

## BALL VALVE Type HKSF-W



Thanks to its proven operating reliability and design construction, the RMA ball valve of the HKSF series is suitable for use in gas and oil pipelines, as well as for measurement and control stations, pig traps and compressor stations.

It is an extremely sturdy, maintenance free, fully welded construction.

The RMA ball valve is characterized by the following:

Up to and including PN 25, sealing is achieved using elastomer sealing rings with special profiles. For constructions up to PN 100/ANSI 600, sealing is achieved firstly with metal sealing surface and secondly with PTFE soft sealing rings.

The metal sealing surface of the ring seat is ground in together with the valve ball. This solution offers optimum results for both, safe sealing and wear resistance, even in case of a medium laden with impurities.

In accordance with requirements, each seating ring is additionally equipped with a sealing pressure system. For PN 100 / ANSI 600, the sealing of the spindle is achieved using four independent seals.

The spindle may be changed during operation. The fourth seal consists of a pressure injection of a plastic sealing agent and can be applied from the outside.

Models for underground installation are also available.

#### Supply Program:

|                 |                                    |
|-----------------|------------------------------------|
| Size            | DN 50 - DN 400<br>DN 2" - DN 16"   |
| Pressure stages | PN 16 - 25 - 100<br>ANSI 150 - 600 |
| Connections     | Flanges - Weld-on ends             |

#### Double Block and Bleed

The "double block and bleed" principle allows to verify tightness when the valve is in either the fully open or closed position by bleeding the body cavity via the vent or drain connections.

#### Anti-static Design

Ball plug and valve body have metallic contact. This excludes build-up of static electricity.

#### Fire-safe Design

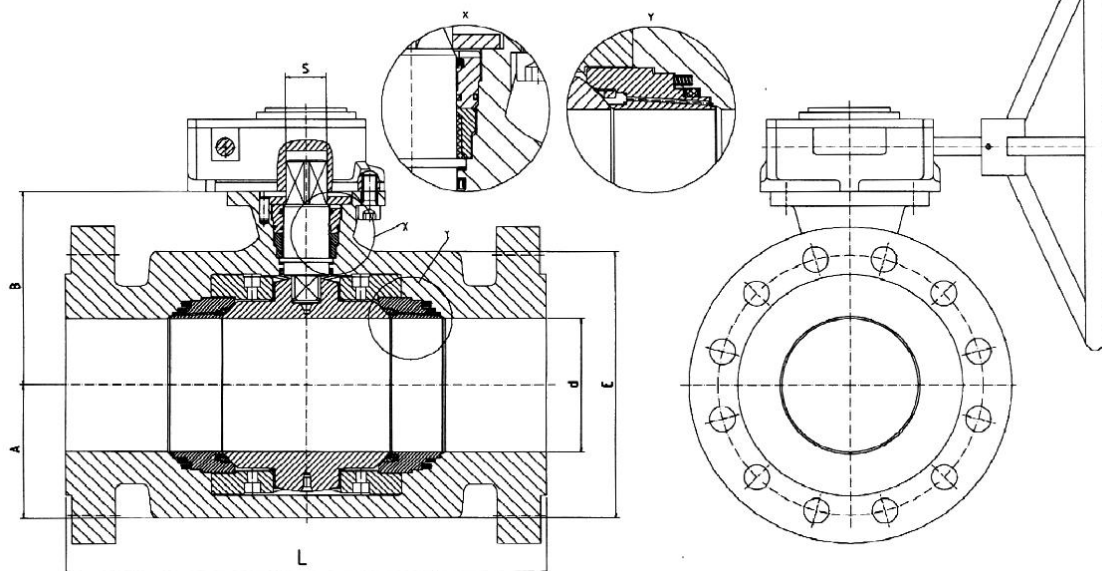
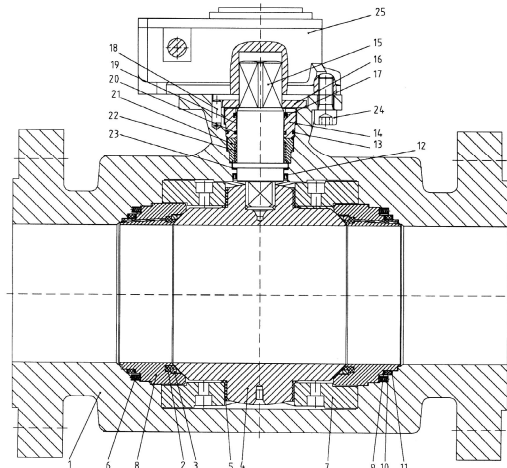
RMA ball valves are fire-safe to the most stringent standards presently applicable for oil, gas and production pipelines.

#### Maintenance-free

RMA ball valves require no lubrication or maintenance.

**Ball valve**  
**Type HKSF - double sided flanged**  
**PN 64/70 / ANSI 400**  
**PN 100 / ANSI 600**

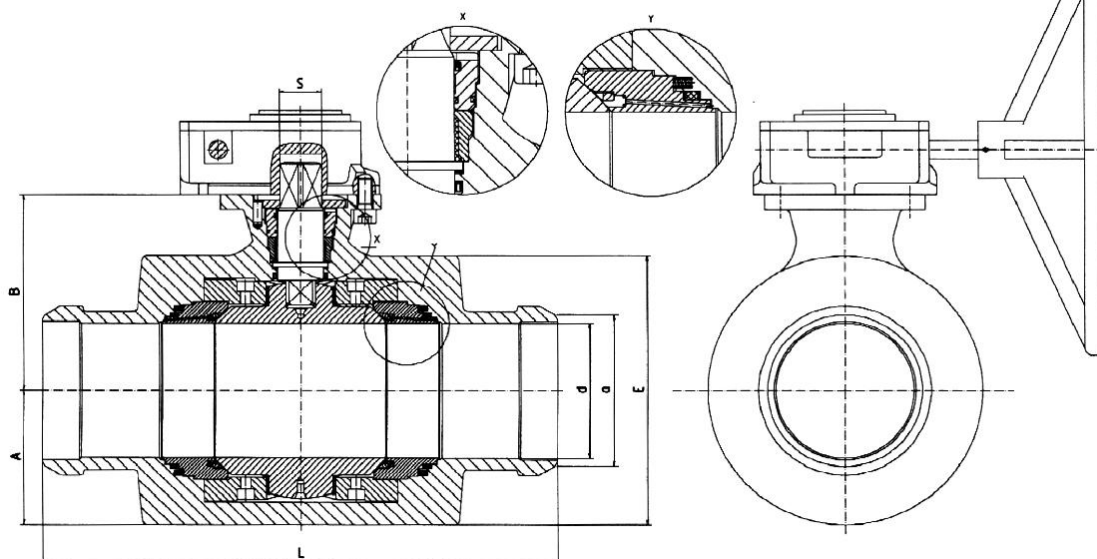
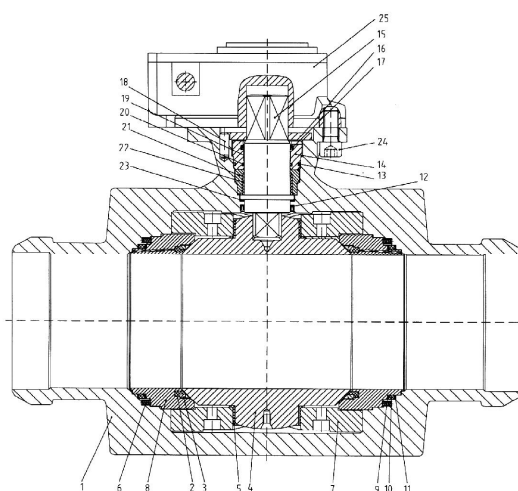
| Pos. | Description                |
|------|----------------------------|
| 1    | Housing                    |
| 2    | Seal                       |
| 3    | Clamping ring              |
| 4    | Ball                       |
| 5    | Plain bearing              |
| 6    | Compression spring         |
| 7    | Guide plate                |
| 8    | Pick-up ring               |
| 9    | Back-up ring               |
| 10   | O-seal                     |
| 11   | Pick-up ring               |
| 12   | Turcon-Variaseal           |
| 13   | O-seal                     |
| 14   | Thrust piece upper         |
| 15   | Switching spindle          |
| 16   | Stop disc                  |
| 17   | Wiper ring                 |
| 18   | Straight pin               |
| 19   | Antisize                   |
| 20   | O-seal                     |
| 21   | Thrust piece under         |
| 22   | Plain bearing              |
| 23   | Slide ring                 |
| 24   | Hex. Socket head cap screw |
| 25   | Gear                       |



| DN   | 80  | 100   | 150   | 200 | 250   | 300   | 400   |
|------|-----|-------|-------|-----|-------|-------|-------|
| size | 3"  | 4"    | 6"    | 8"  | 10"   | 12"   | 16"   |
| L    | 356 | 432   | 559   | 660 | 787   | 838   | 991   |
| d    | 78  | 102,3 | 154,1 | 220 | 247,6 | 298   | 390   |
| B    | 140 | 170,5 | 217   | 250 | 327   | 363,5 | 439,4 |
| A    | 80  | 96,8  | 150   | 185 | 235   | 279,5 | 355   |
| E    | 160 | 193,7 | 300   | 370 | 470   | 559   | 710   |
| S    | 22  | 27    | 36    | 36  | 46    | 46    | 55    |

**Ball valve**  
**Type HKSF - double sided weld-on ends**  
**PN 64/70 / ANSI 400**  
**PN 100 / ANSI 600**

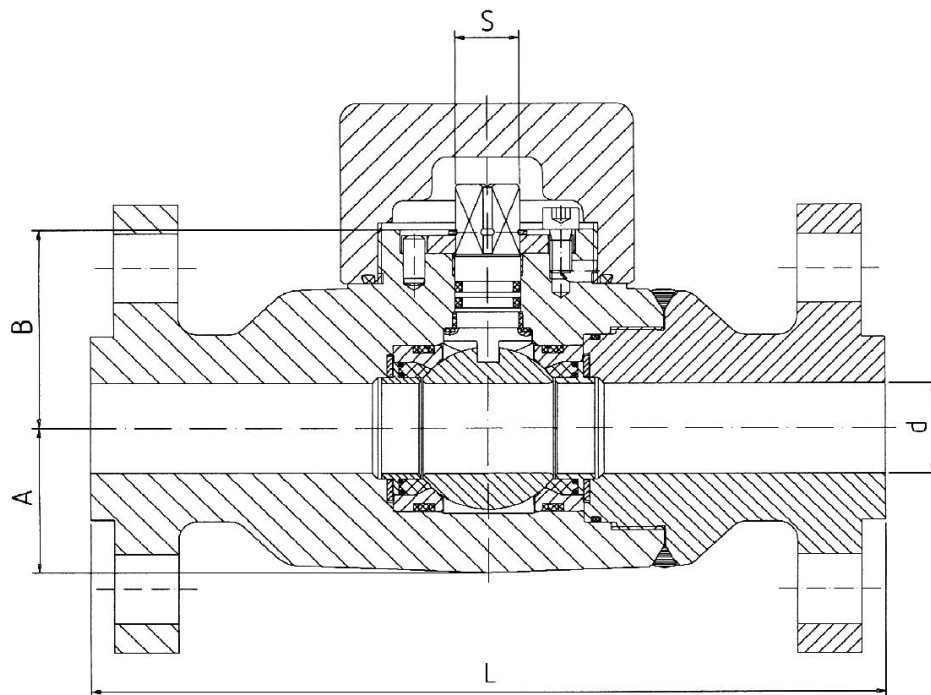
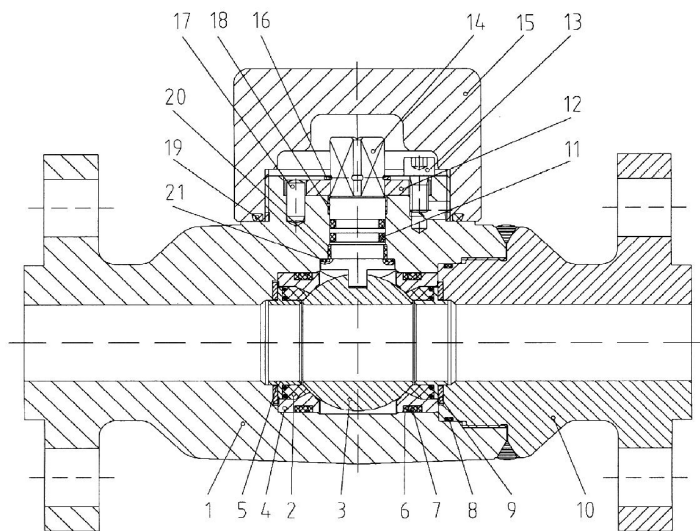
| Pos. | Description                |
|------|----------------------------|
| 1    | Housing                    |
| 2    | Seal                       |
| 3    | Clamping ring              |
| 4    | Ball                       |
| 5    | Plain bearing              |
| 6    | Compression spring         |
| 7    | Guide plate                |
| 8    | Pick-up ring               |
| 9    | Back-up ring               |
| 10   | O-seal                     |
| 11   | Pick-up ring               |
| 12   | Turcon-Variaseal           |
| 13   | O-seal                     |
| 14   | Thrust piece upper         |
| 15   | Switching spindle          |
| 16   | Stop disc                  |
| 17   | Wiper ring                 |
| 18   | Straight pin               |
| 19   | Antisize                   |
| 20   | O-seal                     |
| 21   | Thrust piece under         |
| 22   | Plain bearing              |
| 23   | Slide ring                 |
| 24   | Hex. Socket head cap screw |
| 25   | Gear                       |



| DN   | 80   | 100   | 150   | 200   | 250   | 300   | 400   |
|------|------|-------|-------|-------|-------|-------|-------|
| size | 3"   | 4"    | 6"    | 8"    | 10"   | 12"   | 16"   |
| L    | 356  | 432   | 559   | 660   | 787   | 838   | 991   |
| d    | 78   | 102,3 | 154,1 | 220   | 247,6 | 298   | 390   |
| a    | 88,9 | 114,3 | 168,3 | 219,1 | 273   | 323,9 | 406,4 |
| B    | 140  | 170,5 | 217   | 250   | 327   | 363,5 | 439,4 |
| A    | 80   | 96,8  | 150   | 185   | 235   | 279,5 | 355   |
| E    | 160  | 193,7 | 300   | 370   | 470   | 559   | 710   |
| S    | 22   | 27    | 36    | 36    | 46    | 46    | 55    |

**Ball valve**  
**Type HKSF - double sided flanges**  
**PN 64/70 / ANSI 400**  
**PN 100 / ANSI 600**

| Pos. | Description                |
|------|----------------------------|
| 1    | Housing                    |
| 2    | Seal                       |
| 3    | Ball                       |
| 4    | Bearing                    |
| 5    | Pick-up ring               |
| 6    | Back-up ring               |
| 7    | O-ring                     |
| 8    | O-ring                     |
| 9    | Disk spring                |
| 10   | Screw nut                  |
| 11   | O-ring                     |
| 12   | Stop disk                  |
| 13   | Hex. Socket head cap screw |
| 14   | Switching spindle          |
| 15   | Protection cap             |
| 16   | Sealing ring               |
| 17   | Straight pin               |
| 18   | Antisize                   |
| 19   | O-ring                     |
| 20   | O-ring                     |
| 21   | Disk                       |

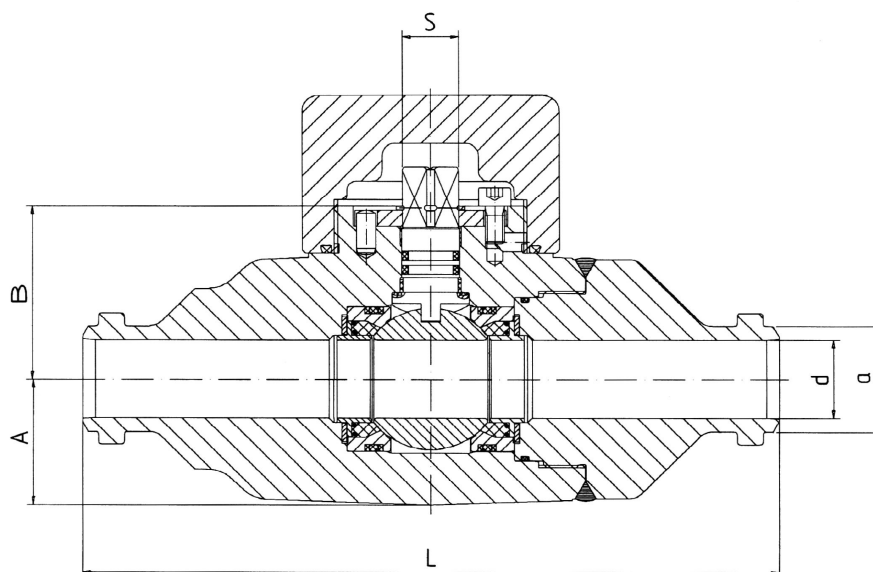
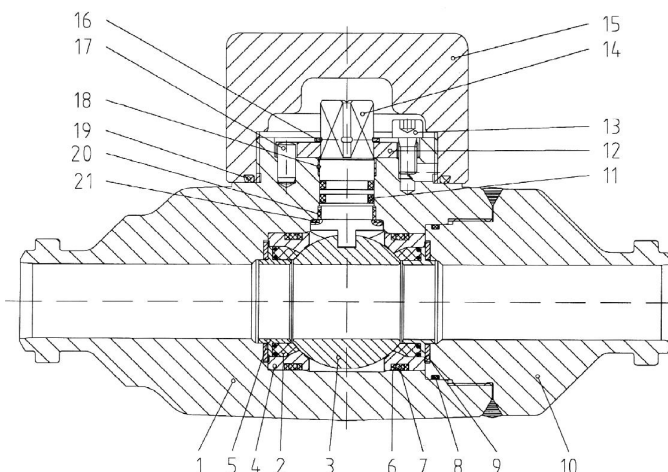


| DN size | 25<br>1" | 50<br>2" |
|---------|----------|----------|
| L       | 216      | 292      |
| d       | 25       | 49       |
| B       | 55       | 87       |
| A       | 40       | 80,5     |
| S       | 14       | 17       |



**Ball valve**  
**Type HKSF - double sided weld-on ends**  
**PN 64/70 / ANSI 400**  
**PN 100 / ANSI 600**

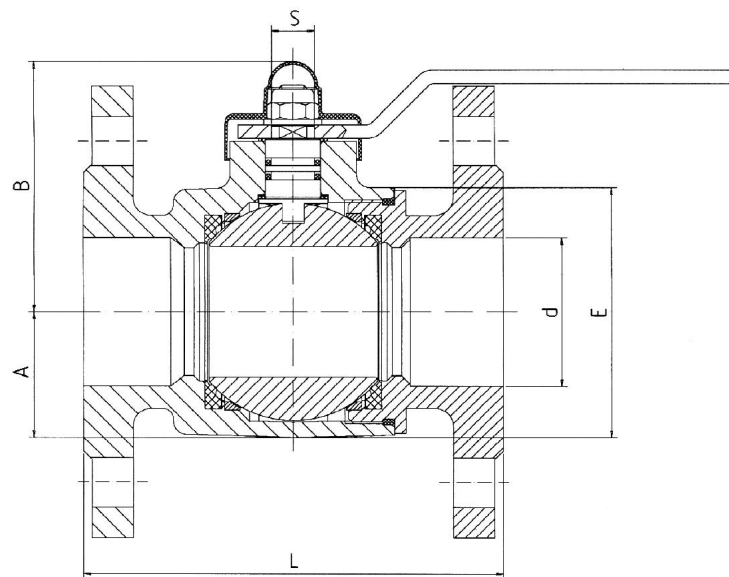
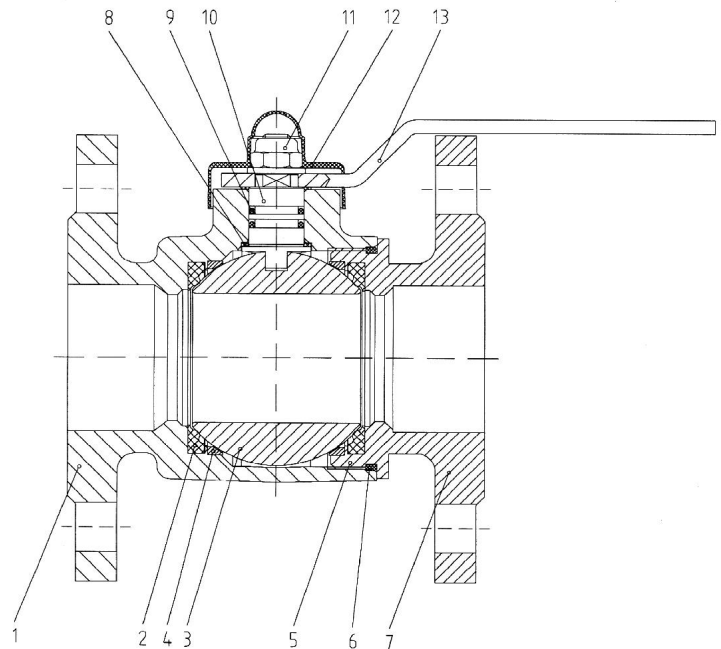
| Pos. | Description                |
|------|----------------------------|
| 1    | Housing                    |
| 2    | Seal                       |
| 3    | Ball                       |
| 4    | Bearing                    |
| 5    | Pick-up ring               |
| 6    | Back-up ring               |
| 7    | O-ring                     |
| 8    | O-ring                     |
| 9    | Disk spring                |
| 10   | Screw nut                  |
| 11   | O-ring                     |
| 12   | Stop disk                  |
| 13   | Hex. Socket head cap screw |
| 14   | Switching spindle          |
| 15   | Protection cap             |
| 16   | Sealing ring               |
| 17   | Straight pin               |
| 18   | Antisize                   |
| 19   | O-ring                     |
| 20   | O-ring                     |
| 21   | Disk                       |



| DN size | 25<br>1" | 50<br>2" |
|---------|----------|----------|
| L       | 216      | 292      |
| d       | 25       | 49       |
| a       | 33,7     | 60,3     |
| B       | 55       | 87       |
| A       | 40       | 80,5     |
| S       | 14       | 17       |

**Ball valve**  
**Type HKSF - double sided flanges**  
**PN 16/25**

| Pos. | Description       |
|------|-------------------|
| 1    | Housing           |
| 2    | Seal              |
| 3    | Ball              |
| 4    | Ring              |
| 5    | Weld nut          |
| 6    | O-seal            |
| 7    | Flanges           |
| 8    | Washer            |
| 9    | O-seal            |
| 10   | Switching spindle |
| 11   | Hexagon nut       |
| 12   | Cap               |
| 13   | Key               |

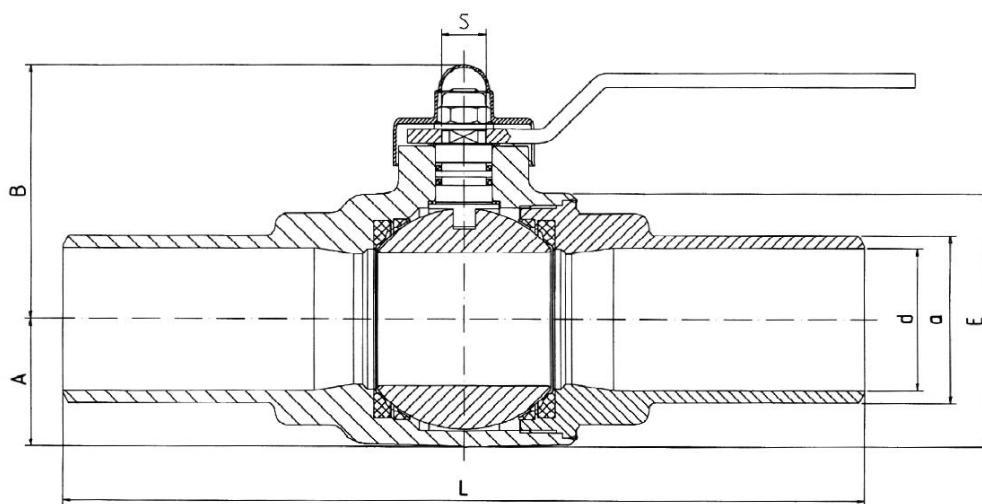
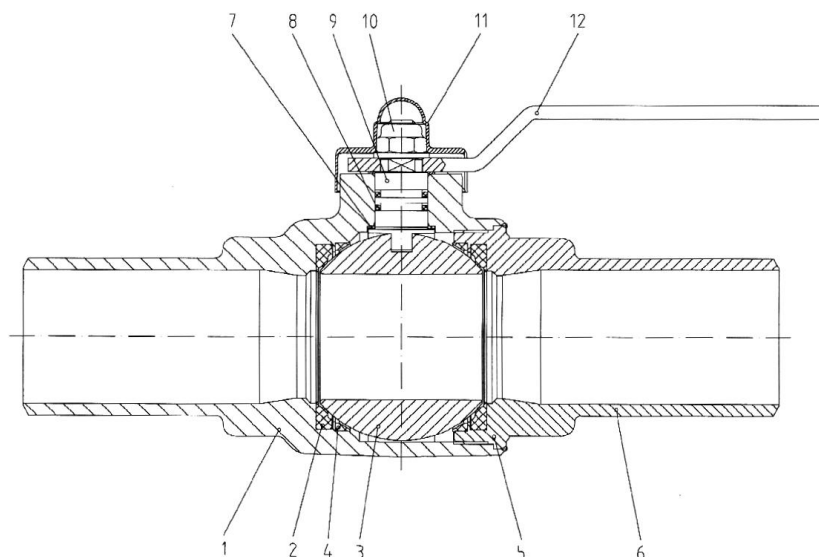


| DN size | 25   | 32     | 40     | 50   | 65     |
|---------|------|--------|--------|------|--------|
|         | 1"   | 1 1/4" | 1 1/2" | 2"   | 2 1/2" |
| L       | 160  | 180    | 200    | 150* | 290    |
| d       | 28,5 | 37,2   | 40     | 54,5 | 70,3   |
| B       | 44,7 | 56,4   | 56,4   | 61,5 | 66,4   |
| A       | 27   | 41,5   | 41,5   | 46   | 46     |
| E       | 55   | 78     | 78     | 90   | 90     |
| S       | 12   | 12     | 12     | 12   | 12     |

\*200 resp. 230

**Ball valve**  
**Type HKSF - double sided weld-on ends**  
**PN 16/25**

| Pos. | Description       |
|------|-------------------|
| 1    | Housing           |
| 2    | Seal              |
| 3    | Ball              |
| 4    | Ring              |
| 5    | Weld nut          |
| 6    | O-seal            |
| 7    | Flanges           |
| 8    | Washer            |
| 9    | O-seal            |
| 10   | Switching spindel |
| 11   | Hexagon nut       |
| 12   | Cap               |
| 13   | Key               |

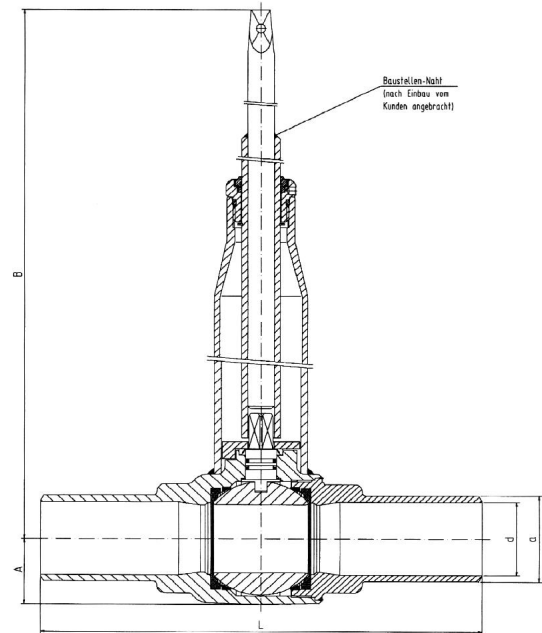


| DN   | 25   | 32     | 40     | 50   | 65     |
|------|------|--------|--------|------|--------|
| size | 1"   | 1 1/4" | 1 1/2" | 2"   | 2 1/2" |
| L    | 500  | 500    | 500    | 500  | 500    |
| d    | 25,6 | 34,7   | 40,2   | 51,3 | 67     |
| a    | 33,7 | 42,8   | 48,3   | 60,3 | 76     |
| B    | 44,7 | 56,4   | 56,4   | 61,5 | 66,4   |
| A    | 27   | 41,5   | 41,5   | 46   | 46     |
| E    | 55   | 78     | 78     | 90   | 90     |
| S    | 12   | 12     | 12     | 12   | 12     |

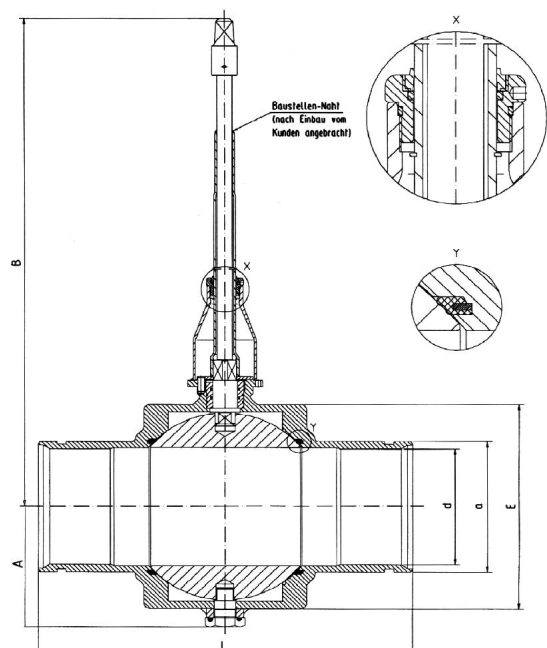


**Ball valve  
Type HKSF-E  
PN 16/25**

| DN<br>size | 25<br>1"              | 32<br>1 1/4"          | 40<br>1 1/2"          | 50<br>2"              | 65<br>2 1/2"          |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| L          | 500                   | 500                   | 500                   | 500                   | 500                   |
| d          | 25,6                  | 34,7                  | 40,2                  | 51,3                  | 67                    |
| a          | 33,7                  | 42,8                  | 48,3                  | 60,3                  | 76                    |
| B          | Min. 676<br>Max. 1026 | Min. 689<br>Max. 1039 | Min. 689<br>Max. 1039 | Min. 695<br>Max. 1045 | Min. 695<br>Max. 1045 |
| A          | 27                    | 41,5                  | 41,5                  | 46                    | 46                    |
| E          | 55                    | 78                    | 78                    | 90                    | 90                    |

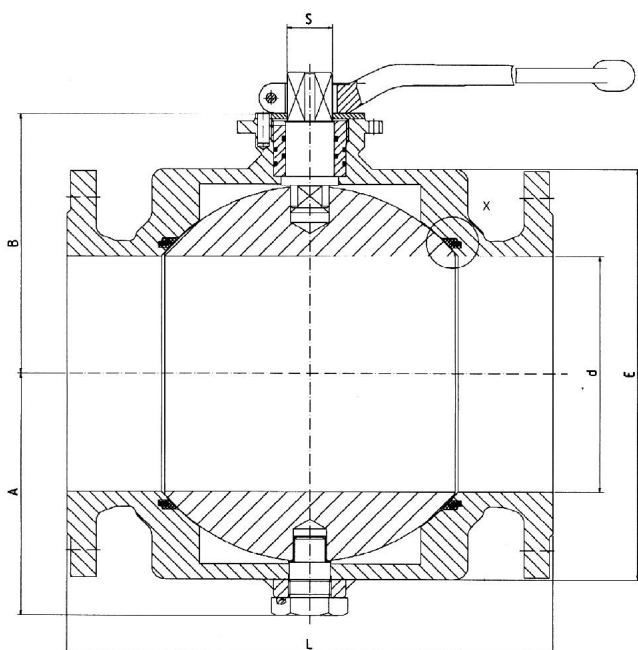
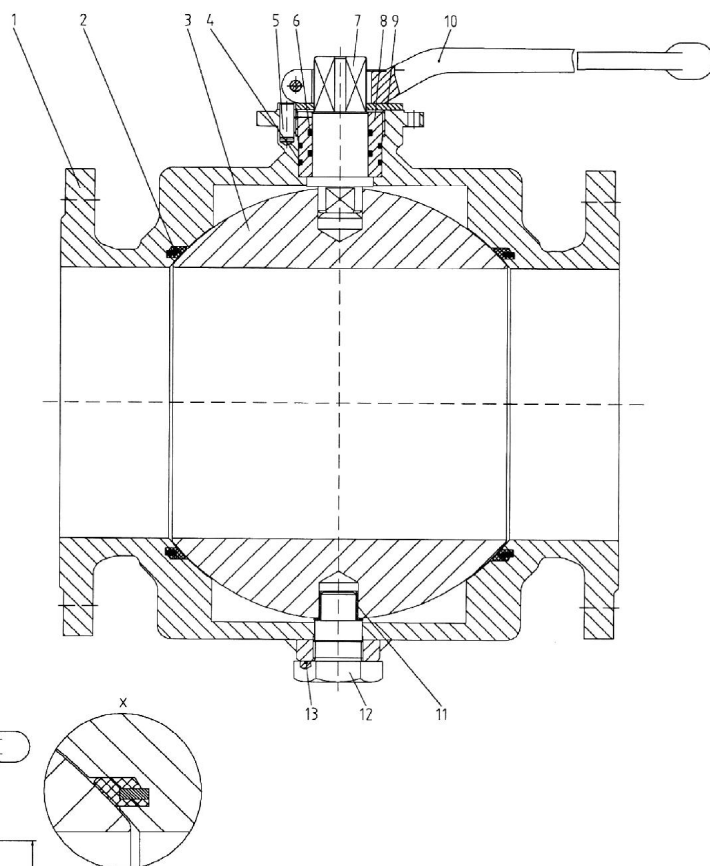


| DN<br>size | 80<br>3"              | 100<br>4"             | 150<br>6"             | 200<br>8"             | 250<br>10"             | 300<br>12"             |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|
| L          | 390                   | 450                   | 600                   | 600                   | 730                    | 850                    |
| d          | 78                    | 101                   | 148,3                 | 194,1                 | 244,6                  | 295,5                  |
| a          | 88,9                  | 114,3                 | 168,3                 | 219,1                 | 273                    | 322,9                  |
| B          | Min. 710<br>Max. 1060 | Min. 730<br>Max. 1080 | Min. 777<br>Max. 1127 | Min. 820<br>Max. 1170 | Min. 1270<br>Max. 1750 | Min. 1300<br>Max. 1780 |
| A          | 111                   | 110                   | 154                   | 202                   | 250                    | 250                    |
| E          | 146                   | 177                   | 254                   | 343                   | 445                    | 508                    |



**Ball valve**  
**Type HKSF - double sided flanges**  
**PN 16/25**

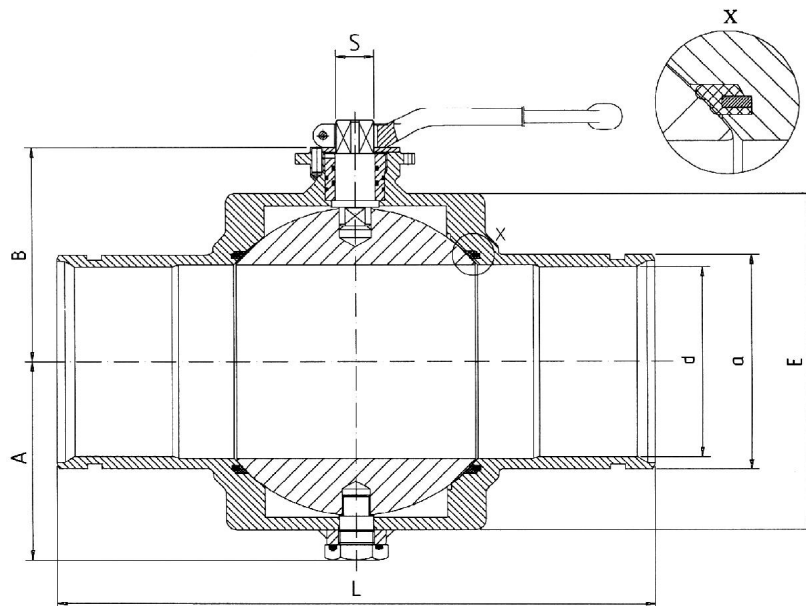
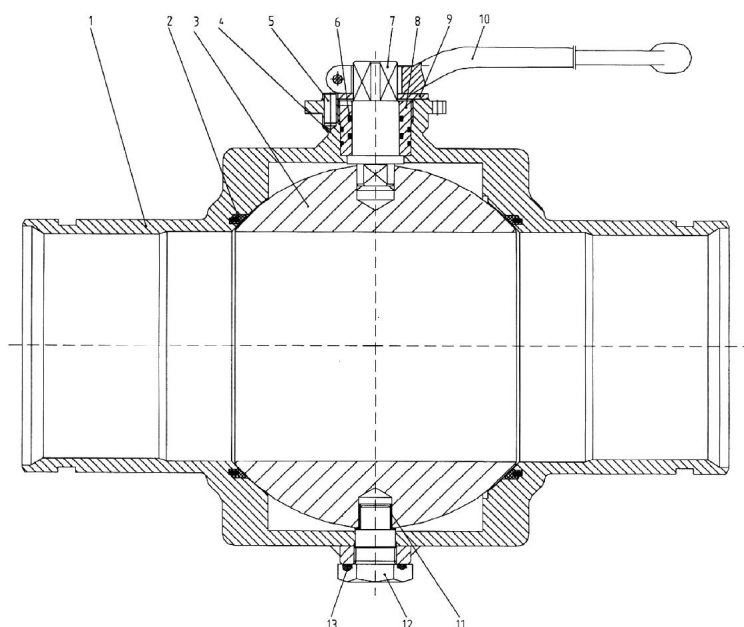
| Pos. | Description       |
|------|-------------------|
| 1    | Housing           |
| 2    | Seal              |
| 3    | Ball              |
| 4    | O-seal            |
| 5    | Straight pin      |
| 6    | O-seal            |
| 7    | Switching spindle |
| 8    | Thrust piece      |
| 9    | Stop disk         |
| 10   | Key               |
| 11   | Bearing bush      |
| 12   | Holding screw     |
| 13   | O-seal            |



| DN size | 80<br>3" | 100<br>4" | 150<br>6" | 200<br>8" | 250<br>10" | 300<br>12" |
|---------|----------|-----------|-----------|-----------|------------|------------|
| L       | 180      | 190       | 350       | 400       | 650        | 750        |
| d       | 78       | 98        | 159       | 206       | 260        | 308        |
| B       | 100      | 127       | 174       | 219       | 290        | 322        |
| A       | 100      | 110       | 154       | 202       | 250        | 254        |
| E       | 146      | 177       | 254       | 343       | 445        | 508        |
| S       | 22       | 22        | 32        | 32        | 36         | 36         |

**Ball valve**  
**Type HKSF - double sided weld-on end**  
**PN 16/25**

| Pos. | Description       |
|------|-------------------|
| 1    | Housing           |
| 2    | Seal              |
| 3    | Ball              |
| 4    | Ring              |
| 5    | Weld nut          |
| 6    | O-seal            |
| 7    | Flanges           |
| 8    | Washer            |
| 9    | O-seal            |
| 10   | Switching spindel |
| 11   | Hexagon nut       |
| 12   | Cap               |
| 13   | Key               |



| DN   | 80   | 100   | 150   | 200   | 250   | 300   |
|------|------|-------|-------|-------|-------|-------|
| size | 3"   | 4"    | 6"    | 8"    | 10"   | 12"   |
| L    | 390  | 450   | 600   | 600   | 730   | 850   |
| d    | 78   | 101   | 148,5 | 194,1 | 244,6 | 295,5 |
| a    | 88,9 | 114,3 | 168,3 | 219,1 | 273   | 322,9 |
| B    | 94   | 127   | 174   | 219   | 290   | 322   |
| A    | 111  | 110   | 154   | 202   | 250   | 254   |
| E    | 146  | 177   | 254   | 343   | 445   | 508   |
| S    | 22   | 22    | 32    | 32    | 36    | 36    |