

- Standard: EN 16767
- Forged or casted body and cover
- Bolted cover (BC)
- Self acting operation
- Guided disc pressed with spring on the body seat (Lift type)
- Seats are integral or welded on

APPLICATIONS

- Power plant
- Chemical,
- Petrochemical
- Refining

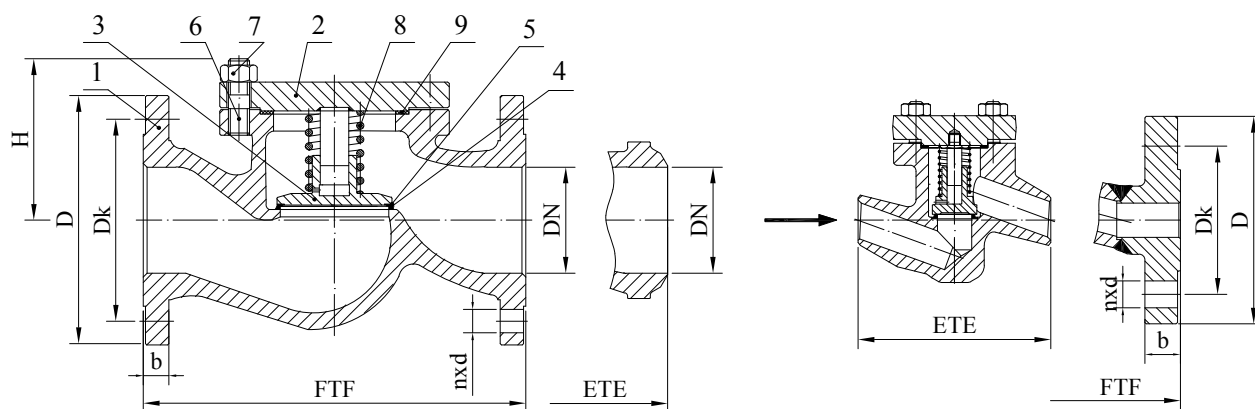


ADVANTAGES

- Possibility of installation in any position
- Long service life
- Respect to emission standards
- Easy handling and maintenance

TECHNICAL DATA

| | |
|---------------------------|--|
| Media: | Depending on the valve materials: water, steam, gas, oil and oil derivatives and other non aggressive media |
| Pressure and temperature: | Pressure up to 160 bar Temperature up to 600 °C |
| Materials: | Carbon, heat resistant alloy and stainless steels |
| Options: | Seats and sealing made of elastic materials Y-Type (CLENY) Angle-Type (CLEN A) Flanges and welding ends according to: ASME, DIN, GOST, etc. Other paint finishes are available upon customer's request Valve complete with counter flanges, bolting and gaskets |
| Testing: | Every produced valve was tested according to EN 12266 |



LIST OF MATERIALS

| Item | Part | Material Group acc. to EN 12516-1 | | | | | |
|------|---------------------|---|----------------------------------|-------------------|-----------------|----------------------------|-------------------|
| | | 3E0 | 4E0 | 5E0 | 6E0 | 11E0 | 15E0 / 14E0 |
| | | Application | | | | | |
| | | up to 400 °C | up to 550 °C | up to 550 °C | up to 600 °C | -196 °C ÷ 600 °C | -196 °C ÷ 600 °C |
| 1 | Body ¹⁾ | 1.0460 / 1.0619 | 1.5415 / 1.5419 | 1.7335 / 1.7357 | 1.7383 / 1.7379 | 1.4301 / 1.4308 | 1.4571 / 1.4408 |
| 2 | Cover ¹⁾ | 1.0460 / 1.0619 | 1.5415 / 1.5419 | 1.7335 / 1.7357 | 1.7383 / 1.7379 | 1.4301 / 1.4308 | 1.4571 / 1.4408 |
| 3 | Disc ¹⁾ | 1.4021 / 1.0619 | 1.5415 / 1.5419 | 1.7335 / 1.7357 | 1.7383 / 1.7379 | 1.4301 / 1.4308 | 1.4571 / 1.4408 |
| 4 | Body welded on with | 13 Cr | 13 Cr (up to 450 °C) or Stellite | | | Basic material or Stellite | |
| 5 | Disc welded on with | 13 Cr | 13 Cr (up to 450 °C) or Stellite | | | Basic material or Stellite | |
| 6 | Stud Bolts | A193 B7 / 1.7225 | | A193 B16 / 1.7709 | | A193 B8 / 1.4301 | A193 B8M / 1.4401 |
| 7 | Nuts | A194 2H / 1.1191 | | A194 4 / 1.7709 | | A194 8 / 1.4301 | A194 8M / 1.4401 |
| 8 | Spring | 45CrMoV6-7 | | | | AISI 316 | |
| 9 | Cover Gasket | spiral-wound / reinforced pure graphite | | | | | |

¹⁾ other materials available according to EN standard

STANDARTS

| | |
|---|-------------------------|
| Globe Lift Check Valves according to EN 16767 | PN 63 / PN 100 / PN 160 |
| Face-to face dimensions according to | EN 558, Serie 1 |
| Flanged ends according to | EN 1092-1 |
| End-to-end dimensions according to | EN 558, Serie 65 |
| Welding ends according to | EN 12627 |

CLEN PN 63 DIMENSIONS

| DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | |
|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| [mm] | FTF | 210 | 230 | 230 | 260 | 260 | 300 | 340 | 380 | 430 | 500 | 550 | 650 | 775 |
| | ETE | 150 | 150 | 160 | 180 | 210 | 250 | 340 | 380 | 430 | 500 | 550 | 650 | 775 |
| | D | 105 | 130 | 140 | 155 | 170 | 180 | 205 | 215 | 250 | 295 | 345 | 415 | 470 |
| | Dk | 75 | 90 | 100 | 110 | 125 | 135 | 160 | 170 | 200 | 240 | 280 | 345 | 400 |
| | nxd | 4×14 | 4×18 | 4×18 | 4×22 | 4×22 | 4×22 | 8×22 | 8×22 | 8×26 | 8×30 | 8×33 | 12×36 | 12×36 |
| | b | 20 | 22 | 24 | 26 | 28 | 26 | 26 | 28 | 30 | 34 | 36 | 42 | 46 |
| | H | 80 | 80 | 80 | 110 | 110 | 143 | 173 | 192 | 235 | 260 | 315 | 380 | 434 |
| kg | FTF | 5,1 | 6,5 | 8,5 | 15 | 16 | 27 | 35 | 58 | 71 | 143 | 150 | 375 | 643 |
| | ETE | 2,5 | 2,7 | 3 | 8 | 9 | 15 | 26 | 47 | 63 | 123 | 128 | 326 | 593 |

CLEN PN 100 DIMENSIONS

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 |
|------|-----|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| [mm] | FTF | 210 | 230 | 230 | 260 | 260 | 300 | 340 | 380 | 430 | 500 | 550 | 650 | 779 |
| | ETE | 150 | 150 | 160 | 180 | 210 | 250 | 340 | 380 | 430 | 500 | 550 | 650 | 779 |
| | D | 105 | 130 | 140 | 155 | 170 | 195 | 220 | 230 | 265 | 315 | 355 | 430 | 505 |
| | Dk | 75 | 90 | 100 | 110 | 125 | 145 | 170 | 180 | 210 | 250 | 290 | 360 | 430 |
| | nxd | 4×14 | 4×18 | 4×18 | 4×22 | 4×22 | 4×26 | 8×26 | 8×26 | 8×30 | 8×33 | 12×33 | 12×36 | 12×39 |
| | b | 20 | 22 | 24 | 26 | 28 | 30 | 34 | 36 | 40 | 40 | 44 | 52 | 60 |
| | H | 80 | 80 | 80 | 110 | 110 | 143 | 173 | 192 | 235 | 260 | 315 | 380 | 454 |
| kg | FTF | 5,1 | 6,5 | 8,5 | 15 | 16 | 28 | 36 | 64 | 96 | 156 | 240 | 445 | 705 |
| | ETE | 2,5 | 2,7 | 3 | 8 | 9 | 15 | 26 | 47 | 73 | 130 | 201 | 367 | 593 |

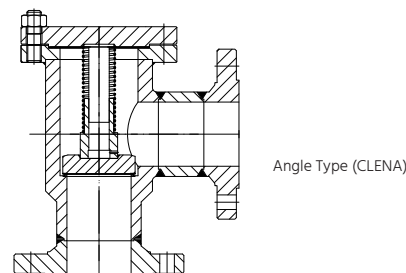
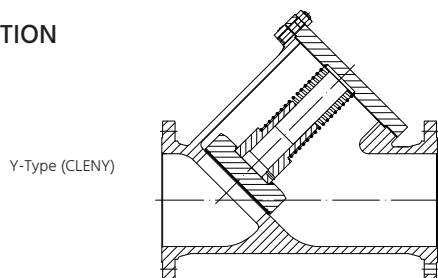
CLEN PN 160 DIMENSIONS

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|------|-----|------|------|------|------|------|------|------|------|------|------|-------|-------|
| [mm] | FTF | 210 | 230 | 230 | 260 | 260 | 300 | 340 | 380 | 430 | 500 | 550 | 650 |
| | ETE | 150 | 150 | 160 | 180 | 210 | 250 | 340 | 380 | 430 | 500 | 550 | 650 |
| | D | 105 | 130 | 140 | 155 | 170 | 195 | 220 | 230 | 265 | 315 | 355 | 430 |
| | Dk | 75 | 90 | 100 | 110 | 125 | 145 | 170 | 180 | 210 | 250 | 290 | 360 |
| | nxd | 4×14 | 4×18 | 4×18 | 4×22 | 4×22 | 4×26 | 8×26 | 8×26 | 8×30 | 8×33 | 12×33 | 12×36 |
| | b | 20 | 22 | 24 | 24 | 28 | 30 | 34 | 36 | 40 | 44 | 50 | 60 |
| | H | 80 | 80 | 80 | 110 | 110 | 143 | 173 | 192 | 235 | 260 | 315 | 380 |
| kg | FTF | 5,1 | 6,5 | 8,5 | 16 | 17 | 28 | 37 | 68 | 98 | 160 | 246 | 455 |
| | ETE | 2,5 | 2,7 | 3 | 8 | 9 | 15 | 26 | 47 | 73 | 130 | 201 | 367 |

RANGE OF APPLICATIONS

| Materials | PN | Pressure (bar) / temperature (°C) ratings according to EN 12516-1 | | | | | | | | | | | | | | | | | | | | | |
|------------------|-----|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| | | -10 | 20 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 375 | 400 | 425 | 450 | 470 | 475 | 480 | 500 | 510 | 525 | 550 | 575 | 600 |
| 1.0460 1.0619 | 63 | 63,0 | 63,0 | 63,0 | 59,0 | 55,9 | 52,9 | 48,4 | 43,8 | 40,8 | 39,3 | 37,8 | | | | | | | | | | | |
| | 100 | 100,0 | 100,0 | 100,0 | 93,6 | 88,8 | 84,0 | 76,8 | 69,6 | 64,8 | 62,4 | 60,0 | | | | | | | | | | | |
| | 160 | 160,0 | 160,0 | 160,0 | 149,8 | 142,1 | 134,5 | 122,9 | 111,4 | 103,7 | 99,9 | 96,0 | | | | | | | | | | | |
| 1.5415 1.5419 | 63 | 63,0 | 63,0 | 63,0 | 63,0 | 61,6 | 57,5 | 53,7 | 49,9 | 46,9 | 46,1 | 45,4 | 43,7 | 42,0 | 41,4 | 41,3 | 41,1 | 28,6 | 24,9 | 17,8 | 10,1 | | |
| | 100 | 100,0 | 100,0 | 100,0 | 100,0 | 97,8 | 91,2 | 85,2 | 79,2 | 74,4 | 73,2 | 72,0 | 69,4 | 66,7 | 65,8 | 65,5 | 65,3 | 45,3 | 39,5 | 28,3 | 16,0 | | |
| | 160 | 160,0 | 160,0 | 160,0 | 160,0 | 156,6 | 146,0 | 136,4 | 126,8 | 119,1 | 117,2 | 115,3 | 111,0 | 106,8 | 105,3 | 104,9 | 104,5 | 72,6 | 63,2 | 45,2 | 25,6 | | |
| 1.7335 1.7357 | 63 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 58,7 | 56,5 | 53,8 | 51,4 | 49,7 | 47,2 | 46,5 | 45,5 | 39,3 | 35,1 | 28,9 | 18,5 | | | |
| | 100 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 93,1 | 89,8 | 85,3 | 81,6 | 78,9 | 74,9 | 73,9 | 72,2 | 62,4 | 55,8 | 45,9 | 29,3 | | | |
| | 160 | 160,0 | 160,0 | 160,0 | 160,0 | 160,0 | 160,0 | 160,0 | 149,1 | 143,7 | 136,6 | 130,7 | 126,2 | 119,8 | 118,2 | 115,6 | 99,9 | 89,3 | 73,4 | 47,0 | | | |
| 1.7383 1.7379 | 63 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 63,0 | 59,1 | 57,0 | 53,8 | 51,4 | 49,7 | 47,2 | 46,5 | 45,5 | 41,5 | 40,0 | 33,9 | 22,2 | 21,7 | 9,4 | |
| | 100 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 93,8 | 90,5 | 85,3 | 81,6 | 78,9 | 74,9 | 73,9 | 72,2 | 65,8 | 63,5 | 53,9 | 35,2 | 34,4 | 14,9 | |
| | 160 | 160,0 | 160,0 | 160,0 | 160,0 | 160,0 | 160,0 | 150,2 | 144,9 | 136,6 | 130,7 | 126,2 | 119,8 | 118,2 | 115,6 | 105,3 | 101,7 | 86,2 | 56,3 | 55,1 | 23,9 | | |
| 1.4301 1.4308 | 63 | 63,0 | 63,0 | 63,0 | 58,2 | 51,2 | 44,1 | 41,5 | 38,8 | 36,0 | 35,1 | 34,2 | 33,3 | 32,5 | 31,9 | 31,8 | 31,6 | 31,0 | 30,7 | 28,7 | 27,9 | 25,2 | 19,8 |
| | 100 | 100,0 | 100,0 | 100,0 | 92,4 | 81,2 | 70,0 | 65,8 | 61,6 | 57,1 | 55,7 | 54,3 | 52,9 | 51,5 | 50,6 | 50,4 | 49,3 | 48,7 | 45,6 | 44,3 | 40,0 | 31,5 | |
| | 160 | 160,0 | 160,0 | 160,0 | 147,9 | 130,0 | 112,1 | 105,3 | 98,6 | 91,4 | 89,2 | 87,0 | 84,7 | 82,5 | 81,0 | 80,7 | 80,3 | 78,9 | 78,0 | 73,0 | 70,9 | 64,0 | 50,4 |
| 1.4408 | 63 | 63,0 | 63,0 | 63,0 | 60,0 | 53,8 | 47,6 | 44,1 | 40,6 | 38,8 | 37,9 | 37,0 | 36,2 | 35,6 | 35,4 | 35,3 | 35,2 | 34,9 | 34,8 | 32,9 | 32,6 | 27,6 | 22,8 |
| | 100 | 100,0 | 100,0 | 100,0 | 95,2 | 85,4 | 75,6 | 70,0 | 64,4 | 61,6 | 60,2 | 58,8 | 57,4 | 56,6 | 56,1 | 56,0 | 55,9 | 55,4 | 55,2 | 52,3 | 51,7 | 43,7 | 36,3 |
| | 160 | 160,0 | 160,0 | 160,0 | 152,4 | 136,7 | 121,0 | 112,1 | 103,1 | 98,6 | 96,4 | 94,1 | 91,9 | 90,5 | 89,8 | 89,6 | 89,5 | 88,7 | 88,4 | 83,7 | 82,8 | 70,0 | 58,1 |
| 1.4571 | 63 | 63,0 | 63,0 | 63,0 | 63,0 | 60,9 | 56,4 | 53,8 | 51,2 | 48,5 | 47,2 | 45,9 | 45,0 | 44,1 | 43,4 | 43,2 | 43,0 | 41,5 | 40,0 | 37,9 | 36,7 | 33,9 | 24,5 |
| | 100 | 100,0 | 100,0 | 100,0 | 100,0 | 96,6 | 89,6 | 85,4 | 82,2 | 77,0 | 74,9 | 72,8 | 71,4 | 70,0 | 68,9 | 68,6 | 68,3 | 65,8 | 63,5 | 60,2 | 58,2 | 53,9 | 38,9 |
| | 160 | 160,0 | 160,0 | 160,0 | 160,0 | 154,6 | 143,4 | 136,7 | 130,0 | 123,3 | 119,9 | 116,5 | 114,3 | 112,1 | 110,3 | 109,8 | 109,4 | 105,3 | 101,7 | 96,3 | 93,2 | 86,2 | 82,3 |

OPTIONAL EXECUTION



The data in this datasheet are informative only and the manufacturer reserves the right to changes of technical details.