

HELICOIL® Plus Free Running thread inserts, refill pack

Stainless steel A2 | coloured green | Metric fine thread



Advantages:

- High thread loading
- Increased quality and value
- Wear-resistant, low and constant thread friction
- Highly resilient
- Corrosion and temperature resistant
- Cost-effective
- Tight fit

Technical information can be found on the last page.

| Diameter (d) | Article number | Pitch (P) | D _{HC} min. | D _{1HC} | | Nominal length | | W | t ₃ max. | B | d ₁ | |
|--------------|----------------|-----------|----------------------|------------------|-------|----------------------|----------------|------|---------------------|-------|----------------|------|
| | | | | min. | max. | t ₂ (x d) | t ₂ | | | | min. | max. |
| M 8x1 | 41890083008 | 1.00 | 9.30 | 8.22 | 8.41 | 1.0 | 8.0 | 6.1 | 7.5 | 8.30 | 9.85 | 10.1 |
| | 41890083012 | | | | | 1.5 | 12.0 | 9.5 | 11.5 | | | |
| | 41890083016 | | | | | 2.0 | 16.0 | 12.9 | 15.5 | | | |
| M 10x1 | 41890103010 | 1.00 | 11.30 | 10.22 | 10.41 | 1.0 | 10.0 | 7.6 | 9.5 | 10.25 | 12.10 | 12.5 |
| | 41890103015 | | | | | 1.5 | 15.0 | 12.1 | 14.5 | | | |
| | 41890103020 | | | | | 2.0 | 20.0 | 16.3 | 19.5 | | | |
| M 10x1.25 | 41890109010 | 1.25 | 11.62 | 10.27 | 10.48 | 1.0 | 10.0 | 6.0 | 9.4 | 10.40 | 12.10 | 12.5 |
| | 41890109015 | | | | | 1.5 | 15.0 | 9.7 | 14.4 | | | |
| | 41890109020 | | | | | 2.0 | 20.0 | 13.1 | 19.4 | | | |
| M 12x1.0 | 41890123024 | 1.00 | 13.30 | 12.22 | 12.41 | 2.0 | 24.0 | 19.5 | 23.5 | 12.25 | 14.40 | 14.8 |
| M 12x1.25 | 41890129012 | 1.25 | 13.62 | 12.27 | 12.48 | 1.0 | 12.0 | 7.4 | 11.4 | 12.25 | 14.40 | 14.8 |
| | 41890129018 | | | | | 1.5 | 18.0 | 11.6 | 17.4 | | | |
| | 41890129024 | | | | | 2.0 | 24.0 | 15.9 | 23.4 | | | |
| M 12x1.5 | 41890124009 | 1.50 | 13.95 | 12.32 | 12.56 | 0.8 | 9.0 | - | - | 12.50 | 14.40 | 14.8 |
| | 41890124012 | | | | | 1.0 | 12.0 | 6.2 | 11.2 | | | |
| | 41890124018 | | | | | 1.5 | 18.0 | 9.8 | 17.2 | | | |
| | 41890124024 | | | | | 2.0 | 24.0 | 13.5 | 23.2 | | | |
| M 14x1.25 | 41890149008 | 1.25 | 15.62 | 14.27 | 14.48 | 0.6 | 8.4 | 4.6 | 7.8 | 14.25 | 16.80 | 17.2 |
| | 41890149012 | | | | | 0.9 | 12.4 | 7.4 | 11.8 | | | |
| | 41890149016 | | | | | 1.2 | 16.4 | 10.2 | 15.8 | | | |
| M 14x1.5 | 41890144014 | 1.50 | 15.95 | 14.38 | 14.56 | 1.0 | 14.0 | 7.4 | 13.2 | 14.50 | 16.80 | 17.2 |
| | 41890144021 | | | | | 1.5 | 21.0 | 11.6 | 20.2 | | | |
| | 41890144028 | | | | | 2.0 | 28.0 | 15.7 | 27.2 | | | |
| M 16x1.5 | 41890164016 | 1.50 | 17.95 | 16.32 | 16.56 | 1.0 | 16.0 | 8.7 | 15.2 | 16.50 | 19.00 | 19.4 |
| | 41890164024 | | | | | 1.5 | 24.0 | 13.4 | 23.2 | | | |
| | 41890164032 | | | | | 2.0 | 32.0 | 18.1 | 31.2 | | | |
| M 18x1.5 | 01891184018 | 1.50 | 19.95 | 18.32 | 18.56 | 1.0 | 18.0 | 9.5 | 17.2 | 18.50 | 21.50 | 22.0 |
| | 01891184027 | | | | | 1.5 | 27.0 | 14.9 | 26.2 | | | |
| | 01891184036 | | | | | 2.0 | 36.0 | 20.2 | 35.2 | | | |
| M 18x2 | 01891185027 | 2.00 | 20.60 | 18.43 | 18.72 | 1.5 | 27.0 | 11.2 | 26.0 | 18.50 | 21.50 | 22.0 |
| | 01891185036 | | | | | 2.0 | 36.0 | 15.1 | 35.0 | | | |
| | 01891204020 | | | | | 1.0 | 20.0 | 10.7 | 19.2 | | | |
| M 20x1.5 | 01891204030 | 1.50 | 21.95 | 20.32 | 20.56 | 1.5 | 30.0 | 16.7 | 29.2 | 20.50 | 23.70 | 24.2 |
| | 01891204040 | | | | | 2.0 | 40.0 | 22.4 | 39.2 | | | |

All technical data refer to the measure mm



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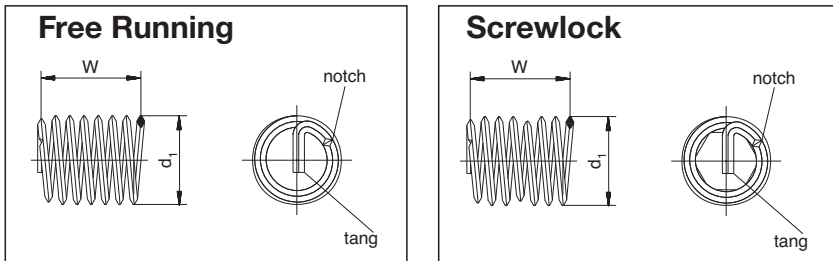
Stainless steel A2 | coloured green | Metric fine thread

| Diameter (d) | Article number | Pitch (P) | D _{HC} min. | D _{1HC} | | Nominal length | | W | t ₃ max. | B | d ₁ | |
|--------------|----------------|-----------|----------------------|------------------|-------|----------------------|----------------|------|---------------------|-------|----------------|------|
| | | | | min. | max. | t ₂ (x d) | t ₂ | | | | min. | max. |
| M 20x2 | 01891205020 | 2.00 | 22.60 | 20.43 | 20.73 | 1.0 | 20.0 | 8.0 | 19.0 | 20.50 | 23.70 | 24.2 |
| | 01891205030 | | | | | 1.5 | 30.0 | 12.5 | 29.0 | | | |
| | 01891205040 | | | | | 2.0 | 40.0 | 16.8 | 39.0 | | | |
| M 22x1.5 | 01891224022 | 1.50 | 23.95 | 22.32 | 22.56 | 1.0 | 22.0 | 11.7 | 21.2 | 22.50 | 26.30 | 26.8 |
| | 01891224033 | | | | | 1.5 | 33.0 | 18.1 | 32.2 | | | |
| | 01891224044 | | | | | 2.0 | 44.0 | 24.5 | 43.2 | | | |
| M 24x1.5 | 01891244024 | 1.50 | 25.95 | 24.33 | 24.56 | 1.0 | 24.0 | 12.9 | 23.2 | 24.50 | 28.60 | 29.1 |
| | 01891244036 | | | | | 1.5 | 36.0 | 19.8 | 35.2 | | | |
| M 24x2 | 01891245024 | 2.00 | 26.60 | 24.43 | 24.73 | 1.0 | 24.0 | 9.6 | 23.0 | 24.50 | 28.60 | 29.1 |
| | 01891245036 | | | | | 1.5 | 36.0 | 15.0 | 35.0 | | | |
| | 01891245048 | | | | | 2.0 | 48.0 | 20.2 | 47.0 | | | |
| M 26x1.5 | 01891264026 | 1.50 | 27.95 | 26.33 | 26.56 | 1.0 | 26.0 | 14.0 | 25.2 | 26.50 | 31.00 | 31.5 |
| | 01891264039 | | | | | 1.5 | 39.0 | 21.6 | 38.2 | | | |
| M 27x2 | 01891275054 | 2.00 | 29.60 | 27.43 | 27.73 | 2.0 | 54.0 | 22.6 | 53.0 | 29.60 | 32.20 | 32.7 |
| M 30x1.5 | 01891304030 | 1.50 | 31.95 | 30.33 | 30.56 | 1.0 | 30.0 | 16.5 | 29.2 | 30.50 | 35.20 | 35.7 |
| | 01891304060 | | | | | 2.0 | 60.0 | 34.0 | 59.2 | | | |
| M 30x2 | 01891305030 | 2.00 | 32.60 | 30.43 | 30.73 | 1.0 | 30.0 | 12.3 | 29.0 | 30.50 | 35.20 | 35.7 |
| | 01891305045 | | | | | 1.5 | 45.0 | 19.0 | 44.0 | | | |
| | 01891305060 | | | | | 2.0 | 60.0 | 25.5 | 59.0 | | | |
| M 33x2 | 01891335033 | 2.00 | 35.60 | 33.43 | 33.73 | 1.0 | 33.0 | 13.7 | 32.0 | 33.50 | 38.30 | 38.8 |
| M 36x1.5 | 01891364036 | 1.50 | 37.95 | 36.33 | 36.56 | 1.0 | 36.0 | 19.9 | 35.2 | 36.50 | 42.10 | 42.6 |
| | 01891364054 | | | | | 1.5 | 54.0 | 30.5 | 53.2 | | | |

All technical data refer to the measure mm

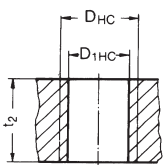


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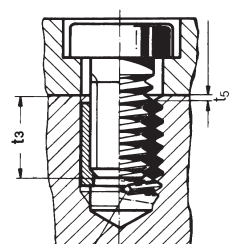
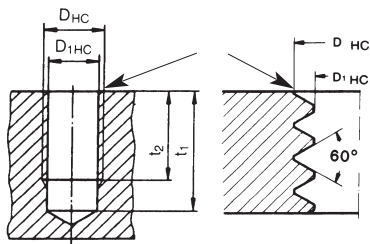
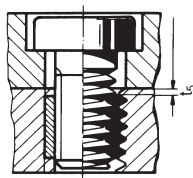


W and d_1 are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

Holding thread



Assembly



tang not broken off

Prior to tapping, counter-bore 90° and deburr.
Outside diameter of countersink = $D_{HC} + 0.1 \text{ mm}$.

- d = Nominal thread diameter
- P = Thread pitch
- d_1 = Outside diameter of thread insert prior to installation
- W = Number of threads prior to installation
- D_{HC} = Outside diameter of the parent thread
- D_{1HC} = Crest diameter
- B = Suitable twist drill diameter. Please note: D_{1HC} is critical for selecting the correct twist drill diameter.
- t_1 = Minimum depth of tapped hole according to DIN 76 – Part 1 (guide value)
- t_2 = The nominal length of the thread insert corresponds to the minimum length of the full parent thread for blind holes or the minimum plate thickness for a through hole.
- t_3 = Maximum screw-in depth when the tang is not removed
- t_5 = Distance of the thread insert from the joint face = 0.25 to 0.5 P, if t_2 corresponds to the above-mentioned minimum value

When you use HELICOIL® Plus thread inserts for volume production, we recommend to add at least $1 \times P$ to values t_1 and t_2 .

All technical data refer to the measure mm

