HELICOIL® Plus Free Running thread inserts, refill pack

Stainless steel A2 | coloured green | Metric standard 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)	Pitch (P)	D_{HC} min.	D_{1HC} min.	D_{1HC} max.	Nominal length t_2 (x d)	Nominal length t_2	W	t_3 max.	B	d_1 min.	d_1 max.
M 2	0.40	2.52	2.09	2.18	1.0	2.00	2.9	1.8	2.10	2.60	2.80
					1.5	3.00	4.9	2.8			
					2.0	4.00	6.9	3.8			
M 2.5	0.45	3.08	2.60	2.70	1.0	2.50	3.5	2.3	2.60	3.80	4.00
					1.5	3.75	5.9	3.5			
					2.0	5.00	8.1	4.8			
M 3	0.50	3.65	3.11	3.22	1.0	3.00	3.9	2.7	3.20	3.80	4.00
					1.5	4.50	6.3	4.2			
					2.0	6.00	8.7	5.7			
M 3.5	0.60	4.28	3.63	3.76	1.0	3.50	3.7	3.2	3.70	4.42	4.60
					1.5	5.25	6.3	5.0			
					2.0	7.00	8.7	6.7			
M 4	0.70	4.91	4.15	4.29	1.0	4.00	3.7	3.6	4.20	5.05	5.25
					1.5	6.00	6.1	5.6			
					2.0	8.00	8.4	7.6			
M 5	0.80	6.04	5.17	5.33	1.0	5.00	4.3	4.6	5.20	6.35	6.60
					1.5	7.50	6.9	7.1			
					2.0	10.00	9.7	9.6			
M 6	1.00	7.30	6.22	6.41	–	18.00	14.6	17.5	6.30	7.60	7.85
					1.0	6.00	4.2	5.5			
					1.5	9.00	6.9	8.5			
					2.0	12.00	9.6	11.5			
M 7	1.00	8.30	7.22	7.41	1.0	7.00	5.3	6.5	7.30	8.65	8.90
					1.5	10.50	8.2	10.0			
					2.0	14.00	11.1	13.5			
M 8	1.25	9.62	8.27	8.48	1.0	8.00	4.7	7.4	8.40	9.85	10.10
					1.5	12.00	7.4	11.4			
					2.0	16.00	10.6	15.4			
M 9	1.25	10.62	9.27	9.48	1.0	9.00	5.3	8.4	9.40	10.85	11.10
					1.5	13.50	8.6	12.9			
					2.0	18.00	11.9	17.4			
M 10	1.50	11.95	10.32	10.56	1.0	10.00	5.0	9.2	10.50	12.10	12.50
					1.5	15.00	8.1	14.2			
					2.0	20.00	11.2	19.2			

All technical data refer to the measure mm

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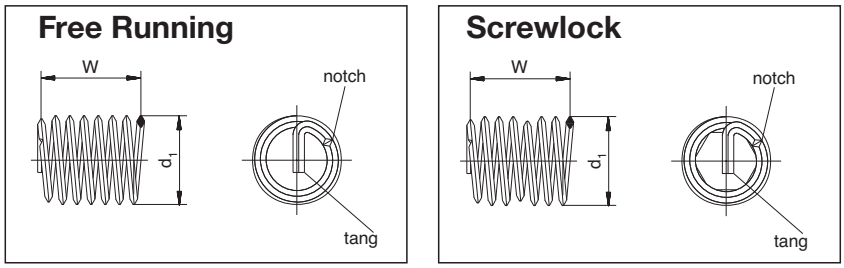
Diameter (d)	Pitch (P)	D_{HC} min.	D_{1HC} min.	D_{1HC} max.	Nominal length t_2 (x d)	Nominal length t_2	W	t_3 max.	B	d_1 min.	d_1 max.
M 11	1.50	12.95	11.33	11.56	1.0	11.00	5.6	10.2	11.50	13.10	13.50
					1.5	16.50	9.0	15.7			
					2.0	22.00	12.3	21.2			
M 12	1.75	14.27	12.38	12.64	1.0	12.00	5.2	11.1	12.50	14.40	14.80
					1.5	18.00	8.4	17.1			
					2.0	24.00	11.7	23.1			
M 14	2.00	16.60	14.43	14.73	1.0	14.00	5.6	13.0	14.50	16.80	17.20
					1.5	21.00	8.8	20.0			
					2.0	28.00	12.0	27.0			
M 16	2.00	18.60	16.43	16.73	1.0	16.00	6.5	15.0	16.50	19.00	19.40
					1.5	24.00	10.1	23.0			
					2.0	32.00	13.8	31.0			
M 18	2.50	21.25	18.54	18.90	–	9.00	2.3	7.7	18.75	21.50	22.00
					1.0	18.00	5.6	16.7			
					1.5	27.00	9.0	25.7			
					2.0	36.00	12.3	34.7			
M 20	2.50	23.25	20.54	20.90	1.0	20.00	6.3	18.7	20.75	23.70	24.20
					1.5	30.00	10.0	28.7			
					2.0	40.00	13.7	38.7			
M 22	2.50	25.25	22.54	22.90	1.0	22.00	6.9	20.7	22.75	26.30	26.80
					1.5	33.00	10.9	31.7			
					2.0	44.00	15.0	42.7			
M 24	3.00	27.90	24.65	25.05	1.0	24.00	6.2	22.5	24.75	28.60	29.10
					1.5	36.00	10.0	34.5			
					2.0	48.00	14.0	46.5			
M 27	3.00	30.90	27.65	28.05	1.0	27.00	7.1	25.5	27.75	32.20	32.70
					1.5	40.50	11.4	39.0			
					2.0	54.00	15.4	52.5			
M 30	3.50	34.55	30.76	31.21	1.0	30.00	7.0	27.2	31.00	35.20	35.70
					1.5	45.00	11.0	43.2			
					2.0	60.00	14.9	58.2			
M 33	3.50	37.55	33.76	34.21	1.5	49.50	12.2	47.7	34.00	38.30	38.80

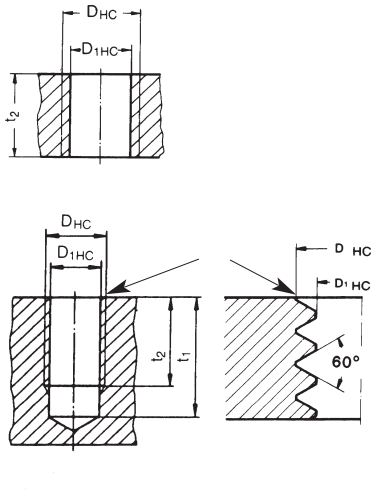
All technical data refer to the measure mm

HELICOIL® Plus thread inserts

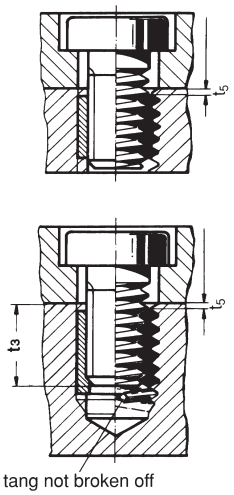


W and d_1 are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

Holding thread



Assembly



Prior to tapping, counter-bore 90° and deburr.
Outside diameter of **countersink = D_{HC} + 0.1 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 x P to values t_1 and t_2.

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