

precote® 30/80/85 – locking coat for external and internal threads ...



Field of application

A variety of standard products are offered to address different practical requirements.

precote® 30:

For thread sealing and medium strength thread locking. Easy dismantling, no subsequent hardening.

precote® 80:

Universal screw locking system, high-strength, temperature resistant to 170°C; Also suitable for sealing applications.

precote® 85:

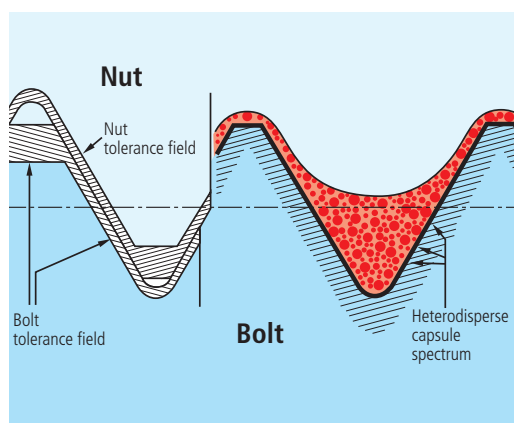
Universal screw locking system, high-strength, with slow thread friction value, temperature resistant to 170°C; Also suitable for sealing applications

precote® variants:

- 3 for faster curing
(e.g. precote® 80-3)
- 8 for smaller thread dimensions
(e.g. precote® 80-8)

Product features

- Extremely good thread locking action against dynamic stress and absolutely reliable seal.
- High temperature resistance from -50°C to +170°C (with precote® 80).
- The nut and locking element are inseparably joined, meaning that the locking element can never get lost or be forgotten.
- Replaces conventional and in some cases unreliable mechanical locking elements such as circlips, castellated nuts, plain washers, wire locking elements, locking plates etc.
- Good resistance to chemicals such as fuels, hydraulic oils, coolants etc., corrosion-inhibiting.
- Corrosion inhibiting.
- Economical due to large-series coating and use of customary installation tools.
- Saves costs for inventory management, storage and assembly of locking materials..



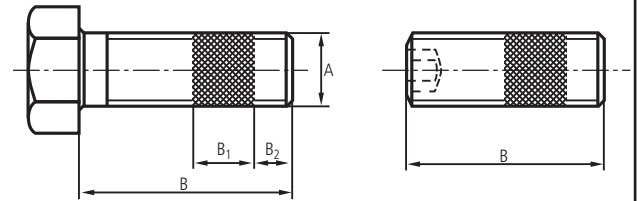
Application

For the manufacture of ready-toinstall self-locking screws and threaded components:

- External thread from M2
- Internal thread from M5

Standard coating external

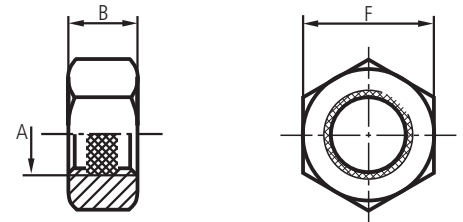
$B_1 \approx A$, 360° all round.
Around 2 to 3 thread turns remain uncoated to ease the screwing action (B_2).



Standard coating internal

360° all round.

Whole internal thread if possible.
Depending on the design, the first and/or last thread remain almost free.



	precote® 30	precote® 80	precote® 85
Article no.			
– Nuts, internal thread	924 ... 300	924 ... 800	924 ... 900
– Headed screws	926 ... 300	926 ... 800	926 ... 900
– Studs	927 ... 300	927 ... 800	927 ... 900
Coating colour	yellow	red	turquoise
Breakaway torque:			
Installed under pretension	mid-range	$\geq 0,9 M_A$	$\geq 0,9 M_A$
Not installed under pretension		min. 10 Nm	min. 10 Nm
Temperature range	-50°C to +150°C	-50°C to +170°C	-50°C to +170°C
Coefficient of thread friction μ (Guideline values)	0,10 to 0,15	$> 0,25$	0,10 to 0,15
Hardening time (room temperature)	24h	24h	24h

M_A = tightening torque

All values refer to M10 black tempered screws (thread pairing medium tolerance range), coating length $\approx A$, 360° all round.

Surface properties

The coating can be applied to all metal thread materials. **The thread should be free of oil and grease.**
When using bright, phosphatized parts, suitable corrosion protection agents are admissible.
In the case of coefficient of friction-reduced surfaces, a reduction of the unseating torque can occur.

Hardening properties

Curing begins shortly after screwing in the thread. Adjustment and tightening processes should therefore have been completed within 5 minutes. Sufficient functional strength is generally achieved after around 30 minutes; curing is faster with precote® -3. For smaller thread dimensions, use precote® -8. Precote® also cures at temperatures as low as -20°C, but with a lower curing speed

Storage life

max. 4 years at room temperature (max. 30 °C) and dry (max. 65 %)

Further technical details should be clarified depending on the case in question.

Animation

