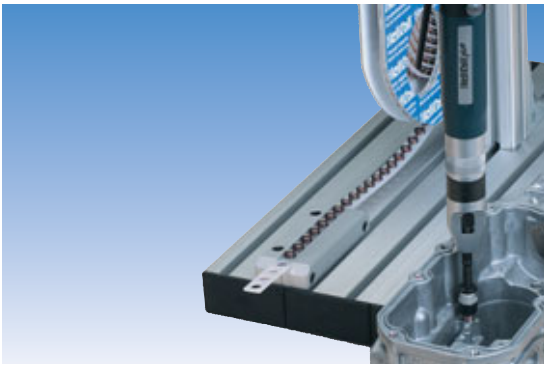


HELICOIL® plus Installation Mandrels for the rapid installation of HELICOIL® plus UNC 2-56 to UNF 1/2"-20 with HELICOIL® plus Installation Tools.



Pick and Place equipment see pages 20 and 21.

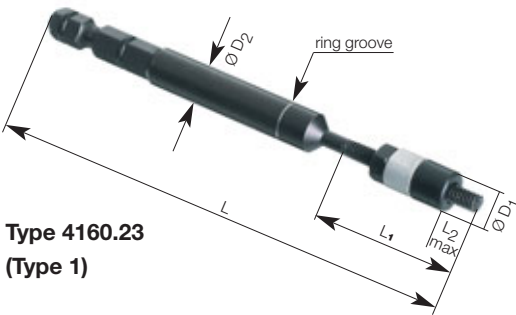
Also suitable for the pick and place installation method. The benefits to you:

- Simple installation mandrel
 - for critical installation points
 - rapid conversion
 - lower cost tools
- Size UNC 2-56 to UNF 1/2"-20
 - HELICOIL® plus STRIPFEED® (UNC 2-56 ... 3/8"-16 and UNF 4-48 ... 3/8"-24)
 - HELICOIL® plus bulk (UNC 2-56 ... 1/2"-13 and UNF 4-48 ... 1/2"-20)
 - flexible
- Pick and Place installation
 - simple handling with HELICOIL® plus
 - shorter assembly time
- Direction of rotation simple to change
 - easy operation

HELICOIL® plus installation spindles for Type P-S 412 electric and pneumatic power tools

Installation spindle with depth stop (imperial sizes)

For the installation of HELICOIL® plus free running and screwlock inserts only. With 1/4" hexagon insert bit as per DIN 3126 - E 6,3.



Type 4160.23 (Type 1)

Important:

This installation mandrels can be also used for manually installation.

HELICOIL® plus screwlock installation tools are marked with a ring groove on the drive spindle. Free running installation tools have a flat-side drive spindle.

UNC/NC = American National Coarse Thread

| Nominal thread Ø | Spindle free running Order no. | Spindle screwlock Order no. | L ₁ | L ₂ max | L | D ₁ | D ₂ | Type |
|------------------|--------------------------------|-----------------------------|----------------|--------------------|---|----------------|----------------|------|
|------------------|--------------------------------|-----------------------------|----------------|--------------------|---|----------------|----------------|------|

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

| | | | | | | | | |
|-------|---------------|---------------|----|----|-----|----|---|---|
| 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 |

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

| | | | | | | | | |
|----------|---------------|---------------|----|----|-----|----|---|---|
| 1/4"-20 | 4160 257 4620 | 4160 257 4620 | 49 | 32 | 105 | 12 | 8 | 1 |
| 5/16"-18 | 4160 257 6620 | 4160 257 6620 | 49 | 32 | 105 | 16 | 8 | 1 |
| 3/8"-16 | 4160 257 7620 | 4160 257 7620 | 59 | 35 | 115 | 16 | 8 | 1 |
| 7/16"-14 | 4160 257 8620 | 4160 257 8620 | 64 | 42 | 120 | 20 | 8 | 1 |
| 1/2"-13 | 4160 257 9620 | 4160 257 9620 | 74 | 48 | 130 | 21 | 8 | 1 |

UNF/NF = American National Fine Thread

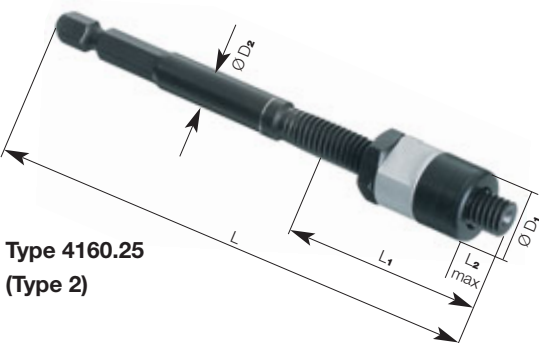
For installation tools type B-S 206, E-S 206, E-S 410 and P-S 412

| | | | | | | | | |
|-------|---------------|---------------|----|----|-----|----|---|---|
| 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 |

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

| | | | | | | | | |
|----------|---------------|---------------|----|----|-----|----|---|---|
| 1/4"-28 | 4160 257 4720 | 4160 257 4722 | 49 | 28 | 105 | 12 | 8 | 1 |
| 5/16"-24 | 4160 257 6720 | 4160 257 6722 | 49 | 28 | 105 | 16 | 8 | 2 |
| 3/8"-24 | 4160 257 7720 | 4160 257 7722 | 59 | 37 | 115 | 16 | 8 | 2 |
| 7/16"-20 | 4160 257 8720 | 4160 257 8722 | 64 | 40 | 120 | 20 | 8 | 2 |
| 1/2"-20 | 4160 257 9720 | 4160 257 9722 | 74 | 58 | 130 | 21 | 8 | 2 |

Tools for use with NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1,5 inserts are available on request.



Type 4160.25 (Type 2)

Electric and Battery power pack Installation Tools for HELICOIL® plus



Battery power pack Installation Tool Type B-S 206

For use with HELICOIL® plus UNC 2-56 to UNC 1/4"-20 and UNF 4-48 to UNF 1/4"-28 with HELICOIL® plus installation spindles.

Extent of delivery:

- Accumulator pistol baton installation tool (bendable)
- 2 pcs. Accumulator pack 3.6 V, 1.2 Ah
- Fast battery charger
- Carrying case

Technical details:

Load-free revolutions: 2 stage 200 min⁻¹ and 600 min⁻¹, reversible
 Torque: Adjust. 21 steps 0.3 – 3.0 Nm / max. 4.4 Nm
 Tool holding fixture: Quick release chuck 1/4" hexago socket as per DIN 3120 – E 6.3

Weight including accumulator battery: 0.52 kg
 Accumulator battery: 3.6 V / 1.2 Ah / charging time 15 min.
 Order no.: **4160 330 0000**

Spare parts and equipment:

Spare accu. battery: Order no. 4160 330 0200
 Fast battery charger: Order no. 4160 330 0300



Battery power pack Installation Tool Type B-S 824

For use with 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 spindles.

Extent of delivery:

- Accumulator pistol screwdriver
- 2 pcs. Accumulator pack 15.6 V, 3 Ah
- Fast battery charger
- Carrying case

Technical details:

Load free revolutions: Step 1 / stage-less 65 – 450 min⁻¹, reversible
 Step 2 / stage-less 200 – 1450 min⁻¹, reversible
 Torque: Adjust. 19 steps 1 – 6.9 Nm / max. 31.9 Nm
 Tool holding fixture: Three parts chuck 1.0 – 13 mm

Weight including accumulator battery: 2.0 kg
 Accumulator battery: 15.6 V / 3 Ah / charging time 45 min.
 Order no.: **4160 350 0000**

Spare parts and equipment:

Spare accumulator battery: Order no. 4160 350 0200
 Fast battery charger: Order no. 4160 350 0300

Electric Installation tool for HELICOIL® plus



Electric Installation tool Type E-S 206

For the speedy working with HELICOIL® plus UNC 2-56 to UNC 1/4"-20 and UNF 4-48 to UNF 1/4"-28 with HELICOIL® plus installation mandrel

Extent of delivery:

- Baton screw driver with 1/4" hexagonal chuck
- Power supply unit for two screw drivers
- Carrying case

Technical details:

| | |
|------------------------|---|
| Load-free revolutions: | 720 min ⁻¹ |
| Output voltage: | 35 V DC |
| Torque: | M = 0.45 – 0.95 Nm stepless adjustable clutch |
| Tool holding fixture: | Quick release chuck, 1/4" hexagon socket with radial bearing |
| Weight: | 0.31 kg |
| Order no.: | 4160 220 0000 |

Special size HELICOIL® plus mandrels with 1/4" hexagon should be ordered separately, see pages 33.



Electric Installation tool Type E-S 410

For speedy working with HELICOIL® plus UNC 8-32 to UNC 3/8"-16 and UNF 8-36 to UNF 3/8"-24 with HELICOIL® plus installation mandrel.

Extent or delivery:

- Baton screw driver with 1/4" hexagonal chuck
- Revolution adjustment by means of high running ramp control (type CLT 500)
- Carrying case

Technical details:

| | |
|------------------------|--|
| Load-free revolutions: | Stage-less adjustable on the adjusting equipment, 720 min ⁻¹ RPM. Automatic reversing switch upon reaching the screw-in depth |
| Torque: | M = 0.9 – 3.5 Nm |
| Tool holding fixture: | 1/4" hexagonal socket chuck with radial bearing |
| Weight: | 0.66 kg |
| Order no.: | 4160 440 0000 |

Special size HELICOIL® plus mandrels with 1/4" hexagon should be ordered separately, see page 33.

Pneumatic Installation tool for HELICOIL® plus

Pneumatic Installation tool Type P-S 412

For the rapid installation 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 details:

| | |
|------------------------|---|
| Load-free revolutions: | 1500 min ⁻¹ at p = 6.3 bar adjustable by adjusting air pressure |
| Air consumption: | 5.5 L/s at p = 6.3 bar |
| Torque: | M = 1.2 – 4.5 Nm stepless adjustable clutch |
| Tool holding fixture: | Quick release chuck, 1/4" hexagon socket with radial bearing |
| Weight: | 0.8 kg |
| Order no.: | 4160 270 0010 |

Special size HELICOIL® plus mandrels with 1/4" hexagon should be ordered separately, see page 33.

Pneumatic Installation tool Type P-S 1216

For the rapid installation 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 details:

| | |
|------------------------|--|
| Load-free revolutions: | 950 min ⁻¹ at p = 6.3 bar adjustable by adjusting air pressure |
| Air consumption: | 5.5 L/s at p = 6.3 bar |
| Torque: | M = 1.2 – 5.5 Nm stepless adjustable clutch |
| Tool holding fixture: | Quick release chuck, 1/4" hexagon socket with radial bearing |
| Weight: | 0.8 kg |
| Order no.: | 4160 180 0010 |

Special size HELICOIL® plus mandrels with 1/4" hexagon should be ordered separately, see page 33.

Accessories:

Extra hand grip for P-S 1216

Hand grip for safe positioning during insert torquing, for sizes ≥ UNC 7/16"-14 and UNF 7/16"-20.

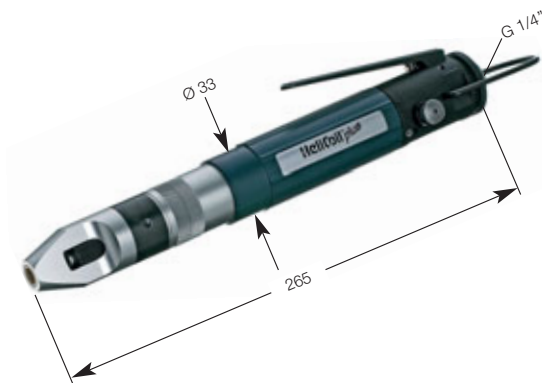
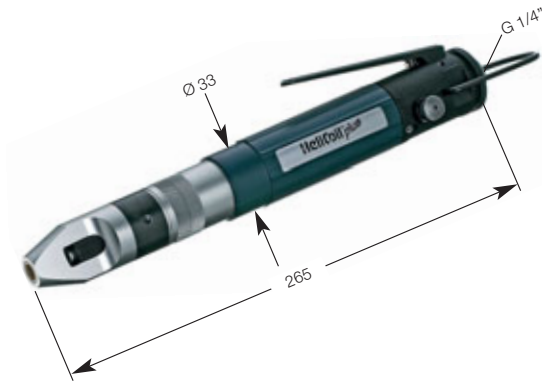
Order no.: 4160 180 0006

Hanger bracket for P-S 412 and P-S 1216

For hanging power tools horizontally on balance systems.

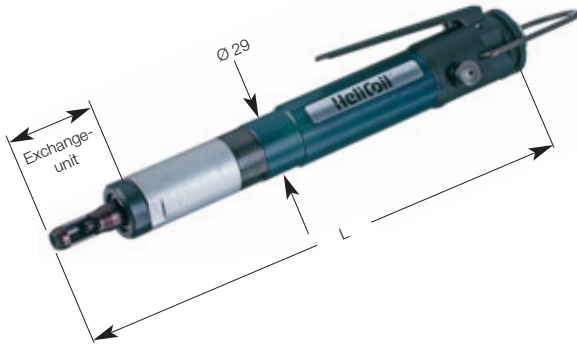
For details, see page 40.

Order no.: 4160 180 0007



Mechanical Installation Tool Type P-PSG for HELICOIL® and HELICOIL® plus
free running and screwlock

Complete tool



Push-start HELICOIL® and HELICOIL®plus installation tool for handling **bulk-fed** inserts.
 Power installation tool with reversing compressed air motor and size change part (exchange unit).
 The HELICOIL® installation depth is set by changing the compensating discs.
 This tool is recommended for medium- to large-series production applications.

Ordering example for UNC 5-40:

P-PSG 256 UNC 5-40
 Part no. 0160 376 6600

| Nominal thread Ø d | Type | Complete tool Order no. | Construction size | | Weight kg | Con-nection bar | **Compressed air con-sumption l/Min. |
|--------------------|------|-------------------------|-------------------|---|-----------|-----------------|--------------------------------------|
| | | | Ø D | L | | | |

UNC/NC = American National Coarse Thread

| | | | | | | | | |
|----------|---------------|---------------|---------------|-----|-----|---------|---------|-----|
| 2-56 | P-PSG 256 | 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 | 42 | 360 | 1.4 | 4.0-5.0 | 282 | |
| 1/4"-20 | | 0160 377 4600 | 42 | 360 | 1.4 | 4.0-5.0 | 282 | |
| 5/16"-18 | | P-PSG 714 | 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 Thread

| | | | | | | | |
|----------|---------------|---------------|---------------|-----|-----|---------|---------|
| 4-48 | P-PSG 256 | 0160 376 5700 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 6-40 | | 0160 376 7700 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 8-36 | | 0160 376 8700 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 10-32 | | 0160 376 9700 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 1/4"-28 | | P-PSG 714 | 0160 377 4700 | 42 | 360 | 1.4 | 4.0-5.0 |
| 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 notes when ordering:

When ordering a tool please quote type, size and length of the HELICOIL® plus thread inserts to be utilised. All dimensions to HELICOIL® nominal length 1.5 d applicable. Further nominal length on request. The installation tools are fitted with Bosch motors, **compressed air requirements approximately 6.3 bar. Installations with screwlock are possible for all sizes. For inserts made from NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1.5 adapted tools upon request.

Components

| Nominal thread Ø d | Type | Exchange unit ≤ 2d order no. | Basic tool Order no. | Motor Order no. |
|--------------------|------|------------------------------|----------------------|-----------------|
|--------------------|------|------------------------------|----------------------|-----------------|

UNC/NC = American National Coarse Thread

| | | | | | |
|----------|---------------|---------------|---------------|---------------|---------------|
| 2-56 | P-PSG 256 | 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 | | | |
| 5/16"-18 | | P-PSG 714 | 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 Thread

| | | | | |
|----------|-----------|---------------|---------------|---------------|
| 4-48 | P-PSG 256 | 0160 176 5750 | 0160 370 0040 | 0160 370 0010 |
| 6-40 | | 0160 176 7750 | | |
| 8-36 | | 0160 176 8750 | | |
| 10-32 | | 0160 176 9750 | | |
| 1/2"-28 | | 0160 177 4750 | | |
| 5/16"-24 | P-PSG 714 | 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



Manual Installation tool Type P-PSG for HELICOIL® and HELICOIL® plus

Pre-winder cartridge



free running and screwlock

Wear and spare parts

Installation mandrel



Clutch for installation mandrel



Compensating disc assortment



| Nominal thread Ø d | Type | Pre-winder cartridge Order no. | Installation mandrel Order no. | Clutch for installation mandrel Order no. | Compensating disc assortment Order no. |
|--------------------|------|--------------------------------|--------------------------------|---|--|
|--------------------|------|--------------------------------|--------------------------------|---|--|

UNC/NC = American National Coarse Thread

| | | | | | |
|----------|-----------|---------------|---------------|---------------|---------------|
| 2-56 | P-PSG 256 | 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 | P-PSG 714 | 0160 177 0632 | 0160 277 0620 | 0160 170 0066 | |
| 1/4"-20 | | 0160 177 4632 | 0160 177 4620 | | |
| 5/16"-18 | | 0160 287 6632 | 0160 287 6620 | | |
| 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 Thread

| | | | | | |
|----------|-----------|---------------|---------------|---------------|---------------|
| 4-48 | P-PSG 256 | 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 | P-PSG 714 | 0160 177 4732 | 0160 177 4720 | 0160 170 0066 | |
| 5/16"-24 | | 0160 287 6732 | 0160 187 6780 | | |
| 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 | | |

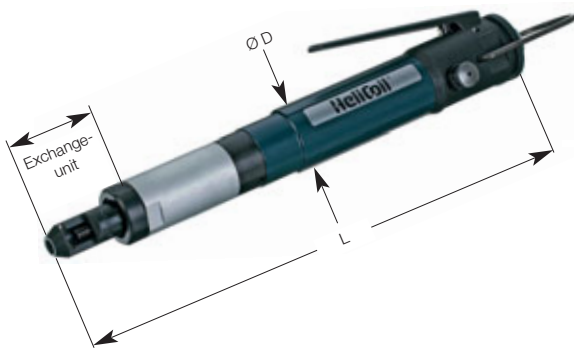
Ordering instructions:

When ordering a tool, please state the type, size and length of the HELICOIL® thread insert to be used. Tools for installing HELICOIL® thread inserts longer 2.5 d are available on request. Tools P-PSG 714 and P-PSG 1626 are fitted with a sliding finger guard in compliance with accident prevention regulations. Do not remove the finger guard. Tools for use with NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1.5 inserts are available on request.

Other sizes available on request.

Mechanical Installation Tool Type P-PSG for HELICOIL® and HELICOIL® plus

**STRIPFEED®
Complete tool**



Push-start HELICOIL® und HELICOIL® plus installation tool for handling **magazine-fed** thread inserts.
Power installation tool with reversing compressed air motor and size change part (exchange unit).
The HELICOIL® installation depth is set by changing the compensating discs.
This tool is recommended for medium- to large-series production applications.

| Nominal thread Ø d | Type | Complete tool Order no. | Construction size | | Weight kg | Con- nection bar | air con- sumption l/Min. |
|---|---------------|----------------------------|-------------------|-----|--------------|------------------------|--------------------------------|
| | | | Ø D | L | | | |
| UNC/NC = American National Coarse Thread | | | | | | | |
| 2-56 | P-PSG 256 SF | 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 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 1/4"-20 | | 0160 377 4603 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 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 | P-PSG 714 SF | 0160 287 9603 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |

| UNF/NF = American National Fine Thread | | | | | | | |
|---|--------------|---------------|----|-----|-----|---------|-----|
| 4-48 | P-PSG 256 SF | 0160 376 5703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 6-40 | | 0160 376 7703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 8-36 | | 0160 376 8703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 10-32 | | 0160 376 9703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 1/4"-28 | | 0160 377 4703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 5/16"-24 | | 0160 287 6703 | 42 | 360 | 1.4 | 4.0-5.0 | 282 |
| 3/8"-24 | P-PSG 714 SF | 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 notes when ordering:
When ordering a tool please quote type, size and length of the HELICOIL® plus thread inserts to be utilised.
The installation tools are fitted with Bosch motors, **compressed air requirements approximately 6.3 bar.
Installations with HELICOIL® screwlock are possible for all sizes.
For inserts made from NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1.5 adapted tools upon request.

Exchange unit



Basic tool



Motor



Components

| Nominal thread Ø d | Type | Exchange unit ≤ 2d order no. | Basic tool order no. | Motor order no. |
|-----------------------|------|---------------------------------|-------------------------|--------------------|
|-----------------------|------|---------------------------------|-------------------------|--------------------|

| UNC/NC = American National Coarse Thread | | | | |
|---|--------------|---------------|---------------|---------------|
| 2-56 | P-PSG 256 SF | 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 | 0160 180 0040 | 0160 180 0010 |
| 1/4"-20 | | 0160 177 4653 | | |
| 5/16"-18 | | 0160 287 6653 | | |
| 3/8"-16 | | 0160 287 7653 | | |
| 7/16"-14 | P-PSG 714 SF | 0160 287 8653 | | |
| 1/2"-13 | P-PSG 714 SF | 0160 287 9653 | | |

| UNF/NF = American National Fine Thread | | | | |
|---|---------------|---------------|---------------|---------------|
| 4-48 | P-PSG 256 SF | 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 | | |
| 5/16"-24 | | 0160 287 6753 | | |
| 3/8"-24 | 0160 287 7753 | | | |
| | | | | |
| | | | | |

Parallel system type S for HELICOIL® and HELICOIL® plus installation tools



| Type | Product characteristic | | order no. |
|-------|------------------------|-----------------|--|
| S 600 | Working radius | 140 mm – 600 mm | 0182 080 0003 (see scope of delivery) |
| | Working height | 50 mm – 430 mm | |
| | Weight without tool | 8 kg | |
| | Max. permitted torque | Max. 15 Nm | |

Advantages

- Ergonomic
- Quick, accurate positioning
- Precise installation direction
- No reaction torque
- Tool holder
- Light and easy to use
- Flexibility
- Suitable for use with electrical and pneumatic HELICOIL® installation tools
- Rapid tool changeover
- 360° rotation
- Roller bearings for light, smooth movement
- Safe, orderly workstation

Included in delivery

- 3-axis guide system
- Tool holder
- 1 Balancer 1-3 kg
- Base plate made from extruded aluminium profile with slots, dimensions: w x h x l: 240 x 40 x 500 mm

Accessories

| Type | Dimensions | order no. |
|--|---|---------------|
| Maintenance unit | for 6 bar nominal flow G 1/4" = 700 L/min | 0182 080 1001 |
| Stationary roll holder for HELICOIL® plus STRIPFEED® | | 0182 080 0004 |
| Hose | LW 6 | 0196 000 1130 |
| Hose clip | 8 – 12 mm | 0196 000 1150 |
| Hose liner | G 1/8"-6 | 0196 000 1151 |
| Hose liner | G 1/4"-6 | 0196 000 1152 |
| Waste air hose | Ø 15 mm | 0196 000 1131 |

Automatic STRIPFEED® unit for HELICOIL® plus



- For integration into
- Assembly lines
 - Robot/handling systems

These units are assembled to customer application-requirements. Please ask concerning any extension systems.

Magazined HELICOIL® plus thread inserts offer many advantages especially when processing smaller thread inserts.



Automatic installation of HELICOIL® plus screwlock, separation by vibration.

Manual Installation Tools for HELICOIL® and HELICOIL® plus

Manual Installation mandrel, with pre-stressing cartridge for HELICOIL® and HELICOIL® plus. Applicable for HELICOIL® plus in case of fine thread pitches and special applications.

| Nominal thread Ø | Type | Installation tools with pre-stressing cartridge Order no. | Fly-over tools Type H-M Order no. |
|---|----------------|--|---|
| BSP = British Standard Pipe thread · G = ISO 228/1 Pipe thread | | | |
| 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 | – |

Type **H-PSG**:
Threaded mandrel, with bit gauge
Order no. 0150 **01**. ...*

| | | | |
|---|------------|---------------|---|
| BA = British Association Standard Thread | | | |
| 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 | – |

Type **H-PMG**:
Flat mandrel, pitch guided, with bit gauge
Order no. 0150 **02**. ...*

* For thread inserts made from NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1.5 adapted tools upon request.

Type **H-PM**:
Flat mandrel, without pitch guiding, with bit gauge
Order no. 0150 **04**. ...*

Fly-over tool for HELICOIL® and HELICOIL® plus

Type **H-M**
with bit gauge
Order no. 0150 **07**. ...*

Manual Installation Tools for HELICOIL® and HELICOIL® plus

Manual Installation tool, with pre-stressing cartridge for HELICOIL® and HELICOIL® plus. Applicable for HELICOIL® plus in case of fine thread pitches and special applications.

Manual installation mandrels you will find on page 36 (HELICOIL® plus installation mandrels).

Type **H-PSG**:
Threaded mandrel, with bit gauge
Order no. 0150 **01**. ...*

Type **H-PMG**:
Flat mandrel, pitch guided, with bit gauge
Order no. 0150 **02**. ...*

Type **H-PM**:
Flat mandrel, without pitch guiding, with bit gauge
Order no. 0150 **04**. ...*

Fly-over tool for HELICOIL® and HELICOIL® plus

Type **H-M**
with bit gauge
Order no. 0150 **07**. ...*

| Nominal thread Ø | Type | Installation tools with pre-stressing cartridge | Fly-over tools Type H-M |
|---|-------------------|---|-------------------------|
| | | Order no. | Order no. |
| UNC/NC = American National Coarse Thread | | | |
| 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 Thread | | | |
| 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 | – |

* For thread inserts made from NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1.5 adapted tools upon request.

Manual Installation Tools for HELICOIL® and HELICOIL® plus

Manual Installation mandrel, with pre-stressing cartridge for HELICOIL® and HELICOIL® plus.
Applicable for HELICOIL® plus in case of fine thread pitches and special applications.

| Nominal thread Ø | Type | Installation tools with pre-stressing cartridge | Fly-over tools Type H-M |
|--|--------------------|---|-------------------------|
| | | Order no. | Order no. |
| BSW = British Standard Whitworth Thread | | | |
| 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 |

Type **H-PSG**:
 Threaded mandrel, with bit gauge
 Order no. 0150 **01**. ...*

BSF = British Standard Fine Thread

| | | | |
|-----------|--------------------|---------------|---|
| 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 | – |

Type **H-PMG**:
 Flat mandrel, pitch guided, with bit gauge
 Order no. 0150 **02**. ...*

Type **H-PM**:
 Flat mandrel, without pitch guiding, with bit gauge
 Order no. 0150 **04**. ...*

* For thread inserts made from NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1.5 adapted tools upon request.

Fly-over tool for HELICOIL® and HELICOIL® plus

Type **H-M**
 with bit gauge
 Order no. 0150 **07**. ...*

Tang break off and extracting tools for HELICOIL® and HELICOIL® plus

Tang break-off tools for HELICOIL® and HELICOIL® plus



Tang break-off tool



Semi automatic tang break-off tool with spring loaded tension **Typ TB-M**



Pneumatic tang break-off tool with push start **Typ TB-P**

| Nominal thread Ø | Tang break-off tool Order no. | Type TB-M Order no. | Type TB-P pneumatic* Order no. |
|---|-------------------------------|---------------------|--------------------------------|
| UNC/NC = American National Coarse Thread | | | |
| 2-56 | 0158 040 0000 | 0158 602 0000 | – |
| 4-40 | 0158 040 1000 | 0158 603 0000 | 0168 020 1000 |
| 5-40 | 0158 040 1000 | 0158 603 0000 | 0168 020 1000 |
| 6-32 | 0158 040 2000 | 0158 603 0000 | 0168 020 1000 |
| 8-32 | 0158 040 2000 | 0158 604 0000 | 0168 020 2000 |
| 10-24 | 0158 040 3000 | 0158 604 0000 | 0168 020 3000 |
| 12-24 | 0158 040 3000 | 0158 605 0000 | 0168 020 4000 |
| 1/4"-20 | 0158 040 3000 | 0158 606 0000 | 0168 021 4000 |
| 5/16"-18 | 0158 040 5000 | 0158 607 0000 | 0168 021 4000 |
| 3/8"-16 | 0158 040 5000 | 0158 609 0000 | 0168 020 5000 |
| 7/16"-14 | 0158 040 6000 | 0158 610 0000 | 0168 020 6000 |
| 1/2"-13 | 0158 040 6000 | 0158 611 0000 | 0168 020 7000 |
| 9/16"-12 | – | 0158 612 0000 | – |
| 5/8"-11 | – | 0158 614 0000 | – |

* Operating pressures 3 – 4 bar, connection G 1/4"
As of BSW 3/4" the tang must be removed by narrow nose.

| Nominal thread Ø | Tang break-off tool order no. | Type TB-M Order no. | Type TB-P pneumatic* Order no. |
|---|-------------------------------|---------------------|--------------------------------|
| UNF/NF = American National Fine Thread | | | |
| 4-48 | 0158 040 1000 | 0158 603 0000 | 0168 020 1000 |
| 6-40 | 0158 040 2000 | 0158 603 0000 | 0168 021 1000 |
| 8-36 | 0158 040 2000 | 0158 604 0000 | 0168 020 2000 |
| 10-32 | 0158 040 3000 | 0158 604 0000 | 0168 020 3000 |
| 1/4"-28 | 0158 040 3000 | 0158 606 0000 | 0168 020 4000 |
| 5/16"-24 | 0158 040 4000 | 0158 608 0000 | 0168 021 4000 |
| 3/8"-24 | 0158 040 4000 | 0158 609 0000 | 0168 020 5000 |
| 7/16"-20 | 0158 040 5000 | 0158 611 0000 | 0168 020 6000 |
| 1/2"-20 | 0158 040 6000 | 0158 612 0000 | 0168 020 7000 |
| 9/18"-18 | – | 0158 614 0000 | – |
| 5/8"-18 | – | 0158 616 0000 | – |

* Operating pressures 3 – 4 bar, connection G 1/4"
As of BSW 3/4" the tang must be removed by narrow nose.

Tang break off and extracting tools for HELICOIL® and HELICOIL® plus
Extracting tools for HELICOIL® and HELICOIL® plus


| Nominal thread Ø | order no. |
|---------------------------------|---------------|
| 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"-1 | |
| 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 | |

Machine extracting tools for HELICOIL® and HELICOIL® plus


With 1/4" hexagon, insert bit as per DIN 3126 - E 6,3 for battery tools B-S 206 und type B-S 824.

| Nominal thread-Ø | Order no. |
|------------------------------|---------------|
| UNC 2-56 ... UNC 12-24 | 0180 501 0000 |
| UNF 4-48 ... UNF 1/4"-28 | |
| UNC 1/4"-20 ... UNC 5/8"-11 | 0180 502 0000 |
| UNF 5/16"-24 ... UNF 5/8"-18 | |

Tang break off and extracting tools for HELICOIL® and HELICOIL® plus

Tang break-off tools for HELICOIL® and HELICOIL® plus



Tang break-off tool



Semi automatic tang break-off tool with spring loaded tension
Typ TB-M



Pneumatic tang break-off tool with push start **Typ TB-P**

| Nominal thread Ø | Tang break-off tool Order no. | Type TB-M Order no. | Type TB-P pneumatic* order no. |
|--|-------------------------------|---------------------|--------------------------------|
| BSW = British Standard Whitworth Thread | | | |
| 3/4"-40 | 0158 040 1000 | 0158 603 0000 | upon 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 | |
| 3/4"-11 | – | 0158 616 0000 | |

* Operating pressures 3 – 4 bar, connection G 1/4"
As of BSW 3/4" the tang must be removed by narrow nose.

| Nominal thread Ø | Tang break-off tool Order no. | Type TB-M Order no. | Type TB-P pneumatic* Order no. |
|---|-------------------------------|---------------------|--------------------------------|
| BSF = British Standard Fine Thread | | | |
| 3/18"-32 | 0158 040 2000 | 0158 604 0000 | upon 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 pressures 3 – 4 bar, connection G 1/4"
As of BSW 3/4" the tang must be removed by narrow nose.

Extracting tools for HELICOIL® and HELICOIL® plus



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

Tang break off and extracting tools for HELICOIL® and HELICOIL® plus

Tang break-off tools for HELICOIL® and HELICOIL® plus



Tang break-off tool



Semi automatic tang break-off tool with spring loaded tension **Typ TB-M**



Pneumatic tang break-off tool with push start **Typ TB-P**

| Nominal thread Ø | Tang break-off tool Order no. | Type TB-M Order no. | Type TB-P pneumatic* Order no. |
|---|-------------------------------|---------------------|--------------------------------|
| BSP = British Standard Pipe Thread · G = ISO 228/1 Pipe thread | | | |
| G 1/8" | 0158 040 5000 | 0158 610 0000 | – |

| BA = British Association Standard Thread | | | upon request |
|---|---------------|---------------|--------------|
| 0 BA | 0158 040 3000 | 0158 606 0000 | |
| 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 | |

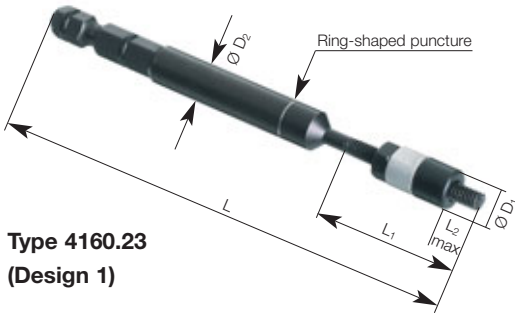
* Operating pressures 3 – 4 bar, connection G 1/4"
As of BSW 3/4" the tang must be removed by narrow nose.

Extracting tools for HELICOIL® and HELICOIL® plus

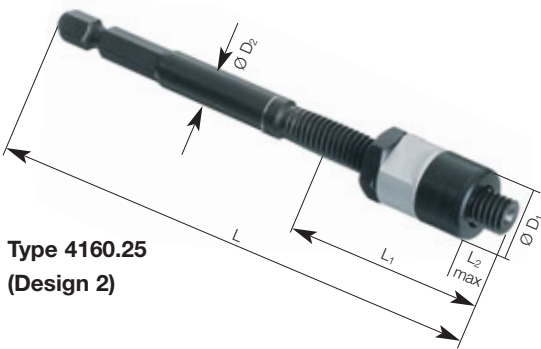


| Nominal thread Ø | Order no. | Nominal thread Ø | Order no. |
|---|---------------|---|---------------|
| BSP = British Standard Pipe thread · G = ISO 228/1 Pipe thread | | BA = British Association Standard Thread | |
| G 1/8" | 0180 302 0000 | 0 BA | 0180 300 0000 |
| G 1/4" | | 1 BA | |
| G 3/8" | 0180 303 0000 | 2 BA | |
| G 1/2" | | 3 BA | |
| G 5/8" | 0180 304 0000 | 4 BA | |
| G 3/4" | | 5 BA | |
| G 7/8" | 0180 305 0000 | 6 BA | |
| G 1" | | | |
| G 1 1/4" | | | |
| G 1 1/2" | | | |

HELICOIL® plus installation mandrels for electrical installation tools type E-S 206 and E-S 410, battery installation tool type B-S 206 and B-S 824 as well as for pneumatic installation tools type P-S 412



**Type 4160.23
(Design 1)**



**Type 4160.25
(Design 2)**

Caution:

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

screwlock installation mandrels are marked with a ring-shaped puncture on the leading shank. HELICOIL® free running installation mandrels are provided with a smooth guiding shank.

Installation mandrel with depth stop

Only suitable for installation of HELICOIL® plus free running and screwlock. With external hexagon DIN 3126 - E 6.3.

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

| Nominal thread Ø | free running mandrel | screwlock mandrel | L ₁ | L ₂ max. | L | D ₁ | D ₂ Ø _{H9} | De-sign |
|------------------|----------------------|-------------------|----------------|---------------------|-----|----------------|--------------------------------|---------|
| | Order No | Order No | | | | | | |
| 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 |

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

| Nominal thread Ø | free running mandrel | screwlock mandrel | L ₁ | L ₂ max. | L | D ₁ | D ₂ Ø _{H9} | De-sign |
|------------------|----------------------|-------------------|----------------|---------------------|-----|----------------|--------------------------------|---------|
| | Order No | Order No | | | | | | |
| 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 8 x 1 | 4160 2508 320 | 4160 2508 322 | 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 10 x 1 | 4160 2510 320 | 4160 2510 322 | 65 | 40 | 115 | 16 | 8 | 2 |
| M 10 x 1.25 | 4160 2510 920 | 4160 2510 922 | 65 | 40 | 115 | 16 | 8 | 2 |
| M 12 | 4160 2512 020 | 4160 2512 022 | 70 | 45 | 115 | 20 | 8 | 2 |
| M 12 x 1.25 | 4160 2512 920 | 4160 2512 922 | 70 | 45 | 120 | 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 |

For thread inserts of NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1.5 adapted tools on request.



Drill chuck with external hexagon

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

HELICOIL® plus installation mandrels for quick processing of HELICOIL® plus M 2–M 24 with HELICOIL® plus installation tools. Also suitable for the pick-and-place installation method.



Pick-and-place equipment see page 18.

Advantages:

- Simple installation mandrel
 - for critical installation points
 - quick retooling
 - reduced tool costs
- Dimension M 2 – M 24
 - HELICOIL® plus STRIPFEED® (M 2 – M 10)
 - HELICOIL® plus bulk material (M 2 – M 24)
 - flexible
- Pick-and-place processing
 - easy handling of HELICOIL® plus
 - shorter assembly times
- Easy change-over of direction of rotation
 - easy handling

Electrical and battery installation tools for HELICOIL® plus

Battery power pack installation tool type B-S 206

For processing HELICOIL® plus M 4 – M 6 with HELICOIL® plus installation mandrel

Delivery scope:

- Battery gun-straight installation tool (bendable)
- 2 pieces battery pack 3.6 V; 1.2 Ah
- Quick charger
- Trunk

Technical data:

Speed without load: two-speed 200 min⁻¹ and 600 min⁻¹, reversible
 Torque: adjustable at 21 levels 0.3–3.0 Nm / 4.4 Nm max.
 Tool holder: 1/4" hexagon socket
 Weight incl. battery: 0.52 kg
 Battery: 3.6 V / 1.2 Ah / charging time 15 min
 Order No: **4160 330 0000**

Spare parts and accessories:

Spare battery: Order No 4160 330 0200
 Quick charger: Order No 4160 330 0300



Battery power pack installation tool type B-S 824

For processing HELICOIL® plus M 7–M 24 with HELICOIL® plus installation mandrel

Delivery scope:

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

Technical data:

Speed without load: level 1 / stepless 65 – 450 min⁻¹, reversible
 level 2 / stepless 200 – 1450 min⁻¹, reversible
 Torque: 19-speed 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
 Order No: **4160 350 0000**

Spare parts and accessories:

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



Electrical installation tools for HELICOIL® plus



Electrical installation tool type E-S 206

For quick processing of HELICOIL® plus M 2 – M 6
with HELICOIL® plus installation mandrel

Delivery scope:

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

Technical data:

| | |
|---------------------|---|
| Speed without load: | 720 min ⁻¹ |
| 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 |
| Order No: | 4160 220 0000 |

Dimension-dependent HELICOIL® plus installation mandrels with depth stop must be ordered separately, see page 33.



Electrical installation tool type E-S 410

For quick processing of HELICOIL® plus M 4 – M 10
with HELICOIL® plus installation mandrel

Delivery scope:

- Straight screwdriver with quick-change chuck 1/4" hexagon socket
- Speed regulator with ramp control type CLT 500
- Trunk

Technical data:

| | |
|---------------------|---|
| Speed without load: | steplessly adjustable at regulator rpm 720 min ⁻¹ Automatic change-over of direction of rotation upon reaching the screw-in depth |
| Torque: | M = 0.9 – 3.5 Nm steplessly adjustable clutch |
| Tool holder: | quick-change chuck 1/4" hexagon socket with radial bearing for installation mandrel |
| Weight: | 0.66 kg |
| Order No: | 4160 440 0000 |

Dimension-dependent HELICOIL® plus installation mandrels with depth stop must be ordered separately, see page 33.

Pneumatic installation tools for HELICOIL® plus

Pneumatic installation tool type P-S 412

For quick processing of HELICOIL® plus M 4 – M 12 with HELICOIL® plus installation mandrel

Technical data:

| | |
|---------------------|--|
| Speed without load: | 1500 min ⁻¹ at p = 6.3 bar adjustable via 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 |
| Order No: | 4160 270 0010 |

Dimension-dependent HELICOIL® plus installation mandrels with depth stop must be ordered separately, see page 33.

Pneumatic installation tool type P-S 1216

For quick processing of HELICOIL® plus M 12 – M 16 with HELICOIL® plus installation mandrel

Technical data:

| | |
|---------------------|---|
| Speed without load: | 950 min ⁻¹ at p = 6.3 bar adjustable via 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 |
| Order No: | 4160 180 0010 |

Dimension-dependent HELICOIL® plus installation mandrels with depth stop must be ordered separately, see page 33.

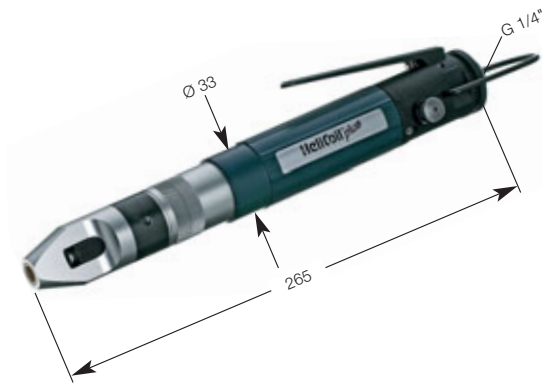
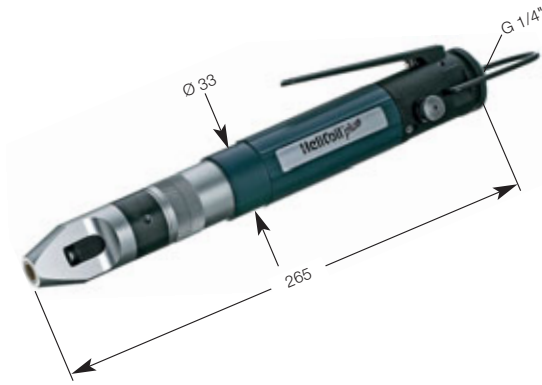
Accessories:

Spare handle for P-S 1216

Handle for safe compensation of installation torque for dimensions ≥ M 12
Order No: 4160 180 0006

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

for horizontal suspension of tools at balancer systems
Order No: 4160 180 0007



Mechanical installation tool type P-PSG for HELICOIL® plus

**For HELICOIL® plus
free running and screwlock**

Complete tool



Order example M 6:
P-PSG 256 M 6
Order No 0160 370 6000

Pitch-controlled HELICOIL® and HELICOIL® plus installation tool for **bulk material processing**. The mechanical tap is equipped with a reversible compressed-air motor and a dimension-dependent exchange unit. The HELICOIL® installation depth is adjusted with compensation washers. This tool is recommended for medium- and large-scale series.

| Nominal thread Ø | Type | Complete tool Order No | Construction dimensions | | Weight kg | Con- nection bar | **Air consumption l/Min. |
|------------------|------------|---------------------------|-------------------------|-----|--------------|------------------------|--------------------------------|
| | | | Ø D | L | | | |
| M 2.5 | P-PSG 256 | 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 |
| 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 | P-PSG 714 | 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 |
| 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 | P-PSG 1626 | 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 |

Assemblies

Exchange unit



Basic tool



Engine



| Nominal length Ø | Type | Exchange unit Order No | Basic tool Order No | Engine Order No | |
|------------------|---------------|---------------------------|------------------------|--------------------|---------------|
| | | | | | d |
| M 2.5 | P-PSG 256 | 0160 272 5050 | 0160 370 0040 | 0160 370 0010 | |
| M 3 | | 0160 270 3050 | | | |
| M 4 | | 0160 270 4050 | | | |
| M 5 | | 0160 270 5050 | | | |
| M 6 | | 0160 270 6050 | | | |
| M 7 | | 0160 280 7050 | | | |
| M 8 | | 0160 280 8050 | | | |
| M 8 x 1 | | 0160 281 8350 | | | |
| M 10 | P-PSG 714 | 0160 281 0050 | 0160 180 0040 | 0160 180 0010 | |
| 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 |
| M 14 x 1.25 | | 0160 281 4950 | | | 0160 090 0040 |
| 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 | | | | |

Mechanical installation tool type P-PSG for HELICOIL® plus

Leader cartridge



Installation mandrel



Clutch for installation mandrel



Range of compensation washers



**For HELICOIL® plus
free running and screwlock**

Wear and spare parts

| Nominal thread Ø | Type | Leader cartridge Order No | Installation mandrel Order No | Clutch for installation mandrel Order No | Range of compensation washers Order No |
|------------------|---------------|------------------------------|----------------------------------|---|---|
| M 2.5 | P-PSG 256 | 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 | | |
| M 7 | | 0160 280 7032 | 0160 280 7020 | 0160 170 0066 | |
| 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 | P-PSG 714 | 0160 281 0932 | 0160 281 0920 | | |
| M 10 x 1 | | 0160 281 0332 | 0160 281 0320 | | |
| M 12 | | 0160 281 2032 | 0160 281 2020 | 0160 180 0006 | 0160 280 0060 |
| 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 | P-PSG 1626 | 0160 281 4932 | 0160 281 4920 | 0160 090 0006 | 0160 190 0060 |
| M 16 | | 0160 191 6032 | 0160 091 6020 | | |
| M 16 x 1.5 | | 0160 191 6432 | 0160 091 6420 | | |
| M 18 x 1.5 | | 0160 191 8432 | 0160 091 8420 | | |
| M 20 | | 0160 192 0032 | 0160 092 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 | | | |

Important information order:

Upon tool order, specify type, dimension and length of HELICOIL® plus thread inserts to be processed. For installation of HELICOIL® plus thread inserts with lengths > 2.5 d on request. According to German accident prevention regulations (UVV), types P-PSG 714 and P-PSG 1626 are equipped with a sliding sleeve as a finger protection. This finger protection shall not be removed.

Installation tools are equipped with motors of the Bosch company.

**Air consumption at 6.3 bar. (See page 36.)

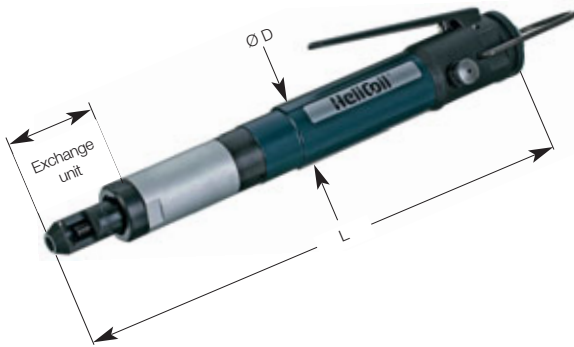
* Basic tool with boosted motor.

For inserts of NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1.5, adapted tools on request.

Mechanical installation tool type P-PSG for HELICOIL® plus

For HELICOIL® plus STRIPFEED®

Complete tool



Pitch-controlled HELICOIL® and HELICOIL® plus installation tool for processing **magazined thread inserts**. The mechanical tap is equipped with a reversible compressed-air motor and a dimension-dependent exchange unit. The HELICOIL® installation depth is adjusted with compensation washers. This tool is recommended for medium- and large-scale series.

| Nominal thread Ø | Type | Complete tool Order No | Max. length | Construction dimensions | | Weight kg | Con nection bar | **Air consumption l/min. |
|------------------|--------------|------------------------|-------------|-------------------------|-----|-----------|-----------------|--------------------------|
| | | | | Ø D | L | | | |
| M 2.5 | P-PSG 256 SF | 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 |
| 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 | P-PSG 714 SF | 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 information order:
 Upon tool order, specify type, dimension and length of HELICOIL® plus thread inserts to be processed. For installation of HELICOIL® plus thread inserts with lengths > 2.5 d on request. Installation tools are equipped with motors of the Bosch company.
 **Air consumption at 6.3 bar. (See page 36.)
 For inserts of NiCr15Fe7TiAl, NiCr20Co18Ti and AlZnMgCu1.5, adapted tools on request.

Assemblies

Exchange unit



Basic tool



Engine



| Nominal thread Ø | Type | Exchange unit ≤1.25 d | Exchange unit 1.5-2 d | Basic tool Order No | Engine Order No |
|------------------|---------------|-----------------------|-----------------------|---------------------|-----------------|
| | | Order No | Order No | | |
| M 2.5 | P-PSG 256 SF | 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 | | |
| M 7 | | P-PSG 714 SF | 0160 280 7052 | | |
| M 8 | 0160 280 8052 | | 0160 280 8053 | | |
| M 10 | 0160 281 0052 | | 0160 281 0053 | | |
| | 0160 281 0052 | | 0160 281 0053 | | |

Wear and spare parts

| Nominal thread Ø | Type | Leader cartridge ≤1.25 d | Leader cartridge 1.5-2.5 d | Installation mandrel Order No | Clutch for installation mandrel Order No | |
|------------------|--------------|--------------------------|----------------------------|-------------------------------|--|---------------|
| | | Order No | Order No | | | |
| M 2.5 | P-PSG 256 SF | 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 | | |
| M 7 | | P-PSG 714 SF | 0160 180 7035 | 0160 180 7033 | | 0160 280 7020 |
| M 8 | | | 0160 180 8035 | 0160 180 8033 | 0160 280 8020 | |
| M 10 | | | 0160 181 0035 | 0160 181 0033 | 0160 281 0020 | |
| | | | 0160 181 0035 | 0160 181 0033 | 0160 281 0020 | |

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

Parallel arm stand type S for HELICOIL® and HELICOIL®plus installation tools



| Type | Product characteristics | | Order No |
|-------|-------------------------|-----------------|---------------------------------------|
| S 600 | work radius | 140 mm – 600 mm | 0182 080 0003 (see delivery scope) |
| | work height | 50 mm – 430 mm | |
| | weight without tool | 8 kg | |
| | torque absorption | 15 Nm max. | |

Benefits

- Rationalisation
- Quick and safe positioning
- Easy handling, no operator fatigue
- No return rotation forces
- Absorption of screwdriver weight
- Can be used with electrical and pneumatic HELICOIL® installation tools
- Quick retooling
- 360° rotatable
- Smooth and precise roller guides
- Optimum work-place layout

Delivery scope

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

Delivery scope

| Type | Size | Order No |
|--|--|---------------|
| Maintenance unit | at 6 bar nominal flow G 1" = 700 l/min | 0182 080 1001 |
| Stationary roller holder for HELICOIL® plus STRIPFEED® | | 0182 080 0004 |
| Hose | LW 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 |

Automatic STRIPFEED® unit



For integration into

- assembly lines
- robot/handling systems

This unit is assembled as required by the customer. Please contact us for information on further systems.

Magazined HELICOIL® plus thread inserts provide advantages especially for processing smaller thread inserts.



Automatic processing of HELICOIL® plus M 8 screwlock with vibration singling-out.

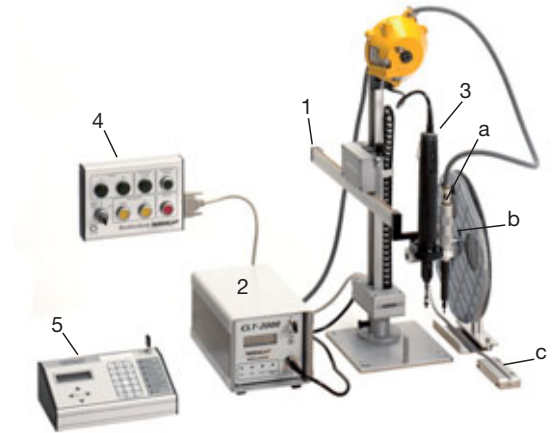
**Parallel arm stand type PR-E
for HELICOIL® and HELICOIL® plus installation tools**

3-axis parallel arm stand with displacement measuring system

Parallel arm stand type PR-E for quick, process-safe and manual positioning of HELICOIL® plus installation tools.

Type PR-E is a universal, flexible and cost-effective system that allows position queries according to a freely programmable pattern.

- Position detection x-axis, y-axis and z-axis
- Monitoring of screw depth, screw positions and process of screwing positions
- 10 programs
- 25 screw positions per program storable
- Control outputs to control of e.g. solenoid valves (24 DC) for pneumatic clamping devices



The PR-E type is suitable for holding the electrical HELICOIL® plus installation tool type E-S410 (see page 36). (Other electrical screwing tools on request.)

With the great extension length it is possible to cover a large working area. The tool is always in vertical position. The user of tool reaction torques is thus disburdened.

Further benefits are:

- Quality assurance. No HELICOIL® plus installation points are left out
- Securing of installation depth
- Registration of installation faults

| Type | Order No | Max. work angle | Work height z-axis | Max. tool weight |
|-----------|---------------|-----------------|---------------------------------------|--------------------|
| PR-E 400 | 0182 100 0001 | 300° | 80 mm – 420 mm | 2,0 kg |
| PR-E 1000 | 0182 100 0002 | | Work radius (extension length) y-axis | Total stand weight |
| | | | 160 mm – 400 mm | 6,3 kg |

Delivery scope type PR-E

- (1) Stress relief arm with displacement measuring system
- (2) Regulator unit (suitable for networking)
- (3) Electrical screwdriver 0.9–3.5 Nm 730 U/min 1/4" hex. with lever start (figure with E-S 410 for M4 – M10)
- (4) Operation box
- (5) Control unit
- Maintenance unit

Accessories

- (a) Pneumatic tang break-off tool (see page 43)
- (b) Stationary roller holder for HELICOIL® plus STRIPFEED®
- (c) HELICOIL® plus “pick-and-place” system (see page 18)

Manual installation tools for HELICOIL® plus

Manual installation tool with leader cartridge for HELICOIL® and HELICOIL® plus.

Only required for HELICOIL® plus in case of fine screw threads and special applications.

Manual installation mandrels are described on page 33 (HELICOIL® plus installation mandrels).



Type **H-PSG**:

Threaded mandrel, pitch-controlled, with depth stop

Order No 0150 **01**. ...*



Type **H-PMG**:

Smooth mandrel, pitch-controlled, with depth stop

Order No 0150 **02**. ...*



Type **H-PM**:

Smooth mandrel, without pitch control, with depth stop

Order No 0150 **04**. ...*



Fly-over tool for

HELICOIL® and HELICOIL® plus

Type **H-M**

with depth stop

Order No 0150 **07**. ...*

| Nominal thread Ø | Type | Installation tool with leader cartridge | Fly-over tool Type H-M |
|------------------|-------------------|---|------------------------|
| | | Order No | Order No |
| M 2 | H-PMG M 2 | 0150 020 2000 | – |
| M 2.5 | H-PMG M 2.5 | 0150 022 5000 | – |
| M 3 | H-PMG M 3 | 0150 020 3000 | – |
| M 3.5 | H-PMG M 3.5 | 0150 023 5000 | – |
| M 4 | H-PMG M 4 | 0150 020 4000 | – |
| M 5 | H-PMG M 5 | 0150 020 5000 | – |
| M 6 | H-PM M 6 | 0150 040 6000 | – |
| M 7 | H-PSG M 7 | 0150 010 7000 | – |
| M 8 | H-PM M 8 | 0150 040 8000 | – |
| M 8 x 1 | H-PSG M 8 x 1 | 0150 010 8300 | – |
| M 9 | H-PM M 9 | 0150 040 9000 | – |
| M 10 | H-PM M 10 | 0150 041 0000 | – |
| M 10 x 1 | H-PSG M 10 x 1 | 0150 011 0300 | – |
| M 10 x 1.25 | H-PSG M 10 x 1.25 | 0150 011 0900 | – |
| M 11 | H-PM M 11 | 0150 041 1000 | – |
| M 12 | H-PM M 12 | 0150 041 2000 | – |
| M 12 x 1 | H-PSG M 12 x 1 | 0150 011 2300 | – |
| M 12 x 1.25 | H-PSG M 12 x 1.25 | 0150 011 2900 | – |
| M 12 x 1.5 | H-PSG M 12 x 1.5 | 0150 011 2400 | – |
| M 14 | H-PM M 14 | 0150 041 4000 | – |
| M 14 x 1 | H-PSG M 14 x 1 | 0150 011 4300 | – |
| M 14 x 1.25 | H-PSG M 14 x 1.25 | 0150 011 4900 | – |
| M 14 x 1.5 | H-PSG M 14 x 1.5 | 0150 011 4400 | – |
| M 16 | H-PM M 16 | 0150 041 6000 | – |
| M 16 x 1.5 | H-PMG M 16 x 1.5 | 0150 021 6400 | – |
| M 18 | H-M M 18 | – | 0150 071 8000 |
| M 18 x 1.5 | H-PSG M 18 x 1.5 | 0150 011 8400 | – |
| M 18 x 2 | H-PSG M 18 x 2 | 0150 011 8500 | – |
| M 20 | H-M M 20 | – | 0150 072 0000 |
| M 20 x 1.5 | H-PSG M 20 x 1.5 | 0150 012 0400 | – |
| M 20 x 2 | H-PSG M 20 x 2 | 0150 012 0500 | – |
| M 22 | H-M M 22 | – | 0150 072 2000 |
| M 22 x 1.5 | H-PSG M 22 x 1.5 | 0150 012 2400 | – |
| M 22 x 2 | H-PSG M 22 x 2 | 0150 012 2500 | – |
| M 24 | H-M M 24 | – | 0150 072 4000 |
| M 24 x 1.5 | H-PSG M 24 x 1.5 | 0150 012 4400 | – |
| M 24 x 2 | H-PSG M 24 x 2 | 0150 012 4500 | – |
| M 26 x 1.5 | H-PSG M 26 x 1.5 | 0150 012 6400 | – |
| M 27 | H-M M 27 | – | 0150 072 7000 |
| M 27 x 1.5 | H-PSG M 27 x 1.5 | 0150 012 7400 | – |
| M 27 x 2 | H-PSG M 27 x 2 | 0150 012 7500 | – |
| M 28 x 1.5 | H-PSG M 28 x 1.5 | 0150 012 8400 | – |
| M 30 | H-M M 30 | – | 0150 073 0000 |
| M 30 x 1.5 | H-PSG M 30 x 1.5 | 0150 013 0400 | – |
| M 30 x 2 | H-PSG M 30 x 2 | 0150 013 0500 | – |
| M 33 | H-M M 33 | – | 0150 073 3000 |
| M 33 x 2 | H-PSG M 33 x 2 | 0150 013 3500 | – |
| M 36 | H-M M 36 | – | 0150 073 6000 |
| M 36 x 1.5 | H-PSG M 36 x 1.5 | 0150 013 6400 | – |
| M 36 x 2 | H-PSG M 36 x 2 | 0150 013 6500 | – |
| M 36 x 3 | H-PSG M 36 x 3 | 0150 013 6600 | – |

* For thread inserts of NiCr 15 Fe 7 Ti Al, NiCr 20 Co 18 Ti, AlZn Mg Cu 1.5 adapted tools on request.

Tang break-off and extracting tools for HELICOIL® plus

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 Order No | Type TB-M Order No | Type TB-P pneumatic* Order 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.

Manual extracting tools for HELICOIL® plus



| Nominal thread Ø d | Order No | Nominal thread Ø d | Order No |
|--------------------|---------------|--------------------|---------------|
| M 2 | 0180 300 0000 | M 18 | 0180 303 0000 |
| M 2.5 | | M 18 x 1.5 | |
| M 3 | | M 18 x 2 | |
| M 3.5 | | M 20 | |
| M 4 | 0180 301 0000 | M 20 x 1.5 | 0180 304 0000 |
| M 5 | | M 20 x 2 | |
| M 6 | | M 22 | |
| M 7 | | M 22 x 1.5 | |
| M 8 | | M 22 x 2 | |
| M 8 x 1 | | M 24 | |
| M 9 | 0180 302 0000 | M 24 x 1.5 | 0180 305 0000 |
| M 10 | | M 24 x 2 | |
| M 10 x 1 | | M 26 x 1.5 | |
| M 10 x 1.25 | | M 27 | |
| M 11 | | M 27 x 1.5 | |
| M 12 | | M 27 x 2 | |
| M 12 x 1 | | M 28 x 1.5 | |
| M 12 x 1.25 | | M 30 | |
| M 12 x 1.5 | 0180 302 0000 | M 30 x 1.5 | 0180 305 0000 |
| M 14 | | M 30 x 2 | |
| M 14 x 1 | | M 33 | |
| M 14 x 1.25 | | M 33 x 2 | |
| M 14 x 1.5 | 0180 302 0000 | M 36 | 0180 305 0000 |
| M 16 | | M 36 x 1.5 | |
| M 16 x 1.5 | | M 36 x 2 | |
| | | M 36 x 3 | |

*Mechanical extracting tools for **HELICOIL®** and **HELICOIL® plus***



With 1/4" external hexagon DIN 3126 — E 6.3
for battery power pack installation tool type B-S 206
and type B-S 824.

| Nominal thread Ø | Order No |
|------------------|---------------|
| M 2 to M 6 | 0180 501 0000 |
| M 7 to M 16 | 0180 502 0000 |

*Examples of equipment and special machines for semi- and fully automatic installation of **HELICOIL® plus***

