

HELICOIL® Plus Kit - Thread repair

M 2 – M 16 x 1.5 | Stainless steel A2 | ISO metric threads



Contents:

- HELICOIL® Plus thread inserts in three lengths
- Twist drill (up to M 12, HSS)
- Hand tap (HSS)
- Installation mandrel
- Tang break-off tool (up to M 12)

Technical information can be found on the last page.

Thread size d (x P)	Pitch P	Article-Nr. Repair Kit	Quantity of HELICOIL® x L		Thread size Refill Pack d (x P) x L		Article-Nr. Refill Pack	Quantity of HELICOIL®
M 2	0.4	4185 102 0000	20 x M 2	x 2	M 2	x 2	4189 002 0002	20
			20 x M 2	x 3	M 2	x 3	4189 002 0003	20
			20 x M 2	x 4	M 2	x 4	4189 002 0004	20
M 2.5	0.45	4185 125 0000	20 x M 2.5	x 2.5	M 2.5	x 2.5	4189 025 0025	20
			20 x M 2.5	x 3.75	M 2.5	x 3.75	4189 025 0375	20
			20 x M 2.5	x 5	M 2.5	x 5.0	4189 025 0005	20
M 3	0.5	4185 103 0000	20 x M 3	x 3	M 3	x 3	4189 003 0003	20
			20 x M 3	x 4.5	M 3	x 4.5	4189 003 0045	20
			20 x M 3	x 6	M 3	x 6	4189 003 0006	20
M 3.5	0.6	4185 135 0000	20 x M 3.5	x 3.5	M 3.5	x 3.5	4189 035 0035	20
			20 x M 3.5	x 5.25	M 3.5	x 5.25	4189 035 0053	20
			20 x M 3.5	x 7	M 3.5	x 7	4189 035 0007	20
M 4	0.7	4185 104 0000	20 x M 4	x 4	M 4	x 4	4189 004 0004	20
			20 x M 4	x 6	M 4	x 6	4189 004 0006	20
			20 x M 4	x 8	M 4	x 8	4189 004 0008	20
M 5	0.8	4185 105 0000	20 x M 5	x 5	M 5	x 5	4189 005 0005	20
			20 x M 5	x 7.5	M 5	x 7.5	4189 005 0075	20
			20 x M 5	x 10	M 5	x 10	4189 005 0010	20
M 6	1.0	4185 106 0000	20 x M 6	x 6	M 6	x 6	4189 006 0006	20
			20 x M 6	x 9	M 6	x 9	4189 006 0009	20
			20 x M 6	x 12	M 6	x 12	4189 006 0012	20
M 7	1.0	4185 107 0000	10 x M 7	x 7	M 7	x 7	4189 007 0007	10
			10 x M 7	x 10.5	M 7	x 10.5	4189 007 0105	10
			10 x M 7	x 14	M 7	x 14	4189 007 0014	10
M 8	1.25	4185 108 0000	10 x M 8	x 8	M 8	x 8	4189 008 0008	10
			10 x M 8	x 12	M 8	x 12	4189 008 0012	10
			10 x M 8	x 16	M 8	x 16	4189 008 0016	10
M 8 x 1	1.0	4185 108 3000	10 x M 8 x 1	x 8	M 8 x 1	x 8	4189 008 3008	10
			10 x M 8 x 1	x 12	M 8 x 1	x 12	4189 008 3012	10
			10 x M 8 x 1	x 16	M 8 x 1	x 16	4189 008 3016	10
M 9	1.25	4185 109 0000	10 x M 9	x 9	M 9	x 9	4189 009 0009	10
			10 x M 9	x 13.5	M 9	x 13.5	4189 009 0135	10
			10 x M 9	x 18	M 9	x 18	4189 009 0018	10
M 10	1.5	4185 110 0000	10 x M 10	x 10	M 10	x 10	4189 010 0010	10
			10 x M 10	x 15	M 10	x 15	4189 010 0015	10
			10 x M 10	x 20	M 10	x 20	4189 010 0020	10
M 10 x 1	1.0	4185 110 3000	10 x M 10 x 1	x 10	M 10 x 1	x 10	4189 010 3010	10
			10 x M 10 x 1	x 15	M 10 x 1	x 15	4189 010 3015	10
			10 x M 10 x 1	x 20	M 10 x 1	x 20	4189 010 3020	10
M 10 x 1.25	1.25	4185 110 9000	10 x M 10 x 1.25	x 10	M 10 x 1.25	x 10	4189 010 9010	10
			10 x M 10 x 1.25	x 15	M 10 x 1.25	x 15	4189 010 9015	10
			10 x M 10 x 1.25	x 20	M 10 x 1.25	x 20	4189 010 9020	10

All technical data refer to the measure mm



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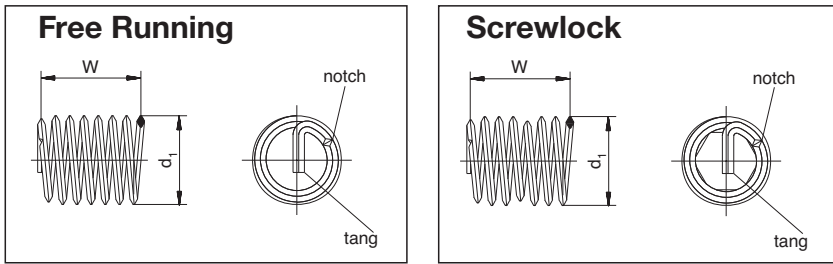
M 2 – M 16 x 1.5 | Stainless steel A2 | ISO metric threads

Thread size d (x P)	Pitch P	Article-Nr. Repair Kit	Quantity of HELICOIL® x L	Thread size Refill Pack d (x P) x L	Article-Nr. Refill Pack	Quantity of HELICOIL®
M 11	1.5	4185 111 0000	10 x M 11 x 11	M 11 x 11	4189 011 0011	10
			10 x M 11 x 16.5	M 11 x 16.5	4189 011 0165	10
			10 x M 11 x 22	M 11 x 22	4189 011 0022	10
M 12	1.75	4185 112 0000	10 x M 12 x 12	M 12 x 12	4189 012 0012	10
			10 x M 12 x 18	M 12 x 18	4189 012 0018	10
			10 x M 12 x 24	M 12 x 24	4189 012 0024	10
M 12 x 1	1.0	4185 112 3000	10 x M 12 x 1.0 x 12	M 12 x 1.0 x 12	4189 012 3012	10
			10 x M 12 x 1.0 x 18	M 12 x 1.0 x 18	4189 012 3018	10
			10 x M 12 x 1.0 x 24	M 12 x 1.0 x 24	4189 012 3024	10
M 12 x 1.25	1.25	4185 112 9000	10 x M 12 x 1.25 x 12	M 12 x 1.25 x 12	4189 012 9012	10
			10 x M 12 x 1.25 x 18	M 12 x 1.25 x 18	4189 012 9018	10
			10 x M 12 x 1.25 x 24	M 12 x 1.25 x 24	4189 012 9024	10
M 12 x 1.5	1.5	4185 112 4000	10 x M 12 x 1.5 x 12	M 12 x 1.5 x 12	4189 012 4012	10
			10 x M 12 x 1.5 x 18	M 12 x 1.5 x 18	4189 012 4018	10
			10 x M 12 x 1.5 x 24	M 12 x 1.5 x 24	4189 012 4024	10
M 14	2.0	4185 114 0000	10 x M 14 x 14	M 14 x 14	4189 014 0014	10
			10 x M 14 x 21	M 14 x 21	4189 014 0021	10
			10 x M 14 x 28	M 14 x 28	4189 014 0028	10
M 14 x 1.5	1.5	4185 114 4000	10 x M 14 x 1.5 x 14	M 14 x 1.5 x 14	4189 014 4014	10
			10 x M 14 x 1.5 x 21	M 14 x 1.5 x 21	4189 014 4021	10
			10 x M 14 x 1.5 x 28	M 14 x 1.5 x 28	4189 014 4028	10
M 16	2.0	4185 116 0000	10 x M 16 x 16	M 16 x 16	4189 016 0016	10
			10 x M 16 x 24	M 16 x 24	4189 016 0024	10
			10 x M 16 x 32	M 16 x 32	4189 016 0032	10
M 16 x 1.5	1.5	4185 116 4000	10 x M 16 x 1.5 x 16	M 16 x 1.5 x 16	4189 016 4016	10
			10 x M 16 x 1.5 x 24	M 16 x 1.5 x 24	4189 016 4024	10
			10 x M 16 x 1.5 x 32	M 16 x 1.5 x 32	4189 016 4032	10

All technical data refer to the measure mm

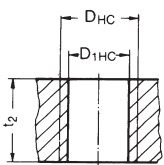


HELICOIL® Plus thread inserts

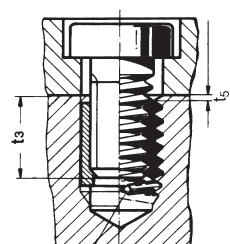
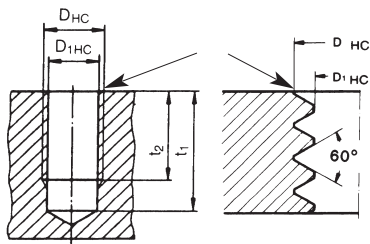
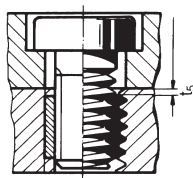


W and d₁ are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

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
- d₁ = 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.
- t₁ = Minimum depth of tapped hole according to DIN 76 – Part 1 (guide value)
- t₂ = 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.
- t₃ = Maximum screw-in depth when the tang is not removed
- t₅ = Distance of the thread insert from the joint face = 0.25 to 0.5 P, if t₂ corresponds to the above-mentioned minimum value

When you use HELICOIL® Plus thread inserts for volume production, we recommend to add at least 1 x P to values t₁ and t₂.

All technical data refer to the measure mm

