

HELICOIL® Plus installation mandrel

HELICOIL® Plus installation mandrels can be used with the following tools:

- Electrical installation tools type E-S 206 and E-S 410
- Battery installation tools type B-S 206 and B-S 824
- Pneumatic installation tools P-S 412 and P-S 1216

Your benefits

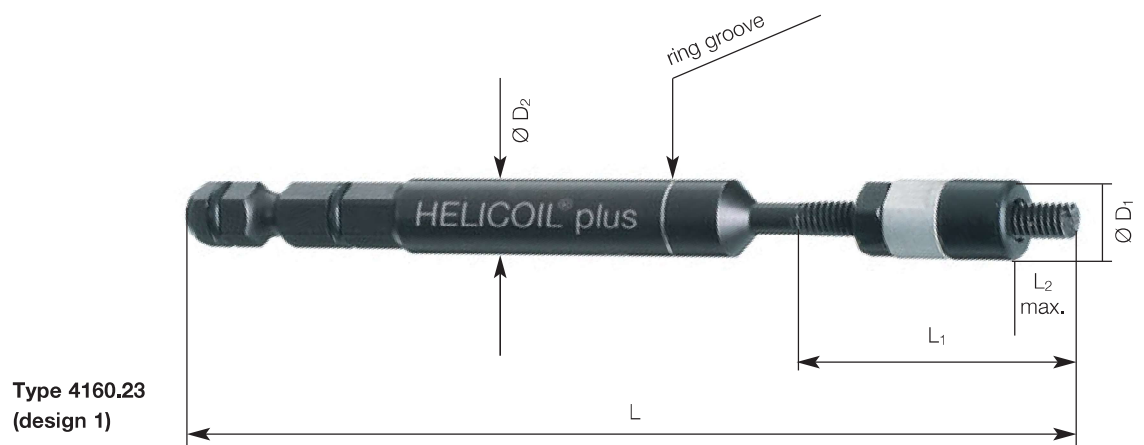
- Quick tool change
- Reduced tool costs
- Sizes M 2 to M 24
- Pick-and-place processing possible

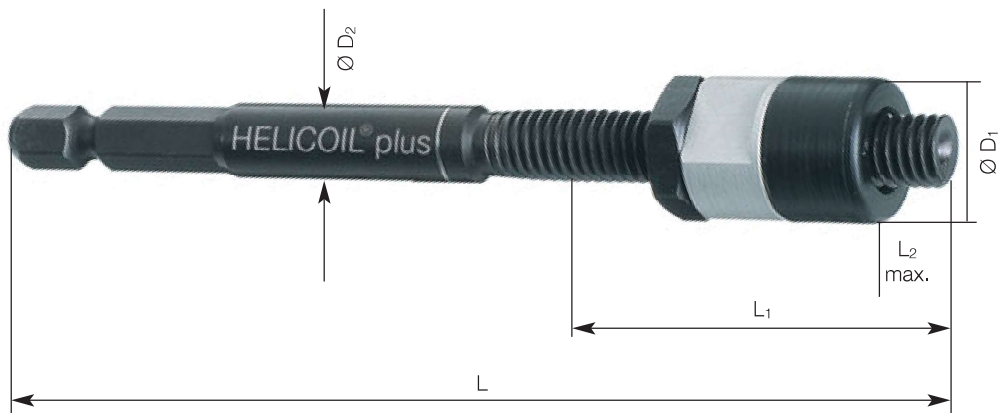
Installation mandrel with depth stop

Only for installation of HELICOIL® Plus Free Running and Screwlock.
With external hexagon DIN 3126 – E 6.3/DIN ISO 1173.

For installation tools types B-S 206, E-S 206, E-S 410, P-S 412

Nominal thread \emptyset	Mandrel Free Running Item No	Mandrel Screwlock Item No	L_1	L_2 max.	L	D_1	D_2 \emptyset_{hg}	Design
M 2	4160 2302 020	4160 2302 022	25	9	100	8	8	1
M 2.5	4160 2325 020	4160 2325 022	25	9	100	8	8	1
M 3	4160 2303 020	4160 2303 022	30	14	100	8	8	1
M 3.5	4160 2335 020	4160 2335 022	30	14	100	8	8	1
M 4	4160 2304 020	4160 2304 022	35	16	100	8	8	1
M 5	4160 2305 020	4160 2305 022	40	20	105	10	8	1
M 6	4160 2306 020	4160 2306 022	40	20	105	11	8	1





**Type
4160.25**

For installation tools types B-S 824, E-S 410, P-S 412 and P-S 1216

Nominal thread Ø	Mandrel Free Running Item No	Mandrel Screwlock Item No	L ₁	L ₂ max.	L	D ₁	D ₂ Ø _{h9}	Design
M 7	4160 2507 020	4160 2507 022	55	30	105	13	8	2
M 8	4160 2508 020	4160 2508 022	55	30	105	15	8	2
M 9	4160 2509 020	4160 2509 022	65	40	110	15	8	2
M 10	4160 2510 020	4160 2510 022	60	40	110	16	8	2
M 12	4160 2512 020	4160 2512 022	70	45	115	20	8	2
M 12 x 1.5	4160 2512 420	4160 2512 422	65	45	115	20	8	2
M 14	4160 2514 020	4160 2514 022	70	50	120	21	8	2
M 14 x 1.5	4160 2514 420	4160 2514 422	70	50	120	21	8	2
M 16	4160 2516 020	4160 2516 022	80	55	135	24	8	2
M 16 x 1.5	4160 2516 420	4160 2516 422	80	55	135	24	8	2
M 18	4160 2518 020	4160 2518 022	90	65	135	30	8	2
M 20	4160 2520 020	4160 2520 022	100	70	145	31	8	2
M 22	4160 2522 020	4160 2522 022	110	80	155	33	8	2
M 24	4160 2524 020	4160 2524 022	120	90	165	35	8	2

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.



These installation mandrels can also be used as manual installation mandrels.

HELICOIL® Plus Screwlock installation mandrels are marked with a ring groove on the guide shaft. HELICOIL® Free Running installation mandrels have a smooth guide shaft.

Installation tools for **HELICOIL® Plus**

Basically, there are three types of installation tools. Installation tools are chosen based on the volume of HELICOIL® Plus thread inserts to process, the location of the tapped holes in the workpiece and the thread size.

Hence, there are:

- Manual installation tools
- Electrical installation tools
- Electrical installation tools with battery power
- Pneumatic installation tools

Battery installation tools



Battery power pack installation tool type B-S 206

For processing HELICOIL® Plus M 2 to M 6 with HELICOIL® Plus installation mandrel

Delivery scope:

- Battery gun-straight installation tool (articulated)
- 2 pieces battery pack 3.6 V; 1.5 Ah
- Quick charger
- Case

Technical data:

Idle speed:	Two-speed 200 rpm and 600 rpm, reversible
Torque:	Adjustable in 21 steps 0.3–2.9 Nm/4.4 Nm max.
Tool holder:	1/4" hexagon socket
Weight incl. battery:	0.5 kg
Battery:	3.6 V/1.5 Ah/charging time 30 min
Item No:	4160 430 0000

Spare parts and accessories:

Spare battery:	Item No 4160 430 0200
Quick charger:	Item No 4160 430 0300

Battery power pack installation tool type B-S 824

For processing HELICOIL® Plus M 7 to M 24 with HELICOIL® Plus installation mandrel

Delivery scope:

- Battery gun screwdriver
- 2 pieces battery pack 15.6 V; 3 Ah
- Quick charger
- Case

Technical data:

Idle speed:	Speed 1/stepless 65– 450 rpm, reversible Speed 2/stepless 200–1450 rpm, reversible
Torque:	19-step adjustable 1–6.9 Nm/31.9 Nm max.
Tool holder:	Three-jaw chuck 1.0–13 mm
Weight incl. battery:	2.0 kg
Battery:	15.6 V/3 Ah/charging time 45 min
Item No:	4160 350 0000

Spare parts and accessories:

Spare battery:	Item No 4160 350 0200
Quick charger:	Item No 4160 350 0300



Electrical installation tools



Type E-S 206

For quick processing of HELICOIL® Plus thread inserts M 2 to M 6 with HELICOIL® Plus installation mandrel

Delivery scope:

- Straight screwdriver with 1/4" hexagon
- Power supply for two screwdrivers
- Case

Technical data:

Idle speed:	720 rpm
Output voltage:	35 V DC
Torque:	M = 0.45 – 0.95 Nm Steplessly adjustable shut-off clutch
Tool holder:	1/4" hexagon socket with radial bearing
Weight:	0.31 kg
Item No:	4160 220 0000

The installation mandrels for all available sizes are provided on page 42/43.



Type E-S 410

For quick processing of HELICOIL® Plus thread inserts M 4 to M 10 with HELICOIL® Plus installation mandrel

Delivery scope:

- Straight screwdriver with quick-change chuck 1/4" hexagon socket
- Speed control with ramp control on control device EDU 2AE
- Case

Technical data:

Idle speed:	1200 rpm (steplessly adjustable) Automatic change-over of the direction of rotation when reaching the screw-in depth
Torque:	0.9 to 3 Nm Torque steplessly adjustable on the control device
Tool holder:	Quick-change chuck 1/4" hexagon socket with radial bearing for installation mandrel
Weight:	0.57 kg
Item No:	4160 540 0000

The installation mandrels for all available sizes are provided on page 42/43.



Type E-PSG 256 with leader cartridge

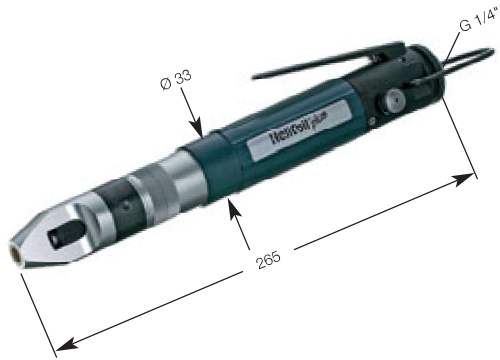
For quick processing of HELICOIL® Plus thread inserts M 2.5 to M 6 with HELICOIL® Plus exchange unit

Delivery scope: See type E-S 410

Technical data:

Idle speed:	1200 rpm (steplessly adjustable) Automatic change-over of the direction of rotation when reaching the screw-in depth
Torque:	0.9 to 3 Nm Torque steplessly adjustable on the control device
Tool holder:	Connection for leader cartridges of P-PSG 256
Weight:	0.75 kg
Item No:	0160 470 0000

The exchange units for all available sizes are provided on pages 49 and 51.



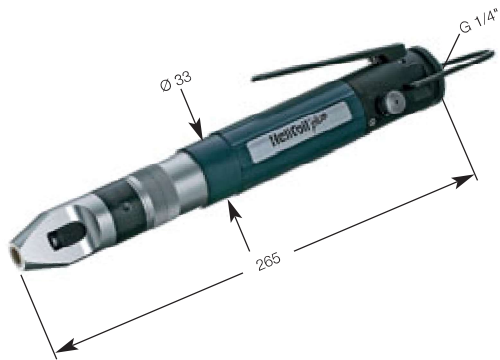
Pneumatic installation tool type P-S 412

For quick processing of HELICOIL® Plus M 4 to M 12 with HELICOIL® Plus installation mandrel

Technical data:

Idle speed:	1500 rpm at p = 6.3 bar Adjustable through air pressure
Air consumption:	5.5 l/s at p = 6.3 bar
Torque:	M = 1.2–4.5 Nm Steplessly adjustable shut-off clutch
Tool holder:	1/4" hexagon socket with radial bearing
Weight:	0.8 kg
Item No:	4160 270 0010

HELICOIL® Plus installation mandrels depending on the size with depth stop must be ordered separately, see page 42/43.



Pneumatic installation tool type P-S 1216

For quick processing of HELICOIL® Plus M 12 to M 16 with HELICOIL® Plus installation mandrel

Technical data:

Idle speed:	950 rpm at p = 6.3 bar Adjustable through air pressure
Air consumption:	5.5 l/s at p = 6.3 bar
Torque:	M = 1.2–5.5 Nm Steplessly adjustable shut-off clutch
Tool holder:	1/4" hexagon socket with radial bearing
Weight:	0.8 kg
Item No:	4160 180 0010

HELICOIL® Plus installation mandrels depending on the size with depth stop must be ordered separately, see page 42/43.

**Spare handle for P-S 1216**

Handle for safe compensation of installation torque for sizes \geq M 12
Item No: **4160 180 0006**

**Suspension bracket for P-S 412 and P-S 1216**

For horizontal suspension of tools on counterbalance systems
Item No: **4160 180 0007**

For **HELICOIL®** Classic and **HELICOIL®** Plus Free Running and Screwlock

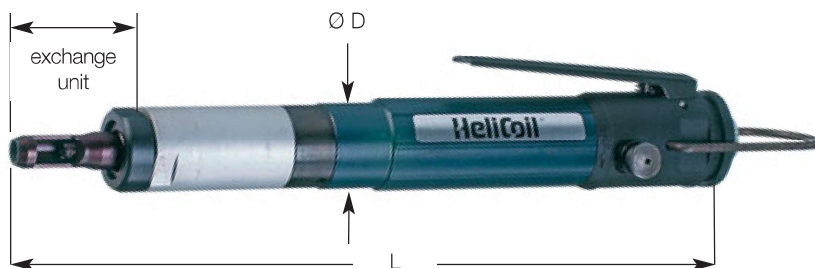
Pitch-controlled **HELICOIL®** Classic and **HELICOIL®** Plus installation tool for **bulk material processing**.

The installation tool is equipped with a reversible compressed-air motor and a size-dependent exchange unit.

The **HELICOIL®** installation depth is adjusted with compensation washers.

We recommend this tool for medium and large scale production.

Complete tool



Type***	Nominal thread Ø d	Complete tool Item No	Dimensions		Weight kg	Connection bar	**Air consumption l/min.
			Ø D	L			
P-PSG 256	M 2.5	0160 372 5000	28	240	0.6	2.5–4.0	204
	M 3	0160 370 3000	28	240	0.6	2.5–4.0	204
	M 4	0160 370 4000	28	240	0.6	2.5–4.0	204
	M 5	0160 370 5000	28	240	0.6	2.5–4.0	204
P-PSG 714	M 6	0160 370 6000	28	240	0.6	2.5–4.0	204
	M 7	0160 280 7000	42	360	1.4	4.0–5.0	282
	M 8	0160 280 8000	42	360	1.4	4.0–5.0	282
	M 8 x 1	0160 280 8300	42	360	1.4	4.0–5.0	282
	M 10	0160 281 0000	42	360	1.4	4.0–5.0	282
	M 10 x 1.25	0160 281 0900	42	360	1.4	4.0–5.0	282
	M 10 x 1	0160 281 0300	42	360	1.4	4.0–5.0	282
	M 12	0160 281 2000	42	360	1.4	4.0–5.0	282
	M 12 x 1.5	0160 281 2400	42	360	1.4	4.0–5.0	282
	M 12 x 1.25	0160 281 2900	42	360	1.4	4.0–5.0	282
	M 12 x 1	0160 281 2300	42	360	1.4	4.0–5.0	282
	M 14*	0160 281 4000	42	360	1.4	4.0–5.0	282
P-PSG 1626	M 14 x 1.5	0160 281 4400	42	360	1.4	4.0–5.0	282
	M 14 x 1.25	0160 281 4900	42	360	1.4	4.0–5.0	282
	M 16	0160 191 6000	42	440	2.5	4.0–6.0	282
	M 16 x 1.5	0160 191 6400	42	440	2.5	4.0–6.0	282
	M 18 x 1.5	0160 191 8400	42	440	2.5	4.0–6.0	282
	M 20	0160 192 0000	42	440	2.5	4.0–6.0	282
	M 20 x 1.5	0160 192 0400	42	440	2.5	4.0–6.0	282
	M 22 x 1.5	0160 192 2400	42	440	2.5	4.0–6.0	282
M 24 x 1.5*	0160 192 4400	42	440	2.5	4.0–6.0	282	
M 26 x 1.5*	0160 192 6400	42	440	2.5	4.0–6.0	282	

Important order information:

When you order tools, specify type, size and length of **HELICOIL®** Plus thread inserts to process. Tools for installation of **HELICOIL®** Plus thread inserts with lengths > 2.5 d on request. As required by German accident prevention regulations (UVV), types P-PSG 714 and P-PSG 1626 are equipped with a sliding sleeve as finger guard.

This finger guard must not be removed.

Installation tools are equipped with Bosch motors.

*Basic tool with stronger motor.

**Air consumption at 6,3 bar. (See page 46.)

***Exchange units can be interchanged within the individual series.

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.

Subassemblies

Exchange unit



Basic tool



Motor



Type***	Nominal thread Ø	Exchange unit	Basic tool	Motor
	d	Item No	Item No	Item No
P-PSG 256	M 3	0160 270 3050	0160 370 0040	0160 370 0010
	M 4	0160 270 4050		
	M 5	0160 270 5050		
	M 6	0160 270 6050		
P-PSG 714	M 7	0160 280 7050	0160 180 0040	0160 180 0010
	M 8	0160 280 8050		
	M 8 x 1	0160 281 8350		
	M 10	0160 281 0050		
	M 10 x 1.25	0160 281 0950		
	M 10 x 1	0160 281 0350		
	M 12	0160 281 2050		
	M 12 x 1.5	0160 281 2450		
	M 12 x 1.25	0160 281 2950		
	M 12 x 1	0160 281 2350		
	M 14*	0160 281 4050		0160 090 0011
	M 14 x 1.5	0160 281 4450		0160 180 0010
P-PSG 1626	M 14 x 1.25	0160 281 4950	0160 090 0040	0160 090 0011
	M 16	0160 191 6050		
	M 16 x 1.5	0160 191 6450		
	M 18 x 1.5	0160 191 8450		
	M 20	0160 192 0050		
	M 20 x 1.5	0160 192 0450		
	M 22 x 1.5	0160 192 2450		
M 24 x 1.5*	0160 192 4450			
	M 26 x 1.5*	0160 192 6450		

Wear and spare parts

Prewinder



Installation mandrel



Clutch for installation mandrel



Range of compensation washers



Type***	Nominal thread Ø	Prewinder	Installation mandrel	Clutch for installation mandrel	Range of compensation washers
	d	Item No	Item No	Item No	Item No
P-PSG 256	M 2.5	0160 172 5032	0160 372 5020	0160 170 0006	0160 170 0060
	M 3	0160 170 3032	0160 270 3020		
	M 4	0160 170 4032	0160 270 4020		
	M 5	0160 170 5032	0160 270 5020		
	M 6	0160 170 6032	0160 270 6020		
P-PSG 714	M 7	0160 280 7032	0160 280 7020	0160 180 0006	0160 280 0060
	M 8	0160 280 8032	0160 280 8020		
	M 8 x 1	0160 280 8332	0160 280 8320		
	M 10	0160 281 0032	0160 281 0020		
	M 10 x 1.25	0160 281 0932	0160 281 0920		
	M 10 x 1	0160 281 0332	0160 281 0320		
	M 12	0160 281 2032	0160 281 2020		
	M 12 x 1.5	0160 281 2432	0160 281 2420		
	M 12 x 1.25	0160 281 2932	0160 281 2920		
	M 12 x 1	0160 281 2332	0160 281 2320		
	M 14*	0160 281 4032	0160 281 4020		
	M 14 x 1.5	0160 281 4432	0160 281 4420		
M 14 x 1.25	0160 281 4932	0160 281 4920			
P-PSG 1626	M 16	0160 191 6032	0160 191 6020	0160 090 0006	0160 190 0060
	M 16 x 1.5	0160 191 6432	0160 191 6420		
	M 18 x 1.5	0160 191 8432	0160 191 8420		
	M 20	0160 192 0032	0160 192 0020		
	M 20 x 1.5	0160 192 0432	0160 192 0420		
	M 22 x 1.5	0160 192 2432	0160 192 2420		
	M 24 x 1.5*	0160 192 4432	0160 192 4420		
M 26 x 1.5*	0160 192 6432	0160 192 6420			

Exemplary illustrations.

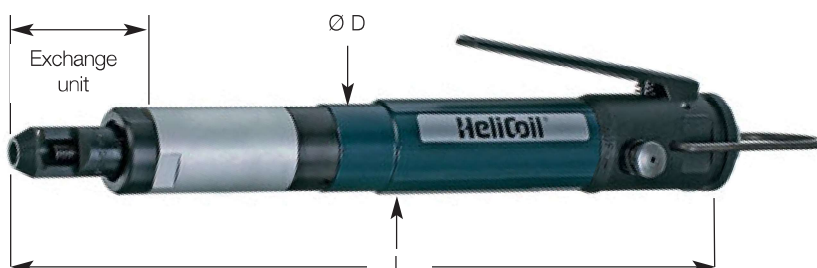
For HELICOIL® Classic STRIPFEED® and HELICOIL® Plus STRIPFEED®

Pitch-controlled HELICOIL® Classic and HELICOIL® Plus installation tool for processing **magazined thread inserts**.

The installation tool is equipped with a reversible compressed-air motor and a size-dependent exchange unit.

The HELICOIL® installation depth is adjusted with compensation washers. We recommend this tool for medium and large scale production.

Complete tool



Type**	Nominal thread Ø d	Complete tool Item No	Max. length	Dimensions		Weight kg	Connec- tion bar	*Air con- sumption l/min.
				Ø D	L			
P-PSG 256 SF	M 2,5	0160 372 5002	≤ 1,25 d	28	240	0,6	2,5-4,0	204
	M 2,5	0160 372 5003	1,5-2,5 d	28	240	0,6	2,5-4,0	204
	M 3	0160 370 3002	≤ 1,25 d	28	240	0,6	2,5-4,0	204
	M 3	0160 370 3003	1,5-2,5 d	28	240	0,6	2,5-4,0	204
	M 4	0160 370 4002	≤ 1,25 d	28	240	0,6	2,5-4,0	204
	M 4	0160 370 4003	1,5-2,5 d	28	240	0,6	2,5-4,0	204
	M 5	0160 370 5002	≤ 1,25 d	28	240	0,6	2,5-4,0	204
	M 5	0160 370 5003	1,5-2,5 d	28	240	0,6	2,5-4,0	204
P-PSG 714 SF	M 6	0160 370 6002	≤ 1,25 d	28	240	0,6	2,5-4,0	204
	M 6	0160 370 6003	1,5-2,5 d	28	240	0,6	2,5-4,0	204
	M 7	0160 280 7002	≤ 1,25 d	42	360	1,4	4,0-5,0	282
	M 7	0160 280 7003	1,5-2,5 d	42	360	1,4	4,0-5,0	282
	M 8	0160 280 8002	≤ 1,25 d	42	360	1,4	4,0-5,0	282
	M 8	0160 280 8003	1,5-2,5 d	42	360	1,4	4,0-5,0	282
	M 10	0160 281 0002	≤ 1,25 d	42	360	1,4	4,0-5,0	282
	M 10	0160 281 0003	1,5-2,5 d	42	360	1,4	4,0-5,0	282

Important order information:

When you order tools, specify type, size and length of HELICOIL® Plus thread inserts to process. Tools for installation of HELICOIL® Plus thread inserts with lengths > 2,5 d on request. Installation tools are equipped with Bosch motors.

*Air consumption at 6,3 bar.

**Exchange units can be interchanged within the individual series.

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.

Subassemblies

Exchange unit



Basic tool



Motor



Type**	Nominal thread Ø	Exchange unit ≤ 1.25 d	Exchange unit 1.5–2 d	Basic tool	Motor
	d	Item No	Item No	Item No	Item No
P-PSG 256 SF	M 2.5	0160 272 5052	0160 272 5053	0160 370 0040	0160 370 0010
	M 3	0160 270 3052	0160 270 3053		
	M 4	0160 270 4052	0160 270 4053		
	M 5	0160 270 5052	0160 270 5053		
	M 6	0160 270 6052	0160 270 6053		
P-PSG 714 SF	M 7	0160 280 7052	0160 280 7053	0160 180 0040	0160 180 0010
	M 8	0160 280 8052	0160 280 8053		
	M 10	0160 281 0052	0160 281 0053		

Prewinder



Installation mandrel



Clutch for installation mandrel



Wear and spare parts

Type**	Nominal thread Ø	Prewinder ≤ 1.25 d	Prewinder 1.5–2.5 d	Installation mandrel	Clutch for installation mandrel
	d	Item No	Item No	Item No	Item No
P-PSG 256 SF	M 2.5	0160 172 5035	0160 172 5033	0160 272 5020	0160 170 0006
	M 3	0160 170 3035	0160 170 3034	0160 270 3020	
	M 4	0160 170 4035	0160 170 4033	0160 270 4020	
	M 5	0160 170 5035	0160 170 5033	0160 270 5020	
	M 6	0160 170 6035	0160 170 6033	0160 270 6020	
P-PSG 714 SF	M 7	0160 180 7035	0160 180 7033	0160 280 7020	0160 180 0006
	M 8	0160 180 8035	0160 180 8033	0160 280 8020	
	M 10	0160 181 0035	0160 181 0033	0160 281 0020	

Range of compensation washers ≤ M 6: Item No 0160 170 0060, ≥ M 8: 0160 280 0060.

Range of compensation washers



Exemplary illustrations.



Parallel system type S for HELICOIL® Classic and HELICOIL® Plus installation tools

Type	Product characteristics		Item No
S 600	Work radius	130 mm–450 mm	0182 080 0003 (see delivery scope)
	Work height	50 mm–450 mm	
	Weight without tool	8 kg	
	Torque absorption	15 Nm max.	

Advantages

- Rationalisation
- Quick and positioning especially for small dimensions
- Easy handling, no operator fatigue
- No return rotation forces
- Absorption of screwdriver weight
- Can be used with electrical and pneumatic HELICOIL® installation tools
- Quick tool change
- 360° rotatable
- Smooth and precise roller guides
- Optimum workstation layout

Delivery scope

- 3-axis guiding system
- Tool holder
- 1 counterbalance 1–3 kg
- Base plate made of extruded aluminium profile with grooves, dimensions w x h x l: 240 x 40 x 500 mm

Accessories

Type	Size	Item No
Service unit	at 6 bar nominal flow G 01" = 700l/min	0182 080 1001
Stationary roller holder for HELICOIL® Plus STRIPFEED®		0182 080 0004
Hose	ID 6	0196 000 1130
Hose clip	8–12 mm	0196 000 1150
Hose tail	G 1/8" -6	0196 000 1151
Hose tail	G 1/4" -6	0196 000 1152
Exhaust air hose	Ø 15 mm	0196 000 1131



Drill chuck with external hexagon

DIN 3126 – E 6.3 for type B-S 206
Item No 4160 000 0100

HELICOIL® Plus automatic installation

The economical installation of HELICOIL® Plus thread inserts is just as important as the high quality standard.

That is why we offer modules for integration into automatic processes as well as complete systems.



**Manual installation tool with prewinder for
HELICOIL® Classic and HELICOIL® Plus**

Only required for **HELICOIL® Plus** for fine screw threads and special applications.
Manual installation mandrels are described on page 42 (**HELICOIL® Plus** installation mandrels).



Type **H-PSG**:
Threaded mandrel, pitch-controlled,
with depth stop
Item No 0150 **01**. ...*



**Fly-over tool for
HELICOIL® and HELICOIL® Plus**
Type **H-M**
with depth stop
Item No 0150 **07**. ...*



Type **H-PMG**:
Plain mandrel, pitch-controlled,
with depth stop
on request



Type **H-PM**:
Plain mandrel, without pitch control,
with depth stop
on request

Nominal thread Ø	Type	Installation tool with prewinder Item No	Fly-over tool Type H-M Item No
M 2	H-PSG	0150 010 2000	–
M 2.5	H-PSG	0150 012 5000	–
M 3	H-PSG	0150 010 3000	–
M 3.5	H-PSG	0150 013 5000	–
M 4	H-PSG	0150 010 4000	–
M 5	H-PSG	0150 010 5000	–
M 6	H-PSG	0150 010 6000	–
M 7	H-PSG	0150 010 7000	–
M 8	H-PSG	0150 010 8000	–
M 8 x 1	H-PSG	0150 010 8300	–
M 9	H-PSG	0150 010 9000	–
M 10	H-PSG	0150 011 0000	–
M 10 x 1	H-PSG	0150 011 0300	–
M 10 x 1.25	H-PSG	0150 011 0900	–
M 11	H-PSG	0150 011 1000	–
M 12	H-PSG	0150 011 2000	–
M 12 x 1	H-PSG	0150 011 2300	–
M 12 x 1.25	H-PSG	0150 011 2900	–
M 12 x 1.5	H-PSG	0150 011 2400	–
M 14	H-PSG	0150 011 4000	–
M 14 x 1	H-PSG	0150 011 4300	–
M 14 x 1.25	H-PSG	0150 011 4900	–
M 14 x 1.5	H-PSG	0150 011 4400	–
M 16	H-PSG	0150 011 6000	–
M 16 x 1.5	H-PSG	0150 011 6400	–
M 18	H-M	–	0150 071 8000
M 18 x 1.5	H-PSG	0150 011 8400	–
M 18 x 2	H-PSG	0150 011 8500	–
M 20	H-M	–	0150 072 0000
M 20 x 1.5	H-PSG	0150 012 0400	–
M 20 x 2	H-PSG	0150 012 0500	–
M 22	H-M	–	0150 072 2000
M 22 x 1.5	H-PSG	0150 012 2400	–
M 22 x 2	H-PSG	0150 012 2500	–
M 24	H-M	–	0150 072 4000
M 24 x 1.5	H-PSG	0150 012 4400	–
M 24 x 2	H-PSG	0150 012 4500	–
M 26 x 1.5	H-PSG	0150 012 6400	–
M 27	H-M	–	0150 072 7000
M 27 x 1.5	H-PSG	0150 012 7400	–
M 27 x 2	H-PSG	0150 012 7500	–
M 28 x 1.5	H-PSG	0150 012 8400	–
M 30	H-M	–	0150 073 0000
M 30 x 1.5	H-PSG	0150 013 0400	–
M 30 x 2	H-PSG	0150 013 0500	–
M 33	H-M	–	0150 073 3000
M 33 x 2	H-PSG	0150 013 3500	–
M 36	H-M	–	0150 073 6000
M 36 x 1.5	H-PSG	0150 013 6400	–
M 36 x 2	H-PSG	0150 013 6500	–
M 36 x 3	H-PSG	0150 013 6600	–

* Adapted tools for thread inserts of Inconel X 750, Nimonic 90 and aluminium on request.

Tang break-off and extraction tools for **HELICOIL®**

Tang break-off tools for **HELICOIL® Plus**



Tang break-off mandrel



Mechanical tang break-off tool with spring tension **type TB-M**



Pneumatic tang break-off tool with thrust trigger **type TB-P**

Nominal thread Ø	Tang break-off mandrel Item No	Type TB-M Item No	Type TB-P pneumatic system* Item No
M 2	0158 040 0000	0158 602 0000	–
M 2.5	0158 040 1000	0158 625 0000	–
M 3	0158 040 1000	0158 603 0000	0168 040 3000
M 3.5	0158 040 2000	0158 635 0000	–
M 4	0158 040 2000	0158 604 0000	0168 040 4000
M 5	0158 040 3000	0158 605 0000	0168 040 5000
M 6	0158 040 3000	0158 606 0000	0168 040 6000
M 7	0158 040 4000	0158 607 0000	0168 040 7000
M 8	0158 040 4000	0158 608 0000	0168 040 8000
M 9	0158 040 4000	0158 609 0000	–
M 10	0158 040 5000	0158 610 0000	0168 041 0000
M 11	0158 040 5000	0158 610 0000	–
M 12	0158 040 6000	0158 612 0000	0168 041 2000

* Operating pressure 3–4 bar, connection G 1/4".

From M 14, the tang must be removed with long nose pliers.



HELICOIL® extraction tool M 3 to M 5

HELICOIL® extraction tool

For manual and machine disassembly of HELICOIL® thread inserts M 3 to M 14 (larger sizes on request).

Delivery scope:

- Extracted tool
- Adapter for 1/4" hexagon
- Operating instructions
- Telescoping sleeve

Deep-installed HELICOIL® thread inserts can be extracted without damaging the parent thread:

	Steel	Aluminium R _m > 200 N/mm ² **	Aluminium R _m < 200 N/mm ² **
Flush-mounted HELICOIL®	OK	OK	OK
Deep-mounted HELICOIL®	OK	OK	limited



HELICOIL® extraction tool M 6 to M 56

Nominal thread Ø	Item No
M 3	0180 603 0000
M 4	0180 604 0000
M 5	0180 605 0000
M 6	0180 606 0000
M 8	0180 608 0000
M 10	0180 610 0000
M 12	0180 612 0000
M 14	0180 614 0000

From M 16 on request

The tool can be assembled using a tap wrench, ratchet or cordless screwdriver. The tool comes complete with an adapter for a cordless screwdriver.

** 1 N/mm² equals 1 MPa

System modules – the fastener

	Page
Technology	05
Designs	06
A close look at the advantages	08
Modular system	10
Materials	12
Design guidelines	13
Fields of application	14
Installation	16
Technical data and item numbers	18

System modules – the tool

All taps at a glance	34
Thread tolerances for imperial threads	36
Manual taps	38
Machine taps	40
Internal thread gauges	42

Installation

Installation mandrels	46
Installation tools	
Battery installation tools	48
Electrical installation tools	49
Pneumatic installation tools	50
Mechanical installation tools	52
Accessories	56
Automatic installation	57
Manual installation tools	58
Tang break-off and extraction tools	60



HELICOIL® Plus installation mandrel

HELICOIL® Plus installation mandrels can be used with the following tools:

- Electrical installation tools type E-S 206 and E-S 410
- Battery installation tools type B-S 206 and B-S 824
- Pneumatic installation tools P-S 412 and P-S 1216

Your benefits

- Quick tool change
- Reduced tool costs
- Pick-and-place processing possible

Installation mandrel spindle with depth stop

Only for installation of HELICOIL® Plus Free Running and Screwlock.
With 1/4" external hexagon DIN 3126 – E 6.3/DIN ISO 1173.

For installation tools types B-S 206, E-S 206, E-S 410 and P-S 412

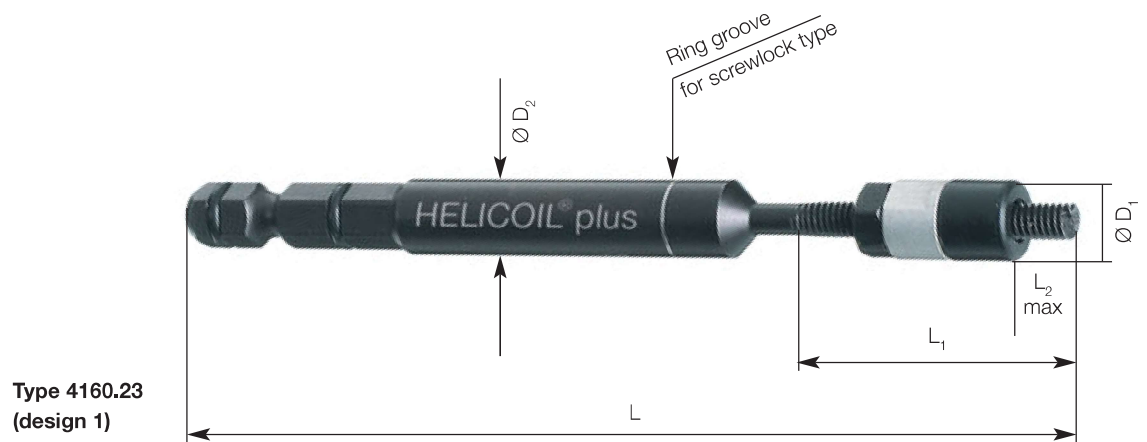
Nominal thread Ø	Mandrel Free Running Item No	Mandrel Screwlock Item No	L ₁	L ₂ max	L	D ₁	D ₂	Design
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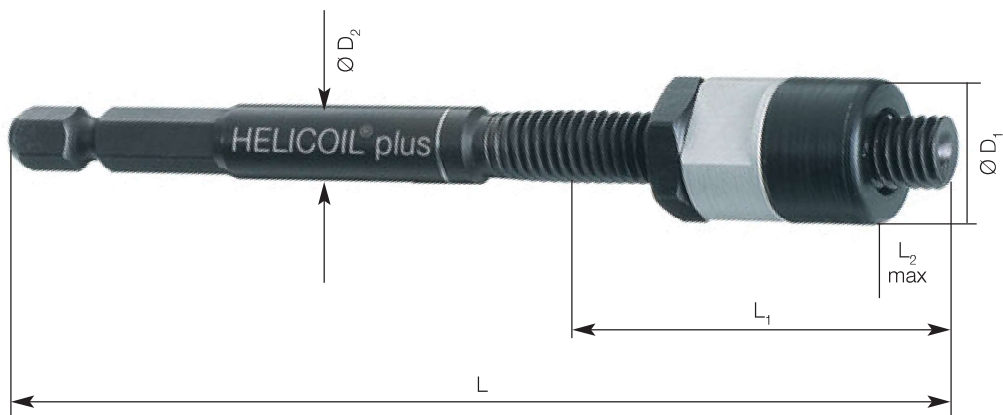
UNC/NC = American National Coarse threads

2-56	4160 236 3620	4160 236 3620	17	17	113	8	8	1
4-40	4160 236 5620	4160 236 5620	22	22	118	8	8	1
5-40	4160 236 6620	4160 236 6620	24	24	117	8	8	1
6-32	4160 236 7620	4160 236 7620	26	26	119	8	8	1
8-32	4160 236 8620	4160 236 8622	35	19	100	8	8	1
10-24	4160 236 9620	4160 236 9620	49	32	105	9	8	1
12-24	4160 237 0620	4160 237 0620	49	32	105	10	8	1

UNF/NF = American National Fine threads

4-48	4160 236 5720	4160 236 5722	22	22	118	6	8	1
6-40	4160 236 7720	4160 236 7722	44	30	100	8	8	1
8-36	4160 236 8720	4160 236 8722	44	30	100	8	8	1
10-32	4160 236 9720	4160 236 9722	49	34	105	10	8	1





**Type 4160.25
(design 2)**

For installation tools types B-S 824, E-S 410, P-S 412 and P-S 1216

Nominal thread Ø	Mandrel Free Running Item No	Mandrel Screwlock Item No	L ₁	L ₂ max	L	D ₁	D ₂	Design
1/4"-20	4160 257 4620	4160 257 4620	49	32	105	12	8	2
5/16"-18	4160 257 6620	4160 257 6620	49	32	105	16	8	2
3/8"-16	4160 257 7620	4160 257 7620	59	35	115	16	8	2
7/16"-14	4160 257 8620	4160 257 8620	64	42	120	20	8	2
1/2"-13	4160 257 9620	4160 257 9620	74	48	130	21	8	2

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.



These installation mandrels can also be used as manual installation mandrels.

HELICOIL® Plus Screwlock installation mandrels are marked with a ring groove on the guide shaft. HELICOIL® Free Running installation mandrels have a smooth guide shaft.

Installation tools for **HELICOIL® Plus**

Basically, there are three types of installation tools. Installation tools are chosen based on the volume of HELICOIL® Plus thread inserts to process, the location of the tapped holes in the workpiece and the thread size.

Hence, there are:

- Manual installation tools
- Electrical installation tools
- Electrical installation tools with battery power
- Pneumatic installation tools

Battery installation tools



Battery power pack installation tool type B-S 206

For processing HELICOIL® Plus UNC 2-56 to UNC 1/4"-20 and UNF 4-48 to UNF 1/4"-28 with HELICOIL® Plus installation mandrel

Delivery scope:

- Battery gun-straight installation tool (articulated)
- 2 pieces battery pack 3.6 V; 1.5 Ah
- Quick charger
- Case

Technical data:

Idle speed:	Two-speed 200 rpm and 600 rpm, reversible
Torque:	Adjustable in 21 steps 0.3–2.9 Nm/4.4 Nm max.
Tool holder:	1/4" hexagon socket
Weight incl. battery:	0.5 kg
Battery:	3,6 V / 1.5 Ah / charging time 30 min
Item No:	4160 430 0000

Spare parts and accessories:

Spare battery:	Item No 4160 430 0200
Quick charger:	Item No 4160 430 0300

Battery power pack installation tool type B-S 824

For processing HELICOIL® Plus UNC 5/16"-18 to UNC 1/2"-13 and UNF 5/16"-24 to UNF 1/2"-20 with HELICOIL® Plus installation mandrel

Delivery scope:

- Battery gun screwdriver
- 2 pieces battery pack 15.6 V; 3 Ah
- Quick charger
- Case

Technical data:

Idle speed:	Speed 1/stepless 65– 450 rpm, reversible Speed 2/stepless 200–1450 rpm, reversible
Torque:	19-step adjustable 1–6.9 Nm/31.9 Nm max.
Tool holder:	Three-jaw chuck 1.0–13 mm
Weight incl. battery:	2.0 kg
Battery:	15,6 V / 3 Ah / charging time 45 min
Item No:	4160 350 0000

Spare parts and accessories:

Spare battery:	Item No 4160 350 0200
Quick charger:	Item No 4160 350 0300



Electrical installation tools



Type E-S 206

For quick processing of HELICOIL® Plus thread inserts UNC 2-56 to UNC 1/4"-20 and UNF 4-48 to UNF 1/4"-28 with HELICOIL® Plus installation mandrel

Delivery scope:

- Straight screwdriver with 1/4" hexagon
- Power supply for two screwdrivers
- Case

Technical data:

Idle speed:	720 rpm
Output voltage:	35 V DC
Torque:	M = 0.45 – 0.95 Nm
	Steplessly adjustable shut-off clutch
Tool holder:	1/4" hexagon socket with radial bearing
Weight:	0.31 kg
Item No:	4160 220 0000

The installation mandrels for all available sizes are provided on page 46 and 47.



Type E-S 410

For quick processing of HELICOIL® Plus thread inserts UNC 8-32 to UNC 3/8"-16 and UNF 8-36 to UNF 3/8"-24 with HELICOIL® Plus installation mandrel

Delivery scope:

- Straight screwdriver with quick-change chuck 1/4" hexagon socket
- Speed control with ramp control on control device EDU 2AE
- Case

Technical data:

Idle speed:	1200 rpm (steplessly adjustable)
	Automatic change-over of the direction of rotation when reaching the screw-in depth
Torque:	0.9 to 3 Nm
	Torque steplessly adjustable on the control device
Tool holder:	Quick-change chuck 1/4" hexagon socket with radial bearing for installation mandrel
Weight:	0.57 kg
Item No:	4160 540 0000

The installation mandrels for all available sizes are provided on page 46 and 47.



Type E-PSG 256 with leader cartridge

For quick processing of HELICOIL® Plus thread inserts UNC 4-40 to UNF 1/4"-28 with HELICOIL® Plus exchange unit

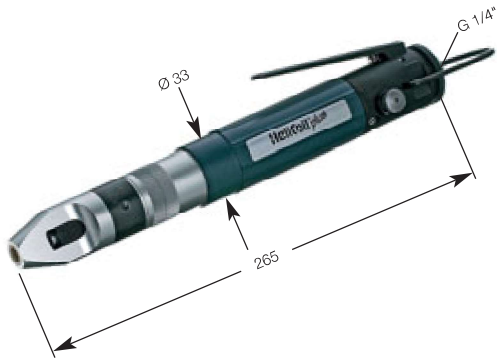
Delivery scope: See type E-S 410

Technical data:

Idle speed:	1200 rpm (steplessly adjustable)
	Automatic change-over of the direction of rotation when reaching the screw-in depth
Torque:	0.9 to 3 Nm
	Torque steplessly adjustable on the control device
Tool holder:	Connection for leader cartridges of P-PSG 256
Weight:	0.75 kg
Item No:	0160 470 0000

The exchange units for all available sizes are provided on pages 52 to 55.





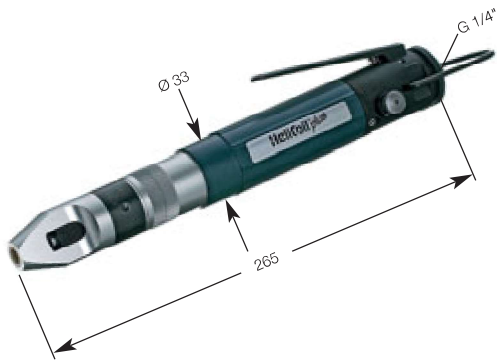
Pneumatic installation tool type P-S 412

For quick processing of HELICOIL® Plus UNC 8-32 to UNC 1/2"-13 and UNF 8-36 to UNF 1/2"-20 with HELICOIL® Plus installation mandrel

Technical data:

Idle speed:	1500 rpm at p = 6.3 bar Adjustable through air pressure
Air consumption:	5.5 l/s at p = 6.3 bar
Torque:	M = 1.2–4.5 Nm Steplessly adjustable shut-off clutch
Tool holder:	Quick-action chuck 1/4" hexagon socket DIN 3120-E 6,3 with radial bearing for installation mandrel
Weight:	0.8 kg
Item No:	4160 270 0010

HELICOIL® Plus installation mandrels depending on the size with depth stop must be ordered separately, see page 46 and 47.



Pneumatic installation tool type P-S 1216

For quick processing of HELICOIL® Plus UNC 7/16" and UNC 1/2"-13 and UNF 7/16"-20 and UNF 1/2"-20 with HELICOIL® Plus installation mandrel

Technical data:

Idle speed:	950 rpm at p = 6.3 bar Adjustable through air pressure
Air consumption:	5.5 l/s at p = 6.3 bar
Torque:	M = 1.2–5.5 Nm Steplessly adjustable shut-off clutch
Tool holder:	Quick-action chuck 1/4" hexagon socket DIN 3120-E 6,3 with radial bearing for installation mandrel
Weight:	0.8 kg
Item No:	4160 180 0010

HELICOIL® Plus installation mandrels depending on the size with depth stop must be ordered separately, see page 46 and 47.

**Spare handle for P-S 1216**

Handle for safe compensation of installation torque for sizes \geq UNC 7/16"-14 and UNF 7/16"-20

Item No: **4160 180 0006**

**Suspension bracket for P-S 412 and P-S 1216**

For horizontal suspension of tools on counterbalance systems

For details, see page 56

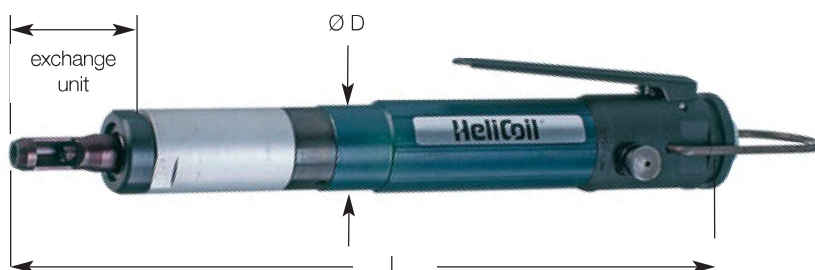
Item No: **4160 180 0007**

For **HELICOIL®** Classic and **HELICOIL®** Plus Free Running and Screwlock

Pitch-controlled **HELICOIL®** Classic and **HELICOIL®** Plus installation tool for **bulk material processing**.

The installation tool is equipped with a reversible compressed-air motor and a size-dependent exchange unit. The **HELICOIL®** installation depth is adjusted with compensation washers. We recommend this tool for medium and large scale production.

Complete tool



Type**	Nominal thread Ø d	Complete tool Item No	Dimensions		Weight	Connection bar	*Air consumption l/Min.
			Ø D	L	kg		
UNC/NC = American National Coarse threads							
P-PSG 256	2-56	0160 376 3600	28	240	0.6	2.5-4.0	204
	4-40	0160 376 5600	28	240	0.6	2.5-4.0	204
	5-40	0160 376 6600	28	240	0.6	2.5-4.0	204
	6-32	0160 376 7600	28	240	0.6	2.5-4.0	204
	8-32	0160 376 8600	28	240	0.6	2.5-4.0	204
	10-24	0160 376 9600	28	240	0.6	2.5-4.0	204
	12-24	0160 377 0600	28	240	0.6	2.5-4.0	204
P-PSG 714	1/4"-20	0160 377 4600	28	240	0.6	2.5-4.0	204
	5/16"-18	0160 287 6600	42	360	1.4	4.0-5.0	282
	3/8"-16	0160 287 7600	42	360	1.4	4.0-5.0	282
	7/16"-14	0160 287 8600	42	360	1.4	4.0-5.0	282
	1/2"-13	0160 287 9600	42	360	1.4	4.0-5.0	282
UNF/NF = American National Fine threads							
P-PSG 256	4-48	0160 376 5700	28	240	0.6	2.5-4.0	204
	6-40	0160 376 7700	28	240	0.6	2.5-4.0	204
	8-36	0160 376 8700	28	240	0.6	2.5-4.0	204
	10-32	0160 376 9700	28	240	0.6	2.5-4.0	204
	1/4"-28	0160 377 4700	28	240	0.6	2.5-4.0	204
P-PSG 714	5/16"-24	0160 287 6700	42	360	1.4	4.0-5.0	282
	3/8"-24	0160 287 7700	42	360	1.4	4.0-5.0	282
	7/16"-20	0160 287 8700	42	360	1.4	4.0-5.0	282
	1/2"-20	0160 287 9700	42	360	1.4	4.0-5.0	282

Important order information:

When you order tools, specify type, size and length of **HELICOIL®** Plus thread inserts to process. Tools for installation of **HELICOIL®** Plus thread inserts with lengths $\geq 2,5 d$ on request. As required by German accident prevention regulations (UVV), types P-PSG 714 and P-PSG 1626 are equipped with a sliding sleeve as finger guard.

This finger guard must not be removed. Installation tools are equipped with industrial Bosch motors.

*Air consumption at 6.3 bar.

**Exchange units can be interchanged within the individual series.

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.

Subassemblies

Type**	Nominal thread Ø	Exchange unit	Basic tool	Motor
	d	Item No	Item No	Item No
UNC/NC = American National Coarse threads				
P-PSG 256	2-56	0160 276 3650	0160 370 0040	0160 370 0010
	4-40	0160 176 5650		
	5-40	0160 176 6650		
	6-32	0160 176 7650		
	8-32	0160 176 8650		
	10-24	0160 176 9650		
	12-24	0160 177 0650		
	1/4"-20	0160 177 4650		
P-PSG 714	5/16"-18	0160 287 6650	0160 180 0040	0160 180 0011
	3/8"-16	0160 287 7650		
	7/16"-14	0160 287 8650		
	1/2"-13	0160 287 9650		
UNF/NF = American National Fine threads				
P-PSG 256	4-48	0160 176 5750	0160 370 0040	0160 370 0010
	6-40	0160 176 7750		
	8-36	0160 176 8750		
	10-32	0160 176 9750		
	1/4"-28	0160 177 4750		
P-PSG 714	5/16"-24	0160 287 6750	0160 180 0040	0160 180 0011
	3/8"-24	0160 287 7750		
	7/16"-20	0160 287 8750		
	1/2"-20	0160 287 9750		

Exchange unit



Basic tool



Motor



Wear and spare parts

Type**	Nominal thread Ø	Prewinder	Installation mandrel	Clutch for installation mandrel	Range of compensation washers
	d	Item No	Item No	Item No	Item No
UNC/NC = American National Coarse threads					
P-PSG 256	2-56	0160 276 3632	0160 276 3620	0160 170 0006	0160 170 0060
	4-40	0160 176 5632	0160 276 5620		
	5-40	0160 176 6632	0160 176 6620		
	6-32	0160 176 7632	0160 276 7620		
	8-32	0160 176 8632	0160 276 8620		
	10-24	0160 176 9632	0160 276 9620		
	12-24	0160 177 0632	0160 177 0620		
	1/4"-20	0160 277 4632	0160 277 4620		
P-PSG 714	5/16"-18	0160 287 6632	0160 287 6620	0160 180 0006	0160 280 0060
	3/8"-16	0160 287 7632	0160 287 7620		
	7/16"-14	0160 287 8632	0160 187 8620		
	1/2"-13	0160 287 9632	0160 287 9620		
UNF/NF = American National Fine threads					
P-PSG 256	4-48	0160 176 5732	0160 176 5720	0160 170 0006	0160 170 0060
	6-40	0160 176 7732	0160 176 7720		
	8-36	0160 176 8732	0160 176 8720		
	10-32	0160 276 9732	0160 276 9720		
	1/4"-28	0160 177 4732	0160 277 4720		
P-PSG 714	5/16"-24	0160 287 6732	0160 287 6720	0160 180 0006	0160 280 0060
	3/8"-24	0160 287 7732	0160 287 7720		
	7/16"-20	0160 287 8732	0160 187 8720		
	1/2"-20	0160 287 9732	0160 287 9720		

Prewinder



Installation mandrel



Clutch for installation mandrel



Range of compensation washers



Exemplary illustrations.

For HELICOIL® Classic STRIPFEED® and HELICOIL® Plus STRIPFEED®

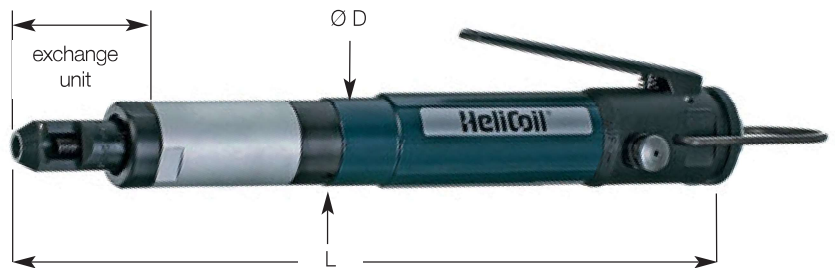
Pitch-controlled HELICOIL® Classic and HELICOIL® Plus installation tool for processing **magazined thread inserts**.

The installation tool is equipped with a reversible compressed-air motor and a size-dependent exchange unit.

The HELICOIL® installation depth is adjusted with compensation washers.

We recommend this tool for medium and large scale production.

Complete tool



Type**	Nominal thread Ø	Complete tool Item No	Dimensions		Weight kg	Conne- ction bar	*Air con- sumption l/Min.
	d		Ø D	L			
UNC/NC = American National Coarse threads							
P-PSG 256 SF	2-56	0160 376 3603	28	240	0.6	2.5-4.0	204
	4-40	0160 376 5603	28	240	0.6	2.5-4.0	204
	5-40	0160 376 6603	28	240	0.6	2.5-4.0	204
	6-32	0160 376 7603	28	240	0.6	2.5-4.0	204
	8-32	0160 376 8603	28	240	0.6	2.5-4.0	204
	10-24	0160 376 9603	28	240	0.6	2.5-4.0	204
	12-24	0160 377 0603	28	240	0.6	2.5-4.0	204
	1/4"-20	0160 377 4603	28	240	0.6	2.5-4.0	204
P-PSG 714 SF	5/16"-18	0160 287 6603	42	360	1.4	4.0-5.0	282
	3/8"-16	0160 287 7603	42	360	1.4	4.0-5.0	282
	7/16"-14	0160 287 8603	42	360	1.4	4.0-5.0	282
	1/2"-13	0160 287 9603	42	360	1.4	4.0-5.0	282
UNF/NF = American National Fine threads							
P-PSG 256 SF	4-48	0160 376 5703	28	240	0.6	2.5-4.0	204
	6-40	0160 376 7703	28	240	0.6	2.5-4.0	204
	8-36	0160 376 8703	28	240	0.6	2.5-4.0	204
	10-32	0160 376 9703	28	240	0.6	2.5-4.0	204
	1/4"-28	0160 377 4703	28	240	0.6	2.5-4.0	204
P-PSG 714 SF	5/16"-24	0160 287 6703	42	360	1.4	4.0-5.0	282
	3/8"-24	0160 287 7703	42	360	1.4	4.0-5.0	282
	7/16"-20	0160 287 8703	42	360	1.4	4.0-5.0	282
	1/2"-20	0160 287 9703	42	360	1.4	4.0-5.0	282

Important order information:

When you order tools, specify type, size and length of HELICOIL® Plus thread inserts to process.

Tools for installation of HELICOIL® Plus thread inserts with lengths $\geq 2,5 d$ on request.

Installation tools are equipped with industrial Bosch motors.

*Air consumption at 6,3 bar.

Other length on request.

**Exchange units can be interchanged within the individual series.

Adapted tools for inserts of Inconel X 750, Nimonic 90 and aluminium on request.

Subassemblies

Exchange unit



Basic tool



Motor



	Nominal thread Ø	Exchange unit ≤ 2 d	Basic tool	Motor
	d	Item No	Item No	Item No
Type** UNC/NC = American National Coarse threads				
P-PSG 256 SF	2-56	0160 276 3653	0160 370 0040	0160 370 0010
	4-40	0160 176 5653		
	5-40	0160 176 6653		
	6-32	0160 176 7653		
	8-32	0160 176 8653		
	10-24	0160 176 9653		
	12-24	0160 177 0653		
	1/4"-20	0160 177 4653		
P-PSG 714 SF	5/16"-18	0160 287 6653	0160 180 0040	0160 180 0010
Type** UNF/NF = American National Fine threads				
P-PSG 256 SF	4-48	0160 176 5753	0160 370 0040	0160 370 0010
	6-40	0160 176 7753		
	8-36	0160 176 8753		
	10-32	0160 176 9753		
	1/4"-28	0160 177 4753		
P-PSG 714 SF	5/16"-24	0160 287 6753	0160 180 0040	0160 180 0011

Prewinder



Installation mandrel



Clutch for installation mandrel



Range of compensation washers



Wear and spare parts

	Nominal thread Ø	Prewinder up to 2 d*	Installation mandrel	Clutch for installation mandrel	Range of compensation washers
	d	Item No	Item No	Item No	Item No
Type** UNC/NC = American National Coarse threads					
P-PSG 256 SF	2-56	0160 276 3633	0160 276 3620	0160 170 0006	0160 170 0060
	4-40	0160 176 5633	0160 276 5620		
	5-40	0160 176 6633	0160 176 6620		
	6-32	0160 176 7633	0160 276 7620		
	8-32	0160 176 8633	0160 276 8620		
	10-24	0160 176 9633	0160 276 9620		
	12-24	0160 177 0633	0160 177 0620		
	1/4"-20	0160 277 4633	0160 277 4620		
P-PSG 714 SF	5/16"-18	0160 287 6633	0160 287 6620	0160 180 0006	0160 280 0060
Type** UNF/NF = American National Fine threads					
P-PSG 256 SF	4-48	0160 176 5733	0160 176 5720	0160 170 0006	0160 170 0060
	6-40	0160 176 7733	0160 176 7720		
	8-36	0160 176 8733	0160 176 8720		
	10-32	0160 176 9733	0160 276 9720		
	1/4"-28	0160 177 4733	0160 277 4720		
P-PSG 714 SF	5/16"-24	0160 287 6733	0160 287 6720	0160 180 0006	0160 280 0060

Exemplary illustrations.

* Other dimensions on request.



Parallel system type S for **HELICOIL® Classic** and **HELICOIL® Plus** installation tools

Type	Product characteristics		Item No
S 600	Work radius	130 mm–450 mm	0182 080 0003 (see delivery scope)
	Work height	50 mm–450 mm	
	Weight without tool	8 kg	
	Torque absorption	15 Nm max.	

Advantages

- Rationalisation
- Quick and positioning especially for small dimensions
- Easy handling, no operator fatigue
- No return rotation forces
- Absorption of screwdriver weight
- Can be used with electrical and pneumatic HELICOIL® installation tools
- Quick tool change
- 360° rotatable
- Smooth and precise roller guides
- Optimum workstation layout

Delivery scope

- 3-axis guiding system
- Tool holder
- 1 counterbalance 1–3 kg
- Base plate made of extruded aluminium profile with grooves, dimensions w x h x l: 240 x 40 x 500 mm

Accessories

Type	Size	Item No
Service unit	at 6 bar nominal flow G 01" = 700l/min	0182 080 1001
Stationary roller holder for HELICOIL® Plus STRIPFEED®		0182 080 0004
Hose	ID 6	0196 000 1130
Hose clip	8–12 mm	0196 000 1150
Hose tail	G 1/8" -6	0196 000 1151
Hose tail	G 1/4" -6	0196 000 1152
Exhaust air hose	Ø 15 mm	0196 000 1131



Drill chuck with external hexagon

DIN 3126 – E 6.3 for type B-S 206
Item No 4160 000 0100

HELICOIL® Plus automatic installation

The economical installation of HELICOIL® Plus thread inserts is just as important as the high quality standard.

That is why we offer modules for integration into automatic processes as well as complete systems.



Manual installation tools for **HELICOIL®**

Manual installation tool with prewinder for HELICOIL® Classic and HELICOIL® Plus. Only required for HELICOIL® Plus for fine screw threads and special applications.



Type **H-PSG**:
Threadet mandrel, pitch-controlled, with depth stop
Item No 0150 **01**. ...*



Type **H-PMG**:
Plain mandrel, pitch-controlled, with depth stop
Item No 0150 **02**. ...*



Type **H-PM**:
Plain mandrel, without pitch control, with depth stop
Item No 0150 **04**. ...*



Fly-over tool for HELICOIL® Classic and HELICOIL® Plus
Type **H-M**
with depth stop
Item No 0150 **07**. ...*

Nominal thread Ø		Installation tool with prewinder	Fly-over tool Type H-M
d	Type	Item No	Item No
UNC/NC = American National Coarse threads			
2-56	H-PSG UNC 2-56	on request	–
4-40	H-PSG UNC 4-40	0150 016 5600	–
5-40	H-PSG UNC 5-40	0150 016 6600	–
6-32	H-PSG UNC 6-32	0150 016 7600	–
8-32	H-PSG UNC 8-32	0150 016 8600	–
10-24	H-PSG UNC 10-24	0150 016 9600	–
12-24	H-PM UNC 12-24	0150 047 0600	–
1/4"-20	H-PM UNC 1/4"-20	0150 047 4600	–
5/16"-18	H-PM UNC 5/16"-18	0150 047 6600	–
3/8"-16	H-PM UNC 3/8"-16	0150 047 7600	–
7/16"-14	H-PM UNC 7/16"-14	0150 047 8600	–
1/2"-13	H-PM UNC 1/2"-13	0150 047 9600	–
9/16"-12	H-PM UNC 9/16"-12	0150 048 0600	–
5/8"-11	H-M UNC 5/8"-11	–	0150 078 1000
3/4"-10	H-M UNC 3/4"-10	–	0150 078 3000
7/8"-9	H-M UNC 7/8"-9	–	0150 078 5000
1"-8	H-M UNC 1"-8	–	0150 078 6000
1 1/8"-7	H-M UNC 1 1/8"-7	–	0150 078 7000
1 1/4"-7	H-M UNC 1 1/4"-7	–	0150 078 8000
1 3/8"-6	H-M UNC 1 3/8"-6	–	0150 078 9000
1 1/2"-6	H-M UNC 1 1/2"-6	–	0150 079 0000
UNF/NF = American National Fine threads			
4-48	H-PSG UNF 4-48	0150 016 5700	–
6-40	H-PSG UNF 6-40	0150 016 7700	–
8-36	H-PSG UNF 8-36	0150 016 8700	–
10-32	H-PSG UNF 10-32	0150 016 9700	–
1/4"-28	H-PSG UNF 1/4"-28	0150 017 4700	–
5/16"-24	H-PSG UNF 5/16"-24	0150 017 6700	–
3/8"-24	H-PSG UNF 3/8"-24	0150 017 7700	–
7/16"-20	H-PSG UNF 7/16"-20	0150 017 8700	–
1/2"-20	H-PSG UNF 1/2"-20	0150 017 9700	–
9/16"-18	H-PMG UNF 9/16"-18	0150 028 0700	–
5/8"-18	H-PMG UNF 5/8"-18	0150 028 1700	–
3/4"-16	H-PMG UNF 3/4"-16	0150 028 3700	–
7/8"-14	H-PMG UNF 7/8"-14	0150 028 5700	–
1"-14	H-PMG UNF 1"-14	0150 028 6900	–
1"-12	H-PMG UNF 1"-12	0150 028 6700	–
1 1/8"-12	H-PMG UNF 1 1/8"-12	0150 028 7700	–
1 1/4"-12	H-PMG UNF 1 1/4"-12	0150 028 8700	–
1 3/8"-12	H-PMG UNF 1 3/8"-12	0150 028 9700	–
1 1/2"-12	H-PMG UNF 1 1/2"-12	0150 029 0700	–

* Adapted tools for thread inserts of NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1,5 on request.

Manual installation tool with prewinder for HELICOIL® Classic and HELICOIL® Plus. Only required for HELICOIL® Plus for fine screw threads and special applications.



Type **H-PSG**:
Threadet mandrel, pitch-controlled, with depth stop
Item No 0150 **01**. ...*



Type **H-PMG**:
Plain mandrel, pitch-controlled, with depth stop
Item No 0150 **02**. ...*



Type **H-PM**:
Plain mandrel, without pitch control, with depth stop
Item No 0150 **04**. ...*



Fly-over tool for HELICOIL® Classic and HELICOIL® Plus
Type **H-M**
with depth stop
Item No 0150 **07**. ...*

Nominal thread Ø		Installation tool with prewinder	Fly-over tool Type H-M
d	Type	Item No	Item No
BSW= British Standard Whitworth threads			
1/8"-40	H-PSG BSW 1/8"-40	0150 017 1300	--
3/16"-24	H-PSG BSW 3/16"-24	0150 017 2300	--
1/4"-20	H-PM BSW 1/4"-20	0150 047 4300	--
5/16"-18	H-PM BSW 5/16"-18	0150 047 6300	--
3/8"-16	H-PM BSW 3/8"-16	0150 047 7300	--
7/16"-14	H-PM BSW 7/16"-14	0150 047 8300	--
1/2"-12	H-PM BSW 1/2"-12	0150 047 9300	--
9/16"-12	H-PM BSW 9/16"-12	0150 048 0300	--
5/8"-11	H-M BSW 5/8"-11	--	0150 078 1000
11/16"-11	H-M BSW 11/16"-11	--	0150 078 2000
3/4"-10	H-M BSW 3/4"-10	--	0150 078 3000
7/8"-9	H-M BSW 7/8"-9	--	0150 078 5000
1"-8	H-M BSW 1"-8	--	0150 078 6000
1 1/8"-7	H-M BSW 1 1/8"-7	--	0150 078 7000
1 1/4"-7	H-M BSW 1 1/4"-7	--	0150 078 8000
1 1/2"-6	H-M BSW 1 1/2"-6	--	0150 079 0000
BSF = British Standard Fine threads			
3/16"-32	H-PSG BSF 3/16"-32	0150 017 2500	--
7/32"-28	H-PSG BSF 7/32"-28	0150 017 3500	--
1/4"-26	H-PM BSF 1/4"-26	0150 047 4500	--
9/32"-26	H-PM BSF 9/32"-26	0150 047 5500	--
5/16"-22	H-PM BSF 5/16"-22	0150 047 6500	--
3/8"-20	H-PM BSF 3/8"-20	0150 047 7500	--
7/16"-18	H-PM BSF 7/16"-18	0150 047 8500	--
1/2"-16	H-PM BSF 1/2"-16	0150 047 9500	--
9/16"-16	H-PM BSF 9/16"-16	0150 048 0500	--
5/8"-14	H-PM BSF 5/8"-14	0150 048 1500	--
11/16"-14	H-PM BSF 11/16"-14	0150 048 2500	--
3/4"-12	H-PM BSF 3/4"-12	0150 048 3500	--
13/16"-12	H-PM BSF 13/16"-12	0150 048 4500	--
7/8"-11	H-PM BSF 7/8"-11	0150 048 5500	--
1"-10	H-PM BSF 1"-10	0150 048 6500	--
1 1/8"-9	H-PM BSF 1 1/8"-9	0150 048 7500	--
1 1/4"-9	H-PM BSF 1 1/4"-9	0150 048 8500	--
1 3/8"-8	H-PM BSF 1 3/8"-8	0150 048 9500	--
1 1/2"-8	H-PM BSF 1 1/2"-8	0150 049 0500	--
BSF = British Standard Pipe thread · G = ISO 228/1 Pipe threads			
G 1/8"	H-PSG G 1/8"	0150 017 1400	--
G 1/4"	H-PMG G 1/4"	0150 027 4400	--
G 3/8"	H-PMG G 3/8"	0150 027 7400	--
G 1/2"	H-PMG G 1/2"	0150 027 9400	--
G 5/8"	H-PMG G 5/8"	0150 028 1400	--
G 3/4"	H-PMG G 3/4"	0150 028 3400	--
G 7/8"	H-PMG G 7/8"	0150 028 5400	--
G 1"	H-PMG G 1"	0150 028 6400	--
G 1 1/4"	H-PMG G 1 1/4"	0150 028 8400	--
G 1 1/2"	H-PMG G 1 1/2"	0150 029 0400	--
BA = British Association Standard threads			
0 BA	H-PM 0 BA	0150 049 2200	--
1 BA	H-PSG 1 BA	0150 019 3200	--
2 BA	H-PSG 2 BA	0150 019 4200	--
3 BA	H-PSG 3 BA	0150 019 5200	--
4 BA	H-PSG 4 BA	0150 019 6200	--
5 BA	H-PSG 5 BA	0150 019 7200	--
6 BA	H-PSG 6 BA	0150 019 8200	--

* Adapted tools for thread inserts of NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1,5 on request.

Tang break-off tools for **HELICOIL® Classic** and **HELICOIL® Plus**



Tang break-off mandrel



Mechanical tang break-off tool with spring tension **type TB-M**



Pneumatic tang break-off tool with thrust trigger **type TB-P**

Nominal thread Ø	Tang break-off mandrel	Type TB-M	Type TB-P pneumatic system*
d	Item No	Item No	Item No
UNC/NC = American National Coarse threads			
2-56	0158 040 0000	0158 602 0000	–
4-40	0158 040 1000	0158 603 0000	0168 040 3000
5-40	0158 040 1000	0158 603 0000	0168 040 3000
6-32	0158 040 2000	0158 603 0000	0168 040 4000
8-32	0158 040 2000	0158 604 0000	0168 040 4000
10-24	0158 040 3000	0158 604 0000	0168 040 5000
12-24	0158 040 3000	0158 605 0000	0168 040 5000
1/4"-20	0158 040 3000	0158 606 0000	0168 040 6000
5/16"-18	0158 040 5000	0158 607 0000	0168 040 8000
3/8"-16	0158 040 5000	0158 609 0000	0168 041 0000
7/16"-14	0158 040 6000	0158 610 0000	0168 041 0000
1/2"-13	0158 040 6000	0158 610 0000	0168 041 2000
9/16"-12	–	0158 612 0000	–
5/8"-11	–	0158 614 0000	–
UNF/NF = American National Fine threads			
4-48	0158 040 1000	0158 603 0000	0168 040 3000
6-40	0158 040 2000	0158 603 0000	0168 040 4000
8-36	0158 040 2000	0158 604 0000	0168 040 4000
10-32	0158 040 3000	0158 604 0000	0168 040 5000
1/4"-28	0158 040 3000	0158 606 0000	0168 040 6000
5/16"-24	0158 040 4000	0158 608 0000	0168 040 8000
3/8"-24	0158 040 4000	0158 609 0000	0168 041 0000
7/16"-20	0158 040 5000	0158 611 0000	0168 041 0000
1/2"-20	0158 040 6000	0158 612 0000	0168 041 2000
9/18"-18	–	0158 614 0000	–
5/8"-18	–	0158 616 0000	–

* Operating pressure 3 – 4 bar.
From UNC 5/8" – 18, the tang must be removed with long nose pliers.



Manual extracting tools for HELICOIL® Classic and HELICOIL® Plus

Nominal thread Ø	Item No
d UNC 2-56 ... UNC 6-32	0180 300 0000
UNF 4-48 ... UNF 6-40	
UNC 8-32 ... UNC 3/8"-16	0180 301 0000
UNF 8-36 ... UNF 3/8"-24	
UNC 7/16"-14 ... UNC 5/8"-11	0180 302 0000
UNF 7/16"-20 ... UNF 9/16"-18	
UNC 3/4"-10 ... UNC 7/8"-9	0180 303 0000
UNF 5/8"-18 ... UNF 7/8"-14	
UNC 1"-8 ... UNC 1 1/8"-7	0180 304 0000
UNF 1"-14 ... UNF 1 1/8"-12	
UNC 1 1/4"-7 ... UNC 1 1/2"-6	0180 305 0000
UNF 1 1/4"-12 ... UNF 1 1/2"-12	



HELICOIL® extraction tool
UNC 2-56 to UNF 10-32

HELICOIL® extraction tool

For manual and machine disassembly of HELICOIL® thread inserts UNC 2-56 to UNF 10-32 (larger sizes on request).

Delivery scope:

- Extraction tool
- Adapter for 1/4" hexagon
- Operating instructions
- Telescoping sleeve

Deep-installed HELICOIL® thread inserts can be extracted without damaging the parent thread:

	Steel	Aluminium R _m > 200 N/mm ² **	Aluminium R _m < 200 N/mm ² **
Flush-mounted HELICOIL®	OK	OK	OK
Deep-mounted HELICOIL®	OK	OK	limited

Nominal thread Ø	Item No
UNC 2-56	0180 6636 000
UNC 3-48	0180 6646 000
UNC 4-40	0180 6656 000
UNC 6-32	0180 6676 000
UNC 8-32	0180 6686 000
UNF 10-32	0180 6697 000

The tool can be assembled using a tap wrench, ratchet or cordless screwdriver. The tool comes complete with an adapter for a cordless screwdriver.

** 1 N/mm² equals 1 MPa

Tang break-off tools for HELICOIL® Classic and HELICOIL® Plus



Tang break-off mandrel



Mechanical tang break-off tool with spring tension **type TB-M**



Pneumatic tang break-off tool with thrust trigger **type TB-P**

Nominal thread Ø	Tang break-off mandrel	Type TB-M	Type TB-P pneumatic system*
d	Item No	Item No	Item No
BSW = British Standard Whitworth threads			
1/8"-40	0158 040 1000	0158 603 0000	on request
3/16"-24	0158 040 2000	0158 604 0000	
1/4"-20	0158 040 3000	0158 606 0000	
5/16"-18	0158 040 4000	0158 607 0000	
3/8"-16	0158 040 4000	0158 609 0000	
7/16"-14	0158 040 5000	0158 610 0000	
1/2"-12	0158 040 6000	0158 612 0000	
9/16"-12	–	0158 612 0000	
5/8"-11	–	0158 614 0000	
11/16"-11	–	0158 616 0000	
BSF = British Standard Fine threads			
3/18"-32	0158 040 2000	0158 604 0000	on request
7/32"-28	0158 040 3000	0158 605 0000	
1/4"-26	0158 040 3000	0158 606 0000	
9/32"-26	0158 040 4000	0158 607 0000	
5/18"-22	0158 040 4000	0158 608 0000	
3/8"-20	0158 040 4000	0158 609 0000	
7/18"-18	0158 040 5000	0158 611 0000	
1/2"-16	0158 040 6000	0158 612 0000	
9/18"-16	–	0158 614 0000	
5/8"-14	–	0158 616 0000	

* Operating pressure 3–4 bar
From BSW 3/4", the tang must be removed with long nose pliers.

Manual extracting tools for HELICOIL® Classic and HELICOIL® Plus



Nominal thread Ø	Item No
d	Item No
BSW 1/8"-40 ... BSW 3/8"-16	0180 301 0000
BSF 3/16"-32 ... BSF 5/16"-22	0180 302 0000
BSW 7/16"-14 ... BSW 5/8"-11	0180 303 0000
BSF 3/8"-20 ... BSF 5/8"-14	0180 304 0000
BSW 11/16"-11 ... BSW 7/8"-9	0180 305 0000
BSF 11/16"-14 ... BSF 7/8"-11	0180 301 0000
BSW 1"-8 ... BSW 1 1/8"-7	0180 304 0000
BSF 1"-10 ... BSF 1 1/8"-9	0180 305 0000
BSW 1 1/4"-7 ... BSW 1 1/2"-6	0180 301 0000
BSF 1 1/7"-9 ... BSF 1 1/2"-8	0180 302 0000

Tang break-off tools for HELICOIL® Classic and HELICOIL® Plus



Tang break-off mandrel



Mechanical tang break-off tool with spring tension **type TB-M**



Pneumatic tang break-off tool with thrust trigger **type TB-P**

Nominal thread Ø	Tang break-off mandrel	Type TB-M	Type TB-P pneumatic system*
d	Item No	Item No	Item No
BSP = British Standard Pipe threads · G = ISO 228/1 Pipe threads			
G 1/8"	0158 040 5000	0158 610 0000	—
BA = British Association Standard threads			
0 BA	0158 040 3000	0158 606 0000	on request
1 BA	0158 040 3000	0158 605 0000	
2 BA	0158 040 3000	0158 605 0000	
3 BA	0158 040 2000	0158 604 0000	
4 BA	0158 040 2000	0158 605 0000	
5 BA	0158 040 1000	0158 603 0000	
6 BA	0158 040 1000	0158 603 0000	

* Operating pressure 3–4 bar
From G 1/4", the tang must be removed with long nose pliers.

Manual extracting tools for HELICOIL® Classic and HELICOIL® Plus



Nominal thread Ø	Item No
d	Item No
BSP = British Standard Pipe threads · G = ISO 228/1 Pipe threads	
G 1/8"	0180 302 0000
G 1/4"	
G 3/8"	0180 303 0000
G 1/2"	
G 5/8"	0180 304 0000
G 3/4"	
G 7/8"	0180 305 0000
G 1"	
G 1 1/4"	
G 1 1/2"	
BA = British Association Standard threads	
0 BA	0180 300 0000
1 BA	
2 BA	
3 BA	
4 BA	
5 BA	
6 BA	