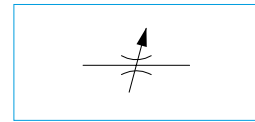
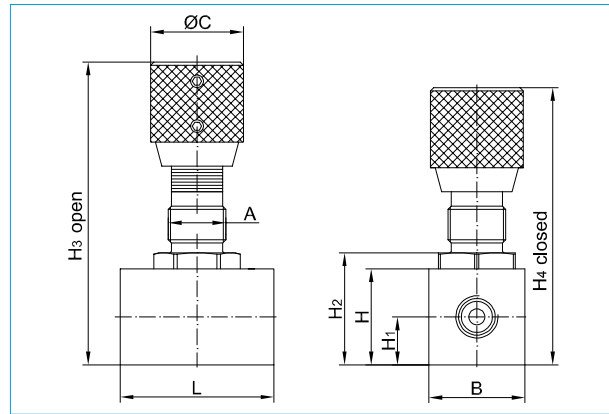
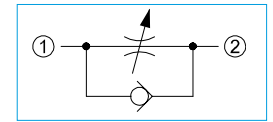
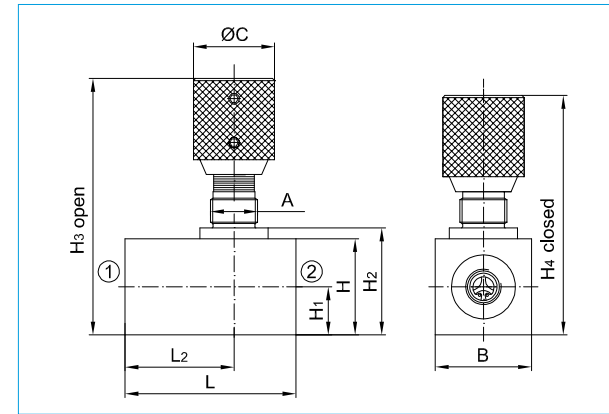


Needle valves · DN 4 - DN 50



Body: steel
 Spindle: steel
 Rotary knob: aluminium
 PN: 350 bar
 Custom orders on request
 All dimensions subject to change without notice
 Dimensions in mm
 Weight in kg

Flow control valves · DN 4 - DN 50



Body: steel
 Spindle: steel
 Rotary knob: aluminium
 PN: 350 bar
 Opening pressure: 0,5 bar
 Custom orders on request
 All dimensions subject to change without notice
 Dimensions in mm
 Weight in kg

| Connection | DN | Thread D | L | L1 | A | B | ØC | H | H1 | H2 | H3 | H4 | Weig. | Art.-No. (NBR) | Art.-No. (FKM) |
|--|------------------------------|--------------------|----------------|------|---------|---------|----|----|------|------|-----|-------|-------|----------------|----------------|
| BSP-female thread DIN EN ISO 228-1 | 4 | G 1/8 | 38 | 10,0 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87 | 78,0 | 0,23 | 219 001 | 219 028 |
| | 6 | G 1/4 | 48 | 12,0 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92 | 83,0 | 0,33 | 219 002 | 219 029 |
| | 10 | G 3/8 | 58 | 14,0 | M18x1,5 | 30 | 29 | 30 | 15,0 | 35 | 95 | 86,0 | 0,56 | 219 003 | 219 030 |
| | 12 | G 1/2 | 68 | 15,0 | M18x1,5 | 35 | 29 | 35 | 17,5 | 40 | 100 | 91,5 | 0,68 | 219 004 | 219 031 |
| | 16 | G 5/8 | 78 | 16,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 52 | 122 | 114,0 | 1,30 | 219 055 | 219 058 |
| | 20 | G 3/4 | 78 | 16,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 52 | 122 | 114,0 | 1,30 | 219 005 | 219 032 |
| | 25 | G1 | 108 | 20,0 | M36x1,5 | 50 | 50 | 50 | 25,0 | 60 | 173 | 158,5 | 2,55 | 219 006 | 219 033 |
| | 32 | G1 1/4 | 108 | 20,0 | M36x1,5 | 60 | 50 | 60 | 30,0 | 70 | 183 | 168,5 | 3,26 | 219 007 | 219 034 |
| | 40 | G1 1/2 | 108 | 23,0 | M36x1,5 | 70 | 50 | 70 | 35,0 | 80 | 193 | 178,5 | 4,21 | 219 008 | 219 035 |
| | 50 | G2 | 130 | 24,5 | M36x1,5 | 90 | 50 | 90 | 45,0 | 100 | 213 | 198,5 | 7,60 | 219 009 | 219 036 |
| NPT-female thread ANSI/ASME B1.20.1-1983 | 4 | 1/8-27 NPT | 38 | 6,9 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87 | 78,0 | 0,23 | 219 010 | 219 037 |
| | 6 | 1/4-18 NPT | 48 | 10,0 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92 | 83,0 | 0,33 | 219 011 | 219 038 |
| | 10 | 3/8-18 NPT | 58 | 10,3 | M18x1,5 | 30 | 29 | 30 | 15,0 | 35 | 95 | 86,0 | 0,56 | 219 012 | 219 039 |
| | 12 | 1/2-14 NPT | 68 | 13,6 | M18x1,5 | 35 | 29 | 35 | 17,5 | 40 | 100 | 91,5 | 0,68 | 219 013 | 219 040 |
| | 20 | 3/4-14 NPT | 78 | 14,1 | M22x1,5 | 45 | 38 | 45 | 22,5 | 52 | 122 | 114,0 | 1,30 | 219 014 | 219 041 |
| | 25 | 1 - 11 1/2 NPT | 108 | 16,8 | M36x1,5 | 50 | 50 | 50 | 25,0 | 60 | 173 | 158,5 | 2,55 | 219 015 | 219 042 |
| | 32 | 1 1/4 - 11 1/2 NPT | 108 | 17,3 | M36x1,5 | 60 | 50 | 60 | 30,0 | 70 | 183 | 168,5 | 3,26 | 219 016 | 219 043 |
| | 40 | 1 1/2 - 11 1/2 NPT | 108 | 17,3 | M36x1,5 | 70 | 50 | 70 | 35,0 | 80 | 193 | 178,5 | 4,21 | 219 017 | 219 044 |
| | 50 | 2 - 11 1/2 NPT | 130 | 17,7 | M36x1,5 | 90 | 50 | 90 | 45,0 | 100 | 213 | 198,5 | 7,60 | 219 018 | 219 045 |
| | Female thread ISO 11926-1 | 4 | 7/16-20 UNF-2B | 42 | 6,9 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87 | 78,0 | 0,23 | 219 020 |
| 6 | | 1/2-20 UNF-2B | 48 | 10,0 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92 | 83,0 | 0,33 | 219 056 | 219 059 |
| 8 | | 9/16-18 UNF-2B | 58 | 12,7 | M18x1,5 | 30 | 29 | 30 | 15,0 | 35 | 95 | 86,0 | 0,56 | 219 021 | 219 048 |
| 10 | | 3/4-16 UNF-2B | 60 | 14,3 | M18x1,5 | 30 | 29 | 30 | 15,0 | 35 | 95 | 86,0 | 0,56 | 219 022 | 219 049 |
| 12 | | 7/8-14 UNF-2B | 72 | 16,7 | M18x1,5 | 35 | 29 | 35 | 17,5 | 40 | 100 | 91,5 | 0,68 | 219 057 | 219 060 |
| 16 | | 1 1/16-12 UN -2B | 84 | 19,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 52 | 122 | 114,0 | 1,30 | 219 023 | 219 050 |
| 20 | | 1 5/16-12 UN -2B | 108 | 19,0 | M36x1,5 | 50 | 50 | 50 | 25,0 | 60 | 173 | 158,5 | 2,55 | 219 024 | 219 051 |
| 25 | | 1 9/8-12 UN -2B | 108 | 16,8 | M36x1,5 | 60 | 50 | 60 | 30,0 | 70 | 183 | 168,5 | 3,26 | 219 025 | 219 052 |
| 32 | | 1 7/8-12 UN -2B | 108 | 19,0 | M36x1,5 | 70 | 50 | 70 | 35,0 | 80 | 193 | 178,5 | 4,21 | 219 026 | 219 053 |
| 40 | | 2 1/2-12 UN -2B | 130 | 19,0 | M36x1,5 | 90 | 50 | 90 | 45,0 | 100 | 213 | 198,5 | 7,60 | 219 027 | 219 054 |

| Connection | DN | Thread D | L | L1 | L2 | A | B | ØC | H | H1 | H2 | H3 | H4 | Weig. | Art.-No. (NBR) | Art.-No. (FKM) |
|---------------------------------------|--|--------------------|----------------|------|-------|---------|---------|----|----|------|------|-------|-------|-------|----------------|----------------|
| BSP-female thread DIN EN ISO 228-1 | 4 | G 1/8 | 45 | 10,0 | 26,0 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87,0 | 78,0 | 0,25 | 218 001 | 218 028 |
| | 6 | G 1/4 | 55 | 12,0 | 33,5 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92,0 | 83,0 | 0,38 | 218 002 | 218 029 |
| | 10 | G 3/8 | 65 | 14,0 | 41,0 | M18x1,5 | 30 | 29 | 30 | 15,0 | 33 | 97,0 | 88,0 | 0,52 | 218 003 | 218 030 |
| | 12 | G 1/2 | 73 | 15,0 | 48,0 | M18x1,5 | 35 | 29 | 35 | 17,5 | 38 | 102,0 | 93,0 | 0,70 | 218 004 | 218 031 |
| | 20 | G 3/4 | 88 | 16,0 | 57,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 49 | 123,0 | 111,0 | 1,35 | 218 005 | 218 032 |
| | 25 | G1 | 127 | 20,0 | 77,0 | M36x1,5 | 50 | 50 | 50 | 25,0 | 56 | 172,5 | 154,5 | 2,68 | 218 006 | 218 033 |
| | 32 | G1 1/4 | 143 | 20,0 | 93,0 | M36x1,5 | 60 | 50 | 60 | 30,0 | 66 | 182,5 | 164,5 | 3,92 | 218 007 | 218 034 |
| | 40 | G1 1/2 | 143 | 23,0 | 98,0 | M36x1,5 | 70 | 50 | 70 | 35,0 | 76 | 192,5 | 174,5 | 4,84 | 218 008 | 218 035 |
| | 50 | G2 | 165 | 24,5 | 111,0 | M36x1,5 | 90 | 50 | 90 | 45,0 | 96 | 212,5 | 194,5 | 8,95 | 218 009 | 218 036 |
| | NPT-female thread ANSI/ ASME B1.20.1-1983 | 4 | 1/8-27 NPT | 45 | 6,9 | 26,0 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87,0 | 78,0 | 0,25 | 218 010 |
| 6 | | 1/4-18 NPT | 55 | 10,0 | 33,5 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92,0 | 83,0 | 0,38 | 218 011 | 218 038 |
| 10 | | 3/8-18 NPT | 65 | 10,3 | 41,0 | M18x1,5 | 30 | 29 | 30 | 15,0 | 33 | 97,0 | 88,0 | 0,52 | 218 012 | 218 039 |
| 12 | | 1/2-14 NPT | 73 | 13,6 | 48,0 | M18x1,5 | 35 | 29 | 35 | 17,5 | 38 | 102,0 | 93,0 | 0,70 | 218 013 | 218 040 |
| 20 | | 3/4-14 NPT | 88 | 14,1 | 57,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 49 | 123,0 | 111,0 | 1,35 | 218 014 | 218 041 |
| 25 | | 1 - 11 1/2 NPT | 127 | 16,8 | 77,0 | M36x1,5 | 50 | 50 | 50 | 25,0 | 56 | 172,5 | 154,5 | 2,68 | 218 015 | 218 042 |
| 32 | | 1 1/4 - 11 1/2 NPT | 143 | 17,3 | 93,0 | M36x1,5 | 60 | 50 | 60 | 30,0 | 66 | 182,5 | 164,5 | 3,92 | 218 016 | 218 043 |
| 40 | | 1 1/2 - 11 1/2 NPT | 143 | 17,3 | 98,0 | M36x1,5 | 70 | 50 | 70 | 35,0 | 76 | 192,5 | 174,5 | 4,84 | 218 017 | 218 044 |
| 50 | | 2 - 11 1/2 NPT | 165 | 17,7 | 111,0 | M36x1,5 | 90 | 50 | 90 | 45,0 | 96 | 212,5 | 194,5 | 8,95 | 218 018 | 218 045 |
| Female thread ISO 11926-1 | | 4 | 7/16-20 UNF-2B | 49 | 11,5 | 28,0 | M18x1,5 | 20 | 29 | 20 | 10,0 | 23 | 87,0 | 78,0 | 0,25 | 218 020 |
| | 6 | 1/2-20 UNF-2B | 55 | 11,5 | 33,5 | M18x1,5 | 25 | 29 | 25 | 12,5 | 28 | 92,0 | 83,0 | 0,38 | 218 055 | 218 057 |
| | 8 | 9/16-18 UNF-2B | 67 | 12,7 | 42,0 | M18x1,5 | 30 | 29 | 30 | 15,0 | 33 | 97,0 | 88,0 | 0,52 | 218 021 | 218 048 |
| | 10 | 3/4-16 UNF-2B | 67 | 14,3 | 42,0 | M18x1,5 | 30 | 29 | 30 | 15,0 | 33 | 97,0 | 88,0 | 0,52 | 218 022 | 218 049 |
| | 12 | 7/8-14 UNF-2B | 77 | 16,7 | 50,0 | M18x1,5 | 35 | 29 | 35 | 17,5 | 38 | 102,0 | 93,0 | 0,70 | 218 056 | 218 058 |
| | 16 | 1 1/16-12 UN -2B | 94 | 19,0 | 60,0 | M22x1,5 | 45 | 38 | 45 | 22,5 | 49 | 123,0 | 111,0 | 1,35 | 218 023 | 218 050 |
| | 20 | 1 5/16-12 UN -2B | 127 | 19,0 | 77,0 | M36x1,5 | 50 | 50 | 50 | 25,0 | 56 | 172,5 | 154,5 | 2,68 | 218 024 | 218 051 |
| | 25 | 1 9/8-12 UN -2B | 143 | 19,0 | 93,0 | M36x1,5 | 60 | 50 | 60 | 30,0 | 66 | 182,5 | 164,5 | 3,92 | 218 025 | 218 052 |
| | 32 | 1 7/8-12 UN -2B | 143 | 19,0 | 98,0 | M36x1,5 | 70 | 50 | 70 | 35,0 | 76 | 192,5 | 174,5 | 4,84 | 218 026 | 218 053 |
| | 40 | 2 1/2-12 UN -2B | 165 | 19,0 | 111,0 | M36x1,5 | 90 | 50 | 90 | 45,0 | 96 | 212,5 | 194,5 | 8,95 | 218 027 | 218 054 |