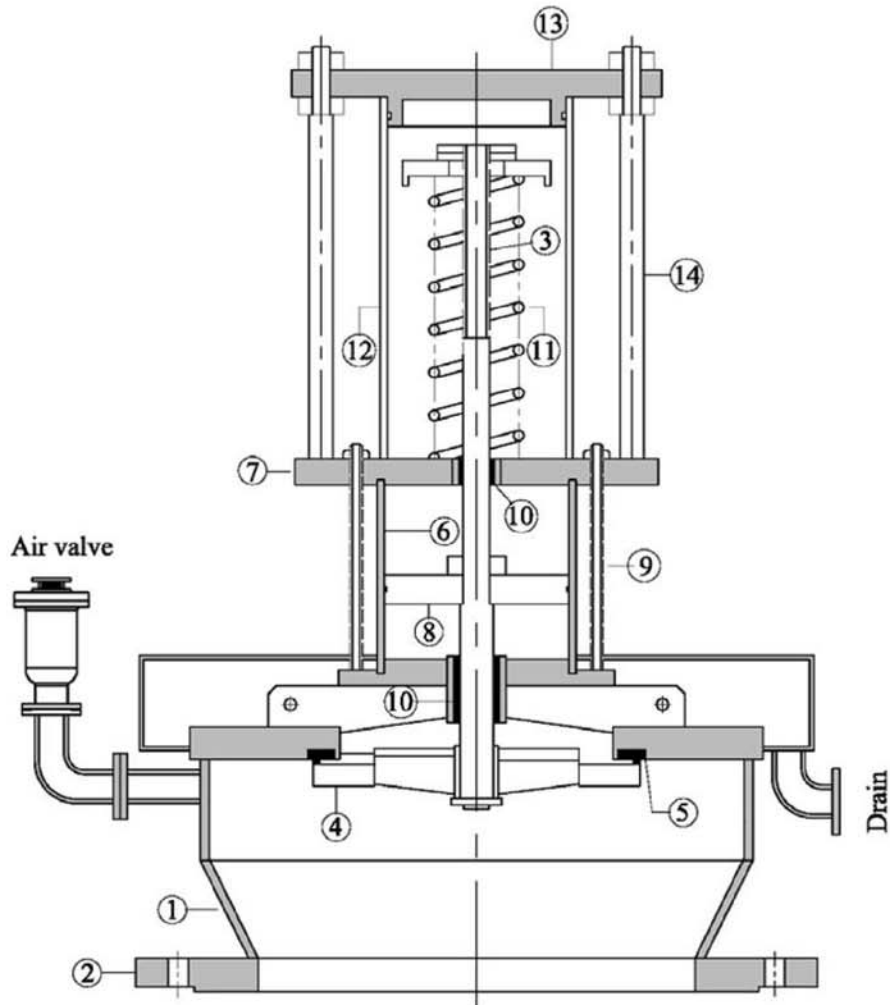


Air Valves:

- Flange drilling for fabricated steel valves according to DIN EN 1092-1 (DIN 2501) similar with ISO 7005-1 (The flange of valve can also be manufactured according to ANSI standard in both classes of 150&300 according to customer's order.)
- Flange drilling for ductile cast iron valves according to DIN EN 1092-2 (DIN 2501) similar with ISO 7005-2
- Final test according to DIN EN12266 or ISO 5208
- Coating paint: epoxy powder paint with electrostatic process



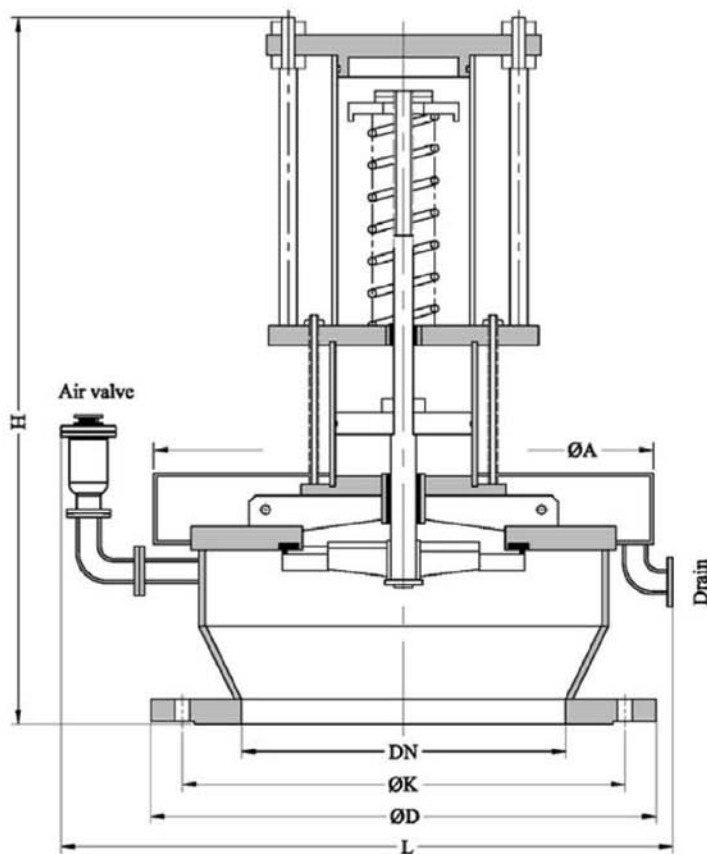
Part List and Materials of Disk Air Valves:



| No. | Part Name | Material | No. | Part Name | Material |
|-----|----------------|-------------------|-----|------------------------|--------------|
| 1 | Body | ST 37-2 or ST52-3 | 8 | Piston | ST 37-2 |
| 2 | End Flange | ST 37-2 or ST52-3 | 9 | Cylinder Retainer Arms | X20Cr13 |
| 3 | Shaft | X20Cr13 | 10 | Bushing | Bronze |
| 4 | Sealing Part | AISI 304 | 11 | Spring | Spring Steel |
| 5 | Sealing Ring | NBR or EPDM | 12 | Oil Box | Plexy |
| 6 | Cylinder | AISI 304 | 13 | Oil Box Cover | ST 37-2 |
| 7 | Cylinder Cover | ST 37-2 | 14 | Oil Box Retainer Arms | X20Cr13 |

The valve can be covered with fence in order to protect them against external materials according to customer's order.

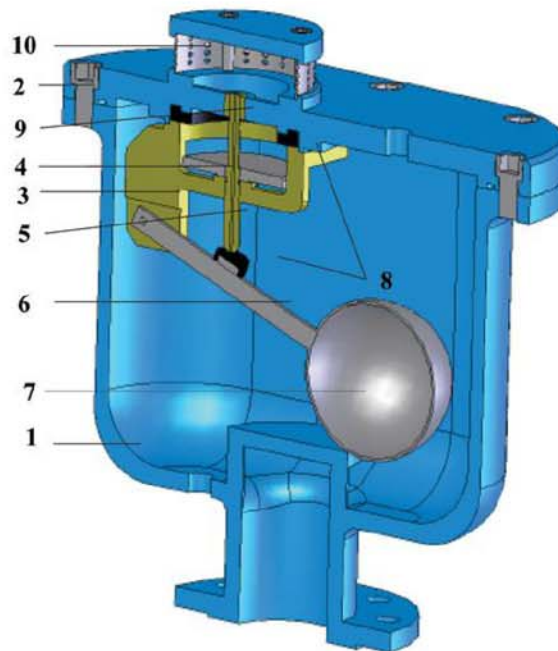
Dimensions of Disk Air Valves:



| DN [mm] | ØD [mm] | | | ØK [mm] | | | ØA [mm] | L [mm] | H [mm] | Weight [mm] | | |
|------------|------------|------|------|------------|------|------|------------|-----------|-----------|----------------|------|------|
| | PN10 | PN16 | PN25 | PN10 | PN16 | PN25 | | | | PN10 | PN16 | PN25 |
| 200 | 340 | 340 | 360 | 295 | 295 | 310 | 508 | 855 | 930 | 135 | 145 | 165 |
| 250 | 395 | 405 | 425 | 350 | 355 | 370 | 610 | 940 | 1000 | 205 | 220 | 250 |
| 300 | 445 | 460 | 485 | 400 | 410 | 430 | 650 | 950 | 1050 | 260 | 280 | 315 |
| 350 | 505 | 520 | 555 | 460 | 470 | 490 | 710 | 1100 | 1140 | 320 | 340 | 370 |
| 400 | 565 | 580 | 620 | 515 | 525 | 550 | 840 | 1200 | 1160 | 370 | 390 | 420 |
| 450 | 615 | 640 | 670 | 565 | 585 | 600 | 915 | 1300 | 1250 | 450 | 475 | 500 |
| 500 | 670 | 715 | 730 | 620 | 650 | 660 | 915 | 1300 | 1350 | 515 | 530 | 570 |
| 600 | 780 | 840 | 845 | 725 | 770 | 770 | 1020 | 1400 | 1480 | 610 | 640 | 700 |
| 700 | 895 | 910 | 960 | 840 | 840 | 875 | 1150 | 1500 | 1570 | 690 | 720 | 790 |
| 800 | 1015 | 1025 | 1085 | 950 | 950 | 990 | 1220 | 1600 | 1680 | 780 | 810 | 870 |

Single Chamber Double Orifice Air Valves (DN50...200, PN6...40):

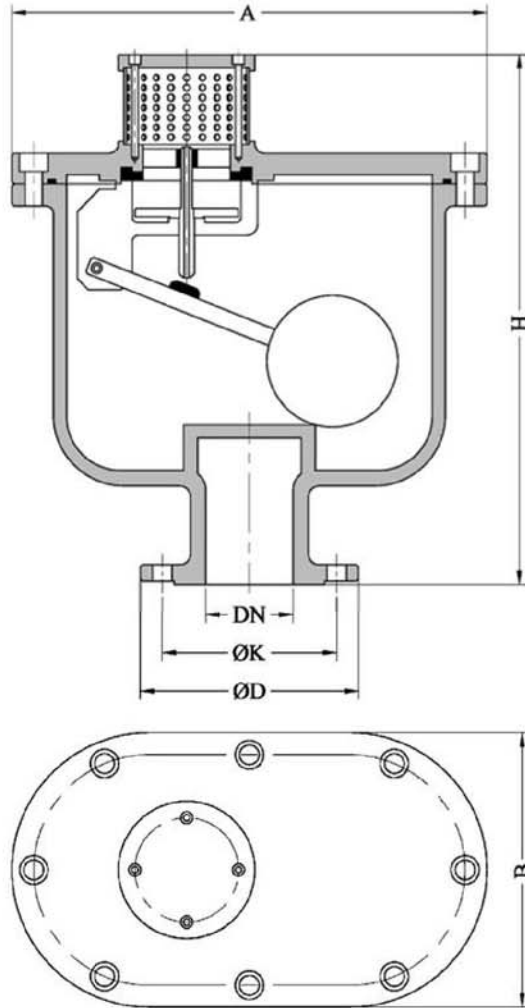
Part List and Materials of Single Chamber Double Orifice Air Valves:



| No. | Part Name | Material | No. | Part Name | Material |
|-----|-----------|----------------|-----|---------------|-------------|
| 1 | Body | GGG40 or GGG50 | 6 | Arm | AISI 304 |
| 2 | Cover | GGG40 or GGG50 | 7 | Float | AISI 304 |
| 3 | Bearing | Bronze | 8 | Sealing Parts | NBR or EPDM |
| 4 | Disk | X20Cr13 | 9 | Bushing | Bronze |
| 5 | Shaft | Bronze | 10 | Strainer | AISI 304 |

- GGG50 according to DIN EN 1693 is similar with EN-GJS-500-7 according to DIN EN 1563
- GGG40 according to DIN EN 1693 is similar with EN-GJS-400-15 according to DIN EN 1563

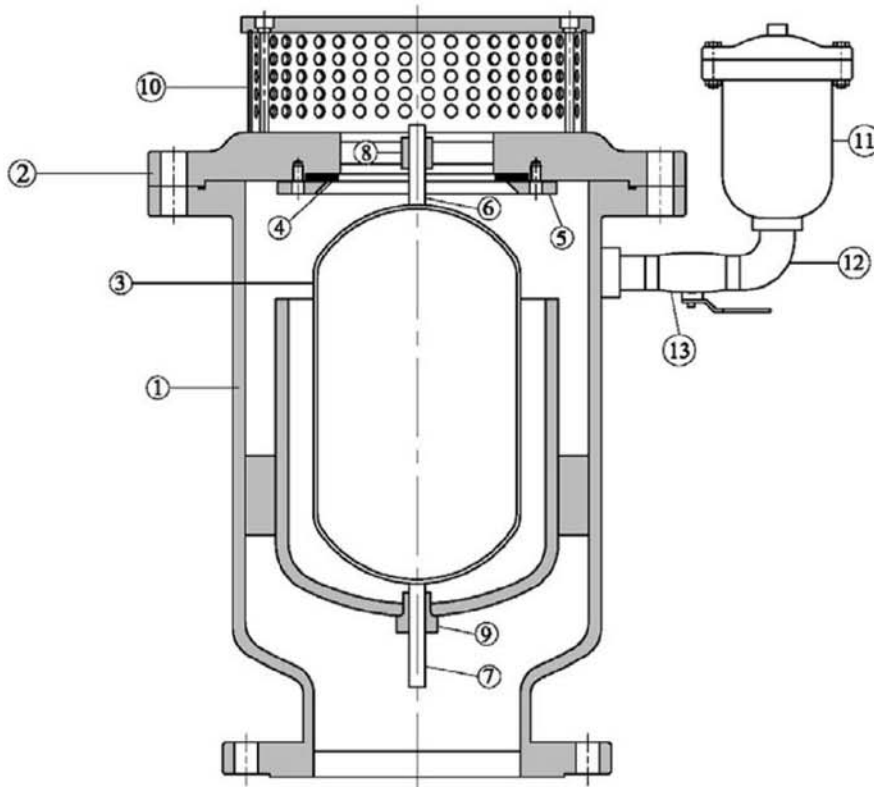
Dimensions of Single Chamber Double Orifice Air Valves:



| DN [mm] | ØD [mm] | | | | ØK [mm] | | | | A [mm] | B [mm] | H [mm] | Weight [mm] | | |
|------------|------------|------|------|------|------------|------|------|------|-----------|-----------|-----------|----------------|------|------|
| | PN10 | PN16 | PN25 | PN40 | PN10 | PN16 | PN25 | PN40 | | | | PN10 PN16 | PN25 | PN40 |
| 50 | 165 | 165 | 165 | 165 | 125 | 125 | 125 | 125 | 345 | 200 | 365 | 40 | 45 | 50 |
| 65 | 185 | 185 | 185 | 185 | 145 | 145 | 145 | 145 | 365 | 220 | 365 | 43 | 47 | 53 |
| 80 | 200 | 200 | 200 | 200 | 160 | 160 | 160 | 160 | 435 | 250 | 485 | 62 | 64 | 70 |
| 100 | 220 | 220 | 235 | 235 | 180 | 180 | 190 | 190 | 435 | 250 | 520 | 64 | 66 | 73 |
| 150 | 285 | 285 | 300 | 300 | 240 | 240 | 250 | 250 | 560 | 350 | 645 | 119 | 121 | 130 |
| 200 | 340 | 340 | 360 | 375 | 295 | 295 | 310 | 320 | 560 | 350 | 690 | 125 | 127 | 140 |

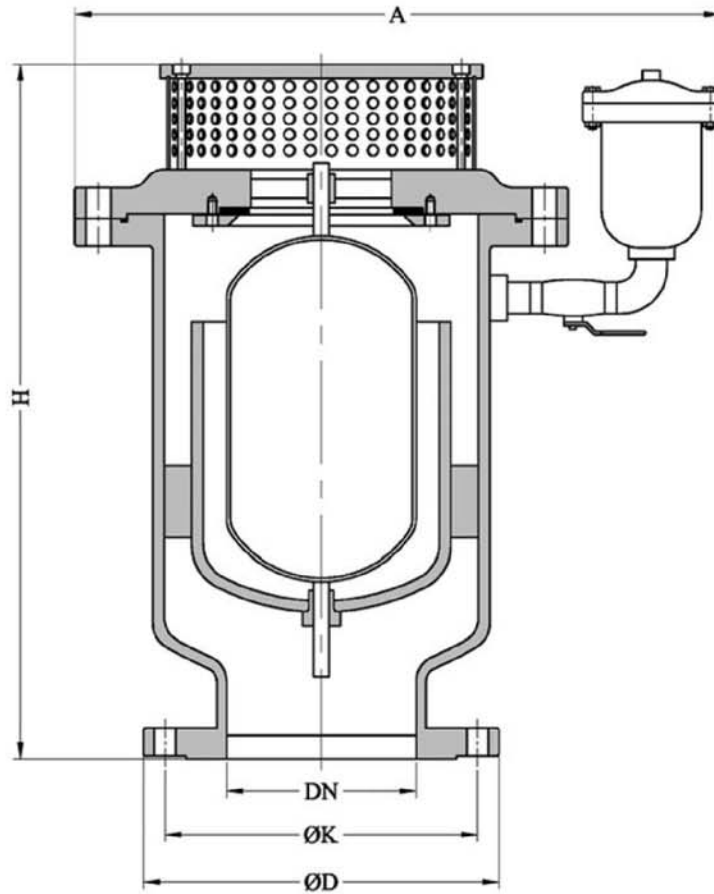
Double Chamber Double Orifice Air Valves (Fabricated Steel) (DN50...600, PN6...63)

Part List and Materials of Double Chamber Double Orifice Air Valves:



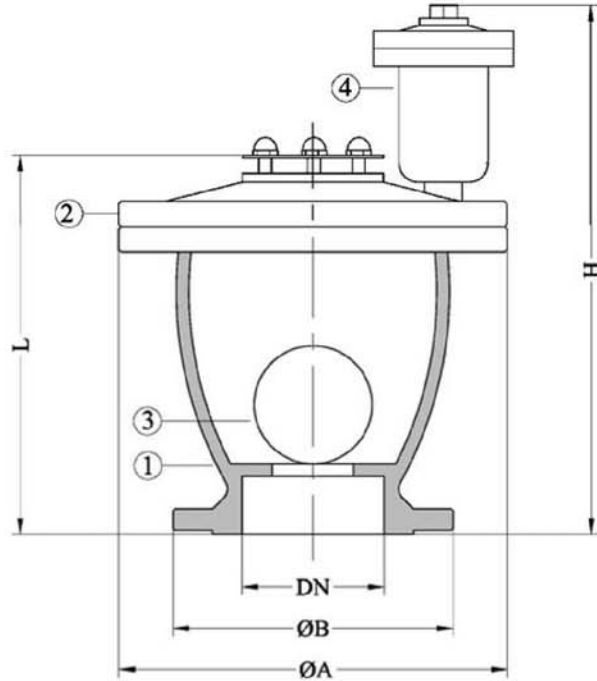
| No. | Part Name | Material | No. | Part Name | Material |
|-----|--------------|-------------------|-----|--------------------------|----------|
| 1 | Body | ST 37-2 or ST52-3 | 8 | Upper Bearing | Bronze |
| 2 | Cover | ST 37-2 or ST52-3 | 9 | Lower Bearing | Bronze |
| 3 | Float | AISI 304 | 10 | Strainer | AISI 304 |
| 4 | Sealing Ring | NBR or EPDM | 11 | Air Valve(Small Orifice) | GGG 40 |
| 5 | Retainer | ST 37-2 | 12 | Elbow | Bronze |
| 6 | Upper Shaft | X20Cr13 | 13 | Ball Cok | ---- |
| 7 | Lower Shaft | X20Cr13 | | | |

Dimensions of Double Chamber Double Orifice Air Valves (Fabricated Steel):



| DN | ØD [mm] | | | | ØK [mm] | | | | A [mm] | H [mm] | Weight [mm] | | | |
|-----|---------|------|------|------|---------|------|------|------|--------|--------|--------------|------|------|--|
| | PN10 | PN16 | PN25 | PN40 | PN10 | PN16 | PN25 | PN40 | | | PN10 PN16 | PN25 | PN40 | |
| 80 | 200 | 200 | 200 | 200 | 160 | 160 | 160 | 160 | 460 | 440 | 90 | 95 | 100 | |
| 100 | 220 | 220 | 235 | 235 | 180 | 180 | 190 | 190 | 540 | 520 | 100 | 110 | 125 | |
| 150 | 285 | 285 | 300 | 300 | 240 | 240 | 250 | 250 | 610 | 650 | 150 | 160 | 175 | |
| 200 | 340 | 340 | 360 | 375 | 295 | 295 | 310 | 320 | 710 | 735 | 200 | 210 | 230 | |
| 250 | 395 | 405 | 425 | 450 | 350 | 355 | 370 | 385 | 730 | 870 | 350 | 370 | 390 | |
| 300 | 445 | 460 | 485 | 515 | 400 | 410 | 430 | 450 | 790 | 900 | 500 | 520 | 540 | |
| 350 | 505 | 520 | 555 | 580 | 460 | 470 | 490 | 510 | 865 | 950 | 625 | 650 | 670 | |
| 400 | 565 | 580 | 620 | 660 | 515 | 525 | 550 | 585 | 900 | 1000 | 680 | 710 | 740 | |
| 450 | 615 | 640 | 670 | 685 | 565 | 585 | 600 | 610 | 990 | 1000 | 760 | 790 | 825 | |
| 500 | 670 | 715 | 730 | 755 | 620 | 650 | 660 | 670 | 1040 | 1100 | 840 | 870 | 905 | |
| 600 | 780 | 840 | 845 | 890 | 725 | 770 | 770 | 795 | 1140 | 1200 | 960 | 985 | 1020 | |

Dimensions of Ductile Cast Iron Double Chamber Double Orifice Air Valves:

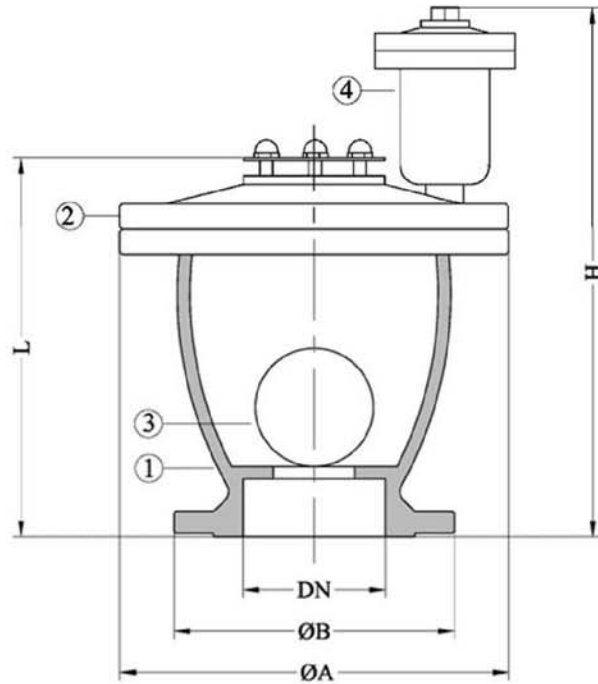


| No. | Part Name | Material | No. | Part Name | Material |
|-----|-----------|----------------|-----|--------------------------|----------|
| 1 | Body | GGG40 or GGG50 | 3 | Float | AISI 304 |
| 2 | Cover | GGG40 or GGG50 | 4 | Air Valve(Small Orifice) | GGG 40 |

- GGG50 according to DIN EN 1693 is similar with EN-GJS-500-7 according to DIN EN 1563
- GGG40 according to DIN EN 1693 is similar with EN-GJS-400-15 according to DIN EN 1563

| DN [mm] | PN [bar] | ØA [mm] | B [mm] | | L [mm] | H [mm] | Weight [Kg] | |
|------------|-------------|------------|--------------|------|-----------|-----------|----------------|------|
| | | | PN10 PN16 | PN25 | | | PN10 PN16 | PN25 |
| 50 | 10-25 | 182 | 165 | 165 | 200 | 325 | 12 | 16 |
| 65 | 10-25 | 182 | 185 | 185 | 200 | 325 | 14 | 20 |
| 80 | 10-25 | 220 | 200 | 200 | 245 | 395 | 20 | 27 |
| 100 | 10-25 | 248 | 220 | 235 | 290 | 435 | 27 | 35 |
| 150 | 10-25 | 306 | 285 | 300 | 330 | 505 | 45 | 53 |
| 200 | 10-25 | 360 | 340 | 360 | 395 | 555 | 62 | 70 |

Dimensions of Ductile Cast Iron Automatic Air Valves (Double float, triple function):



| No. | Part Name | Material | No. | Part Name | Material |
|-----|-----------|----------------|-----|--------------------------|----------|
| 1 | Body | GGG40 or GGG50 | 3 | Float | AISI 304 |
| 2 | Cover | GGG40 or GGG50 | 4 | Air Valve(Small Orifice) | GGG 40 |

- GGG50 according to DIN EN 1693 is similar with EN-GJS-500-7 according to DIN EN 1563
- GGG40 according to DIN EN 1693 is similar with EN-GJS-400-15 according to DIN EN 1563

| DN [mm] | PN [bar] | ØA [mm] | B [mm] | | L [mm] | H [mm] | Weight [Kg] | |
|------------|-------------|------------|--------------|------|-----------|-----------|----------------|------|
| | | | PN10 PN16 | PN25 | | | PN10 PN16 | PN25 |
| 50 | 10-25 | 182 | 165 | 165 | 200 | 325 | 12 | 16 |
| 65 | 10-25 | 182 | 185 | 185 | 200 | 325 | 14 | 20 |
| 80 | 10-25 | 220 | 200 | 200 | 245 | 395 | 20 | 27 |
| 100 | 10-25 | 248 | 220 | 235 | 290 | 435 | 27 | 35 |
| 150 | 10-25 | 306 | 285 | 300 | 330 | 505 | 45 | 53 |
| 200 | 10-25 | 360 | 340 | 360 | 395 | 555 | 62 | 70 |