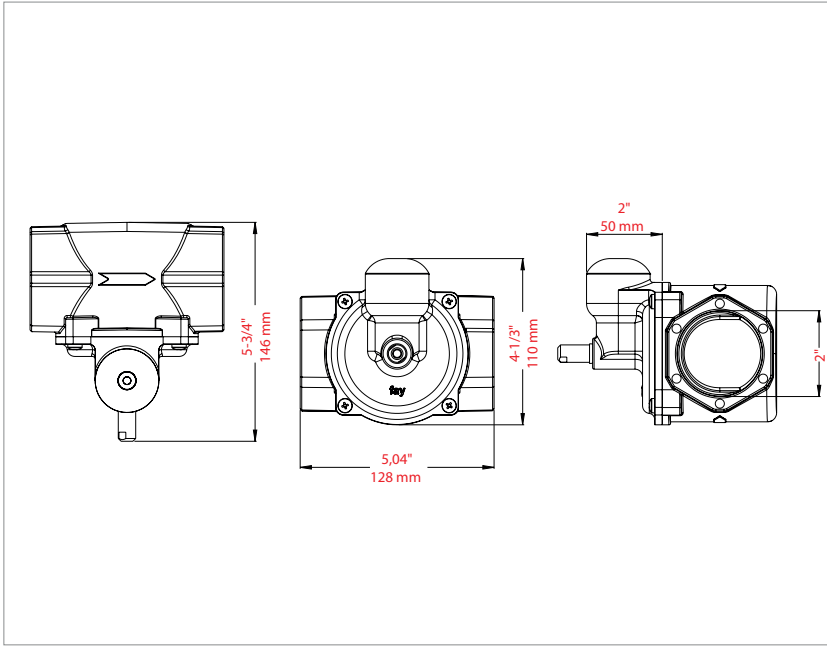


# FM 503 MECHANICAL EARTQUAKE VALVE

## 2" Threaded Horizontal



| MODEL  | PIPE SIZE | DN | POSITION   | TEMP. RANGE                    | MAX. PRESSURE  | WEIGHT              |
|--------|-----------|----|------------|--------------------------------|----------------|---------------------|
| FM 503 | 2"        | 50 | Horizontal | -23°C(-10°F) to +66°C (+150°F) | 4 bar / 60 PSI | 2,765 lb / 1,257 kg |

| Material                                  | Min. Turning Effort     | Min. Bending Moment | CV | Eqv Length of pipe (ft) |
|---|-------------------------|---------------------|----|-------------------------|
| Aluminium Alloy / Brass / Stainless Steel | 1190 Inc lbf / 134,5 Nm | 160,0 Lb / 72,6 kg  | 48 | 5,8                     |

### FLOW CAPACITY TABLE IWC/PSIG - Capacity S.C.F.H

| Pressure Drop |     | Inlet Pressure (iwc) |         | Inlet Pressure (psi) |      |      |      |      |       |
|---------------|-----|----------------------|---------|----------------------|------|------|------|------|-------|
| psi           | iwc | 8" iwc               | 14" iwc | 3                    | 5    | 7    | 10   | 20   | 60    |
| 0.0036        | 0.1 | 831                  | 837     | 903                  | 952  | 999  | 1066 | 1264 | 1855  |
| 0.0072        | 0.2 | 1175                 | 1183    | 1276                 | 1347 | 1413 | 1508 | 1787 | 2623  |
| 0.0108        | 0.3 | 1438                 | 1449    | 1563                 | 1649 | 1731 | 1847 | 2189 | 3212  |
| 0.0144        | 0.4 | 1661                 | 1673    | 1805                 | 1904 | 1998 | 2132 | 2527 | 3709  |
| 0.018         | 0.5 | 1856                 | 1870    | 2018                 | 2129 | 2234 | 2384 | 2826 | 4146  |
| 0.0216        | 0.6 | 2033                 | 2048    | 2210                 | 2332 | 2447 | 2611 | 3095 | 4542  |
| 0.0252        | 0.7 | 2196                 | 2212    | 2387                 | 2518 | 2643 | 2820 | 3343 | 4906  |
| 0.0288        | 0.8 | 2347                 | 2364    | 2551                 | 2692 | 2825 | 3015 | 3574 | 5244  |
| 0.0324        | 0.9 | 2490                 | 2508    | 2706                 | 2855 | 2996 | 3197 | 3790 | 5562  |
| 0.036         | 1.0 | 2624                 | 2643    | 2852                 | 3009 | 3158 | 3370 | 3995 | 5863  |
| 0.072         | 2.0 | 3706                 | 3733    | 4029                 | 4251 | 4463 | 4762 | 5647 | 8290  |
| 0.108         | 3.0 | 4534                 | 4567    | 4929                 | 5202 | 5461 | 5828 | 6912 | 10151 |
| 0.144         | 4.0 | 5229                 | 5267    | 5686                 | 6001 | 6301 | 6725 | 7978 | 11718 |
| 0.18          | 5.0 | 5839                 | 5881    | 6351                 | 6704 | 7039 | 7513 | 8915 | 13098 |

### FLOW CAPACITY TABLE IWC/PSIG - Capacity m<sup>3</sup>/h

| Pressure Drop |     | Inlet Pressure (iwc) |         | Inlet Pressure (psi) |        |        |        |        |        |
|---------------|-----|----------------------|---------|----------------------|--------|--------|--------|--------|--------|
| psi           | iwc | 8" iwc               | 14" iwc | 3                    | 5      | 7      | 10     | 20     | 60     |
| 0.0036        | 0.1 | 23,27                | 23,44   | 25,28                | 26,66  | 27,97  | 29,85  | 35,39  | 51,94  |
| 0.0072        | 0.2 | 32,90                | 33,12   | 35,73                | 37,72  | 39,56  | 42,22  | 50,04  | 73,44  |
| 0.0108        | 0.3 | 40,26                | 40,57   | 43,76                | 46,17  | 48,47  | 51,72  | 61,29  | 89,94  |
| 0.0144        | 0.4 | 46,51                | 46,84   | 50,54                | 53,31  | 55,94  | 59,70  | 70,76  | 103,85 |
| 0.018         | 0.5 | 51,97                | 52,36   | 56,50                | 59,61  | 62,55  | 66,75  | 79,13  | 116,09 |
| 0.0216        | 0.6 | 56,92                | 57,34   | 61,88                | 65,30  | 68,52  | 73,11  | 86,66  | 127,18 |
| 0.0252        | 0.7 | 61,49                | 61,94   | 66,84                | 70,50  | 74,00  | 78,96  | 93,60  | 137,37 |
| 0.0288        | 0.8 | 65,72                | 66,19   | 71,43                | 75,38  | 79,10  | 84,42  | 100,07 | 146,83 |
| 0.0324        | 0.9 | 69,72                | 70,22   | 75,77                | 79,94  | 83,89  | 89,52  | 106,12 | 155,74 |
| 0.036         | 1.0 | 73,47                | 74,00   | 79,86                | 84,25  | 88,42  | 94,36  | 111,86 | 164,16 |
| 0.072         | 2.0 | 103,77               | 104,52  | 112,81               | 119,03 | 124,96 | 133,34 | 158,12 | 232,12 |
| 0.108         | 3.0 | 126,95               | 127,88  | 138,01               | 145,66 | 152,91 | 163,18 | 193,54 | 284,23 |
| 0.144         | 4.0 | 146,41               | 147,48  | 159,21               | 168,03 | 176,43 | 188,30 | 223,38 | 328,10 |
| 0.18          | 5.0 | 163,49               | 164,67  | 177,83               | 187,71 | 197,09 | 210,36 | 249,62 | 366,74 |

### FLOW CAPACITY TABLE IWC/PSIG - Capacity kW

| Pressure Drop |     | Inlet Pressure (iwc) |         | Inlet Pressure (psi) |         |         |         |         |         |
|---------------|-----|----------------------|---------|----------------------|---------|---------|---------|---------|---------|
| psi           | iwc | 8" iwc               | 14" iwc | 3                    | 5       | 7       | 10      | 20      | 60      |
| 0.0036        | 0.1 | 245,48               | 247,25  | 266,75               | 281,22  | 295,10  | 314,90  | 373,39  | 547,97  |
| 0.0072        | 0.2 | 347,10               | 349,46  | 376,93               | 397,90  | 417,40  | 445,46  | 527,88  | 774,83  |
| 0.0108        | 0.3 | 424,79               | 428,03  | 461,71               | 487,11  | 511,34  | 545,60  | 646,63  | 948,82  |
| 0.0144        | 0.4 | 490,66               | 494,20  | 533,20               | 562,44  | 590,21  | 629,79  | 746,48  | 1095,64 |
| 0.018         | 0.5 | 548,26               | 552,40  | 596,12               | 628,91  | 659,92  | 704,23  | 834,80  | 1224,73 |
| 0.0216        | 0.6 | 600,55               | 604,98  | 652,83               | 688,87  | 722,84  | 771,29  | 914,26  | 1341,71 |
| 0.0252        | 0.7 | 648,70               | 653,42  | 705,12               | 743,82  | 780,74  | 833,03  | 987,52  | 1449,23 |
| 0.0288        | 0.8 | 693,30               | 698,33  | 753,57               | 795,22  | 834,51  | 890,63  | 1055,76 | 1549,08 |
| 0.0324        | 0.9 | 735,55               | 740,86  | 799,35               | 843,37  | 885,02  | 944,39  | 1119,57 | 1643,01 |
| 0.036         | 1.0 | 775,13               | 780,74  | 842,48               | 888,86  | 932,87  | 995,50  | 1180,12 | 1731,93 |
| 0.072         | 2.0 | 1094,75              | 1102,73 | 1190,17              | 1255,75 | 1318,37 | 1406,69 | 1668,12 | 2448,87 |
| 0.108         | 3.0 | 1339,34              | 1349,09 | 1456,03              | 1536,67 | 1613,18 | 1721,59 | 2041,80 | 2998,61 |
| 0.144         | 4.0 | 1544,65              | 1555,87 | 1679,64              | 1772,70 | 1861,32 | 1986,57 | 2356,70 | 3461,50 |
| 0.18          | 5.0 | 1724,84              | 1737,25 | 1876,09              | 1980,36 | 2079,32 | 2219,34 | 2633,49 | 3869,15 |

|              |   |
|--------------|---|
| CERTIFICATES | TUV Austria CE 0408 (Products Approval Standard ASCE 25-16 and TS 12884)  |
| APPLICATION  | Gasses : Natural Gas, LPG, methane, propane, air, etc... non corrosive gaseous fluids.  |
| INFORMATION  | Experiments were carried out with air. Calculations based on gas with a density of 0.64 and a calorific value of 37 MJ/m <sup>3</sup> . The measured flow value is arranged according to 15 °C and 101.3 kPa pressure |

