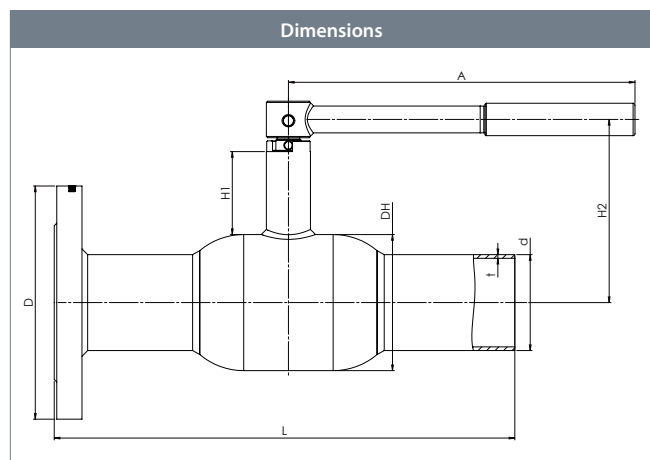
Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | |
|-----|-----------------|------|-----|---------------|----------------------|-----|-------|-----|-------|------|-------|-----|
| | | | | | DH | D | d | t | L | H1 | H2 | A |
| 65 | 64104065S271400 | 50 | 180 | 8.7 | 108.0 | 185 | 76.1 | 2.9 | 366.0 | 65.8 | 145.0 | 275 |
| 80 | 64104080S233010 | 65 | 288 | 11.3 | 127.0 | 200 | 88.9 | 3.2 | 377.5 | 66.0 | 153.0 | 275 |
| 100 | 64104100S271500 | 80 | 470 | 16.3 | 152.4 | 235 | 114.3 | 3.6 | 397.5 | 80.9 | 192.0 | 365 |

Steel ball valve - DN 65 - 100, PN 25

Type 64104 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|------------|----------------------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |
| | 66160065 000 | DN 65 - 80 | Hexagon for insertion key. |
| | 66164100 000 | DN 100 | |

Steel ball valve - DN 125 - 150, PN 25

Type 61104 - Reduced bore

Flange × Welding with ISO-flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

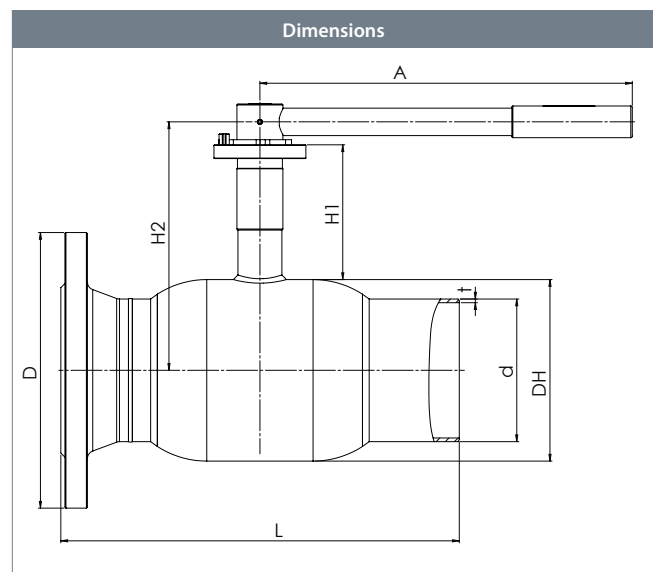
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear. Larger dimensions DN 200-500, on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|------|---------------|----------------------|-----|-------|-----|-----|-----|-----|-----|-----|
| | | | | | DH | D | d | t | L | H1 | H2 | A | ISO |
| 125 | 61104125S188000 | 100 | 699 | 21.1 | 178 | 270 | 139.7 | 3.6 | 390 | 132 | 243 | 365 | F07 |
| 150 | 61104150S188100 | 125 | 1046 | 31.2 | 219 | 300 | 168.3 | 4.0 | 390 | 135 | 276 | 650 | F10 |

Steel ball valve - DN 125 - 150, PN 25

Type 61104 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|-------------------|---|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| 17 | O-ring | Rubber - FPM70 | |
| 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 | |
| 20 | Handle | Steel | |
| 22 | Bearing | Steel - PTFE | |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|-----------|----------------------------|
| | 600584 | DN 125 | BROEN-Gear. |
| | 600585 | DN 150 | |
| | 66161100 000 | DN 125 | Hexagon for insertion key. |
| | 66161150 000 | DN 150 | |

Steel ball valve - DN 65 - 100, PN 16

Type 64104 - Reduced bore

Flange × Welding

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

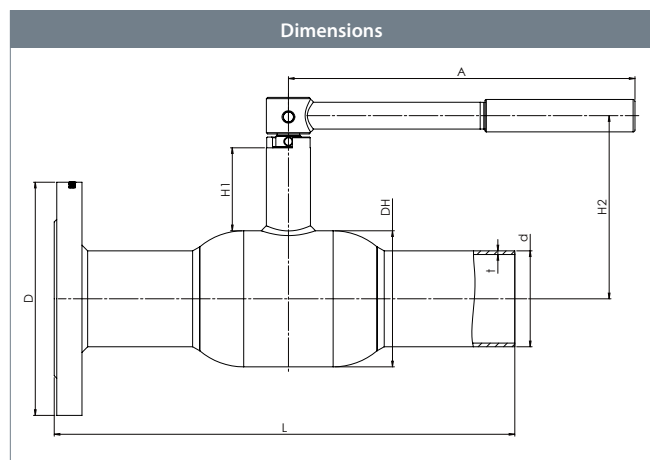
Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | |
|-----|-----------------|------|-----|---------------|----------------------|-----|-------|-----|-------|------|-------|-----|
| | | | | | DH | D | d | t | L | H1 | H2 | A |
| 65 | 64104065S342500 | 50 | 180 | 8.7 | 108.0 | 185 | 76.1 | 2.9 | 360.0 | 65.8 | 145.0 | 275 |
| 80 | 64104080S226500 | 65 | 288 | 11.3 | 127.0 | 200 | 88.9 | 3.2 | 377.5 | 66.0 | 153.0 | 275 |
| 100 | 64104100S226600 | 80 | 470 | 16.3 | 152.4 | 220 | 114.3 | 3.6 | 397.5 | 80.9 | 192.0 | 365 |

Steel ball valve - DN 65 - 100, PN 16

Type 64104 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|------------|----------------------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |
| | 66160065 000 | DN 65 - 80 | Hexagon for insertion key. |
| | 66164100 000 | DN 100 | |

Steel ball valve - DN 125 - 150, PN 16

Type 61104 - Reduced bore

Flange × Welding with ISO-flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

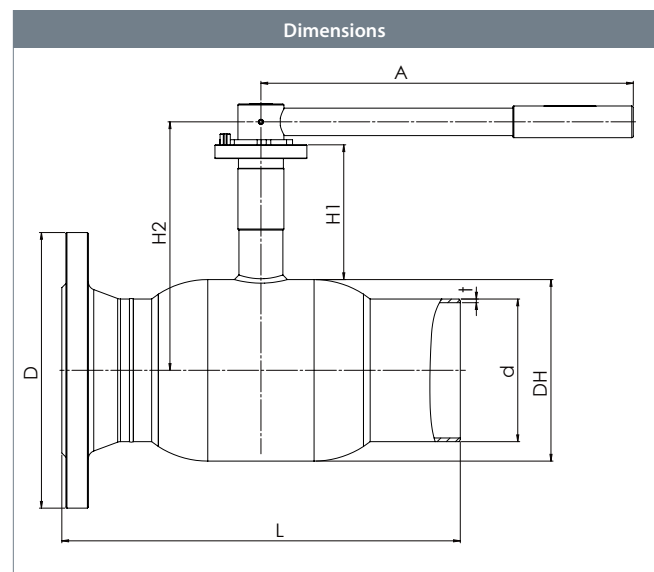
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear. Larger dimensions DN 200-500, on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|------|---------------|----------------------|-----|-------|-----|-------|-----|-----|-----|-----|
| | | | | | DH | D | d | t | L | H1 | H2 | A | ISO |
| 125 | 61104125S226700 | 100 | 699 | 29.3 | 178 | 250 | 139.7 | 3.6 | 397.5 | 132 | 243 | 365 | F07 |
| 150 | 61104150S208600 | 125 | 1046 | 32.5 | 219 | 285 | 168.3 | 4.0 | 338.0 | 135 | 276 | 650 | F10 |

Steel ball valve - DN 125 - 150, PN 16

Type 61104 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 1 | Welding end | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|-----------|----------------------------|
| | 600584 | DN 125 | BROEN-Gear. |
| | 600585 | DN 150 | |
| | 66161100 000 | DN 125 | Hexagon for insertion key. |
| | 66161150 000 | DN 150 | |

Steel ball valve - DN 15 - 50, PN 40

Type 61103 / 64103 - Reduced bore

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

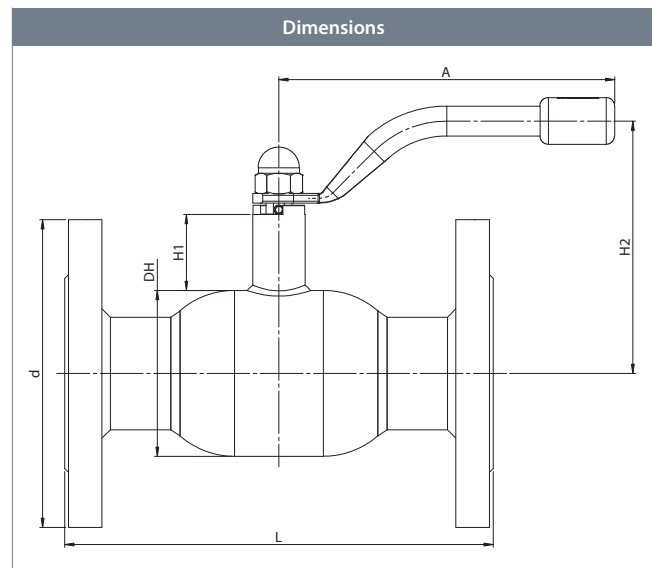
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | |
|----|--------------|------|-----|---------------|----------------------|-----|-----|----|-----|-----|
| | | | | | DH | d | L | H1 | H2 | A |
| 15 | 61103015 010 | 10 | 8 | 1.5 | 38 | 95 | 130 | 50 | 116 | 140 |
| 20 | 64103020 010 | 15 | 15 | 2.9 | 42 | 105 | 150 | 47 | 85 | 140 |
| 25 | 64103025 010 | 20 | 27 | 3.5 | 51 | 115 | 160 | 47 | 89 | 140 |
| 32 | 64103032 010 | 25 | 40 | 4.8 | 57 | 140 | 180 | 48 | 93 | 140 |
| 40 | 64103040 010 | 32 | 69 | 6.2 | 76 | 150 | 200 | 41 | 108 | 180 |
| 50 | 64103050 010 | 40 | 110 | 8.2 | 89 | 165 | 230 | 41 | 114 | 180 |

Steel ball valve - DN 15 - 50, PN 40

Type 61103 / 64103 - **Reduced bore**



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 21 | Cap nut | Steel - galvanized |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------------------|------------|---|
| | 66050010 000 - yellow | DN 15 - 32 | T-handles in three different colors - yellow, blue and red. Factory fitted T-handle on request. |
| | 66050010 003 - blue | | |
| | 66050010 004 - red | | |
| | 66050040 000 - yellow | DN 40 - 50 | |
| | 66050040 003 - blue | | |
| | 66050040 004 - red | | |
| | 203245 | DN 15 - 32 | ISO-flange. |
| | 208245 | DN 40 - 50 | |
| | 66160010 000 | DN 15 - 32 | Hexagon for insertion key. |
| | 66160040 000 | DN 40 - 50 | |

Special model: Minimum length - Flange x Flange - DN 15 - 50:

| DN | Standard length - mm | Minimum length - mm |
|----|----------------------|---------------------|
| 15 | 130 | On request |
| 20 | 150 | 118 |
| 25 | 160 | 130 |
| 32 | 180 | 135 |
| 40 | 200 | 150 |
| 50 | 230 | 165 |

Steel ball valve - DN 65 - 150, PN 25

Type 64103 - Reduced bore

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

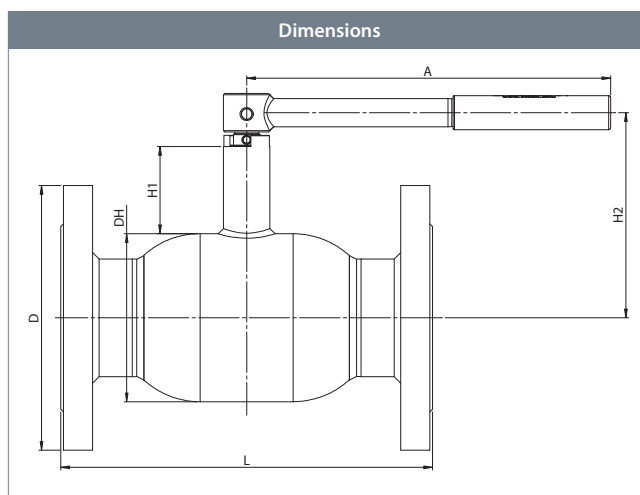
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | |
|-----|----------------|------|------|---------------|----------------------|-----|-----|-----|-----|-----|
| | | | | | DH | D | L | H1 | H2 | A |
| 65 | 6410325065 010 | 50 | 180 | 9,9 | 108 | 185 | 270 | 66 | 144 | 275 |
| 80 | 6410325080 010 | 65 | 288 | 13,2 | 127 | 200 | 280 | 66 | 154 | 275 |
| 100 | 6410325100 010 | 85 | 470 | 18,3 | 152 | 235 | 300 | 81 | 193 | 365 |
| 125 | 6410325125 010 | 100 | 699 | 27,1 | 178 | 270 | 325 | 91 | 211 | 365 |
| 150 | 6410325150 010 | 125 | 1046 | 36,2 | 219 | 300 | 350 | 101 | 249 | 650 |

Steel ball valve - DN 65 - 150, PN 25



Type 64103 - Reduced bore

| Technical drawing | Material description | | |
|-------------------|----------------------|-------------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Stainless steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|------------|----------------------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |
| | 66160065 000 | DN 65 - 80 | Hexagon for insertion key. |
| | 66164100 000 | DN 100 | |
| | 66161100 000 | DN 125 | |
| | 66161150 000 | DN 150 | |

Special model: Minimum length - Flange x Flange - DN 65 - 150:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 65 | 270 | 206 |
| 80 | 280 | 224 |
| 100 | 300 | 244 |
| 125 | - | - |
| 150 | - | - |

Steel ball valve - DN 125 - 200, PN 25

Type 61103 - Reduced bore

Flange × Flange with ISO-flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

The following operating devices are available on request

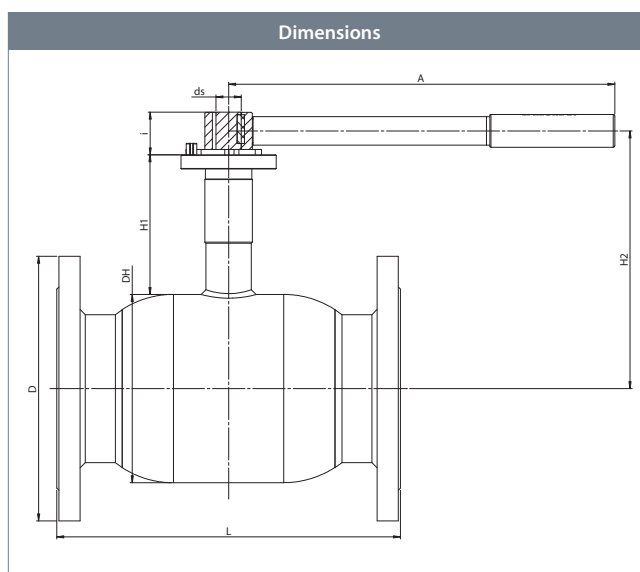
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear. Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|------|---------------|----------------------|-----|-----|-----|-----|----|----|-----|-----|
| | | | | | DH | D | L | H1 | H2 | ds | i | A | ISO |
| 125 | 6110325125 010 | 100 | 699 | 25.1 | 178 | 270 | 325 | 132 | 221 | 24 | 40 | 365 | F07 |
| 150 | 6110325150 010 | 125 | 1046 | 38.2 | 219 | 300 | 350 | 135 | 245 | 30 | 50 | 650 | F10 |
| 200 | 6110325200 010 | 150 | 1500 | 61.7 | 267 | 360 | 400 | 155 | 289 | 30 | 60 | 900 | F12 |

Steel ball valve - DN 125 - 200, PN 25



Type 61103 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|-----------------|--|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |
| 25 | Friction gasket | PTFE 20% Carbon | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|-----------|----------------------------|
| | 600584 | DN 125 | BROEN-Gear. |
| | 600585 | DN 150 | |
| | 600586 | DN 200 | |
| | 66161100 000 | DN 125 | Hexagon for insertion key. |
| | 66161150 000 | DN 150 | |

Special model: Minimum length - Flange x Flange - DN 125 - 200:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 125 | 325 | 272 |
| 150 | 350 | 300 |
| 200 | 400 | 385 |

Steel ball valve - DN 125 - 200, PN 25

Type 61103 - Reduced bore

Flange × Flange with ISO-flange and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

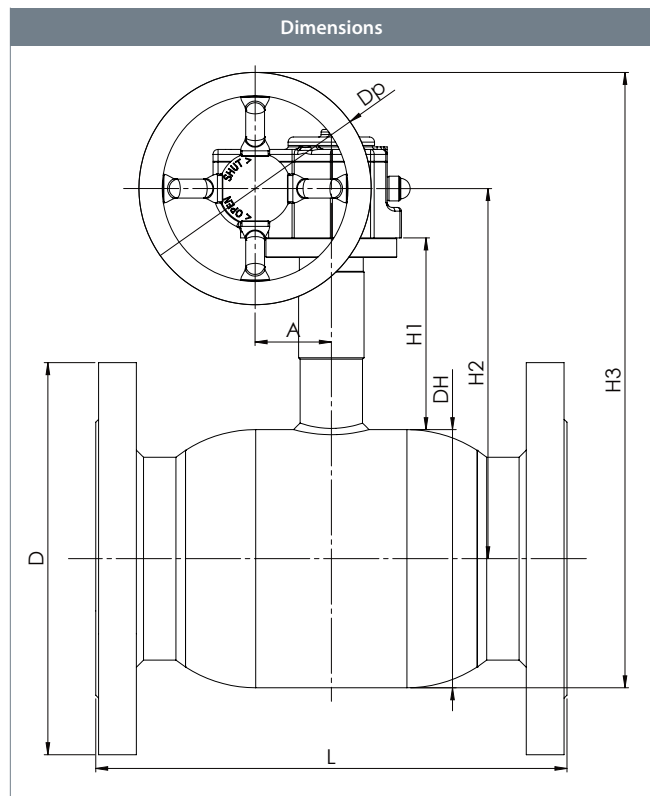
Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



| | | | | | All dimensions in mm | | | | | | | |
|-----|----------------|------|------|---------------|----------------------|-----|-----|-----|-----|-----|-----|----|
| DN | BROEN No. | Bore | Kvs | net Weight kg | DH | D | L | H1 | H2 | H3 | Dp | A |
| 125 | 6110325125 480 | 100 | 699 | 32.4 | 178 | 270 | 325 | 132 | 255 | 424 | 160 | 53 |
| 150 | 6110325150 480 | 125 | 1046 | 47.1 | 219 | 300 | 350 | 135 | 287 | 522 | 250 | 69 |
| 200 | 6110325200 480 | 150 | 1500 | 71.3 | 267 | 360 | 400 | 155 | 331 | 590 | 250 | 69 |

Steel ball valve - DN 125 - 200, PN 25



Type 61103 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|-------------------|---|--|
| | 1 | Welding | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 | |
| 22 | Bearing | Steel - PTFE | |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |
| 47 | Gear | - | |

Special model: Minimum length - Flange x Flange - DN 125 - 200:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 125 | 325 | 272 |
| 150 | 350 | 300 |
| 200 | 400 | 385 |

Steel ball valve - DN 250 - 500, PN 25

Type 85004 - Reduced bore

Flange × Flange with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

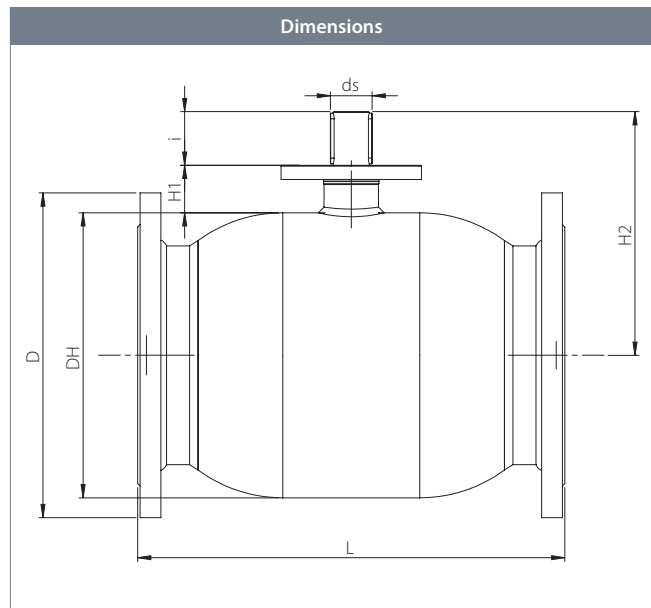
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-----|---|-----|-------|-----|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8500425250 000 | 200 | 3200 | 92.8 | 356 | 405 | - | 533 | 60.2 | 304 | 45 | 67 | F14 |
| 300 | 8500425300 000 | 250 | 4700 | 141.8 | 457 | 460 | - | 610 | 69.2 | 382 | 50 | 84 | F16 |
| 350 | 8500425350 000 | 250 | 5500 | 178.7 | 457 | 520 | - | 686 | 69.2 | 382 | 50 | 84 | F16 |
| 400 | 8500425400 000* | 305 | 10600 | 297.8 | 508 | 620 | - | 762 | 82.5 | 437 | 60 | 100 | F16 |
| 500 | 8500425500 000* | 400 | 18150 | 535.0 | 660 | 730 | - | 914 | 105.0 | 547 | 80 | 112 | F30 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25



Type 85004 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85004 - Reduced bore

Flange × Flange with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

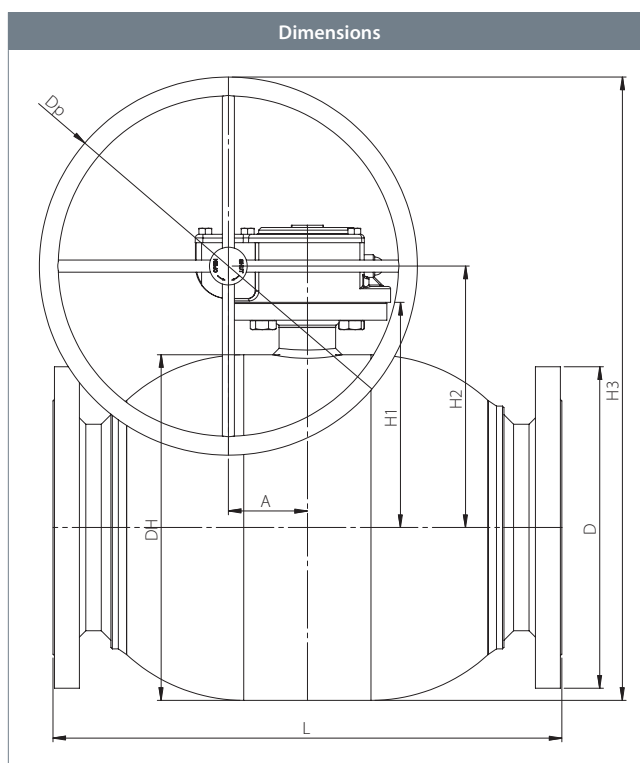
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-----|---|-----|-------|-----|-------|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8500425250 480 | 200 | 3200 | 107.2 | 356 | 405 | - | 533 | 60.2 | 275 | 500.0 | 450 | 68.8 |
| 300 | 8500425300 480 | 250 | 4700 | 147.0 | 457 | 460 | - | 610 | 69.2 | 346 | 596.0 | 500 | 104.5 |
| 350 | 8500425350 480 | 250 | 5500 | 183.7 | 457 | 520 | - | 686 | 69.2 | 346 | 596.0 | 500 | 104.5 |
| 400 | 8500425400 480* | 305 | 10600 | 306.1 | 508 | 620 | - | 762 | 82.5 | 387 | 566.5 | 350 | 130.0 |
| 500 | 8500425500 480* | 400 | 18150 | 603.1 | 660 | 730 | - | 914 | 105.0 | 494 | 719.0 | 450 | 182.0 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25

Type 85004 - Reduced bore



| Technical drawing | Material description | |
|-------------------|----------------------|--|
| | 2 Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 Seat ring | PTFE 20% Carbon |
| | 12 Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 O-ring | Rubber - EPDM70 |
| | 23 ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 O-ring | Rubber - EPDM70 |
| | 48 Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 Friction ring | Gunmetal |
| | 51 Bottom end | Steel - S355J2H - EN 10210 |
| | 52 Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |

Steel ball valve - DN 250 - 500, PN 25

Type 85014 - Reduced bore

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

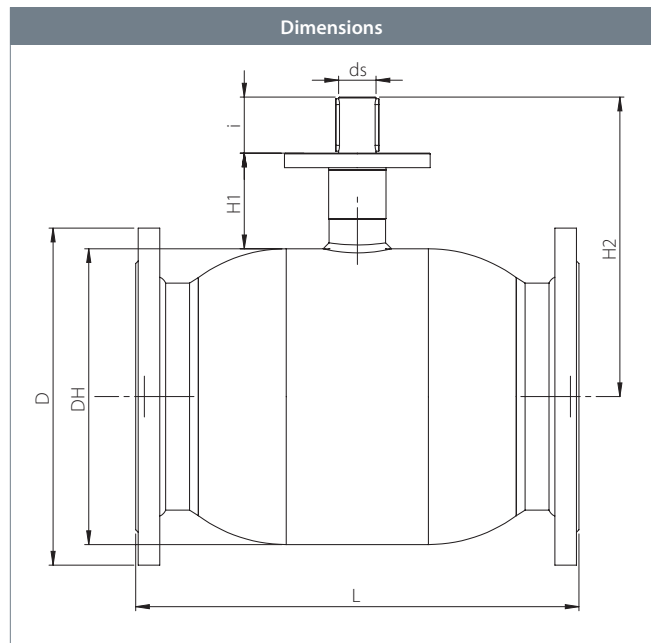
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-------|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8501425250 000 | 200 | 3200 | 94.4 | 356 | 405 | - | 533 | 115 | 360.0 | 45 | 67 | F14 |
| 300 | 8501425300 000 | 250 | 4700 | 143.9 | 457 | 460 | - | 610 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8501425350 000 | 250 | 5500 | 180.8 | 457 | 520 | - | 686 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | 8501425400 000* | 305 | 10600 | 301.1 | 508 | 620 | - | 762 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | 8501425500 000* | 400 | 18150 | 541.2 | 660 | 730 | - | 914 | 180 | 622.5 | 80 | 112 | F30 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25



Type 85014 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|---------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| 50 | Friction ring | Gunmetal | |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85014 - Reduced bore

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

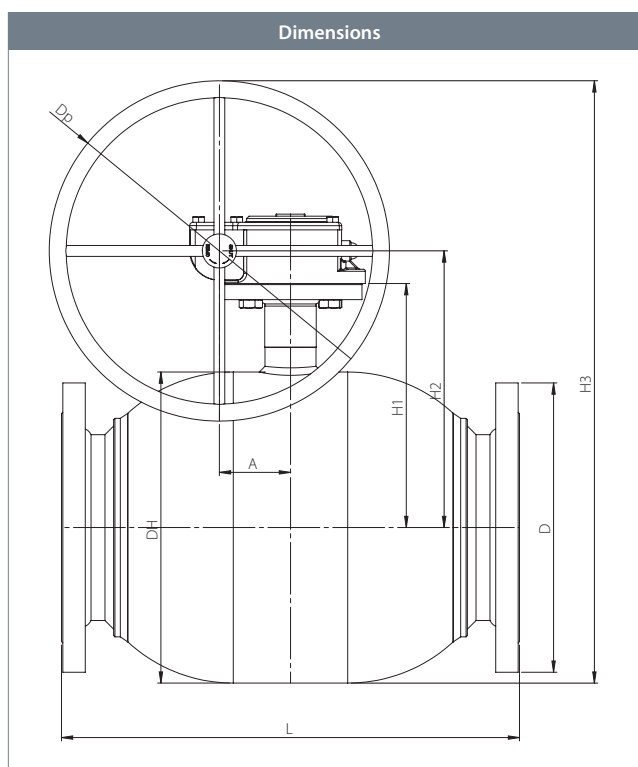
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|-----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-----|-----|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8501425250 480 | 200 | 3200 | 96.5 | 356 | 405 | - | 533 | 115 | 330 | 555 | 450 | 68.8 |
| 300 | 8501425300 480 | 250 | 4700 | 149.1 | 457 | 460 | - | 610 | 130 | 407 | 657 | 500 | 104.5 |
| 350 | 8501425350 480 | 250 | 5500 | 185.8 | 457 | 520 | - | 686 | 130 | 407 | 657 | 500 | 104.5 |
| 400 | 8501425400 480* | 305 | 10600 | 309.6 | 508 | 620 | - | 762 | 155 | 464 | 639 | 350 | 130.0 |
| 500 | 8501425500 480* | 400 | 18150 | 609.4 | 660 | 730 | - | 914 | 180 | 569 | 794 | 450 | 182.0 |

* DN 400 - 500 - with ball flow guide.

Steel ball valve - DN 250 - 500, PN 25

Type 85014 - Reduced bore



| Technical drawing | Material description | | |
|-------------------|----------------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| 50 | Friction ring | Gunmetal | |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |
| | | | |
| | | | |
| | | | |

Steel ball valve - DN 250 - 500, PN 25

Type 85114 - Reduced bore - FLOWOPTIMIZED

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

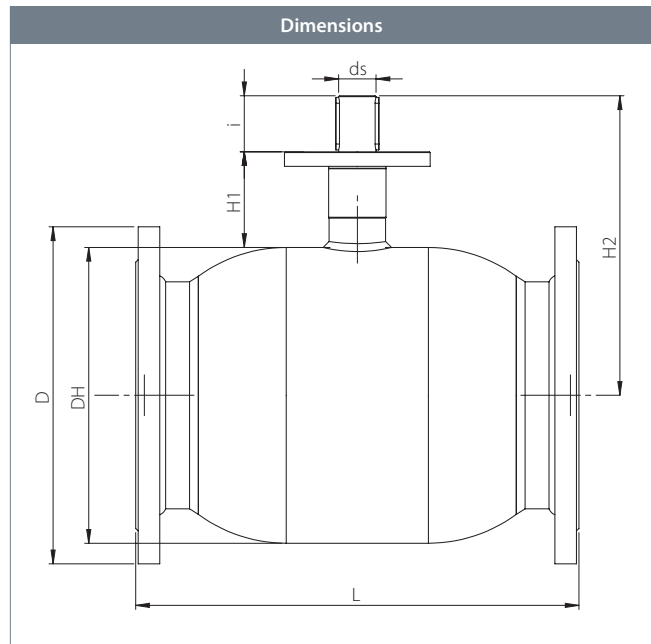
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-------|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8511425250 000 | 200 | 5300 | 96.2 | 356 | 405 | - | 533 | 115 | 360.0 | 45 | 67 | F14 |
| 300 | 8511425300 000 | 250 | 8200 | 146.7 | 457 | 460 | - | 610 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8511425350 000 | 250 | 8900 | 183.6 | 457 | 520 | - | 686 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | 8511425400 000 | 305 | 13700 | 302.9 | 508 | 620 | - | 762 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | 8511425500 000 | 400 | 20300 | 543.6 | 660 | 730 | - | 914 | 180 | 622.5 | 80 | 112 | F30 |

Steel ball valve - DN 250 - 500, PN 25



Type 85114 - **Reduced bore** - FLOWOPTIMIZED

| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |
| 54 | Flowguides | Steel | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 25

Type 85114 - **Reduced bore** - FLOWOPTIMIZED

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

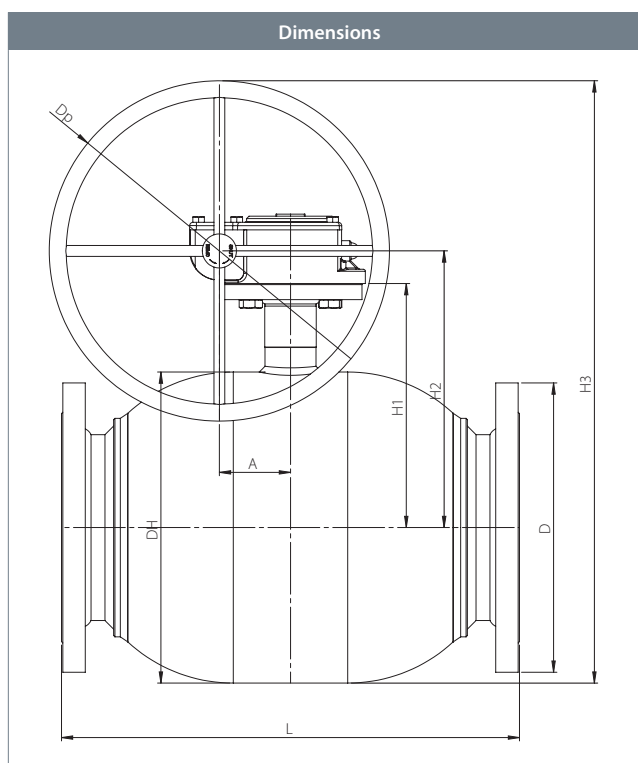
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-----|-----|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8511425250 480 | 200 | 5300 | 99.1 | 356 | 405 | - | 533 | 115 | 330 | 555 | 450 | 68.8 |
| 300 | 8511425300 480 | 250 | 8200 | 151.7 | 457 | 460 | - | 610 | 130 | 407 | 657 | 500 | 104.5 |
| 350 | 8511425350 480 | 250 | 8900 | 188.4 | 457 | 460 | - | 686 | 130 | 407 | 657 | 500 | 104.5 |
| 400 | 8511425400 480 | 305 | 13700 | 312.2 | 508 | 620 | - | 762 | 155 | 464 | 639 | 350 | 130.0 |
| 500 | 8511425500 480 | 400 | 20300 | 612.0 | 660 | 730 | - | 914 | 180 | 569 | 794 | 450 | 182.0 |

Steel ball valve - DN 250 - 500, PN 25

Type 85114 - Reduced bore - **FLOWOPTIMIZED**



| Technical drawing | Material description | |
|-------------------|----------------------|--|
| | 2 Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 Seat ring | PTFE 20% Carbon |
| | 12 Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 O-ring | Rubber - EPDM70 |
| | 23 ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 O-ring | Rubber - EPDM70 |
| | 48 Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 Friction ring | Gunmetal |
| | 51 Bottom end | Steel - S355J2H - EN 10210 |
| | 52 Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 54 Flowguides | Steel |

Steel ball valve - DN 65 - 150, PN 16

Type 64103 - Reduced bore

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

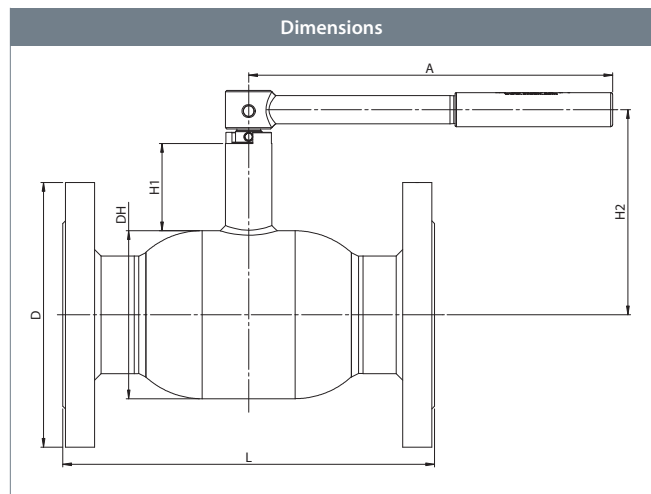
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | |
|-----|--------------|------|------|---------------|----------------------|-----|-----|----|-----|-----|
| | | | | | DH | D | L | H1 | H2 | A |
| 65 | 64103065 010 | 50 | 180 | 9.9 | 108.0 | 185 | 270 | 66 | 144 | 275 |
| 80 | 64103080 010 | 65 | 288 | 13.2 | 127.0 | 200 | 280 | 66 | 154 | 275 |
| 100 | 64103100 010 | 85 | 470 | 18.3 | 152.0 | 220 | 300 | 81 | 193 | 365 |
| 125 | 64103125 010 | 100 | 699 | 24.3 | 177.8 | 250 | 325 | 91 | 212 | 365 |
| 150 | 64103150 010 | 125 | 1046 | 32.2 | 219.1 | 285 | 350 | 90 | 250 | 650 |

Steel ball valve - DN 65 - 150, PN 16

Type 64103 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 19 | Pin | Steel - hardenat |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|------------|----------------------------|
| | 167245 | DN 65 - 80 | ISO-flange. |
| | 169245 | DN 100 | |
| | 66160065 000 | DN 65 - 80 | Hexagon for insertion key. |
| | 66164100 000 | DN 100 | |
| | 66161100 000 | DN 125 | |
| | 66161150 000 | DN 150 | |

Special model: Minimum length - Flange x Flange - DN 65 - 150:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 65 | 270 | 206 |
| 80 | 280 | 224 |
| 100 | 300 | 244 |
| 125 | - | - |
| 150 | - | - |

Steel ball valve - DN 125 - 200, PN 16

Type 61103 - Reduced bore

Flange × Flange with ISO-flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

The following operating devices are available on request:

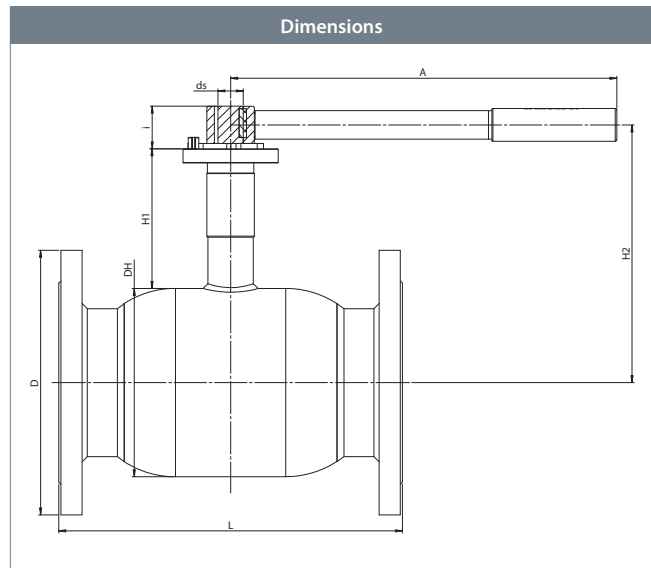
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear. Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|--------------|------|------|---------------|----------------------|-----|-----|-----|-----|----|----|-----|-----|
| | | | | | DH | D | L | H1 | H2 | ds | i | A | ISO |
| 125 | 61103125 010 | 100 | 699 | 25.1 | 178 | 250 | 325 | 132 | 221 | 24 | 40 | 365 | F07 |
| 150 | 61103150 010 | 125 | 1046 | 38.2 | 219 | 285 | 350 | 135 | 245 | 30 | 50 | 650 | F10 |
| 200 | 61103200 000 | 150 | 1500 | 61.7 | 267 | 340 | 400 | 155 | 289 | 30 | 60 | 900 | F12 |

Steel ball valve - DN 125 - 200, PN 16

Type 61103 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|-----------------|--|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 17 | O-ring | Rubber - FPM70 |
| | 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 |
| | 20 | Handle | Steel |
| | 22 | Bearing | Steel - PTFE |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |
| 25 | Friction gasket | PTFE 20% Carbon | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|--------------|-----------|----------------------------|
| | 600584 | DN 125 | BROEN-Gear. |
| | 600585 | DN 150 | |
| | 600586 | DN 200 | |
| | 66161100 000 | DN 125 | Hexagon for insertion key. |
| | 66161150 000 | DN 150 | |

Special model: Minimum length - Flange x Flange - DN 125 - 200:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 125 | 325 | 272 |
| 150 | 350 | 300 |
| 200 | 400 | 385 |

Steel ball valve - DN 125 - 200, PN 16

Type 61103 - Reduced bore

Flange × Flange with ISO-flange and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

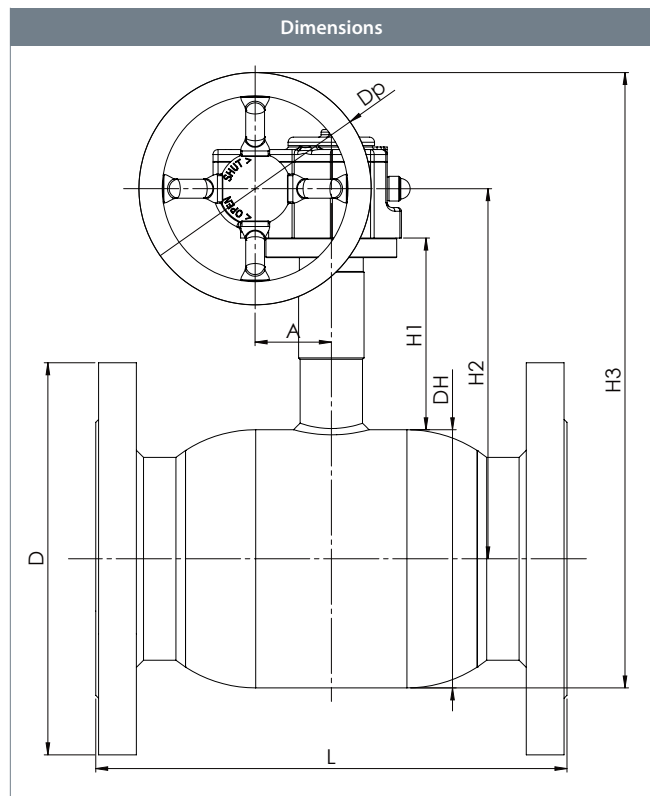
Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | |
|-----|----------------|------|------|---------------|----------------------|-----|-----|-----|-----|-----|-----|----|
| | | | | | DH | D | L | H1 | H2 | H3 | Dp | A |
| 125 | 6110316125 480 | 100 | 699 | 29.7 | 178 | 250 | 325 | 132 | 221 | 424 | 160 | 53 |
| 150 | 6110316150 480 | 125 | 1046 | 46.8 | 219 | 285 | 350 | 135 | 245 | 522 | 250 | 69 |
| 200 | 6110316200 480 | 150 | 1500 | 69.7 | 267 | 340 | 400 | 155 | 289 | 590 | 250 | 69 |

Steel ball valve - DN 125 - 200, PN 16



Type 61103 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|-------------------|---|--|
| | 1 | Welding | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 8 | Back-up ring | Steel - DC01 / 1.0330 / EN 10130 |
| | 9 | Disc spring | Steel - C75S / 1.1248 / EN 10132-4 |
| | 11 | Stem guide | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 13 | Stem washer | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 14 | Friction washer | PTFE 20% Carbon |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| 18 | Intermediate ring | Stainless steel - AISI303 / 1.4305 / EN 10088-3 | |
| 22 | Bearing | Steel - PTFE | |
| 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 | |
| 47 | Gear | - | |

Special model: Minimum length - Flange x Flange - DN 125 - 200:

| DN | Standard length - mm | Minimum length - mm |
|-----|----------------------|---------------------|
| 125 | 325 | 272 |
| 150 | 350 | 300 |
| 200 | 400 | 385 |

Steel ball valve - DN 250 - 500, PN 16

Type 85004 - Reduced bore

Flange × Flange with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

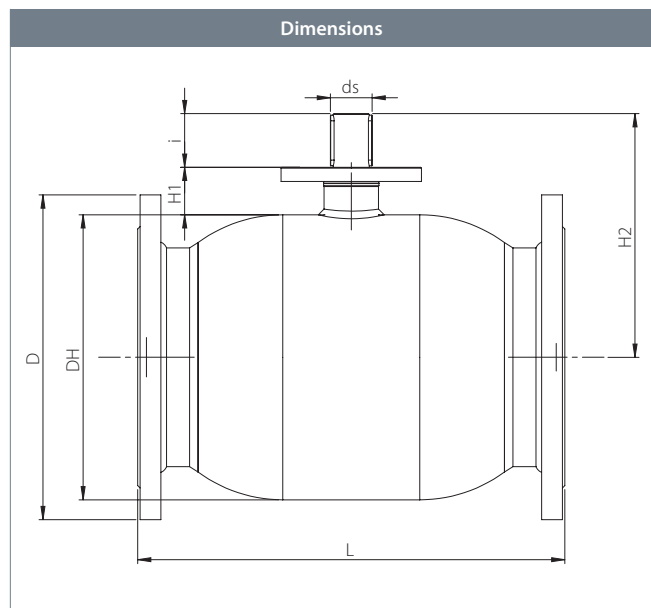
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-------|-----|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8500416250 000 | 200 | 3200 | 92.8 | 356 | 405 | - | 533 | 60.2 | 304 | 45 | 67 | F14 |
| 300 | 8500416300 000 | 250 | 4700 | 141.8 | 457 | 460 | - | 610 | 69.2 | 382 | 50 | 84 | F16 |
| 350 | 8500416350 000 | 250 | 5500 | 178.7 | 457 | 520 | - | 686 | 69.2 | 382 | 50 | 84 | F16 |
| 400 | On request | 305 | 10600 | 297.8 | 508 | 620 | - | 762 | 82.5 | 437 | 60 | 100 | F16 |
| 500 | On request | 400 | 18150 | 535.0 | 660 | 730 | - | 914 | 105.0 | 547 | 80 | 112 | F30 |

Steel ball valve - DN 250 - 500, PN 16

Type 85004 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 16

Type 85004 - Reduced bore

Flange × Flange with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

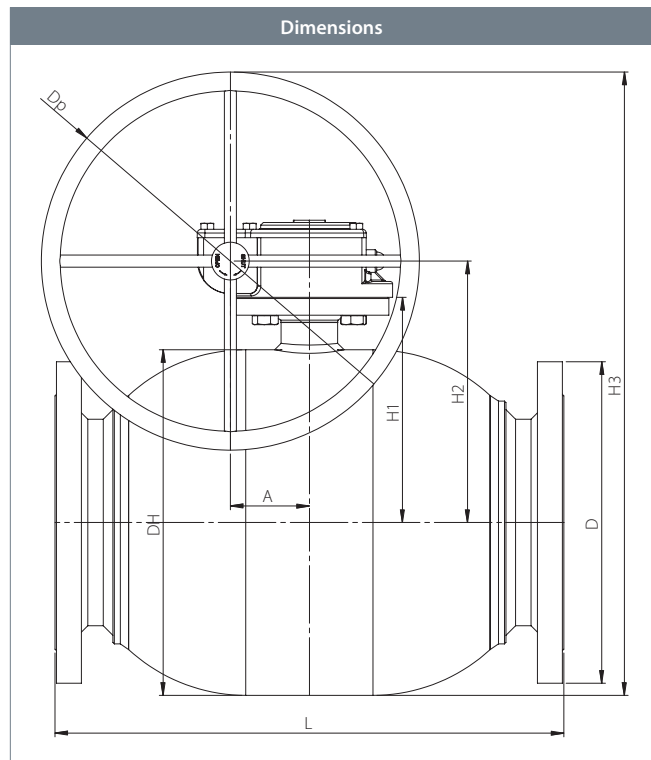
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-------|-----|-------|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8500416250 480 | 200 | 3200 | 94.9 | 356 | 405 | - | 533 | 60.2 | 275 | 500.0 | 450 | 68.8 |
| 300 | 8500416300 480 | 250 | 4700 | 147.0 | 457 | 460 | - | 610 | 69.2 | 346 | 596.0 | 500 | 104.5 |
| 350 | 8500416350 480 | 250 | 5500 | 183.7 | 457 | 520 | - | 686 | 69.2 | 346 | 596.0 | 500 | 104.5 |
| 400 | 8500416400 480 | 305 | 10600 | 302.8 | 508 | 620 | - | 762 | 82.5 | 387 | 566.5 | 350 | 130.0 |
| 500 | 8500416500 480 | 400 | 18150 | 597.5 | 660 | 730 | - | 914 | 105.0 | 494 | 719.0 | 450 | 182.0 |

Steel ball valve - DN 250 - 500, PN 16

Type 85004 - Reduced bore



| Technical drawing | | Material description | |
|-------------------|----|----------------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |

Steel ball valve - DN 250 - 500, PN 16

Type 85014 - Reduced bore

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

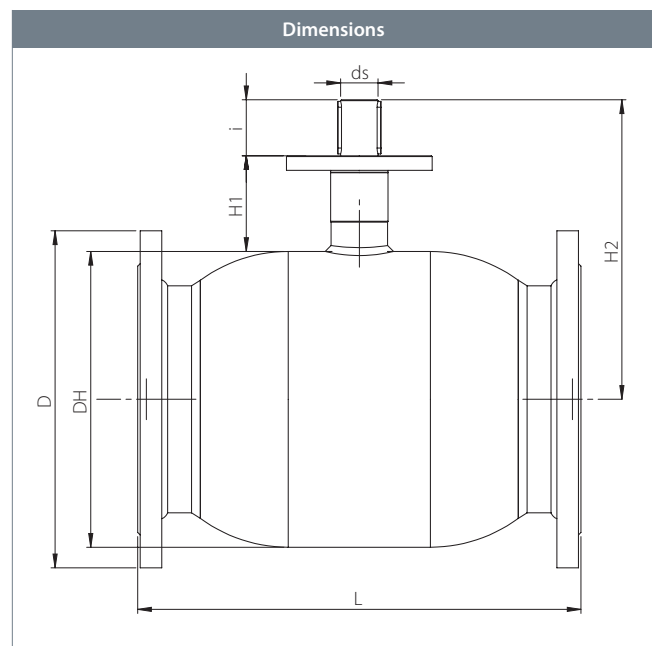
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-------|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8501416250 000 | 200 | 3200 | 94.4 | 356 | 405 | - | 533 | 115 | 360.0 | 45 | 67 | F14 |
| 300 | 8501416300 000 | 250 | 4700 | 143.9 | 457 | 460 | - | 610 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8501416350 000 | 250 | 5500 | 180.8 | 457 | 520 | - | 686 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | 8501416400 000 | 305 | 10600 | 301.1 | 508 | 620 | - | 762 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | 8501416500 000 | 400 | 18150 | 541.2 | 660 | 730 | - | 914 | 180 | 622.5 | 80 | 112 | F30 |

Steel ball valve - DN 250 - 500, PN 16



Type 85014 - Reduced bore

| Technical drawing | | Material description | |
|-------------------|---------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| 50 | Friction ring | Gunmetal | |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 16

Type 85014 - Reduced bore

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

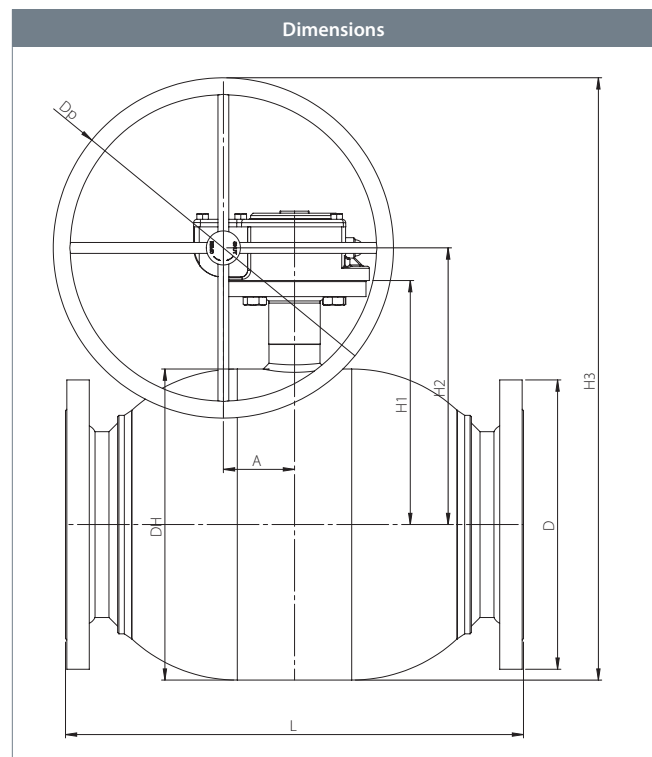
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-----|-----|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8501416250 480 | 200 | 3200 | 96.5 | 356 | 405 | - | 533 | 115 | 330 | 555 | 450 | 68.8 |
| 300 | 8501416300 480 | 250 | 4700 | 149.1 | 457 | 460 | - | 610 | 130 | 407 | 657 | 500 | 104.5 |
| 350 | 8501416350 480 | 250 | 5500 | 185.8 | 457 | 520 | - | 686 | 130 | 407 | 657 | 500 | 104.5 |
| 400 | 8501416400 480 | 305 | 10600 | 309.6 | 508 | 620 | - | 762 | 155 | 464 | 639 | 350 | 130.0 |
| 500 | 8501416500 480 | 400 | 18150 | 609.4 | 660 | 730 | - | 914 | 180 | 569 | 794 | 450 | 182.0 |

Steel ball valve - DN 250 - 500, PN 16

Type 85014 - Reduced bore



| Technical drawing | Material description | | |
|-------------------|----------------------|---------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |

Steel ball valve - DN 250 - 500, PN 16

Type 85114 - **Reduced bore** - FLOWOPTIMIZED

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

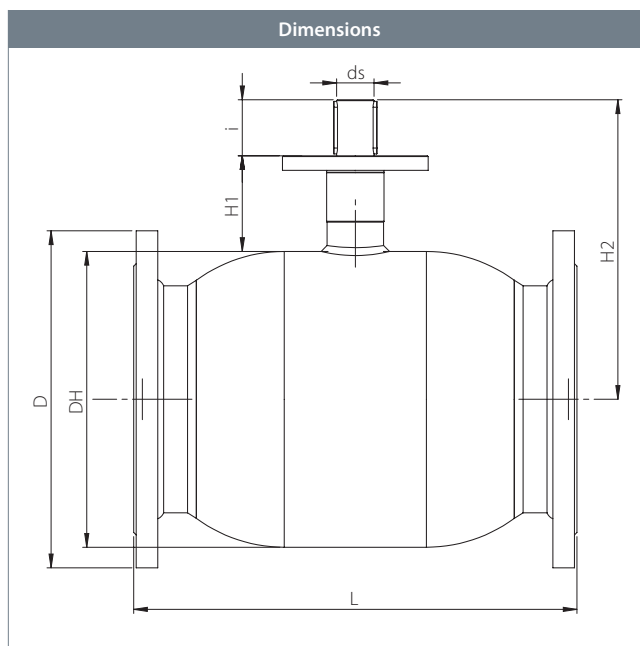
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-------|----|-----|-----|
| | | | | | DH | D | t | L | H1 | H2 | ds | i | ISO |
| 250 | 8511416250 000 | 200 | 5300 | 96.2 | 356 | 405 | - | 533 | 115 | 360.0 | 45 | 67 | F14 |
| 300 | 8511416300 000 | 250 | 8200 | 146.7 | 457 | 460 | - | 610 | 130 | 443.0 | 50 | 84 | F16 |
| 350 | 8511416350 000 | 250 | 8900 | 183.6 | 457 | 520 | - | 686 | 130 | 443.0 | 50 | 84 | F16 |
| 400 | On request | 305 | 13700 | 302.9 | 508 | 620 | - | 762 | 155 | 506.5 | 60 | 100 | F16 |
| 500 | On request | 400 | 20300 | 543.6 | 660 | 730 | - | 914 | 180 | 622.5 | 80 | 112 | F30 |

Steel ball valve - DN 250 - 500, PN 16



Type 85114 - **Reduced bore** - FLOWOPTIMIZED

| Technical drawing | | Material description | |
|-------------------|--------------|---|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 10 | Neck ring | Steel - S355J2+N / 1.0570 / EN 10025-2 |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 16 | Back-up ring | PTFE 20% Carbon |
| | 17 | O-ring | Rubber - FPM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 29 | Key | Steel |
| | 30 | Circlip | Steel |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 49 | Bearing | PTFE coated steel |
| | 50 | Friction ring | Gunmetal |
| 51 | Bottom end | Steel - S355J2H - EN 10210 | |
| 52 | Back-up ring | Steel - S355J2H - EN 10210 | |
| 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 | |
| 54 | Flowguides | Steel | |

| Accessories | BROEN No. | Dimension | Description |
|-------------|-----------|-----------|-------------|
| | 600587 | DN 250 | BROEN-Gear. |
| | 600588 | DN 300 | |
| | 600588 | DN 350 | |
| | 600589 | DN 400 | |
| | 600590 | DN 500 | |

Steel ball valve - DN 250 - 500, PN 16

Type 85114 - **Reduced bore** - FLOWOPTIMIZED

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

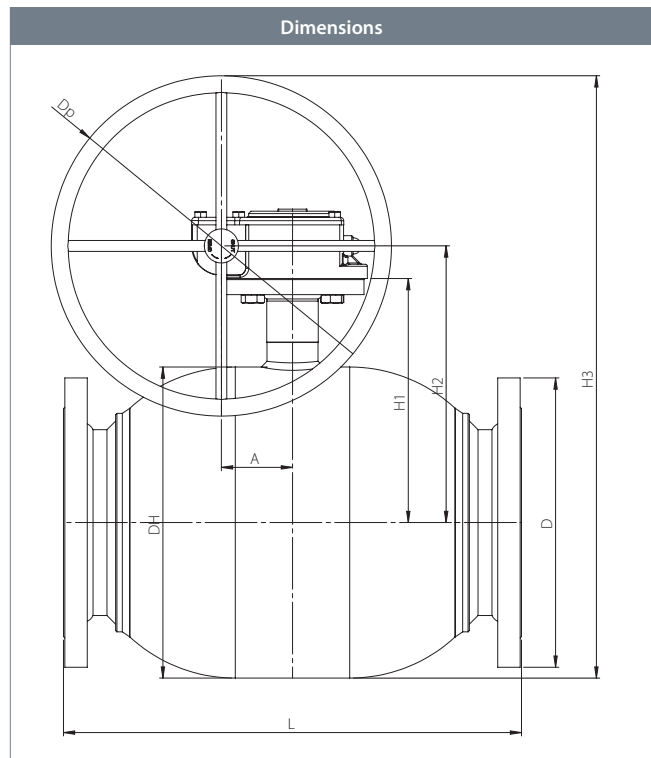
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 40 are CE-marked. The 3.1 certificate is available upon request.



| DN | BROEN No. | Bore | Kvs | net Weight kg | All dimensions in mm | | | | | | | | |
|-----|----------------|------|-------|---------------|----------------------|-----|---|-----|-----|-----|-----|-----|-------|
| | | | | | DH | D | t | L | H1 | H2 | H3 | Dp | A |
| 250 | 8511416250 480 | 200 | 5300 | 99,1 | 356 | 405 | - | 533 | 115 | 330 | 555 | 450 | 68,8 |
| 300 | 8511416300 480 | 250 | 8200 | 151,7 | 457 | 460 | - | 610 | 130 | 407 | 657 | 500 | 104,5 |
| 350 | 8511416350 480 | 250 | 8900 | 188,4 | 457 | 460 | - | 686 | 130 | 407 | 657 | 500 | 104,5 |
| 400 | 8511416400 480 | 305 | 13700 | 312,2 | 508 | 620 | - | 762 | 155 | 464 | 639 | 350 | 130,0 |
| 500 | 8511416500 480 | 400 | 20300 | 612,0 | 660 | 730 | - | 914 | 180 | 569 | 794 | 450 | 182,0 |

Steel ball valve - DN 250 - 500, PN 16

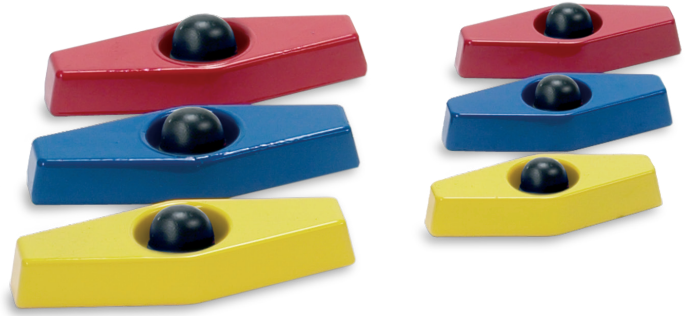
Type 85114 - **Reduced bore** - FLOWOPTIMIZED



| Technical drawing | Material description | | |
|-------------------|----------------------|---------------|--|
| | 2 | Flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 5 | Valve body | Steel - P235GH / 1.0345 / EN 10217-2 |
| | 6 | Ball | Stainless steel - AISI304L / 1.4306 / EN 10217-7 |
| | 7 | Seat ring | PTFE 20% Carbon |
| | 12 | Stem | Stainless steel - ASTM420 / 1.4021 / EN 10088-3 |
| | 15 | O-ring | Rubber - EPDM70 |
| | 23 | ISO-flange | Steel - S235JRG2 / 1.0038 / EN 10025-2 |
| | 27 | O-ring | Rubber - EPDM70 |
| | 48 | Stem guide | Steel - P235GH / 1.0345 / EN 10216-2 |
| | 50 | Friction ring | Gunmetal |
| | 51 | Bottom end | Steel - S355J2H - EN 10210 |
| | 52 | Back-up ring | Steel - S355J2H - EN 10210 |
| | 53 | Springs | Stainless steel - AISI304 / 1.4301 / EN 10088-3 |
| | 54 | Flowguides | Steel |

T-handle - DN 10 - 50

Type 66050 - Reduced bore



| DN | BROEN No. | Color | L - mm | B - mm |
|---------|--------------|--------|--------|--------|
| 10 - 32 | 66050010 000 | Yellow | 85 | 34 |
| 10 - 32 | 66050010 003 | Blue | 85 | 34 |
| 10 - 32 | 66050010 004 | Red | 85 | 34 |
| 40 - 50 | 66050040 000 | Yellow | 120 | 44 |
| 40 - 50 | 66050040 003 | Blue | 120 | 44 |
| 40 - 50 | 66050040 004 | Red | 120 | 44 |

Handle - DN 10 - 200

Type 66060 / 66064 / 66061 - Reduced bore



| DN | BROEN No. | L - mm |
|---------|-----------|--------|
| 10 - 32 | 66060010 | 140 |
| 40 - 50 | 66060040 | 180 |
| 65 - 80 | 66060065 | 275 |
| 100 | 66064100 | 365 |
| 125 | 66061100 | 365 |
| 150 | 66061150 | 650 |
| 200 | 66061200 | 900 |

ISO-flanges, mounting kit - DN 10 - 100

Type 203... / 208... / 167... / 169... - Reduced bore

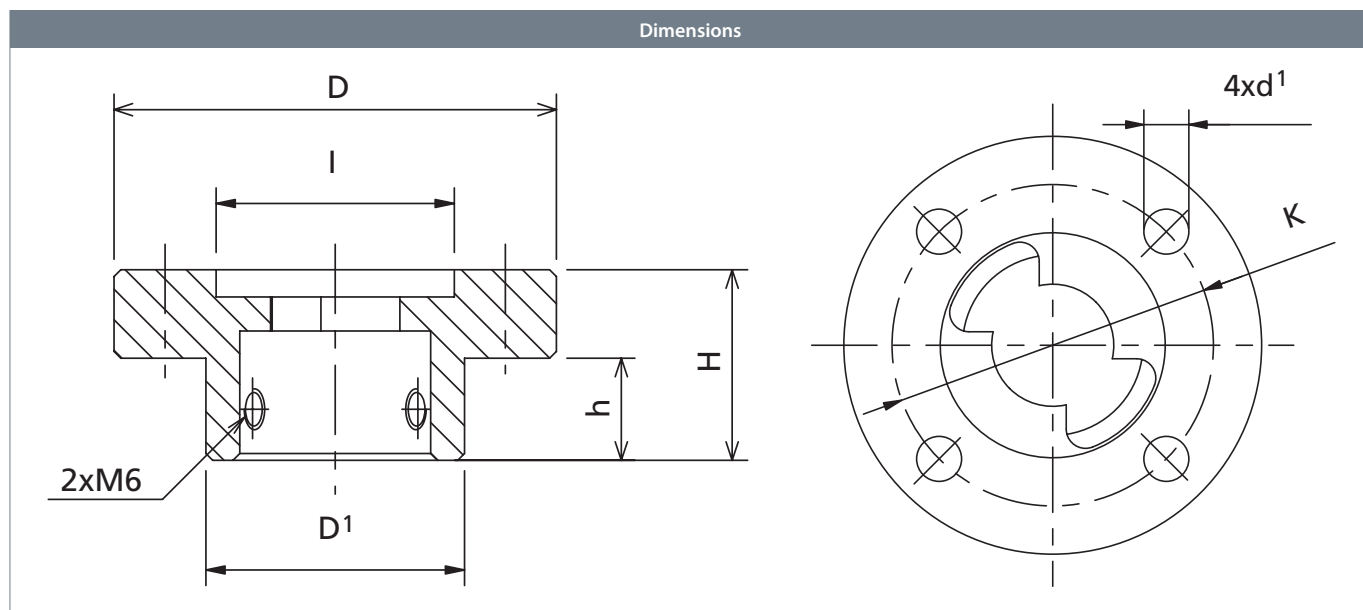
ISO-flanges, mounting kit

Mounting flange for later mounting of gear / actuator.

No mounting facing downwards.



Dimensions



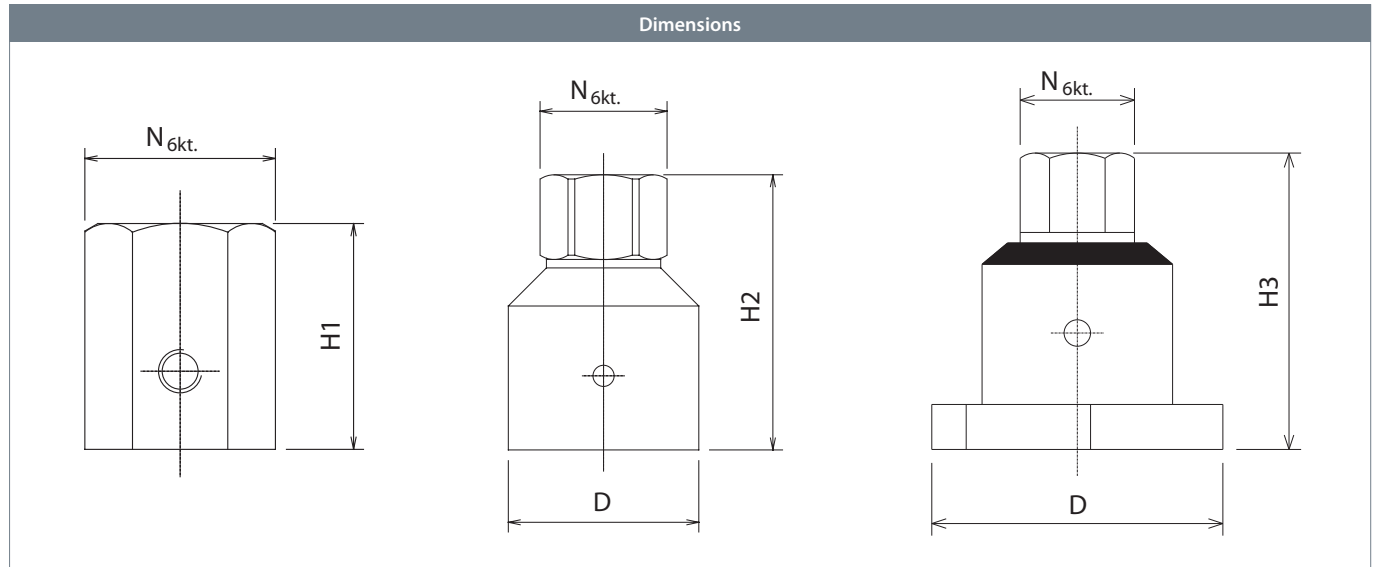
| DN | BROEN No. | ISO-flange | All dimensions in mm | | | | | | |
|---------|-----------|------------|----------------------|----|----|----|----|----|----|
| | | | D | D' | H | h | I | K | d' |
| 10 - 32 | 203245 | F05 | 65 | 34 | 28 | 15 | 35 | 50 | 7 |
| 40 - 50 | 208245 | F05 | 65 | 38 | 28 | 15 | 35 | 50 | 7 |
| 65 - 80 | 167245 | F05 | 65 | 47 | 33 | 20 | 35 | 50 | 7 |
| 100 | 169245 | F07 | 90 | 57 | 35 | 20 | 55 | 70 | 9 |

Hexagon for insertion key - DN 10 - 150

Type 66160 / 66164 / 66161 - Reduced bore

Hexagon for insertions key

To make thread end of spindle to hexagon.



| DN | BROEN No. | All dimensions in mm | | | | |
|---------|--------------|----------------------|----|----|----|--------|
| | | D | H1 | H2 | H3 | N hex. |
| 10 - 32 | 66160010 000 | - | 26 | - | - | 19 |
| 40 - 50 | 66160040 000 | - | 26 | - | - | 19 |
| 65 - 80 | 66160065 000 | 28 | - | 52 | - | 19 |
| 100 | 66164100 000 | 45 | - | 65 | - | 27 |
| 125 | 66161100 000 | 80 | - | - | 75 | 27 |
| 150 | 66161150 000 | 112 | - | - | 85 | 27 |

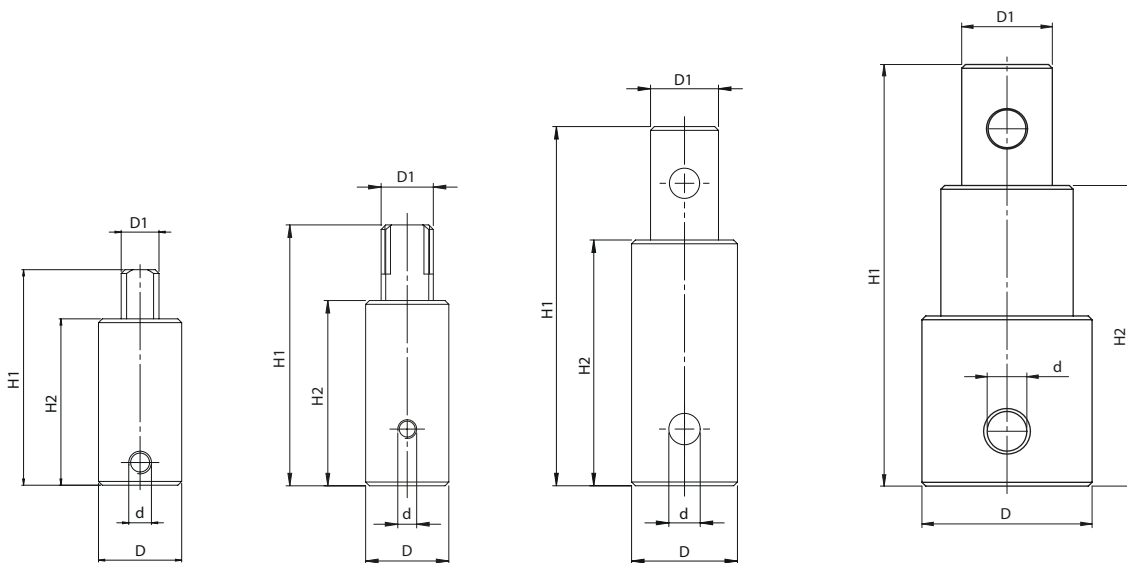
Spindle extension - DN 10 - 125

Type 084... / 251... - Reduced bore

Spindle extension for type 61-64 valves



Dimensions



| | | All dimensions in mm | | | | |
|-----------|-----------|----------------------|-------|------|---------|----|
| DN | BROEN No. | D | H1 | H2 | d | D1 |
| 10 - 32 | 084600 | 22 | 57.0 | 44.0 | M 5 × 5 | 10 |
| 40 - 50 | 084500 | 22 | 69.0 | 49.0 | M 5 × 5 | 14 |
| 65 - 80 | 084800 | 28 | 95.0 | 65.0 | 8.3 | 18 |
| 100 - 125 | 251300 | 45 | 111.5 | 79.5 | 10.5 | 24 |

BROEN BALLOMAX® Repair set - DN 10 - 500

Type 600... - Reduced bore



| DN | BROEN No. | Type |
|-----------|-----------|----------|
| 10 - 32 | 600040 | 60-61-64 |
| 40 - 50 | 600041 | 60-61-64 |
| 65 - 80 | 600042 | 60-64 |
| 65 - 80 | 600043 | 61 |
| 100 | 600044 | 60-64 |
| 100 | 600045 | 61 |
| 125 | 600046 | 64 |
| 150 | 600048 | 64 |
| 150 - 200 | 600049 | 61 |
| 250 | 600050 | 40 |
| 300 - 350 | 600051 | 40 |
| 400 | 600052 | 40 |
| 450 - 500 | 600053 | 40 |
| 250 | 600568 | 85 |
| 300 - 350 | 600600 | 85 |
| 400 | 600601 | 85 |
| 500 | 600602 | 85 |

Repair set include tools and 5 gaskets for repair.

BROEN-Gear - DN 100 - 500

Type 500... / 300... - Reduced bore

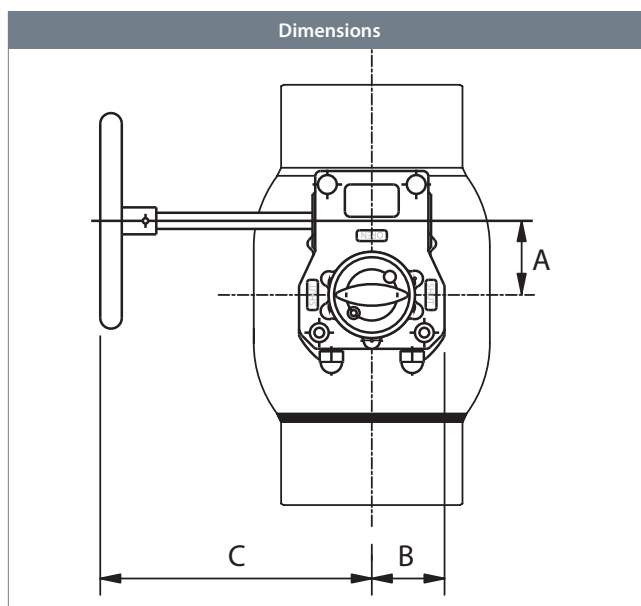
BROEN-Gear

Hand-operated gearbox.

BROEN-Gear is a strong high quality hand-operated gearbox. The hand wheel is ergonomically designed.

Operating torque

Operating torque of handwheel (Nm) - see below table.

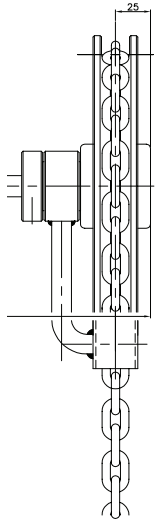


| DN | BROEN No. | net Weight kg* | All dimensions in mm | | | | |
|-----------|-----------|----------------|----------------------|-------|-----|-------|------------|
| | | | A | B | C | Nm | Hand wheel |
| 100 | 600583 | 2,5 | 41,3 | 40,0 | 145 | 650 | 200 |
| 125 | 600584 | 2,5 | 41,3 | 40,0 | 145 | 300 | 200 |
| 150 | 600585 | 7,8 | 68,8 | 67,5 | 240 | 1200 | 300 |
| 200 | 600586 | 8,6 | 68,8 | 67,5 | 245 | 1200 | 350 |
| 250 | 600587 | 9,5 | 68,8 | 67,5 | 275 | 1200 | 450 |
| 300 - 350 | 600588 | 26,0 | 104,5 | 110,0 | 346 | 3250 | 500 |
| 400 | 600589 | 42,0 | 130,0 | 142,5 | 387 | 7000 | 350 |
| 500 | 600590 | 67,9 | 182,0 | 185,0 | 470 | 17000 | 450 |

* Weight gearbox with hand wheel.

BROEN-Gear with chain - DN 40 - 300

Type CW... - Reduced bore



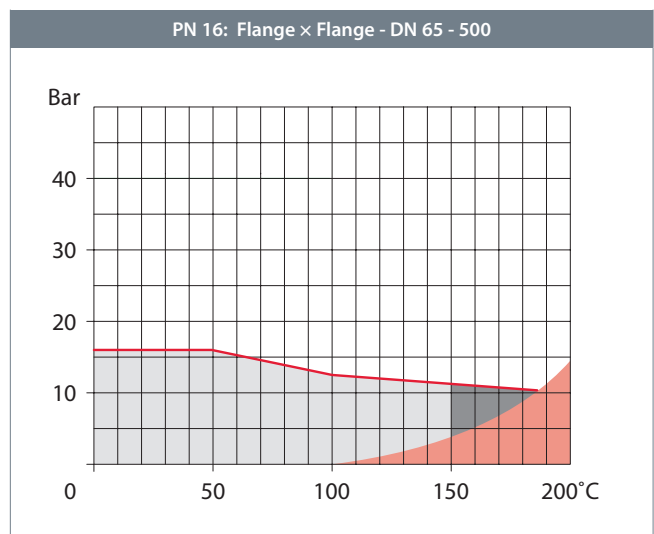
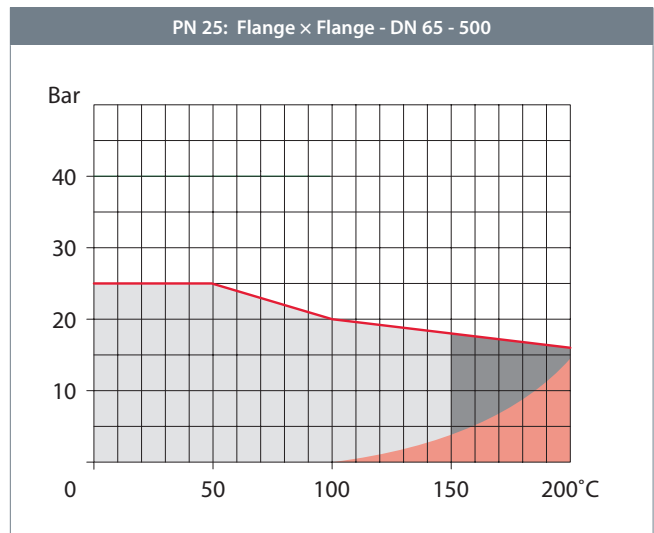
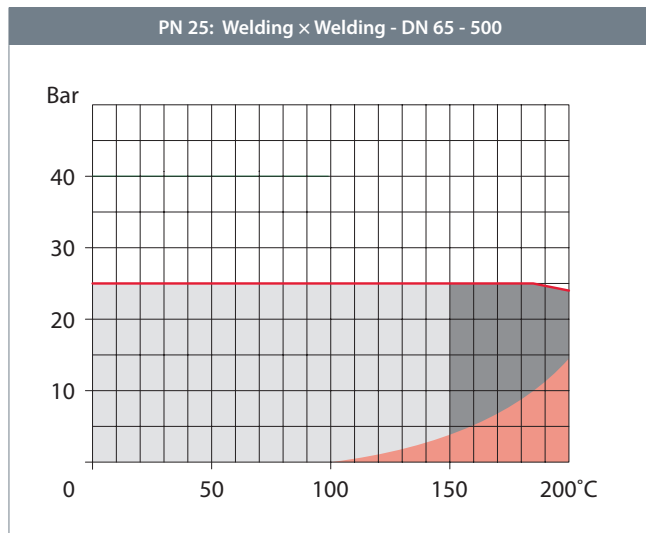
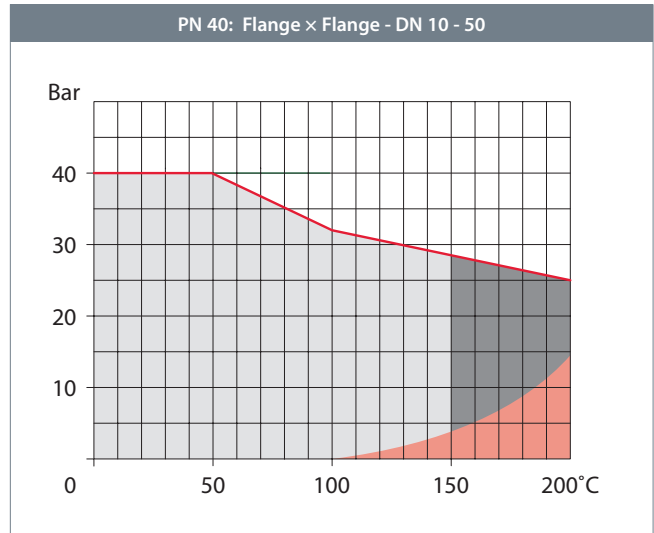
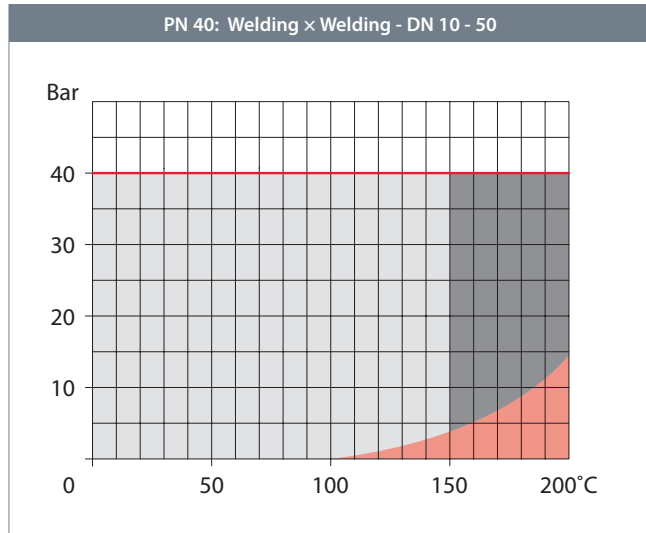
| | Size | BROEN No. |
|-------------------|----------------------------------|-----------|
| | Ø15 | CW 135 |
| | Ø20 | CW 215 |
| | Ø25 | CW 335 |
| Accessory: | | |
| Gear chain | 1 meter - ZP chain (+ Splitlink) | |
| Gear chain | 1 meter - SS chain (+ Splitlink) | |

BROEN manual gear, mounting and adjustment are customers responsibility. Possible to operate with chain, for gear mounted high above ground.
Galvanized chain, price per meter.

NOTICE: The length is the total length, not the height above ground of the gear.

Pressure and temperature graph - DN 10 - 500 - PN 40/25/16

Reduced bore



- Normal working area
- Short-term working area
- Steam area
(see high temperature valves
- section 8)

Pressure drop graph - DN 10 - 500

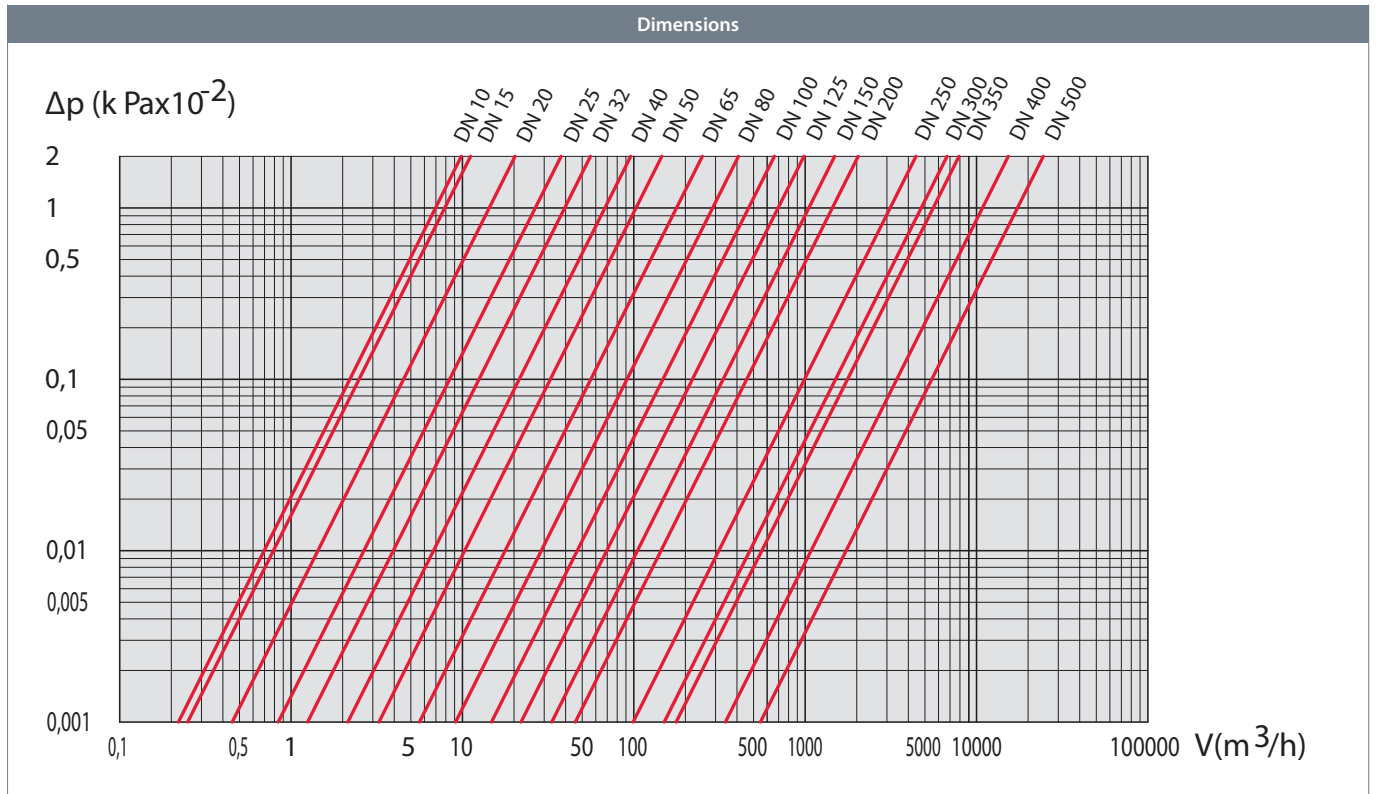
Reduced bore

Pressure drop graph

Ball valve in fully open position.
Medium: water density in 1000 kg/m³

Definitions

Kvs: M³ water per hour at pressure drop 1 bar.



| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 500 |
|-----|----|----|----|----|----|----|-----|-----|-----|-----|-----|------|------|------|------|------|-------|-------|
| Kvs | 7 | 8 | 15 | 27 | 40 | 69 | 110 | 180 | 288 | 470 | 699 | 1046 | 1500 | 5300 | 8200 | 8900 | 13700 | 20300 |

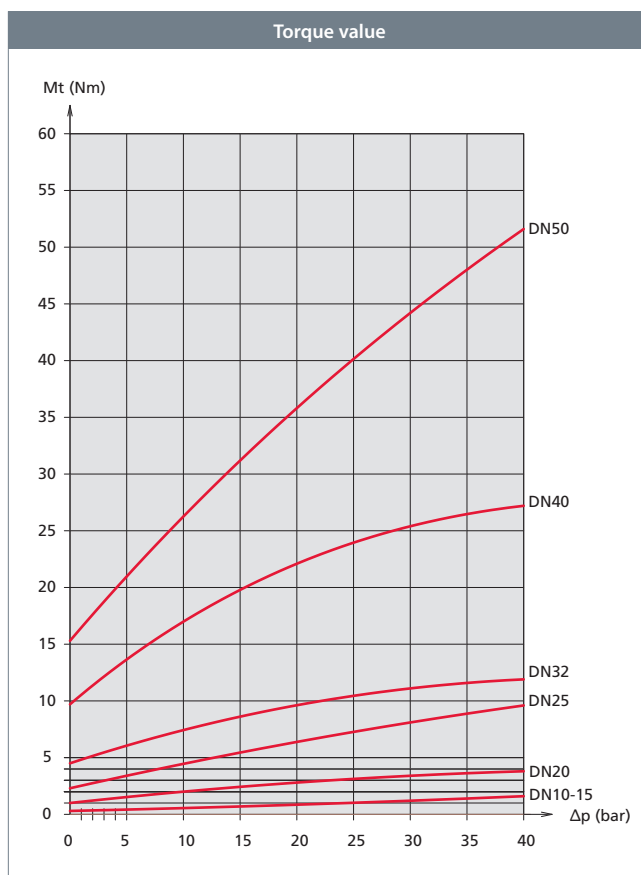
Operating torque - DN 10 - 50, PN 40

Reduced bore

Operating torque

The torque stated is for guidance only; it has been obtained by measuring on new ball valves. The torque is to be understood as the pull-off torque applicable for a closed, but recently activated ball valve.

The value stated may rise to a factor of 1.5 after a long period of inactivity.



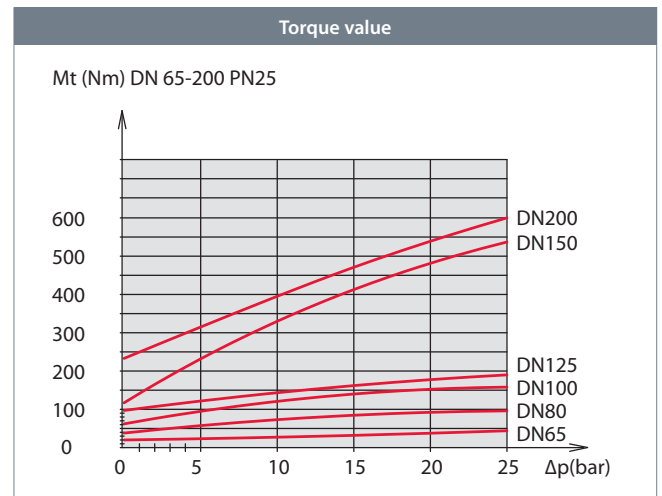
Operating torque - DN 65 - 500, PN 25

Reduced bore

Operating torque

The torque stated is for guidance only; it has been obtained by measuring on new ball valves. The torque is to be understood as the pull-off torque applicable for a closed, but recently activated ball valve.

The value stated may rise to a factor of 1.5 after a long period of inactivity.



Torque Nm

The value stated may rise to a factor of 2 after a long period of inactivity.

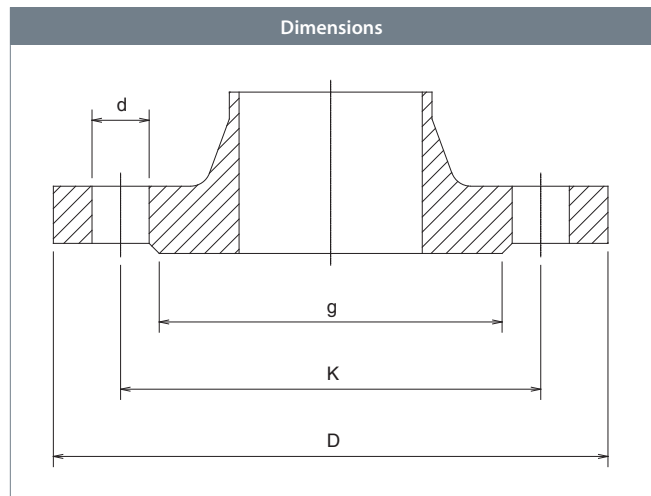
| Torque Nm | | | | |
|-----------|--------|------------|--------|--------|
| RB | DN 250 | DN 300/350 | DN 400 | DN 500 |
| Δ16 bar | 570 | 1460 | 2670 | 5665 |
| Δ25 bar | 610 | 1620 | 3325 | 6205 |

Connecting flange - DN 15 - 50, PN 40

EN 1092-1 - Reduced bore

Description

Flangestandard.



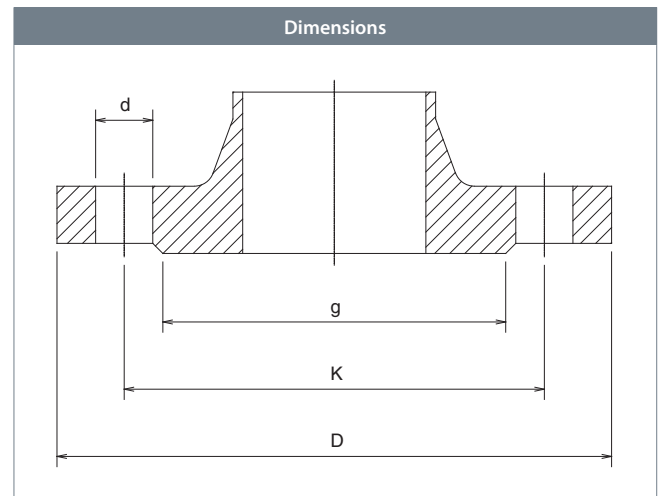
| DN | All dimensions in mm | | | | No. of bolt holes |
|----|----------------------|-----|-----|----|-------------------|
| | D | K | g | d | |
| 15 | 95 | 65 | 45 | 14 | 4 |
| 20 | 105 | 75 | 58 | 14 | 4 |
| 25 | 115 | 85 | 68 | 14 | 4 |
| 32 | 140 | 100 | 78 | 18 | 4 |
| 40 | 150 | 110 | 88 | 18 | 4 |
| 50 | 165 | 125 | 102 | 18 | 4 |

Connecting flange - DN 15 - 500, PN 25

EN 1092-1 - **Reduced bore**

Description

Flangestandard.



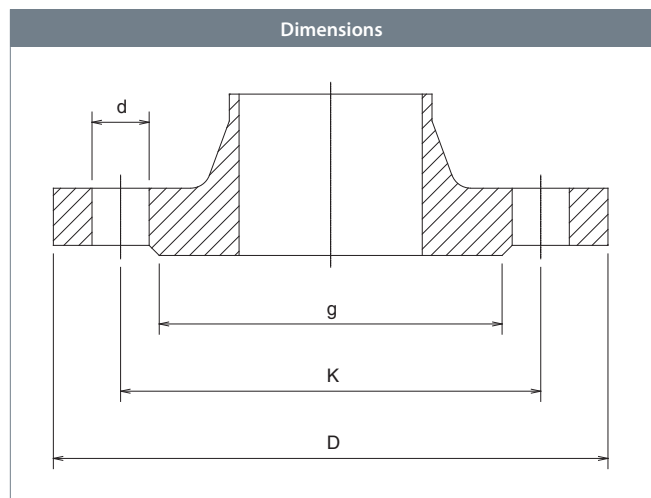
| All dimensions in mm | | | | | |
|----------------------|-----|-----|-----|----|-------------------|
| DN | D | K | g | d | No. of bolt holes |
| 15 | 95 | 65 | 45 | 14 | 4 |
| 20 | 105 | 75 | 58 | 14 | 4 |
| 25 | 115 | 85 | 68 | 14 | 4 |
| 32 | 140 | 100 | 78 | 18 | 4 |
| 40 | 150 | 110 | 88 | 18 | 4 |
| 50 | 165 | 125 | 102 | 18 | 4 |
| 65 | 185 | 145 | 122 | 18 | 8 |
| 80 | 200 | 160 | 138 | 18 | 8 |
| 100 | 235 | 190 | 162 | 22 | 8 |
| 125 | 270 | 220 | 188 | 26 | 8 |
| 150 | 300 | 250 | 218 | 26 | 8 |
| 200 | 360 | 310 | 278 | 26 | 12 |
| 250 | 425 | 370 | 335 | 30 | 12 |
| 300 | 485 | 430 | 395 | 30 | 16 |
| 350 | 555 | 490 | 450 | 33 | 16 |
| 400 | 620 | 550 | 505 | 36 | 16 |
| 500 | 730 | 660 | 615 | 36 | 20 |

Connecting flange - DN 15 - 500, PN 16

EN 1092-1 - Reduced bore

Description

Flangestandard.



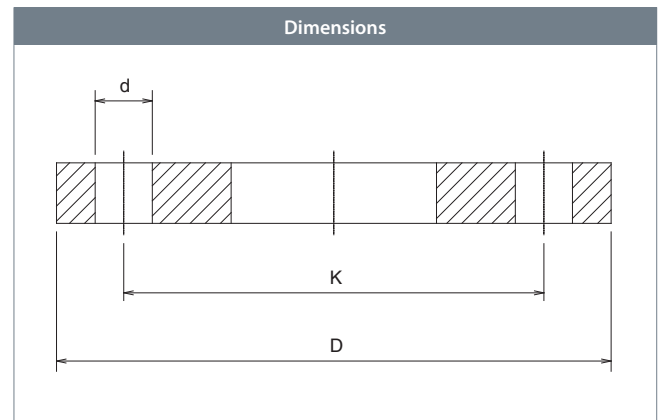
| DN | All dimensions in mm | | | | No. of bolt holes |
|-----|----------------------|-----|-----|----|-------------------|
| | D | K | g | d | |
| 15 | 95 | 65 | 45 | 14 | 4 |
| 20 | 105 | 75 | 58 | 14 | 4 |
| 25 | 115 | 85 | 68 | 14 | 4 |
| 32 | 140 | 100 | 78 | 18 | 4 |
| 40 | 150 | 110 | 88 | 18 | 4 |
| 50 | 165 | 125 | 102 | 18 | 4 |
| 65 | 185 | 145 | 122 | 18 | 4 |
| 80 | 200 | 160 | 138 | 18 | 8 |
| 100 | 220 | 180 | 158 | 18 | 8 |
| 125 | 250 | 210 | 188 | 18 | 8 |
| 150 | 285 | 240 | 212 | 22 | 8 |
| 200 | 340 | 295 | 268 | 22 | 12 |
| 250 | 405 | 355 | 320 | 26 | 12 |
| 300 | 460 | 410 | 378 | 26 | 12 |
| 350 | 520 | 470 | 438 | 26 | 16 |
| 400 | 580 | 525 | 490 | 30 | 16 |
| 500 | 715 | 650 | 610 | 33 | 20 |

Connecting flange - DN 15 - 500, PN10

EN 1092-1 - **Reduced bore**

Description

Flangestandard.



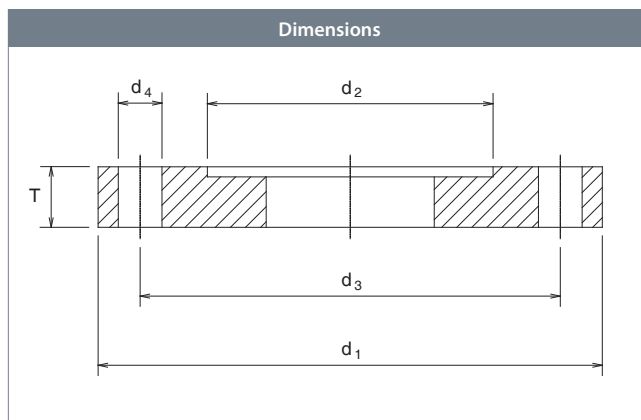
| DN | All dimensions in mm | | | No. of bolt holes |
|-----|----------------------|-----|----|-------------------|
| | D | K | d | |
| 15 | 95 | 65 | 14 | 4 |
| 20 | 105 | 75 | 14 | 4 |
| 25 | 115 | 85 | 14 | 4 |
| 32 | 140 | 100 | 18 | 4 |
| 40 | 150 | 110 | 18 | 4 |
| 50 | 165 | 125 | 18 | 4 |
| 65 | 185 | 145 | 18 | 4 |
| 80 | 200 | 160 | 18 | 8 |
| 100 | 220 | 180 | 18 | 8 |
| 125 | 250 | 210 | 18 | 8 |
| 150 | 285 | 240 | 22 | 8 |
| 200 | 340 | 295 | 22 | 8 |
| 250 | 395 | 350 | 22 | 12 |
| 300 | 445 | 400 | 22 | 12 |
| 350 | 505 | 460 | 22 | 16 |
| 400 | 565 | 515 | 26 | 16 |
| 500 | 670 | 620 | 26 | 20 |

Valve actuator attachment - DN 65 - 500, PN10

ISO 5210 / ISO 5211 - Reduced bore

Description

ISO-flange for gear.



| | | All dimensions in mm | | | | | |
|-----------------|-------------|----------------------|-------|-------|-------|-------|-------------------|
| To be used with | Flange type | T | d_1 | d_2 | d_3 | d_4 | No. of bolt holes |
| DN 65 - 80 | F05 | 12.5 | 65 | 35 | 50 | 7 | 4 |
| DN 100 - 125 | F07 | 13.5 | 90 | 55 | 70 | 9 | 4 |
| DN 150 | F10 | 14.5 | 125 | 70 | 102 | 11 | 4 |
| DN 200 | F12 | 14.5 | 150 | 85 | 125 | 13 | 4 |
| DN 250 | F14 | 17.6 | 175 | 100 | 140 | 17 | 4 |
| DN 300 | F16 | 23.5 | 210 | 130 | 165 | 21 | 4 |
| DN 350 | F16 | 23.5 | 210 | 130 | 165 | 21 | 4 |
| DN 400 | F25 | 27.5 | 300 | 200 | 254 | 17 | 8 |
| DN 500 | F30 | 28.5 | 350 | 230 | 298 | 21 | 8 |