

Technical Data Bulletin

## SCREW THREAD

### Comparison of ISO metric threads and MJ – threads with different tolerances and their advantages

| screw thread    | pitch-diameter [mm] |       | core-diameter [mm] |       | stressed cross section [mm <sup>2</sup> ] | root of thread radius [mm] |
|-----------------|---------------------|-------|--------------------|-------|---|----------------------------|
|                 | max.                | min.  | max.               | min.  |   |                            |
| M4x0,7 - 6g     | 3,523               | 3,433 | 3,119              | 3,002 | 8,658                                     | 0,101 – 0,088              |
| M4x0,7 - 4h     | 3,545               | 3,489 | 3,141              | 3,058 | 8,773                                     |                            |
| MJ4x0,7 - 4h6h  | 3,545               | 3,489 | 3,192              | 3,094 | 8,907                                     | 0,126 – 0,105              |
| M6x1 - 6g       | 5,324               | 5,212 | 4,747              | 4,596 | 19,905                                    | 0,144 – 0,125              |
| M6x1 - 4h       | 5,350               | 5,279 | 4,773              | 4,663 | 20,111                                    |                            |
| MJ6x1 - 4h6h    | 5,350               | 5,279 | 4,845              | 4,713 | 20,398                                    | 0,180 – 0,150              |
| M10x1,5 - 6g    | 8,994               | 8,862 | 8,128              | 7,938 | 57,533                                    | 0,216 – 0,188              |
| M10x1,5 - 4h    | 9,026               | 8,936 | 8,160              | 8,017 | 57,964                                    |                            |
| MJ10x1,5 - 4h6h | 9,026               | 8,936 | 8,268              | 8,087 | 58,695                                    | 0,271 – 0,255              |

.. **larger core diameter**

⇒ larger stressed cross section

.. **larger root of thread radius**

⇒ lower stress concentration / notch effect

resulting characteristics:

⇒ **increased tensile strength but**

⇒ **mainly improved tension fatigue strength**