



Recoil Threaded inserts and tools





FOLDER 6 THREADED INSERTS

RECOIL.....	R
INTRODUCTION.....	R-3
SPARK PLUG_REFILL PACKAGES, REPAIR KIT (SPARK PLUG), BICYCLE FOOT PEDAL REPAIR KIT	R-11
SPECIAL SIZE_HARLEY, CUMMINS AND CARBURETTOR.....	R-12
METRIC THREADED INSERTS	R-14
INCH THREADED INSERTS „AMERICAN“	R-21
INCH THREADED INSERTS „BRITISH“	R-27
REPAIR KITS.....	R-34
THREADED INSERTS „TAPED- METRIC“	R-43
THREADED INSERTS „TAPED- INCH“	R-44
HAND TOOLS	R-46
HEXAGONAL ASSEMBLY PLUG.....	R-49
THREAD PLUG-GAUGE.....	R-50
TOOLS_-ELECTRIC, PNEUMATIC, AUTOMATIC AND BATTERY-POWERED	R-51
RECOIL TANGLESS.....	
INTRODUCTION.....	R-72
METRIC THREADED INSERTS	R-73
AMERICAN COARSE THREAD.....	R-74
AMERICAN FINE THREAD	R-76
THREADED INSERTS „TAPED-METRIC“	R-77
THREADED INSERTS „TAPED-INCH“	R-78
HAND TOOLS	R-79
HEXAGONAL ASSEMBLY PLUG_STAR HANDLE FOR HEXAGONAL INSERTION TOOLS..	R-80
ROUND SHAFT ASSEMBLY PLUG_HANDLE FOR INSERTION TOOLS	R-81
TOOLS.....	R-82
KEENINSERTS	
TERMS AND CONDITIONS.....	

Introduction



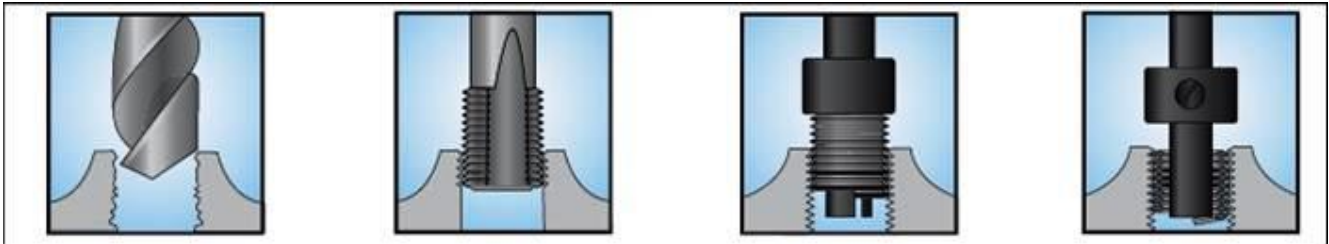
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„Recoil“

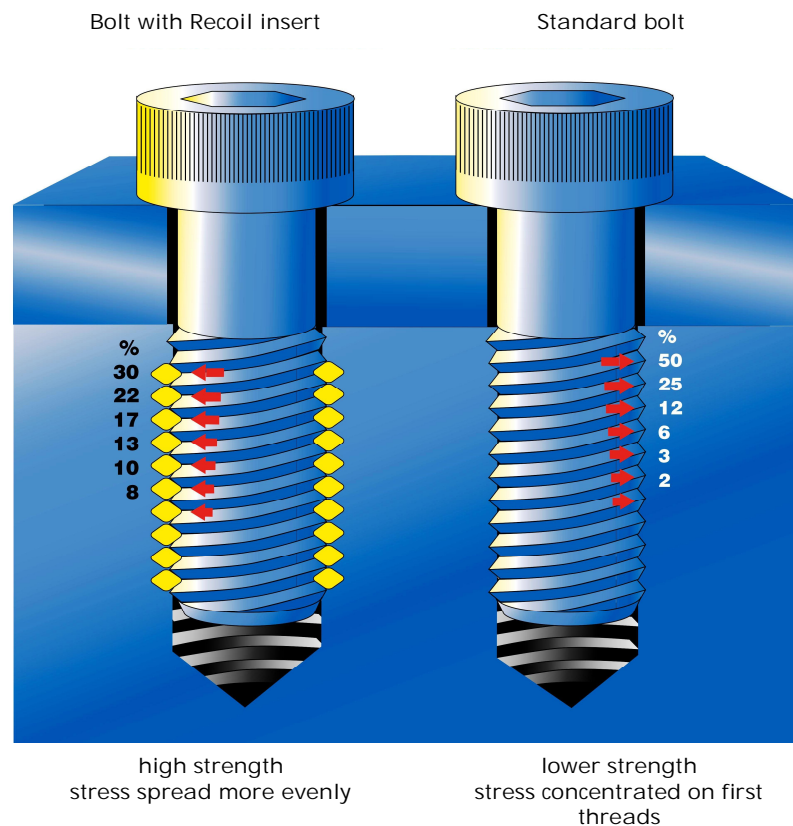
The Recoil system are used for repairing damaged screw threads or creating strong new threads.

- A superior thread with great holding power
- Most cost-effective method of repair
- Returns thread to the original size
- Generally stronger than the original female thread



Reinforcement of thread

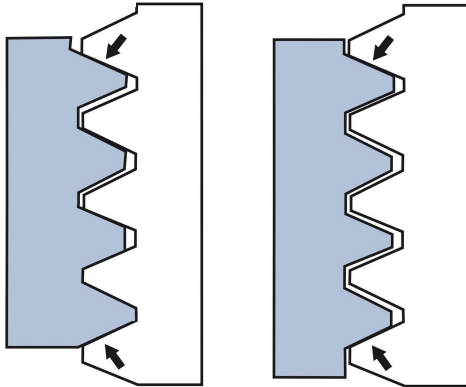
This improved strength allows to select a fastener based on the minimum strength of the bolt, smaller diameters and shorter thread lengths confidently even in low strength materials such as magnesium or aluminium alloys.



„Recoil“

Pitch and Angle error compensation

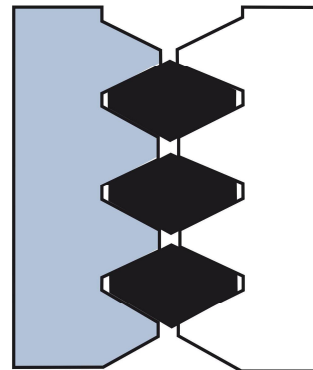
Problems



Angle error

Pitch error

Solution



Recoil compensation effect

Typical thread and angle errors may cause:

- Limited contact point
- Poor flank contact between bolt to parent thread
- Unequal distribution of bolt load over engaged threads
- Failure of threaded components when loaded

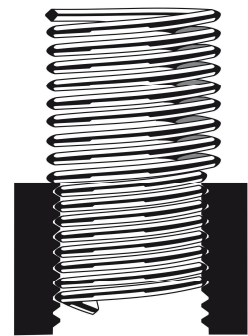
Recoil-inserts reduce thread pitch - and angle errors to provide:

- Greater fastener strength
- Greater contact area
- Equally distributed load over all tapped threads
- Reduced stress concentration thereby extending fatigue life

Types of inserts

Uninstalled, Recoil inserts are greater in diameter than the tapped hole. During the assembly operation the diameter of the leading coils is reduced thereby permitting entry of the insert into the tapped hole.

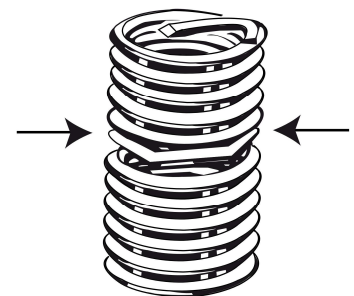
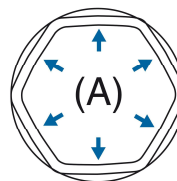
When the insert is installed at the correct depth, the coils expand and permanently retains the insert in place.



Recoil insert in „Semi installed“ position

- „Free running“ inserts
Provide a standard female thread.

- „Locking“ inserts
After the installation of the fastener result a clamp effect to the bolt.
For differentiation these are pigmented in red.



„Recoil“

„Locking“ insert torque values

locking torque values for unified conform to NASM8846

Metric coarse series

Nominal thread size	Locking torque	
	Max	Min
M2.2 x 0.45	0.14 Nm	0.02 Nm
M2.5 x 0.45	0.23 Nm	0.05 Nm
M3 x 0.5	0.45 Nm	0.1 Nm
M3.5 x 0.6	0.68 Nm	0.12 Nm
M4 x 0.7	0.9 Nm	0.15 Nm
M5 x 0.8	1.6 Nm	0.3 Nm
M6 x 1	3 Nm	0.4 Nm
M7 x 1	4.5 Nm	0.6 Nm
M8 x 1.25	6 Nm	0.8 Nm
M10 x 1.5	10.5 Nm	1.4 Nm
M12 x 1.75	15.5 Nm	2.1 Nm
M14 x 2	23.5 Nm	3 Nm
M16 x 2	31.5 Nm	4.2 Nm
M18 x 2.5	42 Nm	5.5 Nm
M20 x 2.5	54 Nm	7 Nm
M22 x 2.5	67.5 Nm	9 Nm
M24 x 3	80 Nm	10.5 Nm
M27 x 3	94 Nm	12 Nm
M30 x 3.5	108 Nm	14 Nm
M33 x 3.5	122 Nm	15.5 Nm
M36 x 4	136 Nm	17.5 Nm
M39 x 4	150 Nm	19.5 Nm

Metric fine series

Nominal thread size	Locking torque	
	Max	Min
M8 x 1	6 Nm	0.8 Nm
M10 x 1	10.5 Nm	1.4 Nm
M10 x 1.25	10.5 Nm	1.4 Nm
M12 x 1.25	15.5 Nm	2.1 Nm
M12 x 1.5	15.5 Nm	2.1 Nm
M14 x 1.5	23.5 Nm	3 Nm
M16 x 1.5	31.5 Nm	4.2 Nm
M18 x 1.5	42 Nm	5.5 Nm
M20 x 1.5	54 Nm	7 Nm
M22 x 1.5	67.5 Nm	9 Nm
M18 x 2	42 Nm	5.5 Nm
M20 x 2	54 Nm	7 Nm
M22 x 2	67.5 Nm	9 Nm
M24 x 2	80 Nm	10.5 Nm
M27 x 2	94 Nm	12 Nm
M30 x 2	108 Nm	14 Nm
M33 x 2	122 Nm	15.5 Nm
M36 x 2	136 Nm	17.5 Nm
M39 x 2	150 Nm	19.5 Nm
M36 x 3	136 Nm	17.5 Nm
M39 x 3	150 Nm	19.5 Nm

Unified coarse (UNC)

Nominal thread size	Locking torque	
	Max	Min
2 (.086") - 56	20 oz.in	3 oz.in
3 (.099") - 40	32 oz.in	7 oz.in
4 (.112") - 40	48 oz.in	10 oz.in
5 (.125") - 40	75 oz.in	13 oz.in
6 (.138") - 32	6 lb.in	1.0 lb.in
8 (.164") - 32	9 lb.in	1.5 lb.in
10 (.190") - 24	13 lb.in	2.0 lb.in
12 (.216") - 24	24 lb.in	3.0 lb.in
1/4 (.250") - 20	30 lb.in	4.5 lb.in
5/16 (.3125") - 18	60 lb.in	7.5 lb.in
3/8 (.3750") - 18	80 lb.in	12.0 lb.in
7/16 (.4375") - 14	100 lb.in	16.5 lb.in
1/2 (.5000") - 13	150 lb.in	24.0 lb.in
9/16 (.5625") - 12	200 lb.in	30.0 lb.in
5/8 (.6250") - 11	300 lb.in	40.0 lb.in
3/4 (.7500") - 10	400 lb.in	60.0 lb.in
7/8 (.8750") - 9	600 lb.in	82.0 lb.in
1 (1.000") - 8	800 lb.in	110.0 lb.in
1 1/8 (1.1250") - 7	900 lb.in	137.0 lb.in
1 1/4 (1.1250") - 7	1000 lb.in	165.0 lb.in
1 1/2 (1.3750") - 6	1150 lb.in	185.0 lb.in
1 3/4 (1.5000") - 6	1350 lb.in	210.0 lb.in

Unified fine (UNF)

Nominal thread size	Locking torque	
	Max	Min
3 (.099) - 56	32 oz.in	7oz.in
4 (.112) - 48	48 oz.in	10 oz.in
6 (.138) - 40	6 lb.in	1.0 lb.in
8 (.164) - 36	9 lb.in	1.5 lb.in
10 (.190) - 32	13lb.in	2.0 lb.in
1/4 (.2500) - 28	30 lb.in	3.5 lb.in
5/16 (.3125) - 24	60 lb.in	6.5 lb.in
3/8 (.3750) - 24	80 lb.in	9.5 lb.in
7/16 (.4375) -20	100 lb.in	14.0 lb.in
1/2 (.5000) - 20	150 lb.in	18.0 lb.in
9/16 (.5625) - 18	200 lb.in	24.0 lb.in
5/8 (.6250) - 18	300 lb.in	32.0 lb.in
3/4 (.7500) - 16	400 lb.in	50.0 lb.in
7/8 (.8750) - 14	600 lb.in	70.0 lb.in
1 (1.0000) - 12	800 lb.in	90.0 lb.in
1 1/8 (1.1250) - 12	900 lb.in	117.0 lb.in
1 1/4 (1.2500) - 12	1000 lb.in	143.0 lb.in
1 1/2 (1.3750) - 12	1150 lb.in	165.0 lb.in
1 3/4 (1.5000) -12	1350 lb.in	190.0 lb.in

„Recoil“

Recoil wire thread insert finishes and coatings

Plating/ finish	Part number suffix	Applicable process specification
Silver plating	<u>AG</u>	<u>OOS-365 or AMS2411 or EN2786</u>
Cadmium plating	<u>C</u>	<u>QOP-416 or DEF STD 03-19</u>
Dry film lubricant	<u>D</u>	<u>MIL-L-8937 or MIL-L-46010</u>
Red dye	Not applicable	Applied to all Recoil locking inserts for identification where called for by specification

Material Type	Max. temperature Peak	Max. temperature continuous	Typical applications	Coatings (see section on lubricants)
Stainless 1.4301	425°C	315°C	Most general applications in all materials	Non-finish Dry film lubricant
Stainless 1.4571	425°C	315°C	Improved corrosion resistance salt water applications	Silver Cadmium
Phosphor bronze	300°C	235°C	Copper parts Non magnetic/ low permeability applications	Cadmium Silver
Inconel x 750	650°C	550°C	Aerospace/ turbines/ corrosive atmospheres/ high temperature use	Silver Copper
Nimonic alloy 90	650°C	550°C	Aerospace/ turbine applications	Silver

Recoil insert part number example

O5082XAG

First digit=product group

0=inserts bulk-free running
1=inserts bulk-self locking
2=inserts packing (free running only)

Second digit=thread type

0=BSF, BA
1=BSP
2=BSW
3=UNC
4=UNF, UNEF, UNS, ETC.
5=METRIC Coarse
6=NPT, BSC, 8UN
7=Metric Medium
8=Metric Fine&Spark-Plug
9=Tang break tool

Fifth digit=length
length in 1/2 diameters

2=1D
3=1,5D
4=2D
5=2,5D
6=3D

Dritte und vierte Stelle :

Third and fourth digit=thread diameter

0=size in 1/16 (08=1/2)
1= size in 1/16 (08=1/2)
2= size in 1/16 (08=1/2)
3= size in 1/16 (08=1/2)
4= size in 1/16 (08=1/2)
5=size in 1mm (08=8mm)
6= size in 1/16 (08=1/2)
7= size in 1mm (08=8mm)
8= size in 1mm (08=8mm)

Special suffixes

AG=silver plated
C=cadmium plated
D=dry film lubrication
LH=left hand
PB=phosphor bronze
SF=strip feed
X=inconel X750
Y=316 stainless steel

YAG=M8-1,25x1D 316SS, silver plated insert



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„Recoil“

Materials

304 Stainless (Standard)

Most general applications in all materials.
Manufactured to AS7245.



Inconel (X)

Inconel X-750 is an alloy material with excellent high heat resistance and strength characteristics. Used in demanding applications like gas turbines and auto lambda sensors repairs, these inserts can withstand temperatures of 1020 °F and can be certified to GE Power Generation standards. Inconel X-625 material possesses very high corrosion resistance is used in sub-sea platforms and other critical salt water and marine applications.



1.4571 Stainless steel

Often used in highly corrosive application, Recoil 316 Stainless steel inserts provide a high degree of reliable corrosion resistance. In freshwater, saltwater, even chlorine environments, the inserts are designed to deliver years of failure-proof threadholding performance.



Phosphor Bronze (P)

Designed for electrical applications, Recoil Phosphor Bronze inserts provide no outside interference of signals. This characteristic ensures their successful use in electrical bonding joints and related operations. The advanced inserts have been successfully employed in the manufacturing of a wide range of sensitive electrical equipment including circuit boards, control boxes, and medical instrumentation and equipment.



Nitronic 60 Einsätze (N)

Designed for applications where galling can be a problem, Recoil Nitronic 60 inserts wear-resistant, anti-galling characteristics eliminate the need for additional lubrication. Based on the reduction in friction they provide, these inserts deliver more consistent clamping torque. In addition, Nitronic 60 inserts are suitable for use with stainless steel screws.



„Recoil“

Finishes and coatings

Silver plating (AG)

Primarily used to reduce the effects of galling (seizure) of screw threads in the high temperature service applications. Silver plating is the most commonly used coating for aero-engine fasteners providing an even degree of lubrications up to a maximum service temperature of about 650°C (1200°F). The plated silver is electrolytically deposited in typical thickness up to 6.3 µm (0.00025). Silver plated wire thread inserts may be installed into various housing materials including magnesium alloys, aluminium alloys, corrosion and heat resistant materials, etc.

Caution must be emphasized where inserts are to be installed into titanium alloy components which may exceed a service temperature of 300°C (570°F) silver plated inserts are not recommended with titanium housings as stress corrosion, resulting from the combination of silver with titanium may occur in the housing material. As DTD 939.



Tin plating (SN)

As per ISO 2093, used for moderate conditions typically in automotive applications.



Red dye coating

Recoil screw-locking inserts are, generally color coded with a red dye coating for identification purposes only. This organic resin based does not affect the installation or function of the inserts and normally does not need to be removed. However, if in extreme conditions of (such as precision instrument assembly in clean room conditions) removal of the dye may be desired. The red dye may be removed by soaking the inserts in a denatured alcohol solution prior to use. To prevent galling or seizing when using an unplated or corrosion resistant screw/bolt a screw-locking insert, we recommend the use of an anti-seize compound on the bolt threads.



Dry film lubrications (D)

Used for mildly corrosive or high temperature applications, dry film lubricants comprise suspensions of small particles of solid lubricants such as molybdenum disulphide (MoS₂) or PTFE, in organic or inorganic binders. They are applied as a thin film (5µm- 20µm) to grease-free metal surfaces. Through careful selection of appropriate additives and solvents, specific lubricants may be formulated to suit most industrial applications to service temperatures around 315°C (600°F). Special high temperature lubricant coatings are available for use up to 425°C (800°F). Recoil inserts may be coated with dry film lubricant in either the non-finished (passivated) condition or after cadmium plating treatment for maximum corrosion protection. As per AS5272.



„Recoil“

Finishes and coatings

Cadmium plating (C)

In mildly corrosive or marine environments, cadmium plating is the preferred treatment for providing protection against pitting of the insert/bolt materials and to minimize the risk of thread seizure. Plating thickness may vary depending on particular applications, between 2µm - 5µm (0.0001 - 0.0002). Following cadmium plating, either a bronze or olive chromate finish will be used to provide uniformity in the overall finish. It should be noted that cadmium plated parts must not:

- Be subjected to temperatures exceeding 235°C (455°F)
- Come into contact with fuel or hot oil
- Come into contact with food or drinking water
- Be used with titanium components either directly or indirectly as, at elevated temperatures, and subsequent component failure may occur.

Warning: Cadmium is a highly toxic compound. Because of its poisonous nature extreme care must be taken when handling.



Zinc-Nickel coating

Zinc-Nickel electroplating is an alloy coating and is an environmentally safe alternative to cadmium electroplating. Zinc-Nickel demonstrates equivalent, or better, corrosion properties when compared to cadmium and is normally applied for corrosion purposes and functions as a „sacrificial coating“, corroding before the base material. Zinc-Nickel is an efficient economical coating, with minimal environmental impact and is typically applied at 2.5µm thickness on wire thread inserts.

Salt spray corrosion tests are carried out (at least 1000 hours until red corrosion). Compliant and has been applied to meet the requirements of AMS 2417.



Blue and Green dye coating

This organic resin based dye does not affect the installation or function of the inserts and normally does not need to be removed. However, if in extreme conditions of cleanliness (such as precision instrument assembly in clean room conditions) removal of the dye may be desired. The red dye may be removed by soaking the inserts in a denatured alcohol solution prior to use. To prevent galling or seizing when using an unplated or corrosion resistant screw/bolt in a screw-locking insert, we recommend the use of an anti-seize compound on the bolt threads.

Note: Recoil inserts Green or Blue for identification purposes.



„Recoil“

Spark plugs

Wire thread inserts

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread inside- Ø	Art. no.	Lengths in Inch	Drill-Ø in mm	Outside-Ø in mm	Refill packages	
					Art. no.	UNIT
M10 -1,0	08108	0,339	-	-	28108	10
	08109	1/2	-	-	28109	10
M12 -1,25	08122	1/2	-	-	28122	10
	08123	3/4	-	-	28123	10
M14 -1,25	08148	3/8	14,25	15,62	28148	10
	08141	0,472	14,25	15,62	-	-
	08147	7/16	14,25	15,62	28147	10
	08149	1/2	14,25	15,62	28149	10
	08140	3/4	14,25	15,62	28140	10
M18 -1,5	08189	1/2	18,50	19,95	28189	5

Thread repair (Spark plugs – Kits)

„Metric“

Content:

- HSS special thread drill with guide nose
- Itallation tool
- Tang Break Tool
- Thread inserts
- Instruction



Thread inside- Ø	Art. no.	Inserts per kit
M10 -1,0	38108-2	10
M12 -1,0	38120-1	10
M12 -1,25	38120-2	10
M14 -1,25*	38140	10
M14 -1,25	38147	10
	38148-2	5
	38148	6
M18 -1,5	38188	5
	38188-1	6

Spark plug repair kits include Thread Drill with guide nose and pre-drilling is unnecessary. This makes a exact guidance guaranteed.

„Recoil“

Special sizes

Wire thread inserts

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread inside- Ø	Art. no.		Lengths		Drill Ø in mm	Outside Ø in mm	Thread Drill Art.Nr.		Refill packages	
	Free running	Self-locking	D	mm			3 Levels	Machine-Drill	Art. no.	UNIT
1/4 -24	04042-24		1D	-	-	-	44044-24	-	-	-
	04043-24		1,5 D	-			44045-24			
1/4 -32	04042-32	-	1D	-	13,6	-	44044-32	-	-	-
	04043-32		1,5 D	-			44045-32			
1" -20	04161-20-325	-	-	-	-	-	44165-16	-	-	-
HARLEY 7/16 -16	04073-16	-	-	-	-	-	44074-16 44075-16 44076-16	-	24073-16	10
CUMMINS 11/16 -16	04110-16-1.25	-	-	-	-	-	44114-16 44115-16 44116-16	-	-	-
CARBY 7/8 -20	04140-20-330	-	-	-	-	-	44144-20 44145-20 44146-20	-	-	-

Thread repair Kits

„inch“ - (Special sizes)

Thread inside- Ø „inch“	Art. no.	Inserts per kit
„UNEF“ -1/4 -32	34048-32	10
„HARLEY“ -1/4 -24	34048-24	10
„HARLEY“ -7/16 -16	34078-16	10
„CARBURETTOR“ -7/8 -20	34140-20	10
„CARBURETTOR“ -1 -20	34160-20	10
„CUMMINS- HEAD BOLT“ 11/16 -11	34110-16	10



„Recoil“

Bicycle Pedal Crank Repair Kit „Left and right“








Content:

- 1x left special thread drill with guide nose
- 1x right special thread drill with guide nose
- 2x inserts (5 left/ 5 right)
- Itallation tool
- Instruction



Thread-type	Art. no.	Inserts per kit	Refill Package	
			Art. no.	UNIT
UNEF	34096-20	5 9/16-20x 1/2 (12,7mm) long left inserts	24090-20LH	5
		5 9/16-20x 1/2 (12,7mm) long right inserts	24090-20	5

„Recoil“ Thread Drill/ Tap

Hand Thread Drill				
	Taper	Intermediate	Bottoming	Pilot-Nose
				
Article end digit	4	5	6	7
Application				
	<ul style="list-style-type: none"> •HSS Thread Drill •Suitable for manual or mechanical use. •For use in medium tensile materials. •Has a lead of eight threads •no size reduction. 	<ul style="list-style-type: none"> •HSS Thread Drill • Suitable for manual or mechanical use. •For use in medium tensile materials. •Has a lead of four threads •no size reduction. •Suitable for through and blind holes 	<ul style="list-style-type: none"> •HSS Thread Drill •Suitable for manual or mechanical use. •Zwei-Gang Anschnitt •Normally used after the pre-cutter and mid-cutter. •For use in medium tensile materials. 	<ul style="list-style-type: none"> • HSS Thread Drill • Suitable for manual use. • For use in medium tensile materials. • Repair of spark plug threads.
Machine thread Drill				
	Spiral point (Gun Nose)	Spiral flute	Thredflo "Roll thread" taps	
				
Article end digit	8	9	0	
Application				
	<ul style="list-style-type: none"> • HSSE Thread Drill • Suitable for tapping through holes. 	<ul style="list-style-type: none"> • HSSE Thread Drill • For all blind hole applications, especially for soft materials such as copper, magnesium and aluminium 	<ul style="list-style-type: none"> • HSS Thread Drill • Suitable for through and blind holes. • For materials with higher elasticity, e.g. materials with a low silicon content, aluminium and some stainless steels 	

„Recoil“

Metrice standard thread

Drahtgewindeeinsätze „Freewheeling and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill-Ø in mm	Outside Ø in mm	Thread Drill Art. no.		Refill package (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Machine- Drill	Art.no.	UNIT
M2 x 0,4	05022	15022	1D	2,0	2,10	-	45024 45025 45026	45028 45029	-	-
	05023	15023	1,5D	3,0					25023	10
	05024	15024	2D	4,0					-	-
	05025	15025	2,5D	5,0					-	-
	05026	15026	3D	6,0					-	-
M2.2 x 0,45	05012	15012	1D	2,2	2,30	-	45014 45015 45016	45018 45019	-	-
	05013	15013	1,5D	3,3					25013	10
	05014	15014	2D	4,4					-	-
	05015	15015	2,5D	5,5					-	-
	05016	15016	3D	6,6					-	-
M2.5 x 0,45	05252	15252	1D	2,5	2,60	3,08	45254 45255 45256	45258 45259	-	-
	05253	15253	1,5D	3,8					25253	10
	05254	15254	2D	5,0					-	-
	05255	15255	2,5D	6,3					-	-
	05256	15256	3D	7,5					-	-
M3 x 0,5	05032	15032	1D	3,0	3,10		45034 45035 45036	45038 45039	25032	10
	05033	15033	1,5D	4,5					25033	10
	05034	15034	2D	6,0					25034	10
	05035	15035	2,5D	7,5					-	-
	05036	15036	3D	9,0					-	-
M3.5 x 0,6	05352	15352	1D	3,5	3,60	4,28	45354 45355 45356	45358 45359	-	-
	05353	15353	1,5D	5,3					-	-
	05354	15354	2D	7,0					-	-
	05355	15355	2,5D	8,8					-	-
	05356	15356	3D	10,5					-	-
M4 x 0,7	05042	15042	1D	4,0	4,10	4,91	45044 45045 45046	45048 45049	25042	10
	05043	15043	1,5D	6,0					25043	10
	05044	15044	2D	8,0					25044	10
	05045	15045	2,5D	10,0					-	-
	05046	15046	3D	12,0					-	-
M5 x 0,8	05052	15052	1D	5,0	5,20	6,04	45054 45055 45056	45058 45059	25052	10
	05053	15053	1,5D	7,5					25053	10
	05054	15054	2D	10,0					25054	10
	05055	15055	2,5D	12,5					-	-
	05056	15056	3D	15,0					-	-
M6 x 1,0	05062	15062	1D	6,0	6,20	7,30	45064 45065 45066	45068 45069	25062	10
	05063	15063	1,5D	9,0					25063	10
	05064	15064	2D	12,0					25064	10
	05065	15065	2,5D	15,0					25065	10
	05066	15066	3D	18,0					-	-
M7 x 1,0	05072	15072	1D	7,0	7,20	8,30	45074 45075 45076	-	25072	10
	05073	15073	1,5D	10,5					25073	10
	05074	15074	2D	14,0					25074	10
	05075	15075	2,5D	17,5					-	-
	05076	15076	3D	21,0					-	-

„Recoil“

Metrice standard thread

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside - Ø	Art. no.		Lengths		Drill- Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free-running)	
	Free running	Self- locking	D	mm			3 Levels	Machine- Drill	Art. no.	UNIT
M8 x 1,25	05082	15082	1D	8,0	8,20	-	45084 45085 45086	45088 45089	25082	10
	05083	15083	1,5D	12,0					25083	10
	05084	15084	2D	16,0					25084	10
	05085	15085	2,5D	20,0					25085	10
	05086	15086	3D	24,0					-	-
M9 x 1.25	05092	-	1D	9,0	9,30	10,62	45094 45095 45096	-	-	-
	05093	-	1,5D	13,5					25093	10
	05094	-	2D	18,0					-	-
	05095	-	2,5D	22,5					-	-
	05096	-	3D	27,0					-	-
M10 x 1.5	05102	15102	1D	10,0	10,30	11,95	45104 45105 45106	45108 45109	25102	10
	05103	15103	1,5D	15,0					25103	10
	05104	15104	2D	20,0					25105	10
	05105	15105	2,5D	25,0					-	-
	05106	15106	3D	30,0					-	-
M11 x 1.5	05112	-	1D	11,0	11,30	12,95	45114 45115 45116	-	25112	10
	05113	-	1,5D	16,5					25113	10
	05114	-	2D	22,0					-	-
	05115	-	2,5D	27,5					-	-
	05116	-	3D	33,0					-	-
M12 x 1.75	05122	15122	1D	12,0	12,40	14,27	45124 45125 45126	45128 45129	25122	10
	05123	15123	1,5D	18,0					25123	10
	05124	15124	2D	24,0					25124	10
	05125	15125	2,5D	30,0					-	-
	05126	15126	3D	36,0					-	-
M14 x 2,0	05142	15142	1D	14,0	14,40	16,60	45144 45145 45146	45148 45149	25142	5
	05143	15143	1,5D	21,0					25143	5
	05144	15144	2D	28,0					25144	5
	05145	15145	2,5D	35,0					-	-
	05146	15146	3D	42,0					-	-
M15 x 2,0	05152	-	1D	15,0	15,50	17,60	45154 45155 45156	-	-	-
	05153	-	1,5D	22,5					25153	5
	05154	-	2D	30,0					-	-
	05155	-	2,5D	37,5					-	-
	05156	-	3D	45,0					-	-
M16 x 2,0	05162	15162	1D	16,0	16,50	18,60	45164 45165 45166	45168 45169	25163	5
	05163	15163	1,5D	24,0					25164	5
	05164	15164	2D	32,0					25165	5
	05165	15165	2,5D	40,0					-	-
	05166	15166	3D	48,0					-	-
M18 x 2.5	05182	15182	1D	18,0	18,50	21,25	45184 45185 45186	45188 45189	25182	5
	05183	15183	1,5D	27,0					25183	5
	05184	15184	2D	36,0					-	-
	05185	15185	2,5D	45,0					-	-
	05186	15186	3D	54,0					-	-

„Recoil“

Metrice standard thread

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill-Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill package (free-running)	
	Free running	Self-locking	D	mm			3 Levels	Machine-Drill	Art. no	UNIT
M20 x 2.5	05202	15202	1D	20,0	20,50	23,25	45204 45205 45206	45208 45209	-	-
	05203	15203	1,5D	30,0					25203	5
	05204	15204	2D	40,0					-	-
	05205	15205	2,5D	50,0					-	-
	05206	15206	3D	60,0					-	-
M22 x 2.5	05222	15222	1D	22,0	22,50	25,25	45224 45225 45226	-	-	-
	05223	15223	1,5D	33,0					25223	3
	05224	15224	2D	44,0					-	-
	05225	15225	2,5D	55,0					-	-
	05226	15226	3D	66,0					-	-
M24 x 3,0	05242	15242	1D	24,0	24,80	27,90	45244 45245 45246	45248 45249	-	-
	05243	15243	1,5D	36,0					25243	3
	05244	15244	2D	48,0					-	-
	05245	15245	2,5D	60,0					-	-
	05246	15246	3D	72,0					-	-
M27 x 3,0	05272	15272	1D	27,0	27,50	30,90	45274 45275 45276	-	-	-
	05273	15273	1,5D	40,5					25273	1
	05274	15274	2D	54,0					-	-
	05275	15275	2,5D	67,5					-	-
	02756	15276	3D	81,0					-	-
M30 x 3.5	05302	15302	1D	30,0	30,50	34,55	45304 45305 45306	45308 45309	-	-
	05303	15303	1,5D	45,0					25303	1
	05304	15304	2D	60,0					-	-
	05305	15305	2,5D	75,0					-	-
	05306	15306	3D	90,0					-	-
M30 x 3,0	05202-3	15302-3	1D	30,0	-	-	45304-3 45305-3 45306-3	-	-	-
	05203-3	15303-3	1,5D	45,0					25303-3	1
	05204-3	15304-3	2D	60,0					-	-
	05205-3	15305-3	2,5D	75,0					-	-
	05206-3	15306-3	3D	90,0					-	-
M36 x 4,0	05362	15362	1D	36,0	36,50	41,20	45364 45365 45366	45369	-	-
	05363	15363	1,5D	54,0					25363	1
	05364	15364	2D	72,0					-	-
	05365	15365	2,5D	90,0					-	-
	05366	15366	3D	108,0					-	-
M39 x 4,0	05392	15392	1D	39,0	39,50	44,20	45394 45395 45396	-	-	-
	05393	15393	1,5D	58,5					25393	1
	05394	15394	2D	78,0					-	-
	05395	-	2,5D	97,5					-	-
	05396	-	3D	117,0					-	-
M42 x 4,0	05422	-	1D	42,0	43,00	47,85	45424 45425 45426	-	25423-4	1
	05423	-	1,5D	63,0					-	-
	05424	-	2D	84,0					-	-
M42 x 4.5	05422-4	-	1D	42,0	-	-	45424-4 45425-4 45426-4	-	25423	1
	05423-4	-	1,5D	63,0					-	-
	05424-4	-	2D	84,0					-	-

„Recoil“

Metrice fine thread

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill-Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill package (free-running)	
	Free running	Self-locking	D	mm			3 Levels	Machine-Drill	Art. no.	UNIT
M8 x 1,0	07082	17082	1D	8,0	8,30	9,30	47084 47085 47086	47088 47089	27082	10
	07083	17083	1,5D	12,0					27083	10
	07084	17084	2D	16,0					27084	10
	07085	17085	2,5D	20,0					-	-
	07086	17086	3D	24,0					-	-
M9 x 1,0	07092	-	1D	9,0	9,30	10,30	47094 47095 47096	-	-	-
	07093	-	1,5D	13,5					27093	10
	07094	-	2D	18,0					-	-
	07095	-	2,5D	22,5					-	-
	07096	-	3D	27,0					-	-
M10 x 1.25	07102	17102	1D	10,0	10,30 10,40	11,62	47104 47105 47106	47108 47109	27102	10
	07103	17103	1,5D	15,0					27103	10
	07104	17104	2D	20,0					27104	10
	07105	17105	2,5D	25,0					-	-
	07106	17106	3D	30,0					27106	10
M10 x 1,0	08102	-	1D	10,0	10,30	11,30	48104 48105 48106	48108 48109	28102	10
	08103	-	1,5D	15,0					28103	10
	08104	-	2D	20,0					28104	10
	08105	-	2,5D	25,0					-	-
	08106	-	3D	30,0					-	-
M11 x 1.25	07112	-	1D	11,0	-	-	47114 47115 47116	-	-	-
	07113	-	1,5D	16,5					27113	10
	07114	-	2D	22,0					-	-
	07115	-	2,5D	27,5					-	-
	07116	-	3D	33,0					-	-
M11 x 1,0	08112	-	1D	11,0	11,30	12,30	48114 48115 48116	-	-	-
	08113	-	1,5D	16,5					28113	10
	08114	-	2D	22,0					-	-
	08115	-	2,5D	27,5					-	-
	08116	-	3D	33,0					-	-
M12 x 1.5	07122	17122	1D	12,0	12,50	13,95	47124 47125 47126	47128 47129	27122	10
	07123	17123	1,5D	18,0					27123	10
	07124	17124	2D	24,0					27124	10
	07125	17125	2,5D	30,0					-	-
	07126	17126	3D	36,0					-	-
M12 x 1.25	08122	-	1D	12,0	12,30	13,62	48124 48125 48126	48128 48129	-	-
	08123	-	1,5D	18,0					28123	10
	08124	-	2D	24,0					28124	10
	08125	-	2,5D	30,0					-	-
	08126	-	3D	36,0					-	-
M14 x 1.5	07142	17142	1D	14,0	14,30 14,50	15,95	47144 47145 47146	47148 47149	-	-
	07143	17143	1,5D	21,0					27143	5
	07144	17144	2D	28,0					27144	5
	07145	17145	2,5D	35,0					-	-
	07146	17146	3D	42,0					-	-

„Recoil“

Metrice fine thread

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill- Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self- locking	D	mm			3 Levels	Machine -Drill	Art. no.	UNIT
M15 x 1,5	07152	-	1D	15,0	15,50	16,95	47154 47155 47156	-	-	-
	07153	-	1,5D	22,5					27153	5
	07154	-	2D	30,0					-	-
	07155	-	2,5D	37,5					-	-
	07156	-	3D	45,0					-	-
M16 x 1,5	07162	17162	1D	16,0	16,50	17,95	47164 47165 47166	47168 47169	27162	5
	07163	17163	1,5D	24,0					27163	5
	07164	17164	2D	32,0					-	-
	07165	17165	2,5D	40,0					27165	5
	07166	17166	3D	48,0					-	-
M18 x 2,0	07182	17182	1D	18,0	18,50	20,60	47184 47185 47186	47188 47189	-	-
	07183	17183	1,5D	27,0					-	-
	07184	17184	2D	36,0					27183	5
	07185	17185	2,5D	45,0					-	-
	07186	17186	3D	54,0					-	-
M18 x 1,5	08182	-	1D	18,0	18,50	19,95	48184 48185 48186	48188 48189	-	-
	08183	-	1,5D	27,0					28133	5
	08184	-	2D	36,0					-	-
	08185	-	2,5D	45,0					-	-
	08186	-	3D	54,0					-	-
M20 x 2,0	07202	17202	1D	20,0	20,50	22,60	47204 47205 47206	-	-	-
	07203	17203	1,5D	30,0					27203	5
	07204	17204	2D	40,0					-	-
	07205	17205	2,5D	50,0					-	-
	07206	17206	3D	60,0					-	-
M20 x 1,5	08202	-	1D	20,0	20,50	21,95	48204 48205 48206	-	-	-
	08203	-	1,5D	30,0					28203	5
	08204	-	2D	40,0					-	-
	08205	-	2,5D	50,0					-	-
	08206	-	3D	60,0					-	-
M22 x 2,0	07222	17222	1D	22,0	22,50	24,60	47224 47225 47226	-	-	-
	07223	17223	1,5D	33,0					27223	3
	07224	17224	2D	44,0					-	-
	07225	17225	2,5D	55,0					-	-
	07226	17226	3D	66,0					-	-
M22 x 1,5	08222	-	1D	22,0	22,50	23,95	48224 48225 48226	-	-	-
	08223	-	1,5D	33,0					28223	3
	08224	-	2D	44,0					-	-
	08225	-	2,5D	55,0					-	-
	08226	-	3D	66,0					-	-
M24 x 2,0	07242	17242	1D	24,0	24,50	26,60	47244 47245 47246	47248 47249	-	-
	07243	17243	1,5D	36,0					27273	3
	07244	17244	2D	48,0					-	-
	07245	17245	2,5D	60,0					-	-
	07246	17246	3D	72,0					-	-

„Recoil“

Metrice fine thread

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill- Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self- locking	D	mm			3 Levels	Machine -Drill	Art. no.	UNIT
M24 x 1,5	08242	-	1D	24,0	24,50	25,95	48244 48245 48246	48247	-	-
	08243	-	1,5D	36,0					28243	3
	08244	-	2D	48,0					-	-
	08245	-	2,5D	60,0					-	-
	08246	-	3D	72,0				-	-	
M26 x 1,5	08262	-	1D	26,0	26,50	27,95		48267	-	-
	08263	-	1,5D	39,0					28263	1
	08264	-	2D	52,0					-	-
	08265	-	2,5D	65,0					-	-
	08266	-	3D	78,0				-	-	
M27 x 2,0	07272	17272	1D	27,0	27,50	29,60	47274 47275 47276		-	-
	07273	17273	1,5D	40,5					27273	1
	07274	17274	2D	54,0					-	-
	07275	17275	2,5D	67,5					-	-
	07276	17276	3D	81,0				-	-	
M30 x 2,0	07302	17302	1D	30,0	30,50	32,60	47304 47305 47306		-	-
	07303	17303	1,5D	45,0					27303	1
	07304	17304	2D	60,0					-	-
	07305	17305	2,5D	75,0					-	-
	07306	17306	3D	90,0				-	-	
M30 x 1,5	08302	-	1D	30,0	30,50	31,95	48304 48305 48306		-	-
	08303	-	1,5D	45,0					28303	1
	08304	-	2D	60,0					-	-
	08305	-	2,5D	75,0					-	-
	08306	-	3D	90,0				-	-	
M36 x 3,0	07362	17362	1D	36,0	37,00	39,90	47364 47365 47366		-	-
	07363	17363	1,5D	54,0					27363	1
	07364	17364	2D	72,0					-	-
	07365	17365	2,5D	90,0					-	-
	07366	17366	3D	108,0				-	-	
M36 x 1,5	08362	-	1D	36,0			48364 48365 48366		-	-
	08363	-	1,5D	54,0					28363	1
	08364	-	2D	72,0					-	-
	08364	-	2,5D	90,0					-	-
	08366	-	3D	108,0				-	-	
M39 x 3,0	07392	17392	1D	39,0	40,00	42,90	47394 47395 47396		-	-
	07393	17393	1,5D	58,5					27393	1
	07394	17394	2D	78,0					-	-
	07395	-	2,5D	97,5					-	-
	07396	-	3D	117,0				-	-	
M39 x 2,0	08392	-	1D	39,0	39,50	41,60	48394 48395 48396		-	-
	08393	-	1,5D	58,5					28393	1
	08394	-	2D	78,0					-	-
	08395	-	2,5D	97,5					-	-
	08396	-	3D	117,0				-	-	

„Recoil“

Metrice fine thread

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill-Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self-locking	D	mm			3 Levels	Machine -Drill	Art. no.	UNIT
*M42 x 2,0	08422	-	1D	42,0	42,50	44,60	48424 48425 48426	-	-	-
	08423	-	1,5D	63,0					28423	1
	08424	-	2D	84,0					-	-
	-	-	-	-					-	-
M42 x 3,0	07422	-	1D	42,0	43,00	45,90	47424 47425 47426	-	-	-
	07423	-	1,5D	63,0					27423	1
	07424	-	2D	84,0					-	-
	-	-	-	-					-	-
	-	-	-	-					-	-

* on request



„Recoil“

American coarse thread (UNC)

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill- Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
2 -56	03522	13522	1D	2,0	2,3	2,84	43524 43525 43526	43528 43529	23522	10
	03523	13523	1,5D	3,0					23523	10
	03524	13524	2D	4,0					-	-
	03525	13525	2,5D	5,0					-	-
	03526	13526	3D	6,0					-	-
3 -48	03532	13532	1D	2,2	2,7	-	43534 43535 43536	43538 43539	-	-
	03533	13533	1,5D	3,3					23533	10
	03534	13534	2D	4,4					-	-
	03535	13535	2,5D	5,5					-	-
	03536	13536	3D	6,6					-	-
4 -40	03542	13542	1D	2,5	3,0	3,67	43544 43545 43546	43548 43549	-	-
	03543	13543	1,5D	3,8					23543	10
	03544	13544	2D	5,0					23544	10
	03545	13545	2,5D	6,3					-	-
	03546	13546	3D	7,5					-	-
5 -40	03552	13552	1D	3,0	3,4	4,00	43554 43555 43556	43558 43559	-	-
	03553	13553	1,5D	4,5					23553	10
	03554	13554	2D	6,0					-	-
	03555	13555	2,5D	7,5					-	-
	03556	13556	3D	9,0					-	-
6 -32	03562	13562	1D	3,5	3,7	4,54	43564 43565 43566	43568 43569	-	-
	03563	13563	1,5D	5,3					23563	10
	03564	13564	2D	7,0					-	-
	03565	13565	2,5D	8,8					-	-
	03566	13566	3D	10,5					-	-
8 -32	03582	13582	1D	4,0	4,4	5,20	43584 43585 43586	43588 43589	-	-
	03583	13583	1,5D	6,0					23583	10
	03584	13584	2D	8,0					-	-
	03585	13585	2,5D	10,0					-	-
	03586	13586	3D	12,0					-	-
10 -24	03602	13602	1D	5,0	5,0	6,20	43604 43605 43606	43608 43609	23602	10
	03603	13603	1,5D	7,5					23603	10
	03604	13604	2D	10,0					-	-
	03605	13605	2,5D	12,5					-	-
	03606	13606	3D	15,0					-	-
12 -24	03622	13622	1D	6,0	5,8	6,86	43624 43625 43626	43628 43629	-	-
	03623	13623	1,5D	9,0					23623	10
	03624	13624	2D	12,0					-	-
	03625	13625	2,5D	15,0					-	-
	03626	13626	3D	18,0					-	-
1/4 -20	03042	13042	1D	7,0	6,7	8,00	43044 43045 43046	43048 43049	23042	10
	03043	13043	1,5D	10,5					23043	10
	03044	13044	2D	14,0					23044	10
	03045	13045	2,5D	17,5					-	-
	03046	13046	3D	21,0					-	-

„Recoil“

American coarse thread (UNC)

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
5/16 -18	03052	13052	1D	8,0	8,3	9,77	43054 43055 43056	43058 43059	23052	10
	03053	13053	1,5D	12,0					23053	10
	03054	13054	2D	16,0					23054	10
	03055	13055	2,5D	20,0					-	-
	03056	13056	3D	24,0					-	-
3/8 -16	03062	13062	1D	10,0	9,9	11,59	43064 43065 43066	43068 43069	23062	10
	03063	13063	1,5D	15,0					23063	10
	03064	13064	2D	20,0					23064	10
	03065	13065	2,5D	25,0					-	-
	03066	13066	3D	30,0					-	-
7/16 -14	03072	13072	1D	11,0	11,5	13,47	43074 43075 43076	43078 43079	-	-
	03073	13073	1,5D	16,5					23073	10
	03074	13074	2D	22,0					23074	10
	03075	13075	2,5D	27,5					-	-
	03076	13076	3D	33,0					-	-
1/2 -13	03082	13082	1D	11,0	13,0	15,24	43084 43085 43086	43088 43089	23082	10
	03083	13083	1,5D	16,5					23083	10
	03084	13084	2D	22,0					23084	10
	03085	13085	2,5D	27,5					-	-
	03086	13086	3D	33,0					-	-
9/16 -12	03092	13092	1D	14,0	14,5	17,04	43094 43095 43096	43098 43099	-	-
	03093	13093	1,5D	21,0					23093	5
	03094	13094	2D	28,0					-	-
	03095	13095	2,5D	35,0					-	-
	03096	13096	3D	42,0					-	-
5/8 -11	03102	13102	1D	15,0	16,5	18,88	43104 43105 43106	43108 43109	23102	5
	03103	13103	1,5D	22,5					23103	5
	03104	13104	2D	30,0					-	-
	03105	13105	2,5D	37,5					-	-
	03106	13106	3D	45,0					-	-
11/16 -11	03102	13112	1D	16,0	-	-	43114 43115 43116	-	-	-
	03103	13113	1,5D	24,0					23113	5
	03104	13114	2D	32,0					-	-
	03105	13115	2,5D	40,0					-	-
	03106	13116	3D	48,0					-	-
3/4 -10	03122	13122	1D	18,0	19,80	22,35	43124 43125 43126	43128 43129	-	-
	03123	13123	1,5D	27,0					23123	5
	03124	13124	2D	36,0					-	-
	03125	13125	2,5D	45,0					-	-
	03126	13126	3D	54,0					-	-
7/8 -9	03142	13142	1D	22,0	23,0	25,89	43144 43145 43146	43148 43149	-	-
	03143	13143	1,5D	33,0					23143	3
	03144	13144	2D	44,0					-	-
	03145	13145	2,5D	55,0					-	-
	03146	13146	3D	66,0					-	-

„Recoil“

American coarse thread (UNC)

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill package (free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
1" -8	03162	13162	1D	24,0	26,0	29,53	43164 43165 43166	43168 43169	-	-
	03163	13163	1,5D	36,0					23163	3
	03164	13164	2D	48,0					-	-
	03165	13165	2,5D	60,0					-	-
	03166	13166	3D	72,0					-	-
1 1/8 -7	03182	13182	1D	26,0	29,5	33,29	43184 43185 43186	-	-	-
	03183	13183	1,5D	39,0					23183	1
	03184	13184	2D	52,0					-	-
	03185	13185	2,5D	65,0					-	-
	03186	13186	3D	78,0					-	-
1 1/4 -7	03202	13202	1D	30,0	33,0	36,46	43204 43205 43206	-	-	-
	03203	13203	1,5D	45,0					23203	1
	03204	13204	2D	60,0					-	-
	03205	13205	2,5D	75,0					-	-
	03206	13206	3D	90,0					-	-
1 3/8 -6	03222	13222	1D	36,0	-	-	43224 43225 43226	-	-	-
	03223	13223	1,5D	54,0					23223	1
	03224	13224	2D	72,0					-	-
	03225	13225	2,5D	90,0					-	-
	03226	13226	3D	108,0					-	-
1 1/2 -6	03242	13242	1D	39,0	39,0	43,60	43244 43245 43246	-	-	-
	03243	13243	1,5D	58,5					23243	1
	03244	13244	2D	78,0					-	-
	03245	13245	2,5D	97,5					-	-
	03246	13246	3D	117,0					-	-



„Recoil“

American fine thread (UNF)

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
3 -56	04532	14532	1D	2,2	2,70	-	44534 44535 44536	43589*	-	-
	04533	14533	1,5D	3,3					24533	10
	04534	14534	2D	4,4					-	-
	04535	-	2,5D	5,5					-	-
4 -48	04536	-	3D	6,6	3,0	3,53	44544 44545 44546	44548 44549	-	-
	04542	14542	1D	2,5					24543	10
	04543	14543	1,5D	3,8					-	-
	04544	14544	2D	5,0					-	-
6 -40	04545	-	2,5D	6,3	3,7	4,33	44564 44565 44566	44568 44569	-	-
	04546	-	3D	7,5					24563	10
	04562	14562	1D	3,5					-	-
	04563	14563	1,5D	5,3					-	-
8 -36	04564	14564	2D	7,0	4,4	5,08	44584 44585 44586	44588 44589	-	-
	04565	-	2,5D	8,8					24583	10
	04566	-	3D	10,5					-	-
	04582	14582	1D	4,0					-	-
10 -32	04583	14583	1,5D	6,0	5,1	5,86	44604 44605 44606	44608 44609	24583	10
	04584	14584	2D	8,0					-	-
	04585	-	2,5D	10,0					-	-
	04586	-	3D	12,0					-	-
1/4 -28	04602	14602	1D	5,0	6,6	7,53	44044 44045 44046	44048 44049	24603	10
	04603	14603	1,5D	7,5					-	-
	04604	14604	2D	10,0					-	-
	04605	14605	2,5D	12,5					-	-
5/16 -24	04606	14606	3D	15,0	8,2	9,31	44054 44055 44056	44058 44059	-	-
	04042	14042	1D	7,0					24043	10
	04043	14043	1,5D	10,5					-	-
	04044	14044	2D	14,0					-	-
3/8 -24	04045	14045	2,5D	17,5	9,8	10,90	44064 44065 44066	44068 44069	-	-
	04046	14046	3D	21,0					24052	10
	04052	14052	1D	8,0					24053	10
	04053	14053	1,5D	12,0					24054	10
7/16 -20	04054	14054	2D	16,0	11,5	12,76	44074 44075 44076	44078 44079	-	-
	04055	14055	2,5D	20,0					-	-
	04056	14056	3D	24,0					-	-
	04062	14062	1D	10,0					24063	10
7/16 -20	04063	14063	1,5D	15,0	9,8	10,90	44064 44065 44066	44068 44069	24064	10
	04064	14064	2D	20,0					-	-
	04065	14065	2,5D	25,0					-	-
	04066	14066	3D	30,0					-	-
7/16 -20	04072	14072	1D	11,0	11,5	12,76	44074 44075 44076	44078 44079	-	-
	04073	14073	1,5D	16,5					24073	10
	04074	14074	2D	22,0					24074	10
	04075	14075	2,5D	27,5					-	-
	04076	14076	3D	33,0					-	-

„Recoil“

American coarse thread (UNF)

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
1/2 -20	04082	14082	1D	11,0	13,0	14,35	44084 44085 44086	44088 44089	24082	10
	04083	14083	1,5D	16,5					24083	10
	04084	14084	2D	22,0					24084	10
	04085	14085	2,5D	27,5					-	-
	04086	14086	3D	33,0					-	-
9/16 -18	04092	14092	1D	14,0	14,5	16,12	44094 44095 44096	44098 44099	-	-
	04093	14093	1,5D	21,0					24093	5
	04094	14094	2D	28,0					-	-
	04095	14095	2,5D	35,0					-	-
	04096	14096	3D	42,0					-	-
5/8 -18	04102	14102	1D	15,0	16,3	17,71	44104 44105 44106	44108 44109	-	-
	04103	14103	1,5D	22,5					24103	5
	04104	14104	2D	30,0					-	-
	04105	14105	2,5D	37,5					-	-
	04106	14106	3D	45,0					-	-
3/4 -16	04122	14122	1D	18,0	19,5	21,11	44124 44125 44126	44128 44129	-	-
	04123	14123	1,5D	27,0					24123	5
	04124	14124	2D	36,0					-	-
	04125	14125	2,5D	45,0					-	-
	04126	14126	3D	54,0					-	-
7/8 -14	04142	14142	1D	22,0	22,5	24,58	44144 44145 44146	44149*	-	-
	04143	14143	1,5D	33,0					24143	3
	04144	14144	2D	44,0					-	-
	04145	14145	2,5D	55,0					-	-
	04146	14146	3D	66,0					-	-
1" -12	04162	14162	1D	24,0	26,0	28,15	44164 44165 44166	44169*	-	-
	04163	14163	1,5D	36,0					24163	3
	04164	14164	2D	48,0					-	-
	04165	14165	2,5D	60,0					-	-
	04166	14166	3D	72,0					-	-
1 1/8 -12	04182	14182	1D	26,0	29,5	31,33	44184 44185 44186	-	-	-
	04183	14183	1,5D	39,0					24183	1
	04184	14184	2D	52,0					-	-
	04185	14185	2,5D	65,0					-	-
	04186	14186	3D	78,0					-	-
1 1/4 -12	04202	14202	1D	30,0	32,5	34,50	44204 44205 44206	-	-	-
	04203	14203	1,5D	45,0					24183	1
	04204	14204	2D	60,0					-	-
	04205	14205	2,5D	75,0					-	-
	04206	14206	3D	90,0					-	-

* on request

„Recoil“

American fine thread (UNF)

Wire thread inserts „Free-running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self-locking	D	mm			3 Levels	Maschine-Drill	Art. no.	UNIT
1 3/8 - 12	04222	14222	1D	36,0	36,0	37,68	44224 44225 44226	-	-	-
	04223	14223	1,5D	54,0					24223	1
	04224	14224	2D	72,0					-	-
	04225	14225	2,5D	90,0					-	-
	04226	14226	3D	108,0				-	-	
1 1/2 - 12	04242	14242	1D	39,0	39,0	40,85	44244 44245 44246	-	-	-
	04243	14243	1,5D	58,5					24243	1
	04244	14244	2D	78,0					-	-
	04245	14245	2,5D	97,5					-	-
	04246	14246	3D	117,0				-	-	

American coarse thread (NPT)

Wire thread inserts

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self-locking	D	mm			3 Levels	Maschine-Drill	Art. no.	UNIT
1/8 - 27	06023	-	1,5D	0,273	-	-	46024 46025 46026	-	26023	10
1/4 - 18	06043	-	1,5D	0,394	-	-	46044 46045 46046	-	26043	10
3/8 - 18	06063	-	1,5D	0,407	-	-	46064 46065 46066	-	26063	10
1/2 - 14	06083	-	1,5D	0,534	-	-	46084 46085 46086	-	26083	5
3/4 - 14	06123	-	1,5D	0,553	-	-	46124 46125 46126	-	26123	5
1 - 11 1/2	06163	-	1,5D	0,661	-	-	46164 46165 46166	-	26163	5

„Recoil“

British coarse thread

Wire thread inserts „Standard“ (BSW / Withworth-thread)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
3/16 -24	02032	-	1D	-	5,0	6,01	42034 42035 42036	42039*	-	-
	02033	-	1,5D	-					22033	10
	02034	-	2D	-					-	-
	02035	-	2,5D	-					-	-
	02036	-	3D	-					-	-
1/4 -20	02042	-	1D	7,0	6,7	7,84	42044 42045 42046	42049	-	-
	02043	-	1,5D	10,5					22043	10
	02044	-	2D	14,0					-	-
	02045	-	2,5D	17,5					-	-
	02046	-	3D	21,0					-	-
5/16 -18	02052	-	1D	8,0	8,3	9,59	42054 42055 42056	42059	-	-
	02053	-	1,5D	12,0					22053	10
	02054	-	2D	16,0					-	-
	02055	-	2,5D	20,0					-	-
	02056	-	3D	24,0					-	-
3/8 -16	02062	-	1D	10,0	9,9	11,39	42064 42065 42066	42069	-	-
	02063	-	1,5D	15,0					22063	10
	02064	-	2D	20,0					-	-
	02065	-	2,5D	25,0					-	-
	02066	-	3D	30,0					-	-
7/16 -14	02072	-	1D	11,0	11,5	13,24	42074 42075 42076	-	-	-
	02073	-	1,5D	16,5					22073	10
	02074	-	2D	22,0					-	-
	02075	-	2,5D	27,5					-	-
	02076	-	3D	33,0					-	-
1/2 -12	02082	-	1D	12,0	13,0	15,17	42084 42085 42086	-	22082	10
	02083	-	1,5D	18,0					22083	10
	02084	-	2D	24,0					22084	10
	02085	-	2,5D	30,0					-	-
	02086	-	3D	36,0					-	-
9/16 -12	02092	-	1D	14,0	15,0	16,76	42094 42095 42096	-	-	-
	02093	-	1,5D	21,0					22093	5
	02094	-	2D	28,0					-	-
	02095	-	2,5D	35,0					-	-
	02096	-	3D	42,0					-	-
5/8 -11	02102	-	1D	15,0	16,7	18,57	42104 42105 42106	-	-	-
	02103	-	1,5D	22,5					22103	5
	02104	-	2D	30,0					-	-
	02105	-	2,5D	37,5					-	-
	02106	-	3D	45,0					-	-
3/4 -10	02122	-	1D	18,0	20,0	22,02	42124 42125 42126	-	-	-
	02123	-	1,5D	27,0					22123	5
	02124	-	2D	36,0					-	-
	02125	-	2,5D	45,0					-	-
	02126	-	3D	54,0					-	-

* on request

„Recoil“

British coarse thread

Wire thread inserts „Standard“ (BSW / Withworth-thread)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
7/8 -9	02142	-	1D	22,0	23,0	25,52	42144 42145 42146	-	-	-
	02143	-	1,5D	33,0					22143	3
	02144	-	2D	44,0					-	-
	02145	-	2,5D	55,0					-	-
	02146	-	3D	66,0					-	-
1" -8	02162	-	1D	24,0	26,5	-	42164 42165 42166	-	-	-
	02163	-	1,5D	36,0					22163	3
	02164	-	2D	48,0					-	-
	02165	-	2,5D	60,0					-	-
	02166	-	3D	72,0					-	-



„Recoil“

British fine thread

Wire thread inserts „Standard“ (BSF)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
3/16 -32	00032	-	1D	-	5,0	5,71	40034 40035 40036	-	20032	10
	00033	-	1,5D	-					20033	10
	00034	-	2D	-					-	-
	00035	-	2,5D	-					-	-
	00036	-	3D	-					-	-
1/4 - 20	00042	-	1D	7,0	6,6	7,51	40044 40045 40046	-	20043	10
	00043	-	1,5D	10,5					-	-
	00044	-	2D	14,0					-	-
	00045	-	2,5D	17,5					-	-
	00046	-	3D	21,0					-	-
5/16 -22	00052	-	1D	8,0	8,3	9,30	40054 40055 40056	-	20052	10
	00053	-	1,5D	12,0					20053	10
	00054	-	2D	16,0					20054	10
	00055	-	2,5D	20,0					-	-
	00056	-	3D	24,0					-	-
3/8 -20	00062	-	1D	10,0	9,9	11,02	40064 40065 40066	-	20062	10
	00063	-	1,5D	15,0					20063	10
	00064	-	2D	20,0					20064	10
	00065	-	2,5D	25,0					-	-
	00066	-	3D	30,0					-	-
7/16 -18	00072	-	1D	11,0	11,5	12,78	40074 40075 40076	-	-	-
	00073	-	1,5D	16,5					20073	10
	00074	-	2D	22,0					-	-
	00075	-	2,5D	27,5					-	-
	00076	-	3D	33,0					-	-
1/2 -16	00082	-	1D	12,0	13,1	14,57	40084 40085 40086	-	20082	10
	00083	-	1,5D	18,0					20083	10
	00084	-	2D	24,0					20084	10
	00085	-	2,5D	30,0					-	-
	00086	-	3D	36,0					-	-
9/16 -16	00092	-	1D	14,0	14,8	16,16	40094 40095 40096	-	-	-
	00093	-	1,5D	21,0					20093	5
	00094	-	2D	28,0					-	-
	00095	-	2,5D	35,0					-	-
	00096	-	3D	42,0					-	-
5/8 -14	00102	-	1D	15,0	16,4	18,01	40104 40105 40106	-	-	-
	00103	-	1,5D	22,5					20103	5
	00104	-	2D	30,0					-	-
	00105	-	2,5D	37,5					-	-
	00106	-	3D	45,0					-	-
3/4 - 12	00122	-	1D	18,0	19,5	21,53	40124 40125 40126	-	-	-
	00123	-	1,5D	27,0					20123	5
	00124	-	2D	36,0					-	-
	00125	-	2,5D	45,0					-	-
	00126	-	3D	54,0					-	-

„Recoil“

British fine thread

Wire thread inserts „Standard“ (BSF)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Maschine- Drill	Art. no.	UNIT
7/8 -11	00142	-	1D	22,0	22,5	24,94	40144 40145 40146	-	-	-
	00143	-	1,5D	33,0					20143	3
	00144	-	2D	44,0					-	-
	00145	-	2,5D	55,0					-	-
1" -10	00146	-	3D	66,0	26,0	28,38	40164 40165 40166	-	-	-
	00162	-	1D	24,0					20163	3
	00163	-	1,5D	36,0					-	-
	00164	-	2D	48,0					-	-
	00165	-	2,5D	60,0					-	-
00166	-	3D	72,0	-	-					

British thread

Wire thread inserts „Standard“ (BSC)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Machine- Drill	Art. no.	UNIT
5/16 -26	06502	-	1D	-	-	-	46504 46505 46506	-	-	-
	06503	-	1,5D	-					26503	10
	06504	-	2D	-					-	-
3/8 -26	06602	-	1D	-	-	-	46604 46605 46606	-	-	-
	06603	-	1,5D	-					26603	10
	06604	-	2D	-					-	-
7/16 -26	06702	-	1D	-	-	-	46704 *46705 46706	-	-	-
	06703	-	1,5D	-					26703	10
	06704	-	2D	-					-	-
1/2 -26	06802	-	1D	-	-	-	46804 46805 *46806	-	-	-
	06803	-	1,5D	-					26803	10
	06804	-	2D	-					-	-

* on request

„Recoil“

British thread

Wire thread inserts „Standard“ (BA)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Außen Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self-locking	D	mm			3 Levels	Machine-Drill	Art. no.	UNIT
0BA	00502	-	1D	-	6,2	7,12	40504 40505 40506	-	-	-
	00503	-	1,5D	-					20503	10
	00504	-	2D	-					-	-
	00505	-	2,5D	-					-	-
1BA*	00512	-	1D	-	5,5	6,31	40514 40515 40516	-	-	-
	-	-	-	-					-	-
	00514	-	2D	-					-	-
	00515	-	2,5D	-					-	-
2BA	00522	-	1D	-	4,9	5,61	40524 40525 40526	-	-	-
	00523	-	1,5D	-					20523	10
	00524	-	2D	-					-	-
	00525	-	2,5D	-					-	-
4BA	00542	-	1D	-	3,8	4,35	40544 40545 40546	-	-	-
	00543	-	1,5D	-					20543	10
	00544	-	2D	-					-	-
	00545	-	2,5D	-					-	-
6BA	00562	-	1D	-	2,9	3,40	40564 40565 40566	-	-	-
	00563	-	1,5D	-					20563	10
	00564	-	2D	-					-	-
	00565	-	2,5D	-					-	-
	00566	-	3D	-					-	-

* on request



„Recoil“

British thread

Wire thread inserts „Standard“ 8 TPI (UN)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside-Ø in mm	Thread Drill Art. No.		Refill packages (Free running)		
	Free running	Self-locking	D	mm			3 Levels	Machine-Drill	Art. no.	UNIT	
1 1/8 -3	06182	-	1D	-	-	-	46184	-	-	-	
	06183	-	1,5D	-			46185		-	-	-
	06184	-	2D	-			46186		-	-	-
1 1/4 -8	06202	-	1D	-	-	-	46204	-	-	-	
	06203	-	1,5D	-			46205		-	-	-
	06204	-	2D	-			46206		-	-	-
1 3/8 -8	06222	-	1D	-	-	-	46224	-	-	-	
	06223	-	1,5D	-			46225		-	-	-
	06224	-	2D	-			46226		-	-	-
1 1/2 -8	06242	-	1D	-	-	-	46244	-	-	-	
	06243	-	1,5D	-			46245		-	-	-
	06244	-	2D	-			46246		-	-	-
1 5/8 -8	06262	-	1D	-	-	-	46264	-	-	-	
	06263	-	1,5D	-			46265		-	-	-
	06264	-	2D	-			46266		-	-	-
1 3/4 -8	06282	-	1D	-	-	-	46284	-	-	-	
	06283	-	1,5D	-			46285		-	-	-
	06284	-	2D	-			46286		-	-	-
1 7/8 -8	06302	-	1D	-	-	-	46304	-	-	-	
	06303	-	1,5D	-			46305		-	-	-
	06304	-	2D	-			46306		-	-	-
2" -8	06322	-	1D	-	-	-	46324	-	-	-	
	06323	-	1,5D	-			46325		-	-	-
	06324	-	2D	-			46326		-	-	-



„Recoil“

British standard pipe thread

Wire thread inserts „Standard“ (BSP)

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Drill Ø in mm	Outside- Ø in mm	Thread Drill Art. No.		Refill packages (Free running)	
	Free running	Self- locking	D	mm			3 Levels	Machine- Drill	Art. no.	UNIT
1/8-28	01022	-	1D	-	9,9	-	41024	-	21022	10
	01023	-	1,5D	0,273			41025		21023	10
	01024	-	2D	-			41026		21024	10
1/4-19	01042	-	1D	-	13,5	-	41044	-	21042	10
	01043	-	1,5D	0,394			41045		21043	10
	01044	-	2D	-			41046		21044	10
3/8-19	01062	-	1D	-	17,0	-	41064	-	21062	10
	01063	-	1,5D	0,407			41065		21063	10
	01064	-	2D	-			41066		21064	10
1/2-14	01082	-	1D	-	21,5	-	41084	-	21082	5
	01083	-	1,5D	0,534			41085		21083	5
	01084	-	2D	-			41086		21084	5
5/8-14	01102	-	1D	-	23,5	-	41104	-	-	-
	01103	-	1,5D	-			41105		21103	5
	01104	-	2D	-			41106		-	-
3/4-14	01122	-	1D	-	27,0	-	41124	-	-	-
	01123	-	1,5D	0,553			41125		21123	5
	01124	-	2D	-			41126		-	-
1"-11	01162	-	1D	-	33,5	-	41164	-	-	-
	01163	-	1,5D	0,661			41165		21163	3
	01164	-	2D	-			41166		-	-



„Recoil“

Thread repair Kits

„Metric“

Content:

- HSS special thread drill
- Installation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction

From size M13 -1.75 without tang remover and drill.

„Type 1“



„Type 2“



Thread inside- Ø „Metric“	Art. no.	Type	Inserts per kit	Core-Ø SpiralDrill Ø in mm
M2 -0,4	35028	1	15	2,1
M2,2 -0,45	35018	1	15	2,3
M2,5 -0,45	35258	1	15	2,6
M3 -0,5	35038	1	15	3,2
M3,5 -0,6*	35358	1	10	3,7
M4 -0,7	35048	1	15	4,2
M5 -0,8	35058	1	15	5,2
M6 -1,0	35068	1	15	6,3
M7 -1,0	35078	1	15	7,3
M8 -1,25	35088	1	15	8,3
M9 -1,25	35098	1	15	9,4
M10 -1,5	35108	1	10	10,4
M11 -1,5	35118	1	10	11,5
M12 -1,75	35128	1	10	12,5
M13 -1,75	35138	1	6	13,5
M14 -2,0	35148	1	6	14,5
M15 -2,0	35158	1	6	15,5
M16 -2,0	35168	1	6	16,5
M18 -2,5	35188	1	6	18,8
M20 -2,5	35208	1	6	20,8
M22 -2,5	35220	2	5	22,8
M24 -3,0	35240	2	5	24,8
M27 -3,0	35270	2	5	28,0
M30 -3,5	35300	2	5	30,5
M30 -3,0*	35300-3	2	5	31,0
M33- 0,5	35330	2	5	34,0
M36 -4,0	35360	2	4	37,0
M39 -4,0	35390	2	4	40,0
M42 -4,0*	35420-4	2	4	43,0
M42 -4,5	35420	2	4	43,0
M45 -4,5*	35450	2	4	-
Left-hand thread				
M6- 1,0	35068LH	1	10	6,3
M8- 1,25	35088LH	1	10	8,3
M10- 1,5	35108LH	1	10	10,4
M12- 1,75	35128LH	1	5	12,5

* on request

„Recoil“

Thread repair Kits

„Metric- Fine“

Content:

- HSS special thread drill
- Itallation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction

From size M13 -1.5 without tang remover and drill.

Thread inside- \varnothing „Metric- Fine“	Art. no.	Type	Inserts per kit
M8 -1,0	37088	1	15
M9 -1,0	37098	1	10
M10 -1,25	37108	1	10
M11 -1,25	37118	1	10
M12 -1,5	37128	1	10
M13 -1,5	37138	1	6
M14 -1,5	37148	1	6
M15 -1,5	37158	1	5
M16 -1,5	37168	1	6
M18 -2,0	37188	1	6
M20 -2,0	37208	1	6
M22 -2,0	37220	2	5
M24 -2,0	37240	2	5
M27 -2,0	37270	2	5
M30 -2,0	37300	2	5
M36 -3,0	37360	2	4
M39 -3,0	37390	2	4
M42 -3,0	37420	2	4

„Type 1“



Thread repair Kits

„Metric- Extra- Fine“

From size M13 -1.25 without tang remover and drill.

Thread inside- \varnothing „Metric- X- Fine“	Art. no.	Type	Inserts per kit
M10 -1,0	38108	1	10
M11 -1,0	38118	1	10
M12 -1,25	38128	1	10
M13 -1,25	38138	1	6
M14 -1,25	38148-1	1	6
M18 -1,5	38188	1	6
M20 -1,5	38208	2	5
M22 -1,5	38220	2	5
M24 -1,5	38240	2	5
M25 -1,5	38250	2	5
M26 -1,5	38260	2	5
M27 -1,5	38270	2	5
M30 -1,5	38300	2	5
M36 -1,5	38360	2	4
M39 -2,0	38390	2	5
M42 -2,0	38420	2	4

„Type 2“



„Recoil“

Thread repair- (Mini Kombi Kits)

„Metric“

Content:

- HSS - HSS special thread drill standard
- Itallation tool
- Tang Break Tool
- Thread inserts (3 different thread sizes)
- Instruction

Thread-type	Art. no.	Inserts per kit (10pcs.)
Metric	35001	M5, M6, M8



Thread repair- (Kombi Kits)

„Metric“

Content:

- HSS special thread Drill Standard
- Itallation tool
- Tang Break Tool
- Thread inserts (5 different thread sizes)
- Instruction

Thread-type	Art. no.	Inserts per kit
Metric	35003R	M4, M5, M6, M8, M10
Metric	35004R	M5, M6, M8, M10, M12
Metric	35005R	M6, M8, M10, M12, M16
Metric	37007R	M6, M8, M10, M12, M14 -1,25
Motorcycle	38006R	M6, M8, M10-1, M10-1,25, M12-1,25, M14-1,25



„Recoil“

Thread repair Kits

„inch“ - (UNC)

Content:

- HSS special thread drill
- Itallation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction

From size 9/16 -12 including size 12-24 without Driving pin remover and drill.

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
2 -56	33528	1	15
3 -48	33538	1	15
4 -40	33548	1	15
5 -40	33558	1	15
6 -32	33568	1	15
8 -32	33588	1	15
10 -24	33608	1	15
12 -24	33628	1	15
1/4 -20	33048	1	15
5/16 -18	33058	1	15
3/8 -16	33068	1	15
7/16 -14	33078	1	10
1/2 -13	33088	1	10
9/16 -12	33098	1	6
5/8 -11	33108	1	6
11/16 -11	33110	1	5
3/4 -10	33128	1	6
7/8 -9	33140	2	5
1 -8	33160	2	5
1 1/8 -7	33180	2	5
1 1/4 -7	33200	2	5
1 3/8 -6	33220	2	5
1 1/2 -6	33240	2	4
1/4 20	*33048	1	36
5/16 -18	*33058	1	36
3/8 -16	*33068	1	18
1/2 -13	*33088	1	18

„Type 1“



„Type 2“



„Recoil“

Thread repair Kits

„inch“ - (UNF)

Content:

- HSS special thread drill
- Itallation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction

From size 9/16 -18 without tang remover and drill.

Thread inside- Ø „Zoll“	Art. no.	Type	Inserts per kit
3 -56	34538	1	15
4 -48	34548	1	15
6 -40	34568	1	15
8 -36	34588	1	15
10 -32	34608	1	15
12 -28	34628	1	15
1/4 -28	34048	1	15
5/16 -24	34058	1	15
3/8 -24	34068	1	15
7/16 -20	34078	1	10
1/2 -20	34088	1	10
9/16 -18	34098	1	6
5/8 -18	34108	1	6
3/4 -16	34128	1	6
7/8 -14	34140	2	5
1 -12	34160	2	5
*1 -14	34160-14	2	5
1 1/8 -12	34180	2	5
1 1/4 -12	34200	2	5
1 3/8 -12	34220	2	3
1 1/2 -12	34240	2	3

* on request

Thread repair Kits

„inch“ - (BA)

Content:

- HSS special thread drill
- Itallation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction

Thread inside- Ø „inch“	Art. no.	Type	Inserts per kit
0 BA	30508	1	15
2 BA	30528	1	15
4 BA	30548	1	15
6 BA	30568	1	15

„Type 1“



„Type 2“



„Recoil“

Thread repair Kits

„inch“ - (BSC/ BRASS)

Content:

- HSS special thread drill standard
- Itallation tool
- Thread inserts
- Instruction

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
5/16 -26	36508	1	15
3/8 -26	36608	1	10
7/16 -26	36708	1	10
1/2 -26	36808	1	10

„Type 1“



Thread repair Kits

„inch“ - (BSF)

Content:

- HSS special thread drill standard
- Itallation tool
- Tang Break Tool
- Thread inserts
- Drill
- Instruction



From size 9/16 -16 without tang remover and drill.

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
3/16 -32	30038	1	15
1/4 -26	30048	1	15
5/16 -22	30058	1	15
3/8 -20	30068	1	10
7/16 -18	30078	1	10
1/2 -16	30088	1	10
9/16 -16	30098	1	6
5/8 -14	30108	1	6
3/4 -12	30128	1	6
7/8 -11	30140	2	5
1 -10	30160	2	5
1 1/4 -9	30200	2	5

„Type 2“



„Recoil“

Thread repair Kits

„inch“ - (BSP)

Content:

- HSS special thread drill
- Itallation tool
- Thread inserts
- Instruction

From size 1/4 -19 without tang remover and drill.

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
1/8 -28	31028	1	10
1/4 -19	31048	1	6
3/8 -19	31068	1	6
1/2 -14	31080	2	5
5/8 -14	31100	2	5
3/4 -14	31120	2	5
1 -11	31160	2	5

„Type 1“



Thread repair Kits

„inch“ - (BSW)

Content:

- HSS special thread drill
- Itallation tool
- Thread inserts
- Instruction

From size 9/16 -12 without tang remover and drill.

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
1/8 -40	32028	1	15
3/16 -24	32038	1	15
1/4 -20	32048	1	15
5/16 -18	32058	1	15
3/8 -16	32068	1	10
7/16 -14	32078	1	10
1/2 -12	32088	1	10
9/16 -12	32098	1	6
5/8 -11	32108	1	6
3/4 -10	32128	1	6
7/8 -9	32140	2	5
1 -8	32160	2	5
1 1/8 -7	32180	2	5
1 1/4 -7	32200	2	5
1 3/8 -6	32220	2	5
1 1/2 -6	32240	2	5

„Type 2“



„Recoil“

Thread repair Kits

„inch“ - (NPT)

Content:

- HSS special thread drill
- Itallation tool
- Thread inserts
- Instruction

From size 1/4 -18 without tang remover and drill.

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
1/8 -27	36028	1	10
1/4 -18	36048	1	10
3/8 -18	36068	1	6
1/2 -14	36080	2	5
3/4 -14	36120	2	5
1 -11 1/2	36160	2	5

„Type 1“



Thread repair Kits

„inch“ - (8 TPI UN)

Content:

- HSS special thread drill
- Itallation tool
- Thread inserts
- Instruction

Thread inside- ø „inch“	Art. no.	Type	Inserts per kit
1 1/8 -8	36180	2	5
1 1/4 -8	36200	2	5
1 3/8 -8	36220	2	5
1 1/2 -8	36240	2	4
1 5/8 -8	36260	2	4
1 3/4 -8	36280	2	4
1 7/8 -8	36300	2	4
2 -8	36320	2	4

„Type 2“



„Recoil“

Thread repair (Mini Kombi Kits) „inch“

Content:

- HSS special thread drill standard
- Tang Break Tool
- Thread inserts (3 different thread sizes)
- Drill
- Instruction

Thread-type	Art. no.	Inserts per kit
UNC	33001	1/4, 5/16, 3/8
UNF	34001	1/4, 5/16, 3/8



Thread repair (Kombi Kits) „inch“

Content:

- HSS special thread drill standard
- Itallation tool
- Tang Break Tool
- Thread inserts (5 different thread sizes)
- Drill
- Instruction

Thread-type	Art. no.	Inserts per kit
BSF	30004R	1/4, 5/16, 3/8, 7/16, 1/2
BSP	31004R	1/8, 1/4, 3/8, 1/2
BSW	32004R	1/4, 5/16, 3/8, 7/16, 1/2
UNC	33004R	1/4, 5/16, 3/8, 7/16, 1/2
UNF	34004R	1/4, 5/16, 3/8, 7/16, 1/2
NPT	36004R	1/8, 1/4, 3/8, 1/2



„Recoil“

Metrice standard thread (taped)

Wire thread inserts „Free running and self-locking“

Taps content:

- Pre-cutters, intermediate and finishing cutters



Thread Inside Ø	Art. no.		Lengths		Core- Ø SpiralDrill Ø in mm	Outside- Ø in mm	Set thread drill Art. no.	Rollers Ø in mm	Inserts per strap
	Free running	Self- locking	D	mm					
M2,2 x 0,45	05012SF	15012SF	1D	2,2	2,1	-	45025	200	1000
	05013SF	15013SF	1,5D	3,3					
	05014SF	15014SF	2D	4,4					
M2,5 x 0,45	05252SF	15252SF	1D	2,5	2,6	-	45015	200	1000
	05253SF	15253SF	1,5D	3,8					
	05254SF	15254SF	2D	5,0					
M3 x 0,5	05032SF	15032SF	1D	2,5	3,10	3,65	45035	200	1000
	05033SF	15033SF	1,5D	3,8				290	
	05034SF	15034SF	2D	5,0					
M4 x 0,7	05042SF	15042SF	1D	4,0	4,10	4,91	45045	200	1000
	05043SF	15043SF	1,5D	6,0				290	
	05044SF	15044SF	2D	8,0					
M5 x 0,8	05052SF	15052SF	1D	5,0	5,20	6,04	45055		1000
	05053SF	15053SF	1,5D	7,5				290	500
	05054SF	15054SF	2D	10,0					
M6 x 1,0	05062SF	15062SF	1D	7,0	6,20	7,30	45065	200	500
	05063SF	15063SF	1,5D	10,5				290	
	05064SF	15064SF	2D	14,0					
M8 x 1,25	05082SF	15082SF	1D	8,0	8,30	8,30	45075	290	500
	05083SF	15083SF	1,5D	12,5				385	
	05084SF	15084SF	2D	16,0					
M8 x 1,0	07082SF	17082SF	1D	8,0	8,20		47085	290	
	07083SF	17083SF	1,5D	12,0					
	07084SF	17084SF	2D	16,0					
M12 -1,75	05122SF	15122SF	1D	8,0	12,40	14,27	45125	290	125
	05123SF	15123SF	1,5D	12,0					
	05124SF	15124SF	2D	16,0					

„Recoil“

„inch UNC“ (taped)

Wire thread inserts „Free running and self-locking“



Thread Inside Ø	Art. no.		Lengths		Core- Ø SpiralDrill Ø in mm	Outside-Ø in mm	Set thread drill Art. no.	Rollers Ø in mm	Inserts per strap
	Free running	Self- locking	D	mm					
2- 56	03522SF	13522SF	1D	2,0	2,3	2,84	43525	200	1000
	03523SF	13523SF	1,5D	3,0					
	03524SF	13524SF	2D	4,0					
3- 48	03532SF	13532SF	1D	2,2	2,7	-	43535	200	1000
	03533SF	13533SF	1,5D	3,3					
	03534SF	13534SF	2D	4,4					
4- 40	03542SF	13542SF	1D	2,5	3,0	-	43545	200	1000
	03543SF	13543SF	1,5D	3,8				290	
	03544SF	13544SF	2D	5,0					
5- 40	03552SF	13552SF	1D	2,5	3,1	3,67	43545	200	1000
	03553SF	13553SF	1,5D	3,8					
	03554SF	13554SF	2D	5,0					
6- 32	03562SF	13562SF	1D	3,5	3,4	4,00	43555	200	1000
	03563SF	13563SF	1,5D	5,3				290	
	03564SF	13564SF	2D	7,0					
8- 32	03582SF	13582SF	1D	4,0	4,4	-	43585	290	1000
	03583SF	13583SF	1,5D	6,0					
	03584SF	13584SF	2D	8,0					
10- 24	03602SF	13602SF	1D	5,0	3,8	4,54	43565	290	1000
	03603SF	13603SF	1,5D	7,5					500
	03604SF	13604SF	2D	10,0					
1/4- 20	03042SF	13042SF	1D	7,0	6,7	8,00	43045	290	500
	03043SF	13043SF	1,5D	10,5					250
	03044SF	13044SF	2D	14,0					
5/16- 18	03052SF	13052SF	1D	8,0	8,3	-	43055	290	250
	03053SF	13053SF	1,5D	12,0					
	03054SF	13054SF	2D	16,0					

„Recoil“

„Inch- UNF“ (Taped)

Wire thread inserts „Free running and self-locking“



Thread Inside Ø	Art. no.		Lengths		Core-Ø SpiralDrill Ø in mm	Outsid e-Ø in mm	Set thread drill	Rollers Ø in mm	Inserts per strap
	Free running	Self-locking	D	mm			Art. no.		
3- 56	04532SF	14532SF	1D	2,2	2,65	-	44535	200	1000
	04533SF	14533SF	1,5D	3,3					
	04534SF	14534SF	2D	4,4					
4- 48	04542SF	14542SF	1D	2,5	3,0	3,53	44545	200	1000
	04543SF	14543SF	1,5D	3,8				290	
	04544SF	14544SF	2D	5,0					
6- 40	04562SF	14562SF	1D	3,5	3,7	4,33	44565	200	1000
	04563SF	14563SF	1,5D	5,3				290	
	04564SF	14564SF	2D	7,0					
8- 36	04582SF	14582SF	1D	4,0	4,4	5,08	44585	290	1000
	04583SF	14583SF	1,5D	6,0					
	04584SF	14584SF	2D	8,0					
10- 32	04602SF	14602SF	1D	5,0	5,1	5,86	44605	290	1000
	04603SF	14603SF	1,5D	7,5				500	
	04604SF	14604SF	2D	10,0					
1/4- 28	04042SF	14042SF	1D	7,0	6,6	7,53	44045	290	500
	04043SF	14043SF	1,5D	10,5					
	04044SF	14044SF	2D	14,0					
5/16- 24	04052SF	14052SF	1D	8,0	8,2	9,31	44055	290	250
	04053SF	14053SF	1,5D	12,0					
	04054SF	14054SF	2D	16,0					

„Recoil“

Hand Tools

„Metric“



Thread Ø Inside	Installation tools				
					
	Plastic body	Metal body		Aluminium body	Metal
Standard thread					
M2 x 0,4	-	55021	50061-20	-	-
M2.2 x 0,45	-	55011	50061-21	-	-
M2.5 x 0,45	55252U	55251	50069-21	-	-
M3 x 0,5	55032U	55031	50089-17	-	-
M3.5 x 0,6	-	55351	50095-15	-	-
M4 x 0,7	55042U	55041	50125-13	-	-
M5 x 0,8	55052U	55051	50156-9	-	-
M6 x 1,0	55062U	55061	50188-5	-	-
M7 x 1,0	55072U	55071	50219-4	-	-
M8 x 1,25	55082U	55081	50250-7	-	-
M9 x 1,25	55092U	55091	50281-5	-	-
M10 x 1,5	55102U	55101	50281-4	-	-
M12 x 1,75	55122U	55121	50375-1	-	-
M14 x 2	55142U	55141	50438-0	-	-
M15 x 2	-	-	50438-0	-	55146
M16 x 2	-	-	50500-0	55161	55166
M18 x 2,5	-	55181	50591-0	-	-
M22 x 2,5	-	-	50688	-	-
M24 x 3	-	-	50750	-	-
M27 x 3	-	55271	50875	-	-
M30 x 3,5	-	55301	51000	-	-
M30 x 3	-	-	-	-	-
M36 x 4	-	-	51125	-	-
M39 x 4	-	-	51250	-	-
Fine thread					
M8 x 1	-	57081	50250-7	-	-
M9 x 1	-	57091	50281-5	-	-
M10 x 1,0	-	58101	50313-4	-	-
M10 x 1,25	57102U	57101		-	-
M12 x 1,25	58122U	58121	50375-1	-	-
M12 x 1,5	57122U	57121		-	-
M14 x 1,5	-	57141	50438-0	-	-
M16 x 1,5	-	-	50500-0	57161	-
M18 x 1,5	-	57181	50591-0	-	-
M18 x 2	-	58181		-	-

„Recoil“

Hand Tools

„Inch“








Thread Ø Inside	Installation tools				
	Plastic body	Metal body		Aluminium body	Metal
Standard					
2- 56	53522U	53521	50061-17	-	-
3- 48	53532U	53531	50069-17	-	-
4- 40	53542U	53541	50077-17	-	-
5- 40	-	53551	50089-18	-	-
3/16- 32	-	-	50156-9	-	-
6- 32	53562U	53561	50095-16	-	-
8- 32	53582U	53581	50125-14	-	-
10- 24	53602U	53601	50140-11	-	-
12- 24	-	53621	50156-10	-	-
1/4- 20	53042U	53041	50188-10	-	-
5/16- 18	53052U	53051	50219-8	-	-
3/8- 16	53062U	53061	50281-4	-	-
7/16- 14	53072U	53071	50344-3	-	-
1/2- 13	53082U	53081	50375-2	-	-
9/16- 12	-	-	50438-1	53091	53096
5/8- 11	-	-	50500-1	53101	53106
3/4- 10	-	-	50591-1	53121	53126
7/8- 9	-	-	50688	53141	53146
1-8	-	-	50750	53161	53166
1 1/8- 7	-	-	50875	53181	53186
1 1/4-7	-	-	51000	53201	53209
1 3/8- 6	-	-	51063	53221	53226
1 1/2- 6	-	-	51125	53241	53246
1 7/8- 8	-	-	51500	-	-
3/8- 20	-	-	50281-5	-	-

„Recoil“

Hand Tools

„Inch“







Thread Ø Inside	Installation tools				
					
	Plastic body	Metal body		Aluminium body	Metal
Fine thread					
3- 56	-	54531	50069-17	-	-
4- 48	-	54541	50077-17	-	-
6- 40	-	54561	50095-17	-	-
8- 36	-	54581	50125-14	-	-
10- 32	54602U	54601	50156-11	-	-
1/4- 28	54042U	54041	50188-10	-	-
5/16- 24	54052U	54051	50250-5	-	-
3/8- 24	54062U	54061	50313-6	-	-
7/16- 20	54072U	54071	50344-4	-	-
1/2- 20	54082U	54081	50375-3	-	-
9/16- 18	-	-	50438-0	54091	-
5/8- 18	-	-	50500-0	54101	-
3/4- 16	-	-	50591-0	54121	-
7/8- 14	-	-	50688	54141	-
1- 12	-	-	50750	54161	-
1-14	-	-	-	54171	-
1 1/8- 12	-	-	51000	54181	-
1 1/4- 12	-	54201	51063	-	-
1 3/8- 12	-	54221	51125	-	-
1 1/2- 12	-	54241	51250	-	-
1/8- 27	-	-	50313-3	-	-
1/8- 28	-	-	50313-5	-	-
3/8- 26	-	-	50313-5	-	-
5/16- 22	50250U	-	50250-5	-	-
1/8- 40	-	-	50089-19	-	-
3/16- 24	-	-	50140-9	-	-
7/16	-	-	50344-1	-	-

„Recoil“

Hand Tools

„Metric“







Thread Ø Inside	Tang breaker and boring tools				
					
	magnetic	with spring	pneumatic	Boring tools	
Standard thread					
M2 x 0,4	M59060	59061	-	50001	-
M2.2 x 0,45	-	-	-		
M2.5 x 0,45	M59070	59071	-		
M3 x 0,5	M59090	59091	-		
M3.5 x 0,6	M59100	59101	-		
M4 x 0,7	M59130	59121	-		
M5 x 0,8	M59160	59141	-		
M6 x 1,0	M59190	59181	-		
M7 x 1,0	-	-	-		
M8 x 1,25	M59250	59241	-		
M9 x 1,25	-	-	-		
M10 x 1,5	M59280	59291	-		
M12 x 1,75	M59380	59331	59332		
M14 x 2	-	-	-		
M15 x 2	-	-	-		
M16 x 2	-	-	-	-	
M18 x 2,5	-	-	-		
M22 x 2,5	-	-	-		
M24 x 3	-	-	-		
M27 x 3	-	-	-		50004
M30 x 3,5	-	-	-		
M30 x 3	-	-	-	50005 bis M65	
M36 x 4	-	-	-		
M39 x 4	-	-	-		
Fine thread					
M8 x 1	M59250	59241	-	50002	
M9 x 1	-	-	-		
M10 x 1,0	-	59291	-		
M10 x 1,25	M59310	-	-		
M12 x 1,25	-	59332	-	50003	
M12 x 1,5	-	-	-		
M14 x 1,5	-	59462	59462		
M16 x 1,5	-	-	-		
M18 x 1,5	-	-	-		
M18 x 2	-	-	-		

„Recoil“

Hand Tools

„Inch“



Thread Ø Inside	Tang breakers and boring tools				
					
	magnetic	with spring	pneumatic	Boring tools	
Standard					
2- 56	-	59061	-	50001	-
3- 48	-	59071	-		
4- 40	-	59081	-		
5- 40	-	59091	-		
3/16- 32	-	-	-	50003	50002
6- 32	-	59101	-		
8- 32	-	59121	-		
10- 24	M59140	59141	-		
12- 24	-	-	-	50003	-
1/4- 20	-	59181	-		
5/16- 18	M59220	59241	-		
3/8- 16	-	59291	-		
7/16- 14	-	-	-	50004	-
1/2- 13	-	59332	59332		
9/16- 12	-	-	-		
5/8- 11	-	-	-		
3/4- 10	-	-	-	50004	-
7/8- 9	-	-	-		
1-8	-	-	-		
1 1/8- 7	-	-	-		
1 1/4- 7	-	-	-	50004	50005
1 3/8- 6	-	-	-		
1 1/2- 6	-	-	-		
Fine thread					
3- 56	-	59071	-	50001	
4- 48	-	59081	-	50002	-
6- 40	-	59101	-		
8- 36	-	59121	-		
10- 32	-	59141	-		
1/4- 28	-	59181	-	-	50003
5/16- 24	-	59241	-		
3/8- 24	-	59291	-		
7/16- 20	-	-	-		
1/2- 20	-	-	-	-	-
9/16- 18	-	-	-		
5/8- 18	-	-	-		
3/4- 16	-	-	-		
7/8- 14	-	-	-	-	-
1- 12	-	-	-		
1-14	-	-	-		
1 1/8- 12	-	-	-	50004	

„Recoil“

Hexagonal assembly mandrel

can be used with:

- „electric“ tool REC-12
- „pneumatic“ tool REC-10K
- „battery-powered“ tool REC-20



Thread Ø inside	Art. no.	Length In mm	ØB
Metric			
M2 x 0,4	55027	100	8
M2,5 x 0,45	55257	100	8
M3 x 0,5	55037	100	8
M3,5 x 0,6	55357	100	8
M4 x 0,7	55047	100	8
M5 x 0,8	55057	100	10
M6 x 1,0	55067	100	11
M8 x 1,25	55087	100	14
M10 x 1.5	55107	100	14
UNC			
2- 56	53527	100	8
4- 40	53547	100	8
5- 40	53557	100	8
6- 32	53567	100	8
8- 32	53587	100	8
10- 24	53607	100	8
1/4- 20	53047	100	13
5/16- 18	53057	100	14
3/8- 16	53067	100	14
UNF			
10- 32	54607	100	10
1/4- 28	54047	100	11



Thread limit plug gauges

Thread Ø inside	Art. no.
Metric	
M2,5- 0,45	65255
M3- 0,5	65035
M4- 0,7	65045
M5- 0,8	65055
M6- 1	65065
M8- 1	67085
M8- 1,25	65085
M10- 1,25	67105
M10- 1,5	65105
M12- 1,75	65125
M14- 2	65145
M16- 2	65165
Inch	
3- 48	63532
5- 40	63552
12- 24	63622
9/16- 12	63092
10- 32	64602
1/4- 28	64042
5/16- 24	64052
3/8- 24	64062



„Recoil“

Gewindegrenzlehrdornen

Metrisch

Gewinde Ø Innen	Art. Nr.	
	4H/5H enge Passung	5H mittlere Passung
M2-0,4	65024	65025
M2,2-0,45	65014	65015
M2,5-0,45	65254	65255
M3-0,5	65034	65035
M3,5-0,6	65354	65355
M4-0,7	65044	65045
M5-0,8	65054	65055
M6-1,0	65064	65065
M7-1,0	65074	65075
M8-1,25	65084	65085
M9-1,25	65094	65095
M10-1,5	65104	65105
M11-1,5	65114	65115
M12-1,75	65124	65125
M13-1,75	65134	65135
M14-2,0	65144	65145
M15-2,0	65154	65155
M16-2,0	65164	65165
M18-2,5	65184	65185
M20-2,5	65204	65205
M22-2,5	65224	65225
M24-3,0	65244	65245
M27-3,0	65274	65275
M30-3,5	65304	65305
M30-3,0	65304-3	65305-3
M36-4,0	65364	65365
M39-4,0	65394	65395
M42-4,5	65424	65425
M42-4,0	65424-4	65425-4



„Recoil“

Gewindegrenzlehrdornen

Metrisch-Fein

Gewinde Ø Innen	Art. Nr.	
	4H/5H close fit	5H medium fit
M8-1,0	67084	67085
M10-1,0	68104	68105
M10-1,25	67104	67105
M11-1,0	68114	68115
M11-1,25	67114	67115
M12-1,25	68124	68125
M12-1,5	67124	67125
M13-1,25	68134	68135
M13-1,5	67134	67135
M14-1,5	67144	67145
M15-1,5	67154	67155
M16-1,5	67164	67165
M18-1,5	68184	68185
M18-2,0	67184	67185
M20-1,5	68204	68205
M20-2,0	67204	67205
M22-1,5	68224	68225
M22-2,0	67224	67225
M24-1,5	68244	68245
M24-2,0	67244	67245
M26-1,5	68264	68265
M27-1,5	68274	68275
M27-2,0	67274	67275
M30-1,5	68304	68305
M30-2,0	68304	67305
M36-1,5	68364	68365
M36-3,0	67364	67365
M39-2,0	68394	68395
M39-3,0	67394	67395
M42-2,0	68424	68425
M42-3,0	67424	67425



„Recoil“

Gewindegrenzlehrdornen

Zoll

Gewinde Ø Innen	Art. Nr.	
	3B close fit	2B medium fit
UNC		
2-56	63523	63522
3-48	63533	63532
4-40	63543	63542
5-40	63553	63552
6-32	63563	63562
8-32	63583	63582
10-24	63603	63602
12-24	63623	63622
1/4-20	63043	63042
5/16-18	63053	63052
3/8-16	63063	63062
7/16-14	63073	63072
1/2-13	63083	63082
9/16-12	63093	63092
5/8-11	63103	63102
11/16-11	63113	63112
3/4-10	63123	63122
7/8-9	63143	63142
1-8	63163	63162
1 1/8-7	63183	63182
1 1/4-7	63203	63202
1 3/8-6	63223	63222
1 1/2-6	63243	63242
UNF		
3-56	64533	64532
4-48	64543	64542
6-40	64563	64562
8-36	64583	64582
10-32	64603	64602
1/4-28	64043	64042
5/16-24	64053	64052
3/8-24	64063	64062
7/16-20	64073	64072
1/2-20	64083	64082
9/16-18	64093	64092
5/8-18	64103	64102
3/4-16	64123	64122
7/8-14	64143	64142
1-12	64163	64162
1-14	64163-14	64162-14
1 1/8-12	64183	64182
1 1/4-12	64203	64202
1 3/8-12	64223	64222
1 1/2-12	64243	64242



„Recoil“

„Automatic“ Tools

Can be used with: „Pneumatic“ tool REC-10
„Electric“ tool REC-12



<p>Vorspannhülse mit Dorn (FEA)</p>		<p>HEX-Adapter</p> <p>Large Adapter</p> <p>Small Adapter</p>			
Thread Ø inside	Preload sleeve with mandrel (FEA)	small Adapter	large Adapter	HEX-Adapter	Drive
Metric „Standard thread“					
M2,5- 0,45	M8751-2.5-15	M8550R	-	-	REC-10
M3- 0,5	M8751-3-15				
M4- 0,7	M8751-4-15				
M5- 0,8	M8751-5-15				
M6- 1	M8751-6-15				
M8- 1,25	M8755-8-15	-	M85501R	-	REC-10
M10- 1,5	M8751-10-15*				
M12- 1,75	M8751-12-15*				
M16- 2	M8751-16*				
Metric „Fine“					
M8- 1	M8751-8-15	M8550R	-	-	REC-10
M10- 1	M8755-10-15*				
M10- 1,25	M8756-10-15*				
M12- 1,25	M8756-12-15*				
M12- 1,5	M8753-12-15*				
M14- 1,5	M8753-14*				

*on request

„Recoil“

„Automatic“ Tools

Can be used with: „Pneumatic“ tool REC-10
„Electric“ tool REC-12



<p>Vorspannhülse mit Dorn (FEA)</p>		<p>HEX-Adapter</p> <p>Large Adapter</p> <p>Small Adapter</p>			
Thread Ø Inside	Preload sleeve with mandrel (FEA)	small Adapter	large Adapter	HEX-Adapter	Drive
UNC					
2- 56	M8551-02-15	M8550R	-	-	REC-10
4- 40	M8551-04-15				
5- 40	M8551-05-15				
6- 32	M8551-06-15				
8- 32	M8551-2-15				
10- 24	M8551-3-15				
1/4- 20	M8551-4-15	-	M85501R	-	REC-10
5/16- 18	M8251-5-15				
3/8- 16	M8251-6-15*				
7/16- 14	M8251-7-15*				
1/2- 13	M8251-8-15*				
5/8- 11	M8251-9*				
3/4- 10	M8251-10*				
UNF					
6- 40	M8552-06-15	M8550R	-	-	REC-10
10- 32	M8552-3-15				
1/4- 28	M8552-4-15				
5/16- 24	M8252-5-15	-	M85501R	HEX Adapter	REC-10
3/8- 24	M8252-6-15				
7/16- 20	M8252-7-15				
1/2- 20	M8252-8-15				
5/8- 18	M8252-9*				
3/4- 16	M8252-10*				

*on request

„Recoil“

REC-12 Electric tool



The REC-12 electric tool is designed for small and large production quantities and can be designed for loose or taped Recoil, Tanged and Tangless inserts can be used.

Main features:

- Ligth
- Auto reverse
- Used for Tanged and Tangless Thread Inserts and Tooling
- Loose or belted - usable for HEX (FEA-Front- End-Assembly)
- Usable up to M6 or 1/4
- Low and high speed function
- CE-certified
- Hard shell housing



REC-10K pneumatic tool



For installation of Tanged and Tangless thread inserts.
The REC-10K with air motor contains small and large attachments for Recoil applications (FEA-Front End Assembly) from M2.5 to M16 or 2-56 - 5/8" and an attachment suitable for 1/4" drive mandrel. The air regulator, lubricator and pressure gauge help clean the air and regulate the lubricant for the air motor.

- Suitable standard 1/4" HEX actuator Size range M2 – M12/ 2-56 – 1/2"
- Suitable small adaptor Size range (FEA) M2,5 – M6/ 2-56 – 1/4"
- Suitable large adaptor Size range (FEA) M8- M14; 5/16"- 3/4"
- CE-Zertifiziert
- Packed in a hard-shell case



„Recoil“

REC-10K
automatic tool
Suitcase -Content:



Content	Quantity
Standard 1/4" Hex Drive	1
Suitable small adaptor (FEA)	1
Suitable large adaptor (FEA)	1
Air regulator	1
Lubrication device	1
Pressure gauge	1
Hose	1
Screwdriver	1
Wrench for adaptor	2
Handbook with parts list	1



Air regulator/
Lubrication device



Pressure gauge

HEX
Adapter



small
Adapter



large Adapter

Front tool (FEA)



Spacer



Spacer

„Recoil“

REC-20 Battery Driver tool

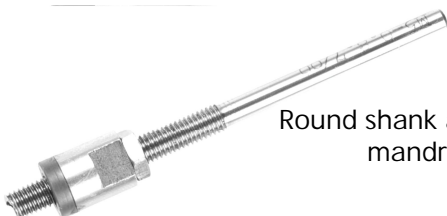


The REC-20 a lightweight battery-operated tool for small productions and difficult to reach threaded holes. Works vertically and horizontally in 2 speed levels. Suitable for Recoil Tanged and Tangless inserts (M2 - M6 or 2-56 - 1/4").

- inclusive spare battery
- Suitable for 1/4" hexagon
- High and low speed
- Forward and backward direction
- Coupling torque controller
- CE-Certified
- Hard shell housing



Hex Assembly pin



Round shank assembly mandrel



*Optional
Item No.: CK10AC-Hex



„Recoil“



Management
System
ISO 14001:2015
www.tuv.com
ID: 9108624624

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Recoil Tangless ® Machines thread inserts for series production



Recoil Tangless® threaded inserts

Recoil Tangless inserts the next step in the development of wire thread inserts

Wichtigste Vorteile:

Verbesserte Installationsgeschwindigkeit

- Nach der Installation des Einsatzes muss kein Zapfen abgebrochen werden, sodass eine Phase des Installationsprozesses entfällt; ideal für die automatische Installation bei Anwendungen mit großen Stückzahlen.
- Der Zapfen muss nach der Installation nicht gesucht werden, sodass kein Staubsaugen, Herausziehen oder Zählen der entfernten Zapfen notwendig ist.
- Aufgrund des bidirektionalen Designs ist keine Eindrehorientierung notwendig. Die zeitaufwändige Prüfung der Einsätze vor jeder Installation ist nicht notwendig.

Anpassung der Installation und Flexibilität beim Entfernen

- Zapfenlose Einsätze können leicht justiert, oder nach der ersten Installation wieder entfernt werden, indem Sie das Installationswerkzeug wieder einführen und drehen oder das Ausdrehwerkzeug einführen und zurückdrehen.
- Die Werkzeuge zum Entfernen der zapfenlosen Einsätze berühren die Anwendung nie, sodass keine Schäden wie bei herkömmlichen Entfernungsvorfahren auftreten.

Keine Beschädigung fremder Objekte

- Lose Zapfen können das fertige Produkt nicht beschädigen.

In Kombination mit allen Vorteilen der Standard-Drahtgewindeeinsätze von Recoil

Drahtgewindeeinsätze werden benutzt, um Gewinde zu verstärken und die Lebensdauer der Anwendungen zu verlängern. Jeder Einsatz verteilt das Gewicht über den gesamten Bolzen und die Bohrung, sodass der Halt oder der Widerstand beim Herausziehen verbessert wird. Mit der Installation eines Recoil Einsatzes kann eine gleichmäßigere Verteilung der Belastung erreicht werden.

Folgende Arten von Recoil Tangless Einsätzen sind verfügbar:

Frei laufende Einsätze

Auch mit einfachem Handwerkzeug schnell und einfach zu installieren.
Für starke Gewinde in wenig starken Materialien.



Selbstsichernde Einsätze

Geeignet für die Befestigung von Schrauben und Bolzen unter stärksten Vibrationsverhältnissen und bei unterschiedlichen Temperaturbedingungen. Der Einsatz enthält eine Reihe von unterschiedlichen Sicherungsvorrichtungen, die beim Eindrehen einer Schraube oder eines Bolzens radial auseinander gehen, um die Installation des Bolzens zu ermöglichen. Bei der Einführung des Bolzens werden diese geraden Elemente nach außen gebogen und üben Druck auf den Bolzen aus. Dieser Druck wird auf die Seiten des Bolzengewindes ausgeübt, so dass die Kontaktfläche maximiert wird.



Strip-Feed Einsätze

In Verbindung mit dem pneumatischen Installationswerkzeug von Recoil wird jeder Einsatz in einem Plastikstreifen gehalten, der durch einen Schlitz auf der Vorderseite der Installationsnase eingeführt wird. So wird die Produktion mit erhöhten Installationszyklen optimiert und der Anwender nicht so leicht müde.



Tangless Einsätze sollen die spiralförmigen Kupfereinsätze mit Zapfen MA3279 bis MA3281 (Standardgewinde) und MA3329 bis MA3331 (Schließgewinde) ersetzen. Inch MS122076 bis MS124690 (frei laufend) und NASM21209 (Selbstsichernd). Sie werden in Standard STI Löcher mit MA1567 und MIL-I-8846 installiert. Installierte Einsätze sind ein fertiges Gewinde entsprechend den Anforderungen von FED-STD-H28, M Profil, Toleranzklassen 4H oder 5H, sowie metrischen Gewindespezifikationen nach ISO oder MJ Bolzen- und Schraubenprofilen.

Recoil Tangless® threaded inserts

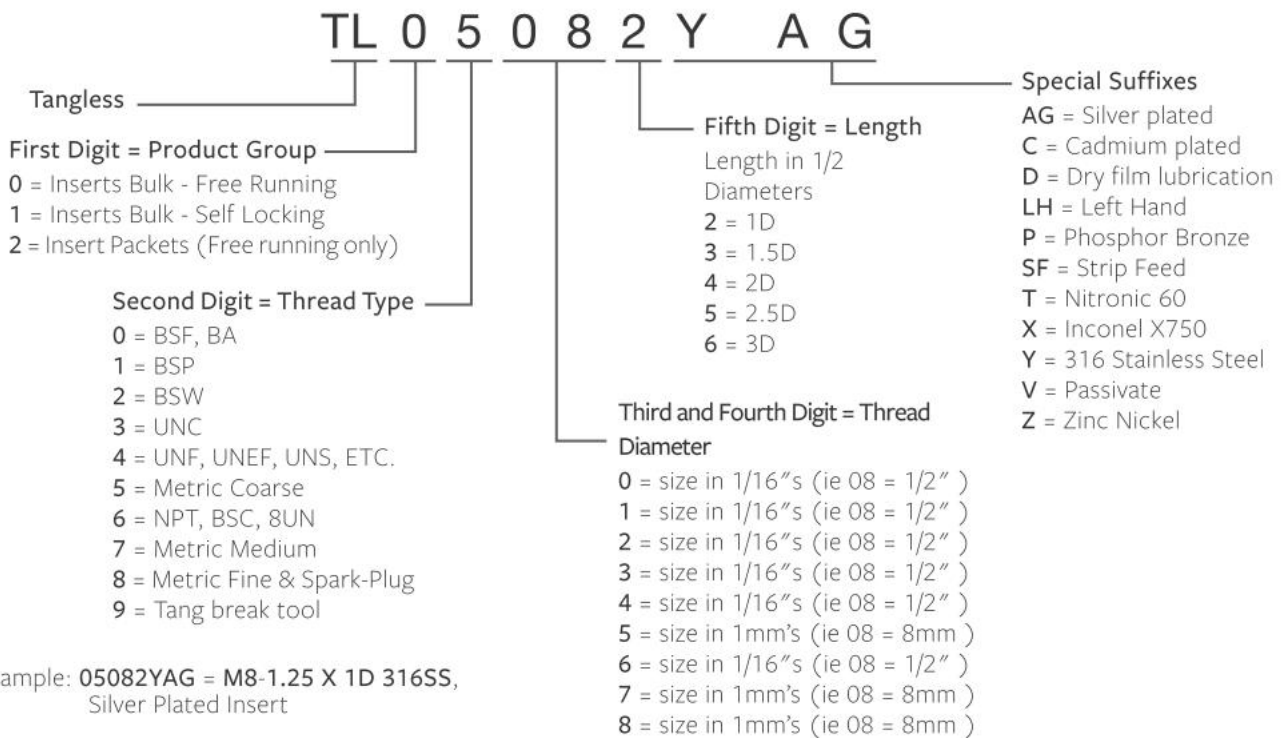
Recoil thread insert part numbering system

Recoil insert product part numbering system uses a logically structured 5 digit basic part number. Suffixes are typically added to differentiate between special or non-standard features.

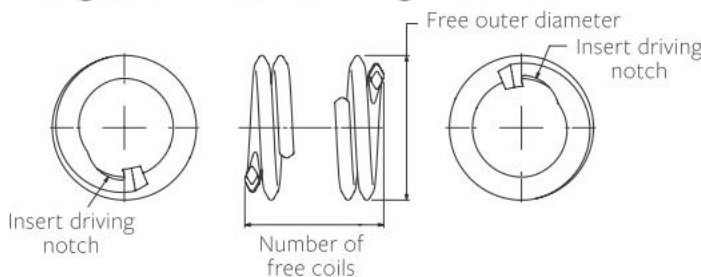
This guide defines the structure of Recoil part numbers and may be used for reference to identify a Recoil insert from its part number.

*Please refer to the technical catalogue for information on taps and thread gauges.

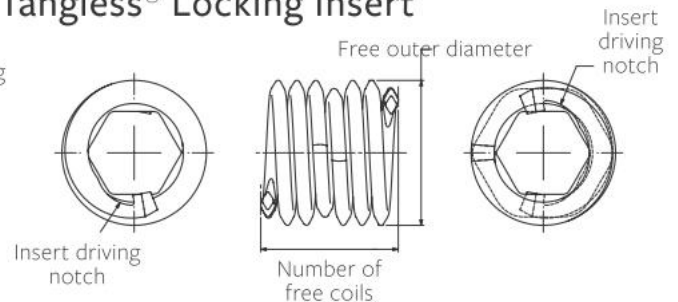
Diagram of Recoil Insert Part Number Example



Tangless® Free Running Insert



Tangless® Locking Insert



Recoil Tangless® threaded inserts

Metric standard threads „Tangless“

Wire thread inserts “free-running” and “self-locking”

Set taps Contents:

- Pre-cutting medium and finishing taps



Thread inside- Ø	Art. no.		Lengths		Core- Ø	Outside- Ø	Taps
	Free running	Locking	D	mm	Spiral drill Ø in mm	in mm	Art. no.
M2 x 0,4	TL05022	-	1D	2,0	2,10	-	45024
	TL05023	-	1,5D	3,0			45025
	TL05024	-	2D	4,0			45026
M2,5-0,45	TL05252	-	1D	2,5	2,60	3,08	45254 45255 45256
	TL05253	-	1,5D	3,8			
	TL05254	-	2D	5,0			
	TL05255	-	2,5D	6,3			
3 x 0,5	TL05032	TL15032	1D	3,0	3,10	3,65	45034 45035 45036
	TL05033	TL15033	1,5D	4,5			
	TL05034	TL15034	2D	6,0			
	TL05035	TL15035	2,5D	7,5			
	TL05036	TL15036	3D	9,0			
M4 x 0,7	TL05042	TL15042	1D	4,0	4,10	4,91	45044 45045 45046
	TL05043	TL15043	1,5D	6,0			
	TL05044	TL15044	2D	8,0			
	TL05045	TL15045	2,5D	10,0			
M5 x 0,8	TL05052	TL15052	1D	5,0	5,20	6,04	45054 45055 45056
	TL05053	TL15053	1,5D	7,5			
	TL05054	TL15054	2D	10,0			
	TL05055	TL15055	2,5D	12,5			
	TL05056	TL15056	3D	15,0			
M6 x 1,0	TL05062	TL15062	1D	6,0	6,20	7,30	45064 45065 45066
	TL05063	TL15063	1,5D	9,0			
	TL05064	TL15064	2D	12,0			
	TL05065	TL15065	2,5D	15,0			
	TL05066	TL15066	3D	18,0			
M8 x 1,25	TL05082	TL15082	1D	8,0	8,20	-	45084 45085 45086
	TL05083	TL15083	1,5D	12,0			
	TL05084	TL15084	2D	16,0			
	TL05085	TL15085	2,5D	20,0			
	TL05086	TL15086	3D	24,0			
M10 x 1,5	TL05102	TL15102	1D	10,0	10,30	11,95	45104 45105 45106
	TL05103	TL15103	1,5D	15,0			
	TL05104	TL15104	2D	20,0			
	TL05105	TL15105	2,5D	25,0			
	TL05106	TL15106	3D	30,0			
M12 x 1,75	TL05122	TL15122	1D	12,0	12,40	14,27	45124 45125 45126
	TL05123	TL15123	1,5D	18,0			
	TL05124	TL15124	2D	24,0			
	TL05125	TL15125	2,5D	30,0			
	TL05126	TL15126	3D	36,0			
M14 x 2,0	TL05142	-	1D	14,0	14,40	16,60	45144
	TL05143	-	1,5D	21,0			45145
	TL05144	-	2D	28,0			45146
M16 x 2,0	TL05162	-	1D	16,0	16,50	18,60	45164
	TL05163	-	1,5D	24,0			45165
	TL05164	-	2D	32,0			45166

Recoil Tangless® threaded inserts

American coarse thread (UNC)

Wire thread inserts "free-running" and "self-locking"

Set taps Contents:

- Pre-cutting medium and finishing taps



Thread inside- Ø	Art. no.		Lengths		Core- Ø	Outside- Ø	Taps
	Free running	Locking	D	mm	Spiral drill Ø in mm	in mm	Art. no.
2 -56	TL03522	TL13522	1D	2,0	2,3	2,84	43524 43525 43526
	TL03523	TL13523	1,5D	3,0			
	TL03524	TL13524	2D	4,0			
	TL03525	TL13525	2,5D	5,0			
	TL03526	TL13526	3D	6,0			
4 -40	TL03542	TL13542	1D	2,5	3,0	3,67	43544 43545 43546
	TL03543	TL13543	1,5D	3,8			
	TL03544	TL13544	2D	5,0			
	TL03545	TL13545	2,5D	6,3			
	TL03546	TL13546	3D	7,5			
6 -32	TL03562	TL13562	1D	3,5	3,7	4,54	43564 43565 43566
	TL03563	TL13563	1,5D	5,3			
	TL03564	TL13564	2D	7,0			
	TL03565	TL13565	2,5D	8,8			
	TL03566	TL13566	3D	10,5			
8 -32	TL03582	TL13582	1D	4,0	4,4	5,20	43584 43585 43586
	TL03583	TL13583	1,5D	6,0			
	TL03584	TL13584	2D	8,0			
	TL03585	TL13585	2,5D	10,0			
	TL03586	TL13586	3D	12,0			
10 -24	TL03602	TL13602	1D	5,0	5,0	6,20	43604 43605 43606
	TL03603	TL13603	1,5D	7,5			
	TL03604	TL13604	2D	10,0			
	TL03605	TL13605	2,5D	12,5			
	TL03606	TL13606	3D	15,0			
1/4 -20	TL03042	TL13042	1D	7,0	6,7	8,00	43044 43045 43046
	TL03043	TL13043	1,5D	10,5			
	TL03044	TL13044	2D	14,0			
	TL03045	TL13045	2,5D	17,5			
	TL03046	TL13046	3D	21,0			
5/16 -18	TL03052	TL13052	1D	8,0	8,3	9,77	43054 43055 43056
	TL03053	TL13053	1,5D	12,0			
	TL03054	TL13054	2D	16,0			
	TL03055	TL13055	2,5D	20,0			
	TL03056	TL13056	3D	24,0			
3/8 -16	TL03062	TL13062	1D	10,0	9,9	11,59	43064 43065 43066
	TL03063	TL13063	1,5D	15,0			
	TL03064	TL13064	2D	20,0			
	TL03065	TL13065	2,5D	25,0			
	TL03066	TL13066	3D	30,0			
1/2 -13	TL03082	TL13082	1D	11,0	13,0	15,24	43084 43085 43086
	TL03083	TL13083	1,5D	16,5			
	TL03084	TL13084	2D	22,0			
	-	TL13085	2,5D	27,5			
	-	-	3D	33,0			

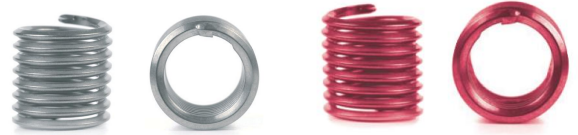
Recoil Tangless ® threaded inserts

American fine thread (UNF)

Wire thread inserts "free-running" and "self-locking"

Set taps Contents:

- Pre-cutting medium and finishing taps



Thread inside- Ø	Art. no.		Lengths		Core- Ø	Outside- Ø	Taps
	Free running	Locking	D	mm	Spiral drill Ø in mm	in mm	Art. no.
10 -32	TLO4602	TL14602	1D	5,0	5,1	5,86	44604 44605 44606
	TLO4603	TL14603	1,5D	7,5			
	TLO4604	TL14604	2D	10,0			
	TLO4605	TL14605	2,5D	12,5			
	TLO4606	TL14606	3D	15,0			
1/4 -28	TLO4042	TL14042	1D	7,0	6,6	7,53	44044 44045 44046
	TLO4043	TL14043	1,5D	10,5			
	TLO4044	TL14044	2D	14,0			
	TLO4045	TL14045	2,5D	17,5			
	TLO4046	TL14046	3D	21,0			
5/16 -24	TLO4052	TL14052	1D	8,0	8,2	9,31	44054 44055 44056
	TLO4053	TL14053	1,5D	12,0			
	TLO4054	TL14054	2D	16,0			
	TLO4055	TL14055	2,5D	20,0			
	-	TL14056	3D	24,0			
3/8 -24	TLO4062	TL14062	1D	10,0	9,8	10,90	44064 44065 44066
	TLO4063	TL14063	1,5D	15,0			
	TLO4064	TL14064	2D	20,0			
	-	TL14065	2,5D	25,0			
	-	TL14066	3D	30,0			

Recoil Tangless® threaded inserts

Metric threads (taped)

Wire thread inserts "free-running" and "self-locking"



Thread inside- Ø	Art. no.		Lengths		Core- Ø Spiral drill Ø in mm	Outside- Ø in mm	Taps	Rolls Ø in mm	Inserts per strap
	Free running	Locking	D	mm			Art. no.		
M2,5 x 0,45	TL05252SF	TL15252SF	1D	2,5	2,6	-	45015	200	1000
	TL05253SF	TL15253SF	1,5D	3,8					
	TL05254SF	TL15254SF	2D	5,0					
M3 x 0,5	TL05032SF	TL15032SF	1D	3	3,10	3,65	45035	200	1000
	TL05033SF	TL15033SF	1,5D	4,5				290	
	05034	15034	2D	6,0					
	05035	15035	2,5D	7,5					
M3,5 x 0,6	TL05352SF	TL15352	1D	3,5	3,60	4,28	45355	200	1000
	TL05353SF	TL15353	1,5D	5,3					
M4 x 0,7	TL05042SF	TL15042SF	1D	4,0	4,10	4,91	45045	200	1000
	TL05043SF	TL15043SF	1,5D	6,0				290	
	TL05044SF	TL15044SF	2D	8,0					
	TL05045SF	TL15045SF	2,5D	10,0					
	TL05046SF	TL15046SF	3D	12,0					
M5 x 0,8	TL05052SF	TL15052SF	1D	5,0	5,2	6,04	45055	290	1000
	TL05053SF	TL15053SF	1,5D	7,5				290	500
	TL05054SF	TL15054SF	2D	10,0					
	TL05055SF	TL15055SF	2,5D	12,5					
M6 x 1,0	TL05062SF	TL15062SF	1D	7,0	6,20	7,30	45065	200	500
	TL05063SF	TL15063SF	1,5D	10,5				290	
	TL05064SF	TL15064SF	2D	14,0					
	TL05065SF	TL15065SF	2,5D	15,0					
M8 x 1,25	TL05082SF	TL15082SF	1D	8,0	8,30		45075	290	500
	TL05083SF	TL15083SF	1,5D	12,5				385	
	TL05084SF	TL15084SF	2D	16,0					
M10 x 1,5	TL05102	TL15102SF	1D	10,0	10,30	11,95	45105	385	500
	TL05103	TL15103SF	1,5D	15,0					
	TL05104	TL15104SF	2D	20,0					
M12 -1,75	TL05122SF	TL15122SF	1D	8,0	12,40	14,27	45125	290	125
	TL05123SF	TL15123SF	1,5D	12,0					
	TL05124SF	TL15124SF	2D	16,0					

Recoil Tangless ® threaded inserts

„ inch UNC“ (taped)



Wire thread inserts “free-running” and “self-locking”



Thread inside- Ø	Art. no.		Lengths		Core- Ø Spiral drill Ø in mm	Outside- Ø in mm	Taps	Rolls Ø in mm	Inserts per strap
	Free running	Locking	D	mm			Art. no.		
2- 56	03522SF	13522SF	1D	2,0	2,3	2,84	43525	200	1000
	03523SF	13523SF	1,5D	3,0					
	03524SF	13524SF	2D	4,0					
3- 48	03532SF	13532SF	1D	2,2	2,7	-	43535	200	1000
	03533SF	13533SF	1,5D	3,3					
	03534SF	13534SF	2D	4,4					
4- 40	03542SF	13542SF	1D	2,5	3,0	-	43545	200	1000
	03543SF	13543SF	1,5D	3,8				290	
	03544SF	13544SF	2D	5,0					
5- 40	03552SF	13552SF	1D	2,5	3,1	3,67	43545	200	1000
	03553SF	13553SF	1,5D	3,8					
	03554SF	13554SF	2D	5,0					
6- 32	03562SF	13562SF	1D	3,5	3,4	4,00	43555	200	1000
	03563SF	13563SF	1,5D	5,3				290	
	03564SF	13564SF	2D	7,0					
8- 32	03582SF	13582SF	1D	4,0	4,4	-	43585	290	1000
	03583SF	13583SF	1,5D	6,0					
	03584SF	13584SF	2D	8,0					
10- 24	03602SF	13602SF	1D	5,0	3,8	4,54	43565	290	1000
	03603SF	13603SF	1,5D	7,5				500	
	03604SF	13604SF	2D	10,0					
1/4- 20	03042SF	13042SF	1D	7,0	6,7	8,00	43045	290	500
	03043SF	13043SF	1,5D	10,5				250	
	03044SF	13044SF	2D	14,0					
5/16- 18	03052SF	13052SF	1D	8,0	8,3	-	43055	290	250
	03053SF	13053SF	1,5D	12,0					
	03054SF	13054SF	2D	16,0					

Recoil Tangless® threaded inserts

Hand Tools „Tangless“

					
Thread inside- Ø	Inserting tool	Spare latch	Removing tool		
Metric					
M2 x 0,4	-	-	50002		
M2.2 x 0,45	-	-			
M2.5 x 0,45	TL55251	TL55252K			
M3 x 0,5	TL55031	TL55032K			
M3.5 x 0,6	-	-			
M4 x 0,7	TL55041	TL55042K	50003		
M5 x 0,8	TL55051	TL55052K			
M6 x 1,0	TL55061	TL55062K			
M7 x 1,0	-	-			
M8 x 1,25	TL55081	TL55082K			
M10 x 1,5	TL55101	TL55102K			
M12 x 1,75	TL55121	TL55122K			
UNC					
2-56	TL53521	TL53522K	50002		
4-40	TL53541	TL53542K			
6-32	TL53561	TL53562K			
8-32	TL53581	TL53582K			
10-24	TL53601*	TL53602K*			
1/4-20	TL53041*	TL53042K*			
5/16-18	TL53051*	TL53052K*			
3/8-16	TL53061*	TL53062K*			
UNF					
10-32	TL54601	TL54602K	50002		
1/4-28	TL54041	TL54042K			
5/16-24	TL54051*	TL54052K*			
3/8-24	TL54061*	TL54062K*			

*on request

Recoil Tangless® threaded inserts

HEX Assembly tool „Tangless“

can be used with:

- Star handle
- "electric" tool REC-12
- "Pneumatic" Tool REC-10K
- "battery operated" tool REC-20

„Freewheeling and self-locking“

Thread inside- Ø	Art. no.			Lengths
	Free running	Locking	Spare latch	mm
Metric				
M2,5 x 0,45	TL55257	TL55257L*	TL55252K	69
M3 x 0,5	TL55037	TL55037L*	TL55032K	69
M4 x 0,7	TL55047	TL55047L*	TL55042K	76
M5 x 0,8	TL55057	TL55057L*	TL55052K	79
M6 x 1,0	TL55067	TL55067L*	TL55062K	78
M8 x 1,25	TL55087	TL55087L*	TL55082K	99
M10 x 1.5	TL55107	TL55107L*	TL55102K	105
M12 x 1.75	TL55127	TL55127L*	TL55122K	115
UNC				
2-56	TL53527	TL53527	TL53522K	70
4-40	TL53547	TL53547	TL53542K	72
6-32	TL53567	TL53567	TL53562K	76
8-32	TL53587	TL53587	TL53582K	76
10-24	TL53607*	TL53607*	TL53602K*	68
1/4-20	TL53047*	TL53047*	TL53042K*	61
5/16-18	TL53057	TL53057	TL53052K	89
3/8-16	TL53067	TL53067	TL53062K	94
UNF				
10-32	TL54607	TL54607L	TL54602K	73

* On request



Star handle for hexagonal insertion tools

Art. no.	
Star handle	PW3SK



Recoil Tangless® threaded inserts

Manual installation tool „Tangless“

„Free running and self-locking“

Thread inside- Ø	Art. no.			Lengths mm
	Free running	Locking	Replacement Pawl kit	
Metric				
M2,5 x 0,45	TL55257GH	TL55257LGH*	TL55252K	69
M3 x 0,5	TL55037GH	TL55037LGH*	TL55032K	69
M4 x 0,7	TL55047GH	TL55047LGH*	TL55042K	76
M5 x 0,8	TL55057GH	TL55057LGH*	TL55052K	79
M6 x 1,0	TL55067GH	TL55067LGH*	TL55062K	78
M8 x 1,25	TL55087GH	TL55087LGH*	TL55082K	99
M10 x 1.5	TL55107GH	TL55107LGH*	TL55102K	105
M12 x 1.75	TL55127GH	TL55127LGH*	TL55122K	115
UNC				
2-56	TL53527GH	TL53527	TL53522K	70
4-40	TL53547GH	TL53547	TL53542K	72
6-32	TL53567GH	TL53567	TL53562K	76
8-32	TL53587GH	TL53587	TL53582K	76
10-24	TL53607GH*	TL53607*	TL53602K*	68
1/4-20	TL53047GH*	TL53047*	TL53042K*	61
5/16-18	TL53057GH	TL53057	TL53052K	89
3/8-16	TL53067GH	TL53067	TL53062K	94
UNF				
10-32	TL54607GH	TL54607LGH	TL54602K	

*on request



Handle for insertion tools

Art. no.	
handle	TL5000



Recoil Tangless® threaded inserts

„Automatic“ tools

to be used with: „Pneumatic“ tool REC-10
„Electric“ tool REC-12

 <p>Preload sleeve with mandrel</p>			 <p>Hex adapter</p> <p>Large adapter</p> <p>Small adapter</p>			
Thread inside- Ø	Preload sleeve with mandrel (FEA)	Replacement Pawl kit	small Adapter	large adapter	HEX-Adapter	Drive
Metric						
M2,5- 0,45	TL55250	TL55252K	M8550R	-	-	REC-10
M3- 0,5	TL55030	TL55032K				
M4- 0,7	TL55040	TL55042K				
M5- 0,8	TL55050	TL55052K	-	-		
M6- 1	TL55060	TL55062K				
M8- 1,25	TL55080	TL55082K				
M10- 1,5	TL55100*	TL55102K*	-	M85501R		
M12- 1,75	TL55120*	TL55122K*				
UNC						
2- 56	TL53520	TL53522K	M8550R	-	-	REC-10
4- 40	TL53540	TL53542K				
6- 32	TL53560	TL53562K				
8- 32	TL53580	TL53582K				
10- 24	TL53600*	TL53602K*				
1/4- 20	TL53040*	TL53042K*	-	M85501R		
5/16- 18	TL53050*	TL53052K				
3/8- 16	TL53060*	TL53062K				
UNF						
10- 32	TL54600	TL54602K	M8550R	-	-	REC-10
1/4- 28	TL54040	TL54042K				
5/16- 24	TL54050	TL54052K	-	M85501R		
3/8- 24	TL54060	TL54062K				
HEX-Metric						
M2,5- 0,45	TL55250E*	TL55252K	-	-	HEX Adapter	REC-10 REC-12
M3- 0,5	TL55030E*	TL55032K				
M4- 0,7	TL55040E*	TL55042K				
M5- 0,8	TL55050E*	TL55052K				
M6- 1	TL55060E*	TL55062K				
HEX-UNC						
2- 56	TL53520E*	TL53522K	-	-	HEX Adapter	REC-10 REC-12
4- 40	TL53540E*	TL53542K				
6- 32	TL53560E*	TL53562K				
8- 32	TL53580E*	TL53582K				
10- 24	TL53600E*	TL53602K*				
1/4- 20	TL53040E*	TL53042K*				
HEX-UNF						
10- 32	TL54600E*	TL54602K	-	-	HEX Adapter	REC-10 REC-12
1/4- 28	TL54040E*	TL54042K				

* on request

Recoil Tangless ® threaded inserts

REC-10K Pneumatic tool

For installation of Tanged and Tangless thread inserts.
The REC-10K with air motor contains small and large attachments for Recoil applications (FEA-Front End Assembly) from M2.5 to M16 or 2-56 - 5/8" and an attachment suitable for 1/4" drive mandrel.

- Standard 1/4" HEX actuator size range
- M2 - M12/ 2-56 - 1/2"
- small adapter size range (FEA)
- M2.5 - M6/ 2-56 - 1/4"
- Large adapter size range (FEA)
- M8/ 5/16" - 3/4"
- CE-certified



REC-12 elektric tool

The REC-12 electric tool is designed for small and large production quantities and can be designed for loose or taped Recoil, Tanged and Tangless inserts can be used.

Main features:

- Light
- Auto reverse function
- Suitable for Tanged and Tangless thread inserts and tools
- Loose or belted - usable for HEX (FEA-Front- End-Assembly)
- Can be used up to M6 or 1/4"
- low and high-speed function
- CE- Certified



Recoil Tangless® threaded inserts

REC-10K
automatic tool
Case contents:

Content	Quantity
Standard 1/4" Hex drive	1
Suitable small adaptor (FEA)	1
Suitable large adaptor (FEA)	1
Air regulator	1
Lubrication	1
Gauge	1
Hose	1
Screwdriver	1
Wrench for adapter	2
Manual with parts list	1



Air regulator/
Lubricator



gauge

HEX
Adaptor



small
Adaptor

large Adaptor

Front tool (FEA)



Spacers



Spacers

Recoil Tangless® threaded inserts

REC-20 Battery Driver

The REC-20 a lightweight, portable, battery operated tool for small productions and difficult to reach threaded holes. Works vertically and horizontally in 2 speed levels. Suitable for Recoil Tanged and Tangless inserts (M2 - M6 or 2-56 - 1/4").

- Inclusive spare battery
- Suitable for 1/4" Hex or round shank
- Forward and backward direction
- Coupling torque controller
- CE-certified
- Hard shell housing



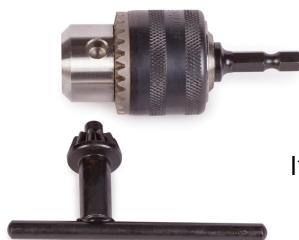
Tanged- Hex Assembly pin



Tangless - Hex Assembly pin



Round shank assembly mandrel
can be used with
CK10AC-Hex



*Optional
Item No.: CK10AC-Hex

