



$l_1 \approx 2 \text{ to } 3 \times \text{thread pitch}$   
 $l_2 \approx 1.5 \times d$

**Metric table**

Dimensions in: millimeters - inches

d Thread	$l_1$	$l_2 \approx$	$M_{IN}$ in Nm Max. tightening torque	$M_{LB}$ in Nm Min. cracking torque	$M_{OUT}$ in Nm Max. loosening torque
M 5	1.5 ... 2.5 <i>0.06 ... 0.10</i>	7.5 <i>0.30</i>	0.5	1	6.5
M 6	2 ... 3 <i>0.08 ... 0.12</i>	9 <i>0.35</i>	0.8	1.8	10
M 8	2.5 ... 4 <i>0.10 ... 0.16</i>	12 <i>0.47</i>	1.5	4	26
M 10	3 ... 4.5 <i>0.12 ... 0.18</i>	15 <i>0.59</i>	3	10	55
M 12	3.5 ... 5 <i>0.14 ... 0.20</i>	18 <i>0.71</i>	5	16	95
M 16	4 ... 6 <i>0.16 ... 0.24</i>	24 <i>0.94</i>	11	35	250
M 20	5 ... 7.5 <i>0.20 ... 0.30</i>	30 <i>1.18</i>	14	45	500

The torque values correspond to DIN 267 part 27. They are based on a test of a thread without preload, with a 6H nut thread at room temperature. For thread lengths  $l_0 < l_2$ ,  $l_2$  is reduced in such a way that one to two thread turns are not coated at the end of the thread.

**Description**

The principle of microencapsulation MVK (adhesive) is that a liquid plastic material and hardener, each encapsulated in a thin polymer film, are embedded in a lacquer-like carrier system that is applied to a partial area of the thread. The result is a dry, non-slip locking coating that is ready for use at any time.

When fitting a screw with this patch, the microcapsules will burst under the pressure and heavy stress between the two threads. During this process, the liquid plastic material and hardener are released and mixed, leading to a chemical reaction which will harden the adhesive, thus giving the required thread locking.

The curing of the mixture will start after 10-15 minutes. Sufficient hardness is achieved after about 30 minutes but complete curing is reached after 24 hours.

Adjustment and tightening operations should be completed within 5 minutes.

The threaded connection can be loosened again by applying the  $M_{OUT}$  torque on the thread or alternatively by heating the component over +338 °F (+170 °C). It is not recommended to re-use the thread after loosening.

Threads free from oil and grease increase the adhesive effect.

The minimum storage stability of the coating when unmounted is 4 years.

**Features**

- Highest thread locking action against self-loosening or loss even under strong vibration. Not suitable for adjusting screws.
- The locking system is a captive part of the standard part. It saves storing and mounting of additional locking materials, including liquid adhesives.
- Low tightening torque
- Temperature resistant from -40 °F to 338 °F (-40 °C to 170 °C)
- High chemical resistance

