

**BLUE-MASTER<sup>®</sup>**  
by *CEESA*



# THREAD RESTORATION GUIDE



Manufactured from high quality chromium nickel stainless steel, PowerCoil Wire Thread Inserts provide high strength internal threads that resist the effects of temperature and corrosion. Their unique design ensures superior threads whose compound performance cannot be reproduced by any other single fastening method. Available in two basic forms, free running or screw locking, they are much lighter and less expensive than any other equivalent type of thread insert and because of their compact size they can generally be incorporated into existing designs where no previous provision has been made.

### Free Running

Produced from precision profiled austenitic stainless steel wire wound into a helical spiral, PowerCoil free running inserts have a spring like appearance. When installed, using any one of a variety of manual or automatic tools, they provide strong permanent internal threads which resist heat and corrosion. Once fitted, their position is maintained by the action of radial pressure between their coils and the flanks of the tapped hole. This pressure exists because their free diameter is larger by a calculated amount, than their installed diameter.

### Screw Locking

Screw locking (or prevailing torque) inserts are of particular value in applications subject to the effects of cyclic vibration or impact. In addition to the benefits afforded by free running inserts, PowerCoil screw locking inserts offer the additional security of prevailing locking torque. This is achieved by the action of one or more polygonal grip coils positioned within the insert's length, which exert radial pressure on the male thread. Each grip coil consists of a number of tangential locking chords which protrude inside the minor diameter of the normal free running coils. As the male thread passes through these grip coils, the locking flats are displaced thus exerting radial pressure or prevailing torque on the male thread. On removal of the male thread, the locking coils relax to their original form permitting repeated assembly whilst retaining a measurable level of prevailing torque.

### Features & Benefits

For many years, helically coiled wire thread inserts have been vastly underestimated. The popular misconception that they were designed for the repair of damaged threads has given this unique fastener a false image.

They are much lighter and less expensive than any other equivalent type of thread insert and because of their compact size, can generally be introduced into existing designs where no previous provision has been made. Unlike many other economic measures, their introduction increases quality and performance whilst reducing overall product cost. Their introduction may result in the use of thinner sections or lighter parent materials without sacrificing thread strength.

They protect tapped threads against failures due to stripping, seizing, corrosion and wear. PowerCoil wire thread inserts are produced from austenitic stainless steel wire which is work hardened to a tensile strength above 200,000psi and a hardness of Rc43-50. The inserts have an exceedingly smooth surface finish which virtually eliminates friction-induced thread erosion.

### Strength

Due to their flexibility, wire thread inserts create internal threads which have a much improved distribution of residual stress loading when compared with conventional tapped holes, where up to 70% of the shearing forces are carried by the first three threads in the tapped hole. The flexibility of wire thread inserts helps to compensate for pitch and flank angle errors, inherent in normal tapped holes, and significantly enhances the load bearing capacity by deflecting the residual forces into a helical hoop stress which is dispersed into the wall of the tapped hole. This enables the design to be confidently based on the bolt strength utilising smaller and shorter threads even when used in low strength materials.

The high tensile coils of a wire thread insert undergo a diameter reduction during installation. The outward spring-like force of the coils "locks" the insert into place.

Each coil can flex independently to contact the greatest amount of parent material thread surface. Both static and dynamic load bearing capabilities are improved.

### Reference standards

#### SBAC AS 6734 & 8456

British Society of Aerospace Companies Standard. Specifically referring to UNC thread free inserts, a mandatory requirement of the Society. In fact, very similar to the Military Standard.

#### SBAC AS 6733 & 8455

Same requirement as above, extending to all free inserts in general.

#### BS

British Standard for Small Diameter Inserts. This is the generalised standard for all insert manufacturers, equivalent to DIN8140.

#### NASM 3279, 3280 & 3281

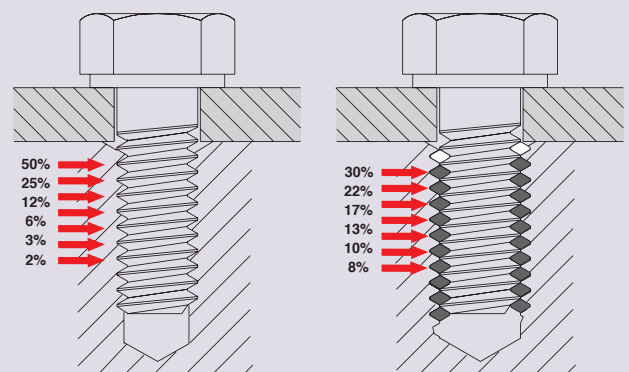
Military standard for free inserts. Military standard inserts are larger in diameter in the free state than standard inserts, making them more difficult to install and to remove. CELESA can supply and certify these inserts on request. The German DIN8140 standard for general purpose inserts has similar tolerances to the military standard inserts.

#### LN9499

German aerospace standard. No longer in use, although CELESA can supply and certify these inserts on request.

#### DIN8140

The Powercoil inserts distributed by CELESA comply with the requirements of the DIN8140 Standard.



2026 PRICE LIST  
GROSS PRICE 2025 + **7%**  
Effective from 4 May 2026



# SCREW THREAD INSERTS

Part No. **35 20 - 12.00 X 1.5D**

**35** PowerCoil - Stainless Steel  
**36** Loksert - Carbon Steel  
**37** Loksert - Stainless Steel

**DIAMETER**

**XX . XX** Metric  
**XX / XX** Imperial

<b>20</b> Metric Coarse	<b>32</b> UNC
<b>21</b> Metric Fine	<b>34</b> UNF
<b>22</b> Spark Plug	<b>44</b> BA
<b>23</b> Metric Fine	<b>46</b> BSP
<b>24</b> Metric Fine	<b>52</b> NPT
<b>28</b> BSW	<b>60</b> BSB
<b>30</b> BSF	<b>70</b> 8-UN
<b>00</b> Multifunctional	

<b>X.XD</b> Insert length as a factor of nominal screw	<b>INC</b> Inconel X-750
<b>IR</b> PowerCoil strip-feed reel	<b>NM</b> Nimonic 90
<b>SL</b> PowerCoil screw locking	<b>NT</b> Nitronic 60
<b>K</b> PowerCoil thread repair kit	<b>Y</b> 316 Stainless Steel
<b>P</b> PowerCoil Hang sell insert packet	<b>CD</b> Cadmium plate
<b>WK</b> PowerCoil workshop kit	<b>ZN</b> Zinc plate
<b>HIT</b> Hand installation tool	<b>AG</b> Silver plate
<b>HIP</b> Prewinder installation tool	<b>FL</b> Dry film lubricant
<b>MIT</b> Machine installation tool	<b>I</b> Tap Intermediate STI
<b>HIM</b> Hex drive installation mandrel	<b>T</b> Tap Taper STI
<b>MIP</b> Pneumatic installation tool	<b>B</b> Tap Bottoming STI
<b>TB</b> Tang break tool	<b>SF</b> Tap Spiral Flute STI
<b>STB</b> Spring loaded tang break tool	<b>SP</b> Tap Spiral Point STI
<b>PTB</b> Pneumatic tang break tool	<b>FT</b> Tap Fluteless STI
<b>RT</b> Removal/extraction tool	<b>PD</b> Loksert Thin Wall
<b>LH</b> Left Hand	<b>PR</b> Loksert Heavy Duty
<b>GC</b> Gauge STI 4H5H tolerance	<b>TT</b> Loksert Thin Wall install tool
<b>GM</b> Gauge STI 6H tolerance	<b>HT</b> Loksert Heavy Duty install tool
<b>PB</b> Phosphor bronze	<b>T</b> Loksert Universal install tool

## FREE RUNNING INSERT



D	L	L	1.0D				1.5D				2.0D				Unit
			L	€			L	€			L	€			
			mm	<500	500-999	1000-...	mm	<500	500-999	1000-...	mm	<500	500-999	1000-...	
M 2x0.40	3520-2.00	2.10	2.00	0,48	0,45	0,43	3.00	0,49	0,47	0,44	4.00	0,50	0,49	0,48	100
M 2.20x0.45	3520-2.20	2.30	2.20	0,48	0,45	0,43	3.30	0,49	0,47	0,44	4.40	0,50	0,49	0,48	100
M 2.50x0.45	3520-2.50	2.60	2.50	0,28	0,25	0,23	3.75	0,29	0,26	0,25	5.00	0,34	0,29	0,27	100
M 3x0.50	3520-3.00	3.20	3.00	0,28	0,25	0,24	4.50	0,29	0,26	0,25	6.00	0,34	0,27	0,26	100
M 3.50x0.60	3520-3.50	3.70	3.50	0,34	0,29	0,27	5.25	0,35	0,32	0,29	7.00	0,38	0,35	0,32	100
M 4x0.70	3520-4.00	4.20	4.00	0,27	0,23	0,22	6.00	0,28	0,25	0,24	8.00	0,34	0,27	0,26	100
M 5x0.80	3520-5.00	5.20	5.00	0,34	0,27	0,26	7.50	0,27	0,26	0,25	10.00	0,38	0,30	0,28	100
M 6x1.00	3520-6.00	6.30	6.00	0,35	0,28	0,26	9.00	0,28	0,26	0,25	12.00	0,42	0,38	0,36	100
M 7x1.00	3520-7.00	7.30	7.00	0,39	0,35	0,32	10.50	0,45	0,39	0,37	14.00	0,50	0,44	0,41	100
M 8x1.00	3521-8.00	8.30	8.00	0,40	0,38	0,36	12.00	0,42	0,40	0,36	16.00	0,53	0,45	0,42	100
M 8x1.25	3520-8.00	8.30	8.00	0,35	0,30	0,28	12.00	0,38	0,32	0,29	16.00	0,50	0,42	0,40	100
M 9x1.25	3520-9.00	9.40	9.00	0,50	0,45	0,43	13.50	0,64	0,60	0,54	18.00	0,67	0,61	0,56	100
M 10x1.00	3523-10.00	10.30	10.00	0,44	0,40	0,38	15.00	0,50	0,44	0,41	20.00	0,60	0,50	0,47	100
M 10x1.25	3521-10.00	10.30	10.00	0,44	0,39	0,37	15.00	0,50	0,44	0,41	20.00	0,60	0,54	0,49	100
M 10x1.50	3520-10.00	10.40	10.00	0,44	0,38	0,36	15.00	0,50	0,42	0,40	20.00	0,60	0,49	0,46	100
M 11x1.00	3523-11.00	11.30	11.00	0,60	0,51	0,48	16.50	0,88	0,80	0,74	22.00	1,22	1,09	1,02	100
M 11x1.25	3521-11.00	11.30	11.00	0,60	0,51	0,48	16.50	0,74	0,71	0,66	22.00	1,22	1,09	1,04	100
M 11x1.50	3520-11.00	11.40	11.00	0,76	0,62	0,58	16.50	0,86	0,72	0,67	22.00	0,89	0,80	0,74	100
M 12x1.00	3524-12.00	12.30	12.00	0,63	0,61	0,58	18.00	0,75	0,74	0,71	24.00	1,23	1,17	1,07	100
M 12x1.25	3523-12.00	12.30	12.00	0,63	0,53	0,49	18.00	0,75	0,61	0,56	24.00	0,87	0,80	0,74	100
M 12x1.50	3521-12.00	12.40	12.00	0,63	0,53	0,49	18.00	0,75	0,54	0,49	24.00	0,87	0,80	0,74	100
M 12x1.75	3520-12.00	12.50	12.00	0,63	0,51	0,48	18.00	0,75	0,65	0,61	24.00	0,87	0,75	0,69	100
M 13x1.25	3523-13.00	13.25	13.00	0,92	0,86	0,80	19.50	1,42	1,33	1,23	26.00	1,92	1,77	1,63	50
M 13x1.50	3521-13.00	13.25	13.00	0,92	0,86	0,80	19.50	1,42	1,33	1,23	26.00	1,92	1,77	1,63	50
M 13x1.75	3520-13.00	13.50	13.00	0,92	0,86	0,80	19.50	1,42	1,33	1,23	26.00	1,92	1,77	1,63	50
M 14x1.00	3524-14.00	14.25	14.00	1,16	1,12	1,09	21.00	1,20	1,16	1,10	28.00	1,38	1,33	1,25	50
M 14x1.25	3523-14.00	14.25	14.00	0,97	0,88	0,82	21.00	1,10	0,96	0,88	28.00	1,16	1,08	1,01	50
M 14x1.50	3521-14.00	14.50	14.00	0,97	0,84	0,79	21.00	1,10	0,90	0,84	28.00	1,16	1,12	1,05	50
M 14x2.00	3520-14.00	14.50	14.00	0,97	0,80	0,74	21.00	1,10	1,01	0,91	28.00	1,16	1,10	1,03	50

Important note: Theoretical insert length is referred to length after insert installation.

**FREE RUNNING INSERT**



		L mm	 <b>2.5D</b>			 <b>3.0D</b>			Unit		
			€	€	€	€	€	€			
			<500	500-999	1000-...	<500	500-999	1000-...			
M 2x0.40	3520-2.00	2.10	5.00	0,58	0,53	0,50	6.00	0,63	0,61	0,58	100
M 2.20x0.45	3520-2.20	2.30	5.50	0,58	0,53	0,50	6.60	0,63	0,61	0,58	100
M 2.50x0.45	3520-2.50	2.60	6.25	0,39	0,35	0,32	7.50	0,45	0,40	0,38	100
M 3x0.50	3520-3.00	3.20	7.50	0,39	0,35	0,32	9.00	0,45	0,40	0,38	100
M 3.50x0.60	3520-3.50	3.70	8.75	0,42	0,39	0,37	10.50	0,50	0,47	0,44	100
M 4x0.70	3520-4.00	4.20	10.00	0,39	0,35	0,32	12.00	0,42	0,38	0,36	100
M 5x0.80	3520-5.00	5.20	12.50	0,44	0,38	0,36	15.00	0,51	0,44	0,41	100
M 6x1.00	3520-6.00	6.30	15.00	0,50	0,47	0,44	18.00	0,63	0,54	0,50	100
M 7x1.00	3520-7.00	7.30	17.50	0,62	0,54	0,50	21.00	0,72	0,70	0,66	100
M 8x1.00	3521-8.00	8.30	20.00	0,64	0,60	0,54	24.00	0,78	0,74	0,68	100
M 8x1.25	3520-8.00	8.30	20.00	0,62	0,54	0,50	24.00	0,72	0,65	0,61	100
M 9x1.25	3520-9.00	9.40	22.50	0,74	0,67	0,65	27.00	0,87	0,84	0,81	100
M 10x1.00	3523-10.00	10.30	25.00	0,70	0,64	0,60	30.00	0,85	0,78	0,71	100
M 10x1.25	3521-10.00	10.30	25.00	0,70	0,66	0,63	30.00	0,85	0,83	0,78	100
M 10x1.50	3520-10.00	10.40	25.00	0,70	0,63	0,59	30.00	0,85	0,75	0,69	100
M 11x1.00	3523-11.00	11.30	27.50	1,62	1,54	1,46	33.00	2,00	1,91	1,79	100
M 11x1.25	3521-11.00	11.30	27.50	1,62	1,54	1,46	33.00	2,00	1,91	1,79	100
M 11x1.50	3520-11.00	11.40	27.50	1,11	1,03	0,93	33.00	1,31	1,27	1,22	100
M 12x1.00	3524-12.00	12.30	30.00	1,54	1,50	1,44	36.00	1,89	1,81	1,67	100
M 12x1.25	3523-12.00	12.30	30.00	1,03	1,01	0,96	36.00	1,25	1,18	1,10	100
M 12x1.50	3521-12.00	12.40	30.00	1,03	1,01	0,96	36.00	1,44	1,18	1,10	100
M 12x1.75	3520-12.00	12.50	30.00	1,03	1,00	0,89	36.00	1,31	1,24	1,18	100
M 13x1.25	3523-13.00	13.25	32.50	2,59	2,38	2,21	39.00	2,98	2,74	2,54	50
M 13x1.50	3521-13.00	13.25	32.50	2,59	2,38	2,21	39.00	2,98	2,74	2,54	50
M 13x1.75	3520-13.00	13.50	32.50	2,59	2,38	2,21	39.00	2,98	2,74	2,54	50
M 14x1.00	3524-14.00	14.25	35.00	1,66	1,58	1,46	42.00	2,16	1,82	1,68	50
M 14x1.25	3523-14.00	14.25	35.00	1,37	1,29	1,19	42.00	1,67	1,47	1,35	50
M 14x1.50	3521-14.00	14.50	35.00	1,37	1,28	1,18	42.00	1,67	1,53	1,42	50
M 14x2.00	3520-14.00	14.50	35.00	1,37	1,31	1,28	42.00	1,67	1,59	1,47	50

Important note: Theoretical insert length is referred to length after insert installation.

FREE RUNNING INSERT



powercoil<sup>®</sup>  
by CELESA  
Pink

D	D	L	1.0D			1.5D			2.0D			Unit
			mm	€		mm	€		mm	€		
				<100	100-500		<100	100-500		<100	100-500	
M 15 x 1.50	3521-15.00	15.25	15.00	1,54	1,28	22.50	1,98	1,63	30.00	2,50	2,10	50
M 15 x 2.00	3520-15.00	15.50	15.00	1,54	1,28	22.50	1,98	1,66	30.00	2,50	2,07	50
M 16 x 1.50	3521-16.00	16.50	16.00	1,29	0,87	24.00	1,35	0,98	32.00	1,67	1,28	50
M 16 x 2.00	3520-16.00	16.50	16.00	1,29	1,08	24.00	1,35	1,12	32.00	1,67	1,40	50
M 18 x 1.50	3523-18.00	18.50	18.00	1,89	1,61	27.00	2,21	1,88	36.00	2,98	2,54	50
M 18 x 2.00	3521-18.00	18.50	18.00	1,89	1,63	27.00	2,21	2,02	36.00	2,98	2,32	50
M 18 x 2.50	3520-18.00	19.00	18.00	1,89	1,56	27.00	2,21	1,84	36.00	2,98	2,48	50
M 20 x 1.50	3523-20.00	20.50	20.00	2,21	1,88	30.00	2,78	2,37	40.00	3,57	3,05	25
M 20 x 2.00	3521-20.00	20.50	20.00	2,21	1,56	30.00	2,78	2,22	40.00	3,57	3,05	25
M 20 x 2.50	3520-20.00	20.75	20.00	2,21	1,88	30.00	2,78	2,37	40.00	3,57	3,05	25
M 22 x 1.50	3523-22.00	22.50	22.00	2,38	2,03	33.00	2,98	2,54	44.00	3,77	3,21	25
M 22 x 2.00	3521-22.00	22.50	22.00	2,38	2,07	33.00	2,98	2,54	44.00	3,77	3,14	25
M 22 x 2.50	3520-22.00	22.75	22.00	2,38	2,02	33.00	2,98	2,54	44.00	3,77	3,21	25
M 24 x 1.50	3523-24.00	24.50	24.00	2,98	2,52	36.00	3,13	2,96	48.00	3,98	3,61	25
M 24 x 2.00	3521-24.00	24.50	24.00	2,98	2,66	36.00	3,13	2,96	48.00	3,98	3,70	25
M 24 x 3.00	3520-24.00	25.00	24.00	2,98	2,66	36.00	3,13	2,96	48.00	3,98	3,48	25
M 26 x 1.50	3523-26.00	26.50	26.00	4,53	3,84	39.00	5,15	4,39	52.00	6,69	5,69	10
M 27 x 1.50	3523-27.00	27.50	27.00	4,25	3,62	40.50	5,15	4,39	54.00	6,31	5,36	10
M 27 x 2.00	3521-27.00	27.50	27.00	4,38	3,73	40.50	5,15	4,42	54.00	6,31	5,30	10
M 27 x 3.00	3520-27.00	28.00	27.00	3,74	3,17	40.50	5,15	4,84	54.00	6,57	6,26	10
M 28 x 1.50	3523-28.00	28.50	28.00	4,34	3,70	42.00	5,15	4,39	56.00	6,69	5,69	10
M 30 x 1.50	3523-30.00	30.50	30.00	5,12	4,37	45.00	5,89	5,01	60.00	7,28	6,18	10
M 30 x 2.00	3521-30.00	30.50	30.00	4,83	4,12	45.00	5,89	5,01	60.00	7,56	6,44	10
M 30 x 3.50	3520-30.00	31.00	30.00	4,31	3,80	45.00	5,89	4,22	60.00	7,86	6,69	10
M 33 x 2.00	3521-33.00	33.50	33.00	7,26	6,17	49.50	7,54	6,56	66.00	8,82	7,54	10
M 33 x 3.50	3520-33.00	34.00	33.00	6,31	5,36	49.50	7,54	6,56	66.00	9,04	7,72	10
M 36 x 1.50	3524-36.00	36.50	36.00	6,21	5,28	54.00	7,54	6,56	72.00	9,08	8,58	10
M 36 x 2.00	3523-36.00	36.50	36.00	6,21	5,28	54.00	7,54	6,42	72.00	9,08	8,58	10
M 36 x 3.00	3521-36.00	37.00	36.00	6,21	5,28	54.00	7,54	7,23	72.00	9,21	8,58	10
M 36 x 4.00	3520-36.00	37.00	36.00	6,21	5,28	54.00	7,54	6,25	72.00	9,08	7,98	10
M 39 x 3,00	3521-39.00	40.00	39.00	-	-	58.50	30,30	-	78.00	-	-	1
M 39 x 4,00	3520-39.00	40.25	39.00	31,42	-	58.50	36,38	-	78.00	38,72	-	1
M 40 x 3,00	3523-40.00	41.00	40.00	-	-	60.00	42,79	-	80.00	-	-	1
M 42 x 3,00	3523-42.00	43.00	42.00	-	-	63.00	42,79	-	84.00	-	-	1
M 42 x 4,50	3520-42.00	43.50	42.00	-	-	63.00	43,15	-	84.00	-	-	1
M 45 x3 ,00	3523-45.00	46.00	45.00	-	-	67.50	51,48	-	90.00	-	-	1
M 45 x 4,50	3520-45.00	46.50	45.00	-	-	67.50	51,91	-	90.00	-	-	1
M 48 x 3,00	3523-48.00	49.00	48.00	-	-	72.00	51,48	-	96.00	-	-	1
M 48 x 5,00	3520-48.00	49.50	48.00	-	-	72.00	68,14	-	96.00	-	-	1
M 50 x 3,00	3523-50.00	51.00	50.00	-	-	75.00	67,57	-	100.00	-	-	1
M 52 x 3,00	3523-52.00	53.00	52.00	-	-	78.00	72,40	-	104.00	-	-	1
M 52 x 5,00	3520-52.00	53.50	52.00	-	-	78.00	73,01	-	104.00	-	-	1

Important note: Theoretical insert length is referred to length after insert installation.

**FREE RUNNING INSERT**












	Ø	L mm	2.5D			3.0D			Unit
			L mm	€		L mm	€		
				<100	100-500		<100	100-500	
M 15 x 1.50	3521-15.00	15.25	37.50	3,08	2,57	45.00	3,57	2,95	50
<b>M 15 x 2.00</b>	<b>3520-15.00</b>	15.50	37.50	3,08	2,57	45.00	3,57	2,95	50
M 16 x 1.50	3521-16.00	16.50	40.00	1,83	1,56	48.00	2,16	1,75	50
<b>M 16 x 2.00</b>	<b>3520-16.00</b>	16.50	40.00	1,83	1,62	48.00	2,16	1,85	50
M 18 x 1.50	3523-18.00	18.50	45.00	3,38	2,89	54.00	3,98	3,38	50
M 18 x 2.00	3521-18.00	18.50	45.00	3,38	2,71	54.00	3,98	3,12	50
<b>M 18 x 2.50</b>	<b>3520-18.00</b>	19.00	45.00	3,38	2,81	54.00	3,98	3,31	50
M 20 x 1.50	3523-20.00	20.50	50.00	3,98	3,38	60.00	4,57	3,89	25
M 20 x 2.00	3521-20.00	20.50	50.00	3,98	3,38	60.00	4,57	3,89	25
<b>M 20 x 2.50</b>	<b>3520-20.00</b>	20.75	50.00	3,98	3,38	60.00	4,57	3,89	25
M 22 x 1.50	3523-22.00	22.50	55.00	4,32	3,68	66.00	5,21	4,43	25
M 22 x 2.00	3521-22.00	22.50	55.00	4,32	3,68	66.00	5,21	4,43	25
<b>M 22 x 2.50</b>	<b>3520-22.00</b>	22.75	55.00	4,32	3,68	66.00	5,21	4,43	25
M 24 x 1.50	3523-24.00	24.50	60.00	5,22	4,34	72.00	5,57	5,09	25
M 24 x 2.00	3521-24.00	24.50	60.00	5,22	4,44	72.00	5,57	5,21	25
<b>M 24 x 3.00</b>	<b>3520-24.00</b>	25.00	60.00	5,22	4,44	72.00	6,37	5,60	25
M 26 x 1.50	3523-26.00	26.50	65.00	8,95	7,59	78.00	11,18	9,50	10
M 27 x 1.50	3523-27.00	27.50	67.50	8,19	6,96	81.00	9,67	8,22	10
M 27 x 2.00	3521-27.00	27.50	67.50	7,44	6,33	81.00	8,78	7,48	10
<b>M 27 x 3.00</b>	<b>3520-27.00</b>	28.00	67.50	7,74	6,58	81.00	9,14	7,78	10
M 28 x 1.50	3523-28.00	28.50	70.00	9,61	8,18	84.00	11,53	9,82	10
M 30 x 1.50	3523-30.00	30.50	75.00	9,79	8,33	90.00	11,73	9,98	10
M 30 x 2.00	3521-30.00	30.50	75.00	8,69	7,41	90.00	10,01	8,53	10
<b>M 30 x 3.50</b>	<b>3520-30.00</b>	31.00	75.00	8,65	7,35	90.00	9,52	8,11	10
M 33 x 2.00	3521-33.00	33.50	82.50	9,71	8,25	99.00	10,68	9,08	10
<b>M 33 x 3.50</b>	<b>3520-33.00</b>	34.00	82.50	11,32	9,63	99.00	12,77	10,86	10
M 36 x 1.50	3524-36.00	36.50	90.00	11,88	10,11	108.00	13,08	11,12	10
M 36 x 2.00	3523-36.00	36.50	90.00	11,20	9,52	108.00	12,27	10,44	10
M 36 x 3.00	3521-36.00	37.00	90.00	11,04	9,40	108.00	12,16	10,34	10
<b>M 36 x 4.00</b>	<b>3520-36.00</b>	37.00	90.00	12,79	10,88	108.00	16,49	14,02	10



Coding example:

M 15x1.50	 1.0D	 1.5D
	3520-15.00x1.0D	3520-15.00x1.5D

## FREE RUNNING INSERT

M  
MF

FREE

M/MF

AISI 304



BS7752  
DIN6140NASM3279 NASM3280  
NASM3281 LN9039

...D-LH



LEFT HAND THREAD INSERT



			 1.5D					
			L mm	€				€
M 3 x 0.50	3520-3.00x1.5D-LH	3.20	4.50	4,45	3520-3.00I-LH		26,58	
M 4 x 0.70	3520-4.00x1.5D-LH	4.20	6.00	4,45	3520-4.00I-LH		26,58	
M 5 x 0.80	3520-5.00x1.5D-LH	5.20	7.50	4,45	3520-5.00I-LH		26,58	
M 6 x 1.00	3520-6.00x1.5D-LH	6.30	9.00	3,07	3520-6.00I-LH		26,58	
M 8 x 1.25	3520-8.00x1.5D-LH	8.30	12.00	3,07	3520-8.00I-LH		33,10	
M 10 x 1.50	3520-10.00x1.5D-LH	10.40	15.00	4,10	3520-10.00I-LH		40,56	
M 12 x 1.75	3520-12.00x1.5D-LH	12.50	18.00	6,13	3520-12.00I-LH		45,91	

M  
MF

FREE

M/MF

AISI 316

BS7752  
DIN6140NASM3279 NASM3280  
NASM3281 LN9039

...DY



AISI 316

			 1.5D			
			L mm	€		€
M 3 x 0.50	3520-3.00x1.5DY	3.20	4.50	2,29		
M 4 x 0.70	3520-4.00x1.5DY	4.20	6.00	2,40		
M 5 x 0.80	3520-5.00x1.5DY	5.20	7.50	2,49		
M 6 x 1.00	3520-6.00x1.5DY	6.30	9.00	2,54		
M 8 x 1.25	3520-8.00x1.5DY	8.30	12.00	3,06		
M 10 x 1.50	3520-10.00x1.5DY	10.40	15.00	3,15		
M 12 x 1.75	3520-12.00x1.5DY	12.50	18.00	3,43		



X.XD

Coding example:

M 6 x 1.00



1.0D

3520-6.00X1.5DY

**TANGLESS INSERTS**



D	L	Ø	1.0D			1.5D			2.0D			Unit			
			L mm	<500	500-999	1000-...	L mm	<500	500-999	1000-...	L mm		<500	500-999	1000-...
M 3 x 0.50	3520-3.00DTL	3.20	3.00	0,44	0,39	0,38	4.50	0,46	0,41	0,39	6.00	0,50	0,42	0,41	100
M 4 x 0.70	3520-4.00DTL	4.20	4.00	0,42	0,36	0,34	6.00	0,44	0,39	0,38	8.00	0,50	0,42	0,41	100
M 5 x 0.80	3520-5.00DTL	5.20	5.00	0,50	0,42	0,41	7.50	0,42	0,41	0,39	10.00	0,59	0,47	0,44	100
M 6 x 1.00	3520-6.00DTL	6.30	6.00	0,53	0,44	0,41	9.00	0,44	0,41	0,39	12.00	0,65	0,59	0,54	100
M 8 x 1.25	3520-8.00DTL	8.30	8.00	0,53	0,47	0,44	12.00	0,59	0,49	0,46	16.00	0,80	0,65	0,62	100
M 10 x 1.50	3520-10.00DTL	10.40	10.00	0,68	0,59	0,54	15.00	0,80	0,65	0,62	20.00	0,91	0,78	0,71	100
M 12 x 1.75	3520-12.00DTL	12.50	12.00	0,97	0,81	0,76	18.00	1,16	1,01	0,93	24.00	1,35	1,16	1,07	100



Coding example:

	1.0D	1.5D	2.0D
M 3 x 0.50	3520-3.00X1.0DTL	3520-3.00X1.5DTL	3520-3.00X2.0DTL

**TANGLESS INSERTS INSTALLATION TOOL**



TANG FREE

	€
3520-3MITTL	608,98
3520-4MITTL	608,98
3520-5MITTL	608,98
3520-6MITTL	608,98
3520-8MITTL	608,98
3520-10MITTL	608,98
3520-12MITTL	608,98



## FREE RUNNING INSERT

UNC



FREE



UNC



AISI 304



SBAC AS 6734

NASM122075  
- NASM122275  
- NASM8646

...D



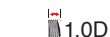
D	UNC	N°	3532	D1	D2	L	1.0D			1.5D			2.0D			Unit	
							<500	500-999	1000-...	<500	500-999	1000-...	<500	500-999	1000-...		
UNC	N°2-56	3532-2G	2.18	2.40	2.29	0,65	0,60	0,54	3.30	0,76	0,69	0,65	4.32	1,00	0,89	0,83	100
UNC	N°3-48	3532-3G	2.51	2.70	2.54	0,66	0,62	0,58	3.81	0,71	0,65	0,61	5.08	0,75	0,70	0,66	100
UNC	N°4-40	3532-4G	2.84	3.00	2.79	0,35	0,30	0,28	4.32	0,36	0,32	0,29	5.59	0,37	0,34	0,30	100
UNC	N°5-40	3532-5G	3.17	3.40	3.30	0,38	0,34	0,30	4.83	0,39	0,35	0,32	6.35	0,41	0,38	0,36	100
UNC	N°6-32	3532-6G	3.50	3.70	3.56	0,28	0,26	0,25	5.33	0,30	0,28	0,26	7.11	0,35	0,29	0,27	100
UNC	N°8-32	3532-8G	4.17	4.40	4.06	0,29	0,27	0,26	6.35	0,34	0,29	0,27	8.38	0,37	0,30	0,28	100
UNC	N°10-24	3532-10G	4.83	5.10	4.83	0,34	0,29	0,27	7.37	0,37	0,30	0,28	9.65	0,39	0,35	0,32	100
UNC	N°12-24	3532-12G	5.49	5.70	5.59	0,38	0,34	0,30	8.13	0,41	0,38	0,36	10.92	0,44	0,40	0,38	100
UNC	1/4-20	3532-1/4	6.35	6.70	6.35	0,38	0,34	0,30	9.65	0,41	0,38	0,36	12.70	0,44	0,40	0,38	100
UNC	5/16-18	3532-5/16	7.94	8.30	7.87	0,49	0,42	0,40	11.94	0,61	0,51	0,48	15.75	0,63	0,54	0,50	100
UNC	3/8-16	3532-3/8	9.52	9.90	9.65	0,69	0,63	0,59	14.48	0,75	0,66	0,62	19.30	1,00	0,86	0,80	100
UNC	7/16-14	3532-7/16	11.11	11.60	11.18	0,84	0,74	0,68	16.76	1,01	0,88	0,82	22.35	1,13	1,01	0,91	100
UNC	1/2-13	3532-1/2	12.70	13.00	12.70	0,89	0,79	0,72	19.05	1,01	0,88	0,82	25.40	1,13	1,01	0,91	100
UNC	9/16-12	3532-9/16	14.28	15.00	14.22	1,74	1,53	1,42	21.34	2,03	1,80	1,66	28.45	2,59	2,28	2,11	50
UNC	5/8-11	3532-5/8	15.87	16.50	16.00	1,75	1,54	1,44	24.13	2,04	1,81	1,67	32.00	2,61	2,30	2,13	50
UNC	3/4-10	3532-3/4	19.05	20.00	19.05	1,93	1,71	1,56	28.70	2,40	2,13	1,96	38.10	2,88	2,54	2,34	50
UNC	7/8-9	3532-7/8	22.22	23.00	22.35	2,51	2,22	2,04	33.53	3,13	2,76	2,55	44.70	3,74	3,30	3,03	25
UNC	1-8	3532-1	25.40	26.25	25.40	3,66	3,57	3,30	38.10	5,47	5,34	4,92	50.80	6,95	6,80	6,27	25
UNC	1.1/8-7	3532-1.1/8	28.57	29.50	28.70	5,82	5,13	4,71	42.93	7,70	6,78	6,25	57.15	7,98	7,04	6,47	25
UNC	1.1/4-7	3532-1.1/4	31.75	32.50	31.75	6,35	5,59	5,15	47.75	8,06	7,10	6,53	63.50	9,09	8,00	7,36	10
UNC	1.3/8-6	3532-1.3/8	34.92	36.00	35.05	6,96	6,13	5,65	52.58	8,59	7,56	6,96	69.85	10,19	8,98	8,25	10
UNC	1.1/2-6	3532-1.1/2	38.10	39.50	38.10	8,06	7,10	6,53	57.15	11,08	9,75	8,99	76.20	12,81	11,28	10,37	10

Important note: Theoretical insert length is referred to length after insert installation.



Coding example:

UNC 1/4-20



3532-1/4x1.0D







3532-1/4x1.5D



3532-1/4x2.0D

**FREE RUNNING INSERT**



		<b>3532-2G</b>	<b>D1</b> mm		<b>L</b> mm	 <b>2.5D</b>			<b>L</b> mm	 <b>3.0D</b>			<b>Unit</b>
						€	€	€		€	€	€	
					<500	500-999	1000-...		<500	500-999	1000-...		
UNC	Nº2-56	<b>3532-2G</b>	2.18	2.40	5.59	1,11	1,02	0,92	6.60	1,39	1,25	1,16	100
UNC	Nº3-48	<b>3532-3G</b>	2.51	2.70	6.35	0,79	0,72	0,67	7.62	0,87	0,80	0,74	100
UNC	Nº4-40	<b>3532-4G</b>	2.84	3.00	9.65	0,41	0,38	0,36	8.64	0,49	0,42	0,40	100
UNC	Nº5-40	<b>3532-5G</b>	3.17	3.40	7.87	0,49	0,42	0,40	9.65	0,61	0,51	0,48	100
UNC	Nº6-32	<b>3532-6G</b>	3.50	3.70	8.89	0,38	0,34	0,30	10.41	0,44	0,39	0,37	100
UNC	Nº8-32	<b>3532-8G</b>	4.17	4.40	10.41	0,39	0,36	0,34	12.45	0,46	0,41	0,39	100
UNC	Nº10-24	<b>3532-10G</b>	4.83	5.10	12.19	0,47	0,41	0,39	14.48	0,58	0,49	0,46	100
UNC	Nº12-24	<b>3532-12G</b>	5.49	5.70	13.72	0,53	0,48	0,45	16.51	0,66	0,60	0,54	100
UNC	1/4-20	<b>3532-1/4</b>	6.35	6.70	16.00	0,53	0,48	0,45	19.05	0,66	0,60	0,54	100
UNC	5/16-18	<b>3532-5/16</b>	7.94	8.30	19.81	0,75	0,65	0,61	23.62	0,89	0,79	0,72	100
UNC	3/8-16	<b>3532-3/8</b>	9.52	9.90	24.13	1,12	1,00	0,91	28.96	1,34	1,18	1,09	100
UNC	7/16-14	<b>3532-7/16</b>	11.11	11.60	27.94	1,37	1,20	1,11	33.53	1,67	1,47	1,35	100
UNC	1/2-13	<b>3532-1/2</b>	12.70	13.00	31.75	1,37	1,20	1,11	38.10	1,67	1,47	1,35	100
UNC	9/16-12	<b>3532-9/16</b>	14.28	15.00	35.56	3,24	2,86	2,63	42.67	3,50	3,09	2,86	50
UNC	5/8-11	<b>3532-5/8</b>	15.87	16.50	40.13	3,29	2,90	2,67	48.01	3,54	3,12	2,88	50
UNC	3/4-10	<b>3532-3/4</b>	19.05	20.00	47.75	3,75	3,31	3,05	57.15	4,13	3,64	3,35	50
UNC	7/8-9	<b>3532-7/8</b>	22.22	23.00	55.88	4,87	4,28	3,95	67.06	5,36	4,71	4,35	25
UNC	1-8	<b>3532-1</b>	25.40	26.25	63.50	8,21	8,03	7,41	76.20	9,96	9,73	8,97	25
UNC	1.1/8-7	<b>3532-1.1/8</b>	28.57	29.50	71.37	9,95	8,77	8,07	85.85	11,08	9,75	8,99	25
UNC	1.1/4-7	<b>3532-1.1/4</b>	31.75	32.50	79.50	11,40	10,05	9,24	95.25	12,82	11,29	10,38	10
UNC	1.3/8-6	<b>3532-1.3/8</b>	34.92	36.00	87.38	12,87	11,33	10,44	104.90	14,04	12,36	11,37	10
UNC	1.1/2-6	<b>3532-1.1/2</b>	38.10	39.50	95.25	16,75	14,74	13,58	114.30	19,05	16,77	15,44	10

Important note: Theoretical insert length is referred to length after insert installation.

## FREE RUNNING INSERT

UNF



FREE



UNF



AISI 304



SBAC AS 6734

NASM124651-124850  
NASM8846  
SBAC8455

...D

L  
1.0DL  
1.5DL  
2.0D

D	D1	D2	L	€			L	€			L	€			Unit	
				<500	500-999	1000-...		<500	500-999	1000-...		<500	500-999	1000-...		
UNF N°3 - 56	3534-3G	2.51	2.70	2.54	0,50	0,45	0,42	3.81	0,63	0,56	0,51	5.08	0,76	0,67	0,63	100
UNF N°4 - 48	3534-4G	2.84	3.00	2.79	0,50	0,45	0,42	4.32	0,63	0,56	0,51	5.59	0,76	0,67	0,63	100
UNF N°6 - 40	3534-6G	3.50	3.70	3.56	0,50	0,45	0,42	5.33	0,63	0,56	0,51	7.11	0,76	0,67	0,63	100
UNF N°8 - 36	3534-8G	4.17	4.40	4.06	0,50	0,45	0,42	6.35	0,63	0,56	0,51	8.38	0,76	0,67	0,63	100
UNF N°10 - 32	3534-10G	4.83	5.10	4.83	0,37	0,30	0,28	7.37	0,38	0,34	0,30	9.65	0,44	0,39	0,37	100
UNF N°12 - 28	3534-12G	5.49	5.70	5.59	0,60	0,51	0,48	8.13	0,62	0,58	0,51	10.92	0,64	0,61	0,56	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	6.35	0,37	0,30	0,28	9.65	0,38	0,34	0,30	12.70	0,44	0,39	0,37	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	7.87	0,48	0,42	0,40	11.94	0,51	0,45	0,42	15.75	0,63	0,53	0,49	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	9.65	0,72	0,63	0,59	14.48	0,75	0,65	0,61	19.30	0,89	0,79	0,72	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	11.18	0,88	0,78	0,71	16.76	1,01	0,87	0,81	22.35	1,12	1,00	0,91	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	12.70	0,88	0,78	0,71	19.05	1,01	0,87	0,81	25.40	1,12	1,00	0,91	100
UNF 9/16 - 18	3534-9/16	14.29	14.70	14.22	1,98	1,75	1,61	21.34	2,10	1,85	1,71	28.45	2,50	2,22	2,04	50
UNF 5/8 - 18	3534-5/8	15.87	16.30	16.00	2,03	1,80	1,66	24.13	2,21	1,94	1,80	32.00	2,50	2,22	2,04	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	19.05	2,24	1,97	1,83	28.70	2,40	2,13	1,96	38.10	2,74	2,42	2,23	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	22.35	4,66	4,11	3,78	33.53	6,87	6,05	5,58	44.70	8,75	7,70	7,09	25
UNF 1-12	3534-1	25.40	26.00	25.40	4,66	4,11	3,78	38.10	6,87	6,05	5,58	50.80	8,75	7,70	7,09	25
UNF 1-14	3535-1	25.40	26.00	25.40	4,85	4,25	3,92	38.10	7,15	6,30	5,79	50.80	9,09	7,99	7,35	25
UNF 1.1/8 - 12	3534-1.1/8	28.57	29.50	28.70	6,68	5,89	5,42	43.18	8,82	7,77	7,15	57.15	9,16	8,06	7,43	10
UNF 1.1/4 - 12	3534-1.1/4	31.75	32.50	31.75	7,26	6,39	5,89	47.75	9,60	8,44	7,78	63.50	10,42	9,17	8,43	10
UNF 1.3/8 - 12	3534-1.3/8	34.92	35.50	35.05	7,96	7,01	6,45	52.58	9,85	8,66	7,97	69.85	11,67	10,27	9,45	10
UNF 1.1/2 - 12	3534-1.1/2	38.10	38.50	38.10	9,22	8,12	7,48	57.15	11,99	11,64	10,71	76.20	14,67	12,92	11,89	10

Important note: Theoretical insert length is referred to length after insert installation.



Coding example:

UNF N°3 - 56

L  
1.0D

3534-3Gx1.0D

L  
1.5D

3534-3Gx1.5D

L  
2.0D

3534-3Gx2.0D

**FREE RUNNING INSERT**

UNF    FREE    UNF    AISI 304    SBAC AS 6734    NASM124551-124850  
NASM8846 SBAC8455    ...D



D	UNF	Part No.	D1 mm	D2 mm	L mm			L mm			Unit			
					2.5D	3.0D	€	€	€					
					<500	500-999	1000-...	<500	500-999	1000-...				
UNF	Nº3	- 56	3534-3G	2.51	2.70	6.35	0,87	0,78	0,71	7.62	1,02	0,89	0,83	100
UNF	Nº4	- 48	3534-4G	2.84	3.00	7.11	0,87	0,78	0,71	8.64	1,02	0,89	0,83	100
UNF	Nº6	- 40	3534-6G	3.50	3.70	8.89	0,87	0,78	0,71	10.41	1,02	0,89	0,83	100
UNF	Nº8	- 36	3534-8G	4.17	4.40	10.41	0,87	0,78	0,71	12.45	1,02	0,89	0,83	100
UNF	Nº10	- 32	3534-10G	4.83	5.10	12.19	0,58	0,49	0,46	14.48	0,66	0,60	0,54	100
UNF	Nº12	- 28	3534-12G	5.49	5.70	13.72	0,67	0,63	0,59	16.51	0,75	0,70	0,66	100
UNF	1/4	- 28	3534-1/4	6.35	6.60	16.00	0,58	0,49	0,46	19.05	0,66	0,60	0,54	100
UNF	5/16	- 24	3534-5/16	7.94	8.20	19.81	0,76	0,67	0,63	23.62	0,89	0,79	0,72	100
UNF	3/8	- 24	3534-3/8	9.52	9.80	24.13	1,13	1,01	0,91	28.96	1,34	1,18	1,09	100
UNF	7/16	- 20	3534-7/16	11.11	11.50	27.94	1,40	1,23	1,13	33.53	1,67	1,47	1,35	100
UNF	1/2	- 20	3534-1/2	12.70	13.00	31.75	1,40	1,23	1,13	38.10	1,67	1,47	1,35	100
UNF	9/16	- 18	3534-9/16	14.29	14.70	35.56	3,17	2,79	2,58	42.67	3,56	3,13	2,89	50
UNF	5/8	- 18	3534-5/8	15.87	16.30	40.13	2,98	2,63	2,42	48.01	3,56	3,13	2,89	50
UNF	3/4	- 16	3534-3/4	19.05	19.50	47.75	3,75	3,31	3,05	57.15	4,13	3,64	3,35	50
UNF	7/8	- 14	3534-7/8	22.22	22.50	55.88	10,45	9,20	8,46	67.06	12,17	10,71	9,86	25
UNF	1	- 12	3534-1	25.40	26.00	63.50	10,45	9,20	8,46	76.20	12,17	10,71	9,86	25
UNF	1	- 14	3535-1	25.40	26.00	63.50	10,45	9,20	8,46	76.20	12,53	11,03	10,15	25
UNF	1.1/8	- 12	3534-1.1/8	28.57	29.50	71.37	11,40	10,05	9,24	85.85	12,71	11,18	10,29	10
UNF	1.1/4	- 12	3534-1.1/4	31.75	32.50	79.50	13,03	11,48	10,57	95.25	14,69	12,93	11,89	10
UNF	1.3/8	- 12	3534-1.3/8	34.92	35.50	87.38	14,74	12,98	11,95	104.90	16,07	14,14	13,02	10
UNF	1.1/2	- 12	3534-1.1/2	38.10	38.50	95.25	19,16	16,87	15,52	114.30	21,82	19,20	17,67	10



Other contents available on demand.

## FREE RUNNING INSERT

BSW



FREE



BSW




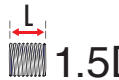
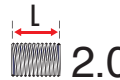
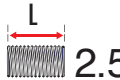
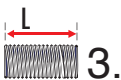


AISI 304

SBAC AS 4736  
SBAC AS 4947

...D



	D1 mm		 1.0D		 1.5D		 2.0D		 2.5D		 3.0D		Unit
			L mm	€	L mm	€	L mm	€	L mm	€	L mm	€	
BSW 1/8 - 40	3.17	3.40	3.30	0,44	5.08	0,48	6.60	0,58	8.38	0,74	9.91	0,96	100
BSW 3/16 - 24	4.76	5.00	4.83	0,44	7.37	0,48	9.65	0,58	12.19	0,74	14.48	0,96	100
BSW 1/4 - 20	6.35	6.70	6.35	0,40	9.65	0,44	12.70	0,50	16.00	0,66	19.05	0,71	100
BSW 5/16 - 18	7.94	8.30	7.87	0,46	11.94	0,53	15.75	0,59	19.81	0,69	23.62	0,85	100
BSW 3/8 - 16	9.52	10.00	9.65	0,83	14.48	0,88	19.30	1,05	24.13	1,23	28.96	1,47	100
BSW 7/16 - 14	11.11	11.60	11.18	1,01	16.76	1,10	22.35	1,27	27.94	1,50	33.53	1,84	100
BSW 1/2 - 12	12.70	13.00	12.70	1,01	19.05	1,10	25.40	1,27	31.75	1,50	38.10	1,84	100
BSW 9/16 - 12	14.29	14.75	14.22	2,50	21.34	3,50	28.45	4,11	35.56	4,88	42.67	5,97	50
BSW 5/8 - 11	15.87	16.50	16.00	2,50	24.13	3,50	32.00	4,11	40.13	4,88	48.01	5,97	50
BSW 3/4 - 10	19.05	20.00	19.05	3,24	28.70	4,16	38.10	5,06	47.75	6,08	57.15	7,28	50
BSW 7/8 - 9	22.22	23.25	22.35	4,16	33.53	5,80	44.70	7,26	55.88	8,74	67.06	10,48	25
BSW 1 - 8	25.40	26.50	25.40	4,48	38.10	6,65	50.80	7,26	63.50	8,74	76.20	10,48	25

BSF



FREE





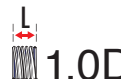
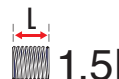
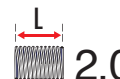
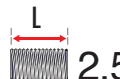
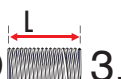
BSF



AISI 304

SBAC AS 4737-8  
SBAC AS 4948-8

...D

	D1 mm		 1.0D		 1.5D		 2.0D		 2.5D		 3.0D		Unit
			L mm	€	L mm	€	L mm	€	L mm	€	L mm	€	
BSF 3/16 - 32	4.76	5.00	4.83	0,44	7.37	0,48	9.65	0,59	12.19	0,68	14.48	0,81	100
BSF 1/4 - 26	6.35	6.60	6.35	0,42	9.65	0,44	12.70	0,51	16.00	0,63	19.05	0,72	100
BSF 5/16 - 22	7.94	8.30	7.87	0,44	11.94	0,54	15.75	0,60	19.81	0,72	23.62	0,87	100
BSF 3/8 - 20	9.52	9.80	9.65	0,84	14.48	0,90	19.30	1,07	24.13	1,25	28.96	1,50	100
BSF 7/16 - 18	11.11	11.60	11.18	1,03	16.76	1,12	22.35	1,29	27.94	1,53	33.53	1,88	100
BSF 1/2 - 16	12.70	13.25	12.70	1,03	19.05	1,12	25.40	1,29	31.75	1,53	38.10	1,88	100
BSF 9/16 - 16	14.29	14.75	14.22	2,56	21.34	3,39	28.45	4,19	35.56	4,99	42.67	6,78	50
BSF 5/8 - 14	15.88	16.50	16.00	2,56	24.13	3,39	32.00	4,19	40.13	4,99	48.01	6,11	50
BSF 3/4 - 12	19.05	19.50	19.05	3,31	28.70	4,24	38.10	5,19	47.75	6,21	57.15	7,46	50
BSF 7/8 - 11	22.23	22.75	22.35	4,24	33.53	5,94	44.70	7,42	55.88	8,94	67.06	10,70	25
BSF 1 - 10	25.40	26.25	25.40	4,24	38.10	5,94	50.80	7,42	63.50	8,94	76.20	10,70	25

**FREE RUNNING INSERT**



	D1 mm		1.0D		1.5D		2.0D		Unit	
			L mm	€	L mm	€	L mm	€		
BSP 1/8 - 28	3546-1/8	9.73	10.00	3.30	0,62	4.83	0,87	6.35	0,97	100
BSP 1/4 - 19	3546-1/4	13.16	13.75	6.35	0,83	9.65	1,19	12.70	1,34	100
BSP 3/8 - 19	3546-3/8	16.66	17.00	9.65	0,74	14.22	1,35	19.05	1,53	100
BSP 1/2 - 14	3546-1/2	20.95	21.50	12.70	1,92	19.05	1,94	25.40	3,08	50
BSP 5/8 - 14	3546-5/8	22.91	23.50	16.00	2,94	23.88	4,34	31.75	4,53	50
BSP 3/4 - 14	3546-3/4	26.44	27.00	19.05	2,94	28.70	4,34	38.10	4,53	50
BSP 7/8 - 14	3546-7/8	30.20	30.50	22.35	7,55	33.53	13,27	44.45	16,55	25
BSP 1 - 11	3546-1	33.25	33.75	25.40	8,46	38.10	14,86	50.80	17,02	25

	L mm	€	Unit	
				1.5D
NPT 1/8 - 27	3552-1/8	4.78	1,24	100
NPT 1/4 - 18	3552-1/4	9.53	1,79	100
NPT 3/8 - 18	3552-3/8	14.30	2,25	100
NPT 1/2 - 14	3552-1/2	19.05	3,69	50
NPT 3/4 - 14	3552-3/4	28.58	5,29	50
NPT 1 - 11.1/2	3552-1	38.10	7,10	25



Coding example:

	1.0D	1.5D
BSP 1/8-28	3546-1/8x1.0D	3546-1/8x1.5D

## FREE RUNNING INSERT

UNx8



FREE






8-UN



AISI 304

...D



		D1 mm		 1.0D		 1.5D		 2.0D		Unit	
				L mm	€	L mm	€	L mm	€		
UN	1.1/8 - 8	3570-1.1/8	28.57	28.50	28.70	11,14	42.93	13,14	57.15	14,02	10
UN	1.1/4 - 8	3570-1.1/4	31.75	32.00	31.75	13,35	47.75	16,11	63.50	18,23	10
UN	1.3/8 - 8	3570-1.3/8	34.92	35.00	35.05	15,07	52.32	20,02	69.85	22,04	10
UN	1.1/2 - 8	3570-1.1/2	38.10	38.00	38.10	16,81	57.15	22,31	76.20	26,17	10
UN	1.5/8 - 8	3570-1.5/8	41.27	41.00	41.40	18,42	61.98	23,67	82.55	29,17	10
UN	1.3/4 - 8	3570-1.3/4	44.45	44.50	44.45	19,96	66.80	25,71	88.90	29,57	10
UN	1.7/8 - 8	3570-1.7/8	47.62	47.50	47.75	21,55	71.37	27,58	95.25	34,04	10
UN	2 - 8	3570-2	50.80	51.00	50.80	23,06	76.20	29,62	101.60	36,48	10

BA



FREE










BA



AISI 304

SBAC AS 4736  
SBAC AS 4947

...D

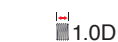
		D1 mm		 1.0D		 1.5D		 2.0D		 2.5D		 3.0D		Unit
				L mm	€	L mm	€	L mm	€	L mm	€	L mm	€	
BA 0	3544-0	6.00	6.20	6.10	2,76	8.89	3,65	11.94	4,38	14.99	5,03	18.03	5,79	100
BA 2	3544-2	4.70	4.90	4.83	1,44	7.11	1,60	9.40	1,76	11.68	2,07	14.22	2,24	100
BA 4	3544-4	3.60	3.80	3.56	1,44	5.33	1,60	7.11	1,76	8.89	2,07	10.92	2,24	100
BA 6	3544-6	2.80	2.90	2.79	1,44	4.32	1,60	5.59	1,76	7.11	2,07	8.38	2,24	100



X.XD

Coding example:

UN 1.1/8 - 8



1.0D

3570-1.1/8x1.0D



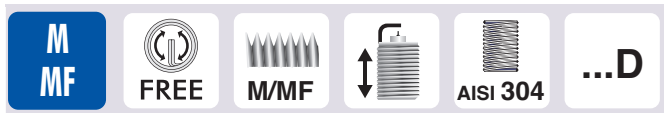
1.5D

3570-1.1/8x1.5D

**FREE RUNNING INSERT**



					1.0D	1.5D	2.0D				
		D1 mm		L mm	€	L mm	€	L mm	€	Unit	
BSB	1/4 - 26	3560-1/4	6,35	6.60	6,35	1,69	9,53	2,33	12,70	2,55	100
BSB	5/16 - 26	3560-5/16	7,94	8.20	7,95	0,76	11,91	0,91	15,88	1,23	100
BSB	3/8 - 26	3560-3/8	9,52	9.80	9,53	0,88	14,30	1,06	19,05	1,44	100
BSB	7/16 - 26	3560-7/16	11,11	11.30	11,13	0,93	16,66	1,44	22,23	1,95	100
BSB	1/2 - 26	3560-1/2	12,70	12.70	12,70	1,91	19,05	2,42	25,40	3,08	50



			8.40mm	12.40mm	16.40mm	
		$\emptyset$	€	€	€	Unit
14x1.25	3522-14.00	14.25	1,03	1,03	1,03	50

			1/2"	3/4"	
		$\emptyset$	€	€	Unit
10x1.00	3522-10.00	10.30	0,51	-	100
12x1.25	3522-12.00	12.30	0,62	0,75	100
14x1.25	3522-14.00	14.25	0,89	1,38	50
18x1.50	3522-18.00	18.50	1,20	-	50



			0.339"	3/8"	7/16"	
			€	€	€	Unit
10x1.00	3522-10.00	10.30	0,43	-	-	100
14x1.25	3522-14.00	14.25	-	0,97	1,06	50

M  
MF



FREE



M/MF



AISI 304



BS7752  
DIN8140

...DP

FREE RUNNING INSERT

		€	D1 mm	L mm					
						Accessories			
M 3 x 0.50	3520-3.00X1.0DP		1.00	3.00	10	3.20	3520-3.00I	3500-HIT4	3500-TB4
<b>M 3 x 0.50</b>	<b>3520-3.00X1.5DP</b>		1.50	4.50	10	3.20	3520-3.00I	3500-HIT4	3500-TB4
M 3 x 0.50	3520-3.00X2.0DP		2.00	6.00	10	3.20	3520-3.00I	3500-HIT4	3500-TB4
M 4 x 0.70	3520-4.00X1.0DP		1.00	4.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6
<b>M 4 x 0.70</b>	<b>3520-4.00X1.5DP</b>		1.50	6.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6
M 4 x 0.70	3520-4.00X2.0DP		2.00	8.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6
M 5 x 0.80	3520-5.00X1.0DP		1.00	5.00	10	5.20	3520-5.00I	3500-HIT8	3500-TB8
<b>M 5 x 0.80</b>	<b>3520-5.00X1.5DP</b>		1.50	7.50	10	5.20	3520-5.00I	3500-HIT8	3500-TB8
M 5 x 0.80	3520-5.00X2.0DP		2.00	10.00	10	5.20	3520-5.00I	3500-HIT8	3500-TB8
M 6 x 1.00	3520-6.00X1.0DP		1.00	6.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9
<b>M 6 x 1.00</b>	<b>3520-6.00X1.5DP</b>		1.50	9.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9
M 6 x 1.00	3520-6.00X2.0DP		2.00	12.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9
M 6 x 1.00	3520-6.00X2.5DP		2.50	15.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9
M 8 x 1.00	3521-8.00X1.0DP		1.00	8.00	10	8.30	3521-8.00I	3500-HIT11	3500TB12
M 8 x 1.00	3521-8.00X1.5DP		1.50	12.00	10	8.30	3521-8.00I	3500-HIT11	3500TB12
M 8 x 1.00	3521-8.00X2.0DP		2.00	16.00	10	8.30	3521-8.00I	3500-HIT11	3500TB12
M 8 x 1.25	3520-8.00X1.0DP		1.00	8.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12
<b>M 8 x 1.25</b>	<b>3520-8.00X1.5DP</b>		1.50	12.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12
M 8 x 1.25	3520-8.00X2.0DP		2.00	16.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12
M 10 x 1.25	3521-10.00X1.5DP		1.50	15.00	10	10.30	3521-10.00I	3500-HIT13	3500-TB13
M 10 x 1.50	3520-10.00X1.0DP		1.00	10.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13
<b>M 10 x 1.50</b>	<b>3520-10.00X1.5DP</b>		1.50	15.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13
M 10 x 1.50	3520-10.00X2.0DP		2.00	20.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13
M 12 x 1.50	3521-12.00X1.5DP		1.50	18.00	10	12.40	3521-12.00I	3500-HIT15	3500-TB15
M 12 x 1.75	3520-12.00X1.0DP		1.00	12.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15
<b>M 12 x 1.75</b>	<b>3520-12.00X1.5DP</b>		1.50	18.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15
M 12 x 1.75	3520-12.00X2.0DP		2.00	24.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15
M 14 x 1.50	3521-14.00X1.5DP		1.50	21.00	5	14.40	3521-14.00I	3500-HIT16	-
M 14 x 2.00	3520-14.00X1.0DP		1.00	14.00	5	14.50	3520-14.00I	3500-HIT16	-
<b>M 14 x 2.00</b>	<b>3520-14.00X1.5DP</b>		1.50	21.00	5	14.50	3520-14.00I	3500-HIT16	-
M 14 x 2.00	3520-14.00X2.0DP		2.00	28.00	5	14.50	3520-14.00I	3500-HIT16	-
M 16 x 1.50	3521-16.00X1.5DP		1.50	24.00	5	16.50	3521-16.00I	3500-HIT18	-
M 16 x 2.00	3520-16.00X1.0DP		1.00	16.00	5	16.50	3520-16.00I	3500-HIT18	-
<b>M 16 x 2.00</b>	<b>3520-16.00X1.5DP</b>		1.50	24.00	5	16.50	3520-16.00I	3500-HIT18	-
M 16 x 2.00	3520-16.00X2.0DP		2.00	32.00	5	16.50	3520-16.00I	3500-HIT18	-
M 18 x 2.00	3521-18.00X1.5DP		1.50	27.00	5	18.50	3521-18.00I	3500-HIT20	-
M 18 x 2.50	3520-18.00X1.0DP		1.00	18.00	5	19.00	3520-18.00I	3500-HIT20	-
<b>M 18 x 2.50</b>	<b>3520-18.00X1.5DP</b>		1.50	27.00	5	19.00	3520-18.00I	3500-HIT20	-
M 18 x 2.50	3520-18.00X2.0DP		2.00	36.00	5	19.00	3520-18.00I	3500-HIT20	-
M 20 x 2.50	3520-20.00X1.0DP		1.00	20.00	5	20.75	3520-20.00I	3500-HIT21	-
<b>M 20 x 2.50</b>	<b>3520-20.00X1.5DP</b>		1.50	30.00	5	20.75	3520-20.00I	3500-HIT21	-
M 20 x 2.50	3520-20.00X2.0DP		2.00	40.00	5	20.75	3520-20.00I	3500-HIT21	-
<b>M 22 x 2.50</b>	<b>3520-22.00X1.5DP</b>		1.50	33.00	3	22.75	3520-22.00I	3500-HIT22	-
M 22 x 2.50	3520-22.00X2.0DP		2.00	44.00	3	22.75	3520-22.00I	3500-HIT22	-
<b>M 24 x 3.00</b>	<b>3520-24.00X1.5DP</b>		1.50	36.00	3	24.50	3520-24.00I	3500-HIT23	-

Accessories not included in listed price



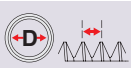





M12x1,25







M12x1,25

		€	D1 mm	L					
						Accessories			
M 12 x 1.25	3522-12.00X1/2P		-	1/2"	10	12.30	3522-12.00PN	3500-HIT15	3500-TB15
M 12 x 1.25	3522-12.00X3/4P		-	3/4"	10	12.30	3522-12.00PN	3500-HIT15	3500-TB15
M 14 x 1.25	3522-14.00X3/8P		-	3/8"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17
M 14 x 1.25	3522-14.00X1/2P		-	1/2"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17
M 14 x 1.25	3522-14.00X3/4P		-	3/4"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17
M 14 x 1.25	3522-14.00X8.4P		-	8.4 mm	5	14.30	3522-14.00PN	3500-HIT17	3500-HIT17
M 14 x 1.25	3522-14.00X12.4P		-	12.4"	5	14.30	3522-14.00PN	3500-HIT17	3500-HIT17
M 14 x 1.25	3522-14.00X16.4P		-	16.4"	5	14.30	3522-14.00PN	3500-HIT17	3500-HIT17

Accessories not included in listed price


**FREE RUNNING INSERT**


		€	D1 mm	L mm		mm	 <small>&lt;60° 4-5</small>	Accessories	
									
UNC N°6 - 32	<b>3532-6GX1.5DP</b>		1.50	5.33	10	3.80	3532-6GI	3500-HIT5	3500-TB5
UNC N°8 - 32	<b>3532-8GX1.5DP</b>		1.50	6.35	10	4.40	3532-8GI	3500-HIT6	3500-TB6
UNC N°10 - 24	<b>3532-10GX1.5DP</b>		1.50	7.11	10	5.20	3532-10GI	3500-HIT7	3500-TB8
UNC 1/4 - 20	<b>3532-1/4X1.5DP</b>		1.50	9.65	10	6.70	3532-1/4I	3500-HIT9	3500-TB9
UNC 5/16 - 18	<b>3532-5/16X1.0DP</b>		1.00	7.87	10	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 5/16 - 18	<b>3532-5/16X1.5DP</b>		1.50	11.94	10	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 3/8 - 16	<b>3532-3/8X1.5DP</b>		1.50	14.22	10	9.90	3532-3/8I	3500-HIT13	3500-TB12
UNC 3/8 - 16	<b>3532-3/8X2.0DP</b>		2.00	19.05	10	9.90	3532-3/8I	3500-HIT13	3500-TB12
UNC 7/16 - 14	<b>3532-7/16X1.5DP</b>		1.50	16.76	10	11.60	3532-7/16I	3500-HIT14	3500-TB14
UNC 1/2 - 13	<b>3532-1/2X1.5DP</b>		1.50	19.05	10	13.00	3532-1/2I	3500-HIT15	3500-TB15
UNC 5/8 - 11	<b>3532-5/8X1.5DP</b>		1.50	23.88	5	16.50	3532-5/8I	3500-HIT18	-
UNC 3/4 - 10	<b>3532-3/4X1.5DP</b>		1.50	28.70	5	20.00	3532-3/4I	3500-HIT20	-
UNC 7/8 - 9	<b>3532-7/8X1.5DP</b>		1.50	33.27	3	23.00	3532-7/8I	3500-HIT22	-
UNC 1 - 8	<b>3532-1X1.5DP</b>		1.50	38.10	3	26.25	3532-1I	3500-HIT23	-


		€	D1 mm	L mm		mm	 <small>&lt;60° 4-5</small>	Accessories	
									
UNF N°10 - 32	<b>3534-10GX1.5DP</b>		1.50	7.11	10	5.10	3534-10GI	3500-HIT8	3500-TB8
UNF 1/4 - 28	<b>3534-1/4X1.5DP</b>		1.50	9.65	10	6.70	3534-1/4I	3500-HIT9	3500-TB9
UNF 5/16 - 24	<b>3534-5/16X1.5DP</b>		1.50	11.94	10	8.30	3534-5/16I	3500-HIT11	3500-TB12
UNF 3/8 - 24	<b>3534-3/8X1.5DP</b>		1.50	14.22	10	9.80	3534-3/8I	3500-HIT13	3500-TB13
UNF 7/16 - 20	<b>3534-7/16X1.5DP</b>		1.50	16.76	10	11.50	3534-7/16I	3500-HIT14	3500-TB14
UNF 1/2 - 20	<b>3534-1/2X1.5DP</b>		1.50	19.05	10	13.00	3534-1/2I	3500-HIT15	3500-TB15
UNF 5/8 - 18	<b>3534-5/8X1.5DP</b>		1.50	24.13	5	16.50	3534-5/8I	3500-HIT18	-
UNF 3/4 - 16	<b>3534-3/4X1.5DP</b>		1.50	28.70	5	19.50	3534-3/4I	3500-HIT21	-


Accessories not included in listed price


**UNC  
UNF**

 **FREE**

 **UNC/UNF**

 **AISI 304**

 **SBAC AS 6734  
SBAC AS 8456**


 **SBAC AS 6733  
SBAC AS 8455**


**...DP**


**powercoil**  
by CELESA


Pink

**BSP  
(GAS)**

 **FREE**

 **BSP**

 **AISI 304**

 **BS84**

**...DP**

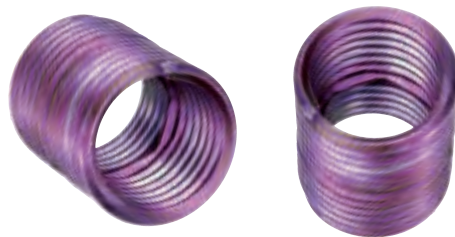


		€	D1 mm	L mm		mm	 <small>&lt;55° 4-5</small>	Accessories	
									
BSP 1/8 - 28	<b>3546-1/8X1.5DP</b>		1.50	4.83	10	10.00	3546-1/8I	3500-HIT14	
BSP 1/4 - 19	<b>3546-1/4X1.5DP</b>		1.50	9.65	10	13.75	3546-1/4I	3500-HIT16	
BSP 3/8 - 19	<b>3546-3/8X1.5DP</b>		1.50	14.22	10	17.00	3546-3/8I	3500-HIT20	
BSP 1/2 - 14	<b>3546-1/2X1.5DP</b>		1.50	19.05	10	21.50	3546-1/2I	3500-HIT23	
BSP 3/4 - 14	<b>3546-3/4X1.5DP</b>		1.50	28.70	5	27.00	3546-3/4I	3500-HIT24	
BSP 1 - 11	<b>3546-1X1.5DP</b>		1.50	38.10	3	33.75	3546-1I	3500-HIT27	

Accessories not included in listed price



SCREW LOCKING INSERTS



powercoil  
by CELESA

Pink

D	L	L	1.0D			1.5D			2.0D			Unit			
			L mm	€			L mm	€			L mm		€		
				<500	500-999	1000-...		<500	500-999	1000-...		<500	500-999	1000-...	
M 2 x 0.40	3520-2.00	2.10	2.00	0,66	0,60	0,54	3.00	0,86	0,76	0,70	4.00	1,01	0,88	0,82	100
M 2.20 x 0.45	3520-2.20	2.30	2.20	0,63	0,56	0,51	3.30	0,82	0,72	0,67	4.40	0,93	0,84	0,79	100
M 2.50 x 0.45	3520-2.50	2.60	2.50	0,42	0,37	0,35	3.75	0,43	0,40	0,38	5.00	0,44	0,41	0,39	100
M 3 x 0.50	3520-3.00	3.20	3.00	0,32	0,28	0,26	4.50	0,37	0,32	0,29	6.00	0,38	0,35	0,32	100
M 3.50 x 0.60	3520-3.50	3.70	3.50	0,38	0,35	0,32	5.25	0,40	0,38	0,36	7.00	0,42	0,40	0,38	100
M 4 x 0.70	3520-4.00	4.20	4.00	0,32	0,29	0,27	6.00	0,37	0,32	0,29	8.00	0,38	0,34	0,30	100
M 5 x 0.80	3520-5.00	5.20	5.00	0,38	0,34	0,30	7.50	0,39	0,35	0,32	10.00	0,42	0,38	0,36	100
M 6 x 1.00	3520-6.00	6.30	6.00	0,41	0,37	0,35	9.00	0,43	0,38	0,36	12.00	0,48	0,43	0,40	100
M 7 x 1.00	3520-7.00	7.30	7.00	0,48	0,43	0,40	10.50	0,58	0,50	0,47	14.00	0,64	0,58	0,51	100
M 8 x 1.00	3521-8.00	8.30	8.00	0,51	0,46	0,43	12.00	0,56	0,47	0,44	16.00	0,65	0,56	0,51	100
M 8 x 1.25	3520-8.00	8.30	8.00	0,42	0,38	0,36	12.00	0,48	0,43	0,40	16.00	0,58	0,48	0,45	100
M 9 x 1.25	3520-9.00	9.40	9.00	1,04	0,92	0,86	13.50	1,33	1,10	1,03	18.00	1,40	1,17	1,08	100
M 10 x 1.00	3523-10.00	10.30	10.00	0,56	0,48	0,45	15.00	0,68	0,59	0,53	20.00	0,70	0,63	0,58	100
M 10 x 1.25	3521-10.00	10.30	10.00	0,53	0,47	0,44	15.00	0,67	0,62	0,58	20.00	0,69	0,66	0,62	100
M 10 x 1.50	3520-10.00	10.40	10.00	0,56	0,47	0,44	15.00	0,67	0,58	0,51	20.00	0,70	0,63	0,59	100
M 11 x 1.50	3520-11.00	11.40	11.00	1,09	0,91	0,85	16.50	1,10	0,93	0,87	22.00	1,11	1,02	0,92	100
M 12 x 1.25	3523-12.00	12.30	12.00	0,89	0,74	0,68	18.00	0,97	0,81	0,75	24.00	1,05	0,93	0,86	100
M 12 x 1.50	3521-12.00	12.40	12.00	0,90	0,79	0,72	18.00	0,98	0,85	0,79	24.00	1,08	1,01	0,91	100
M 12 x 1.75	3520-12.00	12.50	12.00	0,81	0,68	0,64	18.00	0,97	0,82	0,76	24.00	1,05	0,91	0,85	100
M 14 x 1.50	3521-14.00	14.50	14.00	1,24	1,10	1,03	21.00	1,44	1,17	1,08	28.00	1,58	1,31	1,23	50
M 14 x 2.00	3520-14.00	14.50	14.00	1,13	1,01	0,91	21.00	1,30	1,22	1,12	28.00	1,60	1,52	1,41	50
M 16 x 1.50	3521-16.00	16.50	16.00	1,68	1,50	1,42	24.00	1,81	1,62	1,50	32.00	2,18	2,01	1,85	50
M 16 x 2.00	3520-16.00	16.50	16.00	1,56	1,40	1,29	24.00	1,63	1,51	1,40	32.00	2,02	1,88	1,73	50
M 18 x 1.50	3523-18.00	18.50	18.00	2,72	2,26	2,10	27.00	2,76	2,38	2,21	36.00	4,22	3,47	3,18	50
M 18 x 2.00	3521-18.00	18.50	18.00	2,32	2,07	1,92	27.00	2,59	2,42	2,30	36.00	3,53	3,09	2,86	50
M 18 x 2.50	3520-18.00	19.00	18.00	2,34	2,07	1,92	27.00	2,66	2,35	2,17	36.00	3,62	3,27	3,01	50
M 20 x 1.50	3523-20.00	20.50	20.00	3,08	2,68	2,48	30.00	3,64	3,29	3,02	40.00	4,25	3,70	3,39	25
M 20 x 2.00	3521-20.00	20.50	20.00	2,68	2,32	2,14	30.00	3,29	2,91	2,68	40.00	4,22	3,69	3,39	25
M 20 x 2.50	3520-20.00	20.75	20.00	2,81	2,48	2,28	30.00	3,39	3,02	2,78	40.00	4,38	3,87	3,56	25
M 22 x 1.50	3523-22.00	22.50	22.00	3,12	2,96	2,65	33.00	3,50	3,33	2,90	44.00	4,66	4,50	3,51	25
M 22 x 2.00	3521-22.00	22.50	22.00	2,82	2,57	2,36	33.00	3,53	3,18	2,90	44.00	4,47	4,14	3,90	25
M 22 x 2.50	3520-22.00	22.75	22.00	2,93	2,71	2,50	33.00	3,66	3,33	3,07	44.00	4,63	4,23	3,91	25
M 24 x 1.50	3523-24.00	24.50	24.00	3,58	3,39	2,86	36.00	4,10	3,58	3,43	48.00	4,87	4,23	3,99	25
M 24 x 2.00	3521-24.00	24.50	24.00	3,53	3,26	3,05	36.00	4,24	3,90	3,62	48.00	4,69	4,43	4,27	25
M 24 x 3.00	3520-24.00	25.00	24.00	3,70	3,45	3,17	36.00	4,43	4,14	3,80	48.00	4,90	4,60	4,23	25



Coding example:

	1.0D	1.5D
M 14 x 2.00	3520-14.00x1.0DSL	3520-14.00x1.5DSL

**SCREW LOCKING INSERTS**



D	D x P	3520-...	Ø	L mm	2.5D			3.0D				Unit
					€			€				
					<500	500-999	1000-...	L mm	<500	500-999	1000-...	
M	2 x 0.40	3520-2.00	2.10	5.00	1,13	1,01	0,91	6.00	1,42	1,25	1,16	100
M	2.20 x 0.45	3520-2.20	2.30	5.50	1,07	0,93	0,87	6.60	1,34	1,18	1,09	100
M	2.50 x 0.45	3520-2.50	2.60	6.25	0,46	0,43	0,40	9.00	0,56	0,53	0,49	100
M	3 x 0.50	3520-3.00	3.20	7.50	0,43	0,41	0,39	9.00	0,51	0,47	0,44	100
M	3.50 x 0.60	3520-3.50	3.70	8.75	0,48	0,46	0,43	10.50	0,60	0,54	0,50	100
M	4 x 0.70	3520-4.00	4.20	10.00	0,43	0,41	0,39	12.00	0,48	0,44	0,41	100
M	5 x 0.80	3520-5.00	5.20	12.50	0,50	0,47	0,44	15.00	0,62	0,56	0,51	100
M	6 x 1.00	3520-6.00	6.30	15.00	0,60	0,54	0,50	18.00	0,70	0,64	0,60	100
M	7 x 1.00	3520-7.00	7.30	17.50	0,69	0,66	0,62	21.00	0,83	0,79	0,72	100
M	8 x 1.00	3521-8.00	8.30	20.00	0,75	0,67	0,63	24.00	0,91	0,86	0,82	100
M	8 x 1.25	3520-8.00	8.30	20.00	0,69	0,64	0,60	24.00	0,83	0,75	0,69	100
M	9 x 1.25	3520-9.00	9.40	22.50	1,55	1,38	1,27	27.00	2,02	1,85	1,71	100
M	10 x 1.00	3523-10.00	10.30	25.00	0,83	0,71	0,66	30.00	1,13	1,02	0,92	100
M	10 x 1.25	3521-10.00	10.30	25.00	0,84	0,80	0,74	30.00	1,16	1,11	1,04	100
M	10 x 1.50	3520-10.00	10.40	25.00	0,83	0,74	0,68	30.00	1,13	1,04	0,96	100
M	11 x 1.50	3520-11.00	11.40	27.50	1,38	1,26	1,17	33.00	1,69	1,62	1,50	100
M	12 x 1.25	3523-12.00	12.30	30.00	1,35	1,30	1,20	36.00	1,69	1,61	1,58	100
M	12 x 1.50	3521-12.00	12.40	30.00	1,35	1,14	1,06	36.00	1,74	1,72	1,58	100
M	12 x 1.75	3520-12.00	12.50	30.00	1,35	1,29	1,19	36.00	1,69	1,66	1,53	100
M	14 x 1.50	3521-14.00	14.50	35.00	1,93	1,53	1,42	42.00	3,21	3,16	2,92	50
M	14 x 2.00	3520-14.00	14.50	35.00	1,93	1,83	1,69	42.00	2,32	2,25	2,07	50
M	16 x 1.50	3521-16.00	16.50	40.00	2,39	2,24	2,06	48.00	3,09	3,00	2,76	50
M	16 x 2.00	3520-16.00	16.50	40.00	2,43	2,34	2,16	48.00	3,01	2,95	2,72	50
M	18 x 1.50	3523-18.00	18.50	45.00	4,50	3,81	3,52	54.00	5,04	4,43	4,08	50
M	18 x 2.00	3521-18.00	18.50	45.00	4,01	3,54	3,28	54.00	4,69	4,43	4,08	50
M	18 x 2.50	3520-18.00	19.00	45.00	4,12	3,74	3,44	54.00	4,83	4,66	4,18	50
M	20 x 1.50	3523-20.00	20.50	50.00	4,68	4,31	3,96	60.00	5,97	5,46	5,03	25
M	20 x 2.00	3521-20.00	20.50	50.00	4,69	4,33	4,04	60.00	5,97	5,66	5,51	25
M	20 x 2.50	3520-20.00	20.75	50.00	4,86	4,56	4,19	60.00	6,08	5,89	5,42	25
M	22 x 1.50	3523-22.00	22.50	55.00	5,45	4,79	4,41	66.00	6,92	6,64	6,03	25
M	22 x 2.00	3521-22.00	22.50	55.00	5,47	5,20	5,05	66.00	7,86	7,32	7,01	25
M	22 x 2.50	3520-22.00	22.75	55.00	5,67	5,30	4,88	66.00	7,67	7,11	6,54	25
M	24 x 1.50	3523-24.00	24.50	60.00	6,70	5,63	5,19	72.00	8,45	7,15	6,58	25
M	24 x 2.00	3521-24.00	24.50	60.00	6,81	6,16	5,60	72.00	8,13	7,77	7,67	25
M	24 x 3.00	3520-24.00	25.00	60.00	7,11	6,39	5,89	72.00	7,69	7,48	6,88	25

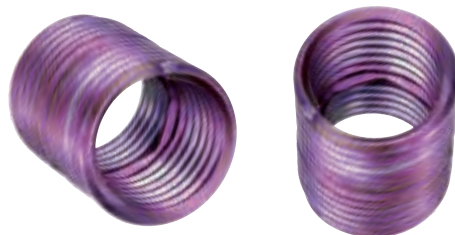
Important note: Theoretical insert length is referred to length after insert installation.



## SCREW LOCKING INSERTS

UNC



...DSL



	D1 mm		L mm	1.0D			1.5D			2.0D			Unit			
				€			€			€						
				<500	500-999	1000-...	L mm	<500	500-999	1000-...	L mm	<500	500-999	1000-...		
UNC N°2 - 56	3532-2G	2.18	2.40	2.29	0,82	0,71	0,66	3.30	0,96	0,83	0,78	4.32	1,24	1,07	1,00	100
UNC N°4 - 40	3532-4G	2.84	3.00	2.79	0,37	0,32	0,29	4.32	0,40	0,35	0,32	5.59	0,42	0,37	0,35	100
UNC N°5 - 40	3532-5G	3.17	3.40	3.30	0,49	0,43	0,40	4.83	0,51	0,46	0,43	6.35	0,54	0,48	0,45	100
UNC N°6 - 32	3532-6G	3.50	3.70	3.56	0,32	0,28	0,26	5.33	0,38	0,34	0,30	7.11	0,40	0,36	0,34	100
UNC N°8 - 32	3532-8G	4.17	4.40	4.06	0,32	0,28	0,26	6.35	0,38	0,34	0,30	8.38	0,40	0,36	0,34	100
UNC N°10 - 24	3532-10G	4.83	5.10	4.83	0,39	0,35	0,32	7.37	0,42	0,37	0,35	9.65	0,46	0,40	0,38	100
UNC N°12 - 24	3532-12G	5.49	5.70	5.59	0,43	0,38	0,36	8.13	0,48	0,42	0,40	10.92	0,51	0,44	0,41	100
UNC 1/4 - 20	3532-1/4	6.35	6.70	6.35	0,43	0,38	0,36	9.65	0,48	0,42	0,40	12.70	0,51	0,44	0,41	100
UNC 5/16 - 18	3532-5/16	7.94	8.30	7.87	0,60	0,49	0,46	11.94	0,69	0,60	0,54	15.75	0,72	0,64	0,60	100
UNC 3/8 - 16	3532-3/8	9.52	9.90	9.65	0,84	0,72	0,67	14.48	0,88	0,78	0,71	19.05	1,16	1,02	0,92	100
UNC 7/16 - 14	3532-7/16	11.11	11.60	11.18	0,98	0,85	0,79	16.76	1,18	1,03	0,93	22.35	1,34	1,16	1,07	100
UNC 1/2 - 13	3532-1/2	12.70	13.00	12.70	1,06	0,91	0,85	19.05	1,18	1,03	0,93	25.40	1,34	1,16	1,07	100
UNC 9/16 - 12	3532-9/16	14.28	15.00	14.22	2,61	2,26	2,10	21.34	3,48	3,00	2,76	28.45	4,46	3,86	3,55	50
UNC 5/8 - 11	3532-5/8	15.87	16.50	16.00	2,37	2,04	1,89	23.88	3,16	2,73	2,52	31.75	3,93	3,40	3,13	50
UNC 3/4 - 10	3532-3/4	19.05	19.80	19.05	2,74	2,38	2,21	28.70	3,73	3,23	2,98	38.10	4,65	4,03	3,72	50
UNC 7/8 - 9	3532-7/8	22.22	23.00	22.35	3,81	3,31	3,05	33.53	5,71	4,92	4,55	44.45	7,25	6,27	5,76	25
UNC 1 - 8	3532-1	25.40	26.20	25.40	5,17	4,46	4,12	38.10	7,73	6,68	6,14	50.80	9,82	8,46	7,80	25

Important note: Theoretical insert length is referred to length after insert installation.



Coding example:

UNC 1/4 - 20



3532-1/4x1.0DSL



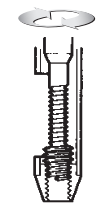
3532-1/4x1.5DSL

**SCREW LOCKING INSERTS**



D	UNC	N°	3532-2G	D1 mm	Ø	2.5D				3.0D				Unit
						L mm	€			L mm	€			
						<500	500-999	1000-...		<500	500-999	1000-...		
UNC	N°2	- 56	<b>3532-2G</b>	<b>2.18</b>	2.40	5.59	1,40	1,20	1,11	6.60	1,50	1,29	1,19	100
UNC	N°4	- 40	<b>3532-4G</b>	<b>2.84</b>	3.00	7.11	0,48	0,42	0,40	8.64	0,60	0,49	0,46	100
UNC	N°5	- 40	<b>3532-5G</b>	<b>3.17</b>	3.40	7.87	0,60	0,49	0,46	9.65	0,82	0,70	0,66	100
UNC	N°6	- 32	<b>3532-6G</b>	<b>3.50</b>	3.70	8.89	0,43	0,38	0,36	10.41	0,50	0,44	0,41	100
UNC	N°8	- 32	<b>3532-8G</b>	<b>4.17</b>	4.40	10.41	0,43	0,38	0,36	12.45	0,50	0,44	0,41	100
UNC	N°10	- 24	<b>3532-10G</b>	<b>4.83</b>	5.10	12.19	0,54	0,47	0,44	14.48	0,66	0,59	0,53	100
UNC	N°12	- 24	<b>3532-12G</b>	<b>5.49</b>	5.70	13.72	0,64	0,56	0,51	16.51	0,78	0,67	0,63	100
UNC	1/4	- 20	<b>3532-1/4</b>	<b>6.35</b>	6.70	16.00	0,64	0,56	0,51	19.05	0,78	0,67	0,63	100
UNC	5/16	- 18	<b>3532-5/16</b>	<b>7.94</b>	8.30	19.81	0,87	0,75	0,69	23.62	1,06	0,91	0,85	100
UNC	3/8	- 16	<b>3532-3/8</b>	<b>9.52</b>	9.90	23.88	1,33	1,14	1,06	28.70	1,56	1,35	1,25	100
UNC	7/16	- 14	<b>3532-7/16</b>	<b>11.11</b>	11.60	27.94	1,60	1,39	1,28	33.53	1,95	1,69	1,56	100
UNC	1/2	- 13	<b>3532-1/2</b>	<b>12.70</b>	13.00	31.75	1,60	1,39	1,28	38.10	1,95	1,69	1,56	100
UNC	9/16	- 12	<b>3532-9/16</b>	<b>14.28</b>	15.00	35.56	5,11	4,42	4,06	42.93	6,16	5,32	4,90	50
UNC	5/8	- 11	<b>3532-5/8</b>	<b>15.87</b>	16.50	39.62	4,69	4,06	3,75	47.75	5,61	4,85	4,46	50
UNC	3/4	- 10	<b>3532-3/4</b>	<b>19.05</b>	19.80	47.75	5,53	4,78	4,40	57.15	6,62	5,72	5,27	50
UNC	7/8	- 9	<b>3532-7/8</b>	<b>22.22</b>	23.00	55.63	8,59	7,41	6,81	66.80	10,42	9,00	8,28	25
UNC	1	- 8	<b>3532-1</b>	<b>25.40</b>	26.20	63.50	11,62	10,02	9,23	76.20	14,09	12,17	11,21	25

Important note: Theoretical insert length is referred to length after insert installation.



## SCREW LOCKING INSERTS

UNF



LOCK



UNF



AISI 304

NASM21209  
NASM8846

...DSL



	D1 mm		L mm	1.0D			1.5D			2.0D			Unit			
				L mm	€	€	L mm	€	€	L mm	€	€				
				<500	500-999	1000-...	<500	500-999	1000-...	<500	500-999	1000-...				
UNF N°4 - 48	3534-4G	2.84	3.00	2.79	0,74	0,66	0,62	4.32	0,85	0,75	0,69	5.59	1,00	0,87	0,81	100
UNF N°6 - 40	3534-6G	3.50	3.70	3.56	0,74	0,66	0,62	5.33	0,85	0,75	0,69	7.11	1,00	0,87	0,81	100
UNF N°8 - 36	3534-8G	4.17	4.40	4.06	0,74	0,66	0,62	6.35	0,85	0,75	0,69	8.38	1,00	0,87	0,81	100
UNF N°10 - 32	3534-10G	4.83	5.10	4.83	0,42	0,37	0,35	7.37	0,43	0,38	0,36	9.65	0,51	0,44	0,41	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	6.35	0,42	0,37	0,35	9.65	0,43	0,38	0,36	12.70	0,51	0,44	0,41	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	7.87	0,60	0,49	0,46	11.94	0,63	0,51	0,48	16.00	0,72	0,64	0,60	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	9.65	0,85	0,72	0,67	14.48	0,88	0,78	0,71	19.05	1,06	0,91	0,85	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	11.18	1,06	0,91	0,85	16.76	1,18	1,03	0,93	22.35	1,34	1,16	1,07	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	12.70	1,06	0,91	0,85	19.05	1,18	1,03	0,93	25.40	1,34	1,16	1,07	100
UNF 9/16 - 18	3534-9/16	14.29	14.75	14.22	2,33	2,00	1,84	21.34	2,48	2,06	1,91	28.70	2,98	2,56	2,35	50
UNF 5/8 - 18	3534-5/8	15.87	16.50	16.00	2,37	2,01	1,85	23.88	2,48	2,14	1,96	31.75	2,98	2,56	2,35	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	19.05	3,12	2,69	2,49	28.70	4,35	3,75	3,45	38.10	5,26	4,53	4,17	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	22.35	5,31	4,58	4,21	33.27	7,84	6,76	6,22	44.45	9,96	8,59	7,91	25
UNF 1 - 12	3534-1	25.40	26.00	25.40	5,31	4,58	4,21	38.10	7,84	6,76	6,22	50.80	9,96	8,59	7,91	25
UNS 1 - 14	3535-1	25.40	26.00	25.40	5,31	4,63	4,26	38.10	7,84	6,84	6,30	50.80	9,96	8,69	8,00	25

Important note: Theoretical insert length is referred to length after insert installation.



Coding example:

UNF N°4 - 48

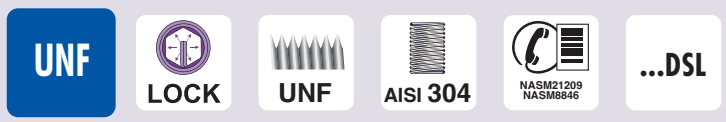






3534-4Gx1.0DSL



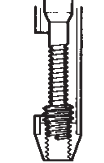
3534-4Gx1.5DSL

**SCREW LOCKING INSERTS**



		3534-4G	D1 mm	 $\emptyset$	 2.5D				 3.0D				Unit
					L mm	€			L mm	€			
					<500	500-999	1000-...	<500	500-999	1000-...			
UNF N°4 - 48	3534-4G	2.84	3.00	7.11	1,12	1,01	0,91	8.64	1,58	1,40	1,29	100	
UNF N°6 - 40	3534-6G	3.50	3.70	8.89	1,12	1,01	0,91	10.41	1,58	1,40	1,29	100	
UNF N°8 - 36	3534-8G	4.17	4.40	10.41	1,12	1,01	0,91	12.45	1,58	1,40	1,29	100	
UNF N°10 - 32	3534-10G	4.83	5.10	12.19	0,64	0,56	0,51	14.48	0,78	0,67	0,63	100	
UNF 1/4 - 28	3534-1/4	6.35	6.60	16.00	0,64	0,56	0,51	19.05	0,78	0,67	0,63	100	
UNF 5/16 - 24	3534-5/16	7.94	8.20	19.81	0,87	0,78	0,71	23.88	1,06	0,91	0,85	100	
UNF 3/8 - 24	3534-3/8	9.52	9.80	23.88	1,30	1,14	1,06	28.70	1,56	1,35	1,25	100	
UNF 7/16 - 20	3534-7/16	11.11	11.50	27.69	1,60	1,40	1,29	33.27	1,95	1,69	1,56	100	
UNF 1/2 - 20	3534-1/2	12.70	13.00	31.75	1,60	1,40	1,29	38.10	1,95	1,69	1,56	100	
UNF 9/16 - 18	3534-9/16	14.29	14.75	35.81	3,62	3,16	2,92	42.93	4,18	3,61	3,33	50	
UNF 5/8 - 18	3534-5/8	15.87	16.50	39.62	3,80	3,35	3,09	47.75	4,18	3,61	3,33	50	
UNF 3/4 - 16	3534-3/4	19.05	19.50	47.75	6,36	5,55	5,11	57.15	7,62	6,58	6,07	50	
UNF 7/8 - 14	3534-7/8	22.22	22.50	55.63	11,46	9,98	9,19	66.80	13,72	11,85	10,92	25	
UNF 1 - 12	3534-1	25.40	26.00	63.50	13,66	11,91	10,97	76.20	16,44	14,21	13,07	25	
UNS 1 - 14	3535-1	25.40	26.00	63.50	13,66	11,91	10,97	76.20	16,44	14,34	13,20	25	




Important note: Theoretical insert length is referred to length after insert installation.








## FREE RUNNING INSERT KITS

M  
MF

...K

		€		
			D	L mm
M 2 x 0.40	3520-2.00K	55,03	1.50	3.00
M 2.20 x 0.45	3520-2.20K	73,67	1.50	3.30
M 2.50 x 0.45	3520-2.50K	50,87	1.50	3.75
M 3 x 0.50	3520-3.00K	50,87	1.50	4.50
M 3.50 x 0.60	3520-3.50K	50,87	1.50	5.25
M 4 x 0.70	3520-4.00K	50,87	1.50	6.00
M 5 x 0.80	3520-5.00K	50,62	1.50	7.50
M 6 x 1.00	3520-6.00K	54,52	1.50	9.00
M 7 x 1.00	3520-7.00K	69,32	1.50	10.50
M 8 x 1.00	3521-8.00K	69,32	1.50	12.00
M 8 x 1.25	3520-8.00K	69,32	1.50	12.00
M 9 x 1.25	3520-9.00K	76,89	1.50	13.50
M 10 x 1.00	3523-10.00K	74,24	1.50	15.00
M 10 x 1.25	3521-10.00K	74,24	1.50	15.00
M 10 x 1.50	3520-10.00K	74,24	1.50	15.00
M 11 x 1.00	3523-11.00K	102,89	1.50	16.50
M 11 x 1.25	3521-11.00K	102,89	1.50	16.50
M 11 x 1.50	3520-11.00K	85,11	1.50	16.50
M 12 x 1.00	3524-12.00K	85,11	1.50	18.00
M 12 x 1.25	3523-12.00K	85,11	1.50	18.00
M 12 x 1.50	3521-12.00K	85,11	1.50	18.00
M 12 x 1.75	3520-12.00K	85,11	1.50	18.00
M 13 x 1.25	3523-13.00K	122,49	1.50	19.50
M 13 x 1.50	3521-13.00K	122,49	1.50	19.50
M 13 x 1.75	3520-13.00K	122,49	1.50	19.50
M 14 x 1.00	3524-14.00K	97,84	1.50	21.00
M 14 x 1.25	3523-14.00K	97,84	1.50	21.00
M 14 x 1.50	3521-14.00K	97,84	1.50	21.00
M 14 x 2.00	3520-14.00K	97,84	1.50	21.00
M 15 x 1.50	3521-15.00K	146,40	1.50	22.50
M 15 x 2.00	3520-15.00K	146,40	1.50	22.50
M 16 x 1.50	3521-16.00K	115,24	1.50	24.00
M 16 x 2.00	3520-16.00K	115,24	1.50	24.00
M 18 x 1.50	3523-18.00K	136,89	1.50	27.00

	mm		Content		
					
20	2.10	3520-2.00I	3500-HIT2	3500-TB2	
20	2.30	3520-2.20I	3500-HIT2	3500-TB2	
20	2.60	3520-2.50I	3500-HIT3	3500-TB3	
20	3.20	3520-3.00I	3500-HIT4	3500-TB4	
20	3.70	3520-3.50I	3500-HIT5	3500-TB5	
20	4.20	3520-4.00I	3500-HIT6	3500-TB6	
20	5.20	3520-5.00I	3500-HIT8	3500-TB8	
20	6.30	3520-6.00I	3500-HIT9	3500-TB9	
20	7.30	3520-7.00I	3500-HIT10	3500-TB11	
20	8.30	3521-8.00I	3500-HIT11	3500-TB12	
20	8.30	3520-8.00I	3500-HIT11	3500-TB12	
15	9.40	3520-9.00I	3500-HIT13	3500-TB12	
15	10.30	3523-10.00I	3500-HIT13	3500-TB13	
15	10.30	3521-10.00I	3500-HIT13	3500-TB13	
15	10.40	3520-10.00I	3500-HIT13	3500-TB13	
10	11.30	3523-11.00I	3500-HIT14	3500-TB14	
10	11.30	3521-11.00I	3500-HIT14	3500-TB14	
10	11.40	3520-11.00I	3500-HIT14	3500-TB14	
10	12.30	3524-12.00I	3500-HIT15	3500-TB15	
10	12.30	3523-12.00I	3500-HIT15	3500-TB15	
10	12.40	3521-12.00I	3500-HIT15	3500-TB15	
10	12.50	3520-12.00I	3500-HIT15	3500-TB15	
10	—	3523-13.00I	3500-HIT15	—	
10	—	3521-13.00I	3500-HIT15	—	
10	—	3520-13.00I	3500-HIT15	—	
10	—	3524-14.00I	3500-HIT16	—	
10	—	3523-14.00I	3500-HIT16	—	
10	—	3521-14.00I	3500-HIT16	—	
10	—	3520-14.00I	3500-HIT16	—	
10	—	3521-15.00I	3500-HIT16	—	
10	—	3520-15.00I	3500-HIT16	—	
10	—	3521-16.00I	3500-HIT18	—	
10	—	3520-16.00I	3500-HIT18	—	
5	—	3523-18.00I	3500-HIT20	—	

**FREE RUNNING INSERT KITS**



**M  
MF**

**FREE**

**M/MF**



**1.5D**

**AINI 304**

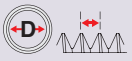

**HSS**

**HSS**

**...K**

		€	D	L mm
M 18 x 2.00	3521-18.00K	136,89	1.50	27.00
<b>M 18 x 2.50</b>	3520-18.00K	139,55	1.50	27.00
M 20 x 1.50	3523-20.00K	149,23	1.50	30.00
M 20 x 2.00	3521-20.00K	149,23	1.50	30.00
<b>M 20 x 2.50</b>	3520-20.00K	149,23	1.50	30.00
M 22 x 1.50	3523-22.00K	171,38	1.50	33.00
M 22 x 2.00	3521-22.00K	171,38	1.50	33.00
<b>M 22 x 2.50</b>	3520-22.00K	171,38	1.50	33.00
M 24 x 1.50	3523-24.00K	196,60	1.50	36.00
M 24 x 2.00	3521-24.00K	196,60	1.50	36.00
<b>M 24 x 3.00</b>	3520-24.00K	196,60	1.50	36.00

Content		
5	3521-18.00I	3500-HIT20
5	3520-18.00I	3500-HIT20
5	3523-20.00I	3500-HIT21
5	3521-20.00I	3500-HIT21
5	3520-20.00I	3500-HIT21
5	3523-22.00I	3500-HIT22
5	3521-22.00I	3500-HIT22
5	3520-22.00I	3500-HIT22
5	3523-24.00I	3500-HIT23
5	3521-24.00I	3500-HIT23
5	3520-24.00I	3500-HIT23

		€	D	L mm
M 26 x 1.50	3523-26.00K	397,85	1.50	39.00
M 27 x 1.50	3523-27.00K	397,85	1.50	40.50
M 27 x 2.00	3521-27.00K	397,85	1.50	40.50
<b>M 27 x 3.00</b>	3520-27.00K	397,85	1.50	40.50
M 28 x 1.50	3523-28.00K	461,01	1.50	42.00
M 30 x 1.50	3523-30.00K	482,33	1.50	45.00
M 30 x 2.00	3521-30.00K	507,60	1.50	45.00
<b>M 30 x 3.50</b>	3520-30.00K	482,33	1.50	45.00
M 33 x 2.00	3521-33.00K	503,66	1.50	49.50
<b>M 33 x 3.50</b>	3520-33.00K	503,66	1.50	49.50
M 36 x 1.50	3524-36.00K	558,94	1.50	54.00
M 36 x 2.00	3523-36.00K	558,94	1.50	54.00
M 36 x 3.00	3521-36.00K	558,94	1.50	54.00
<b>M 36 x 4.00</b>	3520-36.00K	558,94	1.50	54.00
M 39 x 3.00	3521-39.00K	563,25	1.50	58.50
<b>M 39 x 4.00</b>	3520-39.00K	572,24	1.50	58.50
M 40 x 3.00	3523-40.00K	607,94	1.50	60.00
M 42 x 3.00	3523-42.00K	629,81	1.50	63.00
<b>M 42 x 4.50</b>	3520-42.00K	629,81	1.50	63.00
M 45 x 3.00	3523-45.00K	812,23	1.50	67.50
<b>M 45 x 4.50</b>	3520-45.00K	702,39	1.50	67.50
M 48 x 3.00	3523-48.00K	799,71	1.50	72.00
<b>M 48 x 5.00</b>	3520-48.00K	842,29	1.50	72.00
M 50 x 3.00	3523-50.00K	891,84	1.50	75.00
M 52 x 3.00	3523-52.00K	934,44	1.50	78.00
<b>M 52 x 5.00</b>	3520-52.00K	934,44	1.50	78.00

Content		
5	3523-26.00I	3500-HIT24
5	3523-27.00I	3500-HIT24
5	3521-27.00I	3500-HIT24
5	3520-27.00I	3500-HIT24
5	3523-28.00I	3500-HIT24
5	3523-30.00I	3500-HIT26
5	3521-30.00I	3500-HIT26
5	3520-30.00I	3500-HIT25
5	3521-33.00I	3500-HIT26
5	3520-33.00I	3500-HIT26
3	3524-36.00I	3500-HIT28
3	3523-36.00I	3500-HIT28
3	3521-36.00I	3500-HIT28
5	3520-36.00I	3500-HIT28
3	3521-39.00I	3521-39.00HIM
3	3520-39.00I	3520-39.00HIM
3	3523-40.00I	3523-40.00HIM
3	3523-42.00I	3523-42.00HIM
3	3520-42.00I	3520-42.00HIM
3	3523-45.00I	3523-45.00HIM
3	3520-45.00I	3520-45.00HIM
3	3523-48.00I	3523-48.00HIM
3	3520-48.00I	3520-48.00HIM
3	3523-50.00I	3523-50.00HIM
3	3520-52.00I	3520-52.00HIM
3	3520-52.00I	3520-52.00HIM



## FREE RUNNING INSERT KITS

UNC

FREE

UNC

1.5D




AISI 304



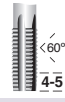


HSS




HSS






...K



			€		
				D	L mm
UNC	Nº2 - 56	<b>3532-2GK</b>	<b>72,18</b>	1.50	3.30
UNC	Nº3 - 48	<b>3532-3GK</b>	<b>69,13</b>	1.50	3.81
UNC	Nº4 - 40	<b>3532-4GK</b>	<b>65,47</b>	1.50	4.32
UNC	Nº5 - 40	<b>3532-5GK</b>	<b>65,47</b>	1.50	4.83
UNC	Nº6 - 32	<b>3532-6GK</b>	<b>65,47</b>	1.50	5.33
UNC	Nº8 - 32	<b>3532-8GK</b>	<b>65,47</b>	1.50	6.35
UNC	Nº10 - 24	<b>3532-10GK</b>	<b>65,47</b>	1.50	7.11
UNC	Nº12 - 24	<b>3532-12GK</b>	<b>65,47</b>	1.50	8.38
UNC	1/4 - 20	<b>3532-1/4K</b>	<b>58,99</b>	1.50	9.65
UNC	5/16 - 18	<b>3532-5/16K</b>	<b>72,18</b>	1.50	11.94
UNC	3/8 - 16	<b>3532-3/8K</b>	<b>77,15</b>	1.50	14.22
UNC	7/16 - 14	<b>3532-7/16K</b>	<b>86,63</b>	1.50	16.76
UNC	1/2 - 13	<b>3532-1/2K</b>	<b>95,07</b>	1.50	19.05
UNC	9/16 - 12	<b>3532-9/16K</b>	<b>126,92</b>	1.50	21.34
UNC	5/8 - 11	<b>3532-5/8K</b>	<b>126,92</b>	1.50	23.88
UNC	3/4 - 10	<b>3532-3/4K</b>	<b>161,77</b>	1.50	28.70
UNC	7/8 - 9	<b>3532-7/8K</b>	<b>196,60</b>	1.50	33.27
UNC	1 - 8	<b>3532-1K</b>	<b>195,33</b>	1.50	38.10

				
mm	mm	<60° 4-5		
Content				
20	2.40	3532-2GI	3500-HIT2	3500-TB2
20	2.70	3532-3GI	3500-HIT3	3500-TB3
20	3.10	3532-4GI	3500-HIT4	3500-TB4
20	3.40	3532-5GI	3500-HIT4	3500-TB4
20	3.80	3532-6GI	3500-HIT5	3500-TB5
20	4.40	3532-8GI	3500-HIT6	3500-TB6
20	5.20	3532-10GI	3500-HIT7	3500-TB8
20	5.80	3532-12GI	3500-HIT8	3500-TB8
20	6.70	3532-1/4I	3500-HIT9	3500-TB9
20	8.30	3532-5/16I	3500-HIT10	3500-TB12
15	9.90	3532-3/8I	3500-HIT13	3500-TB12
10	11.60	3532-7/16I	3500-HIT14	3500-TB14
10	13.00	3532-1/2I	3500-HIT15	3500-TB15
10	–	3532-9/16I	3500-HIT16	–
10	–	3532-5/8I	3500-HIT18	–
5	–	3532-3/4I	3500-HIT20	–
5	–	3532-7/8I	3500-HIT22	–
5	–	3532-1I	3500-HIT23	–

			€		
				D	L mm
UNC	1.1/8 - 7	<b>3532-1.1/8K</b>	<b>393,75</b>	1.50	42.93
UNC	1.1/4 - 7	<b>3532-1.1/4K</b>	<b>438,04</b>	1.50	47.75
UNC	1.3/8 - 6	<b>3532-1.3/8K</b>	<b>526,62</b>	1.50	52.32
UNC	1.1/2 - 6	<b>3532-1.1/2K</b>	<b>613,58</b>	1.50	57.15

				
mm	mm	<60° 4-5		
Content				
3	–	3532-1.1/8I	3500-HIT25	–
3	–	3532-1.1/4I	3500-HIT26	–
3	–	3532-1.3/8I	3500-HIT27	–
3	–	3532-1.1/2I	3500-HIT28	–

**FREE RUNNING INSERT KITS**



**UNF**

**FREE**

**UNF**



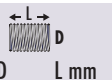


**1.5D**


**AISI 304**

**HSS**

**HSS**

**...K**

		€				mm		<b>Content</b>		
			D	L mm						
UNF N°3 - 56	<b>3534-3GK</b>	<b>72,05</b>	1.50	3.30	20	2.70	3534-3GI	3500-HIT3	3500-TB3	
UNF N°4 - 48	<b>3534-4GK</b>	<b>65,47</b>	1.50	3.81	20	3.00	3534-4GI	3500-HIT4	3500-TB4	
UNF N°6 - 40	<b>3534-6GK</b>	<b>65,47</b>	1.50	4.32	20	3.80	3534-6GI	3500-HIT5	3500-TB5	
UNF N°8 - 36	<b>3534-8GK</b>	<b>65,47</b>	1.50	4.83	20	4.40	3534-8GI	3500-HIT6	3500-TB6	
UNF N°10 - 32	<b>3534-10GK</b>	<b>65,47</b>	1.50	5.33	20	5.10	3534-10GI	3500-HIT8	3500-TB8	
UNF N°12 - 28	<b>3534-12GK</b>	<b>71,72</b>	1.50	6.35	20	5.60	3534-12GI	3500-HIT8	3500-TB8	
UNF 1/4 - 28	<b>3534-1/4K</b>	<b>58,99</b>	1.50	7.11	20	6.70	3534-1/4I	3500-HIT9	3500-TB9	
UNF 5/16 - 24	<b>3534-5/16K</b>	<b>72,18</b>	1.50	8.38	20	8.30	3534-5/16I	3500-HIT11	3500-TB12	
UNF 3/8 - 24	<b>3534-3/8K</b>	<b>77,15</b>	1.50	9.65	15	9.80	3534-3/8I	3500-HIT13	3500-TB13	
UNF 7/16 - 16	<b>3534-7/16-16K</b>	<b>104,96</b>	1.50	11.94	10	11.50	3534-7/16-16I	3500-HIT14	3500-TB14	
UNF 7/16 - 20	<b>3534-7/16K</b>	<b>86,63</b>	1.50	14.22	10	11.50	3534-7/16I	3500-HIT14	3500-TB14	
UNF 1/2 - 20	<b>3534-1/2K</b>	<b>95,07</b>	1.50	16.76	10	13.00	3534-1/2I	3500-HIT15	3500-TB15	
UNF 9/16 - 18	<b>3534-9/16K</b>	<b>126,92</b>	1.50	19.05	10	—	3534-9/16I	3500-HIT16	—	
UNF 5/8 - 18	<b>3534-5/8K</b>	<b>126,92</b>	1.50	21.34	10	—	3534-5/8I	3500-HIT18	—	
UNF 3/4 - 16	<b>3534-3/4K</b>	<b>161,77</b>	1.50	23.88	5	—	3534-3/4I	3500-HIT21	—	
UNF 7/8 - 14	<b>3534-7/8K</b>	<b>196,60</b>	1.50	28.70	5	—	3534-7/8I	3500-HIT22	—	
UNF 1 - 12	<b>3534-1K</b>	<b>192,65</b>	1.50	33.27	5	—	3534-1I	3500-HIT23	—	
UNF 1 - 14	<b>3535-1K</b>	<b>215,66</b>	1.50	38.10	5	—	3535-1I	3500-HIT23	—	

		€				mm		<b>Content</b>		
			D	L mm						
UNF 1.1/8 - 12	<b>3534-1.1/8K</b>	<b>393,75</b>	1.50	42.93	3	—	3534-1.1/8I	3500-HIT25	—	
UNF 1.1/4 - 12	<b>3534-1.1/4K</b>	<b>438,04</b>	1.50	47.75	3	—	3534-1.1/4I	3500-HIT26	—	
UNF 1.3/8 - 12	<b>3534-1.3/8K</b>	<b>526,62</b>	1.50	52.32	3	—	3534-1.3/8I	3500-HIT27	—	
UNF 1.1/2 - 12	<b>3534-1.1/2K</b>	<b>613,58</b>	1.50	57.15	3	—	3534-1.1/2I	3500-HIT28	—	

## FREE RUNNING INSERT KITS

BSW

FREE

BSW

1.5D



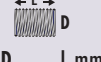


AISI 304

HSS

HSS

...K



		€				mm		Content		
			D	L mm						
BSW 1/8 - 40	3528-1/8K	67,22	1.50	4.83	20	3.40	3528-1/8I	3500-HIT4	3500-TB4	
BSW 3/16 - 24	3528-3/16K	65,47	1.50	7.11	20	5.00	3528-3/16I	3500-HIT7	3500-TB8	
BSW 1/4 - 20	3528-1/4K	60,56	1.50	9.65	20	6.70	3528-1/4I	3500-HIT9	3500-TB9	
BSW 5/16 - 18	3528-5/16K	72,18	1.50	11.94	20	8.30	3528-5/16I	3500-HIT10	3500-TB11	
BSW 3/8 - 16	3528-3/8K	77,15	1.50	14.22	15	9.90	3528-3/8I	3500-HIT11	3500-TB12	
BSW 7/16 - 14	3528-7/16K	86,63	1.50	16.76	10	11.50	3528-7/16I	3500-HIT14	3500-TB14	
BSW 1/2 - 12	3528-1/2K	95,07	1.50	19.05	10	13.00	3528-1/2I	3500-HIT15	3500-TB15	
BSW 9/16 - 12	3528-9/16K	126,92	1.50	21.34	10	–	3528-9/16I	3500-HIT16	–	
BSW 5/8 - 11	3528-5/8K	126,92	1.50	23.88	10	–	3528-5/8I	3500-HIT18	–	
BSW 3/4 - 10	3528-3/4K	161,77	1.50	28.70	5	–	3528-3/4I	3500-HIT20	–	
BSW 7/8 - 9	3528-7/8K	196,60	1.50	33.27	5	–	3528-7/8I	3500-HIT22	–	
BSW 1 - 8	3528-1K	195,33	1.50	38.10	5	–	3528-1I	3500-HIT23	–	

BSF

FREE

BSF



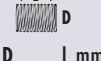


1.5D

AISI 304

HSS

HSS

...K

		€				mm		Content		
			D	L mm						
BSF 3/16 - 32	3530-3/16K	65,47	1.50	7.11	20	5.0	3530-3/16I	3500-HIT8	3500-TB6	
BSF 1/4 - 26	3530-1/4K	58,99	1.50	9.65	20	6.6	3530-1/4I	3500-HIT9	3500-TB9	
BSF 5/16 - 22	3530-5/16K	72,18	1.50	11.94	20	8.3	3530-5/16I	3500-HIT11	3500-TB11	
BSF 3/8 - 20	3530-3/8K	77,15	1.50	14.22	15	9.9	3530-3/8I	3500-HIT13	3500-TB12	
BSF 7/16 - 18	3530-7/16K	86,63	1.50	16.76	10	11.5	3530-7/16I	3500-HIT14	3500-TB14	
BSF 1/2 - 16	3530-1/2K	95,07	1.50	19.05	10	13.0	3530-1/2I	3500-HIT15	3500-TB15	
BSF 9/16 - 16	3530-9/16K	126,92	1.50	21.34	10	–	3530-9/16I	3500-HIT16	–	
BSF 5/8 - 14	3530-5/8K	126,92	1.50	23.88	10	–	3530-5/8I	3500-HIT18	–	
BSF 3/4 - 12	3530-3/4K	161,77	1.50	28.70	5	–	3530-3/4I	3500-HIT20	–	
BSF 7/8 - 11	3530-7/8K	196,60	1.50	33.27	5	–	3530-7/8I	3500-HIT22	–	
BSF 1 - 10	3530-1K	198,40	1.50	38.10	5	–	3530-1I	3500-HIT23	–	

**FREE RUNNING INSERT KITS**



**BSP (GAS)**

**FREE**

**BSP**

**1.5D**



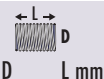
**AISI 304**

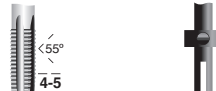
**HSS**

**HSS**




**...K**


powercoil  
by CELESA  
Pink

		€	
			D L mm
BSP 1/8 - 28	<b>3546-1/8K</b>	<b>105,01</b>	1.50 4.83
BSP 1/4 - 19	<b>3546-1/4K</b>	<b>110,89</b>	1.50 9.65
BSP 3/8 - 19	<b>3546-3/8K</b>	<b>127,45</b>	1.50 14.22
BSP 1/2 - 14	<b>3546-1/2K</b>	<b>167,53</b>	1.50 19.05
BSP 5/8 - 14	<b>3546-5/8K</b>	<b>343,92</b>	1.50 23.88
BSP 3/4 - 14	<b>3546-3/4K</b>	<b>360,35</b>	1.50 28.70
BSP 7/8 - 14	<b>3546-7/8K</b>	<b>482,33</b>	1.50 33.27
BSP 1 - 11	<b>3546-1K</b>	<b>482,33</b>	1.50 38.10

		
Content		
10	3546-1/8I	3500-HIT14
10	3546-1/4I	3500-HIT16
10	3546-3/8I	3500-HIT20
10	3546-1/2I	3500-HIT23
10	3546-5/8I	3500-HIT23
10	3546-3/4I	3500-HIT24
5	3546-7/8I	3500-HIT27
5	3546-1I	3500-HIT27

**NPT** **FREE** **NPT** **1.5D** **AISI 304** **HSS** **HSS** **...K**

		€	
			D L mm
NPT 1/8 - 27	<b>3552-1/8K</b>	<b>255,34</b>	1.50 4,78
NPT 1/4 - 18	<b>3552-1/4K</b>	<b>288,63</b>	1.50 9,53
NPT 3/8 - 18	<b>3552-3/8K</b>	<b>366,37</b>	1.50 14,30
NPT 1/2 - 14	<b>3552-1/2K</b>	<b>478,93</b>	1.50 19,05
NPT 3/4 - 14	<b>3552-3/4K</b>	<b>585,35</b>	1.50 28,58
NPT 1 - 11.1/2	<b>3552-1K</b>	<b>776,90</b>	1.50 38,10

		
Content		
10	3552-1/8I	3500-HIT13
10	3552-1/4I	3500-HIT16
10	3552-3/8I	3500-HIT18
10	3552-1/2I	3500-HIT22
10	3552-3/4I	3500-HIT24
10	3552-1I	3500-HIT27

## FREE RUNNING INSERT KITS

UNx8



...K



D	L mm	€	Content		
			mm	mm	mm
UN 1.1/8 - 8	3570-1.1/8K	585,35	3	3570-1.1/8I	3500-HIT25
UN 1.1/4 - 8	3570-1.1/4K	713,07	3	3570-1.1/4I	3500-HIT26
UN 1.3/8 - 8	3570-1.3/8K	883,34	3	3570-1.3/8I	3500-HIT27
UN 1.1/2 - 8	3570-1.1/2K	776,90	3	3570-1.1/2I	3500-HIT28
UN 1.5/8 - 8	3570-1.5/8K	1.096,19	3	3570-1.5/8I	3500-HIT28
UN 1.3/4 - 8	3570-1.3/4K	1.138,76	3	3570-1.3/4I	3500-HIT28
UN 1.7/8 - 8	3570-1.7/8K	1.287,75	3	3570-1.7/8I	3500-HIT30
UN 2 - 8	3570-2K	1.436,77	3	3570-2I	3500-HIT30



BA



...K

D	L mm	€	Content				
			mm	mm	mm	mm	mm
BA 0	3544-0K	124,99	20	6.20	3544-0I	3500-HIT9	3500-TB11
BA 2	3544-2K	124,99	20	4.90	3544-2I	3500-HIT7	3500-TB8
BA 4	3544-4K	124,99	20	3.80	3544-4I	3500-HIT5	3500-TB5
BA 6	3544-6K	137,34	20	2.90	3544-6I	3500-HIT3	3500-TB3

**FREE RUNNING INSERT KITS**



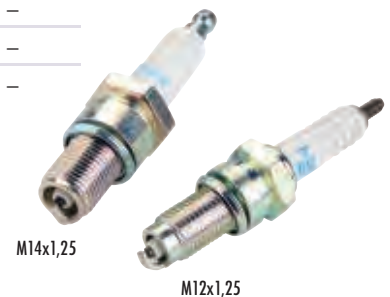
**BSB**



**...K**

		€							
			D	L mm	Content				
BSB 1/4/26	<b>3560-1/4K</b>	<b>152,97</b>	1.50	9,53	20	6.6	3560-1/4I	3500-HIT10	3500-TB9
BSB 5/16 - 26	<b>3560-5/16K</b>	<b>121,56</b>	1.50	11,91	20	8.0	3560-5/16I	3500-HIT11	3500-TB12
BSB 3/8/26	<b>3560-3/8K</b>	<b>131,69</b>	1.50	14,30	15	9.8	3560-3/8I	3500-HIT13	3500-TB13
BSB 7/16 - 26	<b>3560-7/16K</b>	<b>141,83</b>	1.50	16,66	10	11.1	3560-7/16I	3500-HIT14	3500-TB14
BSB 1/2/26	<b>3560-1/2K</b>	<b>151,97</b>	1.50	19,05	10	12.7	3560-1/2I	3500-HIT15	3500-TB15

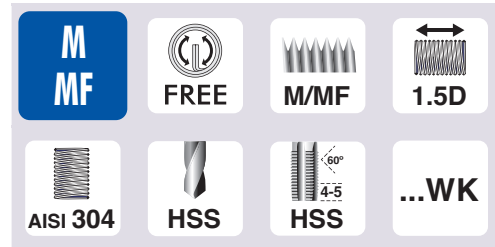
		€						
			D	L mm	Content			
M 10 x 1.00	<b>3522-10.00K</b>	<b>110,95</b>	-	1/2"	5	3522-10.00PN	3500-HIT13	3500-TB13
			-	0.339 mm	5	-	-	-
M 12 x 1.25	<b>3522-12.00K</b>	<b>135,23</b>	-	1/2"	5	3522-12.00PN	3500-HIT15	3500-TB15
			-	3/4"	5	-	-	-
M 14 x 1.25	<b>3522-14.00K</b>	<b>121,25</b>	-	3/8"	5	3522-14.00PN	3500-HIT17	-
			-	1/2"	5	-	-	-
			-	3/4"	5	-	-	-
M 18 x 1.50	<b>3522-18.00K</b>	<b>219,53</b>	-	1/2"	5	3522-18.00PN	3500-HIT20	-
M 14 x 1.25	<b>3522-14.00K1</b>	<b>116,98</b>	8.40	-	5	3522-14.00PN	3500-HIT17	-
			12.40	-	5	-	-	-
			16.40	-	5	-	-	-





M14x1,25

M12x1,25



## FREE RUNNING INSERT KITS



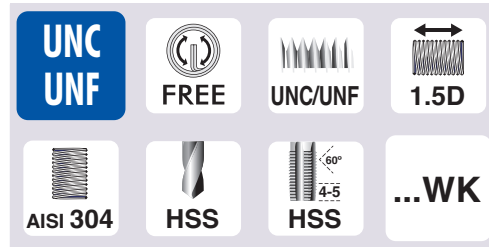
								
		D	L mm					SET M5 - M12
	M 5 x 0.80	1.50	7.50	25	5.20	3520-5.001	3500-HIT8	3500-TB8
	M 6 x 1.00	1.50	9.00	25	6.30	3520-6.001	3500-HIT9	3500-TB9
	M 8 x 1.25	1.50	12.00	25	8.30	3520-8.001	3500-HIT11	3500-TB12
3520-WK1	M 10 x 1.50	1.50	15.00	25	10.40	3520-10.001	3500-HIT13	3500-TB13
358,47 €	M 12 x 1.75	1.50	18.00	10	12.50	3520-12.001	3500-HIT15	3500-TB15



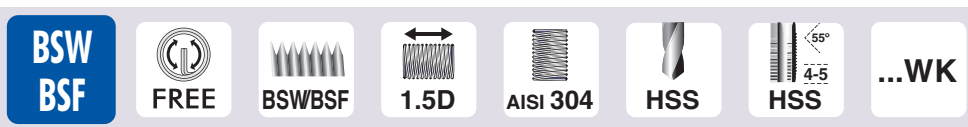
M14x1,25

									
		D	L mm						SPARK PLUG M6 - M12 + M14 X 1.25
	M 6 x 1.00	1.50	9.00	25	6.30	3520-6.001	-	3500-HIT9	3500-TB9
	M 8 x 1.25	1.50	12.00	25	8.30	3520-8.001	-	3500-HIT11	3500-TB12
	M 10 x 1.50	1.50	15.00	25	10.40	3520-10.001	-	3500-HIT13	3500-TB13
	M 12 x 1.75	1.50	18.00	10	12.50	3520-12.001	-	3500-HIT15	3500-TB15
	M 14 x 1.25	-	8.40	5	14.25	-	3522-14.00PN	3500-HIT17	-
3522-WK4		-	12.40	5	-	-	-	-	-
413,08 €		-	16.40	5	-	-	-	-	-

**FREE RUNNING INSERT KITS**



	D	L mm	SET UNC 1/4" - 1/2"				
			mm	mm	mm	mm	
UNC 1/4 - 20	1.50	9.65	25	6.70	3532-1/4I	3500-HIT9	3500-TB9
UNC 5/16 - 18	1.50	11.94	25	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 3/8 - 16	1.50	14.48	25	9.90	3532-3/8I	3500-HIT13	3500-TB12
<b>3532-WK1</b>	UNC 7/16 - 14	1.50	10	11.60	3532-7/16I	3500-HIT14	3500-TB14
<b>447,97 €</b>	UNC 1/2 - 13	1.50	10	13.00	3532-1/2I	3500-HIT15	3500-TB15
			SET UNF 1/4" - 1/2"				
UNF 1/4 - 28	1.50	9.65	25	6.70	3534-1/4I	3500-HIT9	3500-TB9
UNF 5/16 - 24	1.50	11.94	25	8.30	3534-5/16I	3500-HIT11	3500-TB12
UNF 3/8 - 24	1.50	14.48	25	9.80	3534-3/8I	3500-HIT13	3500-TB12
<b>3534-WK1</b>	UNF 7/16 - 20	1.50	10	11.50	3534-7/16I	3500-HIT14	3500-TB14
<b>447,97 €</b>	UNF 1/2 - 20	1.50	10	13.00	3534-1/2I	3500-HIT15	3500-TB15



	D	L mm	SET BSW 1/4" - 1/2"				
			mm	mm	mm	mm	
BSW 1/4 - 20	1.50	9.65	25	6.70	3528-1/4I	3500-HIT9	3500-TB9
BSW 5/16 - 18	1.50	11.94	25	8.30	3528-5/16I	3500-HIT10	3500-TB11
BSW 3/8 - 16	1.50	14.48	25	10.00	3528-3/8I	3500-HIT11	3500-TB12
<b>3528-WK1</b>	BSW 7/16 - 14	1.50	10	11.60	3528-7/16I	3500-HIT14	3500-TB14
<b>447,97 €</b>	BSW 1/2 - 12	1.50	10	13.00	3528-1/2I	3500-HIT15	3500-TB15
			SET BSF 1/4" - 1/2"				
BSF 1/4 - 26	1.50	9.65	25	6.60	3530-1/4I	3500-HIT9	3500-TB9
BSF 5/16 - 22	1.50	11.94	25	8.30	3530-5/16I	3500-HIT11	3500-TB11
BSF 3/8 - 20	1.50	14.48	25	9.80	3530-3/8I	3500-HIT13	3500-TB12
<b>3530-WK1</b>	BSF 7/16 - 18	1.50	10	11.60	3530-7/16I	3500-HIT14	3500-TB14
<b>447,97 €</b>	BSF 1/2 - 16	1.50	10	13.25	3530-1/2I	3500-HIT15	3500-TB15

## FREE RUNNING INSERT DISPLAYS

M  
MF

FREE




AISI 304



330 x 360 x 515 mm

## DISPLAY CONTENT

## SETS

		
4	M 3x0.5	3520-3.00K
4	M 4x0.7	3520-4.00K
4	M 5x0.8	3520-5.00K
3	M 6x1.0	3520-6.00K
3	M 8x1.25	3520-8.00K
3	M 10x1.5	3520-10.00K
2	M 12x1.75	3520-12.00K
2	M 14x2.0	3520-14.00K
SPARK PLUG		
2	M 14x1.25	3522-14.00K







1-87

1.859,70 €

## DISPLAY CONTENT

## SETS

## BLISTERS

					
4	M 3x0.5	3520-3.00K	5	M 4x0.7-1.5D	3520-4.00x1.5DP
4	M 4x0.7	3520-4.00K	5	M 5x0.8-1.5D	3520-5.00x1.5DP
4	M 5x0.8	3520-5.00K	5	M 6x1.0-1.5D	3520-6.00x1.5DP
4	M 6x1.0	3520-6.00K	5	M 8x1.25-1.5D	3520-8.00x1.5DP
3	M 8x1.25	3520-8.00K	5	M 10x1.50-1.5D	3521-10.00x1.5DP
3	M 10x1.5	3520-10.00K	5	M 12x1.75-1.5D	3520-12.00x1.5DP

1-88

1.431,60 €



330 x 360 x 515 mm

**FREE RUNNING INSERT DISPLAYS**



330 x 360 x 515 mm

**DISPLAY CONTENT**

SETS			BLISTERS		
			5	M 3x0.5-1.5D	3520-3.00x1.5DP
			5	M 4x0.7-1.5D	3520-4.00x1.5DP
4	M5x0.8	3520-5.00K	5	M 5x0.8-1.5D	3520-5.00x1.5DP
			5	M 6x1.0-1.0D	3520-6.00x1.0DP
4	M6x1.0	3520-6.00K	5	M 6x1.0-1.5D	3520-6.00x1.5DP
3	M8x1.25	3520-8.00K	3	M 8x1.25-1.0D	3520-8.00x1.0DP
			5	M 8x1.25-2.0D	3520-8.00x2.0DP
			5	M 10x1.5-1.5D	3520-10.00x1.5DP
			5	M 10x1.5-2.0D	3521-10.00x2.0DP
			5	M 12x1.75-1.5D	3520-12.00x1.5DP
			3	M 16x2.0-1.5D	3520-16.00x1.5DP
<b>SPARK PLUG</b>					
			5	M 14x1.25-1/2"	M14x1.25-1/2P

1-89  
1.014,07 €

## FREE RUNNING INSERTS IN REEL

M  
MF

FREE

M/MF

AISI 304

BS7752  
DIN6140NASM3279  
NASM3280  
NASM3281 LNS039

...DIR



D	L	L	1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€
M 2.20 x 0.45	3520-2.20	1000	2.20	433,63	3.30	439,91	4.40	474,47
M 2.50 x 0.45	3520-2.50	1000	2.50	207,70	3.75	223,10	5.00	251,38
M 3 x 0.50	3520-3.00	1000	3.00	194,83	4.50	223,10	6.00	241,94
M 4 x 0.70	3520-4.00	1000	4.00	191,68	6.00	204,24	8.00	226,23
M 5 x 0.80	3520-5.00	1000	5.00	191,68	7.50	226,55	10.00	245,57
M 6 x 1.00	3520-6.00	500	6.00	118,68	9.00	127,41	12.00	165,60
M 8 x 1.00	3521-8.00	250	8.00	89,17	12.00	95,17	16.00	120,89
M 8 x 1.25	3520-8.00	250	8.00	75,01	12.00	82,31	16.00	113,17
M 10 x 1.50	3520-10.00	250	10.00	99,78	15.00	113,17	20.00	131,19
M 12 x 1.75	3520-12.00	125	12.00	70,77	18.00	83,86	24.00	99,02



M 6 x 1.00

1.0D

3520-6.00x1.0DIR

1.5D

3520-6.00x1.5DIR

2.0D

3520-6.00x2.0DIR

**FREE RUNNING INSERTS IN REEL**

UNC FREE UNC AISI 304 SBAC AS 6733 NASM122076 - NASM122275 NASM8846 ...DIR



				1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€	
UNC	Nº2 - 56	<b>3532-2G</b>	1000	2.29	574,14	3.30	672,16	4.32	868,19
UNC	Nº4 - 40	<b>3532-4G</b>	1000	2.79	210,09	4.32	219,26	5.59	224,05
UNC	Nº5 - 40	<b>3532-5G</b>	1000	3.30	231,05	4.83	245,05	6.35	259,07
UNC	Nº6 - 32	<b>3532-6G</b>	1000	3.56	208,18	5.33	233,15	7.11	249,82
UNC	Nº8 - 32	<b>3532-8G</b>	1000	4.06	208,18	6.35	233,15	8.38	249,82
UNC	Nº10 - 24	<b>3532-10G</b>	1000	4.83	224,05	7.37	235,20	9.65	245,05
UNC	1/4 - 20	<b>3532-1/4</b>	500	6.35	145,25	9.65	162,84	12.70	176,04
UNC	5/16 - 18	<b>3532-5/16</b>	250	7.87	110,03	11.94	132,53	15.75	140,03
UNC	3/8 - 16	<b>3532-3/8</b>	250	9.65	170,04	14.48	194,65	19.30	222,56

UNF FREE UNF AISI 304 SBAC AS 6733 NASM124551-124850 NASM8945 SBAC8455 ...DIR

				1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€	
UNF	Nº4 - 48	<b>3534-4G</b>	1000	2.79	512,69	4.32	581,97	5.59	775,97
UNF	Nº6 - 40	<b>3534-6G</b>	1000	3.56	512,69	5.33	581,97	7.11	775,97
UNF	Nº8 - 36	<b>3534-8G</b>	1000	4.06	512,69	6.35	581,97	8.38	775,97
UNF	Nº10 - 32	<b>3534-10G</b>	1000	4.83	221,70	7.37	228,64	9.65	277,14
UNF	1/4 - 28	<b>3534-1/4</b>	500	6.35	143,69	9.65	154,57	12.70	174,20
UNF	5/16 - 24	<b>3534-5/16</b>	250	7.87	108,87	11.94	116,29	15.75	138,56
UNF	3/8 - 24	<b>3534-3/8</b>	250	9.65	160,84	14.48	168,26	19.30	202,90



	1.0D	1.5D	2.0D
UNC 1/4 - 20	3532-1/4x1.0DIR	3532-1/4x1.5DIR	3532-1/4x2.0DIR

## SCREW LOCKING INSERTS IN REEL

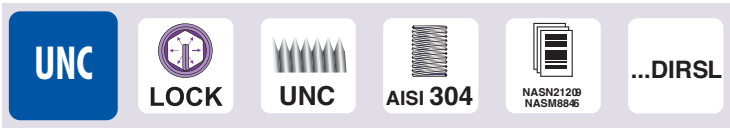


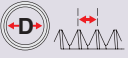

+D+	D	L	1.0D		1.5D		2.0D		
			L mm	€	L mm	€	L mm	€	
M	2.20 x 0.45	3520-2.20	1000	2.20	537,35	3.30	628,43	4.40	659,86
M	2.50 x 0.45	3520-2.50	1000	2.50	277,35	3.75	284,31	5.00	377,07
M	3 x 0.50	3520-3.00	1000	3.00	238,83	4.50	274,56	6.00	314,21
M	4 x 0.70	3520-4.00	1000	4.00	268,70	6.00	282,80	8.00	289,11
M	5 x 0.80	3520-5.00	1000	5.00	268,70	7.50	298,52	10.00	345,64
M	6 x 1.00	3520-6.00	500	6.00	159,38	9.00	166,34	12.00	202,31
M	8 x 1.00	3521-8.00	250	8.00	114,30	12.00	127,39	16.00	145,07
M	8 x 1.25	3520-8.00	250	8.00	95,30	12.00	113,17	16.00	132,33
M	10 x 1.50	3520-10.00	250	10.00	119,74	15.00	155,68	20.00	157,41
M	12 x 1.75	3520-12.00	125	12.00	87,98	18.00	109,68	24.00	119,60

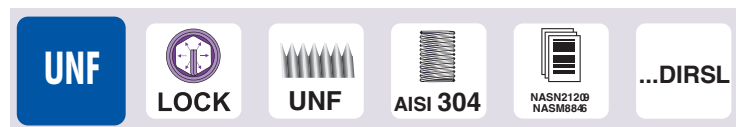




	1.0D	1.5D	2.0D
M 3 x 0.50	3520-3.00x1.0DIRSL	3520-3.00x1.5DIRSL	3520-3.00x2.0DIRSL

**SCREW LOCKING INSERTS IN REEL**



			1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€
UNC N°2 - 56	<b>3532-2G</b>	1000	2.29	688,97	3.30	806,59	4.32	1.041,85
UNC N°4 - 40	<b>3532-4G</b>	1000	2.79	268,85	4.32	282,85	5.59	307,11
UNC N°5 - 40	<b>3532-5G</b>	1000	3.30	310,88	4.83	328,05	6.35	339,94
UNC N°6 - 32	<b>3532-6G</b>	1000	3.56	249,82	5.33	279,78	7.11	299,79
UNC N°8 - 32	<b>3532-8G</b>	1000	4.06	249,82	6.35	279,78	8.38	299,79
UNC N°10 - 24	<b>3532-10G</b>	1000	4.83	268,85	7.37	278,21	9.65	294,07
UNC 1/4 - 20	<b>3532-1/4</b>	500	6.35	176,02	9.65	197,35	12.70	213,35
UNC 5/16 - 18	<b>3532-5/16</b>	250	7.87	135,81	11.94	163,59	15.75	172,84
UNC 3/8 - 16	<b>3532-3/8</b>	250	9.65	209,88	14.48	217,81	19.30	274,70



			1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€
UNF N°4 - 48	<b>3534-4G</b>	1000	2.79	615,24	4.32	698,38	5.59	931,17
UNF N°6 - 40	<b>3534-6G</b>	1000	3.56	615,24	5.33	698,38	7.11	931,17
UNF N°8 - 36	<b>3534-8G</b>	1000	4.06	615,24	6.35	698,38	8.38	931,17
UNF N°10 - 32	<b>3534-10G</b>	1000	4.83	266,05	7.37	274,37	9.65	332,56
UNF 1/4 - 28	<b>3534-1/4</b>	500	6.35	176,15	9.65	188,91	12.70	212,60
UNF 5/16 - 24	<b>3534-5/16</b>	250	7.87	135,81	11.94	145,07	15.75	172,84
UNF 3/8 - 24	<b>3534-3/8</b>	250	9.65	200,62	14.48	209,88	19.30	253,09



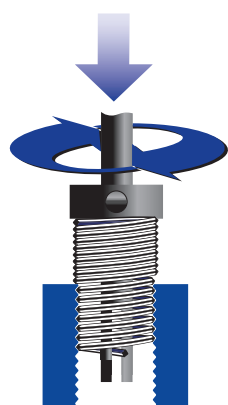
	 1.0D	 1.5D	 2.0D
UNF 1/4 - 28	3534-1/4x1.0DIRSL	3534-1/4x1.5DIRSL	3534-1/4x2.0DIRSL

## PNEUMATIC TOOL

M  
MF

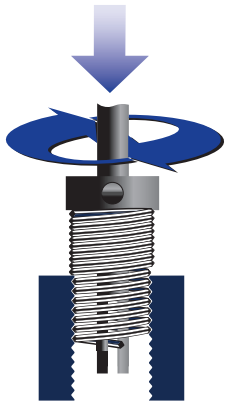
FREE

LOCK




		€		€		€		€		€
M 2.20 x 0.45	3520-2.20MIP	453,58	3520-2.20MIPM	165,55	3520-2.20MIPN	289,15	3500-MIP1	1.778,53	-	
M 2.50 x 0.45	3520-2.50MIP	289,15	3520-2.50MIPM	104,33	3520-2.50MIPN	185,96	3500-MIP1	1.778,53	-	
M 3 x 0.50	3520-3.00MIP	289,15	3520-3.00MIPM	104,33	3520-3.00MIPN	185,96	3500-MIP1	1.778,53	-	
M 3.50 x 0.60	3520-3.50MIP	453,58	3520-3.50MIPM	165,55	3520-3.50MIPN	289,15	3500-MIP1	1.778,53	-	
M 4 x 0.70	3520-4.00MIP	289,15	3520-4.00MIPM	104,33	3520-4.00MIPN	185,96	3500-MIP1	1.778,53	-	
M 5 x 0.80	3520-5.00MIP	289,15	3520-5.00MIPM	104,33	3520-5.00MIPN	185,96	3500-MIP1	1.778,53	-	
M 6 x 1.00	3520-6.00MIP	289,15	3520-6.00MIPM	104,33	3520-6.00MIPN	185,96	3500-MIP1	1.778,53	-	
M 8 x 1.00	3521-8.00MIP	617,99	3521-8.00MIPM	226,79	3521-8.00MIPN	392,34	-		3500-MIP2	2.122,25
M 8 x 1.25	3520-8.00MIP	617,99	3520-8.00MIPM	226,79	3520-8.00MIPN	392,34	-		3500-MIP2	2.122,25
M 10 x 1.00	3523-10.00MIP	617,99	3523-10.00MIPM	226,79	3523-10.00MIPN	392,34	-		3500-MIP2	2.122,25
M 10 x 1.25	3521-10.00MIP	617,99	3521-10.00MIPM	226,79	3521-10.00MIPN	392,34	-		3500-MIP2	2.122,25
M 10 x 1.50	3520-10.00MIP	617,99	3520-10.00MIPM	226,79	3520-10.00MIPN	392,34	-		3500-MIP2	2.122,25
M 12 x 1.25	3523-12.00MIP	700,77	3523-12.00MIPM	268,75	3523-12.00MIPN	433,16	-		3500-MIP2	2.122,25
M 12 x 1.50	3521-12.00MIP	700,77	3521-12.00MIPM	268,75	3521-12.00MIPN	433,16	-		3500-MIP2	2.122,25
M 12 x 1.75	3520-12.00MIP	700,77	3520-12.00MIPM	268,75	3520-12.00MIPN	433,16	-		3500-MIP2	2.122,25

**PNEUMATIC TOOL**

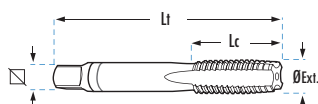
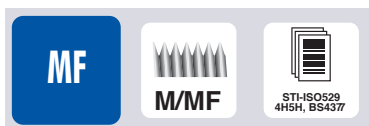


		€		€		€		€		€
UNC N°2 - 56	3532-2GMIP	426,36	3532-2GMIPM	165,55	3532-2GMIPN	261,93	3500-MIP1	1.778,53	-	-
UNC N°4 - 40	3532-4GMIP	289,15	3532-4GMIPM	104,33	3532-4GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNC N°5 - 40	3532-5GMIP	453,58	3532-5GMIPM	165,55	3532-5GMIPN	289,15	3500-MIP1	1.778,53	-	-
UNC N°6 - 32	3532-6GMIP	289,15	3532-6GMIPM	104,33	3532-6GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNC N°8 - 32	3532-8GMIP	289,15	3532-8GMIPM	104,33	3532-8GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNC N°10 - 24	3532-10GMIP	289,15	3532-10GMIPM	104,33	3532-10GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNC N°12 - 24	3532-12GMIP	289,15	3532-12GMIPM	104,33	3532-12GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNC 1/4 - 20	3532-1/4MIP	289,15	3532-1/4MIPM	104,33	3532-1/4MIPN	185,96	3500-MIP1	1.778,53	-	-
UNC 5/16 - 18	3532-5/16MIP	617,99	3532-5/16MIPM	226,79	3532-5/16MIPN	392,34	-	-	3500-MIP2	2.122,25
UNC 3/8 - 16	3532-3/8MIP	617,99	3532-3/8MIPM	226,79	3532-3/8MIPN	392,34	-	-	3500-MIP2	2.122,25
UNC 7/16 - 14	3532-7/16MIP	700,77	3532-7/16MIPM	268,75	3532-7/16MIPN	433,16	-	-	3500-MIP2	2.122,25
UNC 1/2 - 13	3532-1/2MIP	700,77	3532-1/2MIPM	268,75	3532-1/2MIPN	433,16	-	-	3500-MIP2	2.122,25



		€		€		€		€		€
UNF N°6 - 40	3534-6GMIPM	453,58	3534-6GMIPM	165,55	3534-6GMIPN	289,15	3500-MIP1	1.778,53	-	-
UNF N°8 - 36	3534-8GMIPM	453,58	3534-8GMIPM	165,55	3534-8GMIPN	289,15	3500-MIP1	1.778,53	-	-
UNF N°10 - 32	3534-10GMIPM	289,15	3534-10GMIPM	104,33	3534-10GMIPN	185,96	3500-MIP1	1.778,53	-	-
UNF 1/4 - 28	3534-1/4MIPM	289,15	3534-1/4MIPM	104,33	3534-1/4MIPN	185,96	3500-MIP1	1.778,53	-	-
UNF 5/16 - 24	3534-5/16MIPM	617,99	3534-5/16MIPM	226,79	3534-5/16MIPN	392,34	-	-	3500-MIP2	2.122,25
UNF 3/8 - 24	3534-3/8MIPM	617,99	3534-3/8MIPM	226,79	3534-3/8MIPN	392,34	-	-	3500-MIP2	2.122,25
UNF 7/16 - 20	3534-7/16MIPM	700,77	3534-7/16MIPM	268,75	3534-7/16MIPN	433,16	-	-	3500-MIP2	2.122,25
UNF 1/2 - 20	3534-1/2MIPM	700,77	3534-1/2MIPM	268,75	3534-1/2MIPN	433,16	-	-	3500-MIP2	2.122,25

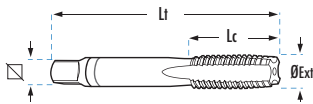
## STI HAND &amp; MACHINE TAPS &amp; GAUGES



TOLERANCE				TOL 5H-6H		TOL 5H-6H		TOL 5H-6H		TOL 5H-6H	
MATERIAL				HSS		HSS-V3		HSS-V3		Gauge	
FORM				Hand		B FORM		35°		Gauge	
				Ø Ext.	Li x Lc x $\varnothing$	€	€	€	€	€	€
M 2 x 0.40	2.10	2.52	44x9.5x2.2	3520-2.00I	15,23	3520-2.00SP	20,09	3520-2.00SF	20,09	3520-2.00GC	223,97
M 2.20 x 0.45	2.30	2.78	48x11x2.5	3520-2.20I	18,08	3520-2.20SP	20,09	3520-2.20SF	20,09	3520-2.20GC	250,40
M 2.50 x 0.45	2.60	3.08	48x11x2.5	3520-2.50I	15,23	3520-2.50SP	20,09	3520-2.50SF	20,09	3520-2.50GC	250,40
M 3 x 0.50	3.20	3.65	53x13x3.15	3520-3.00I	13,28	3520-3.00SP	15,23	3520-3.00SF	15,23	3520-3.00GC	181,30
M 3.50 x 0.60	3.70	4.27	53x13x3.55	3520-3.50I	13,28	3520-3.50SP	15,23	3520-3.50SF	15,23	3520-3.50GC	175,96
M 4 x 0.70	4.20	4.90	58x16x4	3520-4.00I	13,28	3520-4.00SP	15,23	3520-4.00SF	15,23	3520-4.00GC	170,65
M 5 x 0.80	5.20	6.03	66x19x5	3520-5.00I	13,28	3520-5.00SP	15,23	3520-5.00SF	15,23	3520-5.00GC	165,32
M 6 x 1.00	6.30	7.29	72x22x6.3	3520-6.00I	13,28	3520-6.00SP	15,23	3520-6.00SF	15,23	3520-6.00GC	159,98
M 7 x 1.00	7.30	8.29	72x22x7.1	3520-7.00I	16,56	3520-7.00SP	19,09	3520-7.00SF	19,09	3520-7.00GC	183,96
M 8 x 1.00	8.30	9.29	80x24x8	3521-8.00I	16,56	3521-8.00SP	19,09	3521-8.00SF	19,09	3521-8.00GC	196,90
M 8 x 1.25	8.30	9.62	80x24x8	3520-8.00I	16,56	3520-8.00SP	19,09	3520-8.00SF	19,09	3520-8.00GC	165,32
M 9 x 1.25	9.40	10.62	85x25x6.3	3520-9.00I	20,29	3520-9.00SP	29,42	3520-9.00SF	29,42	3520-9.00GC	170,65
M 10 x 1.00	10.30	11.29	85x25x6.3	3523-10.00I	20,29	3523-10.00SP	22,96	3523-10.00SF	22,96	3523-10.00GC	223,97
M 10 x 1.25	10.30	11.62	85x25x6.3	3521-10.00I	20,29	3521-10.00SP	28,36	3521-10.00SF	28,36	3521-10.00GC	229,30
M 10 x 1.50	10.40	11.94	89x29x7.1	3520-10.00I	20,29	3520-10.00SP	22,96	3520-10.00SF	22,96	3520-10.00GC	175,96
M 11 x 1.00	11.30	12.29	89x29x7.1	3523-11.00I	27,48	3523-11.00SP	30,59	3523-11.00SF	30,59	3523-11.00GC	234,62
M 11 x 1.25	11.30	12.62	89x29x7.1	3521-11.00I	27,58	3521-11.00SP	30,59	3521-11.00SF	30,59	3521-11.00GC	228,68
M 11 x 1.50	11.40	12.94	89x29x7.1	3520-11.00I	22,96	3520-11.00SP	30,59	3520-11.00SF	30,59	3520-11.00GC	181,30
M 12 x 1.00	12.30	13.29	95x30x9	3524-12.00I	28,04	3524-12.00SP	34,88	3524-12.00SF	34,88	3524-12.00GC	238,37
M 12 x 1.25	12.30	13.62	95x30x9	3523-12.00I	28,04	3523-12.00SP	30,44	3523-12.00SF	30,44	3523-12.00GC	238,37
M 12 x 1.50	12.40	14.13	95x30x9	3521-12.00I	28,04	3521-12.00SP	34,29	3521-12.00SF	34,29	3521-12.00GC	213,29
M 12 x 1.75	12.50	14.27	95x30x9	3520-12.00I	22,96	3520-12.00SP	30,06	3520-12.00SF	30,06	3520-12.00GC	186,64
M 13 x 1.25	13.25	14.62	95x30x9	3521-13.00I	32,16	3521-13.00SP	43,46	3521-13.00SF	43,46	3521-13.00GC	229,30
M 13 x 1.75	13.50	15.27	102x32x10	3520-13.00I	32,16	3520-13.00SP	43,46	3520-13.00SF	43,46	3520-13.00GC	213,53
M 14 x 1.00	14.25	15.29	102x32x10	3524-14.00I	31,89	3524-14.00SP	53,46	3524-14.00SF	53,46	3524-14.00GC	255,97
M 14 x 1.25	14.25	15.62	102x32x10	3523-14.00I	31,89	3523-14.00SP	42,05	3523-14.00SF	42,05	3523-14.00GC	255,97
M 14 x 1.50	14.50	15.94	102x32x10	3521-14.00I	31,89	3521-14.00SP	42,05	3521-14.00SF	42,05	3521-14.00GC	234,62
M 14 x 2.00	14.50	16.59	102x32x10	3520-14.00I	31,89	3520-14.00SP	42,05	3520-14.00SF	42,05	3520-14.00GC	197,32
M 15 x 1.50	15.25	16.94	102x32x10	3521-15.00I	38,08	3521-15.00SP	59,96	3521-15.00SF	59,96	3521-15.00GC	245,31
M 15 x 2.00	15.50	17.59	112x37x11.2	3520-15.00I	38,08	3520-15.00SP	59,96	3520-15.00SF	59,96	3520-15.00GC	230,39
M 16 x 1.50	16.50	17.94	112x37x11.2	3521-16.00I	38,18	3521-16.00SP	53,08	3521-16.00SF	53,08	3521-16.00GC	250,64
M 16 x 2.00	16.50	18.59	112x37x11.2	3520-16.00I	38,18	3520-16.00SP	44,46	3520-16.00SF	44,46	3520-16.00GC	218,64

Overall dimensions for hand and machine taps are the same. Taps produced with further chamfers (2-3h and 6-8) or other special sizes are available upon request.

**STI HAND & MACHINE TAPS & GAUGES**

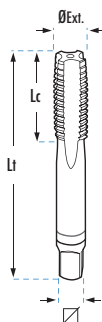


TOLERANCE					TOL 5H-6H		TOL 5H-6H		TOL 5H-6H		TOL 5H-6H	
MATERIAL					HSS		HSS-V3		HSS-V3		Gauge	
FORM					Hand		B FORM		35°		Gauge	
					Ø Ext.	Lt x Lc x $\varnothing$	€	€	€	€	€	€
M 18 x 1.50	18.50	19.94	112x37x11.2	3523-18.00I	48,33	3523-18.00SP	66,96	3523-18.00SF	66,96	3523-18.00GC	254,96	
M 18 x 2.00	18.50	20.59	112x37x11.2	3521-18.00I	48,33	3521-18.00SP	66,96	3521-18.00SF	66,96	3521-18.00GC	261,28	
<b>M 18 x 2.50</b>	19.00	21.24	118x38x12.5	3520-18.00I	48,33	3520-18.00SP	66,96	3520-18.00SF	66,96	3520-18.00GC	234,62	
M 20 x 1.50	20.50	21.94	118x38x12.5	3523-20.00I	53,15	3523-20.00SP	78,88	3523-20.00SF	78,88	3523-20.00GC	303,98	
M 20 x 2.00	20.50	22.59	118x38x12.5	3521-20.00I	53,15	3521-20.00SP	78,88	3521-20.00SF	78,88	3521-20.00GC	277,31	
<b>M 20 x 2.50</b>	20.75	23.24	118x38x12.5	3520-20.00I	53,15	3520-20.00SP	78,88	3520-20.00SF	78,88	3520-20.00GC	250,64	
M 22 x 1.50	22.50	23.94	130x45x14	3523-22.00I	61,14	3523-22.00SP	111,56	3523-22.00SF	111,56	3523-22.00GC	325,03	
M 22 x 2.00	22.50	24.59	130x45x14	3521-22.00I	61,14	3521-22.00SP	111,56	3521-22.00SF	111,56	3521-22.00GC	314,61	
<b>M 22 x 2.50</b>	22.75	25.24	130x45x14	3520-22.00I	61,14	3520-22.00SP	111,56	3520-22.00SF	111,56	3520-22.00GC	266,61	
M 24 x 1.50	24.50	25.94	130x45x14	3523-24.00I	77,31	3523-24.00SP	133,88	3523-24.00SF	133,88	3523-24.00GC	346,02	
M 24 x 2.00	24.50	26.59	127x37x16	3521-24.00I	77,31	3521-24.00SP	133,88	3521-24.00SF	133,88	3521-24.00GC	314,87	
<b>M 24 x 3.00</b>	25.00	27.89	135x45x16	3520-24.00I	77,31	3520-24.00SP	133,88	3520-24.00SF	133,88	3520-24.00GC	298,62	
M 26 x 1.50	26.50	27.94	127x37x16	3523-26.00I	145,26	-	-	-	-	-	-	
M 27 x 1.50	27.50	28.97	127x37x16	3523-27.00I	171,27	-	-	-	-	-	-	
M 27 x 2.00	27.50	29.59	127x37x16	3521-27.00I	171,27	-	-	-	-	-	-	
<b>M 27 x 3.00</b>	28.00	30.89	151x51x18	3520-27.00I	171,27	-	-	-	-	-	-	
M 28 x 1.50	28.50	29.99	137x37x18	3523-28.00I	190,92	-	-	-	-	-	-	
M 30 x 1.50	30.50	31.96	137x37x18	3523-30.00I	203,73	-	-	-	-	-	-	
M 30 x 2.00	30.50	32.59	137x37x18	3521-30.00I	203,73	-	-	-	-	-	-	
<b>M 30 x 3.50</b>	31.00	34.54	162x57x20	3520-30.00I	203,73	-	-	-	-	-	-	
M 33 x 2.00	33.50	35.59	144x39x20	3521-33.00I	247,38	-	-	-	-	-	-	
<b>M 33 x 3.50</b>	34.00	37.54	170x60x22.4	3520-33.00I	247,38	-	-	-	-	-	-	
M 36 x 1.50	36.50	37.92	149x39x22.4	3524-36.00I	284,42	-	-	-	-	-	-	
M 36 x 2.00	36.50	38.55	149x39x22.4	3523-36.00I	284,42	-	-	-	-	-	-	
M 36 x 3.00	37.00	39.89	170x60x22.4	3521-36.00I	284,42	-	-	-	-	-	-	
<b>M 36 x 4.00</b>	37.00	41.19	170x60x22.4	3520-36.00I	284,42	-	-	-	-	-	-	
M 39x3,00	40.00	42.90	149x39x26	3521-39.00I	392,06	-	-	-	-	-	-	
<b>M 39x4,00</b>	40.25	44.20	187x67x28	3520-39.00I	392,06	-	-	-	-	-	-	
M 40x3,00	41.00	43.90	149x39x26	3523-40.00I	414,77	-	-	-	-	-	-	
M 42x3,00	43.00	45.90	165x45x28	3523-42.00I	426,25	-	-	-	-	-	-	
<b>M 42x4,50</b>	43.50	47.90	187x67x28	3520-42.00I	426,25	-	-	-	-	-	-	
M 45x3,00	46.00	48.90	175x45x31	3523-45.00I	453,84	-	-	-	-	-	-	
<b>M 45x4,50</b>	46.50	50.90	200x70x31	3520-45.00I	453,84	-	-	-	-	-	-	
M 48x3,00	49.00	51.90	175x45x31	3523-48.00I	551,17	-	-	-	-	-	-	
<b>M 48x5,00</b>	49.50	54.50	200x70x31	3520-48.00I	551,17	-	-	-	-	-	-	
M 50x3,00	51.00	53.90	175x45x31	3523-50.00I	596,35	-	-	-	-	-	-	
M 52x3,00	53.00	55.90	193x48x34	3523-52.00I	630,54	-	-	-	-	-	-	
<b>M 52x5,00</b>	53.50	58.50	221x76x34	3520-52.00I	630,54	-	-	-	-	-	-	

## STI HAND &amp; MACHINE TAPS &amp; GAUGES

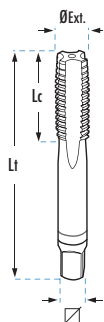
UNC

UNC

STI-HS0629  
4H5H, BS4377

TOLERANCE				TOL 2B-3B		TOL 2B-3B		TOL 2B-3B		TOL 2B-3B		
MATERIAL				HSS		HSS-V3		HSS-V3		Gauge		
FORM												
		$\emptyset$ Ext.	Lt x Lc x $\emptyset$		€		€		€		€	
UNC N°2 - 56		2.40	2.77	44x9.5x2.2	3532-2GI	20,29	3532-2GSP	27,70	3532-2GSF	27,70	3532-2GGC	318,54
UNC N°3 - 48		2.70	3.02	44x9.5x2.2	3532-3GI	20,29	3532-3GSP	29,31	3532-3GSF	29,31	3532-3GGC	318,54
UNC N°4 - 40		3.00	3.67	53x13x3.15	3532-4GI	20,29	3532-4GSP	27,70	3532-4GSF	27,70	3532-4GGC	319,95
UNC N°5 - 40		3.40	4.00	53x13x3.15	3532-5GI	20,29	3532-5GSP	27,70	3532-5GSF	27,70	3532-5GGC	318,57
UNC N°6 - 32		3.70	4.53	58x16x4	3532-6GI	20,29	3532-6GSP	27,70	3532-6GSF	27,70	3532-6GGC	193,90
UNC N°8 - 32		4.40	5.19	62x17x4.5	3532-8GI	20,29	3532-8GSP	27,70	3532-8GSF	27,70	3532-8GGC	189,05
UNC N°10 - 24		5.10	6.20	66x19x5	3532-10GI	20,29	3532-10GSP	25,39	3532-10GSF	25,39	3532-10GGC	184,20
UNC N°12 - 24		5.70	6.86	66x19x5.6	3532-12GI	20,29	3532-12GSP	25,39	3532-12GSF	25,39	3532-12GGC	184,20
UNC 1/4 - 20		6.70	8.00	72x22x6.3	3532-1/4I	13,28	3532-1/4SP	18,48	3532-1/4SF	18,48	3532-1/4GC	174,53
UNC 5/16 - 18		8.30	9.77	80x24x8	3532-5/16I	16,47	3532-5/16SP	21,92	3532-5/16SF	21,92	3532-5/16GC	184,20
UNC 3/8 - 16		9.90	11.58	85x25x6.3	3532-3/8I	15,23	3532-3/8SP	27,70	3532-3/8SF	27,70	3532-3/8GC	184,20
UNC 7/16 - 14		11.60	13.47	95x30x9	3532-7/16I	20,29	3532-7/16SP	31,50	3532-7/16SF	31,50	3532-7/16GC	193,90
UNC 1/2 - 13		13.00	15.23	102x32x10	3532-1/2I	22,96	3532-1/2SP	34,62	3532-1/2SF	34,62	3532-1/2GC	208,45
UNC 9/16 - 12		15.00	17.03	112x37x11.2	3532-9/16I	38,18	3532-9/16SP	57,70	3532-9/16SF	57,70	3532-9/16GC	222,99
UNC 5/8 - 11		16.50	18.87	112x37x11.2	3532-5/8I	47,13	3532-5/8SP	80,42	3532-5/8SF	80,42	3532-5/8GC	232,70
UNC 3/4 - 10		20.00	22.34	118x38x12.5	3532-3/4I	57,27	3532-3/4SP	81,56	3532-3/4SF	81,56	3532-3/4GC	266,61
UNC 7/8 - 9		23.00	25.89	130x45x14	3532-7/8I	66,83	3532-7/8SP	118,27	3532-7/8SF	118,27	3532-7/8GC	300,56
UNC 1 - 8		26.25	29.52	138x48x16	3532-1I	66,83	3532-1SP	138,47	3532-1SF	138,47	3532-1GC	339,34
UNC 1.1/8 - 7		29.50	33.28	151x51x18	3532-1.1/8I	202,36	-	-	-	-	-	-
UNC 1.1/4 - 7		32.50	36.46	162x57x20	3532-1.1/4I	242,78	-	-	-	-	-	-
UNC 1.3/8 - 6		36.00	40.42	170x60x22.4	3532-1.3/8I	303,50	-	-	-	-	-	-
UNC 1.1/2 - 6		39.50	43.59	187x67x25	3532-1.1/2I	393,36	-	-	-	-	-	-

**STI HAND & MACHINE TAPS & GAUGES**



TOLERANCE				TOL 2B-3B		TOL 2B-3B		TOL 2B-3B		TOL 2B-3B		
MATERIAL				HSS		HSS-V3		HSS-V3		Gauge		
FORM				Hand		B FORM		35°		Gauge		
		Ø Ext.	Lt x Lc x $\varnothing$		€		€		€		€	
UNF N°3 - 56		2.70	3.09	44x9.5x2.2	3534-3GI	21,23	3534-3GSP	29,31	3534-3GSF	29,31	3534-3GGC	319,95
UNF N°4 - 48		3.00	3.53	50x13x2.80	3534-4GI	20,29	3534-4GSP	27,70	3534-4GSF	27,70	3534-4GGC	319,95
UNF N°6 - 40		3.70	4.33	53x13x3.55	3534-6GI	20,29	3534-6GSP	27,70	3534-6GSF	27,70	3534-6GGC	193,90
UNF N°8 - 36		4.40	5.08	62x17x4.50	3534-8GI	20,29	3534-8GSP	27,70	3534-8GSF	27,70	3534-8GGC	189,05
UNF N°10 - 32		5.10	5.85	66x19x5.00	3534-10GI	20,29	3534-10GSP	25,39	3534-10GSF	25,39	3534-10GGC	184,20
UNF N°12 - 28		5.80	6.75	66x19x5.60	3534-12GI	23,25	3534-12GSP	25,42	3534-12GSF	25,42	3534-12GGC	310,24
UNF 1/4 - 28		6.60	7.52	72x22x6.30	3534-1/4I	13,28	3534-1/4SP	18,48	3534-1/4SF	18,48	3534-1/4GC	174,53
UNF 5/16 - 24		8.20	9.31	80x24x8.00	3534-5/16I	14,63	3534-5/16SP	21,92	3534-5/16SF	21,92	3534-5/16GC	184,20
UNF 3/8 - 24		9.80	10.89	85x25x6.30	3534-3/8I	15,23	3534-3/8SP	27,70	3534-3/8SF	27,70	3534-3/8GC	184,20
UNF 7/16 - 20		11.50	12.76	89x29x7.10	3534-7/16I	20,29	3534-7/16SP	31,50	3534-7/16SF	31,50	3534-7/16GC	193,90
UNF 1/2 - 20		13.00	14.35	95x30x9.00	3534-1/2I	20,87	3534-1/2SP	34,62	3534-1/2SF	34,62	3534-1/2GC	208,45
UNF 9/16 - 18		14.75	16.12	102x32x10	3534-9/16I	38,18	3534-9/16SP	57,70	3534-9/16SF	57,70	3534-9/16GC	222,99
UNF 5/8 - 18		16.50	17.00	112x37x11.2	3534-5/8I	47,13	3534-5/8SP	80,42	3534-5/8SF	80,42	3534-5/8GC	227,84
UNF 3/4 - 16		19.50	21.11	112x37x11.2	3534-3/4I	57,27	3534-3/4SP	81,56	3534-3/4SF	81,56	3534-3/4GC	184,20
UNF 7/8 - 14		22.50	24.58	130x45x14	3534-7/8I	74,83	3534-7/8SP	118,27	3534-7/8SF	118,27	3534-7/8GC	276,34
UNF 1 - 12		26.00	28.15	127x37x16	3534-1I	66,45	3534-1SP	138,47	3534-1SF	138,47	3534-1GC	252,08
UNS 1 - 14		26.00	27.76	127x37x16	3535-1I	66,45	3535-1SP	138,47	3535-1SF	138,47	3535-1GC	252,08
UNF 1.1/8 - 12		29.50	31.32	137x37x18	3534-1.1/8I	202,36	-	-	-	-	-	-
UNF 1.1/4 - 12		32.50	34.50	144x39x20	3534-1.1/4I	242,78	-	-	-	-	-	-
UNF 1.3/8 - 12		35.50	37.67	149x39x22.4	3534-1.3/8I	303,50	-	-	-	-	-	-
UNF 1.1/2 - 12		38.50	40.85	149x39x22.4	3534-1.1/2I	393,36	-	-	-	-	-	-

## STI HAND TAP

BSW



BSW



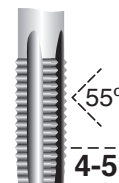
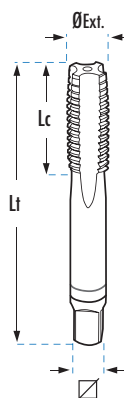
TOL (3B)



HSS



STI-ISO529



			Ø Ext.	Lt x Lc x $\varnothing$		€	
BSW 1/8 - 40			3.40	3.93	53x13x3.15	3528-1/8I	13,28
BSW 3/16 - 24			5.00	6.00	66x19x5	3528-3/16I	13,28
BSW 1/4 - 20			6.70	7.84	72x22x6.3	3528-1/4I	13,28
BSW 5/16 - 18			8.30	9.59	80x24x8	3528-5/16I	14,63
BSW 3/8 - 16			10.00	11.38	85x25x6.3	3528-3/8I	15,23
BSW 7/16 - 14			11.60	13.23	95x30x9	3528-7/16I	20,29
BSW 1/2 - 12			13.00	15.17	102x32x10	3528-1/2I	23,53
BSW 9/16 - 12			14.75	16.76	102x32x10	3528-9/16I	38,18
BSW 5/8 - 11			16.50	18.57	112x37x11.2	3528-5/8I	47,13
BSW 11/16 - 11			17.50	19.60	112x37x11.2	3528-11/16I	57,27
BSW 3/4 - 10			20.00	22.01	118x38x12.5	3528-3/4I	57,27
BSW 7/8 - 9			23.25	25.52	130x45x14	3528-7/8I	66,45
BSW 1 - 8			26.50	29.10	138x48x16	3528-1I	66,45

BSF



BSF



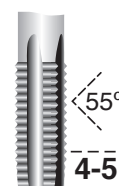
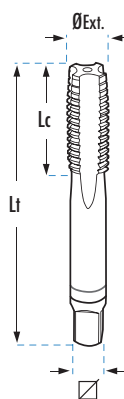
TOL (3B)






HSS



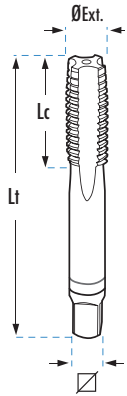
STI-ISO529



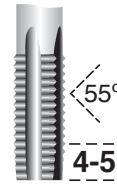
			Ø Ext.	Lt x Lc x $\varnothing$		€	
BSF 3/16 - 32			5.00	5.70	66x19x5	3530-3/16I	13,28
BSF 1/4 - 26			6.60	7.51	72x22x6.3	3530-1/4I	13,28
BSF 5/16 - 22			8.30	9.30	80x24x8	3530-5/16I	14,63
BSF 3/8 - 20			9.80	11.02	85x25x6.3	3530-3/8I	15,23
BSF 7/16 - 18			11.60	12.77	89x29x7.1	3530-7/16I	20,29
BSF 1/2 - 16			13.25	14.56	95x30x9	3530-1/2I	23,53
BSF 9/16 - 16			14.75	16.15	102x32x10	3530-9/16I	38,18
BSF 5/8 - 14			16.50	18.01	112x37x11.2	3530-5/8I	47,13
BSF 11/16 - 14			17.50	19.60	112x37x11.2	3530-11/16I	57,27
BSF 3/4 - 12			19.50	21.53	118x38x12.5	3530-3/4I	57,27
BSF 7/8 - 11			22.75	24.93	130x45x14	3530-7/8I	66,45
BSF 1 - 10			26.25	28.37	138x48x16	3530-1I	66,45

**STI HAND TAP**

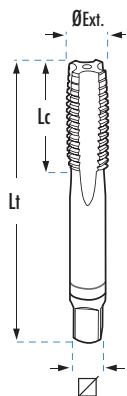
**BSP (GAS)**    **BSP**    **TOL (3B)**    **HSS**



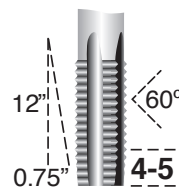
				Ø Ext.	Lt x Lc x ∅		€
BSP	1/8 - 28	10.00	10.81	85x25x6.3	<b>3546-1/8I</b>		<b>20,13</b>
BSP	1/4 - 19	13.75	14.73	95x30x9	<b>3546-1/4I</b>		<b>22,85</b>
BSP	3/8 - 19	17.00	18.24	112x37x11.2	<b>3546-3/8I</b>		<b>30,06</b>
BSP	1/2 - 14	21.50	23.09	118x38x12.5	<b>3546-1/2I</b>		<b>48,71</b>
BSP	5/8 - 14	23.50	25.05	130x45x14	<b>3546-5/8I</b>		<b>71,58</b>
BSP	3/4 - 14	27.00	28.58	127x37x16	<b>3546-3/4I</b>		<b>71,58</b>
BSP	1 - 11	33.75	35.96	162x57x20	<b>3546-1I</b>		<b>111,84</b>



**NPT**    **NPT**    **TOL (3B)**    **HSS**



				Ø Ext.	Lt x Lc x ∅		€
NPT	1/8 - 27	10.43	54x19x8.3	<b>3552-1/8I</b>			<b>97,64</b>
NPT	1/4 - 18	13.95	62x27x10.7	<b>3552-1/4I</b>			<b>109,84</b>
NPT	3/8 - 18	17.37	65x27x13.5	<b>3552-3/8I</b>			<b>146,45</b>
NPT	1/2 - 14	21.65	80x35x13.1	<b>3552-1/2I</b>			<b>176,98</b>
NPT	3/4 - 14	26.96	83x35x17.2	<b>3552-3/4I</b>			<b>231,89</b>
NPT	1 - 11.1/2	33.75	95x44x22.7	<b>3552-1I</b>			<b>317,30</b>



## STI HAND TAPS

UNx8



8-UN



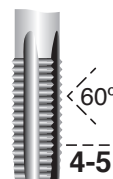
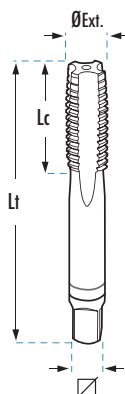
TOL (3B)






HSS



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			Ø Ext.	Lt x Lc x $\varnothing$		€	
UN 1.1/8 - 8			28.50	1.26	5.9x2.0x0.7	3570-1.1/8I	347,93
UN 1.1/4 - 8			32.00	1.38	6.3x2.2x0.7	3570-1.1/4I	400,79
UN 1.3/8 - 8			35.00	1.51	6.6x2.3x0.8	3570-1.3/8I	454,85
UN 1.1/2 - 8			38.00	1.63	6.6x2.3x0.8	3570-1.1/2I	499,63
UN 1.5/8 - 8			41.00	1.76	7.3x2.6x0.9	3570-1.5/8I	584,46
UN 1.3/4 - 8			44.50	1.88	7.3x2.6x0.9	3570-1.3/4I	633,01
UN 1.7/8 - 8			47.50	2.01	7.8x2.7x1.1	3570-1.7/8I	735,90
UN 2 - 8			51.00	2.13	7.8x2.7x1.1	3570-2I	764,43

BA



BA



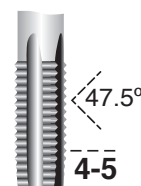
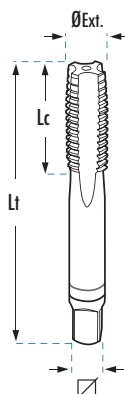
TOL (3B)






HSS

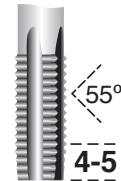
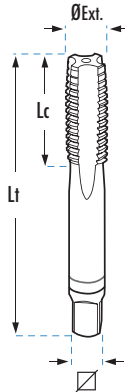


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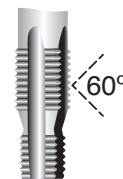
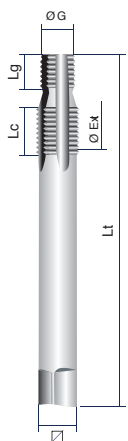
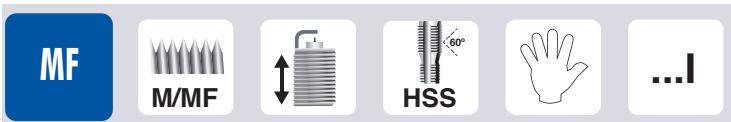


			Ø Ext.	Lt x Lc x $\varnothing$		€	
BA 0			6.20	7.12	66x19x5.6	3544-0I	13,51
BA 2			4.90	5.60	62x17x4.5	3544-2I	13,51
BA 4			3.80	4.34	53x13x3.5	3544-4I	13,51
BA 6			2.90	3.40	50x13x2.8	3544-6I	13,51

**STI HAND TAPS**

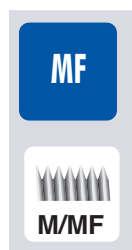


				Ø Ext.	Lt x Lc x $\varnothing$		€
BSB	1/4	- 26	6.60	7.72	72x22x6.3	3560-1/4I	14,97
BSB	5/16	- 26	8.00	9.30	72x22x7.1	3560-5/16I	16,47
BSB	3/8	- 26	9.80	10.89	85x25x6.3	3560-3/8I	17,15
BSB	7/16	- 26	11.10	12.48	89x29x7.1	3560-7/16I	22,85
BSB	1/2	- 26	12.70	14.07	95x30x9	3560-1/2I	25,85



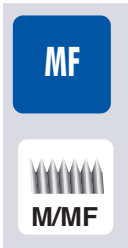
				Ø Ext.	Lg	Ø G	Lt x Lc x $\varnothing$		€
M	6 x	1.00	6.30	7.29	7	6	70x28x6.3	3520-6.00PN	25,83
M	8 x	1.25	8.30	9.62	9	8	75x32x6.3	3520-8.00PN	25,83
M	10 x	1.00	10.30	11.29	8	10	74x30x6.3	3522-10.00PN	32,31
M	10 x	1.50	10.40	11.94	9	10	89x29x7.1	3520-10.00PN	32,31
M	12 x	1.25	12.30	13.62	9	12	75x32x7.1	3522-12.00PN	45,90
M	14 x	1.25	14.25	15.62	10	14	90x45x9.2	3522-14.00PN	53,41
M	18 x	1.50	18.50	19.94	10	18	116x47x12.5	3522-18.00PN	76,37

## INSTALLATION TOOLS



D	FREE		FREE		FREE		FREE	
	€	€	€	LOCK	€	LOCK	€	LOCK
M 2 x 0.40	3500-HIT2	13,28	3520-2.00HIP	128,17	3520-2.00MIT	127,25	-	-
M 2.20 x 0.45	3500-HIT2	13,28	3520-2.20HIP	128,17	3520-2.20MIT	127,25	-	-
M 2.50 x 0.45	3500-HIT3	13,28	3520-2.50HIP	128,17	3520-2.50MIT	127,25	-	-
M 3 x 0.50	3500-HIT4	13,28	3520-3.00HIP	95,55	3520-3.00MIT	117,08	-	-
M 3.50 x 0.60	3500-HIT5	13,28	3520-3.50HIP	95,55	3520-3.50MIT	117,08	-	-
M 4 x 0.70	3500-HIT6	13,28	3520-4.00HIP	95,55	3520-4.00MIT	117,08	-	-
M 5 x 0.80	3500-HIT8	13,28	3520-5.00HIP	95,55	3520-5.00MIT	117,08	-	-
M 6 x 1.00	3500-HIT9	13,28	3520-6.00HIP	99,37	3520-6.00MIT	117,08	-	-
M 7 x 1.00	3500-HIT10	15,23	3520-7.00HIP	99,37	3520-7.00MIT	117,08	-	-
M 8 x 1.00	3500-HIT11	15,23	3521-8.00HIP	95,09	3521-8.00MIT	117,08	-	-
M 8 x 1.25	3500-HIT11	15,23	3520-8.00HIP	80,88	3520-8.00MIT	117,08	-	-
M 9 x 1.25	3500-HIT13	15,23	3520-9.00HIP	80,29	3520-9.00MIT	117,07	-	-
M 10 x 1.00	3500-HIT13	15,23	3523-10.00HIP	108,60	3523-10.00MIT	127,25	-	-
M 10 x 1.25	3500-HIT13	15,23	3521-10.00HIP	118,64	3521-10.00MIT	127,25	-	-
M 10 x 1.50	3500-HIT13	15,23	3520-10.00HIP	107,76	3520-10.00MIT	127,25	-	-
M 11 x 1.00	3500-HIT14	19,09	-	-	-	-	-	-
M 11 x 1.25	3500-HIT14	19,09	-	-	-	-	-	-
M 11 x 1.50	3500-HIT14	19,09	3520-11.00HIP	120,57	3520-11.00MIT	135,75	-	-
M 12 x 1.00	3500-HIT15	19,09	-	-	-	-	-	-
M 12 x 1.25	3500-HIT15	19,09	3523-12.00HIP	112,37	3523-12.00MIT	135,75	-	-
M 12 x 1.50	3500-HIT15	19,09	3521-12.00HIP	105,46	3521-12.00MIT	135,75	-	-
M 12 x 1.75	3500-HIT15	19,09	3520-12.00HIP	103,73	3520-12.00MIT	135,75	-	-
M 13 x 1.25	3500-HIT16	22,96	-	-	-	-	-	-
M 13 x 1.50	3500-HIT15	19,09	-	-	-	-	-	-
M 13 x 1.75	3500-HIT15	19,09	-	-	3520-13.00MIT	135,73	-	-
M 14 x 1.00	3500-HIT16	22,96	-	-	-	-	-	-
M 14 x 1.25	3500-HIT16	22,96	3523-14.00HIP	218,95	3523-14.00MIT	144,21	-	-
M 14 x 1.50	3500-HIT16	22,96	3521-14.00HIP	120,52	3521-14.00MIT	144,21	-	-
M 14 x 2.00	3500-HIT16	22,96	3520-14.00HIP	92,28	3520-14.00MIT	144,21	-	-
M 15 x 1.50	3500-HIT16	22,96	-	-	-	-	-	-
M 15 x 2.00	3500-HIT16	22,96	-	-	-	-	-	-
M 16 x 1.50	3500-HIT18	25,37	3521-16.00HIP	112,37	3521-16.00MIT	144,21	-	-
M 16 x 2.00	3500-HIT18	25,37	-	-	3520-16.00MIT	144,21	-	-
M 18 x 1.50	3500-HIT20	25,37	-	-	-	-	3523-18.00HIP	210,99
M 18 x 2.00	3500-HIT20	25,37	-	-	-	-	3521-18.00HIP	210,99
M 18 x 2.50	3500-HIT20	25,37	-	-	-	-	3520-18.00HIP	101,56

**INSTALLATION TOOLS**



		€		€		€
M 20 x 1.50	3500-HIT21	25,37	-	-	3523-20.00HIP	262,91
M 20 x 2.00	3500-HIT21	25,37	-	-	3521-20.00HIP	262,91
<b>M 20 x 2.50</b>	3500-HIT21	25,37	-	-	3520-20.00HIP	119,01
M 22 x 1.50	3500-HIT22	31,89	-	-	3523-22.00HIP	321,57
M 22 x 2.00	3500-HIT22	31,89	-	-	3521-22.00HIP	321,57
<b>M 22 x 2.50</b>	3500-HIT22	31,89	-	-	3520-22.00HIP	125,05
M 24 x 1.50	3500-HIT23	31,89	-	-	3523-24.00HIP	375,15
M 24 x 2.00	3500-HIT23	31,89	-	-	3521-24.00HIP	375,15
<b>M 24 x 3.00</b>	3500-HIT23	31,89	-	-	3520-24.00HIP	132,65
M 26 x 1.50	3500-HIT24	57,26	3523-26.00HIM	31,94	-	-
M 27 x 1.50	3500-HIT24	57,26	3523-27.00HIM	31,94	-	-
M 27 x 2.00	3500-HIT24	57,26	3521-27.00HIM	31,94	-	-
<b>M 27 x 3.00</b>	3500-HIT24	57,26	3520-27.00HIM	31,94	-	-
M 28 x 1.50	3500-HIT24	57,26	3523-28.00HIM	31,94	-	-
M 30 x 1.50	3500-HIT26	90,15	3523-30.00HIM	38,34	-	-
M 30 x 2.00	3500-HIT26	90,15	3521-30.00HIM	38,34	-	-
<b>M 30 x 3.50</b>	3500-HIT25	57,26	3520-30.00HIM	38,34	-	-
M 33 x 2.00	3500-HIT26	90,15	3521-33.00HIM	44,73	-	-
<b>M 33 x 3.50</b>	3500-HIT26	90,15	3520-33.00HIM	44,73	-	-
M 36 x 1.50	3500-HIT28	90,30	3524-36.00HIM	44,73	-	-
M 36 x 2.00	3500-HIT28	90,30	3523-36.00HIM	44,73	-	-
M 36 x 3.00	3500-HIT28	90,30	3521-36.00HIM	44,73	-	-
<b>M 36 x 4.00</b>	3500-HIT28	90,30	3520-36.00HIM	44,73	-	-
M 39x3,00	3500-HIT28	90,30	3521-39.00HIM	83,48	-	-
<b>M 39x4,00</b>	3500-HIT28	90,30	3520-39.00HIM	83,48	-	-
M 40 x 3,00	3500-HIT28	90,30	3523-40.00HIM	83,48	-	-
M 42 x 3,00	3500-HIT28	90,30	3523-42.00HIM	97,50	-	-
<b>M 42 x 4,50</b>	3500-HIT28	90,30	3520-42.00HIM	97,50	-	-
M 45 x 3,00	3500-HIT30	112,28	3523-45.00HIM	97,50	-	-
<b>M 45 x 4,50</b>	3500-HIT30	112,28	3520-45.00HIM	97,50	-	-
M 48 x 3,00	3500-HIT30	112,28	3523-48.00HIM	103,34	-	-
<b>M 48 x 5,00</b>	3500-HIT30	112,28	3520-48.00HIM	103,34	-	-
M 50 x 3,00	3500-HIT30	112,28	3523-50.00HIM	117,92	-	-
M 52 x 3,00	3500-HIT30	112,28	3523-52.00HIM	117,92	-	-
<b>M 52 x 5,00</b>	3500-HIT30	112,28	3520-52.00HIM	117,92	-	-

## INSTALLATION TOOLS

UNC

UNC



FREE



FREE



LOCK



FREE



FREE



LOCK



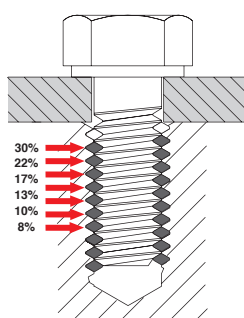
FREE



LOCK



		€		€		€		€		€
UNC N°2 - 56	3500-HIT2	13,28	3532-2GHIP	133,64	-	-	3532-2GMIT	127,25	-	-
UNC N°3 - 48	3500-HIT3	13,28	-	-	-	-	3532-3GMIT	127,25	-	-
UNC N°4 - 40	3500-HIT4	13,28	3532-4GHIP	133,64	-	-	3532-4GMIT	127,25	-	-
UNC N°5 - 40	3500-HIT4	13,28	3532-5GHIP	133,64	-	-	3532-5GMIT	127,25	-	-
UNC N°6 - 32	3500-HIT5	13,28	3532-6GHIP	130,00	-	-	3532-6GMIT	117,08	-	-
UNC N°8 - 32	3500-HIT6	13,28	3532-8GHIP	130,00	-	-	3532-8GMIT	117,08	-	-
UNC N°10 - 24	3500-HIT7	13,28	3532-10GHIP	130,00	-	-	3532-10GMIT	117,08	-	-
UNC N°12 - 24	3500-HIT8	13,28	3532-12GHIP	130,00	-	-	3532-12GMIT	117,07	-	-
UNC 1/4 - 20	3500-HIT9	13,28	3532-1/4HIP	88,37	-	-	3532-1/4MIT	117,08	-	-
UNC 5/16 - 18	3500-HIT10	15,23	3532-5/16HIP	88,43	-	-	3532-5/16MIT	117,08	-	-
UNC 3/8 - 16	3500-HIT13	15,23	3532-3/8HIP	102,67	-	-	3532-3/8MIT	127,25	-	-
UNC 7/16 - 14	3500-HIT14	19,09	3532-7/16HIP	102,67	-	-	3532-7/16MIT	127,25	-	-
UNC 1/2 - 13	3500-HIT15	19,09	3532-1/2HIP	118,70	-	-	3532-1/2MIT	135,75	-	-
UNC 9/16 - 12	3500-HIT16	22,96	-	-	-	-	-	-	3532-9/16HIP	107,30
UNC 5/8 - 11	3500-HIT18	25,37	-	-	-	-	-	-	3532-5/8HIP	112,74
UNC 3/4 - 10	3500-HIT20	25,37	-	-	-	-	-	-	3532-3/4HIP	126,80
UNC 7/8 - 9	3500-HIT22	31,89	-	-	-	-	-	-	3532-7/8HIP	136,55
UNC 1 - 8	3500-HIT23	31,89	-	-	-	-	-	-	3532-1HIP	156,06
UNC 1.1/8 - 7	3500-HIT24	57,26	-	-	3532-1.1/8HIM	38,34	-	-	3532-1.1/8HIP	178,19
UNC 1.1/4 - 7	3500-HIT25	57,26	-	-	3532-1.1/4HIM	38,34	-	-	3532-1.1/4HIP	186,67
UNC 1.3/8 - 6	3500-HIT26	90,15	-	-	3532-1.3/8HIM	44,73	-	-	3532-1.3/8HIP	189,98
UNC 1.1/2 - 6	3500-HIT27	90,30	-	-	3532-1.1/2HIM	44,73	-	-	3532-1.1/2HIP	192,62

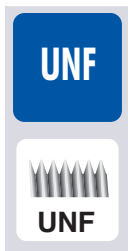











## TECHNICAL RECOMMENDATION:

Install the insert pitch and half deep at the workpiece.



**INSTALLATION TOOLS**



			 				 		 	
		€		€		€		€		€
UNF N°3 - 56	<b>3500-HIT3</b>	13,28	<b>3534-3GHIP</b>	118,98	-	-	-	-	-	-
UNF N°4 - 48	<b>3500-HIT4</b>	13,28	<b>3534-4GHIP</b>	121,40	-	-	<b>3534-4GMIT</b>	127,25	-	-
UNF N°6 - 40	<b>3500-HIT5</b>	13,28	<b>3534-6GHIP</b>	106,37	-	-	<b>3534-6GMIT</b>	117,08	-	-
UNF N°8 - 36	<b>3500-HIT6</b>	13,28	<b>3534-8GHIP</b>	106,37	-	-	<b>3534-8GMIT</b>	117,08	-	-
UNF N°10 - 32	<b>3500-HIT8</b>	13,28	<b>3534-10GHIP</b>	106,37	-	-	<b>3534-10GMIT</b>	117,08	-	-
UNF N°12 - 28	<b>3500-HIT8</b>	13,28	<b>3534-12GHIP</b>	106,37	-	-	<b>3534-12GMIT</b>	117,07	-	-
UNF 1/4 - 28	<b>3500-HIT9</b>	13,28	<b>3534-1/4HIP</b>	72,30	-	-	<b>3534-1/4MIT</b>	117,08	-	-
UNF 5/16 - 24	<b>3500-HIT11</b>	15,23	<b>3534-5/16HIP</b>	72,36	-	-	<b>3534-5/16MIT</b>	117,08	-	-
UNF 3/8 - 24	<b>3500-HIT13</b>	15,23	<b>3534-3/8HIP</b>	84,01	-	-	<b>3534-3/8MIT</b>	127,25	-	-
UNF 7/16 - 20	<b>3500-HIT14</b>	19,09	<b>3534-7/16HIP</b>	84,01	-	-	<b>3534-7/16MIT</b>	127,25	-	-
UNF 1/2 - 20	<b>3500-HIT15</b>	19,09	<b>3534-1/2HIP</b>	97,14	-	-	<b>3534-1/2MIT</b>	135,75	-	-
UNF 9/16 - 18	<b>3500-HIT16</b>	22,96	-	-	-	-	-	-	<b>3534-9/16HIP</b>	87,79
UNF 5/8 - 8	<b>3500-HIT18</b>	25,37	-	-	-	-	-	-	<b>3534-5/8HIP</b>	92,23
UNF 3/4 - 16	<b>3500-HIT21</b>	25,37	-	-	-	-	-	-	<b>3534-3/4HIP</b>	103,76
UNF 7/8 - 14	<b>3500-HIT22</b>	31,89	-	-	-	-	-	-	<b>3534-7/8HIP</b>	111,74
UNF 1-12	<b>3500-HIT23</b>	31,89	-	-	-	-	-	-	<b>3534-1HIP</b>	127,68
UNS 1-14	<b>3500-HIT23</b>	31,89	-	-	-	-	-	-	<b>3535-1HIP</b>	127,68
UNF 1.1/8 - 12	<b>3500-HIT25</b>	57,26	-	-	<b>3534-1.1/8HIM</b>	38,34	-	-	<b>3534-1.1/8HIP</b>	478,82
UNF 1.1/4 - 12	<b>3500-HIT26</b>	90,15	-	-	<b>3534-1.1/4HIM</b>	38,34	-	-	<b>3534-1.1/4HIP</b>	558,62
UNF 1.3/8 - 12	<b>3500-HIT27</b>	90,30	-	-	<b>3534-1.3/8HIM</b>	44,73	-	-	<b>3534-1.3/8HIP</b>	638,43
UNF 1.1/2 - 12	<b>3500-HIT28</b>	90,30	-	-	<b>3534-1.1/2HIM</b>	44,73	-	-	<b>3534-1.1/2HIP</b>	718,22



## INSTALLATION TOOLS

BSW



€

BSW 1/8 - 40	3500-HIT4	13,28
BSW 3/16 - 24	3500-HIT7	13,28
BSW 1/4 - 20	3500-HIT9	13,28
BSW 5/16 - 18	3500-HIT10	15,23
BSW 3/8 - 16	3500-HIT11	15,23
BSW 7/16 - 14	3500-HIT14	19,09
BSW 1/2 - 12	3500-HIT15	19,09
BSW 9/16 - 12	3500-HIT16	22,96
BSW 5/8 - 11	3500-HIT18	25,37
BSW 3/4 - 10	3500-HIT20	25,37
BSW 7/8 - 9	3500-HIT22	31,89
BSW 1 - 8	3500-HIT23	31,89

BSP  
(GAS)

€

€

BSP 1/8 - 28	3500-HIT14	19,09	3546-1/8HIM	19,17
BSP 1/4 - 19	3500-HIT16	22,96	3546-1/4HIM	19,17
BSP 3/8 - 19	3500-HIT20	25,37	3546-3/8HIM	22,37
BSP 1/2 - 14	3500-HIT23	31,89	3546-1/2HIM	25,58
BSP 5/8 - 14	3500-HIT23	31,89	3546-5/8HIM	31,94
BSP 3/4 - 14	3500-HIT24	57,26	3546-3/4HIM	31,94
BSP 7/8 - 14	3500-HIT27	90,30	3546-7/8HIM	44,73
BSP 1 - 11	3500-HIT27	90,30	3546-1HIM	44,73

BSF



€

BSF 3/16 - 32	3500-HIT8	13,28
BSF 1/4 - 26	3500-HIT9	13,28
BSF 5/16 - 22	3500-HIT11	15,23
BSF 3/8 - 20	3500-HIT13	15,23
BSF 7/16 - 18	3500-HIT14	19,09
BSF 1/2 - 16	3500-HIT15	19,09
BSF 9/16 - 16	3500-HIT16	22,96
BSF 5/8 - 14	3500-HIT18	25,37
BSF 3/4 - 12	3500-HIT20	25,37
BSF 7/8 - 11	3500-HIT22	31,89
BSF 1 - 10	3500-HIT23	31,89

NPT

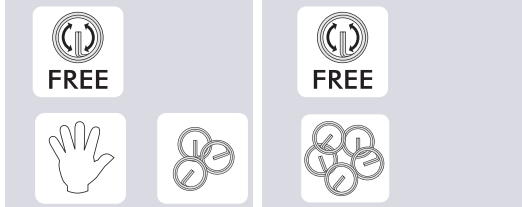


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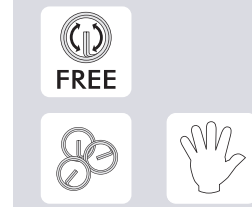
NPT 1/8 - 27	3500-HIT13	15,23
NPT 1/4 - 18	3500-HIT16	22,96
NPT 3/8 - 18	3500-HIT18	25,37
NPT 1/2 - 14	3500-HIT22	31,89
NPT 3/4 - 14	3500-HIT24	57,26
NPT 1 - 11.1/2	3500-HIT27	90,30



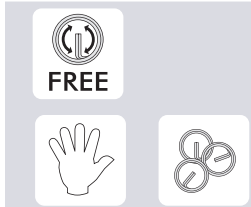
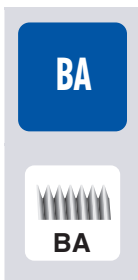
**INSTALLATION TOOLS**



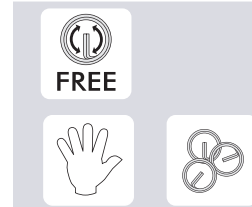
		€		€
UN 1.1/8 - 8	3500-HIT24	57,26	3570-1.1/8HIM	74,59
UN 1.1/4 - 8	3500-HIT25	57,26	3570-1.1/4HIM	74,59
UN 1.3/8 - 8	3500-HIT26	90,15	3570-1.3/8HIM	86,56
UN 1.1/2 - 8	3500-HIT27	90,30	3570-1.1/2HIM	86,56
UN 1.5/8 - 8	3500-HIT27	90,30	3570-1.5/8HIM	89,53
UN 1.3/4 - 8	3500-HIT28	90,30	3570-1.3/4HIM	95,50
UN 1.7/8 - 8	3500-HIT30	112,28	3570-1.7/8HIM	110,42
UN 2 - 8	3500-HIT30	112,28	3570-2HIM	110,42



		€
BSB 1/4 - 26	3500-HIT9	13,28
BSB 5/16 - 26	3500-HIT11	15,23
BSB 3/8 - 26	3500-HIT13	15,23
BSB 7/16 - 26	3500-HIT14	19,09
BSB 1/2 - 26	3500-HIT15	19,09



		€
BA 0	3500-HIT9	13,28
BA 2	3500-HIT7	13,28
BA 4	3500-HIT5	13,28
BA 6	3500-HIT3	13,28



		€
10x1.00	3500-HIT13	15,23
12x1.25	3500-HIT15	19,09
14x1.25	3500-HIT17	22,96
18x1.50	3500-HIT20	25,37



M14x1,25

M12x1,25

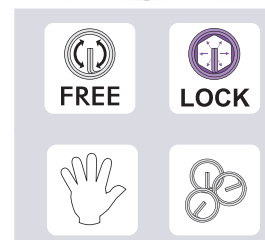
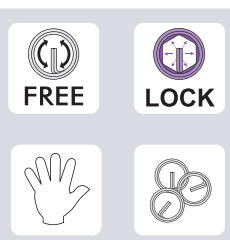





## INSTALLATION TOOL, TANG BREAKER, EXTRACTOR

UNC

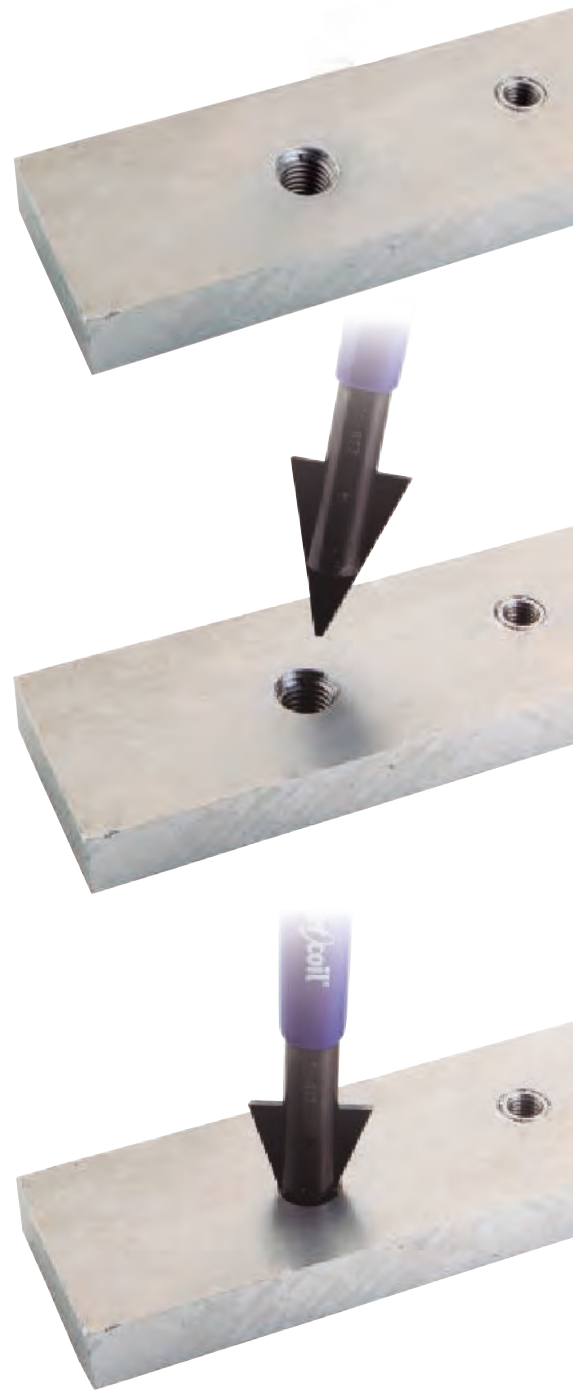
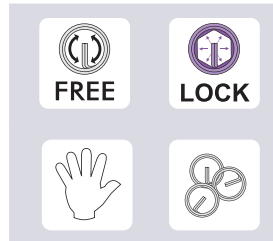
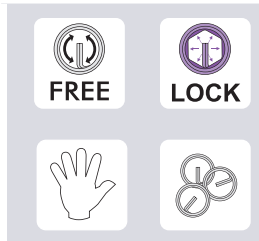
UNC




		€
UNC N°2 - 56	3500-TB2	5,70
UNC N°3 - 48	3500-TB3	5,70
UNC N°4 - 40	3500-TB4	5,70
UNC N°5 - 40	3500-TB4	5,70
UNC N°6 - 32	3500-TB5	5,70
UNC N°8 - 32	3500-TB6	5,70
UNC N°10 - 24	3500-TB8	5,70
UNC N°12 - 24	3500-TB8	5,70
UNC 1/4 - 20	3500-TB9	5,70
UNC 5/16 - 18	3500-TB12	6,31
UNC 3/8 - 16	3500-TB12	6,31
UNC 7/16 - 14	3500-TB14	7,64
UNC 1/2 - 13	3500-TB15	7,64
UNC 9/16 - 12	3500-HIT16	22,96
UNC 5/8 - 11	3500-HIT18	25,37
UNC 3/4 - 10	3500-HIT20	25,37
UNC 7/8 - 9	3500-HIT22	31,89
UNC 1 - 8	3500-HIT23	31,89
UNC 1.1/8 - 7	-	-
UNC 1.1/4 - 7	-	-
UNC 1.3/8 - 6	-	-
UNC 1.1/2 - 6	-	-

	€
3500-RT1	26,07
3500-RT1	26,07
3500-RT1	26,07
3500-RT1	26,07
3500-RT1	26,07
3500-RT1	26,07
3500-RT1	26,07
3500-RT2	28,15
3500-RT2	28,15
3500-RT2	28,15
3500-RT2	28,15
3500-RT3	34,45
3500-RT3	34,45
3500-RT3	34,45
3500-RT3	34,45
3500-RT3	34,45
3500-RT3	34,45
3500-RT3	34,45
3500-RT4	63,05
3500-RT4	63,05
3500-RT4	63,05
3500-RT4	63,05

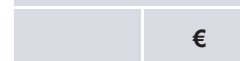
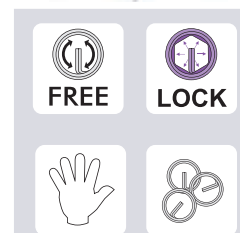
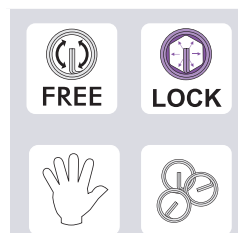
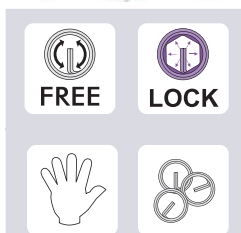
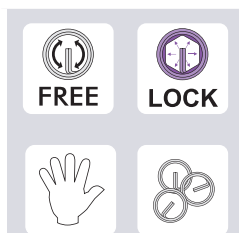
**INSTALLATION TOOL, TANG BREAKER, EXTRACTOR**



		€
UNF N°3 - 56	<b>3500-TB3</b>	<b>5,70</b>
UNF N°4 - 48	<b>3500-TB4</b>	<b>5,70</b>
UNF N°6 - 40	<b>3500-TB5</b>	<b>5,70</b>
UNF N°8 - 36	<b>3500-TB6</b>	<b>5,70</b>
UNF N°10 - 32	<b>3500-TB8</b>	<b>5,70</b>
UNF N°12 - 28	<b>3500-TB8</b>	<b>5,70</b>
UNF 1/4 - 28	<b>3500-TB9</b>	<b>5,70</b>
UNF 5/16 - 24	<b>3500-TB12</b>	<b>6,31</b>
UNF 3/8 - 24	<b>3500-TB13</b>	<b>6,31</b>
UNF 7/16 - 20	<b>3500-TB14</b>	<b>7,64</b>
UNF 1/2 - 20	<b>3500-TB15</b>	<b>7,64</b>
UNF 9/16 - 18	<b>3500-HIT16</b>	<b>22,96</b>
UNF 5/8 - 18	<b>3500-HIT18</b>	<b>25,37</b>
UNF 3/4 - 16	<b>3500-HIT21</b>	<b>25,37</b>
UNF 7/8 - 14	<b>3500-HIT22</b>	<b>31,89</b>
UNF 1 - 12	<b>3500-HIT23</b>	<b>31,89</b>
UNF 1 - 14	<b>3500-HIT23</b>	<b>31,89</b>
UNF 1.1/8 - 12	-	-
UNF 1.1/4 - 12	-	-
UNF 1.3/8 - 12	-	-
UNF 1.1/2 - 12	-	-

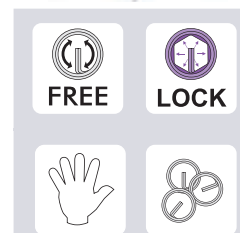
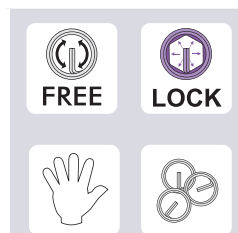
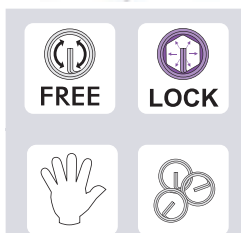
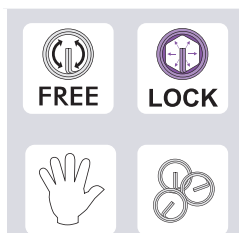
	€
<b>3500-RT1</b>	<b>26,07</b>
<b>3500-RT1</b>	<b>26,07</b>
<b>3500-RT1</b>	<b>26,07</b>
<b>3500-RT1</b>	<b>26,07</b>
<b>3500-RT2</b>	<b>28,15</b>
<b>3500-RT2</b>	<b>28,15</b>
<b>3500-RT2</b>	<b>28,15</b>
<b>3500-RT2</b>	<b>28,15</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT3</b>	<b>34,45</b>
<b>3500-RT4</b>	<b>63,05</b>
<b>3500-RT4</b>	<b>63,05</b>
<b>3500-RT4</b>	<b>63,05</b>
<b>3500-RT4</b>	<b>63,05</b>

## INSTALLATION TOOL, TANG BREAKER, EXTRACTOR



		€		€
BSW 1/8 - 40	3500-TB4	5,70	3500-RT1	26,07
BSW 3/16 - 24	3500-TB8	5,70	3500-RT2	28,15
BSW 1/4 - 20	3500-TB9	5,70	3500-RT2	28,15
BSW 5/16 - 18	3500-TB11	6,31	3500-RT2	28,15
BSW 3/8 - 16	3500-TB12	6,31	3500-RT3	34,45
BSW 7/16 - 14	3500-TB14	7,64	3500-RT3	34,45
BSW 1/2 - 12	3500-TB15	7,64	3500-RT3	34,45
BSW 9/16 - 12	3500-HIT16	22,96	3500-RT3	34,45
BSW 5/8 - 11	3500-HIT18	25,37	3500-RT3	34,45
BSW 3/4 - 10	3500-HIT20	25,37	3500-RT3	34,45
BSW 7/8 - 9	3500-HIT22	31,89	3500-RT3	34,45
BSW 1 - 8	3500-HIT23	31,89	3500-RT3	34,45

		€		€
BSF 3/16 - 32	3500-TB6	5,70	3500-RT2	28,15
BSF 1/4 - 26	3500-TB9	5,70	3500-RT2	28,15
BSF 5/16 - 22	3500-TB11	6,31	3500-RT2	28,15
BSF 3/8 - 20	3500-TB12	6,31	3500-RT3	34,45
BSF 7/16 - 18	3500-TB14	7,64	3500-RT3	34,45
BSF 1/2 - 16	3500-TB15	7,64	3500-RT3	34,45
BSF 9/16 - 16	3500-HIT16	22,96	3500-RT3	34,45
BSF 5/8 - 14	3500-HIT18	25,37	3500-RT3	34,45
BSF 3/4 - 12	3500-HIT20	25,37	3500-RT3	34,45
BSF 7/8 - 11	3500-HIT22	31,89	3500-RT3	34,45
BSF 1 - 10	3500-HIT23	31,89	3500-RT3	34,45



		€		€
BA 0	3500-TB11	6,31	3500-RT2	28,15
BA 2	3500-TB8	5,70	3500-RT2	28,15
BA 4	3500-TB5	5,70	3500-RT1	26,07
BA 6	3500-TB3	5,70	3500-RT1	26,07

		€		€
BSB 1/4 - 26	3500-TB9	5,70	3500-RT2	28,15
BSB 5/16 - 26	3500-TB12	6,31	3500-RT2	28,15
BSB 3/8 - 26	3500-TB13	6,31	3500-RT3	34,45
BSB 7/16 - 26	3500-TB14	7,64	3500-RT3	34,45
BSB 1/2 - 26	3500-TB15	7,64	3500-RT3	34,45

**SOLID CARBIDE DRILLS FOR HARDENED AND HIGH RESISTANCE STEEL**

Ref. BC85

**70  
HRc**

**SOLID  
CARBIDE**

**TOL D1  
h7**

**TOL D2  
h6**

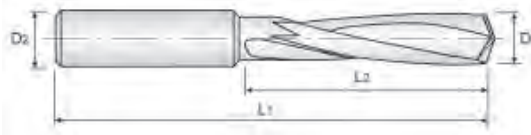


**TiAlN**

**HARDOX  
600**

**HIGH  
PERFORMANCE**

Recommended for HARDOX 600



BC85						
	D1 mm	D2 mm	L1 mm	L2 mm		
BC850300	3,0	3	46	16		49,79
BC850330	3,3	4	48	18	M4	57,14
BC850340	3,4	4	50	20		57,14
BC850350	3,5	4	50	20		57,14
BC850400	4,0	4	52	22		58,30
BC850420	4,2	6	65	25	M5	82,78
BC850430	4,3	6	68	28		82,78
BC850440	4,4	6	68	28		82,78
BC850450	4,5	6	68	28		82,78
BC850500	5,0	6	72	32	M6	82,78
BC850510	5,1	6	72	32		82,78
BC850520	5,2	6	72	32		82,78
BC850550	5,5	6	75	35		82,78
BC850600	6,0	6	75	35		82,78
BC850650	6,5	8	80	40		102,69
BC850680	6,8	8	85	45	M8	102,69
BC850690	6,9	8	85	45		102,69
BC850700	7,0	8	85	45		102,69
BC850750	7,5	8	85	45		102,69
BC850800	8,0	8	98	50		102,69
BC850850	8,5	10	98	50	M10	156,94
BC850860	8,6	10	105	57		156,94
BC850880	8,8	10	105	57		156,94
BC850900	9,0	10	105	57		156,94
BC850950	9,5	10	105	57		156,94
BC851000	10,0	10	111	63		156,94
BC851020	10,2	12	111	63	M12	203,26
BC851030	10,3	12	111	63		238,49
BC851050	10,5	12	111	63		238,49
BC851080	10,8	12	119	71		238,49
BC851100	11,0	12	119	71		238,49
BC851150	11,5	12	119	71		238,49
BC851200	12,0	12	119	71	M14	238,49
BC851400	14,0	14	125	77	M16	271,01

**DRILLING THROUGH BROKEN SCREWS**

**Broken screw**

**1st. Step  
Clean up the surface**

**2nd. Step  
Drilling with BC85 drill**

**3rd. Step  
Remove the chip**

**4th. Step (Optional)  
Repair the thread  
with inserts**

**powercoil**  
by CELESA

Hrc	50-55		55-60		60-70	
	VC	VC	VC	VC	VC	VC
	14-22 m/min	10-16 m/min	8-13 m/min			
Ø	(R.P.M.)	(mm/min)	(R.P.M.)	(mm/min)	(R.P.M.)	(mm/min)
3	1900	0.04	1330	0.04	1000	0.04
4	1430	0.04	1000	0.04	750	0.04
5	1150	0.04	800	0.04	600	0.04
6	960	0.04	670	0.04	500	0.04
8	720	0.04	500	0.04	370	0.04
10	570	0.04	400	0.04	300	0.04
12	480	0.04	330	0.04	250	0.04
14	438	0.04	282	0.04	210	0.04

VC: Cutting Speed

## FULLY GROUND TWIST DRILLS

HSSCo  
5%DIN  
338

GOLD



	Ø mm.	Ø "	L1 x L2 mm	€
3520-0210	2.10	-	49x24	2,80
3520-0230	2.30	3/32	53x27	2,80
3520-0240	2.40	-	57x30	2,80
3520-0260	2.60	-	57x30	2,69
3520-0270	2.70	-	61x33	2,69
3520-0290	2.90	-	61x33	2,69
3520-0300	3.00	-	61x33	2,14
3520-0320	3.20	1/8	65x36	2,58
3520-0340	3.40	-	70x39	2,69
3520-0370	3.70	-	70x39	3,24
3520-0380	3.80	-	75x43	3,24
3520-0420	4.20	-	75x43	3,06
3520-0430	4.30	-	80x47	3,24
3520-0440	4.40	11/64	80x47	3,24
3520-0480	4.80	-	86x52	3,60
3520-0490	4.90	-	86x52	3,60
3520-0500	5.00	-	86x52	3,28
3520-0510	5.10	-	86x52	3,94
3520-0520	5.20	13/64	86x52	3,94
3520-0550	5.50	7/32	93x57	4,16
3520-0570	5.70	15/64	93x57	4,92
3520-0620	6.20	-	101x63	5,48
3520-0630	6.30	1/4	101x63	5,48
3520-0660	6.60	-	101x63	6,58
3520-0670	6.70	17/64	101x63	6,58
3520-0690	6.90	-	109x69	6,58
3520-0730	7.30	9/32	109x69	8,38
3520-0760	7.60	-	117x75	10,08
3520-0800	8.00	5/16	117x75	7,25
3520-0820	8.20	-	117x75	9,67
3520-0830	8.30	21/64	117x75	9,67

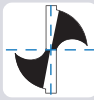
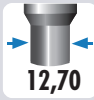
	Ø mm.	Ø "	L1 x L2 mm	€
3520-0840	8.40	-	117x75	9,67
3520-0880	8.80	-	125x81	12,29
3520-0930	9.30	23/64	125x81	13,61
3520-0940	9.40	3/8	125x81	13,57
3520-0980	9.80	-	133x87	15,95
3520-0990	9.90	25/64	133x87	15,95
3520-1000	10.00	-	133x87	10,96
3520-1010	10.10	-	133x87	18,34
3520-1030	10.30	13/32	133x87	18,38
3520-1040	10.40	-	133x87	18,34
3520-1080	10.80	-	142x94	21,33
3520-1110	11.10	7/16	142x94	24,33
3520-1130	11.30	-	142x94	24,33
3520-1140	11.40	-	142x94	24,33
3520-1150	11.50	29/64	142x94	20,48
3520-1160	11.60	-	142x94	25,14
3520-1230	12.30	-	151x101	29,18
3520-1240	12.40	31/64	151x101	29,18
3520-1250	12.50	-	151x101	26,65
3520-1270	12.70	1/2	151x101	30,37
3520-1280	12.80	-	151x101	30,37
3520-1300	13.00	33/64	151x101	27,24
3520-1325	13.25	-	160x108	37,71
3520-1350	13.50	-	160x108	30,03
3520-1375	13.75	-	160x108	37,71
3520-1425	14.25	9/16	169x114	49,55
3520-1450	14.50	-	169x114	42,12
3520-1475	14.75	-	169x114	49,55
3520-1500	15.00	19/32	169x114	42,75
3520-1525	15.25	-	178x120	68,36



**FULLY GROUND REDUCED SHANK TWIST DRILLS**

**HSSCo**  
5%

**DIN**  
338



**GOLD**



	Ø mm.	Ø "	L1 x L2 mm	€
3520-1550	15.50	39/64	178x120	63,88
3520-1650	16.50	-	184x125	75,04
3520-1675	16.75	-	184x125	100,58
3520-1700	17.00	-	184x125	75,53
3520-1750	17.50	-	191x130	83,13
3520-1850	18.50	23/32	198x135	101,65
3520-1875	18.75	-	198x135	127,45
3520-1900	19.00	3/4	198x135	100,77
3520-1950	19.50	49/64	205x140	111,65
3520-2000	20.00	-	205x240	119,63
3520-2050	20.50	13/16	205x140	142,41



**MORSE TAPER SHANK DRILLS**

**HSS**

**DIN**  
345



**OX**



	Ø mm.	Ø "	L1 x L2 mm	€
3520-2075	20.75	-	243x145	77,14
3520-2100	21.00	-	243x145	73,72
3520-2150	21.50	27/32	248x150	73,72
3520-2250	22.50	57/64	253x155	80,82
3520-2275	22.75	-	253x155	93,17
3520-2300	23.00	29/32	253x155	80,64
3520-2325	23.25	-	276x155	102,72
3520-2350	23.50	-	276x155	89,49
3520-2450	24.50	31/32	281x160	97,46
3520-2500	25.00	-	281x160	97,06
3520-2575	25.75	1.1/64	286x165	121,91
3520-2600	26.00	-	286x165	105,62
3520-2625	26.25	-	286x165	132,02
3520-2650	26.50	-	286x165	114,33
3520-2700	27.00	1.1/16	291x170	114,44
3520-2750	27.50	1.5/64	291x170	122,42
3520-2800	28.00	1.3/32	291x170	122,79
3520-2850	28.50	1.1/8	296x175	131,24
3520-2950	29.50	1.5/32	296x175	144,50
3520-3000	30.00	1.11/64	296x175	144,62
3520-3050	30.50	1.3/16	301x180	161,34
3520-3100	31.00	1.7/32	301x180	161,48
3520-3200	32.00	1.1/4	334x185	170,12
3520-3250	32.50	1.9/32	334x185	195,41
3520-3300	33.00	1.19/64	334x185	194,23
3520-3325	33.25	-	334x185	239,58
3520-3350	33.50	1.5/16	334x185	211,90
3520-3375	33.75	-	339x190	240,86
3520-3400	34.00	1.21/64	339x190	211,24
3520-3500	35.00	1.3/8	339x190	231,86
3520-3550	35.50	1.13/32	339x190	247,52
3520-3600	36.00	-	344x195	248,14
3520-3650	36.50	-	344x195	262,44
3520-3700	37.00	1.29/64	344x195	262,07
3520-3800	38.00	1.1/2	349x200	275,26
3520-3850	38.50	-	349x200	292,90
3520-3900	39.00	1.17/32	349x200	293,16
3520-3950	39.50	1.35/64	349x200	310,46
3520-3975	39.75	-	349x200	344,90
3520-4000	40.00	1.9/16	349x200	310,07
3520-4100	41.00	1.5/8	354x205	325,43
3520-4250	42.50	1.43/64	354x205	362,76
3520-4300	43.00	1.11/16	359x210	362,80
3520-4450	44.50	1.3/8	359x210	397,50
3520-4600	46.00	-	364x215	411,61
3520-4750	47.50	1.7/8	364x215	444,64
3520-4850	48.50	1.29/32	369x220	462,28
3520-5100	51.00	2	412x225	562,76

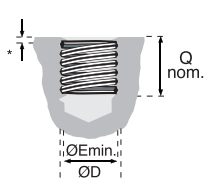
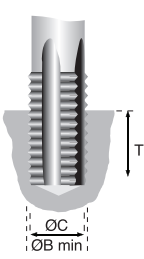
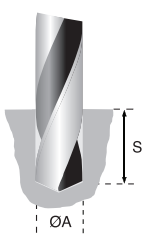
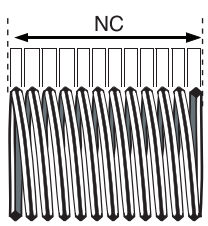
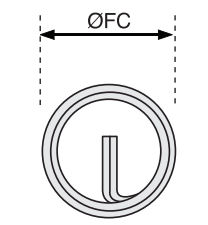




**TECHNICAL INFORMATION FOR FREE RUNNING INSERTS**

M/MF	
<b>A</b>	Minor Diameter
<b>B</b>	Major Diameter
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)
<b>D</b>	Pitch Diameter of Installed Insert (Class 4H)
<b>E</b>	Installed Insert Internal Diameter - min.
<b>FC</b>	Free Coil Diameter of Uninstalled Insert
<b>S</b>	Drilling Length - minimum
<b>T</b>	Tapping Length - minimum
<b>Q</b>	Nominal Length
<b>NC</b>	Number of Coils in Uninstalled Insert counted 90° from tang.

SIZE M/MF	Drill		A max/min mm	FC min/max mm	NC max/min				
	mm	"			1.0D	1.5D	2.0D	2.5D	3.0D
M2 X 0.40	2.10	#45	2.177/2.087	2.49/2.70	3.30/3.00	5.70/5.20	8.10/7.40	10.50/9.60	13.00/11.80
M2.2 X 0.45	2.30	3/32	2.397/2.297	2.76/3.00	3.20/2.90	5.50/5.00	7.90/7.10	10.30/9.30	12.60/11.40
M2.5 X 0.45	2.60	#37	2.697/2.597	3.05/3.70	3.80/3.10	6.50/5.20	9.20/7.40	11.90/9.50	14.60/11.70
M3 X 0.50	3.20	1/8	3.220/3.108	3.61/4.35	4.30/3.40	7.20/5.80	10.10/8.20	13.10/10.50	16.00/12.90
M3.5 X 0.60	3.70	#27	3.755/3.630	4.24/4.95	4.10/3.40	7.00/5.80	9.80/8.20	12.60/10.50	15.50/12.90
M4 x 0.70	4.20	-	4.292/4.152	4.86/5.60	4.00/3.40	6.80/5.70	9.60/8.10	12.30/10.50	15.10/12.80
M5 X 0.80	5.20	13/64	5.333/5.173	5.98/6.80	4.50/3.90	7.60/6.50	10.60/9.20	13.70/11.80	16.70/14.40
M6 X 1.00	6.30	1/4	6.406/6.216	7.23/7.95	4.30/3.80	7.20/6.40	10.10/9.10	13.10/11.70	16.00/14.30
M7 X 1.00	7.30	9/32	7.406/7.216	8.22/9.20	5.30/4.60	8.70/7.70	12.10/10.70	15.60/13.70	19.00/16.70
M8 X 1.25	8.30	21/64	8.483/8.271	9.53/10.35	4.70/4.20	7.80/7.10	10.90/9.90	14.10/12.80	17.20/15.60
M8 X 1.00	8.30	21/64	8.406/8.216	9.39/10.25	6.10/5.60	10.00/9.10	13.80/12.50	17.70/16.00	21.50/19.50
M9 X 1.25	9.40	3/8	9.483/9.271	10.52/11.16	5.50/5.10	9.00/8.40	12.50/11.70	16.10/15.00	19.60/18.30
M9 x 1.00	9.30	23/64	9.406/9.216	10.40/11.23	7.10/6.50	11.50/10.50	15.80/14.50	20.20/18.50	24.50/22.50
M10 X 1.50	10.40	-	10.561/10.325	11.83/12.50	4.90/4.60	8.20/7.70	11.50/10.80	14.70/13.80	18.00/16.90
M10 X 1.25	10.30	13/32	10.483/10.271	11.74/12.65	6.10/5.60	10.00/9.20	13.80/12.70	17.70/16.30	21.50/19.80
M10 x 1.00	10.30	13/32	10.406/10.216	11.41/12.50	8.10/7.30	12.90/11.70	17.80/16.10	22.60/20.50	27.50/24.90
M11 X 1.50	11.40	-	11.561/11.325	12.82/13.59	5.60/5.20	9.20/8.60	12.80/12.00	16.40/15.40	20.00/18.70
M11 X 1.25	11.30	-	11.483/11.271	12.75/13.76	6.90/6.40	11.20/10.30	15.40/14.20	19.70/18.10	23.90/22.00
M11 X 1.00	11.30	-	11.406/11.216	12.42/13.41	9.10/8.40	14.40/13.30	19.80/18.20	25.10/23.10	30.40/28.00
M12 X 1.75	12.50	-	12.644/12.379	14.13/15.00	5.10/4.80	8.50/7.90	11.90/11.10	15.20/14.20	18.60/17.30
M12 X 1.50	12.40	31/64	12.561/12.325	14.09/15.20	6.10/5.60	10.00/9.20	13.80/12.70	17.70/16.20	21.50/19.80
M12 X 1.25	12.30	-	12.483/12.271	13.76/15.00	7.70/7.00	12.40/11.20	17.00/15.50	21.60/19.70	26.30/23.90
M12 X 1.00	12.30	-	12.406/12.216	13.43/14.49	10.10/9.30	15.90/14.70	21.70/20.00	27.60/25.40	33.40/30.80
M13 X 1.75	13.50	-	13.644/13.379	15.12/16.04	5.70/5.30	9.40/8.70	13.00/12.20	16.70/15.60	20.30/19.00
M13 X 1.50	13.25	-	13.561/13.325	15.10/16.29	6.80/6.20	11.00/10.10	15.20/13.90	19.30/17.80	23.50/21.60
M13 X 1.25	13.25	-	13.483/13.271	14.77/15.94	8.50/7.80	13.50/12.50	18.60/17.10	23.60/21.70	28.70/26.40
M14 X 2.00	14.50	-	14.733/14.433	16.43/17.35	5.30/5.00	8.70/8.20	12.10/11.40	15.60/14.60	19.00/17.90
M14 X 1.50	14.50	-	14.561/14.325	16.11/17.25	7.50/6.90	12.00/11.10	16.50/15.30	21.00/19.40	25.50/23.60
M14 X 1.25	14.25	9/16	14.483/14.271	15.78/17.03	9.30/8.60	14.70/13.60	20.20/18.60	25.60/23.60	31.00/28.60
M14 X 1.00	14.25	9/16	14.406/14.216	15.45/16.68	12.10/11.10	18.90/17.40	25.70/23.70	32.50/30.00	39.30/36.20
M15 X 2.00	15.50	39/64	15.733/15.433	17.42/18.48	5.80/5.40	9.50/8.80	13.10/12.30	16.80/15.70	20.50/19.20
M15 X 1.50	15.25	-	15.561/15.325	17.12/18.47	8.10/7.50	12.90/11.90	17.80/16.40	22.60/20.80	27.50/25.30
M16 X 2.00	16.50	-	16.733/16.433	18.41/19.60	6.30/5.90	10.20/9.50	14.20/13.20	18.10/16.90	22.00/20.50
M16 X 1.50	16.50	-	16.561/16.325	18.13/19.60	8.80/8.00	13.90/12.80	19.10/17.50	24.30/22.30	29.40/27.00
M18 X 2.50	19.00	3/4	18.896/18.541	21.04/22.00	5.50/5.20	9.00/8.60	12.50/11.90	16.10/15.30	19.60/18.60
M18 X 2.00	18.50	23/32	18.733/18.433	20.80/21.85	7.10/6.70	11.50/10.90	15.80/15.00	20.20/19.10	24.50/23.20
M18 X 1.50	18.50	23/32	18.561/18.325	20.15/21.75	10.10/9.30	15.90/14.60	21.70/20.00	27.60/25.40	33.40/30.70
M20 X 2.50	20.75	-	20.896/20.541	23.02/24.40	6.30/5.90	10.20/9.60	14.20/13.30	18.10/16.90	22.00/20.60
M20 X 2.00	20.50	13/16	20.733/20.433	22.82/24.05	8.10/7.70	12.90/12.20	17.80/16.80	22.60/21.40	27.50/25.90
M20 X 1.50	20.50	13/16	20.561/20.325	22.17/24.00	11.40/10.50	17.90/16.40	24.40/22.40	30.90/28.30	37.40/34.30
M22 X 2.50	22.75	-	22.896/22.541	25.00/26.90	7.10/6.50	11.40/10.50	15.80/14.50	20.10/18.50	24.50/22.50
M22 X 2.00	22.50	57/64	22.733/22.433	24.84/26.50	9.10/8.50	14.40/13.40	19.80/18.40	25.10/23.40	30.40/28.40
M22 X 1.50	22.50	57/64	22.561/22.325	24.19/26.45	12.70/11.60	19.90/18.10	27.00/24.60	34.20/31.10	41.30/37.60
M24 X 3.00	25.00	-	25.050/24.650	27.62/29.00	6.30/5.90	10.20/9.70	14.20/13.40	18.10/17.10	22.00/20.90
M24 X 2.00	24.50	31/32	24.733/24.433	26.86/29.10	10.10/9.20	15.90/14.60	21.70/19.90	27.60/25.30	33.40/30.60
M24 X 1.50	24.50	31/32	24.561/24.325	26.21/28.28	14.00/12.90	21.80/20.10	29.70/27.30	37.50/34.50	45.30/41.70
M26 X 1.50	26.50	-	26.561/26.325	28.23/30.46	15.40/14.20	23.80/22.00	32.30/29.80	40.80/37.60	49.20/45.40
M27 X 3.00	28.00	1.3/32	28.050/27.650	30.59/32.40	7.30/6.80	11.70/11.00	16.20/15.20	20.60/19.30	25.10/23.50
M27 X 2.00	27.50	1.5/64	27.733/27.433	29.89/32.30	11.60/10.60	18.10/16.70	24.70/22.70	31.30/28.80	37.90/34.80
M30 X 3.50	31.00	1.7/32	31.208/30.758	34.20/35.81	6.90/6.50	11.10/10.50	15.30/14.50	19.50/18.60	23.80/22.60
M30 X 3.00	31.00	1.7/32	31.050/30.650	34.24/36.10	8.10/7.60	12.90/12.20	17.80/16.80	22.60/21.30	27.50/25.90
M30 X 2.00	30.50	1.3/16	30.733/30.433	32.92/35.70	13.00/12.00	20.40/18.70	27.70/25.40	35.00/32.10	42.30/38.80
M33 X 3.50	34.00	1.21/64	34.208/33.758	37.17/38.80	7.70/7.40	12.40/11.80	17.00/16.20	21.70/20.70	26.40/25.10
M33 X 3.00	33.50	1.5/16	34.050/33.650	37.27/39.50	9.10/8.50	14.40/13.50	19.80/18.50	25.10/23.60	30.40/28.60
M33 X 2.00	33.50	1.5/16	33.733/33.433	35.95/39.20	14.50/13.30	22.60/20.60	30.60/28.00	38.70/35.30	46.80/42.70
M36 X 4.00	37.00	1.29/64	37.341/36.866	40.78/42.67	7.30/6.90	11.70/11.20	16.20/15.40	20.60/19.60	25.10/23.80
M36 X 3.00	37.00	1.29/64	37.050/36.650	40.30/42.70	10.10/9.50	15.90/14.90	21.70/20.40	27.60/25.90	33.40/31.40
M39 X 4.00	40.00	1.9/16	40.341/39.866	43.75/45.75	8.00/7.70	12.90/12.20	17.70/16.80	22.50/21.40	27.30/26.00
M42 X 4.50	43.00	1.11/16	43.505/42.975	47.37/49.00	7.60/7.30	12.20/11.80	16.80/16.20	21.50/20.70	26.10/25.10
M42 X 3.00	42.50	1.43/64	43.050/42.650	46.36/49.00	12.10/11.40	18.90/17.80	25.70/24.20	32.50/30.60	39.30/37.10





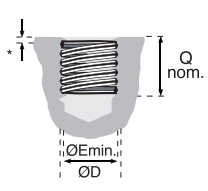
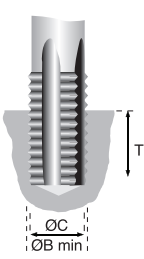
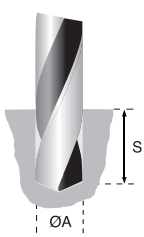
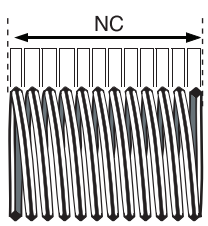
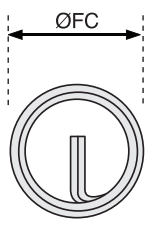
TECHNICAL INFORMATION FOR FREE RUNNING INSERTS

B mm	C (5H) mm	D (4H) mm	C (6H) mm	D (5H) mm	E mm	S					T					Q				
						1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D
2.520	2.296/2.260	1.796/1.740	2.311/2.260	1.811/1.740	1.567	3.80	4.80	5.80	6.80	7.80	3.40	4.40	5.40	6.40	7.40	2.00	3.00	4.00	5.00	6.00
2.785	2.532/2.492	1.968/1.908	2.547/2.492	1.983/1.908	1.713	4.23	5.33	6.43	7.53	8.63	3.78	4.88	5.98	7.08	8.18	2.20	3.30	4.40	5.50	6.60
3.085	2.832/2.792	2.268/2.208	2.847/2.792	2.283/2.208	2.013	4.53	5.78	7.03	8.28	9.53	4.08	5.33	6.58	7.83	9.08	2.50	3.75	5.00	6.25	7.50
3.650	3.367/3.325	2.738/2.675	3.384/3.325	2.755/2.675	2.459	5.25	6.75	8.25	9.75	11.25	4.75	6.25	7.75	9.25	10.75	3.00	4.50	6.00	7.50	9.00
4.279	3.940/3.890	3.181/3.110	3.959/3.890	3.200/3.110	2.850	6.20	7.95	9.70	11.45	13.20	5.60	7.35	9.10	10.85	12.60	3.50	5.25	7.00	8.75	10.50
4.909	4.509/4.455	3.620/3.545	4.529/4.455	3.640/3.545	3.242	7.15	9.15	11.15	13.15	15.15	6.45	8.45	10.45	12.45	14.45	4.00	6.00	8.00	10.00	12.00
6.039	5.577/5.520	4.560/4.480	5.597/5.520	4.580/4.480	4.134	8.60	11.10	13.60	16.10	18.60	7.80	10.30	12.80	15.30	17.80	5.00	7.50	10.00	12.50	15.00
7.299	6.719/6.650	5.445/5.350	6.742/6.650	5.468/5.350	4.917	10.50	13.50	16.50	19.50	22.50	9.50	12.50	15.50	18.50	21.50	6.00	9.00	12.00	15.00	18.00
8.299	7.719/7.650	6.445/6.350	7.742/7.650	6.468/6.350	5.917	11.50	15.00	18.50	22.00	25.50	10.50	14.00	17.50	21.00	24.50	7.00	10.50	14.00	17.50	21.00
9.624	8.886/8.812	7.288/7.188	8.912/8.812	7.313/7.188	6.647	13.63	17.63	21.63	25.63	29.63	12.38	16.38	20.38	24.38	28.38	8.00	12.00	16.00	20.00	24.00
9.299	8.719/8.650	7.445/7.350	8.742/8.650	7.468/7.350	6.917	12.50	16.50	20.50	24.50	28.50	11.50	15.50	19.50	23.50	27.50	8.00	12.00	16.00	20.00	24.00
10.624	9.886/9.812	8.288/8.188	9.912/9.812	8.313/8.188	7.647	14.63	19.13	23.63	28.13	32.63	13.38	17.88	22.38	26.88	31.38	9.00	13.50	18.00	22.50	27.00
10.299	9.719/9.650	8.445/8.350	9.742/9.650	8.468/8.350	7.917	13.50	18.00	22.50	27.00	31.50	12.50	17.00	21.50	26.00	30.50	9.00	13.50	18.00	22.50	27.00
11.949	11.061/10.974	9.138/9.026	11.089/10.974	9.166/9.026	8.376	16.75	21.75	26.75	31.75	36.75	15.25	20.25	25.25	30.25	35.25	10.00	15.00	20.00	25.00	30.00
11.624	10.886/10.812	9.288/9.188	10.912/10.812	9.313/9.188	8.647	15.63	20.63	25.63	30.63	35.63	14.38	19.38	24.38	29.38	34.38	10.00	15.00	20.00	25.00	30.00
11.299	10.724/10.650	9.445/9.350	10.742/10.650	9.468/9.350	8.917	14.50	19.50	24.50	29.50	34.50	13.50	18.50	23.50	28.50	33.50	10.00	15.00	20.00	25.00	30.00
12.949	12.061/11.974	10.138/10.026	12.089/11.974	10.166/10.026	9.376	17.75	23.25	28.75	34.25	39.75	16.25	21.75	27.25	32.75	38.25	11.00	16.50	22.00	27.50	33.00
12.624	11.898/11.812	10.300/10.188	11.926/11.812	10.328/10.188	9.647	16.63	22.13	27.63	33.13	38.63	15.38	20.88	26.38	31.88	37.38	11.00	16.50	22.00	27.50	33.00
12.299	11.724/11.650	10.445/10.350	11.742/11.650	10.468/10.350	9.917	15.50	21.00	26.50	32.00	37.50	14.50	20.00	25.50	31.00	36.50	11.00	16.50	22.00	27.50	33.00
14.273	13.236/13.137	10.988/10.863	13.271/13.137	11.023/10.863	10.106	19.88	25.88	31.88	37.88	43.88	18.13	24.13	30.13	36.13	42.13	12.00	18.00	24.00	30.00	36.00
13.949	13.067/12.974	11.144/11.026	13.099/12.974	11.176/11.026	10.376	18.75	24.75	30.75	36.75	42.75	17.25	23.25	29.25	35.25	41.25	12.00	18.00	24.00	30.00	36.00
13.624	12.898/12.812	11.300/11.188	12.926/12.812	11.328/11.188	10.647	17.63	23.63	29.63	35.63	41.63	16.38	22.38	28.38	34.38	40.38	12.00	18.00	24.00	30.00	36.00
13.299	12.724/12.649	11.450/11.350	12.749/12.649	11.475/11.350	10.917	16.50	22.50	28.50	34.50	40.50	15.50	21.50	27.50	33.50	39.50	12.00	18.00	24.00	30.00	36.00
15.273	14.236/14.137	11.988/11.863	14.271/14.137	12.023/11.863	11.106	20.88	27.38	33.88	40.38	46.88	19.13	25.63	32.13	38.63	45.13	13.00	19.50	26.00	32.50	39.00
14.949	14.067/13.974	12.144/12.026	14.099/13.974	12.176/12.026	11.376	19.75	26.25	32.75	39.25	45.75	18.25	24.75	31.25	37.75	44.25	13.00	19.50	26.00	32.50	39.00
14.624	13.898/13.812	12.300/12.188	13.926/13.812	12.328/12.188	11.647	18.63	25.13	31.63	38.13	44.63	17.38	23.88	30.38	36.88	43.38	13.00	19.50	26.00	32.50	39.00
16.598	15.406/15.299	12.833/12.701	15.444/15.299	12.871/12.701	11.835	23.00	30.00	37.00	44.00	51.00	21.00	28.00	35.00	42.00	49.00	14.00	21.00	28.00	35.00	42.00
15.949	15.067/14.974	13.144/13.026	15.099/14.974	13.176/13.026	12.376	20.75	27.75	34.75	41.75	48.75	19.25	26.25	33.25	40.25	47.25	14.00	21.00	28.00	35.00	42.00
15.624	14.898/14.812	13.300/13.188	14.926/14.812	13.328/13.188	12.674	19.63	26.63	33.63	40.63	47.63	18.38	25.38	32.38	39.38	46.38	14.00	21.00	28.00	35.00	42.00
15.299	14.724/14.649	13.450/13.350	14.749/14.649	13.475/13.350	12.917	18.50	25.50	32.50	39.50	46.50	17.50	24.50	31.50	38.50	45.50	14.00	21.00	28.00	35.00	42.00
17.598	16.406/16.299	13.833/13.701	16.444/16.299	13.871/13.701	12.835	24.00	31.50	39.00	46.50	54.00	22.00	29.50	37.00	44.50	52.00	15.00	22.50	30.00	37.50	45.00
16.949	16.067/15.974	14.144/14.026	16.099/15.974	14.176/14.026	13.376	21.75	29.25	36.75	44.25	51.75	20.25	27.75	35.25	42.75	50.25	15.00	22.50	30.00	37.50	45.00
18.598	17.406/17.299	14.833/14.701	17.444/17.299	14.871/14.701	13.835	25.00	33.00	41.00	49.00	57.00	23.00	31.00	39.00	47.00	55.00	16.00	24.00	32.00	40.00	48.00
17.949	17.067/16.974	15.144/15.026	17.099/16.974	15.176/15.026	14.376	22.75	30.75	38.75	46.75	54.75	21.25	29.25	37.25	45.25	53.25	16.00	24.00	32.00	40.00	48.00
21.248	19.738/19.624	16.516/16.376	19.778/19.624	16.556/16.376	15.294	29.25	38.25	47.25	56.25	65.25	26.75	35.75	44.75	53.75	62.75	18.00	27.00	36.00	45.00	54.00
20.598	19.406/19.299	16.833/16.701	19.444/19.299	16.871/16.701	15.835	27.00	36.00	45.00	54.00	63.00	25.00	34.00	43.00	52.00	61.00	18.00	27.00	36.00	45.00	54.00
19.949	19.067/18.974	17.144/17.026	19.099/18.974	17.176/17.026	16.376	24.75	33.75	42.75	51.75	60.75	23.25	32.25	41.25	50.25	59.25	18.00	27.00	36.00	45.00	54.00
23.248	21.738/21.624	18.516/18.376	21.778/21.624	18.556/18.376	17.294	31.25	41.25	51.25	61.25	71.25	28.75	38.75	48.75	58.75	68.75	20.00	30.00	40.00	50.00	60.00
22.598	21.406/21.299	18.833/18.701	21.444/21.299	18.871/18.701	17.835	29.00	39.00	49.00	59.00	69.00	27.00	37.00	47.00	57.00	67.00	20.00	30.00	40.00	50.00	60.00
21.949	21.067/20.974	19.144/19.026	21.099/20.974	19.176/19.026	18.376	26.75	36.75	46.75	56.75	66.75	25.25	35.25	45.25	55.25	65.25	20.00	30.00	40.00	50.00	60.00
25.248	23.738/23.624	20.516/20.376	23.778/23.624	20.556/20.376	19.294	33.25	44.25	55.25	66.25	77.25	30.75	41.75	52.75	63.75	74.75	22.00	33.00	44.00	55.00	66.00
24.598	23.406/23.299	20.833/20.701	23.444/23.299	20.871/20.701	19.835	31.00	42.00	53.00	64.00	75.00	29.00	40.00	51.00	62.00	73.00	22.00	33.00	44.00	55.00	66.00
23.949	23.067/22.974	21.144/21.026	23.099/22.974	21.176/21.026	20.376	28.75	39.75	50.75	61.75	72.75	27.25	38.25	49.25	60.25	71.25	22.00	33.00	44.00	55.00	66.00
27.897	26.093/25.948	22.221/22.051	26.135/25.948	22.263/22.051	20.752	37.50	49.50	61.50	73.50	85.50	34.50	46.50	58.50	70.50	82.50	24.00	36.00	48.00	60.00	72.00
26.598	25.414/25.299	22.841/22.701	25.454/25.299	22.881/22.701	21.835	33.00	45.00	57.00	69.00	81.00	31.00	43.00	55.00	67.00	79.00	24.00	36.00	48.00	60.00	72.00
25.949	25.044/24.975	23.121/23.026	25.135/24.975	23.186/23.026	22.376	30.75	42.75	54.75	66.75	78.75	29.25	41.25	53.25	65.25	77.25	24.00	36.00	48.00	60.00	72.00
27.949	27.044/26.975	25.121/25.026	27.135/26.975	25.186/25.026	24.376	32.75	45.75	58.75	71.75	84.75	31.25	44.25	57.25	70.25	83.25	26.00	39.00	52.00	65.00	78.00
30.897	29.093/28.948	25.221/25.051	29.135/28.948	25.263/25.051	23.752	40.50	54.00	67.50	81.00	94.50	37.50	51.00	64.50	78.00	91.50	27.00	40.50	54.00	67.50	81.00
29.598	28.414/28.299	25.841/25.701																		



**TECHNICAL INFORMATION FOR FREE RUNNING INSERTS**

	UNF/UNC	BSF
<b>A</b>	Minor Diameter	
<b>B</b>	Major Diameter	
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)	
<b>D</b>	Pitch Diameter of Installed Insert (Class 4H)	
<b>E</b>	Installed Insert Internal Diameter - min.	
<b>FC</b>	Free Coil Diameter of Uninstalled Insert	
<b>S</b>	Drilling Length - minimum	
<b>T</b>	Tapping Length - minimum	
<b>Q</b>	Nominal Length	
<b>NC</b>	Number of Coils in Uninstalled Insert counted 90° from tang.	



SIZE UNF	Drill		A max/min mm	FC min/max mm	NC max/min					
	mm	"			1.0D	1.5D	2.0D	2.5D	3.0D	
No 2 - 64	2.30	3/32	2.36/2.27	2.79/3.05	3.70/3.40	6.30/5.80	8.90/8.20	11.60/10.50	14.20/12.90	
No 3 - 56	2.70	#37	2.71/2.61	3.05/3.81	3.70/3.10	6.40/5.20	9.00/7.40	11.60/9.60	14.30/11.80	
No 4 - 48	3.00	#31	3.07/2.96	3.56/4.06	3.70/3.20	6.40/5.40	9.00/7.60	11.60/9.80	14.20/12.10	
No 5 - 44	3.40	#30	3.41/3.3	4.06/4.32	3.70/3.40	6.30/5.80	8.90/8.20	11.50/10.60	14.20/13.00	
No 6 - 40	3.70	#27	3.75/3.64	4.32/4.83	3.70/3.20	6.30/5.50	9.00/7.80	11.60/10.10	14.20/12.40	
No 8 - 36	4.40	11/64	4.43/4.32	5.08/5.59	4.10/3.60	6.90/6.10	9.70/8.60	12.50/11.10	15.30/13.60	
No 10 - 32	5.10	-	5.12/5	5.84/6.6	4.30/3.80	7.20/6.40	10.10/9.00	13.00/11.60	15.90/14.20	
1/4 X 28	6.60	-	6.72/6.55	7.62/8.38	5.20/4.70	8.50/7.70	11.90/10.80	15.20/13.80	18.60/16.90	
5/16 X 24	8.20	-	8.35/8.17	9.4/10.16	5.60/5.10	9.20/8.50	12.80/11.70	16.40/15.00	20.00/18.30	
3/8 X 24	9.80	-	9.93/9.75	10.92/11.94	7.10/6.50	11.40/10.50	15.80/14.50	20.10/18.50	24.50/22.50	
7/16 X 20	11.50	29/64	11.58/11.39	12.95/13.97	6.90/6.30	11.10/10.20	15.30/14.00	19.50/17.90	23.70/21.70	
1/2 X 20	13.00	33/64	13.16/12.97	14.48/15.75	8.10/7.40	12.90/11.90	17.80/16.30	22.60/20.80	27.50/25.20	
9/16 X 18	14.75	-	14.79/14.59	16.26/17.53	8.30/7.60	13.30/12.20	18.20/16.80	23.10/21.30	28.10/25.90	
5/8 X 18	16.50	-	16.38/16.18	17.78/19.3	9.40/8.70	14.90/13.80	20.50/18.90	26.00/24.00	31.50/29.10	
3/4 X 16	19.50	49/64	19.6/19.39	21.34/22.86	10.10/9.30	15.90/14.70	21.70/20.10	27.60/25.50	33.40/30.90	
7/8 X 14	22.50	57/64	22.84/22.62	24.89/26.67	10.30/9.60	16.30/15.10	22.20/20.60	28.20/26.10	34.20/31.60	
1 X 12	26.00	-	26.11/25.86	28.45/30.48	10.10/9.40	16.00/14.80	21.80/20.30	27.70/25.70	33.50/31.10	
1 X 14	26.00	-	26.02/25.79	27.94/30.23	12.10/11.20	18.90/17.50	25.70/23.80	32.50/30.10	39.40/36.40	
1-1/8 X 12	29.50	1.5/32	29.32/29.03	31.75/33.78	11.60/10.80	18.20/16.90	24.80/23.00	31.40/29.20	38.00/35.30	
1-1/4 X 12	32.50	1.9/32	32.49/32.21	34.8/37.34	13.10/12.20	20.40/19.00	27.80/25.80	35.10/32.70	42.50/39.50	
1-3/8 X 12	35.50	1.13/32	35.67/35.38	38.1/40.89	14.60/13.50	22.70/21.00	30.80/28.50	38.80/36.00	46.90/43.50	
1-1/2 X 12	38.50	-	38.84/38.56	41.15/44.45	16.10/14.90	24.90/23.10	33.70/31.30	42.60/39.50	51.40/47.70	
<b>UNC</b>										
No 2 - 56	2.40	#41	2.39/2.28	2.79/3.05	3.10/2.80	5.40/4.80	7.80/6.90	10.10/9.00	12.50/11.10	
No 3 - 48	2.70	#37	2.74/2.63	3.05/3.56	3.20/2.80	5.50/4.90	7.90/7.00	10.30/9.00	12.70/11.20	
No 4 - 40	3.00	#31	3.11/2.98	3.56/4.06	2.80/2.40	4.90/4.30	7.10/6.20	9.20/8.10	11.40/10.00	
No 5 - 40	3.40	#30	3.44/3.31	4.06/4.32	3.30/2.90	5.70/5.00	8.10/7.20	10.50/9.30	13.00/11.50	
No 6 - 32	3.70	#27	3.82/3.68	4.57/4.83	2.70/2.40	4.80/4.30	7.00/6.20	9.10/8.20	11.20/10.10	
No 8 - 32	4.40	11/64	4.47/4.34	5.08/5.59	3.50/3.20	6.10/5.50	8.60/7.80	11.20/10.10	13.70/12.40	
No 10 - 24	5.10	-	5.21/5.05	6.1/6.6	2.80/2.60	5.00/4.60	7.20/6.70	9.40/8.70	11.60/10.70	
No 12 - 24	5.70	15/64	5.86/5.72	6.86/7.11	3.50/3.20	6.00/5.60	8.50/7.90	11.00/10.30	13.50/12.60	
1/4 X 20	6.70	17/64	6.87/6.62	7.87/8.38	3.30/3.10	5.70/5.30	8.10/7.60	10.50/9.90	13.00/12.10	
5/16 X 18	8.30	21/64	8.49/8.24	9.65/10.16	3.90/3.70	6.70/6.30	9.50/8.90	12.20/11.50	15.00/14.10	
3/8 X 16	9.90	25/64	10.12/9.87	11.43/11.94	4.30/4.10	7.20/6.80	10.10/9.60	13.10/12.40	16.00/15.20	
7/16 X 14	11.60	-	11.78/11.51	13.21/13.97	4.40/4.10	7.40/7.00	10.40/9.80	13.40/12.60	16.30/15.50	
1/2 X 13	13.00	33/64	13.4/13.12	14.99/15.75	4.80/4.50	8.00/7.50	11.10/10.60	14.30/13.60	17.50/16.60	
9/16 X 12	15.00	19/32	15.03/14.74	16.76/17.53	5.00/4.80	8.40/7.90	11.70/11.10	15.00/14.20	18.30/17.40	
5/8 X 11	16.50	-	16.68/16.38	18.8/19.56	5.10/4.90	8.50/8.10	11.90/11.30	15.20/14.50	18.60/17.70	
3/4 X 10	20.00	-	19.91/19.6	22.1/23.11	5.80/5.50	9.50/9.00	13.10/12.60	16.80/16.10	20.50/19.60	
7/8 X 9	23.00	29/32	23.17/22.84	25.65/26.67	6.20/5.90	10.00/9.60	13.90/13.30	17.80/17.00	21.70/20.70	
1 X 8	26.25	-	26.47/26.09	29.21/30.48	6.30/6.00	10.20/9.80	14.20/13.60	18.10/17.30	22.00/21.10	
1-1/8 X 7	29.50	1.5/32	29.74/29.36	33.02/34.54	6.20/5.90	10.10/9.60	14.00/13.30	17.90/17.00	21.80/20.70	
1-1/4 X 7	32.50	1.9/32	32.92/32.53	36.07/37.59	7.10/6.70	11.40/10.90	15.80/15.00	20.10/19.20	24.40/23.30	
1-3/8 X 6	36.00	-	36.35/35.84	40.13/41.66	6.50/6.20	10.60/10.10	14.60/14.00	18.70/17.80	22.70/21.70	
1-1/2 X 6	39.50	1.35/64	39.52/39.02	43.18/44.96	7.30/6.90	11.70/11.20	16.10/15.40	20.60/19.60	25.00/23.90	
<b>BSF</b>										
3/16 X 32	5.00	-	5.03/4.88	5.84/6.35	4.30/3.90	7.20/6.50	10.20/9.20	13.10/11.90	16.00/14.50	
1/4 X 26	6.60	-	6.71/6.53	7.62/8.38	4.80/4.30	7.90/7.10	11.20/9.90	14.40/12.70	17.50/15.60	
5/16 X 22	8.30	21/64	8.38/8.2	9.4/10.16	5.20/4.70	8.50/7.70	11.90/10.70	15.30/13.80	18.70/16.80	
3/8 X 20	9.80	-	9.96/9.78	11.18/12.19	5.80/5.30	9.40/8.60	13.20/12.00	16.90/15.30	20.50/18.70	
7/16 X 18	11.60	-	11.63/11.43	12.95/14.22	6.20/5.60	10.00/9.10	13.90/12.60	17.80/16.10	21.60/19.60	
1/2 X 16	13.25	-	13.26/13.03	14.73/16	6.30/5.70	10.20/9.30	14.20/12.90	18.10/16.50	22.00/20.00	
9/16 X 16	14.75	-	14.88/14.66	16.26/17.78	7.30/6.60	11.70/10.60	16.10/14.70	20.60/18.70	25.00/22.70	
5/8 X 14	16.30	41/64	16.48/16.26	18.29/19.56	7.10/6.50	11.30/10.40	15.70/14.30	20.00/18.30	24.30/22.20	
3/4 X 12	19.50	49/64	19.69/19.43	21.84/23.37	7.30/6.70	11.70/10.80	16.20/14.90	20.70/19.00	25.10/23.00	
7/8 X 11	22.75	-	22.86/22.61	25.15/27.18	7.90/7.20	12.60/11.60	17.40/15.90	22.10/20.30	26.90/24.60	
1 X 10	26.25	-	26.52/26.19	28.7/30.99	8.30/7.60	13.20/12.10	18.10/16.60	23.10/21.20	28.00/25.70	
1-1/8 X 9	29.50	1.5/32	29.72/29.36	32.26/34.8	8.40/7.80	13.30/12.30	18.40/17.00	23.40/21.50	28.40/26.10	
1-1/4 X 9	32.50	1.9/32	32.89/32.54	35.31/38.1	9.50/8.80	15.00/13.90	20.60/19.00	26.20/24.20	31.70/29.30	
1-3/8 X 8	36.00	-	36.07/35.71	39.12/42.16	9.30/8.50	14.60/13.50	20.10/18.50	25.50/23.50	31.00/28.50	
1-1/2 X 8	39.00	1.17/32	39.24/38.89	42.16/45.97	10.30/9.40	16.10/14.80	22.10/20.10	28.00/25.50	33.90/30.90	



**TECHNICAL INFORMATION FOR FREE RUNNING INSERTS**

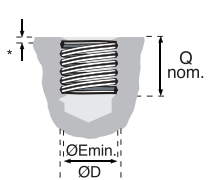
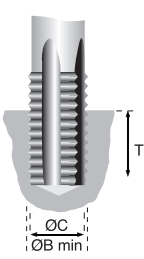
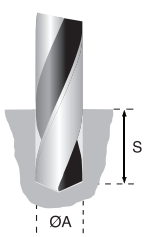
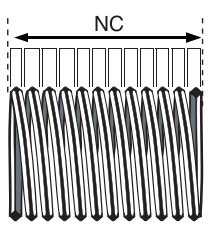
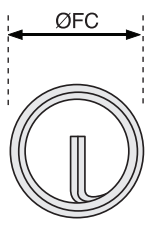
B mm	C (5H) mm	D (4H) mm	C (6H) mm	D (5H) mm	E mm	S					T					Q				
						1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D
0.106	0.0974/0.0962	0.0779/0.0759	0.0980/0.0962	0.0786/0.0759	0.0691	0.156	0.199	0.242	0.285	0.328	0.141	0.184	0.227	0.270	0.313	0.086	0.129	0.172	0.215	0.258
0.122	0.1119/0.1106	0.0895/0.0874	0.1126/0.1106	0.0902/0.0874	0.0797	0.179	0.229	0.278	0.328	0.377	0.161	0.210	0.260	0.310	0.359	0.099	0.148	0.198	0.247	0.297
0.139	0.1270/0.1255	0.1008/0.0985	0.1278/0.1255	0.1016/0.0985	0.0894	0.206	0.262	0.318	0.374	0.430	0.185	0.241	0.297	0.353	0.409	0.112	0.168	0.224	0.280	0.336
0.155	0.1414/0.1398	0.1126/0.1102	0.1422/0.1398	0.1134/0.1102	0.1004	0.227	0.290	0.352	0.414	0.477	0.204	0.267	0.329	0.391	0.454	0.125	0.187	0.250	0.312	0.375
0.171	0.1559/0.1542	0.1243/0.1218	0.1568/0.1542	0.1252/0.1218	0.111	0.250	0.319	0.388	0.457	0.526	0.225	0.294	0.363	0.432	0.501	0.138	0.207	0.276	0.345	0.414
0.200	0.1839/0.1820	0.1487/0.1460	0.1848/0.1820	0.1496/0.1460	0.134	0.289	0.371	0.453	0.535	0.617	0.261	0.343	0.425	0.507	0.589	0.164	0.246	0.328	0.410	0.492
0.231	0.2123/0.2103	0.1726/0.1697	0.2133/0.2103	0.1736/0.1697	0.156	0.331	0.426	0.521	0.616	0.711	0.299	0.394	0.489	0.584	0.679	0.190	0.285	0.380	0.475	0.570
0.296	0.2754/0.2732	0.2300/0.2268	0.2765/0.2732	0.2311/0.2268	0.2113	0.411	0.536	0.661	0.786	0.911	0.375	0.500	0.625	0.750	0.875	0.250	0.375	0.500	0.625	0.750
0.367	0.3421/0.3395	0.2890/0.2854	0.3433/0.3395	0.2902/0.2854	0.2674	0.500	0.656	0.812	0.969	1.125	0.458	0.614	0.771	0.927	1.083	0.312	0.469	0.625	0.781	0.937
0.429	0.4047/0.4020	0.3516/0.3479	0.4059/0.4020	0.3528/0.3479	0.3299	0.562	0.750	0.937	1.124	1.312	0.521	0.708	0.896	1.083	1.271	0.375	0.562	0.750	0.937	1.125
0.503	0.4731/0.4700	0.4091/0.4050	0.4744/0.4700	0.4104/0.4050	0.3834	0.662	0.881	1.100	1.319	1.537	0.612	0.831	1.050	1.269	1.487	0.437	0.656	0.875	1.094	1.312
0.565	0.5357/0.5325	0.4717/0.4675	0.5371/0.5325	0.4731/0.4675	0.4459	0.725	0.975	1.225	1.475	1.725	0.675	0.925	1.175	1.425	1.675	0.500	0.750	1.000	1.250	1.500
0.635	0.6020/0.5986	0.5308/0.5264	0.6035/0.5986	0.5323/0.5264	0.5024	0.811	1.093	1.374	1.655	1.936	0.756	1.038	1.319	1.600	1.881	0.562	0.844	1.125	1.406	1.687
0.697	0.6646/0.6611	0.5934/0.5889	0.6661/0.6611	0.5949/0.5889	0.5649	0.874	1.187	1.500	1.812	2.124	0.819	1.132	1.444	1.757	2.069	0.625	0.937	1.250	1.562	1.875
0.831	0.7945/0.7906	0.7143/0.7094	0.7961/0.7906	0.7159/0.7094	0.6823	1.031	1.406	1.781	2.156	2.531	0.969	1.344	1.719	2.094	2.469	0.750	1.125	1.500	1.875	2.250
0.968	0.9257/0.9214	0.8339/0.8286	0.9274/0.9214	0.8356/0.8286	0.7977	1.196	1.634	2.071	2.509	2.946	1.125	1.562	2.000	2.437	2.875	0.875	1.312	1.750	2.187	2.625
1.108	1.0589/1.0542	0.9516/0.9459	1.0608/1.0542	0.9535/0.9459	0.9098	1.375	1.875	2.375	2.875	3.375	1.292	1.792	2.292	2.792	3.292	1.000	1.500	2.000	2.500	3.000
1.093	1.0508/1.0464	0.9590/0.9536	1.0527/1.0464	0.9609/0.9536	0.9277	1.32	1.82	2.32	2.82	3.32	1.25	1.75	2.25	2.75	3.25	1.000	1.500	2.000	2.500	3.000
1.233	1.1841/1.1792	1.0768/1.0709	1.1860/1.1792	1.0787/1.0709	1.0348	1.500	2.062	2.625	3.187	3.750	1.417	1.979	2.542	3.104	3.667	1.125	1.687	2.250	2.812	3.375
1.358	1.3092/1.3042	1.2019/1.1959	1.3112/1.3042	1.2039/1.1959	1.1598	1.625	2.250	2.875	3.500	4.125	1.542	2.167	2.792	3.417	4.042	1.250	1.875	2.500	3.125	3.750
1.483	1.4343/1.4292	1.3270/1.3209	1.4364/1.4292	1.3291/1.3209	1.2848	1.750	2.438	3.125	3.813	4.500	1.667	2.354	3.042	3.729	4.417	1.375	2.062	2.750	3.437	4.125
1.608	1.5595/1.5542	1.4522/1.4459	1.5615/1.5542	1.4542/1.4459	1.4098	1.875	2.625	3.375	4.125	4.875	1.792	2.542	3.292	4.042	4.792	1.500	2.250	3.000	3.750	4.500
0.109	0.0989/0.0976	0.0765/0.0744	0.0996/0.0976	0.0772/0.0744	0.0667	0.166	0.209	0.252	0.295	0.338	0.148	0.191	0.234	0.277	0.320	0.086	0.129	0.172	0.215	0.258
0.126	0.1139/0.1125	0.0877/0.0855	0.1147/0.1125	0.0885/0.0855	0.0764	0.193	0.242	0.292	0.341	0.391	0.172	0.221	0.271	0.320	0.370	0.099	0.148	0.198	0.247	0.297
0.145	0.1298/0.1282	0.0982/0.0958	0.1307/0.1282	0.0991/0.0958	0.0849	0.224	0.280	0.336	0.392	0.448	0.199	0.255	0.311	0.367	0.423	0.112	0.168	0.224	0.280	0.336
0.158	0.1429/0.1412	0.1113/0.1088	0.1437/0.1412	0.1121/0.1088	0.0979	0.237	0.300	0.362	0.425	0.487	0.212	0.275	0.337	0.400	0.462	0.125	0.187	0.250	0.312	0.375
0.179	0.1601/0.1583	0.1204/0.1177	0.1611/0.1583	0.1214/0.1177	0.1040	0.279	0.348	0.417	0.486	0.555	0.247	0.316	0.385	0.454	0.523	0.138	0.207	0.276	0.345	0.414
0.205	0.1862/0.1843	0.1465/0.1437	0.1872/0.1843	0.1475/0.1437	0.1300	0.305	0.387	0.469	0.551	0.633	0.273	0.355	0.437	0.519	0.601	0.164	0.246	0.328	0.410	0.492
0.244	0.2193/0.2171	0.1661/0.1629	0.2204/0.2171	0.1672/0.1629	0.1450	0.377	0.472	0.567	0.662	0.757	0.336	0.431	0.526	0.621	0.716	0.190	0.285	0.380	0.475	0.570
0.270	0.2454/0.2431	0.1922/0.1889	0.2465/0.2431	0.1933/0.1889	0.1710	0.403	0.511	0.619	0.727	0.835	0.362	0.470	0.578	0.686	0.794	0.216	0.324	0.432	0.540	0.648
0.315	0.2851/0.2825	0.2211/0.2175	0.2863/0.2825	0.2223/0.2175	0.1959	0.475	0.600	0.725	0.850	0.975	0.425	0.550	0.675	0.800	0.925	0.250	0.375	0.500	0.625	0.750
0.385	0.3515/0.3486	0.2803/0.2764	0.3529/0.3486	0.2817/0.2764	0.2524	0.562	0.718	0.875	1.031	1.187	0.507	0.663	0.819	0.975	1.132	0.312	0.469	0.625	0.781	0.937
0.456	0.4189/0.4156	0.3387/0.3344	0.4203/0.4156	0.3401/0.3344	0.3073	0.656	0.844	1.031	1.219	1.406	0.594	0.781	0.969	1.156	1.344	0.375	0.562	0.750	0.937	1.125
0.530	0.4875/0.4839	0.3957/0.3911	0.4890/0.4839	0.3972/0.3911	0.3602	0.758	0.977	1.196	1.415	1.633	0.687	0.906	1.125	1.344	1.562	0.437	0.656	0.875	1.094	1.312
0.600	0.5537/0.5499	0.4548/0.4500	0.5554/0.5499	0.4565/0.4500	0.4167	0.846	1.096	1.346	1.596	1.846	0.769	1.019	1.269	1.519	1.769	0.500	0.750	1.000	1.250	1.500
0.671	0.6208/0.6167	0.5135/0.5084	0.6225/0.6167	0.5152/0.5084	0.4723	0.937	1.219	1.500	1.781	2.062	0.854	1.135	1.417	1.698	1.979	0.562	0.844	1.125	1.406	1.687
0.743	0.6885/0.6841	0.5714/0.5660	0.6903/0.6841	0.5732/0.5660	0.5266	1.034	1.347	1.659	1.972	2.284	0.943	1.256	1.568	1.881	2.193	0.625	0.937	1.250	1.562	1.875
0.880	0.8196/0.8149	0.6907/0.6850	0.8216/0.8149	0.6927/0.6850	0.6417	1.200	1.575	1.950	2.325	2.700	1.100	1.475	1.850	2.225	2.600	0.750	1.125	1.500	1.875	2.250
1.019	0.9522/0.9471	0.8089/0.8028	0.9543/0.9471	0.8110/0.8028	0.7547	1.375	1.812	2.250	2.687	3.125	1.264	1.701	2.139	2.576	3.014	0.875	1.312	1.750	2.187	2.625
1.162	1.0868/1.0812	0.9254/0.9188	1.0890/1.0812	0.9276/0.9188	0.8647	1.562	2.062	2.562	3.062	3.562	1.437	1.937	2.437	2.937	3.437	1.000	1.500	2.000	2.500	3.000
1.311	1.2239/1.2178	1.0393/1.0322	1.2262/1.2178	1.0416/1.0322	0.9704	1.768	2.330	2.893	3.455	4.018	1.625	2.187	2.750	3.312	3.875	1.125	1.687	2.250	2.812	3.375
1.436	1.3490/1.3428	1.1644/1.1572	1.3514/1.3428	1.1668/1.1572	1.0954	1.893	2.518	3.143	3.768	4.393	1.750	2.375	3.000	3.625	4.250	1.250	1.875	2.500	3.125	3.750
1.591	1.4900/1.4832	1.2745/1.2667	1.4926/1.4832	1.2771/1.2667	1.1946	2.125	2.812	3.500	4.187	4.875	1.958	2.646	3.333	4.021	4.708	1.375	2.062	2.750	3.437	4.125
1.716	1.6151/1.6082	1.3996/1.3917	1.6177/1.6082	1.4022/1.3917	1.3196	2.250	3.000	3.750	4.500	5.250	2.083	2.833	3.583	4.333	5.083	1.500	2.250	3.000	3.750	4.500
0.225	0.2087/0.2075	0.1697/0.1675	0.2098/0.2075	0.1708/0.1675	0.1475	0.328	0.422	0.515	0.609	0.703	0.297	0.390	0.484	0.578	0.672	0.187	0.281	0.375	0.469	0.562
0.296	0.2762/0.2747	0.2279/0.2254	0.2774/0.2747	0.2291/0.2254	0.2008	0.423	0.548	0.673	0.798	0.923	0.385	0.510	0.635	0.760	0.885	0.250	0.375	0.500	0.625	0.750
0.366	0.3433/0.3416	0.2861/0.2834	0.3447/0.3416	0.2875/0.2834	0.2543	0.517	0.673	0.829	0.986	1.142	0.472	0.628	0.784	0.940	1.096	0.312	0.469	0.625	0.781	0.937
0.434	0.4089/0.4070	0.3459/0.3430	0.4104/0.4070	0.3474/0.3430	0.3110	0.600	0.787	0.975</												



**TECHNICAL INFORMATION FOR FREE RUNNING INSERTS**

**BSW/BSP BA/BSB/UN-8 PITCH**

<b>A</b>	Minor Diameter
<b>B</b>	Major Diameter
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)
<b>D</b>	Pitch Diameter of Installed Insert (Class 4H)
<b>E</b>	Installed Insert Internal Diameter - min.
<b>FC</b>	Free Coil Diameter of Uninstalled Insert
<b>S</b>	Drilling Length - minimum
<b>T</b>	Tapping Length - minimum
<b>Q</b>	Nominal Length
<b>NC</b>	Number of Coils in Uninstalled Insert counted 90° from tang.



BSW	mm	"	A max/min mm	FC min/max mm	1.0D	1.5D	NC max/min		
							2.0D	2.5D	3.0D
1/8 X 40	3.40	#30	3.43/3.28	3.81/4.32	3.40/3.00	5.80/5.10	8.40/7.30	10.90/9.40	13.40/11.60
3/16 X 24	2.70	#37	2.71/2.61	3.05/3.81	3.70/3.10	6.40/5.20	9.00/7.40	11.60/9.60	14.30/11.80
1/4 X 20	6.70	17/64	6.78/6.63	7.87/8.38	3.40/3.10	5.90/5.40	8.50/7.70	11.00/9.90	13.50/12.20
5/16 X 18	8.30	21/64	8.48/8.33	9.4/10.16	4.10/3.80	6.90/6.40	9.80/9.00	12.60/11.60	15.50/14.20
3/8 X 16	10.00	-	10.11/9.91	11.18/11.94	4.40/4.10	7.40/6.90	10.50/9.70	13.50/12.50	16.50/15.30
7/16 X 14	11.60	-	11.76/11.51	13.21/13.97	4.60/4.20	7.60/7.10	10.70/9.90	13.80/12.80	16.90/15.60
1/2 X 12	13.00	33/64	13.34/13.08	14.99/16	4.50/4.10	7.40/7.00	10.50/9.80	13.60/12.60	16.60/15.40
9/16 X 12	14.75	-	14.94/14.68	16.51/17.53	5.20/4.90	8.60/8.00	12.00/11.20	15.40/14.40	18.80/17.60
5/8 X 11	16.50	-	16.84/16.59	18.29/19.56	5.30/5.00	8.70/8.20	12.20/11.50	15.70/14.70	19.20/17.90
3/4 X 10	20.00	-	20.09/19.84	21.84/22.86	6.00/5.60	9.70/9.20	13.50/12.70	17.30/16.30	21.10/19.80
7/8 X 9	23.25	-	23.27/23.01	25.15/26.67	6.30/6.00	10.20/9.70	14.30/13.40	18.20/17.10	22.20/20.90
1 X 8	26.50	-	26.52/26.187.4	28.7/30.48	6.50/6.10	10.40/9.90	14.50/13.70	18.60/17.50	22.60/21.20
1-1/8 X 7	30.00	1.11/64	30.12/29.743.4	32.51/34.29	6.30/5.90	10.20/9.60	14.30/13.40	18.20/17.10	22.20/20.80
1-1/4 X 7	33.00	1.19/64	33.3/32.918.4	35.56/37.59	7.20/6.80	11.60/10.90	16.00/15.00	20.40/19.20	24.90/23.30
1-1/2 X 6	39.50	1.35/64	39.9/39.268.4	42.67/45.21	7.50/7.00	11.90/11.30	16.50/15.50	21.10/19.80	25.60/24.00
<b>BSP</b>									
1/8 X 28	10.00	-	10.16/9.91	10.92/11.94	1.90/1.70	3.60/3.20	5.30/4.80	7.00/6.40	8.80/7.90
1/4 X 19	13.75	-	13.72/13.46	14.99/16.26	3.10/2.80	5.40/5.00	7.80/7.10	10.10/9.20	12.50/11.40
3/8 X 19	17.00	-	17.27/17.02	18.54/20.07	5.50/5.00	8.90/8.20	12.50/11.40	16.00/14.60	19.50/17.90
1/2 X 14	21.50	27/32	21.59/21.34	23.37/25.15	5.30/4.90	8.80/8.10	12.20/11.20	15.70/14.40	19.10/17.60
5/8 X 14	23.50	-	23.55/23.24	25.4/27.43	7.10/6.50	11.30/10.40	15.70/14.40	20.00/18.40	24.30/22.30
3/4 X 14	27.00	1.1/16	27.08/26.75	28.96/31.24	8.80/8.10	13.90/12.90	19.20/17.60	24.30/22.40	29.50/27.20
7/8 X 14	30.50	1.13/16	30.81/30.48	32.77/35.31	10.50/9.70	16.50/15.30	22.60/20.80	28.70/26.40	34.70/32.00
1 X 11	33.75	-	33.91/33.53	36.32/39.12	9.30/8.60	14.70/13.60	20.10/18.60	25.60/23.60	31.00/28.60
1-1/4 X 11	42.50	1.43/64	42.67/42.29	44.96/48.51	12.00/11.10	18.70/17.40	25.60/23.70	32.40/30.00	39.20/36.20
1-1/2 X 11	48.50	1.29/32	48.79/48.41	51.05/54.86	14.70/13.60	22.80/21.20	31.00/28.70	39.20/36.30	47.30/43.80
<b>BA</b>									
BA 6	2.90	#33	2.95/2.87	3.56/3.81	3.60/3.30	6.20/5.60	8.70/7.90	11.20/10.20	13.80/12.50
BA 5	3.40	#30	3.43/3.28	3.81/4.32	3.80/3.40	6.40/5.80	9.00/8.10	11.60/10.50	14.20/12.90
BA 4	3.80	#25	3.86/3.73	4.32/4.83	3.80/3.50	6.40/5.80	9.10/8.20	11.70/10.60	14.40/13.00
BA 3	4.30	-	4.34/4.22	5.08/5.33	3.90/3.60	6.70/6.00	9.40/8.50	12.10/10.90	14.80/13.40
BA 2	4.90	#10	4.98/4.85	5.59/6.1	4.20/3.80	6.90/6.30	9.80/8.80	12.60/11.40	15.40/13.90
BA 1	5.50	7/32	5.59/5.41	6.35/6.86	4.20/3.80	7.10/6.40	9.90/9.00	12.80/11.60	15.60/14.10
BA 0	6.20	C	6.25/6.12	7.11/7.87	4.30/3.90	7.20/6.60	10.10/9.20	13.00/11.80	16.00/14.50
<b>BSB</b>									
3/16 X 32	5.10	-	5.21/4.95	5.84/6.6	4.10/3.70	6.90/6.20	9.70/8.70	12.50/11.20	15.30/13.70
1/4 X 26	6.60	-	6.86/6.55	7.87/8.64	4.60/4.10	7.60/6.90	10.70/9.60	13.80/12.30	16.80/15.10
5/16 X 26	8.00	5/16	8.43/8.13	9.4/10.41	6.20/5.50	10.00/9.00	13.90/12.50	17.80/16.00	21.60/19.40
3/8 X 26	9.80	-	10.03/9.73	10.92/12.19	7.80/7.00	12.40/11.20	17.10/15.40	21.70/19.60	26.40/23.80
7/16 X 26	11.10	7/16	11.61/11.33	12.7/13.97	9.40/8.40	14.80/13.40	20.30/18.30	25.80/23.30	31.20/28.20
1/2 X 26	12.70	1/2	13.21/12.9	14.22/15.49	11.00/9.90	17.20/15.60	23.50/21.20	29.80/26.90	36.00/32.60
9/16 X 26	14.75	-	14.78/14.5	15.75/17.27	12.60/11.40	19.70/17.80	26.70/24.20	33.80/30.50	40.90/36.90
5/8 X 26	16.50	-	16.38/16.08	17.53/19.05	14.20/12.80	22.00/19.90	29.90/27.10	37.80/34.20	45.70/41.30
3/4 X 26	19.50	49/64	19.53/19.25	20.57/22.61	17.40/15.70	26.90/24.30	36.30/32.90	45.80/41.50	55.30/50.10
1 X 24	25.75	1.1/64	25.91/25.63	27.18/29.72	21.80/19.80	33.50/30.40	45.30/41.00	57.00/51.60	68.70/62.20
<b>UN-8 PITCH</b>									
1.1/8 X 8	28.50	1.1/8	29.34/28.7	31.75/33.02	7.50/7.10	12.00/11.50	16.60/15.80	21.10/20.10	25.60/24.50
1.1/4 X 8	32.00	1.1/4	32.51/31.88	35.31/36.32	8.30/8.10	13.30/12.90	18.30/17.70	23.30/22.60	28.20/27.40
1.3/8 X 8	35.00	1.3/8	35.69/35.05	38.61/39.88	9.30/9.00	14.80/14.30	20.20/19.60	25.70/24.90	31.20/30.20
1.1/2 X 8	38.00	1.1/2	38.86/38.23	41.91/42.93	10.30/10.00	16.20/15.80	22.20/21.50	28.10/27.30	34.10/33.10
1.5/8 X 8	41.00	1.5/8	42.04/41.4	45.21/48.26	11.20/10.50	17.70/16.40	24.10/22.40	30.50/28.40	37.00/34.30
1.3/4 X 8	44.50	1.3/4	45.21/44.58	48.26/51.82	12.20/11.40	19.20/17.80	26.10/24.20	33.00/30.70	39.90/37.10
1.7/8 X 8	47.50	1.7/8	48.39/47.75	51.56/54.86	13.20/12.40	20.60/19.30	28.10/26.20	35.50/33.20	42.90/40.10
2 X 8	51.00	2	51.56/50.93	54.86/57.91	14.20/13.40	22.10/20.90	30.00/28.40	38.00/35.90	45.90/43.30



**TECHNICAL INFORMATION FOR FREE RUNNING INSERTS**

B mm	C (5H) mm	D (4H) mm	C (6H) mm	D (5H) mm	E mm	S					T					Q				
						1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D	1.0D	1.5D	2.0D	2.5D	3.0D
0.155	0.1420/0.1410	0.1109/0.1090	0.1430/0.1410	0.1119/0.1090	0.0930	0.237	0.300	0.362	0.425	0.487	0.212	0.275	0.337	0.400	0.462	0.125	0.187	0.250	0.312	0.375
0.237	0.2154/0.2142	0.1631/0.1608	0.2166/0.2142	0.1643/0.1608	0.1341	0.375	0.469	0.562	0.656	0.750	0.333	0.427	0.521	0.614	0.708	0.187	0.281	0.375	0.469	0.562
0.309	0.2836/0.2820	0.2206/0.2180	0.2849/0.2820	0.2219/0.2180	0.1860	0.475	0.600	0.725	0.850	0.975	0.425	0.550	0.675	0.800	0.925	0.250	0.375	0.500	0.625	0.750
0.378	0.3498/0.3480	0.2797/0.2769	0.3512/0.3480	0.2811/0.2769	0.2413	0.562	0.718	0.875	1.031	1.187	0.507	0.663	0.819	0.975	1.132	0.312	0.469	0.625	0.781	0.937
0.448	0.4170/0.4150	0.3380/0.3350	0.4185/0.4150	0.3395/0.3350	0.2950	0.656	0.844	1.031	1.219	1.406	0.594	0.781	0.969	1.156	1.344	0.375	0.562	0.750	0.937	1.125
0.521	0.4855/0.4833	0.3950/0.3918	0.4871/0.4833	0.3966/0.3918	0.3461	0.758	0.977	1.196	1.415	1.633	0.687	0.906	1.125	1.344	1.562	0.437	0.656	0.875	1.094	1.312
0.597	0.5557/0.5533	0.4500/0.4466	0.5575/0.5533	0.4518/0.4466	0.3932	0.875	1.125	1.375	1.625	1.875	0.792	1.042	1.292	1.542	1.792	0.500	0.750	1.000	1.250	1.500
0.660	0.6184/0.6158	0.5127/0.5091	0.6201/0.6158	0.5144/0.5091	0.4557	0.937	1.219	1.500	1.781	2.062	0.854	1.135	1.417	1.698	1.979	0.562	0.844	1.125	1.406	1.687
0.731	0.6859/0.6832	0.5705/0.5668	0.6878/0.6832	0.5724/0.5668	0.5086	1.034	1.347	1.659	1.972	2.284	0.943	1.256	1.568	1.881	2.193	0.625	0.937	1.250	1.562	1.875
0.867	0.8171/0.8141	0.6900/0.6860	0.8191/0.8141	0.6920/0.6860	0.6220	1.200	1.575	1.950	2.325	2.700	1.100	1.475	1.850	2.225	2.600	0.750	1.125	1.500	1.875	2.250
1.005	0.9495/0.9462	0.8082/0.8039	0.9516/0.9462	0.8103/0.8039	0.7328	1.375	1.812	2.250	2.687	3.125	1.264	1.701	2.139	2.576	3.014	0.875	1.312	1.750	2.187	2.625
1.146	1.0836/1.0801	0.9245/0.9200	1.0859/1.0801	0.9268/0.9200	0.8400	1.562	2.062	2.562	3.062	3.562	1.437	1.937	2.437	2.937	3.437	1.000	1.500	2.000	2.500	3.000
1.291	1.2203/1.2165	1.0383/1.0335	1.2227/1.2165	1.0407/1.0335	0.9420	1.768	2.330	2.893	3.455	4.018	1.625	2.187	2.750	3.312	3.875	1.125	1.687	2.250	2.812	3.375
1.416	1.3454/1.3415	1.1634/1.1585	1.3479/1.3415	1.1659/1.1585	1.0670	1.893	2.518	3.143	3.768	4.393	1.750	2.375	3.000	3.625	4.250	1.250	1.875	2.500	3.125	3.750
1.694	1.6110/1.6067	1.3986/1.3933	1.6137/1.6067	1.4013/1.3933	1.2866	2.250	3.000	3.750	4.500	5.250	2.083	2.833	3.583	4.333	5.083	1.500	2.250	3.000	3.750	4.500
0.426	0.4076/0.4058	0.3629/0.3601	0.4090/0.4058	0.3643/0.3601	0.3372	0.286	0.348	0.411	0.437	0.536	0.250	0.312	0.375	0.437	0.500	0.125	0.187	0.250	0.312	0.375
0.580	0.5539/0.5517	0.4875/0.4843	0.5556/0.5517	0.4892/0.4843	0.4506	0.487	0.612	0.737	0.862	0.987	0.434	0.559	0.684	0.809	0.934	0.250	0.375	0.500	0.625	0.750
0.718	0.6920/0.6897	0.6256/0.6223	0.6937/0.6897	0.6273/0.6223	0.5886	0.612	0.799	0.987	1.174	1.362	0.559	0.747	0.934	1.122	1.309	0.375	0.562	0.750	0.937	1.125
0.909	0.8735/0.8708	0.7830/0.7793	0.8754/0.8708	0.7849/0.7793	0.7336	0.821	1.071	1.321	1.571	1.821	0.750	1.000	1.250	1.500	1.750	0.500	0.750	1.000	1.250	1.500
0.986	0.9506/0.9478	0.8601/0.8563	0.9524/0.9478	0.8619/0.8563	0.8106	0.946	1.258	1.571	1.883	2.196	0.875	1.187	1.500	1.812	2.125	0.625	0.937	1.250	1.562	1.875
1.126	1.0898/1.0868	0.9993/0.9953	1.0918/1.0868	1.0013/0.9953	0.9496	1.071	1.446	1.821	2.196	2.571	1.000	1.375	1.750	2.125	2.500	0.750	1.125	1.500	1.875	2.250
1.274	1.2378/1.2348	1.1473/1.1433	1.2399/1.2348	1.1494/1.1433	1.0976	1.196	1.634	2.071	2.509	2.946	1.125	1.562	2.000	2.437	2.875	0.875	1.312	1.750	2.187	2.625
1.416	1.3705/1.3673	1.2551/1.2508	1.3727/1.3673	1.2573/1.2508	1.1926	1.409	1.909	2.409	2.909	3.409	1.318	1.818	2.318	2.818	3.318	1.000	1.500	2.000	2.500	3.000
1.757	1.7118/1.7083	1.5964/1.5918	1.7141/1.7083	1.5987/1.5918	1.5336	1.660	2.284	2.909	3.534	4.159	1.568	2.193	2.818	3.443	4.068	1.250	1.875	2.500	3.125	3.750
1.989	1.9440/1.9403	1.8286/1.8238	1.9464/1.9403	1.8310/1.8238	1.7656	1.909	2.659	3.409	4.159	4.909	1.818	2.568	3.318	4.068	4.818	1.500	2.250	3.000	3.750	4.500
0.134	0.1252/0.1226	0.1014/0.0976			0.0850	0.204	0.259	0.314	0.369	0.424	0.183	0.238	0.293	0.348	0.404	0.110	0.165	0.220	0.275	0.331
0.152	0.1426/0.1399	0.1159/0.1120			0.0980	0.230	0.293	0.356	0.419	0.482	0.207	0.270	0.333	0.396	0.459	0.126	0.189	0.252	0.315	0.378
0.171	0.1605/0.1574	0.1305/0.1262			0.1106	0.259	0.329	0.400	0.471	0.542	0.233	0.303	0.374	0.445	0.516	0.142	0.212	0.283	0.354	0.425
0.194	0.1821/0.1786	0.1488/0.1441			0.1268	0.291	0.371	0.452	0.533	0.613	0.262	0.343	0.423	0.504	0.585	0.161	0.242	0.323	0.403	0.484
0.221	0.2079/0.2042	0.1709/0.1659			0.1468	0.328	0.421	0.513	0.606	0.698	0.297	0.389	0.482	0.574	0.667	0.185	0.277	0.370	0.462	0.555
0.249	0.2342/0.2299	0.1929/0.1874			0.1661	0.368	0.472	0.576	0.681	0.785	0.333	0.437	0.541	0.646	0.750	0.209	0.313	0.417	0.522	0.626
0.281	0.2645/0.2598	0.2185/0.2126			0.1890	0.413	0.531	0.649	0.768	0.886	0.374	0.492	0.610	0.728	0.846	0.236	0.354	0.472	0.590	0.709
0.232	0.2112/0.2136	0.1738/0.1709			0.1543	0.33	0.42	0.52	0.61	0.70	0.30	0.39	0.48	0.58	0.67	0.187	0.281	0.375	0.469	0.562
0.304	0.2790/0.2817	0.2328/0.2295			0.2090	0.42	0.55	0.67	0.80	0.92	0.38	0.51	0.63	0.76	0.88	0.250	0.375	0.500	0.625	0.750
0.367	0.3415/0.3444	0.2965/0.2920			0.2715	0.49	0.64	0.80	0.95	1.11	0.45	0.60	0.76	0.92	1.07	0.312	0.469	0.625	0.781	0.937
0.429	0.4040/0.4070	0.3583/0.3545			0.3340	0.55	0.74	0.92	1.11	1.30	0.51	0.70	0.88	1.07	1.26	0.375	0.562	0.750	0.937	1.125
0.492	0.4665/0.4697	0.4210/0.4170			0.3965	0.61	0.83	1.05	1.27	1.49	0.57	0.79	1.01	1.23	1.45	0.437	0.656	0.875	1.094	1.312
0.554	0.5290/0.5323	0.4837/0.4795			0.4590	0.67	0.92	1.17	1.42	1.67	0.63	0.88	1.13	1.38	1.63	0.500	0.750	1.000	1.250	1.500
0.617	0.5915/0.5945	0.5464/0.5420			0.5215	0.74	1.02	1.30	1.58	1.86	0.70	0.98	1.26	1.54	1.82	0.562	0.844	1.125	1.406	1.687
0.679	0.6540/0.6575	0.6090/0.6045			0.5840	0.80	1.11	1.42	1.74	2.05	0.76	1.07	1.38	1.70	2.01	0.625	0.937	1.250	1.562	1.875
0.804	0.7790/0.7827	0.7343/0.7295			0.7090	0.92	1.30	1.67	2.05	2.42	0.88	1.26	1.63	2.01	2.38	0.750	1.125	1.500	1.875	2.250
1.059	1.0314/1.0355	0.9828/0.9778			0.9556	1.19	1.69	2.19	2.69	3.19	1.15	1.65	2.15	2.65	3.15	1.000	1.500	2.000	2.500	3.000
1.261	1.1757/1.1688	1.1/4	1.0528/1.0438			1.69	2.25	2.81	3.38	3.94	1.56	2.13	2.69	3.25	3.81	1.125	1.688	2.250	2.81	3.38
1.386	1.3008/1.2938	1.3/8	1.1780/1.1688			1.81	2.44	3.06	3.69	4.31	1.69	2.31	2.94	3.56	4.19	1.250	1.875	2.500	3.13	3.75
1.511	1.4259/1.4188	1.1/2	1.3031/1.2938			1.94	2.62	3.31	4.00	4.69	1.81	2.50	3.19	3.88	4.56	1.375	2.062	2.750	3.44	4.13
1.636	1.5510/1.5438	1.5/8	1.4283/1.4188			2.06	2.81	3.56	4.31	5.06	1.94	2.69	3.44	4.19	4.94	1.500	2.250	3.000	3.75	4.50
1.761	1.6762/1.6688	1.3/4	1.5535/1.5438			2.19	3.00	3.81	4.63	5.44	2.06	2.88	3.69	4.50	5.31	1.625	2.438	3.250	4.06	4.88
1.886	1.8013/1.7938	1.7/8	1.6786/1.6688			2.31	3.19	4.06	4.94	5.81	2.19	3.06	3.94	4.81	5.69	1.750	2.625	3.500	4.38	5.25
2.011	1.9264/1.9188	2	1.8038/1.7938			2.44	3.37	4.31	5.25	6.19	2.31	3.25	4.19	5.13	6.06	1.875	2.812	3.750	4.69	5.63
2.136	2.0515/2.0438	2.1/8	1.9289/1.9188			2.56	3.56	4.56	5.56	6.56	2.44	3.44	4.44	5.44	6.44	2.000	3.000	4.000	5.00	6.00

**QUICK SEARCHING CHART FOR INSERTS INSTALLATION TOOLS**



MC	MF	SPARK	UNC	UNF	BSW	BSF	BA	BSC	NPT	BSP	UN-8	Ref.	Ref.	Ref.
2X0.40	-	-	-	-	-	-	-	-	-	-	-	3500-HIT2	3500-TB1	3500-RT1
2.20X0.45	-	-	2GX56	-	-	-	-	-	-	-	-	3500-HIT2	3500-TB2	3500-RT1
2.50X0.45	-	-	3GX48	3GX56	-	-	#6	-	-	-	-	3500-HIT3	3500-TB3	3500-RT1
-	-	-	4GX40	4GX48	1/8X40	-	-	-	-	-	-	3500-HIT4	3500-TB4	3500-RT1
3X0.50	-	-	4GX40	4GX48	1/8X40	-	-	-	-	-	-	3500-HIT4	3500-TB4	3500-RT2
-	-	-	5GX40	-	-	-	-	-	-	-	-	3500-HIT4	3500-TB4	3500-RT1
3.50X0.60	-	-	-	-	-	-	-	-	-	-	-	3500-HIT5	3500-TB5	3500-RT2
-	-	-	6GX32	6GX40	-	-	#4	-	-	-	-	3500-HIT5	3500-TB5	3500-RT1
4X0.70	-	-	8GX32	8GX36	-	3/16X32	-	-	-	-	-	3500-HIT6	3500-TB6	3500-RT2
-	-	-	8GX32	8GX36	-	-	-	-	-	-	-	3500-HIT6	3500-TB6	3500-RT1
5X0.80	-	-	12GX24	10GX32	3/16X24	3/16X32	#1	-	-	-	-	3500-HIT8	3500-TB8	3500-RT2
-	-	-	12GX24	12GX28	-	-	-	-	-	-	-	3500-HIT8	3500-TB8	3500-RT2
6X1.00	-	-	1/4X20	1/4X28	1/4X20	1/4X26	#0	1/4X26	-	-	-	3500-HIT9	3500-TB9	3500-RT2
7X1.00	-	-	5/16X18	-	5/16X18	5/16X22	#0	-	1/16X27	-	-	3500-HIT10	3500-TB11	3500-RT2
8X1.25	8X1.00	-	5/16X18	5/16X24	3/8X16	5/16X22	-	5/16X26	-	-	-	3500-HIT11	3500-TB12	3500-RT2
9X1.25	9X1.00	10X1.00	3/8X16	3/8X24	-	3/8X20	-	3/8X26	-	-	-	3500-HIT13	3500-TB12	3500-RT2
-	10X1.00	-	3/8X16	-	3/8X16	3/8X20	-	-	-	-	-	3500-HIT13	3500-TB12	3500-RT3
10X1.50	10X1.25	-	-	-	-	-	-	-	1/8X27	-	-	3500-HIT13	3500-TB13	3500-RT2
-	-	-	-	3/8X24	-	-	-	3/8X26	-	-	-	3500-HIT13	3500-TB13	3500-RT3
-	10X1.00	-	-	-	-	-	-	-	-	-	-	3500-HIT13	3500-TB13	3500-RT2
11X1.50	11X1.25	-	7/16X14	7/16X20	7/16X14	7/16X18	-	7/16X26	-	1/8X28	-	3500-HIT14	3500-TB14	3500-RT3
-	11X1.00	-	-	-	-	-	-	-	-	-	-	3500-HIT14	3500-TB14	3500-RT3
12X1.75	12X1.50	10X1.25	1/2X13	1/2X20	1/2X12	1/2X16	-	1/2X26	-	-	-	3500-HIT15	3500-TB15	3500-RT3
-	12X1.25	-	-	-	-	-	-	-	-	-	-	3500-HIT15	-	-
-	12X1.00	12X1.25	-	-	-	-	-	-	-	-	-	3500-HIT15	3500-TB15	3500-RT3
13X1.75	13X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT15	3500-TB15	3500-RT3
-	13X1.25	-	-	-	-	-	-	-	-	-	-	3500-HIT16	-	3500-RT3
14X2.00	14X1.50	14X1.25	9/16X12	9/16X18	9/16X12	9/16X16	-	-	-	1/4X18	-	3500-HIT16	-	3500-RT3
-	14X1.00	-	-	-	-	-	-	-	-	-	-	3500-HIT16	-	3500-RT3
15X2.00	15X1.50	-	-	-	-	-	-	-	1/4X18	-	-	3500-HIT16	-	3500-RT3
-	-	14X1.25	-	-	-	-	-	-	-	-	-	3500-HIT17	-	-
16X2.00	16X1.50	-	5/8X11	5/8X18	5/8X11	5/8X14	-	-	3/8X18	-	-	3500-HIT18	-	3500-RT3
18X2.50	18X2.00	18X1.50	3/4X10	-	3/4X10	3/4X12	-	-	-	3/8X19	-	3500-HIT20	-	3500-RT3
-	18X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT20	-	-
20X2.50	20X2.00	-	-	3/4X16	-	-	-	-	-	-	-	3500-HIT21	-	3500-RT3
-	20X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT21	-	3500-RT3
22X2.50	22X2.00	-	7/8X9	7/8X14	7/8X9	7/8X11	-	-	1/2X14	-	-	3500-HIT22	-	3500-RT3
-	22X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT22	-	3500-RT3
24X3.00	24X2.00	-	1X8	1X12	1X8	1X10	-	-	-	1/2X14	-	3500-HIT23	-	3500-RT3
-	24X1.50	-	-	1X14	-	-	-	-	-	5/8X14	-	3500-HIT23	-	3500-RT3
-	26X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT24	-	3500-RT4
27X3.00	27X2.00	-	-	-	-	-	-	-	-	-	-	3500-HIT24	-	3500-RT4
-	27X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT24	-	3500-RT4
-	28X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT24	-	3500-RT4
30X3.50	30X2.00	-	1.1/8X7	1.1/8X12	-	-	-	-	-	-	-	3500-HIT25	-	3500-RT4
-	30X3.00	-	1.1/8-7	1.1/8-12	-	-	-	-	-	-	1.1/8X8	3500-HIT25	-	-
-	30X1.50	-	1.1/4X7	1.1/4X12	-	-	-	-	-	-	-	3500-HIT26	-	3500-RT4
33X3.50	33X2.00	-	1.3/8X6	1.3/8X12	-	-	-	-	-	3/4X14	1.1/4X8	3500-HIT26	-	3500-RT4
-	-	-	1.3/8-6	1.3/8-12	-	-	-	-	1X11.5	7/8X14	1.3/8X8	3500-HIT27	-	-
-	-	-	-	-	-	-	-	-	-	1X11	-	3500-HIT27	-	-
36X4.00	36X3.00	-	1.1/2X6	1.1/2X12	-	-	-	-	-	-	1.1/2X8	3500-HIT28	-	3500-RT4
39X4.00	36X2.00	-	-	-	-	-	-	-	-	-	-	3500-HIT28	-	3500-RT4
-	36X1.50	-	-	-	-	-	-	-	-	-	-	3500-HIT28	-	3500-RT4
42X4.50	-	-	-	-	-	-	-	-	-	-	1.5/8X8	3500-HIT28	-	-
-	44X3.00	-	-	-	-	-	-	-	-	-	1.3/4X8	3500-HIT28	-	-
48X5.00	-	-	-	-	-	-	-	-	-	-	1.7/8X8	3500-HIT30	-	-
-	50X2.00	-	-	-	-	-	-	-	-	-	2X8	3500-HIT30	-	-



# KEY LOCK INSERTS

## MS51831F, MILITARY SPECIFICATION

Loksert solid keylocking inserts are an easy installation thread assembly that is ideal for replacing damaged or worn threads in almost all kinds of materials (ferrous, non-ferrous and non-metallic). They are constructed from high quality carbon steel or extremely hardwearing stainless steel. A loksert insert is supplied with the dove-tailed locking keys pre-assembled. The pre-positioned keys automatically position the insert at the correct depth below the surface of the parent material. Lokserts are suitable for repairing and creating threads in a wide range of applications including forgings and castings and are especially suited to situations that experience heavy wear and vibration - such as mining, construction and earthmoving equipment.

### Features and Benefits

- Solid bushing utilising locking keys provides positive mechanical lock against rotation.
- Installed using standard drills and taps.
- Simple installation - no special skills required.
- Suitable for use in a wide range of parent materials.
- Impossible to cross thread during installation.
- Simple removal process if required.
- No tang to break and remove.
- Available in metric sizes, inch sizes and spark plug sizes.
- Available in Thinwall and Heavy Duty.



**M/MF** Metric course and metric fine



**UNC** Unified National Course



**UNF** Unified National Fine



Keylocking insert



**PD** Thin wall insert



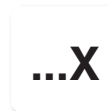
**PR** Heavy duty insert



**AC** Carbon steel insert



**INOX** Stainless steel insert



**...X** Group Code



Insert **internal** Thread



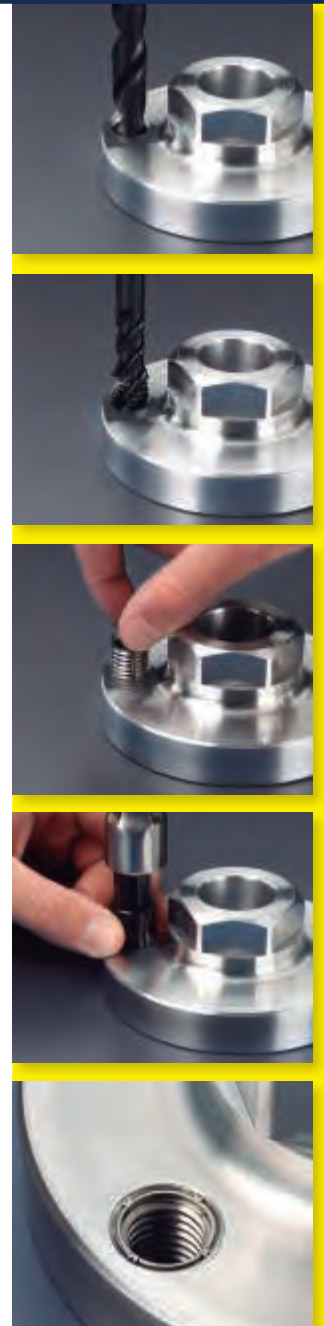
Insert **external** Thread



Pitch (mm)



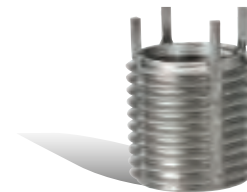
Insert Length







**KEY LOCK INSERTS**
**M**  
**MF**

**M/MF**



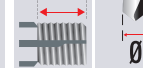

**UNC/UNF**


**PD**
**...TW**


				AC			INOX		
				€			€		
									
<b>M</b>	<b>5 x 0.80</b>	8 x 1.25	8.00	6.90	<b>3620-5.00TW</b>	6,17	<b>3720-5.00TW</b>	13,46	
<b>M</b>	<b>6 x 1.00</b>	10 x 1.25	10.00	8.80	<b>3620-6.00TW</b>	6,57	<b>3720-6.00TW</b>	13,73	
<b>M</b>	<b>8 x 1.00</b>	12 x 1.25	12.00	10.80	<b>3621-8.00TW</b>	8,79	<b>3721-8.00TW</b>	14,63	
<b>M</b>	<b>8 x 1.25</b>	12 x 1.25	12.00	10.80	<b>3620-8.00TW</b>	7,40	<b>3720-8.00TW</b>	14,26	
<b>M</b>	<b>10 x 1.25</b>	14 x 1.50	14.00	12.80	<b>3621-10.00TW</b>	10,97	<b>3721-10.00TW</b>	16,79	
<b>M</b>	<b>10 x 1.50</b>	14 x 1.50	14.00	12.80	<b>3620-10.00TW</b>	10,87	<b>3720-10.00TW</b>	16,63	
<b>M</b>	<b>12 x 1.25</b>	16 x 1.50	16.00	14.75	<b>3621-12.00TW</b>	13,58	<b>3721-12.00TW</b>	21,44	
<b>M</b>	<b>12 x 1.75</b>	16 x 1.50	16.00	14.75	<b>3620-12.00TW</b>	13,35	<b>3720-12.00TW</b>	20,93	



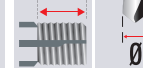

**UNC**

**UNC**

				€			€		
									
<b>UNC (J)</b>	<b>N°10 - 24</b>	5/16 x 18	7.87	6.90	<b>3632-10GTW</b>	4,63	<b>3732-10GTW</b>	11,64	
<b>UNC (J)</b>	<b>1/4 - 20</b>	3/8 x 16	9.40	8.40	<b>3632-1/4TW</b>	4,95	<b>3732-1/4TW</b>	12,78	
<b>UNC (J)</b>	<b>5/16 - 18</b>	7/16 x 14	10.92	10.10	<b>3632-5/16TW</b>	5,28	<b>3732-5/16TW</b>	14,23	
<b>UNC (J)</b>	<b>3/8 - 16</b>	1/2 x 13	12.70	11.50	<b>3632-3/8TW</b>	5,92	<b>3732-3/8TW</b>	14,63	
<b>UNC (J)</b>	<b>7/16 - 14</b>	9/16 x 12	14.22	13.00	<b>3632-7/16TW</b>	7,68	<b>3732-7/16TW</b>	17,79	
<b>UNC (J)</b>	<b>1/2 - 13</b>	5/8 x 11	15.75	14.75	<b>3632-1/2TW</b>	8,96	<b>3732-1/2TW</b>	20,52	

**UNF**

**UNF**

				€			€		
									
<b>UNF (J)</b>	<b>N°10 - 32</b>	5/16 x 18	7.87	6.90	<b>3634-10GTW</b>	4,63	<b>3734-10GTW</b>	11,64	
<b>UNF (J)</b>	<b>1/4 - 28</b>	3/8 x 16	9.40	8.40	<b>3634-1/4TW</b>	4,95	<b>3734-1/4TW</b>	12,78	
<b>UNF (J)</b>	<b>5/16 - 24</b>	7/16 x 14	10.92	10.10	<b>3634-5/16TW</b>	5,28	<b>3734-5/16TW</b>	14,23	
<b>UNF (J)</b>	<b>3/8 - 24</b>	1/2 x 13	12.70	11.50	<b>3634-3/8TW</b>	5,92	<b>3734-3/8TW</b>	14,63	
<b>UNF (J)</b>	<b>7/16 - 20</b>	9/16 x 12	14.22	13.00	<b>3634-7/16TW</b>	7,68	<b>3734-7/16TW</b>	17,79	
<b>UNF (J)</b>	<b>1/2 - 20</b>	5/8 x 11	15.75	14.75	<b>3634-1/2TW</b>	8,96	<b>3734-1/2TW</b>	20,52	

**1**

Drill


**2**

Tap


**3**

Insert


**4**


**KEY LOCK INSERTS**



				AC	INOX		
				€	€	€	
				3620-4.00HD	11,68	3720-4.00HD	15,29
				3620-5.00HD	6,80	3720-5.00HD	16,47
				3620-6.00HD	7,10	3720-6.00HD	16,61
				3621-8.00HD	8,97	3721-8.00HD	17,41
				3620-8.00HD	7,54	3720-8.00HD	17,41
				3621-10.00HD	11,07	3721-10.00HD	20,15
				3620-10.00HD	11,07	3720-10.00HD	19,80
				3621-12.00HD	13,85	3721-12.00HD	21,86
				3620-12.00HD	13,80	3720-12.00HD	21,86
				3621-14.00HD	16,61	3721-14.00HD	25,00
				3620-14.00HD	21,36	3720-14.00HD	30,71
				3621-16.00HD	19,81	3721-16.00HD	28,23
				3620-16.00HD	22,45	3720-16.00HD	33,86
				3621-18.00HD	29,07	3721-18.00HD	43,61
				3621-20.00HD	35,08	3721-20.00HD	51,73
				3620-20.00HD	41,93	3720-20.00HD	62,40
				3621-22.00HD	41,20	3721-22.00HD	61,79
				3621-24.00HD	62,75	3721-24.00HD	94,12
				3620-24.00HD	76,32	3720-24.00HD	113,58



## KEY LOCK INSERTS

UNC

UNF



...HD








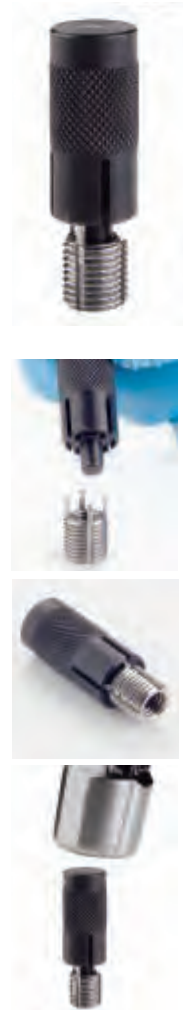
				AC	INOX		
				€	€		
UNC (J) N°8 - 32	5/16x18	7.87	6.90	3632-8GHD	6,39	3732-8GHD	12,78
UNC (J) N°10 - 24	3/8x16	7.87	8.40	3632-10GHD	4,63	3732-10GHD	11,64
UNC (J) 1/4 - 20	7/16x14	9.40	10.10	3632-1/4HD	4,95	3732-1/4HD	12,78
UNC (J) 5/16 - 18	1/2x13	10.92	11.50	3632-5/16HD	5,27	3732-5/16HD	14,31
UNC (J) 3/8 - 16	9/16x12	12.70	13.00	3632-3/8HD	5,91	3732-3/8HD	15,17
UNC (J) 7/16 - 14	5/8x11	15.75	14.75	3632-7/16HD	7,67	3732-7/16HD	22,04
UNC (J) 1/2 - 13	3/4x16	15.75	17.75	3632-1/2HD	8,96	3732-1/2HD	22,68
UNC (J) 9/16 - 12	3/4x16	20.57	17.75	3632-9/16HD	12,30	3732-9/16HD	24,02
UNC (J) 5/8 - 11	7/8x14	22.10	21.00	3632-5/8HD	14,23	3732-5/8HD	27,31
UNC (J) 3/4 - 10	1-1/8x12	28.45	27.00	3632-3/4HD	20,29	3732-3/4HD	35,55
UNC (J) 7/8 - 9	1-1/4x12	31.75	30.00	3632-7/8HD	26,36	3732-7/8HD	55,57
UNC (J) 1 - 8	1-3/8x12	34.80	33.25	3632-1HD	53,34	3732-1HD	112,01
UNC (J) 1.1/8 - 7	1-1/2x12	41.15	36.50	3632-1.1/8HD	255,80	3732-1.1/8HD	-
UNC (J) 1.1/4 - 7	1-5/8x12	45.97	39.50	3632-1.1/4HD	318,24	3732-1.1/4HD	-
UNC (J) 1.1/2 - 6	1-7/8x12	50.80	46.00	3632-1.1/2HD	552,27	3732-1.1/2HD	-


				€	€		
UNF (J) N°10 - 32	3/8x16	7.87	8.40	3634-10GHD	4,63	3734-10GHD	11,64
UNF (J) 1/4 - 28	7/16x14	7.87	10.10	3634-1/4HD	4,95	3734-1/4HD	12,78
UNF (J) 5/16 - 24	1/2x13	9.40	11.50	3634-5/16HD	5,27	3734-5/16HD	14,31
UNF (J) 3/8 - 24	9/16x12	10.92	13.00	3634-3/8HD	5,91	3734-3/8HD	15,17
UNF (J) 7/16 - 20	5/8x11	12.70	14.75	3634-7/16HD	7,67	3734-7/16HD	22,04
UNF (J) 1/2 - 20	3/4x16	15.75	17.75	3634-1/2HD	8,96	3734-1/2HD	22,68
UNF (J) 9/16 - 18	3/4x16	15.75	17.75	3634-9/16HD	12,30	3734-9/16HD	24,02
UNF (J) 5/8 - 18	7/8x14	20.57	21.00	3634-5/8HD	14,23	3734-5/8HD	27,31
UNF (J) 3/4 - 16	1-1/8x12	22.10	27.00	3634-3/4HD	20,29	3734-3/4HD	35,55
UNF (J) 7/8 - 14	1-1/4x12	28.45	30.00	3634-7/8HD	26,36	3734-7/8HD	55,57
UNF (J) 1 - 12	1-3/8x12	31.75	33.25	3634-1HD	53,34	3734-1HD	112,01
UNF (J) 1 - 14	1-3/8x12	34.80	33.25	3635-1HD	96,81	3735-1HD	-
UNF (J) 1.1/8 - 12	1-1/2x12	41.15	36.50	3634-1.1/8HD	255,80	3734-1.1/8HD	-
UNF (J) 1.1/4 - 12	1-5/8x12	45.97	39.50	3634-1.1/4HD	318,24	3734-1.1/4HD	-
UNF (J) 1.1/2 - 12	1-7/8x12	45.97	46.00	3634-1.1/2HD	552,27	3734-1.1/2HD	-

**INSTALLING TOOLS**



	 PD	...TT	 PR	...HT	 PD	 PR	...T
		€		€			€
M 4	-	-	3600-4.00HT	98,32	-	-	-
M 5	3600-5.00TT	99,89	3600-5.00HT	99,89	3600-190T		55,81
M 6	3600-6.00TT	102,75	3600-6.00HT	102,75	3600-250T		51,12
M 8	3600-8.00TT	106,68	3600-8.00HT	106,68	3600-312T		61,30
M 10	3600-10.00TT	115,29	3600-10.00HT	115,29	3600-375T		61,30
M 12	3600-12.00TT	123,63	3600-12.00HT	123,63	3600-500T		67,02
M 14	-	-	3600-14.00HT	134,58	-		-
M 16	-	-	3600-16.00HT	139,27	3600-625T		67,02
M 18	-	-	3600-18.00HT	142,92	-		-
M 20	-	-	3600-20.00HT	148,40	3600-875T		79,02
M 22	-	-	3600-22.00HT	153,08	3600-875T		79,02
M 24	-	-	3600-24.00HT	169,27	3600-875T		79,02



		€		€		€
8G	-	-	3600-8GHT	117,39	-	-
10G	3600-10GTT	106,63	3600-10GHT	117,39	3600-190T	55,81
1/4	3600-1/4TT	110,41	3600-1/4HT	122,33	3600-250T	51,12
5/16	3600-5/16TT	122,33	3600-5/16HT	122,33	3600-312T	61,30
3/8	3600-3/8TT	139,35	3600-3/8HT	129,87	3600-375T	61,30
7/16	3600-7/16TT	128,72	3600-7/16HT	133,00	3600-375T	61,30
1/2	3600-1/2TT	133,00	3600-1/2HT	145,27	3600-500T	67,02
9/16	-	-	3600-9/16HT	145,27	3600-500T	67,02
5/8	-	-	3600-5/8HT	167,71	3600-625T	67,02
3/4	-	-	3600-3/4HT	194,04	3600-875T	79,02
7/8	-	-	3600-7/8HT	205,51	3600-875T	79,02
1	-	-	3600-1HT	203,96	3600-100T	79,02
1-1/8	-	-	3600-1.1/8HT	571,68	-	-
1-1/4	-	-	3600-1.1/4HT	618,10	-	-
1-1/2	-	-	3600-1.1/2HT	727,13	-	-



**KEY LOCK INSERTS SETS**


M 5 x 0.80	8.00 x 1.25	8.00	3620-5.00TWK	AC	INOX	mm	60° 4-5	3600-190T	
				€	€				
M 6 x 1.00	10.00 x 1.25	10.00	3620-6.00TWK	194,76	3720-6.00TWK	226,30	5 6.9	M03M08X1,25	3600-190T
M 8 x 1.25	12.00 x 1.25	12.00	3620-8.00TWK	246,73	3720-8.00TWK	276,09	5 8.8	M03M10X1,25	3600-250T
M 10 x 1.50	14.00 x 1.50	14.00	3620-10.00TWK	306,75	3720-10.00TWK	327,25	5 10.8	M03M12X1,25	3600-312T
M 12 x 1.75	16.00 x 1.50	16.00	3620-12.00TWK	326,61	3720-12.00TWK	351,17	5 12.8	M03M14X1,50	3600-375T
							5 14.75	M03M16X1,50	3600-500T

MF 8 x 1.00	12.00 x 1.25	12.00	3621-8.00TWK	AC	INOX	mm	60° 4-5	3600-312T	
				€	€				
MF 10 x 1.25	14.00 x 1.50	14.00	3621-10.00TWK	306,75	3721-10.00TWK	327,25	5 10.8	M03M12X1,25	3600-312T
MF 12 x 1.25	16.00 x 1.50	16.00	3621-12.00TWK	333,40	3721-12.00TWK	357,95	5 12.8	M03M14X1,50	3600-375T
							5 14.75	M03M16X1,50	3600-500T

UNC №10 x 24	UNC 5/16 x 18	7,87	3632-10GTWK	AC	INOX	mm	60° 4-5	3600-190T	
				€	€				
UNC 1/4 x 20	UNC 3/8 x 16	9,40	3632-1/4TWK	182,36	3732-1/4TWK	230,60	5 6.90	M03NC5/16X18	3600-190T
UNC 5/16 x 18	UNC 7/16 x 14	10,92	3632-5/16TWK	240,74	3732-5/16TWK	290,15	5 8.40	M03NC3/8X16	3600-250T
UNC 3/8 x 16	UNC 1/2 x 13	12,70	3632-3/8TWK	209,37	3732-3/8TWK	258,28	5 10.10	M03NC7/16X14	3600-312T
UNC 7/16 x 14	UNC 9/16 x 12	14,22	3632-7/16TWK	271,85	3732-7/16TWK	318,71	5 11.50	M03NC1/2X13	3600-375T
UNC 1/2 x 13	UNC 5/8 x 11	15,75	3632-1/2TWK	301,94	3732-1/2TWK	353,21	5 13.00	M03NC9/16X12	3600-375T
							5 14.75	M03NC5/8X11	3600-500T

UNF №10 x 32	UNC 5/16 x 18	7,87	3634-10GTWK	AC	INOX	mm	60° 4-5	3600-190T	
				€	€				
UNF 1/4 x 28	UNC 3/8 x 16	9,40	3634-1/4TWK	182,36	3734-1/4TWK	230,60	5 6.90	M03NC5/16X18	3600-190T
UNF 5/16 x 24	UNC 7/16 x 14	10,92	3634-5/16TWK	244,27	3734-5/16TWK	293,67	5 8.40	M03NC3/8X16	3600-250T
UNF 3/8 x 24	UNC 1/2 x 13	12,70	3634-3/8TWK	209,37	3734-3/8TWK	258,28	5 10.10	M03NC7/16X14	3600-312T
UNF 7/16 x 20	UNC 9/16 x 12	14,22	3634-7/16TWK	271,85	3734-7/16TWK	318,71	5 11.50	M03NC1/2X13	3600-375T
UNF 1/2 x 20	UNC 5/8 x 11	15,75	3634-1/2TWK	301,94	3734-1/2TWK	353,21	5 13.00	M03NC9/16X12	3600-375T
							5 14.75	M03NC5/8X11	3600-500T

**KEY LOCK INSERTS SETS**

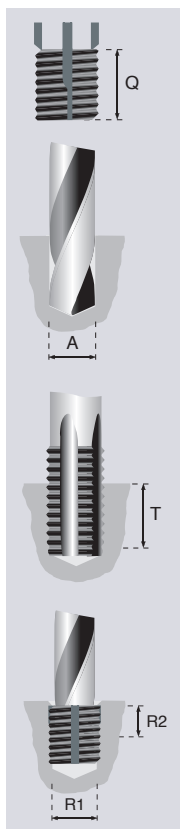


M 5 x 0.80	10.00 x 1.25	10.00	3620-5.00HDK	AC	INOX	5	8.80	M03M10X1,25	3600-190T	
				€	€					
M 6 x 1.00	12.00 x 1.25	12.00	3620-6.00HDK	239,51	3720-6.00HDK	289,17	5	10.80	M03M12X1,25	3600-250T
M 8 x 1.25	14.00 x 1.50	14.00	3620-8.00HDK	301,70	3720-8.00HDK	352,50	5	12.80	M03M14X1,25	3600-312T
M 10 x 1.50	16.00 x 1.50	16.00	3620-10.00HDK	329,94	3720-10.00HDK	375,12	5	14.75	M03M16X1,50	3600-375T
M 12 x 1.75	18.00 x 1.50	18.00	3620-12.00HDK	487,18	3720-12.00HDK	522,74	5	16.75	M03M18X1,50	3600-500T
M 16 x 2.00	22.00 x 1.50	22.00	3620-16.00HDK	654,47	3720-16.00HDK	684,03	5	20.50	M03M22X1,50	3600-625T

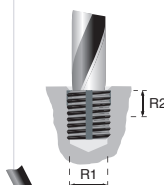
M 8 x 1.00	14.00 x 1.50	14.00	3621-8.00HDK	AC	INOX	5	12.80	M03M14X1,50	3600-312T	
				€	€					
M 10 x 1.25	16.00 x 1.50	16.00	3621-10.00HDK	329,94	3721-10.00HDK	375,12	5	14.75	M03M16X1,50	3600-375T
M 12 x 1.25	18.00 x 1.50	18.00	3621-12.00HDK	487,18	3721-12.00HDK	522,74	5	16.75	M03M18X1,50	3600-500T
M 16 x 1.50	22.00 x 1.50	22.00	3621-16.00HDK	654,47	3721-16.00HDK	684,03	5	20.50	M03M22X1,50	3600-625T

UNC №10 x 24	UNC 3/8 x 16	7.87	3632-10GHDK	AC	INOX	5	8.40	M03NC3/8X16	3600-190T	
				€	€					
UNC 1/4 x 20	UNC 7/16 x 14	9.40	3632-1/4HDK	236,82	3732-1/4HDK	303,18	5	10.10	M03NC7/16X14	3600-250T
UNC 5/16 x 18	UNC 1/2 x 13	10.92	3632-5/16HDK	212,71	3732-5/16HDK	283,52	5	11.50	M03NC1/2X13	3600-312T
UNC 3/8 x 16	UNC 9/16 x 12	12.70	3632-3/8HDK	275,05	3732-3/8HDK	348,64	5	13.00	M03NC9/16X12	3600-375T
UNC 7/16x14	UNC 5/8 x 11	14.22	3632-7/16HDK	263,42	3732-7/16HDK	283,29	5	14.75	M03NC5/8X11	3600-375T
UNC 1/2x13	UNF 3/4 x 16	15.75	3632-1/2HDK	400,76	3732-1/2HDK	431,01	5	17.75	M03NF3/4X16	3600-500T
UNC 9/16x12	UNF 3/4 x 16	20.57	3632-9/16HDK	400,76	3732-9/16HDK	431,01	5	17.75	M03NF3/4X16	3600-500T
UNC 5/8x11	UNF 7/8 x 14	22.10	3632-5/8HDK	541,96	3732-5/8HDK	601,61	5	21.00	M03NF7/8X14	3600-625T

UNF №10 x 32	UNC 3/8 x 16	7.87	3634-10GHDK	AC	INOX	5	8.40	M03NC3/8X16	3600-190T	
				€	€					
UNF 1/4 x 28	UNC 7/16 x 14	9.40	3634-1/4HDK	236,82	3734-1/4HDK	303,18	5	10.10	M03NC7/16X14	3600-250T
UNF 5/16 x 24	UNC 1/2 x 13	10.92	3634-5/16HDK	212,71	3734-5/16HDK	283,52	5	11.50	M03NC1/2X13	3600-312T
UNF 3/8 x 24	UNC 9/16 x 12	12.70	3634-3/8HDK	275,05	3734-3/8HDK	348,64	5	13.00	M03NC9/16X12	3600-375T
UNF 7/16 x 20	UNC 5/8 x 11	14.22	3634-7/16HDK	306,84	3734-7/16HDK	374,44	5	14.75	M03NC5/8X11	3600-375T
UNF 1/2 x 20	UNF 3/4 x 16	15.75	3634-1/2HDK	452,51	3734-1/2HDK	514,84	5	17.75	M03NF3/4X16	3600-500T
UNF 9/16 x 18	UNF 3/4 x 16	20.57	3634-9/16HDK	470,90	3734-9/16HDK	529,07	5	17.75	M03NF3/4X16	3600-500T
UNF 5/8 x 18	UNF 7/8 x 14	22.10	3634-5/8HDK	541,96	3734-5/8HDK	601,61	5	21.00	M03NF7/8X14	3600-625T



REMOVAL



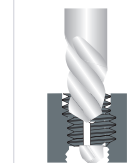
**1 Drilling**

Drill out the material between the locking keys and the internal thread to the specified depth. Note: Drill size and drilling depth are shown in the loksert technical tables.



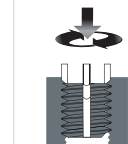
**2 Deflect**

Deflect locking keys inward and break off.



**3 Remove**

Remove the insert from the hole by winding it out using a screw extractor or similar type tool.



**4 Instal**

A new loksert insert of exactly the same size can be installed in the original hole.



	Internal Thread			External Thread			Tap			
	Tol 6H mm	Tol 6G mm	Q mm	Hta de Instalación	A mm	Tol 6H mm	T Min. mm	R1 mm	R2 mm	
THIN WALL	M 5 X 0.8	M8 X 1.25	8.0	3600-190T	6.9	M8 X 1.25	9.5	5.50	4.00	
	M 6 X 1.0	M10 X 1.25	10.0	3600-250T	8.8	M10 x 1.25	11.5	7.50	4.75	
	M 8 X 1.25	M12 x 1.25	12.0	3600-312T	10.8	M12 x 1.25	13.5	9.50	4.75	
	M 8 X 1.0	M12 x 1.25	12.0	3600-312T	10.8	M12 x 1.25	13.5	9.50	4.75	
	M 10 X 1.5	M14 x 1.5	14.0	3600-375T	12.8	M14 x 1.5	15.5	11.50	4.75	
	M 10 X 1.25	M14 x 1.5	14.0	3600-375T	12.8	M14 x 1.5	15.5	11.50	4.75	
	M 12 X 1.75	M16 x 1.5	16.0	3600-500T	14.75	M16 x 1.5	17.5	13.50	4.75	
M 12 X 1.25	M16 x 1.5	16.0	3600-500T	14.75	M16 x 1.5	17.5	13.50	4.75		
HEAVY DUTY	M 4 X 0.7	M8 X 1.25	8.0	3600-4.00HT	6.9	M8 X 1.25	9.5	5.50	4.00	
	M 5 X 0.8	M10 X 1.25	10.0	3600-190T	8.8	M10 x 1.25	12.5	7.50	4.75	
	M 6 X 1.0	M12 x 1.25	12.0	3600-250T	10.8	M12 x 1.25	14.5	9.50	4.75	
	M 8 X 1.25	M14 x 1.5	14.0	3600-312T	12.8	M14 x 1.5	16.5	11.50	4.75	
	M 8 X 1.0	M14 x 1.5	14.0	3600-312T	12.8	M14 x 1.5	16.5	11.50	4.75	
	M 10 X 1.5	M16 x 1.5	16.0	3600-375T	14.75	M16 x 1.5	18.5	13.50	4.75	
	M 10 X 1.25	M16 x 1.5	16.0	3600-375T	14.75	M16 x 1.5	18.5	13.50	4.75	
	M 12 X 1.75	M18 X 1.5	18.0	3600-500T	16.75	M18 X 1.5	20.5	15.50	4.75	
	M 12 X 1.25	M18 X 1.5	18.0	3600-500T	16.75	M18 X 1.5	20.5	15.50	4.75	
	M 14 X 2.0	M20 X 1.5	20.0	3600-14.00HT	18.75	M20 X 1.5	22.5	17.50	4.75	
	M 14 X 1.5	M20 X 1.5	20.0	3600-14.00HT	18.75	M20 X 1.5	22.5	17.50	4.75	
	M 16 X 2.0	M22 X 1.5	22.0	3600-625T	20.5	M22 X 1.5	24.5	17.75	6.35	
	M 16 X 1.5	M22 X 1.5	22.0	3600-625T	20.5	M22 X 1.5	24.5	17.75	6.35	
	M 18 X 1.5	M24 X 1.5	24.0	3600-18.00HT	22.5	M24 X 1.5	26.5	19.75	6.35	
	M 20 X 2.5	M30 X 2.0	30.0	3600-875T	28.0	M30 X 2.0	34.5	25.75	6.35	
	M 20 X 1.5	M30 X 2.0	30.0	3600-875T	28.0	M30 X 2.0	34.5	25.75	6.35	
	M 22 X 1.5	M32 X 2.0	32.0	3600-22.00HT	30.0	M32 X 2.0	36.5	27.75	6.35	
	M 24 X 3.0	M33 X 2.0	33.0	3600-24.00HT	31.0	M33 X 2.0	37.5	28.75	6.35	
	M 24 X 2.0	M33 X 2.0	33.0	3600-24.00HT	31.0	M33 X 2.0	37.5	28.75	6.35	

	Internal Thread			External Thread			Tap			
	Tol 6H mm	Tol 6G mm	Q mm	Hta de Instalación	A mm	Tol 2B "	T Min. mm	R1 mm	R2 mm	
THIN WALL	Nº10 X 24	5/16 X 18	7.87	3600-190T	6.90	UNC 5/16X18	9.40	5.56	3.20	
	Nº10 X 32	5/16 X 18	7.87	3600-190T	6.90	UNC 5/16X18	9.40	5.56	3.20	
	1/4 X 20	3/8 X 16	9.40	3600-250T	8.40	UNC 3/8X16	10.92	7.14	4.75	
	1/4 X 28	3/8 X 16	9.40	3600-250T	8.40	UNC 3/8X16	10.92	7.14	4.75	
	5/16 X 18	7/16 X 14	10.92	3600-312T	10.10	UNC 7/16X14	12.70	8.73	4.75	
	5/16 X 24	7/16 X 14	10.92	3600-312T	10.10	UNC 7/16X14	12.70	8.73	4.75	
	3/8 X 16	1/2 X 13	12.70	3600-375T	11.50	UNC 1/2X13	14.22	10.32	4.75	
	3/8 X 24	1/2 X 13	12.70	3600-375T	11.50	UNC 1/2X13	14.22	10.32	4.75	
	7/16 X 14	9/16 X 12	14.22	3600-375T	13.10	UNC 9/16X12	15.75	11.91	4.75	
	7/16 X 20	9/16 X 12	14.22	3600-375T	13.10	UNC 9/16X12	15.75	11.91	4.75	
	1/2 X 13	5/8 X 11	15.75	3600-500T	14.75	UNC 5/8X11	17.27	13.49	4.75	
	1/2 X 20	5/8 X 11	15.75	3600-500T	14.75	UNC 5/8X11	17.27	13.49	4.75	
	HEAVY DUTY	Nº8 X 32	5/16 X 18	7.87	3600-86HT	6.90	UNC 5/16X18	9.40	5.56	3.20
		Nº10 X 24	3/8 X 16	7.87	3600-190T	8.40	UNC 3/8X16	9.40	7.14	3.20
Nº10 X 32		3/8 X 16	7.87	3600-190T	8.40	UNC 3/8X16	9.40	7.14	3.20	
1/4 X 20		7/16 X 14	9.40	3600-250T	10.10	UNC 7/16X14	10.92	8.73	4.75	
1/4 X 28		7/16 X 14	9.40	3600-250T	10.10	UNC 7/16X14	10.92	8.73	4.75	
5/16 X 18		1/2 X 13	10.92	3600-312T	11.50	UNC 1/2X13	12.70	10.32	4.75	
5/16 X 24		1/2 X 13	10.92	3600-312T	11.50	UNC 1/2X13	12.70	10.32	4.75	
3/8 X 16		9/16 X 12	12.70	3600-375T	13.10	UNC 9/16X12	14.22	11.91	4.75	
3/8 X 24		9/16 X 12	12.70	3600-375T	13.10	UNC 9/16X12	14.22	11.91	4.75	
7/16 X 14		5/8 X 11	15.75	3600-375T	14.75	UNC 5/8X11	17.27	13.49	4.75	
7/16 X 20		5/8 X 11	15.75	3600-375T	14.75	UNC 5/8X11	17.27	13.49	4.75	
1/2 X 13		3/4 X 16	15.75	3600-500T	17.50	UNF 3/4X16	17.27	16.67	4.75	
1/2 X 20		3/4 X 16	15.75	3600-500T	17.50	UNF 3/4X16	17.27	16.67	4.75	
9/16 X 12		3/4 X 16	20.57	3600-500T	17.50	UNF 3/4X16	23.88	16.67	4.75	
9/16 X 18		3/4 X 16	20.57	3600-500T	17.50	UNF 3/4X16	23.88	16.67	4.75	
5/8 X 11		7/8 X 14	22.10	3600-625T	21.00	UNF 7/8X14	25.40	19.84	7.90	
5/8 X 18		7/8 X 14	22.10	3600-625T	21.00	UNF 7/8X14	25.40	19.84	7.90	
3/4 X 10		1-1/8 X 12	28.45	3600-875T	27.00	UNF 1-1/8X12	33.27	24.61	7.90	
3/4 X 16		1-1/8 X 12	28.45	3600-875T	27.00	UNF 1-1/8X12	33.27	24.61	7.90	
7/8 X 9		1-1/4 X 12	31.75	3600-875T	30.00	UNF 1-1/4X12	36.58	27.75	7.90	
7/8 X 14		1-1/4 X 12	31.75	3600-875T	30.00	UNF 1-1/4X12	36.58	27.75	7.90	
1 X 8		1-3/8 X 12	34.80	3600-100T	33.25	UNF 1-3/8X12	39.62	31	7.90	
1 X 12		1-3/8 X 12	34.80	3600-100T	33.25	UNF 1-3/8X12	39.62	31	7.90	
1 X 14		1-3/8 X 12	34.80	3600-100T	33.25	UNF 1-3/8X12	39.62	31	7.90	
1-1/8 X 7		1-1/2 X 12	41.15	3600-1.1/8HT	36.50	UNF 1-1/2X12	46.74	34	7.90	
1-1/8 X 12		1-1/2 X 12	41.15	3600-1.1/8HT	36.50	UNF 1-1/2X12	46.74	34	7.90	
1-1/4 X 7	1-5/8 X 12	45.97	3600-1.1/4HT	39.75	UNF 1-5/8X12	52.32	37.25	7.90		
1-1/4 X 12	1-5/8 X 12	45.97	3600-1.1/4HT	39.75	UNF 1-5/8X12	52.32	37.25	7.90		
1-1/2 X 6	1-7/8 X 12	50.80	3600-1.1/2HT	46.00	UNF 1-7/8X12	57.91	43.50	7.90		
1-1/2 X 12	1-7/8 X 12	50.80	3600-1.1/2HT	46.00	UNF 1-7/8X12	57.91	43.50	7.90		

THIN WALL & HEAVY DUTY

Insert Material	Carbon Steel – C1215. Stainless Steel – AISI 303	Nº Keys	Inserts with internal thread of 5/16" (M7) or larger have 4 locking keys. Smaller sizes have 2 keys.
Keys	AISI 302		
Tolerances	Carbon Steel - Zinc Phosphate; Stainless Steel – Passivated	Tap Drill Hole	6.90 - 10.80 = +0.100 / -0.025 +12.80 = +0.130 / -0.025



**tapsert**<sup>®</sup>  
by *celesa*



# SELF TAPPING INSERTS

**TAPSERTS** are self cutting threaded inserts that feature both external and internal threads. They are driven into a pre-formed or pre-drilled retaining hole and the cutting slots (or cutting bores) effectively tap the hole as the insert is wound into the parent material. TAPSERTS are ideal for use in low shear strength materials (such as alloys, plastics and castings) which require threaded seats with high load capacity and wear resistance.

## Features and Advantages

- Easy to install by using a bolt in prior hole made by standard drill. Thread the insert on to the bolt ensuring the slot side is down.
- The use of threads when installing is not needed. The insert taps the hole.
- Suitable to resist high compression and tensile loads.
- Extremely high tightening torques are allowed in soft materials as plastic, wood, aluminium.
- The pitch tolerance is conserved despite multiple uses, low wear.



Thread the Tapsert on to the bolt ensuring the slot side is down.  
Thread the nut down the bolt until it sits firmly against the top of the Tapsert.

## SELF TAPPING INSERTS WITH CUTTING SLOT

M  
MF

M/MF

AC

AC

INOX



AC 302



INOX 302



Diagram	Diagram	mm	Ø	L	AC	€			INOX	€		
						100-499	500-1999	2000-...		AISI 303	25-499	500-1999
M 2.50 x 0.45	M 4.50 x 0.50	6.00	4.30	8.00	3920-2.5X6	0,48	0,44	0,40	3920-2.5X6SS	0,83	0,79	0,70
M 3 x 0.50	M 5 x 0.50	6.00	4.80	8.00	3920-3X6	0,49	0,45	0,42	3920-3X6SS	0,84	0,80	0,71
M 4 x 0.70	M 6.50 x 0.75	8.00	6.20	10.00	3920-4X8	0,51	0,49	0,46	3920-4X8SS	1,12	1,07	0,96
M 5 x 0.80	M 8 x 1.00	10.00	7.60	13.00	3920-5X10	0,64	0,61	0,57	3920-5X10SS	1,46	1,39	1,25
M 6 x 1.00	M 10 x 1.50	14.00	9.40	17.00	3920-6X14	0,82	0,78	0,70	3920-6X14SS	1,81	1,71	1,54
M 8 x 1.25	M 12 x 1.50	15.00	11.40	18.00	3920-8X15	1,00	0,95	0,86	3920-8X15SS	2,28	2,14	1,94
M 10 x 1.50	M 14 x 1.50	18.00	13.50	22.00	3920-10X18	1,45	1,38	1,25	3920-10X18SS	3,33	3,14	2,84
						25-499	500-1999	2000-...		1-499	500-1999	2000-...
M 12 x 1.75	M 16 x 1.50	22.00	15.50	26.00	3920-12X22	2,28	2,14	1,96	3920-12X22SS	4,49	4,22	3,81
M 14 x 2.00	M 18 x 1.50	24.00	17.50	28.00	3920-14X24	3,10	2,92	2,67	3920-14X24SS	5,90	5,55	5,00
M 16 x 2.00	M 20 x 1.50	22.00	19.50	26.00	3920-16X22	4,16	3,79	3,44	3920-16X22SS	7,23	6,59	5,94
						5-499	500-1999	2000-...		1-499	500-1999	2000-...
M 18 x 2.50	M 22 x 1.50	24.00	21.50	29.00	3920-18X24	6,25	5,68	5,19	3920-18X24SS	7,93	7,22	6,51
M 20 x 2.50	M 26 x 1.50	27.00	25.50	32.00	3920-20X26	7,02	6,41	5,83	3920-20X26SS	9,15	8,34	7,51
M 22 x 2.50	M 26 x 1.50	30.00	25.50	36.00	3920-22X30	8,37	7,61	6,93	3920-22X30SS	10,16	9,26	8,34
M 24 x 3.00	M 30 x 1.50	30.00	29.50	36.00	3920-24X30	10,34	9,44	8,59	3920-24X30SS	11,62	10,58	9,53



AC



3920-6X14P



Diagram	Diagram	mm	Ø	L	AC	€	AC
M 2.50 x 0.45	M 4.50 x 0.50	6.00	4.30*	8.00	3920-2.5X6P	11,72	2
M 3 x 0.50	M 5 x 0.50	6.00	4.80*	8.00	3920-3X6P	11,72	2
M 4 x 0.70	M 6.50 x 0.75	8.00	6.20*	10.00	3920-4X8P	10,65	2
M 5 x 0.80	M 8 x 1.00	10.00	7.60*	13.00	3920-5X10P	10,65	2
M 6 x 1.00	M 10 x 1.50	14.00	9.40*	17.00	3920-6X14P	10,65	2
M 8 x 1.25	M 12 x 1.50	15.00	11.40*	18.00	3920-8X15P	11,72	2
M 10 x 1.50	M 14 x 1.50	18.00	13.50*	22.00	3920-10X18P	12,78	2
M 12 x 1.75	M 16 x 1.50	22.00	15.50*	26.00	3920-12X22P	14,90	2
M 14 x 2.00	M 18 x 1.50	24.00	17.50*	28.00	3920-14X24P	15,58	2
M 16 x 2.00	M 20 x 1.50	22.00	19.50*	26.00	3920-16X22P	22,35	2

\* Prior drill not included in kit.

**SELF TAPPING INSERTS WITH CUTTING SLOT**



**BRASS 302**



**INOX AISI 316L**



Diagram	Diagram	mm	Ø	L	BRASS	€			INOX AISI 316L	€		
						100-499	500-1999	2000-...		25-499	500-1999	2000-...
M 3 x 0.50	M 5 x 0.50	6.00	4.80	8.00	3920-3X6LAT	0,48	0,46	0,42	-			
M 4 x 0.70	M 6.5 x 0.75	8.00	6.20	10.00	3920-4X8LAT	0,55	0,51	0,48	3920-4X8DY	1,46	1,39	1,25
M 5 x 0.80	M 8 x 1.00	10.00	7.60	13.00	3920-5X10LAT	0,68	0,64	0,59	3920-5X10DY	1,90	1,79	1,62
M 6 x 1.00	M 10 x 1.50	14.00	9.40	17.00	3920-6X14LAT	0,86	0,82	0,76	3920-6X14DY	2,35	2,22	2,00
M 8 x 1.25	M 12 x 1.50	15.00	11.40	18.00	3920-8X15LAT	1,17	1,09	1,00	3920-8X15DY	3,23	3,05	2,75
M 10 x 1.50	M 14 x 1.50	18.00	13.50	22.00	3920-10X18LAT	2,06	1,94	1,77	-			
						25-499	500-1999	2000-...		1-499	500-1999	2000-...
M 12 x 1.75	M 16 x 1.50	22.00	15.50	26.00	3920-12X22LAT	2,64	2,49	2,27				

**APPLICATIONS**

- Hard Wood
- Soft Wood
- Soft Thermoplastic
- Composite materials



**BRASS 309**

Diagram	Diagram	mm	SOFT Ø	HARD Ø	L	BRASS	€		
							100-499	500-1999	2000-...
M 3 x 0.50	M 5.5 x 1.60	6.00	4.10	4.20-4.30	9.00	3925-3X6	0,88	0,83	0,79
M 4 x 0.70	M 7 x 2.50	10.00	5.10	5.20-5.30	13.00	3925-4X10	1,19	1,13	1,07
M 5 x 0.80	M 9 x 3.00	12.00	6.60	6.70-6.90	15.00	3925-5X12	1,37	1,30	1,24
M 6 x 1.00	M 10 x 4.00	14.00	7.60	7.70-7.90	17.00	3925-6X14	1,52	1,45	1,38
M 8 x 1.25	M 13 x 4.00	20.00	9.90	10.10-10.30	23.00	3925-8X20	2,08	1,97	1,88
M 10 x 1.50	M 16 x 5.00	23.00	12.40	12.60-12.80	26.00	3925-10X23	3,11	2,95	2,80
							25-499	500-1999	2000-...
M 12 x 1.75	M 19 x 5.00	26.00	15.40	15.60-15.80	30.00	3925-12X26	5,20	4,94	4,68

**Hard Material**



**Soft Material**



## SELF TAPPING INSERTS WITH CUTTING SLOT

UNC



UNC



AC



INOX



AC 302



INOX 302



UNC		M		mm	Ø	L	AC	€	INOX AISI 303	€
UNC	N°4 x 40	M 5 x 0.50	6.00	4.80	8.00		3932-4GX6	1,34	3932-4GX6SS	2,47
UNC	N°6 x 32	M 6 x 0.75	8.00	5.70	10.00		3932-6GX8	1,72	3932-6GX8SS	3,22
UNC	N°8 x 32	M 6.50 x 0.75	8.00	6.20	10.00		3932-8GX8	2,32	3932-8GX8SS	4,19
UNC	N°10 x 24	M 8 x 1.00	10.00	7.60	13.00		3932-10GX10	2,63	3932-10GX10SS	4,87
UNC	1/4 x 20	M 10 x 1.50	14.00	9.40	17.00		3932-1/4X14	3,22	3932-1/4X14SS	6,22
UNC	5/16 x 18	M 12 x 1.50	15.00	11.40	18.00		3932-5/16X15	4,19	3932-5/16X15SS	8,24
UNC	3/8 x 16	M 14 x 1.50	18.00	13.50	22.00		3932-3/8X18	5,92	3932-3/8X18SS	11,76
UNC	7/16 x 14	M 16 x 1.50	22.00	15.50	26.00		3932-7/16X22	8,68	3932-7/16X22SS	17,16
UNC	1/2 x 13	M 18 x 1.50	22.00	17.50	26.00		3932-1/2X22	10,93	3932-1/2X22SS	22,85
UNC	5/8 x 11	M 20 x 1.50	22.00	19.50	26.00		3932-5/8X22	12,51	3932-5/8X22SS	22,85

UNF



UNF



AC



INOX



AC 302

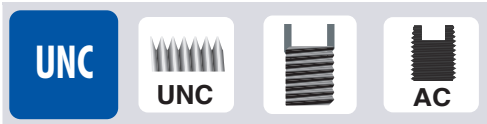


INOX 302



UNF		M		mm	Ø	L	AC	€	INOX AISI 303	€
UNF	N°10 x 32	M 8 x 1.00	10.00	7.60	13.00		3934-10GX10	2,63	3934-10GX10SS	4,87
UNF	1/4 x 28	M 10 x 1.50	14.00	9.40	17.00		3934-1/4X14	3,22	3934-1/4X14SS	6,22
UNF	5/16 x 24	M 12 x 1.50	15.00	11.40	18.00		3934-5/16X15	4,19	3934-5/16X15SS	8,24
UNF	3/8 x 24	M 14 x 1.50	18.00	13.50	22.00		3934-3/8X18	5,92	3934-3/8X18SS	11,76
UNF	7/16 x 20	M 16 x 1.50	22.00	15.50	26.00		3934-7/16X22	8,68	3934-7/16X22SS	17,16
UNF	1/2 x 20	M 18 x 1.50	22.00	17.50	26.00		3934-1/2X22	10,93	3934-1/2X22SS	22,85
UNF	5/8 x 18	M 20 x 1.50	22.00	19.50	26.00		3934-5/8X22	12,51	3934-5/8X22SS	22,85

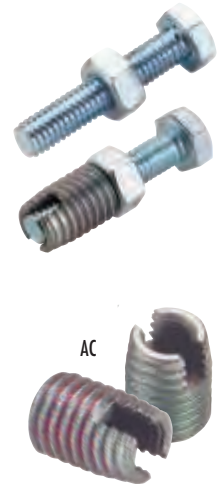
**SELF TAPPING INSERTS WITH CUTTING SLOT**



						€	
UNC N°4 x 40	M 5 x 0.50	6.00	4.80*	8.00	3932-4GX6P	22,85	2
UNC N°6 x 32	M 6 x 0.75	8.00	5.70*	10.00	3932-6GX8P	22,85	2
UNC N°8 x 32	M 6.50 x 0.75	8.00	6.20*	10.00	3932-8GX8P	22,85	2
UNC N°10 x 24	M 8 x 1.00	10.00	7.60*	13.00	3932-10GX10P	22,85	2
UNC 1/4 x 20	M 10 x 1.50	14.00	9.40*	17.00	3932-1/4X14P	25,85	2
UNC 5/16 x 18	M 12 x 1.50	15.00	11.40*	18.00	3932-5/16X15P	28,42	2
UNC 3/8 x 16	M 14 x 1.50	18.00	13.50*	22.00	3932-3/8X18P	31,00	2
UNC 7/16 x 14	M 16 x 1.50	22.00	15.50*	26.00	3932-7/16X22P	33,57	2
UNC 1/2 x 13	M 18 x 1.50	24.00	17.50*	26.00	3932-1/2X22P	36,14	2
UNC 5/8 x 11	M 20 x 1.50	22.00	19.50*	26.00	3932-5/8X22P	40,30	2

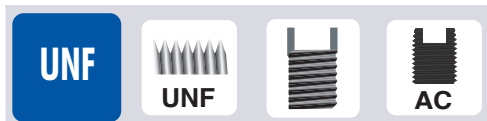


3932-4GX6P



tapsert  
by CELESA

Pink



						€	
UNF N°10 x 32	M 8 x 1.00	10.00	7.60*	13.00	3934-10GX10P	22,85	2
UNF 1/4 x 28	M 10 x 1.50	14.00	9.40*	17.00	3934-1/4X14P	25,85	2
UNF 5/16 x 24	M 12 x 1.50	15.00	11.40*	18.00	3934-5/16X15P	28,42	2
UNF 3/8 x 24	M 14 x 1.50	18.00	13.50*	22.00	3934-3/8X18P	31,00	2
UNF 7/16 x 20	M 16 x 1.50	22.00	15.50*	26.00	3934-7/16X22P	33,57	2
UNF 1/2 x 20	M 18 x 1.50	22.00	17.50*	26.00	3934-1/2X22P	36,14	2
UNF 5/8 x 18	M 20 x 1.50	22.00	19.50*	26.00	3934-5/8X22P	40,30	2



3934-1/4X14P



\* Prior drill not included in kit.

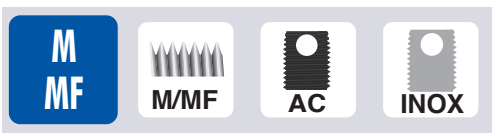
REMOVAL



**SELF TAPPING INSERTS WITH 3 CUTTING BORES**

tapsert  
by CELESA

Pink

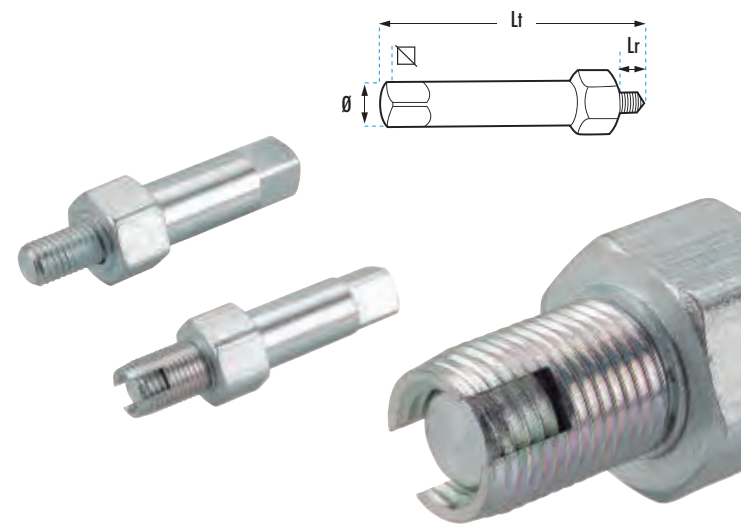


Ø	L	Lr	Ø	L	AC	€			INOX AISI 303	€		
						100-499	500-1999	2000-...		25-499	500-1999	2000-...
M 4 x 0.70	M 6.50 x 0.80	6.00	6.00-6.10	8.00	3333-M4X6	0,76	0,72	0,66	3333-M4X6SS	1,26	1,19	1,09
M 5 x 0.80	M 8 x 1.00	7.00	7.40-7.50	9.00	3333-M5X7	0,89	0,85	0,78	3333-M5X7SS	1,55	1,47	1,34
M 6 x 1.00	M 10 x 1.25	8.00	9.30-9.40	10.00	3333-M6X8	1,03	0,97	0,89	3333-M6X8SS	1,94	1,83	1,67
M 8 x 1.25	M 12 x 1.50	9.00	11.10-11.20	11.00	3333-M8X9	1,23	1,16	1,07	3333-M8X9SS	2,47	2,34	2,12
M 10 x 1.50	M 14 x 1.50	10.00	13.10-13.20	13.00	3333-M10X10	1,82	1,72	1,56	3333-M10X10SS	3,72	3,50	3,19
M 12 x 1.75	M 16 x 1.75	12.00	15.00-15.10	15.00	3333-M12X12	2,87	2,70	2,46	3333-M12X12SS	5,95	5,61	5,10
M 14 x 2.00	M 18 x 2.00	14.00	17.00-17.10	17.00	3333-M14X14	3,74	3,52	3,20	3333-M14X14SS	6,84	6,43	5,85
M 16 x 2.00	M 20 x 2.00	14.00	19.00-19.10	17.00	3333-M16X14	5,08	4,78	4,36	3333-M16X14SS	9,22	8,67	7,90

Ø	L	Lr	Ø	L	AC	€			INOX AISI 303	€		
						100-499	500-1999	2000-...		25-499	500-1999	2000-...
M 4 x 0.70	M 6.50 x 0.80	8.00	6.10-6.20	10.00	3333-M4X8	0,84	0,79	0,72	3333-M4X8SS	1,42	1,33	1,22
M 5 x 0.80	M 8 x 1.00	10.00	7.60-7.70	13.00	3333-M5X10	1,06	1,01	0,92	3333-M5X10SS	1,79	1,69	1,54
M 6 x 1.00	M 10 x 1.25	12.00	9.50-9.60	15.00	3333-M6X12	1,34	1,27	1,17	3333-M6X12SS	2,13	2,03	1,84
M 8 x 1.25	M 12 x 1.50	14.00	11.30-11.15	17.00	3333-M8X14	1,73	1,64	1,50	3333-M8X14SS	2,79	2,63	2,39
M 10 x 1.50	M 14 x 1.50	18.00	13.30-13.50	22.00	3333-M10X18	2,50	2,34	2,15	3333-M10X18SS	4,24	4,00	3,64
M 12 x 1.75	M 16 x 1.75	22.00	15.20-15.40	26.00	3333-M12X22	3,78	3,56	3,24	3333-M12X22SS	9,12	8,58	7,82
M 14 x 2.00	M 18 x 2.00	24.00	17.20-17.40	28.00	3333-M14X24	5,43	5,11	4,65	3333-M14X24SS	10,80	10,16	9,26
M 16 x 2.00	M 20 x 2.00	24.00	19.20-19.10	28.00	3333-M16X24	6,33	5,95	5,43	3333-M16X24SS	12,80	12,03	10,96

**SELF TAPPING INSERTS INSTALLATION TOOL**

Ø	L mm	Lr mm	Ø mm	∇ mm	Part	€
M 3 x 0.50	73.00	6.00	12.00	12.00	3920-M3	60,86
M 4 x 0.70	75.00	7.00	12.00	12.00	3920-M4	60,86
M 5 x 0.80	77.00	9.00	12.00	12.00	3920-M5	60,86
M 6 x 1.00	78.00	11.00	12.00	12.00	3920-M6	60,86
M 8 x 1.25	80.00	12.00	12.00	12.00	3920-M8	60,86
M 10 x 1.50	80.00	16.00	18.00	14.00	3920-M10	60,86
M 12 x 1.75	83.50	20.00	18.00	14.00	3920-M12	68,80
M 14 x 2.00	83.50	20.00	22.00	22.00	3920-M14	76,07
M 16 x 2.00	83.50	20.00	22.00	22.00	3920-M16	91,29
M 18 x 2.50	85.50	21.50	26.00	26.00	3920-M18	114,44
M 20 x 2.50	85.50	21.50	26.00	26.00	3920-M20	114,44
M 22 x 2.50	85.50	21.50	30.00	30.00	3920-M22	121,72
M 24 x 3.00	87.50	23.50	30.00	30.00	3920-M24	136,93

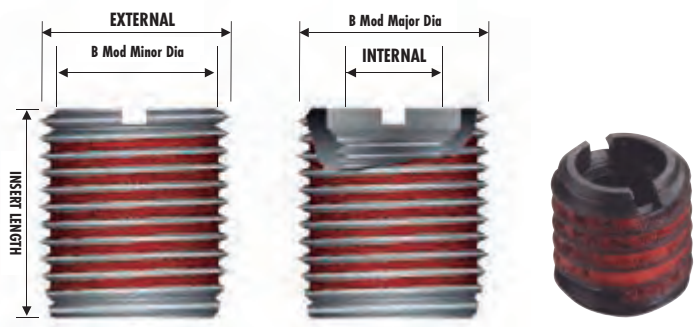




# SOLID INSERTS WITH ANAEROBIC THREADLOCKER

### Features and Benefits

- E-Z SERTs can be installed with a screwdriver, bolt/jam nut, or optional power drive tool.
- Installed using standard drills and taps.
- E-Z SERTs will not back out or vibrate loose. Immediately upon installation, microencapsulated adhesive begins to set and the newly installed inserts are fastener-ready in 3-5 minutes.
- The adhesive seals against liquids and gases to 6,000 psi when fully cured (72 hours).



### REMOVAL



- NOTE: The EZ SERT design requires a modified external thread. While the external thread pitch is standard, the minor diameter is larger than normal. So standard drill/tap combination does not apply. Preparing the hole for installation requires an oversize drill. For example, if a Thin Wall with a 5/8-11 external thread is being installed, a standard 37/64 drill is used as opposed to the typical 17/32, and tapped with a standard 5/8-11 tap.







## SOLID INSERTS WITH ANAEROBIC THREADLOCKER

M  
MF





PD

## THIN WALL

		L mm				€
M 4 x 0.70	UNC 5/16 x 18h	7.92	6,90	9.52	3320-4.00TWF	5,11
M 5 x 0.80	UNC 5/16 x 18h	7.92	6,90	9.52	3320-5.00TWF	5,11
M 6 x 1.00	UNC 3/8 x 16h	9.52	8,40	11.10	3320-6.00TWF	6,44
M 8 x 1.25	UNC 7/16 x 14h	11.10	10,10	12.70	3320-8.00TWF	7,32
M 10 x 1.50	UNC 1/2 x 13h	12.70	11,50	14.22	3320-10.00TWF	10,34
M 12 x 1.75	UNC 5/8 x 11h	15.75	14,50	17.27	3320-12.00TWF	11,61





## HEAVY WALL

		L mm			AC	€	AISI 303	€
M 3 x 0.50	M6 x 1.00	6.50	5.10	7.80	3320-3.00HWM	3,15	3320-3.00HWSS	6,93
M 4 x 0.70	M8 x 1.25	7.50	6.90	9.00	3320-4.00HWM	3,36	3320-4.00HWSS	8,42
M 5 x 0.80	M8 x 1.25	7.50	6.90	9.00	3320-5.00HWM	3,79	3320-5.00HWSS	9,19
M 6 x 1.00	M10 x 1.50	10.50	8.60	12.00	3320-6.00HWM	4,26	3320-6.00HWSS	7,17
M 8 x 1.25	M12 x 1.75	12.50	10.40	14.50	3320-8.00HWM	4,81	3320-8.00HWSS	11,39
M 10 x 1.50	M16 x 2.00	17.00	14.00	19.00	3320-10.00HWM	7,41	3320-10.00HWSS	11,36
M 12 x 1.75	M16 x 2.00	17.00	14.00	19.00	3320-12.00HWM	8,33	3320-12.00HWSS	12,96
M 16 x 2.00	M24 x 3.00	20.00	21.00	24.00	3320-16.00HWM	10,04	3320-16.00HWSS	21,67
M 20 x 2.50	M36 x 4.00	30.00	33.00	35.00	3320-20.00HWM	29,59		

## HEAVY WALL

M 6 x 1.00	UNC 3/8 x 16h	10.31	8.00	11.90	3320-6.00HWF	2,40	3320-6.00HWSSF	9,95
M 8 x 1.25	UNC 1/2 x 13h	12.29	10.70	14.29	3320-8.00HWF	2,94	3320-8.00HWSSF	11,45
M 10 x 1.50	UNC 9/16 x 12h	13.08	12.30	15.08	3320-10.00HWF	3,36	3320-10.00HWSSF	13,08
M 10 x 1.25	UNC 9/16 x 12h	13.08	12.30	15.08	3321-10.00HWF	4,95	3321-10.00HWSSF	-
M 12 x 1.75	UNC 3/4 x 10h	16.66	16.60	19.05	3320-12.00HWF	4,33	3320-12.00HWSSF	18,65
M 14 x 2.00	UNC 7/8 x 9h	17.45	19.50	20.64	3320-14.00HWF	8,69	3320-14.00HWSSF	22,98
M 16 x 2.00	UNC 1 x 8h	19.84	22.00	22.25	3320-16.00HWF	8,66	3320-16.00HWSSF	-

\* Material safety data sheet available.

	
M3 x 0.50	M6 x 1.00
M4 x 0.70	M8 x 1.25
M5 x 0.80	M8 x 1.25
M6 x 1.00	M10 x 1.50
M8 x 1.25	M12 x 1.75

SET 50 Unit M3-M8	AC
10 3320-3.00HW	3320-WK0
10 3320-4.00HW	
10 3320-5.00HW	
10 3320-6.00HW	
10 3320-8.00HW	
	304,41 €

SET 50 Unit M3-M8	AISI 303
10 3320-3.00HWSS	3320-SSWK0
10 3320-4.00HWSS	
10 3320-5.00HWSS	
10 3320-6.00HWSS	
10 3320-8.00HWSS	
	569,54 €

M8 x 1.25	M12 x 1.75
M10 x 1.50	M16 x 2.00
M12 x 1.75	M16 x 2.00
M16 x 2.00	M 24 x 3.00

SET 33 Unit M8-M16	AC
10 3320-8.00HW	3320-WK1
10 3320-10.00HW	
8 3320-12.00HW	
5 3320-16.00HW	
	348,61 €

SET 33 Unit M8-M16	AISI 303
10 3320-8.00HWSS	3320-SSWK1
10 3320-10.00HWSS	
8 3320-12.00HWSS	
5 3320-16.00HWSS	
	602,08 €

M5 x 0.80	M8 x 1.25
M6 x 1.00	M10 x 1.50
M8 x 1.25	M12 x 1.75
M10 x 1.50	M16 x 2.00
M12 x 1.75	M16 x 2.00

SET 46 Unit M5-M12	AISI 303
10 3320-5.00HWSS	3320-SSWK2
10 3320-6.00HWSS	
10 3320-8.00HWSS	
10 3320-10.00HWSS	
6 3320-12.00HWSS	
	585,82 €



REMOVAL





**t-sert**  
by *celesa*



# T-SERT INSERTS WITH COUNTERSINK HEAD










## Features and Benefits

- T-SERT is a solid bushing insert for universal use. Easy installation.
- T-SERT is thin walled due to synchronized internal/external threads. Thin cross sectional area allows the installation in areas of limited space and clearance material.
- T-SERT provides fully sealed threads: oil, water,...
- T-SERT is self locked insert. On installation the bottom internal threads of the insert are cold rolled to expand the mating external threads into the base material locking the insert in place. Locking mechanism is at the bottom of insert.
- Having a flange on the top of the insert will insure that the insert will have positive placement and cannot wind down into the newly repaired hole.
- This guarantees easy installation and allows a full load use of tapped hole, ensuring protection against stress and vibration.
- T-SERT inserts are installed using specific tap, countersink and installation tooling.



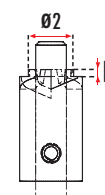
**T-SERT INSERTS WITH COUNTERSINK HEAD**
**t-sert**  
 by CELESA

**INSERTS**

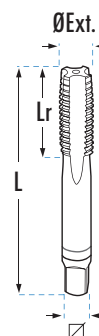
								€	
M 3 x 0.50	M5 x 0.50	4.30	6.00	0.50	4.50	3.80	3910-3.00x4.3	4,04	5
M 4 x 0.70	M6 x 0.70	6.00	7.00	0.50	5.30	5.50	3910-4.00x6.0	4,04	5
M 5 x 0.80	M7 x 0.80	7.60	8.00	0.50	6.20	7.20	3910-5.00x7.6	4,04	5
M 6 x 1.00	M8 x 1.00	9.40	9.00	0.70	7.00	8.90	3910-6.00x9.4	4,36	5
M 8 x 1.25	M10 x 1.25	11.70	12.00	0.80	8.70	11.20	3910-8.00x11.7	4,50	5
M 10 x 1.50	M12 x 1.50	14.00	14.00	1.00	10.50	13.50	3910-10.00x14.0	5,51	5
M 12 x 1.75	M14 x 1.75	16.00	16.00	1.00	12.70	15.50	3910-12.00x16.2	6,08	5

**SEAT CUTTER**

	$\varnothing$ mm	L mm	$\varnothing$ mm	$\varnothing 2$ mm	h mm		€
M 3 x 0.50	6.50	60.00	3.50	6.50	1.00	3910-3.00AVELL	72,83
M 4 x 0.70	7.50	65.00	3.80	7.50	1.00	3910-4.00AVELL	73,76
M 5 x 0.80	8.50	70.00	5.00	8.50	1.00	3910-5.00AVELL	77,96
M 6 x 1.00	9.50	70.00	5.00	9.50	1.20	3910-6.00AVELL	80,06
M 8 x 1.25	12.50	79.00	7.00	12.50	1.30	3910-8.00AVELL	81,82
M 10 x 1.50	14.50	89.00	8.00	14.50	1.50	3910-10.00AVELL	87,50
M 12 x 1.75	16.50	80.00	9.00	16.50	1.50	3910-12.00AVELL	92,66

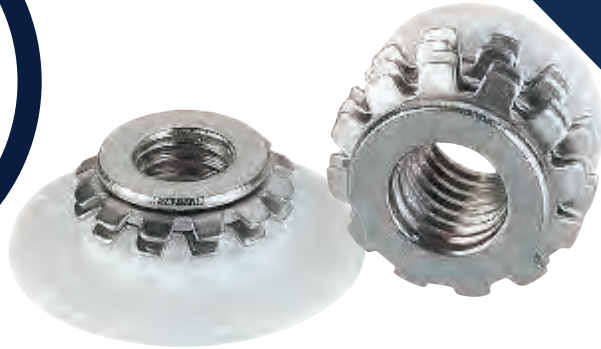

**THREADING TAP**

	$\varnothing$ Ext.	L mm	Lr mm	$\varnothing$ mm	$\varnothing$ mm		€
M 3 x 0.50	M5 x 0.50	60.00	20.00	5.08	4.00	3910-3.00I	68,13
M 4 x 0.70	M6 x 0.70	70.00	22.00	6.09	4.90	3910-4.00I	68,13
M 5 x 0.80	M7 x 0.80	68.00	22.00	7.10	4.50	3910-5.00I	72,80
M 6 x 1.00	M8 x 1.00	72.00	22.00	8.12	4.90	3910-6.00I	76,06
M 8 x 1.25	M10 x 1.25	80.00	24.00	10,12	6.00	3910-8.00I	82,60
M 10 x 1.50	M12 x 1.50	88.00	29.00	12,14	7.10	3910-10.00I	102,67
M 12 x 1.75	M14 x 1.75	90.00	30.00	14,15	8.70	3910-12.00I	113,86


**INSTALLATION TOOL**

	L mm	Lr mm	$\varnothing$ mm	$\varnothing$ mm		€
M 3 x 0.50	54.00	15.00	3.50	3.80	3910-3.00HIP	61,16
M 4 x 0.70	62.00	18.00	5.00	3.80	3910-4.00HIP	62,67
M 5 x 0.80	71.00	30.00	5.80	5.00	3910-5.00HIP	63,00
M 6 x 1.00	72.00	22.00	7.60	5.00	3910-6.00HIP	68,51
M 8 x 1.25	79.00	25.00	10.00	6.00	3910-8.00HIP	71,40
M 10 x 1.50	90.00	30.00	12.00	7.00	3910-10.00HIP	75,60
M 12 x 1.75	95.00	30.00	15.00	9.00	3910-12.00HIP	88,20

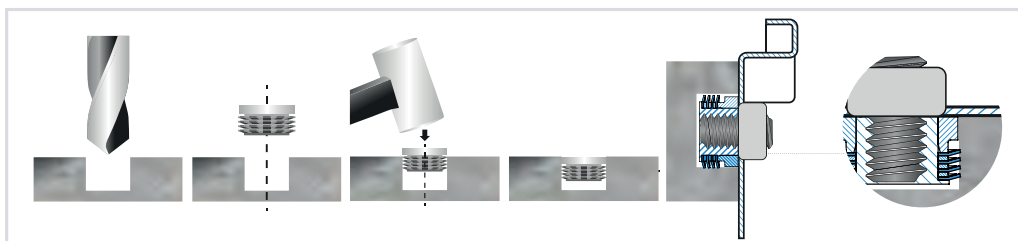




## THREADED INSERTS FOR ANCHORING IN SOLID SURFACES

### Features and benefits

- The **WALLSERT** insert allows the anchoring of threaded inserts in materials such as marble, granite, natural stone, porcelain, sintered stone, composite materials such as corian, phenolic compact panel, solid surfaces in general and a wide range related to design both outdoors and indoors.
- It is an excellent solution to easily introduce threaded anchors in ventilated facade panels, exterior cladding, interior designs such as kitchens, bathrooms, furniture... It offers a wide range of solutions.
- The innovative **WALLSERT** design allows the easy anchoring of threaded elements, supporting great efforts. Its installation is very simple: make the recommended hole on the material at the recommended depth, and insert it by applying a little pressure on the anchor, or a gentle blow with a nylon hammer. Always in solid or high-density materials.



- 2 **WALLSERT** models available, straight head and flat head.

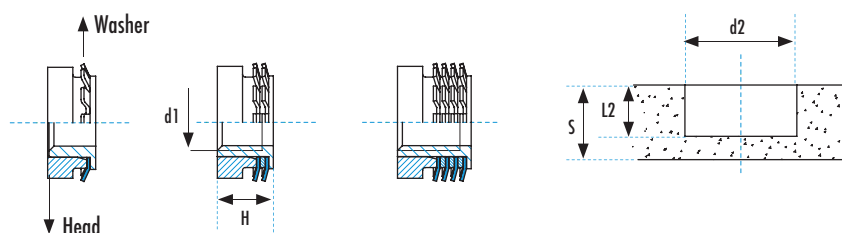
The Wallsert insert is made up of 3 parts,  
Threaded sleeve, Stainless steel AISI 303  
Washers, Stainless steel AISI 303  
Head, Nylon PA6



M

INOX  
AISI303wallsert  
by CELESA

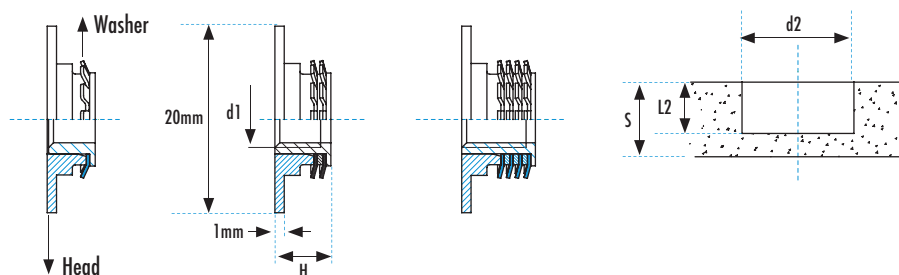
## WALLSERT INSERTS WITH STRAIGHT HEAD



d1	H mm	d2 mm	L2 mm	S mm	N° Washer	kN x wallsert		€	
M 4 x 0.70	5.00	12.00	5.50	8.00	1	1.1	3820-M4X5SS	2,44	50
M 5 x 0.80							3820-M5X5SS	2,44	50
M 6 x 1.00							3820-M6X5SS	2,44	50
M 4 x 0.70	6.00	12.00	6.50	8.50	2	2.1	3820-M4X6SS	2,67	50
M 5 x 0.80							3820-M5X6SS	2,67	50
M 6 x 1.00							3820-M6X6SS	2,67	50
M 4 x 0.70	8.50	12.00	9.00	11.00	4	3.4	3820-M4X8,5SS	2,89	50
M 5 x 0.80							3820-M5X8,5SS	2,89	50
M 6 x 1.00							3820-M6X8,5SS	2,89	50



## WALLSERT INSERTS WITH FLAT HEAD



d1	H mm	d2 mm	L2 mm	S mm	N° Washer	kN x wallsert		€	
M 4 x 0.70	5.00	12.00	4.50	7.00	1	0.7	3825-M4X5SS	2,67	50
M 5 x 0.80							3825-M5X5SS	2,67	50
M 6 x 1.00							3825-M6X5SS	2,67	50
M 4 x 0.70	6.00	12.00	5.50	7.50	2	1.9	3825-M4X6SS	2,89	50
M 5 x 0.80							3825-M5X6SS	2,89	50
M 6 x 1.00							3825-M6X6SS	2,89	50
M 4 x 0.70	8.00	12.00	8.05	10.00	4	3.0	3825-M4X8SS	3,11	50
M 5 x 0.80							3825-M5X8SS	3,11	50
M 6 x 1.00							3825-M6X8SS	3,11	50





**rivetsert**  
by *celesa*



# RIVET NUTS

## Features and Benefits

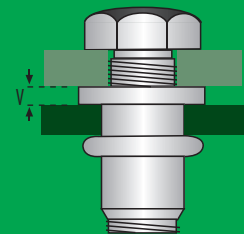
RIVETSERT Rivet nut provides strong, longlife and reliable threads into a variety of different materials including metal, plastic, fiberglass and carbon fiber. It is used in a wide array of applications in the automotive, heavy truck, and manufacturing industries as they move toward making their products both lightweight and easier to make, but guaranteeing strong threads.

Being **FLAT HEAD RIVET NUT** the most universal one, RIVETSERT Rivet nuts have been designed to work on high torques when installed in mechanic components:

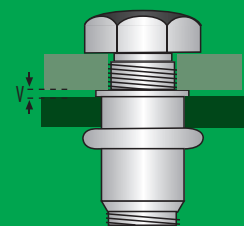
- Provides reliable threads in extra thin metal Sheets. (0,5 mm)
- Double function: Riveting two thin pieces by creating a strong thread.
- Three different heads available: **FLAT**, **REDUCED** AND **SUNK HEAD**.
- Easy and ergonomic installation by manual, automatic or pneumatic tools.

## FLAT, REDUCED & SUNK HEADS.

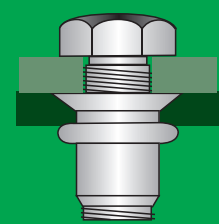
- **FLAT:** This is the most universal and useful Rivet Nut. The head provides enough surface extension for being tightened into any material unless fragile or easy breaking ones, guaranteeing high working torque. "V" space must be taken into consideration.
- **REDUCED:** These rivets have been designed to create a very strong connecting between fragile and very hard thin pieces. "V" space is insignificant but provides lower working torque than Flat Head rivets nuts.
- **SUNK:** This rivet nut provides strong and fully flat connection in any material in high thickness sheets. "V" space does not exist and working torque is high, but previous countersinking is needed.



**FLAT**



**REDUCED**



**SUNK**

## CYLINDRICAL THREADED INSERTS

rivetsert  
by CELESAM  
MF

HCS

## FLAT HEAD - SHORT TYPE

	S mm	D mm +0,07/-0,1	 Ø mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	7.20	0.80	8.50	4.70	2.00	3850-M3	6,95	100
M 4x0.70	0.50 - 2.00	5.90	6.00	8.50	0.80	10.50	6.00	5.00	3850-M4	7,10	100
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	3850-M5	7,25	100
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3850-M6	8,76	100
M 8x1.25	1.00 - 3.50	10.90	11.00	15.00	1.50	18.50	11.50	26.00	3850-M8	14,68	50
M 10x1.50	1.00 - 3.50	11.90	12.00	16.00	1.50	19.00	11.00	50.00	3850-M10	24,00	50
M 10x1.50	1.00 - 2.50	12.90	13.00	16.30	1.60	17.00	11.50	50.00	3850-M10E1	24,20	50
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3850-M12	43,88	50
M 12x1.75	1.00 - 4.00	15.90	16.00	22.00	2.00	25.00	16.00	80.00	3850-M12E1	45,09	50

\* The prices of the list are related to packs of 100 units

## REDUCED COUNTERSINK HEAD - SHORT TYPE

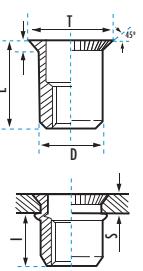
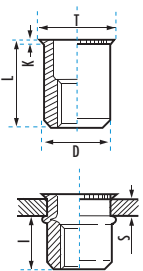
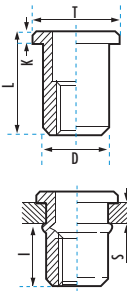
	S mm	D mm +0,07/-0,1	 Ø mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 2.00	4.90	5.00	6.00	0.50	9.00	6.20	1.00	3851-M3	6,95	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	10.50	6.50	3.00	3851-M4	7,10	100
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.00	6.00	3851-M5	7,25	100
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	3851-M6	8,76	100
M 8x1.25	1.00 - 3.00	10.90	11.00	12.00	0.60	16.50	10.00	20.00	3851-M8	14,68	100
M 10x1.50	0.50 - 3.50	11.90	12.00	13.00	0.85	18.00	13.00	32.00	3851-M10	24,00	50
M 10x1.50	1.00 - 3.00	12.90	13.00	14.00	0.70	17.70	12.00	32.00	3851-M10E1	24,20	50
M 12x1.75	0.50 - 3.50	14.90	15.00	16.50	0.85	22.50	16.00	50.00	3851-M12	43,88	50

\* The prices of the list are related to packs of 100 units

## COUNTERSINK HEAD - SHORT TYPE

	S mm	D mm +0,07/-0,1	 Ø mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	1.60 - 3.50	4.90	5.00	7.20	1.50	9.50	4.50	1.00	3852-M3	6,95	100
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	6.50	4.00	3852-M4	7,10	100
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.50	8.00	3852-M5	7,25	100
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3852-M6	8,76	100
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	10.00	26.00	3852-M8	14,68	100
M 10x1.50	1.60 - 5.00	11.90	12.00	15.00	1.50	21.00	11.50	45.00	3852-M10	24,00	50
M 10x1.50	1.60 - 5.00	12.90	13.00	16.00	1.50	21.00	11.50	45.00	3852-M10E1	24,20	50

\* The prices of the list are related to packs of 100 units





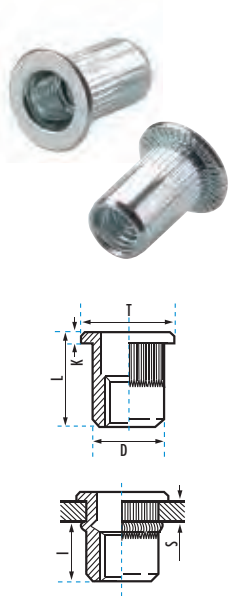
**KNURLED CYLINDRICAL THREADED INSERTS**



rivetsert  
by CELESA

Pink

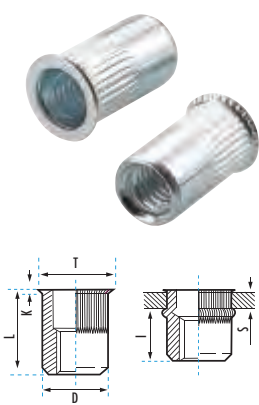
**FLAT HEAD**




	S mm	D mm +0,07/-0,1	 Ø mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	8.00	0.80	10.00	6.00	2.00	3853-M3	6,95	100
M 3x0.50	1.50 - 3.00	4.90	5.00	7.00	0.80	11.50	8.00	2.00	3853-M3E1	7,50	100
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	10.50	6.00	5.00	3853-M4	7,10	100
M 4x0.70	2.00 - 3.50	5.90	6.00	9.00	0.80	12.00	6.00	5.00	3853-M4E1	8,29	100
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	3853-M5	7,25	100
M 5x0.80	2.50 - 5.00	6.90	7.00	10.00	1.00	16.50	8.50	8.50	3853-M5E1	8,46	100
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3853-M6	8,76	100
M 6x1.00	3.00 - 5.50	8.90	9.00	12.30	1.30	19.50	10.50	15.00	3853-M6E1	11,42	100
M 8x1.25	1.00 - 3.50	10.90	11.00	14.50	1.50	18.50	11.50	26.00	3853-M8	14,68	100
M 8x1.25	3.50 - 6.00	10.90	11.00	14.50	1.50	21.00	11.50	26.00	3853-M8E1	17,76	100
M 10x1.50	1.00 - 3.50	11.90	12.00	16.00	1.70	19.00	12.50	50.00	3853-M10	24,00	50
M 10x1.50	3.00 - 6.00	11.90	12.00	16.00	1.60	24.00	18.50	50.00	3853-M10E1	25,38	50
M 10x1.50	1.00 - 4.00	12.90	13.00	17.00	1.70	21.50	13.50	50.00	3853-M10E2	24,20	50
M 10x1.50	4.00 - 6.50	12.90	13.00	17.00	1.70	24.00	13.50	50.00	3853-M10E3	28,47	50
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3853-M12	43,88	50
M 12x1.75	4.00 - 6.50	14.90	15.00	18.00	1.70	25.00	14.00	80.00	3853-M12E1	56,21	50
M 12x1.75	1.00 - 3.50	15.90	16.00	22.00	2.00	25.00	15.00	80.00	3853-M12E2	57,73	50
M 12x1.75	3.50 - 6.00	15.90	16.00	22.00	2.00	28.00	16.50	80.00	3853-M12E3	59,84	50

\* The prices of the list are related to packs of 100 units

**REDUCED COUNTERSINK HEAD**



	S mm	D mm +0,07/-0,1	 Ø mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 2.00	4.90	5.00	6.00	0.50	9.00	6.50	1.00	3854-M3	6,95	100
M 3x0.50	2.00 - 3.50	4.90	5.00	6.00	0.50	11.50	5.50	1.00	3854-M3E1	7,50	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	11.20	7.00	3.00	3854-M4	7,10	100
M 4x0.70	2.00 - 4.00	5.90	6.00	7.00	0.50	13.00	7.00	3.00	3854-M4E1	8,29	100
M 5x0.80	0.50 - 2.50	6.90	7.00	8.00	0.50	11.50	7.00	6.00	3854-M5	7,25	100
M 5x0.80	2.00 - 4.00	6.90	7.00	8.00	0.50	13.00	7.00	6.00	3854-M5E1	8,46	100
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	3854-M6	8,76	100
M 6x1.00	2.50 - 4.50	8.90	9.00	10.00	0.60	16.00	8.50	11.00	3854-M6E1	11,42	100
M 8x1.25	1.00 - 3.00	10.90	11.00	12.00	0.60	16.50	10.00	20.00	3854-M8	14,68	100
M 8x1.25	3.00 - 5.00	10.90	11.00	12.00	0.60	18.50	10.00	20.00	3854-M8E1	17,76	100
M 10x1.50	1.00 - 3.50	11.90	12.00	13.00	0.70	19.50	13.00	32.00	3854-M10	24,00	50
M 10x1.50	3.50 - 6.00	11.90	12.00	13.00	0.70	22.00	17.00	32.00	3854-M10E1	25,38	50
M 10x1.50	1.00 - 3.50	12.90	13.00	14.00	0.70	19.50	12.50	32.00	3854-M10E2	26,58	50
M 10x1.50	3.50 - 6.00	12.90	13.00	14.00	0.70	22.00	12.50	32.00	3854-M10E3	28,47	50
M 12x1.75	0.50 - 3.50	14.90	15.00	16.50	0.85	22.50	16.00	50.00	3854-M12	43,88	50
M 12x1.75	1.00 - 4.00	15.90	16.00	17.60	0.75	24.20	16.00	50.00	3854-M12E1	45,09	50
M 12x1.75	4.00 - 6.00	15.90	16.00	17.15	0.60	27.00	16.00	50.00	3854-M12E2	59,84	50

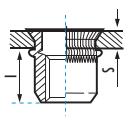
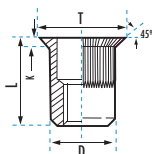
\* The prices of the list are related to packs of 100 units





## KNURLED CYLINDRICAL THREADED INSERTS

rivetsert  
by CELESAM  
MF

HCS

## COUNTERSINK HEAD



	S mm	D mm +0,07/-0,1	 T mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	1.60 - 2.50	4.90	5.00	6.60	1.05	9.50	4.50	1.00	3855-M3	8,88	100
M 3x0.50	2.50 - 4.00	4.90	5.00	6.60	1.50	10.50	4.50	1.00	3855-M3E1	10,58	100
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	6.50	4.00	3855-M4	9,10	100
M 4x0.70	3.00 - 5.00	5.90	6.00	9.00	1.50	14.00	6.00	4.00	3855-M4E1	11,60	100
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.50	8.00	3855-M5	9,13	100
M 5x0.80	3.50 - 6.00	6.90	7.00	10.00	1.50	16.50	8.50	8.00	3855-M5E1	12,75	100
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3855-M6	10,09	100
M 6x1.00	4.00 - 6.00	8.90	9.00	12.00	1.50	18.00	9.00	15.00	3855-M6E1	18,92	100
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	10.00	26.00	3855-M8	19,13	100
M 8x1.25	4.00 - 6.50	10.90	11.00	14.00	1.50	21.00	10.00	26.00	3855-M8E1	19,22	100
M 10x1.50	1.60 - 5.00	11.90	12.00	15.00	1.50	19.00	11.50	45.00	3855-M10	25,38	50
M 10x1.50	5.00 - 7.50	11.90	12.00	15.00	1.50	24.00	11.50	45.00	3855-M10E1	38,98	50
M 10x1.50	2.00 - 5.00	12.90	13.00	16.00	1.50	21.00	11.50	45.00	3855-M10E2	38,97	50
M 10x1.50	5.00 - 7.50	12.90	13.00	16.00	1.50	24.00	11.50	45.00	3855-M10E3	38,98	50
M 12x1.75	1.60 - 5.00	14.90	15.00	18.00	1.50	22.50	14.50	70.00	3855-M12	48,05	50
M 12x1.75	1.70 - 4.50	15.90	16.00	19.00	1.90	24.00	17.50	70.00	3855-M12E1	56,21	50
M 12x1.75	4.00 - 7.50	15.90	16.00	19.00	1.90	29.00	17.50	70.00	3855-M12E2	101,99	50

\* The prices of the list are related to packs of 100 units

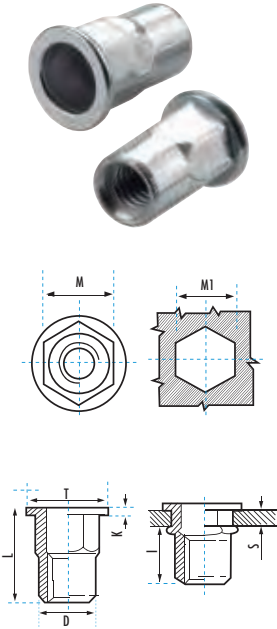








**SEMI-HEXAGONAL THREADED INSERTS**



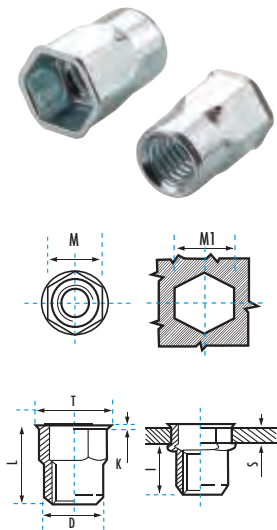
**FLAT HEAD**



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	7.20	0.80	8.50	5.50	2.00	<b>3856-M3</b>	<b>9,67</b>	100
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	11.00	6.50	5.00	<b>3856-M4</b>	<b>9,79</b>	100
M 4x0.70	2.50 - 4.00	5.90	6.00	9.00	0.80	13.50	6.50	5.00	<b>3856-M4E1</b>	<b>17,54</b>	100
M 5x0.80	0.50 - 3.00	6.90	7.00	10.00	1.00	13.00	8.00	8.50	<b>3856-M5</b>	<b>10,58</b>	100
M 5x0.80	3.00 - 5.50	6.90	7.00	10.00	0.80	16.00	11.00	8.50	<b>3856-M5E1</b>	<b>17,54</b>	100
M 6x1.00	0.50 - 4.00	8.90	9.00	12.00	1.50	16.50	8.50	15.00	<b>3856-M6</b>	<b>11,96</b>	100
M 6x1.00	3.00 - 5.50	8.90	9.00	13.00	1.50	18.50	10.50	15.00	<b>3856-M6E1</b>	<b>29,62</b>	100
M 8x1.25	1.00 - 4.00	10.90	11.00	15.90	1.50	18.20	10.50	20.00	<b>3856-M8</b>	<b>16,97</b>	100
M 8x1.25	4.00 - 6.00	10.90	11.00	15.00	1.50	20.50	12.50	26.00	<b>3856-M8E1</b>	<b>31,79</b>	100
M 10x1.50	1.00 - 3.50	11.90	12.00	17.00	1.60	19.00	12.00	50.00	<b>3856-M10</b>	<b>27,13</b>	50
M 10x1.50	0.50 - 3.50	12.90	13.00	17.00	1.80	21.00	12.00	50.00	<b>3856-M10E1</b>	<b>27,75</b>	50
M 12x1.75	2.00 - 5.00	15.90	16.00	23.00	2.20	27.50	16.50	80.00	<b>3856-M12</b>	<b>59,84</b>	50

\* The prices of the list are related to packs of 100 units

**REDUCED COUNTERSINK HEAD**



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.30 - 1.50	4.90	5.00	6.00	0.50	9.00	5.50	1.00	<b>3857-M3</b>	<b>14,63</b>	100
M 3x0.50	1.50 - 2.50	4.90	5.00	6.00	0.50	10.00	5.50	1.00	<b>3857-M3E1</b>	<b>16,80</b>	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	12.00	8.30	3.00	<b>3857-M4</b>	<b>8,46</b>	100
M 5x0.80	0.50 - 2.50	6.90	7.00	8.00	0.50	13.00	8.70	6.00	<b>3857-M5</b>	<b>9,49</b>	100
M 6x1.00	1.00 - 3.50	8.90	9.00	10.00	0.60	16.00	10.50	11.00	<b>3857-M6</b>	<b>10,70</b>	100
M 8x1.25	1.00 - 3.50	10.90	11.00	12.00	0.65	17.50	11.30	20.00	<b>3857-M8</b>	<b>14,50</b>	100
M 10x1.50	1.00 - 4.00	11.90	12.00	13.25	0.70	18.30	12.80	32.00	<b>3857-M10</b>	<b>23,26</b>	50
M 10x1.50	1.00 - 4.00	12.90	13.00	14.50	0.75	21.00	12.80	32.00	<b>3857-M10E1</b>	<b>23,58</b>	50
M 12x1.75	1.50 - 4.00	15.90	16.00	17.50	0.80	24.00	16.00	50.00	<b>3857-M12</b>	<b>59,28</b>	50

\* The prices of the list are related to packs of 100 units

**REDUCED COUNTERSINK HEAD - SPECIAL HOLE**

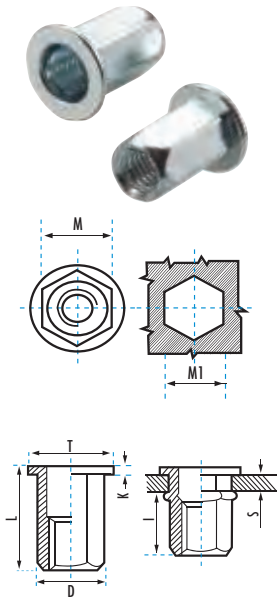



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 4x0.70	0.50 - 2.00	6.30	6.40	7.40	0.50	10.50	6.50	3.00	<b>3858-M4</b>	<b>9,67</b>	100
M 5x0.80	0.50 - 2.50	7.10	7.20	8.20	0.50	12.00	7.50	6.00	<b>3858-M5</b>	<b>11,49</b>	100
M 6x1.00	1.00 - 3.00	9.50	9.60	10.60	0.60	15.00	9.20	11.00	<b>3858-M6</b>	<b>12,38</b>	100
M 8x1.25	1.00 - 3.50	10.50	10.60	11.60	0.60	16.50	10.50	20.00	<b>3858-M8</b>	<b>17,10</b>	100

\* The prices of the list are related to packs of 100 units

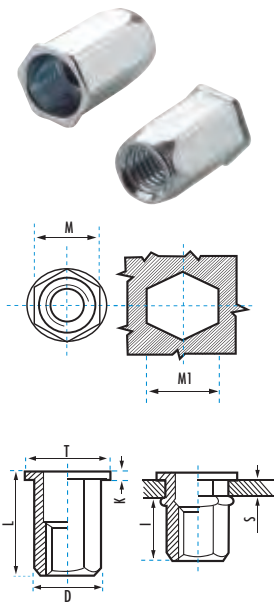
**HEXAGONAL THREADED INSERTS**

**M**  
**MF**

**HCS**
**FLAT HEAD**


	S mm	M mm	M1 mm	T mm	K mm	L mm	I mm	 Nm		€/100 Unit	
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	11.00	6.50	5.00	<b>3859-M4</b>	<b>9,67</b>	100
M 4x0.70	2.00 - 5.00	5.90	6.00	9.00	0.80	13.50	6.50	5.00	<b>3859-M4E1</b>	<b>15,71</b>	100
M 5x0.80	0.50 - 3.00	6.90	7.00	10.00	1.00	14.00	8.00	8.50	<b>3859-M5</b>	<b>10,58</b>	100
M 5x0.80	3.00 - 6.00	6.90	7.00	10.00	1.00	16.50	8.00	8.50	<b>3859-M5E1</b>	<b>16,62</b>	100
M 6x1.00	0.50 - 3.00	8.90	9.00	13.00	1.20	16.00	9.50	15.00	<b>3859-M6</b>	<b>11,96</b>	100
M 6x1.00	3.00 - 5.00	8.90	9.00	13.00	1.50	19.50	8.50	15.00	<b>3859-M6E1</b>	<b>17,54</b>	100
M 8x1.25	1.00 - 3.50	10.90	11.00	16.00	1.50	17.00	9.50	26.00	<b>3859-M8</b>	<b>16,97</b>	100
M 8x1.25	3.50 - 6.00	10.90	11.00	15.00	1.50	21.50	10.50	26.00	<b>3859-M8E1</b>	<b>22,97</b>	100
M 10x1.50	1.00 - 3.50	11.90	12.00	18.00	1.70	21.00	13.50	50.00	<b>3859-M10</b>	<b>27,13</b>	50
M 10x1.50	1.00 - 3.50	12.90	13.00	18.00	1.70	21.00	13.50	50.00	<b>3859-M10E1</b>	<b>27,75</b>	50
M 10x1.50	3.50 - 6.50	12.90	13.00	17.00	1.50	24.00	14.50	50.00	<b>3859-M10E2</b>	<b>42,67</b>	50
M 12x1.75	1.00 - 3.50	14.90	15.00	19.00	2.00	24.30	16.00	80.00	<b>3859-M12</b>	<b>69,51</b>	50
M 12x1.75	2.00 - 5.00	15.90	16.00	23.00	2.00	27.00	16.50	80.00	<b>3859-M12E1</b>	<b>59,84</b>	50

\* The prices of the list are related to packs of 100 units

**REDUCED COUNTERSINK HEAD**


	S mm	M mm	M1 mm	T mm	K mm	L mm	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	6.00	0.45	8.50	5.00	1.00	<b>3860-M3</b>	<b>14,63</b>	100
M 4x0.70	0.50 - 2.50	5.90	6.00	7.00	0.50	11.00	6.70	3.00	<b>3860-M4</b>	<b>8,46</b>	100
M 4x0.70	2.50 - 5.00	5.90	6.00	7.00	0.50	13.50	6.70	3.00	<b>3860-M4E1</b>	<b>12,70</b>	100
M 5x0.80	0.50 - 3.00	6.90	7.00	8.00	0.50	14.50	9.00	6.00	<b>3860-M5</b>	<b>9,49</b>	100
M 5x0.80	3.00 - 5.00	6.90	7.00	8.00	0.50	16.00	9.00	6.00	<b>3860-M5E1</b>	<b>13,59</b>	100
M 6x1.00	1.00 - 3.50	8.90	9.00	10.00	0.60	16.00	10.00	11.00	<b>3860-M6</b>	<b>10,70</b>	100
M 6x1.00	3.50 - 6.00	8.90	9.00	10.00	0.60	18.00	10.00	11.00	<b>3860-M6E1</b>	<b>14,50</b>	100
M 8x1.25	1.00 - 4.00	10.90	11.00	12.00	0.65	18.00	11.50	20.00	<b>3860-M8</b>	<b>14,50</b>	100
M 8x1.25	4.00 - 6.00	10.90	11.00	12.00	0.65	20.00	11.50	20.00	<b>3860-M8E1</b>	<b>21,27</b>	100
M 10x1.50	0.50 - 3.50	11.90	12.00	14.50	1.00	19.00	12.50	32.00	<b>3860-M10</b>	<b>23,26</b>	50
M 10x1.50	1.00 - 3.50	12.90	13.00	14.50	0.75	19.00	12.50	32.00	<b>3860-M10E1</b>	<b>23,58</b>	50
M 10x1.50	3.50 - 6.00	12.90	13.00	14.50	0.75	23.50	14.50	32.00	<b>3860-M10E2</b>	<b>37,47</b>	50
M 12x1.75	1.00 - 4.00	14.90	15.00	17.50	1.10	22.50	-	50.00	<b>3860-M12</b>	<b>75,55</b>	50
M 12x1.75	1.00 - 5.00	15.90	16.00	17.80	1.10	25.00	-	50.00	<b>3860-M12E1</b>	<b>74,94</b>	50
M 12x1.75	5.00 - 7.50	15.90	16.00	17.80	1.10	28.00	-	50.00	<b>3860-M12E2</b>	<b>74,94</b>	50

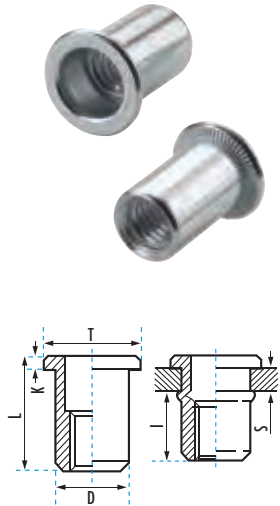
\* The prices of the list are related to packs of 100 units



**CYLINDRICAL THREADED INSERTS**



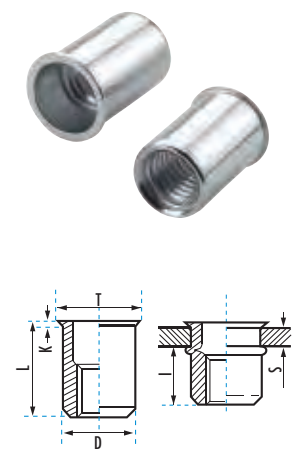
**FLAT HEAD**



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/Unit	
M 3x0.50	0.30 - 1.80	4.90	5.00	8.00	0.75	9.00	5.50	2.00	<b>3950-M3</b>	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	8.50	0.80	10.50	6.00	5.00	<b>3950-M4</b>	0,29	25
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	<b>3950-M5</b>	0,32	25
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	<b>3950-M6</b>	0,54	25
M 8x1.25	1.00 - 3.50	10.90	11.00	15.00	1.50	18.50	11.50	26.00	<b>3950-M8</b>	0,80	25
M 10x1.50	0.80 - 3.50	11.90	12.00	16.00	1.70	19.00	10.50	50.00	<b>3950-M10</b>	-	1
M 10x1.50	1.00 - 4.00	12.90	13.00	17.00	1.60	21.00	12.50	50.00	<b>3950-M10E1</b>	1,25	1
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	<b>3950-M12</b>	-	1
M 12x1.75	1.00 - 4.00	15.90	16.00	23.00	2.00	26.00	16.50	80.00	<b>3950-M12E1</b>	-	1

- Check price and availability

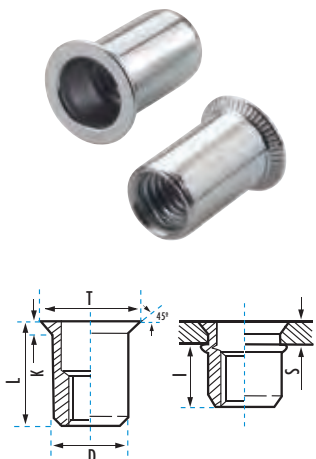
**REDUCED COUNTERSINK HEAD**



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/Unit	
M 3x0.50	0.30 - 1.50	4.90	5.00	5.60	0.35	8.50	5.50	1.00	<b>3951-M3</b>	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	10.50	6.50	3.00	<b>3951-M4</b>	0,26	25
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.00	6.00	<b>3951-M5</b>	0,30	25
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	<b>3951-M6</b>	0,50	25
M 8x1.25	0.50 - 3.00	10.90	11.00	12.00	0.50	16.50	10.50	20.00	<b>3951-M8</b>	0,73	25
M 10x1.50	0.80 - 3.00	11.90	12.00	13.50	0.80	18.00	10.20	32.00	<b>3951-M10</b>	-	1
M 10x1.50	1.00 - 3.50	12.90	13.00	14.10	0.60	19.50	11.50	32.00	<b>3951-M10E1</b>	1,22	1
M 12x1.75	0.5 - 3.5	14.90	15.00	16.50	0.85	22.50	16.00	49.00	<b>3951-M12</b>	-	1

- Check price and availability

**COUNTERSINK HEAD**



	S mm	D mm +0,07/-0,1	 Ø +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/Unit	
M 3x0.50	1.70 - 3.00	4.90	5.00	8.00	1.50	11.50	5.50	1.00	<b>3952-M3</b>	-	25
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	7.50	4.00	<b>3952-M4</b>	0,35	25
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.80	8.00	<b>3952-M5</b>	0,39	25
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	<b>3952-M6</b>	0,56	25
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	12.00	26.00	<b>3952-M8</b>	0,84	25
M 10x1.50	1.00 - 4.00	11.90	12.00	15.00	1.50	18.00	10.50	45.00	<b>3952-M10</b>	-	1
M 10x1.50	2.00 - 5.00	12.90	13.00	16.00	1.50	21.00	13.00	45.00	<b>3952-M10E1</b>	1,25	1




- Check price and availability

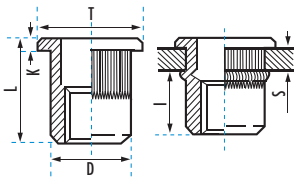
INOX

KNURLED CYLINDRICAL THREADED INSERTS




rivetsert by CELESA Pink

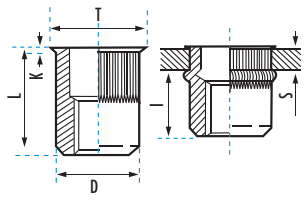
FLAT HEAD

	S mm	D mm +0,07/-0,1	$\phi$ +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm			€/Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	7.00	0.80	10.00	5.00	2.00	3953-M3	-	25
M 3x0.50	1.50 - 3.00	4.90	5.00	8.00	0.75	10.00	5.50	2.00	3953-M3E1	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	10.50	6.50	5.00	3953-M4	0,29	25
M 4x0.70	2.50 - 4.00	5.90	6.00	9.00	0.75	12.50	6.50	5.00	3953-M4E1	-	25
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	8.00	8.50	3953-M5	0,32	25
M 5x0.80	2.00 - 4.00	6.90	7.00	10.00	1.00	16.00	8.00	8.50	3953-M5E1	-	25
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3953-M6	0,54	25
M 6x1.00	3.50 - 6.00	8.90	9.00	13.00	1.50	19.00	9.00	15.00	3953-M6E1	0,74	25
M 8x1.25	1.00 - 3.50	10.90	11.00	14.50	1.50	18.50	11.50	26.00	3953-M8	0,80	25
M 8x1.25	3.00 - 6.00	10.90	11.00	14.50	1.50	21.00	11.50	26.00	3953-M8E1	1,02	25
M 10x1.50	0.80 - 3.50	11.90	12.00	16.00	1.70	19.00	10.50	50.00	3953-M10	1,48	1
M 10x1.50	3.50 - 6.00	11.90	12.00	16.00	1.70	22.00	10.50	50.00	3953-M10E1	-	1
M 10x1.50	1.00 - 4.00	12.90	13.00	17.00	1.60	21.00	13.50	50.00	3953-M10E2	1,25	1
M 10x1.50	3.00 - 6.00	12.90	13.00	19.00	2.00	26.00	14.50	50.00	3953-M10E3	1,77	1
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3953-M12	-	1
M 12x1.75	4.00 - 6.50	14.90	15.00	18.00	1.70	25.00	14.00	80.00	3953-M12E1	-	1
M 12x1.75	1.00 - 4.00	15.90	16.00	23.00	2.00	25.00	16.50	80.00	3953-M12E2	2,11	1
M 12x1.75	3.50 - 7.00	15.90	16.00	23.00	1.60	29.00	16.50	80.00	3953-M12E3	-	1






REDUCED COUNTERSINK HEAD

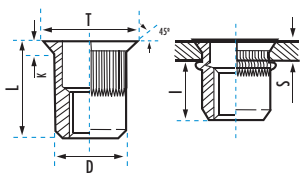
	S mm	D mm +0,07/-0,1	$\phi$ +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm			€/Unit	
M 3x0.50	0.50 - 2.00	4.90	5.00	6.00	0.40	9.00	5.50	1.00	3954-M3	-	25
M 3x0.50	1.50 - 2.50	4.90	5.00	5.80	0.50	10.00	5.50	1.00	3954-M3E1	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	10.50	6.50	3.00	3954-M4	0,26	25
M 4x0.70	2.50 - 4.00	5.90	6.00	7.00	0.50	12.50	6.50	3.00	3954-M4E1	0,51	25
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.20	6.00	3954-M5	0,30	25
M 5x0.80	2.50 - 4.50	6.90	7.00	8.00	0.50	13.00	6.80	6.00	3954-M5E1	0,62	25
M 6x1.00	0.50 - 3.00	8.90	9.00	10.00	0.60	14.00	9.00	11.00	3954-M6	0,50	25
M 6x1.00	3.00 - 6.00	8.90	9.00	10.00	0.50	17.50	8.60	11.00	3954-M6E1	0,77	25
M 8x1.25	1.00 - 3.50	10.90	11.00	12.00	0.50	16.50	10.50	20.00	3954-M8	0,73	25
M 8x1.25	3.50 - 6.00	10.90	11.00	12.00	0.65	19.50	10.00	20.00	3954-M8E1	1,08	25
M 10x1.50	0.80 - 3.00	11.90	12.00	13.50	0.80	18.00	11.20	32.00	3954-M10	1,48	1
M 10x1.50	2.00 - 4.50	11.90	12.00	13.50	0.80	19.50	11.20	32.00	3954-M10E1	-	1
M 10x1.50	1.00 - 3.50	12.90	13.00	14.00	0.70	17.70	10.70	32.00	3954-M10E2	1,48	1
M 10x1.50	3.00 - 6.00	12.90	13.00	14.00	0.50	23.00	13.30	32.00	3954-M10E3	-	1
M 12x1.75	0.50 - 3.50	14.90	15.00	16.50	0.85	22.50	16.00	50.00	3954-M12	-	1
M 12x1.75	1.00 - 4.00	15.90	16.00	17.60	0.75	24.20	14.00	50.00	3954-M12E1	2,11	1
M 12x1.75	4.00 - 6.00	15.90	16.00	17.50	0.60	27.00	16.00	50.00	3954-M12E2	-	1



3952

COUNTERSINK HEAD

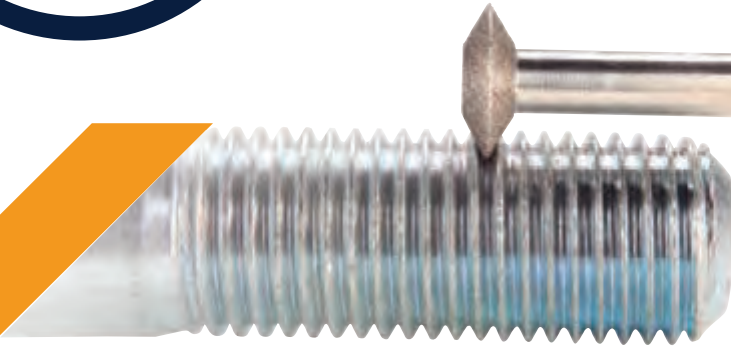
	S mm	D mm +0,07/-0,1	$\phi$ +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm			€/Unit	
M 3x0.50	1.70 - 3.00	4.90	5.00	8.00	1.50	11.50	11.50	1.00	3955-M3	0,35	25
M 3x0.50	3.00 - 4.00	4.90	5.00	8.00	1.50	12.50	11.50	1.00	3955-M3E1	-	25
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	7.50	4.00	3955-M4	0,37	25
M 4x0.70	3.50 - 5.00	5.90	6.00	9.00	1.50	13.00	7.50	4.00	3955-M4E1	0,49	25
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.00	8.00	3955-M5	0,39	25
M 5x0.80	4.00 - 6.00	6.90	7.00	10.00	1.50	15.00	7.00	8.00	3955-M5E1	0,61	25
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3955-M6	0,56	25
M 6x1.00	4.50 - 6.50	8.90	9.00	12.00	1.50	19.00	9.00	15.00	3955-M6E1	0,95	25
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	12.00	26.00	3955-M8	0,84	25
M 8x1.25	3.50 - 6.50	10.90	11.00	13.70	1.50	21.00	12.00	26.00	3955-M8E1	1,15	25
M 10x1.50	1.50 - 4.00	11.90	12.00	15.00	1.50	18.00	10.50	45.00	3955-M10	-	1
M 10x1.50	3.00 - 6.00	11.90	12.00	15.00	1.50	20.00	10.50	45.00	3955-M10E1	-	1
M 10x1.50	2.00 - 5.00	12.90	13.00	16.00	1.50	21.00	13.00	45.00	3955-M10E2	1,25	1
M 10x1.50	3.50 - 6.50	12.90	13.00	15.70	1.60	25.00	14.50	45.00	3955-M10E3	2,02	1
M 12x1.75	1.60 - 5.00	14.90	15.00	18.00	1.50	22.50	14.50	50.00	3955-M12	-	1
M 12x1.75	1.50 - 4.50	15.90	16.00	19.00	1.70	24.00	14.00	50.00	3955-M12E1	2,11	1
M 12x1.75	4.00 - 7.50	15.90	16.00	19.00	1.90	29.00	17.50	50.00	3955-M12E2	-	1



- Check price and availability

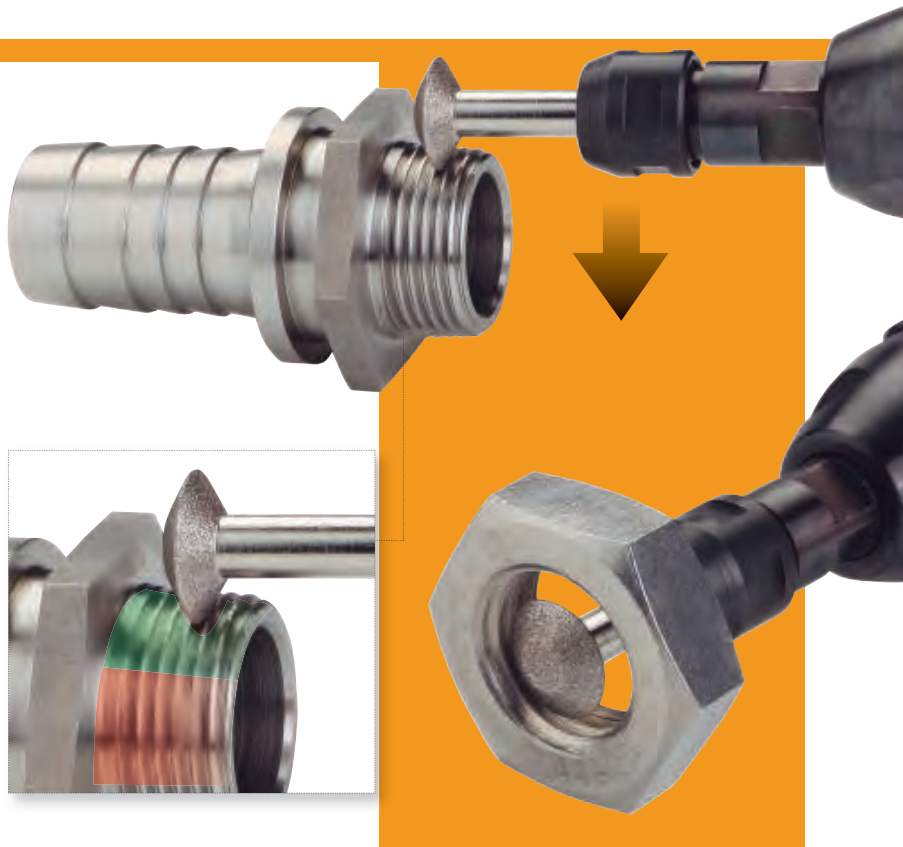


**ROTA  
HREAD®**  
by *celesa*

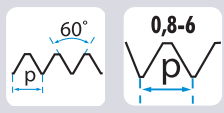


## THREAD RESTORING CBN ROTARY BURRS

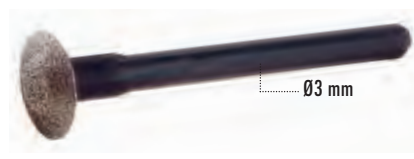
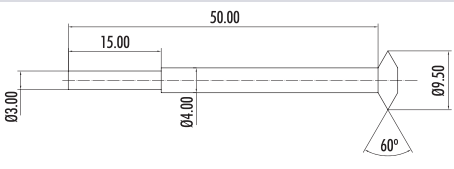
- Start tooling in good thread area (GREEN) and work into damaged area (RED). Moving along the thread profile over damaged area (RED) staying in thread path with light tool pressure. Let the tool do the Work.
- Keep tool clean & use cutting oil in order to improve performance and tool life.
- Repeat steps on needed areas.



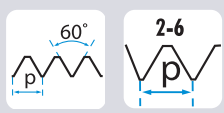
### THREAD RESTORING CBN ROTARY BURRS



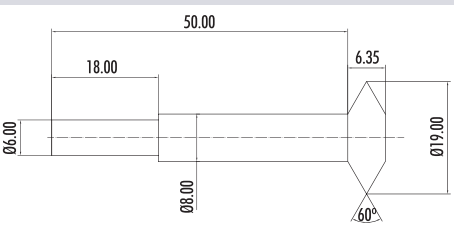
- This Tool restores both internal and external threads precisely.
- **Limitation:** Minimal pitch 0.80mm or 28tpi. In case of internal threads, minimal size to be restored is M12 or 1/2".



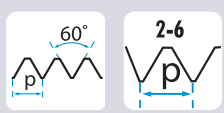
Ref. LRR1  
55,86 €



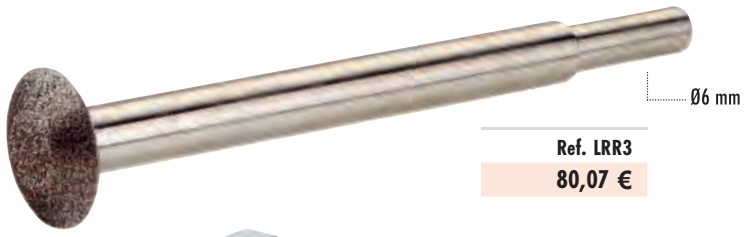
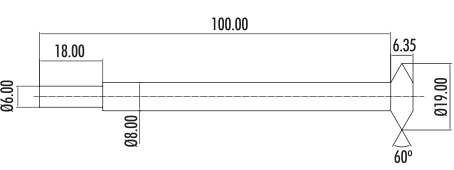
- This Tool restores both internal and external threads precisely. Specially designed for large pitches
- **Limitation:** Minimal pitch 2mm or 12tpi. In case of internal threads, minimal size to be restored is M22 or 7/8.



Ref. LRR2  
70,76 €



- This Tool restores both internal and external threads precisely. Specially designed for large pitches. LONG REACH TOOL.
- **Limitation:** Minimal pitch 2mm or 12tpi. In case of internal threads, minimal size to be restored is M22 or 7/8.



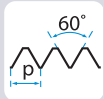
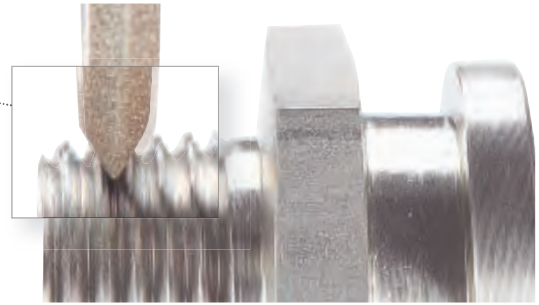
Ref. LRR3  
80,07 €

Pink

**ROTA  
THREAD**<sup>®</sup>  
by CALPESA

ROTA  
THREAD  
by CALPESA

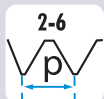
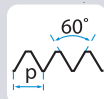
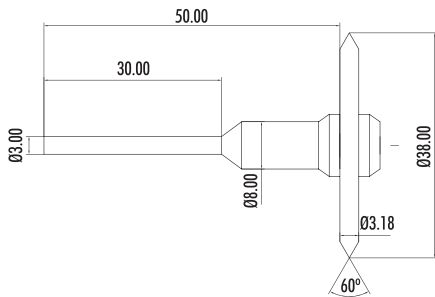
Pink



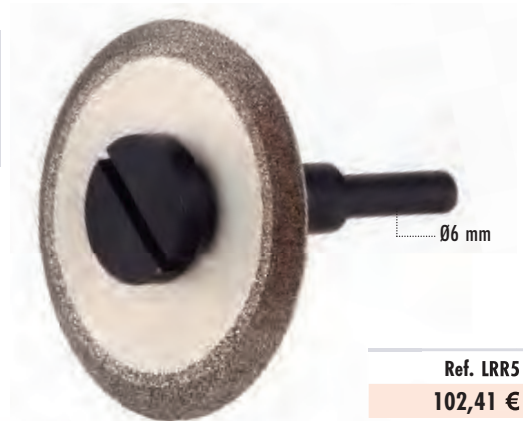
- This Tool restores both internal and external threads precisely. The 38mm diameter offers clearance when working on the threads that are damaged closer to the head of the fasteners.
- **Limitation:** Minimal pitch 0.80mm or 28tpi



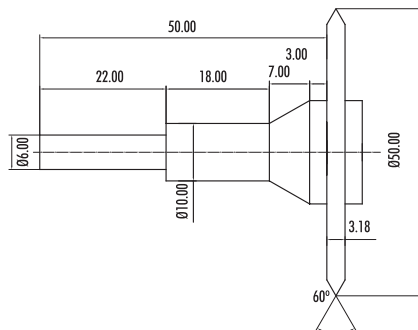
Ref. LRR4  
85,65 €



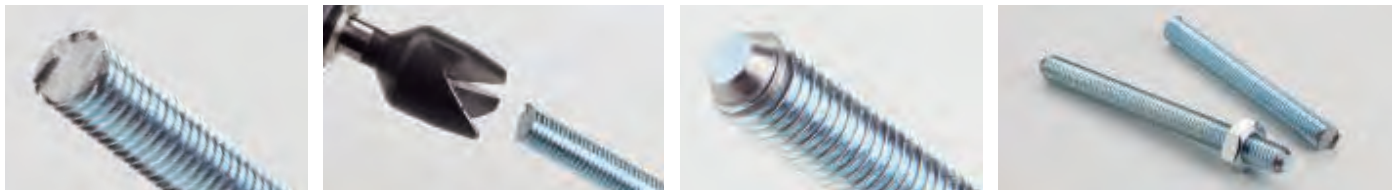
- This Tool restores both internal and external threads precisely. The 50mm diameter offers clearance when working on the threads that are damaged closer to the head of the fasteners.
- **Limitation:** Minimal pitch 2mm or 12tpi



Ref. LRR5  
102,41 €



## EXTERNAL COUNTERSINKS FOR RESTORING STARTING THREADS



## External Countersink

These external countersinks quickly repair starting damaged thread of screws and threaded rods. Those starting threads are usually hit or cut off with a die grinder so burr generated in those threads do not let the nut start. These countersinks shear off those threads and chamfer the thread 60° in order to make a smooth start of the nut.

- This tool does not over heat or spark.
- This tool must be used in low cutting speed. (Max 500RPM).
- Cut magic metalworking fluid makes operation easier.
- Use hand power Tools, especially battery mode ones.

HSS



AVEXT

MIN.-MAX.		L <sub>1</sub> mm		€
M8-M18	1/4"	75	AVEXT	28,11

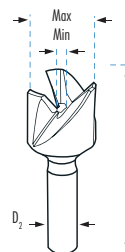
AVMDEXT

MIN.-MAX.			€
5-25 mm	1/4"	AVMDEXT	32,36

INOX

SOLID  
CARBIDE

HSS



AV

MIN.-MAX.	D <sub>1</sub> mm	D <sub>2</sub> mm	L <sub>1</sub> mm		€
M3-M8	3,0	8,0	55	AVX1-60	44,38
M6-M14	6,0	10,0	60	AVX2-60	88,11
M10-M27	10,0	13,0	75	AVX3-60	132,04

## THREAD RESTORING FILES

Easy  
to use

Do not buy, just repair.

**Pitch identification:** If you are not sure of the thread size, match up the bolt thread to one of the file sides. Some of the thread sizes may appear similar, so double-check with the file firmly engaged with the section of good threads placed in front of a bright light to highlight that the file is correct for the thread.

**Reparation:** Once you are sure you have the correct side, gently stoke the threads just like doing a finish filing job on a piece of metal. Not too hard and not too soft. Don't worry about cutting too deep or flattening the cylindrical bolt shape, the file limits the cut depth. Start with the good section of thread just next to the bugged part and start filing around the bolt toward the known bad section. After one file pass, spritz some CUT MAGIC fluid and try the nut for smooth spin-on. If it binds don't force it, make another pass instead.

For external threads

Metric pitches:

0,75 - 1,00 - 1,25 - 1,50 - 1,75 - 2,00 - 2,50 - 3,00



Ref. LR1

40,09 €



For external and internal threads

Metric pitches:

0,80 - 1,00 - 1,25 - 1,50 - 1,75 - 2,00 - 2,50 - 3,00



Ref. LR2

60,20 €



**silbertool®**  
by *celesa*

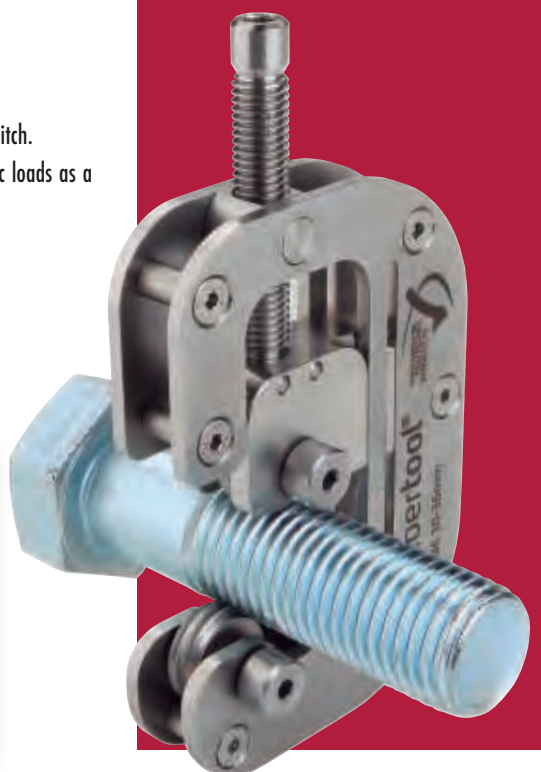
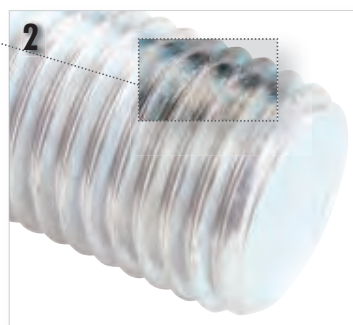
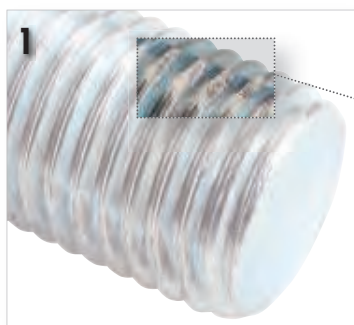


# EXTERNAL THREAD REPAIR ROLLING TOOL

Silbertool repairing tool is the perfect solution for extremely damaged threads where removal of material (like happens with threading dies or other external repairing tools) becomes the thread irreversibly weak and render it useless right away. A wide range of rollers offers versatility because just replacing rollers plenty of different sizes could be repaired. Installing one pitch, many threads in that pitch are workable. For Example M6X1, M8X1, M10X1, M12X1, M14X1, etc... versatile, easy... very useful.

## Advantages

- External threads are repaired without removal of material so the thread does not become weaker.
- Only one Silbertool® Thread - Repair Tools is needed to repair any pitch. Each roller repair one pitch.
- It has been proven that a thread repaired with Silbertool® withstands the same static and dynamic loads as a new undamaged thread. Moreover, they showed a higher fatigue endurance limit.
- During repairing process the surface of the thread becomes perfectly clean; without any burr.
- Use Cut Magic metalworking fluid in order to reduce repairing effort.



**NON-INVASIVE RESTORING**

**EXTERNAL THREAD REPAIR ROLLING TOOL**


Ref. R16



M / MF			R16
M5 - M16	0,50 - 2,00	R16	€ / Unit <b>394,18</b>

Rollers not included.



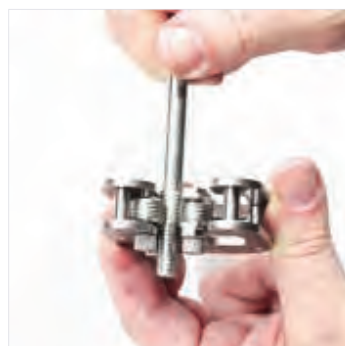
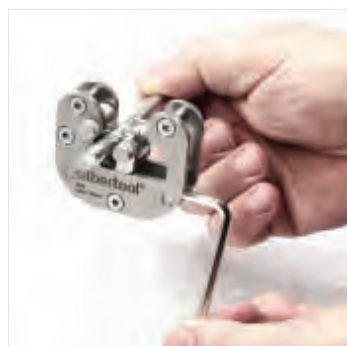
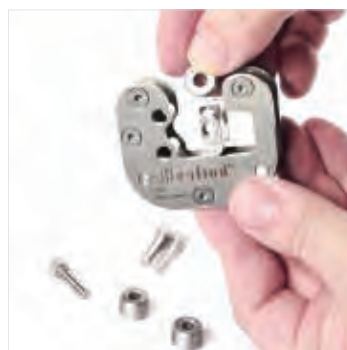
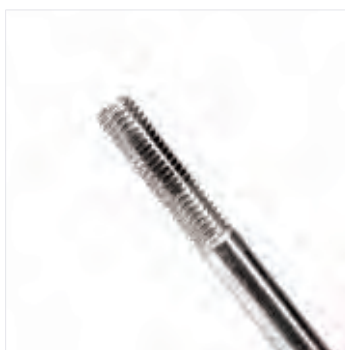
Ref. R160175



Ref. R160125

**SET OF ROLLERS**

M / MF			€ / Unit		€ / Unit
M5 - M16	0.50	<b>R160050</b>	<b>84,25</b>	<b>R16I0050</b>	<b>112,42</b>
M5 - M16	0.75	<b>R160075</b>	<b>84,25</b>	<b>R16I0075</b>	<b>112,42</b>
M5 - M16	0.80	<b>R160080</b>	<b>84,25</b>	<b>R16I0080</b>	<b>112,42</b>
M5 - M16	1.00	<b>R160100</b>	<b>84,25</b>	<b>R16I0100</b>	<b>112,42</b>
M5 - M16	1.25	<b>R160125</b>	<b>84,25</b>	<b>R16I0125</b>	<b>112,42</b>
M5 - M16	1.50	<b>R160150</b>	<b>84,25</b>	<b>R16I0150</b>	<b>112,42</b>
M5 - M16	1.75	<b>R160175</b>	<b>84,25</b>	<b>R16I0175</b>	<b>112,42</b>
M5 - M16	2.00	<b>R160200</b>	<b>84,25</b>	<b>R16I0200</b>	<b>112,42</b>



**EXTERNAL THREAD REPAIR ROLLING TOOL**



Ref. R360250



**SET OF ROLLERS**

M / MF			€/ Unit		€/ Unit
M10 - M36	0.50	R360050	128,37	R36I0050	154,10
M10 - M36	0.75	R360075	128,37	R36I0075	154,10
M10 - M36	1.00	R360100	128,37	R36I0100	154,10
M10 - M36	1.25	R360125	128,37	R36I0125	154,10
M10 - M36	1.50	R360150	128,37	R36I0150	154,10
M10 - M36	1.75	R360175	128,37	R36I0175	154,10
M10 - M36	2.00	R360200	128,37	R36I0200	154,10
M10 - M36	2.50	R360250	128,37	R36I0250	154,10
M10 - M36	3.00	R360300	128,37	R36I0300	154,10
M10 - M36	3.50	R360350	128,37	R36I0350	154,10
M10 - M36	4.00	R360400	128,37	R36I0400	154,10



Ref. R36

M / MF			€/ Unit
M10 - M36	0.50 - 4.00	R36	900,12

Rollers not included.



Ref. R600050



**SET OF ROLLERS**

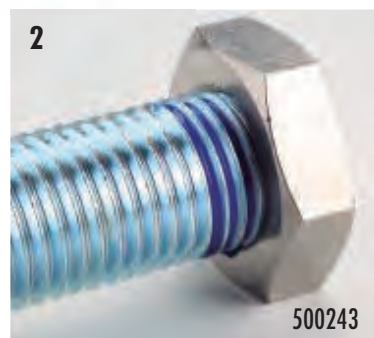
M / MF			€/ Unit		€/ Unit
M10 - M60 - M110	0.50	R600050	231,27	R60I0050	257,00
M10 - M60 - M110	0.80	R600080	231,27	R60I0080	257,00
M10 - M60 - M110	1.00	R600100	231,27	R60I0100	257,00
M10 - M60 - M110	1.25	R600125	231,27	R60I0125	257,00
M10 - M60 - M110	1.50	R600150	231,27	R60I0150	257,00
M10 - M60 - M110	1.75	R600175	231,27	R60I0175	257,00
M10 - M60 - M110	2.00	R600200	231,27	R60I0200	257,00
M10 - M60 - M110	2.50	R600250	231,27	R60I0250	257,00
M10 - M60 - M110	3.00	R600300	231,27	R60I0300	257,00



Ref. R60

M / MF			€/ Unit
M10 - M60	0.50 - 3.00	R60	1.157,37
M50 - M110	0.50 - 3.00	R110	1.800,50

Rollers not included.



## Anaerobic adhesives and sealants. Threadlocking

This product has been specially designed for Industrial threadlocking, retaining and sealing of threaded connections in order to get higher mechanical resistance.

### Advantages

- The characteristic feature of POWERLOCK is the curing in contact with metal while deprived of air.
- It provides a shock- and vibration resistant joint with an excellent resistance to chemicals and solvents.
- Due to its liquid consistency POWERLOCK completely fills the gaps, thus giving protection against leakage and fretting corrosion.
- POWERLOCK is simple, easy to use and very economical. Handling strength is reached within a few minutes and final strength within a few hours at room temperature.
- POWERLOCK is suitable for all metals and certain plastics.

### Main applications

- For locking, fastening and sealing of screw connections from M5 to M36.
- For reliable retaining of bearings, bushings, bolts and other press or slip fitted connections.
- For sealing and locking hydraulic and pneumatic pipe connections.

### Active and passive materials

#### Active Materials (Fast curing)

- Bronze
- Iron
- Cooper
- Brass
- Steel

#### Passive Materials (Slower curing)

- High-alloyed steel
- Aluminium, nickel, zinc, gold
- Oxid layers

500222



	Colour	Application range	Viscosity at +25°C	Max. gap filling	Breakaway strength	Prevailing strength	Shear Strength (N/mm <sup>2</sup> )	Handling strength at room temperature	Final strength at room temperature	Operation temperature	€
500222 *		M1-M36	1.000 mPa-s	0,20 mm	4-8 Nm	2-4 Nm	3-5 N/mm <sup>2</sup> (435-725 psi)	10-20 min.	3-6 h.	-60 - +150°C (-76 - +302°F)	42,99
500243 **		M1-M36	2.000 - 7.000 mPa-s	0,25 mm	17-22 Nm	8-12 Nm	9-13 N/mm <sup>2</sup> (1.305-1.885 psi)	10-20 min.	1-3 h.	-60 - +150°C (-76 - +302°F)	42,99
500270 ***		M1-M20	500 mPa-s	0,15 mm	28-35 Nm	50-65 Nm	15-20 N/mm <sup>2</sup> (2.175-2.900 psi)	10-20 min.	3-6 h.	-60 - +150°C (-76 - +302°F)	42,99

\* Low Strength (easy disassembling)

\*\* Medium Strength (disassembling with regular tools)

\*\*\* High strength (disassembling only with heat)



### Cleaning of bonding surfaces before using adhesives and sealants

Surface Cleaner is used for cleaning and degreasing of surfaces to be joined or sealed with POWERLOCK adhesives and sealants. It cleans and evaporates leaving no residue.



500001

16,01 €



## Hydraulic and pneumatic threaded pipe systems sealant

POWERLOCK pipe and thread sealing types have especially been formulated to prevent the escape of gaseous and liquid substances and they seal up to burst point and resist almost all substances used in industry

### Advantages

- The use of POWERLOCK prevents clogging and contamination of fittings as well as the blockage of hydraulic and pneumatic valves as may occur with conventional sealing methods (e.g. hemp or Teflon tape).
- Connections sealed with POWERLOCK are protected against seizing and fretting corrosion. The available different strength grades allow dismantling even after years. POWERLOCK Pipe
- POWERLOCK Pipe and thread sealing is the best solution to create fully sealed threaded connections which totally avoid any leakage.

### Recommendations for User

#### Application

POWERLOCK is ready for use and should be applied evenly direct from the bottle/tube with the dispensing tip (avoid direct contact of dispensing tip with metal). On press fitted parts and larger cylindrical assemblies a thin and uniform layer should be applied on both surfaces. In the case of threaded blind holes fill sufficient quantity in the bore hole. On screws and bolts, apply POWERLOCK around the thread.

Do not pour back into the bottle any POWERLOCK fluid which had contact with metal; even smallest metal particles will cause the content of the bottle to cure.



500542

	Colour	Application range	Viscosity at +25°C	Max. gap filling	Breakaway strength	Prevailing strength	Shear Strength (N/mm <sup>2</sup> )	Handling strength at room temperature	Final strength at room temperature	Operation temperature	€
500542 		G 1/8"-3/4"	500 mPa·s	0,15 mm	12-15 Nm	18-22 Nm	8-12 N/mm <sup>2</sup> (1.160-1.740 psi)	10-20 min.	2-4 h.	-60 - +150°C (-76 - +302°F)	42,99
500572 ** 		G 1/8"-3"	17.000-50.000 mPa·s	0,40 mm	7-10 Nm	2-4 Nm	4-6 N/mm <sup>2</sup> (580-870 psi)	20-40 min.	5-10 h.	-60 - +150°C (-76 - +302°F)	25,84

\*\* PTFE

\* Material safety data sheet available.



<b>FREE</b>	Free running insert	<b>...X</b>	Group Code	<b>HSS</b>	High Speed Steel STI Tap
<b>LOCK</b>	Screw Locking Insert	<b>1.0D</b>	Installed Insert Length = $\emptyset \times 1.0$	<b>HSS</b>	HSS STI Tap M/MF, UNC, UNF, 8 UN, NPT
<b>M/MF</b>	Metric course and metric fine	<b>1.5D</b>	Installed Insert Length = $\emptyset \times 1.5$	<b>HSS</b>	HSS STI Tap BSW, BSF, BSP, BSB
<b>UNC</b>	Unified National Course	<b>2.0D</b>	Installed Insert Length = $\emptyset \times 2.0$	<b>HSS</b>	HSS STI Tap BA
<b>UNF</b>	Unified National Fine	<b>2.5D</b>	Installed Insert Length = $\emptyset \times 2.5$	<b>HSS-V3</b>	Spark Plug - HSS Pilot Nose STI Tap
<b>BSW</b>	British Standard Whitworth	<b>3.0D</b>	Installed Insert Length = $\emptyset \times 3.0$	<b>HSS-V3</b>	HSS - V3 (3%V) Spiral Flute STI Tap
<b>BSF</b>	British Standard Fine	<b>3.5D</b>	Installed Insert Length = $\emptyset \times 3.5$	<b>HSS-V3</b>	HSS - V3 (3%V) Spiral Point (Gun Nose) STI Tap
<b>BSP</b>	British Standard Pipe	<b>X.XD</b>	Installed Insert length Codification = $\emptyset \times "D"$	<b>TOL5H-6H</b>	STI Tap 5H/6H Tolerance
<b>NPT</b>	National Pipe Taper	<b>AISI 304</b>	304 Stainless steel insert	<b>TOL(2B-3B)</b>	STI Tap 2B-3B Tolerance
<b>8-UN</b>	8-UN Constant Pitch	<b>Spark plug</b>	Spark plug Installed insert Length		Strip Feed Inserts
<b>BA</b>	British Association	<b>Phone</b>	Standard Compliance By Special Order		Low Volume
<b>BSB</b>	British Standard Brass	<b>Insert</b>	Insert Standard Compliance		Low - Medium Volume
		<b>HSS</b>	High Speed Steel Drill		High Volume
		<b>Go Gauge</b>	STI Go No - Go Gauges		Hand Installation Tool



Insert Diameter	Pitch (mm & TPI)	Installed Length	Units of packing	No of inserts	Drill Diameter	Tap	Install Toll Part No	Tang Break Part No