

STANDARD EXECUTIONS

- **MM-BI-NK**: nickel-plated steel.
- **MM-BI-PTFE**: steel with teflon (PTFE) coating.

MAXIMUM WORKING PRESSURE

10 bar.

FEATURES

MM-BI pneumatic fastening clamps are characterized by a "double effect" pneumatic cylinder which transmits a rotating movement to the clamping arm

The maximum locking momentum is achieved when the clamping arm arrives at the stroke end and through pneumatic actuation only.

Under specific tests the pneumatic fastening clamps showed constant performances for more than 20 million cycles.

The teflon (PTFE) coating provides high resistance to weld spatter and corrosion.

See Pneumatic fastening clamp features (on page -).

SPECIAL EXECUTIONS ON REQUEST

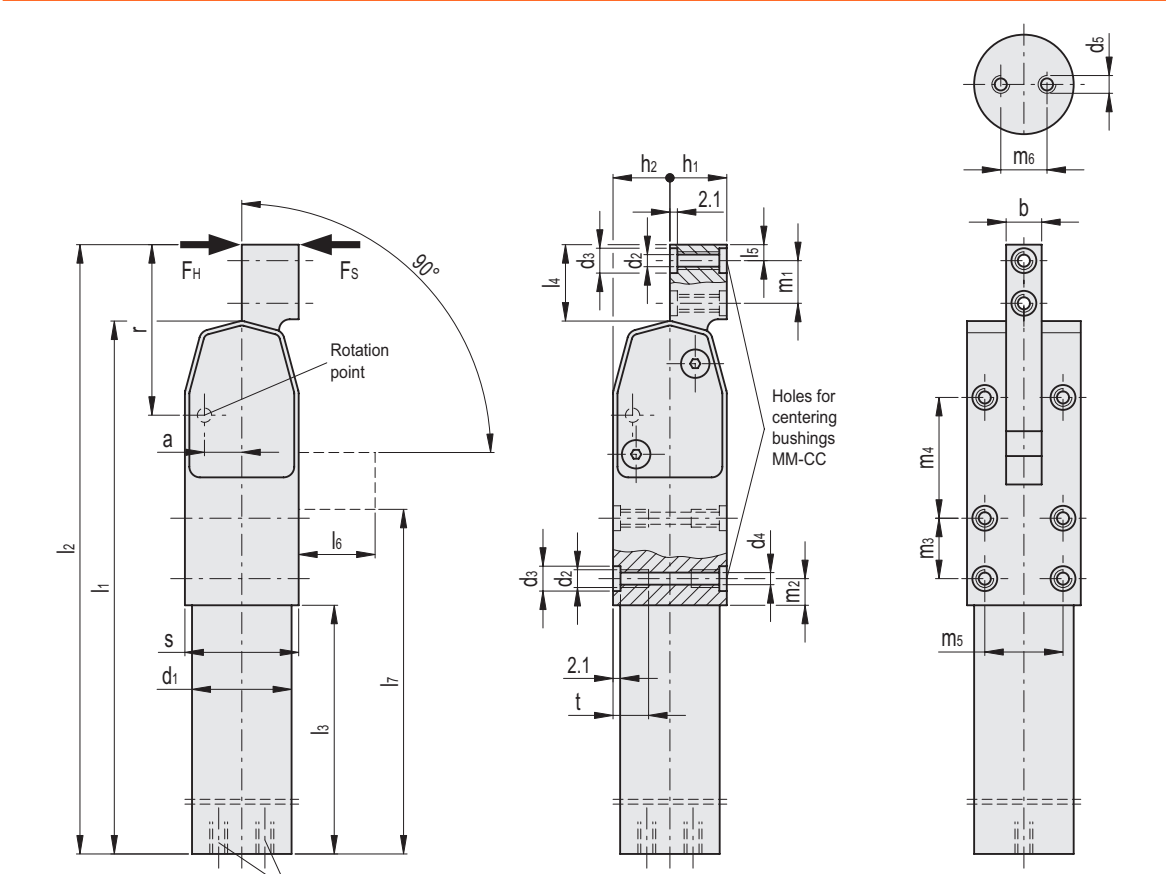
- Fastening clamps with FKM sealing gasket resistant to max working temperatures up to 270°C.
- Fastening clamps with arm rotating movement and locking in the 20° position.
- Fastening clamps with arm rotating movement and locking in the 45° position.

ACCESSORIES ON REQUEST

Brackets, fixing elements and nickel-plated steel sensors (see table of possible configurations)..



| Possible configurations of pneumatic fastening clamp MM-BI |  |                  |  |
|------------------------------------------------------------|--|------------------|--|
| 1 x MM-A-RG-NK                                             |  | 1 x MM-A-RG1-NK  |  |
| 1 x MM-FI-RG-NK                                            |  | 1 x MM-FI-RG1-NK |  |
| 1x MM-SI                                                   |  | 1x MM-SI         |  |
| 4 x MM-RG                                                  |  | 2 x MM-RG        |  |
| 1 x MM-A-SC-NK                                             |  | 1 x MM-A-SCL-NK  |  |
| 1 x MM-FI-SC-NK                                            |  | 1 x MM-FI-SCL-NK |  |
| 1 x MM-SI                                                  |  | 1 x MM-SI        |  |
| 2 x MM-SC                                                  |  | 2 x MM-SC        |  |
| 2 x MM-GBK                                                 |  | 2 x MM-GBK       |  |



**Conversion Table**  
1 mm = 0.039 inch

| l1  |       |
|-----|-------|
| mm  | inch  |
| 150 | 5.85  |
| 206 | 8.03  |
| 244 | 9.52  |
| 279 | 10.88 |

**Conversion Table**  
1 mm = 0.039 inch

| d1 |      |
|----|------|
| mm | inch |
| 28 | 1.09 |
| 40 | 1.56 |
| 50 | 1.95 |
| 60 | 2.34 |

MM-BI-NK

| Code        | Description | a    | b  | d1 | d2  | d3 | d4  | d5    | h1 | h2 | l1   | l2   | l3    | l4 | l5  | l6 | l7  | s    | m1    | m2    | m3    | m4    | m5    | m6    | r     | t     | FH    | FS   | M#   | Δ    |
|-------------|-------------|------|----|----|-----|----|-----|-------|----|----|------|------|-------|----|-----|----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
|             |             | -0.2 | h8 | H8 | H8  | H8 | H8  | H8    | H8 | H8 | -0.5 | -0.5 | H8    | H8 | H8  | H8 | H8  | -0.5 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | [N]   | [N]  | [Nm] | Δ    |
| MM.11020-NK | MM-BI-20-NK | 10.5 | 10 | 28 | M5  | 7  | 4.2 | M5    | 16 | 16 | 150  | 171  | 70    | 21 | 4.5 | 21 | 97  | 32   | 12    | 7.5   | 17    | 34    | 22    | 13    | 47.5  | 13    | 4000  | 1250 | 60   | 619  |
| MM.11032-NK | MM-BI-32-NK | 15.5 | 12 | 40 | M6  | 9  | 5   | G 1/8 | 21 | 21 | 206  | 237  | 91    | 31 | 6   | 31 | 133 | 42   | 18    | 10    | 25    | 51    | 30    | 22    | 67.5  | 15    | 6962  | 2220 | 150  | 1497 |
| MM.11040-NK | MM-BI-40-NK | 18.5 | 16 | 50 | M8  | 11 | 6.8 | G 1/8 | 26 | 26 | 244  | 282  | 104   | 38 | 7.5 | 38 | 155 | 52   | 22    | 13    | 30    | 62    | 37    | 25    | 82.5  | 18    | 9139  | 3640 | 300  | 2822 |
| MM.11050-NK | MM-BI-50-NK | 21.5 | 18 | 60 | M10 | 13 | 8.5 | G 1/8 | 31 | 31 | 279  | 323  | 110.5 | 44 | 8   | 44 | 174 | 62   | 27    | 12    | 47    | 71.5  | 44    | 35    | 96.5  | 21    | 12331 | 4900 | 475  | 4000 |

MM-BI-PTFE

| Code          | Description   | a    | b  | d1 | d2  | d3 | d4  | d5    | h1 | h2 | l1   | l2   | l3    | l4 | l5  | l6 | l7  | s    | m1    | m2    | m3    | m4    | m5    | m6    | r     | t     | FH    | FS   | M#   | Δ    |
|---------------|---------------|------|----|----|-----|----|-----|-------|----|----|------|------|-------|----|-----|----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
|               |               | -0.2 | h8 | H8 | H8  | H8 | H8  | H8    | H8 | H8 | -0.5 | -0.5 | H8    | H8 | H8  | H8 | H8  | -0.5 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | [N]   | [N]  | [Nm] | Δ    |
| MM.11020-PTFE | MM-BI-20-PTFE | 10.5 | 10 | 28 | M5  | 7  | 4.2 | M5    | 16 | 16 | 150  | 171  | 70    | 21 | 4.5 | 21 | 97  | 32   | 12    | 7.5   | 17    | 34    | 22    | 13    | 47.5  | 13    | 4000  | 1250 | 60   | 619  |
| MM.11032-PTFE | MM-BI-32-PTFE | 15.5 | 12 | 40 | M6  | 9  | 5   | G 1/8 | 21 | 21 | 206  | 237  | 91    | 31 | 6   | 31 | 133 | 42   | 18    | 10    | 25    | 51    | 30    | 22    | 67.5  | 15    | 6962  | 2220 | 150  | 1497 |
| MM.11040-PTFE | MM-BI-40-PTFE | 18.5 | 16 | 50 | M8  | 11 | 6.8 | G 1/8 | 26 | 26 | 244  | 282  | 104   | 38 | 7.5 | 38 | 155 | 52   | 22    | 13    | 30    | 62    | 37    | 25    | 82.5  | 18    | 9139  | 3640 | 300  | 2822 |
| MM.11050-PTFE | MM-BI-50-PTFE | 21.5 | 18 | 60 | M10 | 13 | 8.5 | G 1/8 | 31 | 31 | 279  | 323  | 110.5 | 44 | 8   | 44 | 174 | 62   | 27    | 12    | 47    | 71.5  | 44    | 35    | 96.5  | 21    | 12331 | 4900 | 475  | 4000 |

# Maximum tightening moment at 6 bar.

