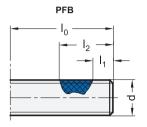
# Thread Locking (Jamming)

Polyamide Patch / Complete Coating





w<sub>2</sub>≈180° w₁≈90°、 PRR

I<sub>0</sub> ≈ Thread length  $I_1 \approx 2$  to 3 x thread pitch

 $I_2 \approx 1.5 \times d$ 

w<sub>1</sub>: Coating core zone

w<sub>2</sub>: Coating including edge zone

## Metric table

Dimensions in: millimeters - inches

Polyamide patch coating <b>PFB</b>										
				Values according to DIN 267 part 28		Values for spring plungers GN 611 / GN 615.3				
<b>d</b> Thread	l₁ ≈		I <sub>2</sub> ≈	M <sub>max</sub> . in Nm 1st screw in	M <sub>min</sub> . in Nm 1st screw out	M ≈ in Nm 1st screw in / out				
M 3	1 0.04	1.5 <i>0.06</i>	4.5 0.18	0.43	0.1	0.3				
M 4	1.5 0.06	2 0.08	6 0.24	0.9	0.12	0.5				
M 5	1.5 0.06	2.5 <i>0.10</i>	7.5 0.30	1.6	0.18	0.6				
M 6	2 0.08	3 <i>0.12</i>	9 <i>0.35</i>	3	0.35	1.2				
M 8	2.5 0.10	4 0.16	12 0.47	6	0.85	2				
M 10	3 0.12	4.5 0.18	15 <i>0.5</i> 9	10.5	1.5	3.5				
M 12	3.5 0.14	5 0.20	18 <i>0.71</i>	15.5	2.3	5				
M 16	4 0.16	6 <i>0.24</i>	24 0.94	32	4	7				
M 20	5 0.20	7.5 0.30	30 1.18	60	5.4	10				
M 24	9 0.35	9 <i>0.35</i>	36 1.42	85	6.9	12				
The terminal relices are bessel on a test of a three divides at available with a CII and three distances										

Polyamide complete coating PRB									
<b>d</b> Thread	I <sub>1</sub> ≈	I <sub>2</sub> ≈	M <sub>max</sub> . in Nm 1st screw in	M <sub>min</sub> . in Nm 1st screw out					
M 12 x 1.5	2.5 0.10	5.5 0.22	15.5	2.3					
M 16 x 1.5	2.5 0.10	5.5 0.22	32	4					
M 20 x 1.5	2.5 0.10	7.5 0.30	54	7.5					
M 24 x 1.5	2.5 0.10	7.5 0.30	80	11.5					
M 27 x 1.5	2.5 0.10	7.5 0.30	94	13.5					
M 30 x 1.5	2.5 0.10	7.5 0.30	108	16					
M 33 x 1.5	2.5 0.10	7.5 0.30	122	18					

The torque values are based on a test of a thread without preload, with a 6H nut thread at room temperature. For PFB and thread lengths I<sub>0</sub> < I<sub>2</sub>, I<sub>2</sub> is reduced in such a way that one to two thread turns are not coated at the end of the thread.

#### Description

The polyamide patch coating PFB is a process whereby an elastic plastic material (polyamide) is applied to a partial area of the thread, which creates a jamming action when the thread is screwed in. The coating can be applied either as a patch or complete coating. The axial play between the screws and the nut thread is taken up by the polyamide thus achieving a high surface pressure between the opposite, uncoated thread areas. This process counteracts the loosening and unscrewing on their own.

There is no cure time required, the thread contact is instantaneous resilient. The typical spray edge zone secures the polyamide coating against shearing.

### Information

Polyamide patch coating is offered for GN 615.3 (→ page 1018) ball plungers. A blue coating indicates type K or KN, green indicates type KS or KSN (high spring load).

Polyamide complete coating is available for GN 252 and GN 252.5 threaded plugs (→ page 1117).

#### **Features**

- High thread locking action, shakeproof. Excellent convenient for adjusting screws.
- The locking system is a captive part of the standard part, which eliminates the fitting of additional belay.
- Temperature resistant from -76 °F to +248 °F (-60 °C to +120 °C)
- Approval for food areas
- High chemical resistance
- Use is also possible in oil-contaminated threaded holes
- Multiple use is possible, whereby the jamming effect after the 5th removal is around 50 % of its original strength.