

THREAD RESTORATION GUIDE



BLUE-MASTER[®]
by *celesa*

CUTTING TECHNOLOGIES



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

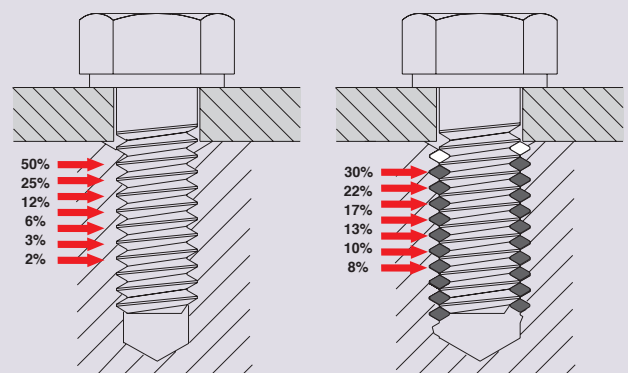
Military standard for free inserts. Military standard inserts are larger in diameter in the free state than standard inserts, making them more difficult to install and to remove. CELESA can supply and certify these inserts on request. The German DIN8140 standard for general purpose inserts has similar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





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

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

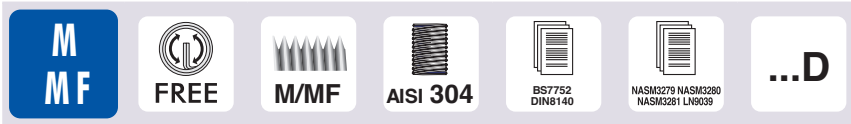
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|--|---|
| X.XD Insert length as a factor of nominal screw | INC Inconel X-750 |
| IR PowerCoil strip-feed reel | NM Nimonic 90 |
| SL PowerCoil screw locking | NT Nitronic 60 |
| K PowerCoil thread repair kit | Y 316 Stainless Steel |
| P PowerCoil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






FREE RUNNING INSERT


		 1.0D					 1.5D					 2.0D					
		L mm	€			L mm	€			L mm	€						
			<500	500-999	1000-...		<500	500-999	1000-...		<500	500-999	1000-...				
M 2x0.40	3520-2.00	2.10	2.00	0,46	0,43	0,41	3.00	0,47	0,45	0,42	4.00	0,48	0,47	0,46	100		
M 2.20x0.45	3520-2.20	2.30	2.20	0,46	0,43	0,41	3.30	0,47	0,45	0,42	4.40	0,48	0,47	0,46	100		
M 2.50x0.45	3520-2.50	2.60	2.50	0,27	0,24	0,22	3.75	0,28	0,25	0,24	5.00	0,32	0,28	0,26	100		
M 3x0.50	3520-3.00	3.20	3.00	0,27	0,24	0,23	4.50	0,28	0,25	0,24	6.00	0,32	0,26	0,25	100		
M 3.50x0.60	3520-3.50	3.70	3.50	0,32	0,28	0,26	5.25	0,33	0,30	0,28	7.00	0,36	0,33	0,30	100		
M 4x0.70	3520-4.00	4.20	4.00	0,26	0,22	0,21	6.00	0,27	0,24	0,23	8.00	0,32	0,26	0,25	100		
M 5x0.80	3520-5.00	5.20	5.00	0,32	0,26	0,25	7.50	0,26	0,25	0,24	10.00	0,36	0,29	0,27	100		
M 6x1.00	3520-6.00	6.30	6.00	0,33	0,27	0,25	9.00	0,27	0,25	0,24	12.00	0,40	0,36	0,34	100		
M 7x1.00	3520-7.00	7.30	7.00	0,37	0,33	0,30	10.50	0,43	0,37	0,35	14.00	0,48	0,42	0,39	100		
M 8x1.00	3521-8.00	8.30	8.00	0,38	0,36	0,34	12.00	0,40	0,38	0,34	16.00	0,50	0,43	0,40	100		
M 8x1.25	3520-8.00	8.30	8.00	0,33	0,29	0,27	12.00	0,36	0,30	0,28	16.00	0,48	0,40	0,38	100		
M 9x1.25	3520-9.00	9.40	9.00	0,48	0,43	0,41	13.50	0,61	0,57	0,51	18.00	0,64	0,58	0,53	100		
M 10x1.00	3523-10.00	10.30	10.00	0,42	0,38	0,36	15.00	0,48	0,42	0,39	20.00	0,57	0,48	0,45	100		
M 10x1.25	3521-10.00	10.30	10.00	0,42	0,37	0,35	15.00	0,48	0,42	0,39	20.00	0,57	0,51	0,47	100		
M 10x1.50	3520-10.00	10.40	10.00	0,42	0,36	0,34	15.00	0,48	0,40	0,38	20.00	0,57	0,47	0,44	100		
M 11x1.00	3523-11.00	11.30	11.00	0,57	0,49	0,46	16.50	0,84	0,76	0,70	22.00	1,16	1,04	0,97	100		
M 11x1.25	3521-11.00	11.30	11.00	0,57	0,49	0,46	16.50	0,70	0,68	0,63	22.00	1,16	1,04	0,99	100		
M 11x1.50	3520-11.00	11.40	11.00	0,72	0,59	0,55	16.50	0,82	0,69	0,64	22.00	0,85	0,76	0,70	100		
M 12x1.00	3524-12.00	12.30	12.00	0,60	0,58	0,55	18.00	0,71	0,70	0,68	24.00	1,17	1,11	1,02	100		
M 12x1.25	3523-12.00	12.30	12.00	0,60	0,50	0,47	18.00	0,71	0,58	0,53	24.00	0,83	0,76	0,70	100		
M 12x1.50	3521-12.00	12.40	12.00	0,60	0,50	0,47	18.00	0,71	0,51	0,47	24.00	0,83	0,76	0,70	100		
M 12x1.75	3520-12.00	12.50	12.00	0,60	0,49	0,46	18.00	0,71	0,62	0,58	24.00	0,83	0,71	0,66	100		
M 13x1.25	3523-13.00	13.25	13.00	0,88	0,82	0,76	19.50	1,35	1,27	1,17	26.00	1,83	1,69	1,55	50		
M 13x1.50	3521-13.00	13.25	13.00	0,88	0,82	0,76	19.50	1,35	1,27	1,17	26.00	1,83	1,69	1,55	50		
M 13x1.75	3520-13.00	13.50	13.00	0,88	0,82	0,76	19.50	1,35	1,27	1,17	26.00	1,83	1,69	1,55	50		
M 14x1.00	3524-14.00	14.25	14.00	1,10	1,07	1,04	21.00	1,14	1,10	1,05	28.00	1,31	1,27	1,19	50		
M 14x1.25	3523-14.00	14.25	14.00	0,92	0,84	0,78	21.00	1,05	0,91	0,84	28.00	1,10	1,03	0,96	50		
M 14x1.50	3521-14.00	14.50	14.00	0,92	0,80	0,75	21.00	1,05	0,86	0,80	28.00	1,10	1,07	1,00	50		
M 14x2.00	3520-14.00	14.50	14.00	0,92	0,76	0,70	21.00	1,05	0,96	0,87	28.00	1,10	1,05	0,98	50		

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

FREE RUNNING INSERT



			 2.5D				 3.0D				
			L mm	€			L mm	€			
		Ø	<500	500-999	1000-...	<500	500-999	1000-...	Unit		
M 2x0.40	3520-2.00	2.10	5.00	0,55	0,50	0,48	6.00	0,60	0,58	0,55	100
M 2.20x0.45	3520-2.20	2.30	5.50	0,55	0,50	0,48	6.60	0,60	0,58	0,55	100
M 2.50x0.45	3520-2.50	2.60	6.25	0,37	0,33	0,30	7.50	0,43	0,38	0,36	100
M 3x0.50	3520-3.00	3.20	7.50	0,37	0,33	0,30	9.00	0,43	0,38	0,36	100
M 3.50x0.60	3520-3.50	3.70	8.75	0,40	0,37	0,35	10.50	0,48	0,45	0,42	100
M 4x0.70	3520-4.00	4.20	10.00	0,37	0,33	0,30	12.00	0,40	0,36	0,34	100
M 5x0.80	3520-5.00	5.20	12.50	0,42	0,36	0,34	15.00	0,49	0,42	0,39	100
M 6x1.00	3520-6.00	6.30	15.00	0,48	0,45	0,42	18.00	0,60	0,51	0,48	100
M 7x1.00	3520-7.00	7.30	17.50	0,59	0,51	0,48	21.00	0,69	0,67	0,63	100
M 8x1.00	3521-8.00	8.30	20.00	0,61	0,57	0,51	24.00	0,74	0,70	0,65	100
M 8x1.25	3520-8.00	8.30	20.00	0,59	0,51	0,48	24.00	0,69	0,62	0,58	100
M 9x1.25	3520-9.00	9.40	22.50	0,70	0,64	0,62	27.00	0,83	0,80	0,77	100
M 10x1.00	3523-10.00	10.30	25.00	0,67	0,61	0,57	30.00	0,81	0,74	0,68	100
M 10x1.25	3521-10.00	10.30	25.00	0,67	0,63	0,60	30.00	0,81	0,79	0,74	100
M 10x1.50	3520-10.00	10.40	25.00	0,67	0,60	0,56	30.00	0,81	0,71	0,66	100
M 11x1.00	3523-11.00	11.30	27.50	1,54	1,47	1,39	33.00	1,90	1,82	1,70	100
M 11x1.25	3521-11.00	11.30	27.50	1,54	1,47	1,39	33.00	1,90	1,82	1,70	100
M 11x1.50	3520-11.00	11.40	27.50	1,06	0,98	0,89	33.00	1,25	1,21	1,16	100
M 12x1.00	3524-12.00	12.30	30.00	1,47	1,43	1,37	36.00	1,80	1,72	1,59	100
M 12x1.25	3523-12.00	12.30	30.00	0,98	0,96	0,91	36.00	1,19	1,12	1,05	100
M 12x1.50	3521-12.00	12.40	30.00	0,98	0,96	0,91	36.00	1,37	1,12	1,05	100
M 12x1.75	3520-12.00	12.50	30.00	0,98	0,95	0,85	36.00	1,25	1,18	1,12	100
M 13x1.25	3523-13.00	13.25	32.50	2,47	2,27	2,10	39.00	2,84	2,61	2,42	50
M 13x1.50	3521-13.00	13.25	32.50	2,47	2,27	2,10	39.00	2,84	2,61	2,42	50
M 13x1.75	3520-13.00	13.50	32.50	2,47	2,27	2,10	39.00	2,84	2,61	2,42	50
M 14x1.00	3524-14.00	14.25	35.00	1,58	1,50	1,39	42.00	2,06	1,73	1,60	50
M 14x1.25	3523-14.00	14.25	35.00	1,30	1,23	1,13	42.00	1,59	1,40	1,29	50
M 14x1.50	3521-14.00	14.50	35.00	1,30	1,22	1,12	42.00	1,59	1,46	1,35	50
M 14x2.00	3520-14.00	14.50	35.00	1,30	1,25	1,22	42.00	1,59	1,51	1,40	50

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



FREE RUNNING INSERT


			 1.0D			 1.5D			 2.0D			 Unit
			L mm	€		L mm	€		L mm	€		
				<100	100-500		<100	100-500		<100	100-500	
M 15 x 1.50	3521-15.00	15.25	15.00	1,47	1,22	22.50	1,89	1,55	30.00	2,38	2,00	50
M 15 x 2.00	3520-15.00	15.50	15.00	1,47	1,22	22.50	1,89	1,58	30.00	2,38	1,97	50
M 16 x 1.50	3521-16.00	16.50	16.00	1,23	0,83	24.00	1,29	0,93	32.00	1,59	1,22	50
M 16 x 2.00	3520-16.00	16.50	16.00	1,23	1,03	24.00	1,29	1,07	32.00	1,59	1,33	50
M 18 x 1.50	3523-18.00	18.50	18.00	1,80	1,53	27.00	2,10	1,79	36.00	2,84	2,42	50
M 18 x 2.00	3521-18.00	18.50	18.00	1,80	1,55	27.00	2,10	1,92	36.00	2,84	2,21	50
M 18 x 2.50	3520-18.00	19.00	18.00	1,80	1,49	27.00	2,10	1,75	36.00	2,84	2,36	50
M 20 x 1.50	3523-20.00	20.50	20.00	2,10	1,79	30.00	2,65	2,26	40.00	3,40	2,90	25
M 20 x 2.00	3521-20.00	20.50	20.00	2,10	1,49	30.00	2,65	2,11	40.00	3,40	2,90	25
M 20 x 2.50	3520-20.00	20.75	20.00	2,10	1,79	30.00	2,65	2,26	40.00	3,40	2,90	25
M 22 x 1.50	3523-22.00	22.50	22.00	2,27	1,93	33.00	2,84	2,42	44.00	3,59	3,06	25
M 22 x 2.00	3521-22.00	22.50	22.00	2,27	1,97	33.00	2,84	2,42	44.00	3,59	2,99	25
M 22 x 2.50	3520-22.00	22.75	22.00	2,27	1,92	33.00	2,84	2,42	44.00	3,59	3,06	25
M 24 x 1.50	3523-24.00	24.50	24.00	2,84	2,40	36.00	2,98	2,82	48.00	3,79	3,44	25
M 24 x 2.00	3521-24.00	24.50	24.00	2,84	2,53	36.00	2,98	2,82	48.00	3,79	3,52	25
M 24 x 3.00	3520-24.00	25.00	24.00	2,84	2,53	36.00	2,98	2,82	48.00	3,79	3,31	25
M 26 x 1.50	3523-26.00	26.50	26.00	4,31	3,66	39.00	4,90	4,18	52.00	6,37	5,42	10
M 27 x 1.50	3523-27.00	27.50	27.00	4,05	3,45	40.50	4,90	4,18	54.00	6,01	5,10	10
M 27 x 2.00	3521-27.00	27.50	27.00	4,17	3,55	40.50	4,90	4,21	54.00	6,01	5,05	10
M 27 x 3.00	3520-27.00	28.00	27.00	3,56	3,02	40.50	4,90	4,61	54.00	6,26	5,96	10
M 28 x 1.50	3523-28.00	28.50	28.00	4,13	3,52	42.00	4,90	4,18	56.00	6,37	5,42	10
M 30 x 1.50	3523-30.00	30.50	30.00	4,88	4,16	45.00	5,61	4,77	60.00	6,93	5,89	10
M 30 x 2.00	3521-30.00	30.50	30.00	4,60	3,92	45.00	5,61	4,77	60.00	7,20	6,13	10
M 30 x 3.50	3520-30.00	31.00	30.00	4,10	3,62	45.00	5,61	4,02	60.00	7,49	6,37	10
M 33 x 2.00	3521-33.00	33.50	33.00	6,91	5,88	49.50	7,18	6,25	66.00	8,40	7,18	10
M 33 x 3.50	3520-33.00	34.00	33.00	6,01	5,10	49.50	7,18	6,25	66.00	8,61	7,35	10
M 36 x 1.50	3524-36.00	36.50	36.00	5,91	5,03	54.00	7,18	6,25	72.00	8,65	8,17	10
M 36 x 2.00	3523-36.00	36.50	36.00	5,91	5,03	54.00	7,18	6,11	72.00	8,65	8,17	10
M 36 x 3.00	3521-36.00	37.00	36.00	5,91	5,03	54.00	7,18	6,89	72.00	8,77	8,17	10
M 36 x 4.00	3520-36.00	37.00	36.00	5,91	5,03	54.00	7,18	5,95	72.00	8,65	7,60	10
M 39 x 3,00	3521-39.00	40.00	39.00			58.50	25,68		78.00			1
M 39 x 4,00	3520-39.00	40.25	39.00	26,63		58.50	30,83		78.00	32,81		1
M 40 x 3,00	3523-40.00	41.00	40.00			60.00	35,96		80.00			1
M 42 x 3,00	3523-42.00	43.00	42.00			63.00	35,96		84.00			1
M 42 x 4,50	3520-42.00	43.50	42.00			63.00	35,96		84.00			1
M 45 x 3,00	3523-45.00	46.00	45.00			67.50	43,26		90.00			1
M 45 x 4,50	3520-45.00	46.50	45.00			67.50	43,26		90.00			1
M 48 x 3,00	3523-48.00	49.00	48.00			72.00	43,26		96.00			1
M 48 x 5,00	3520-48.00	49.50	48.00			72.00	56,78		96.00			1
M 50 x 3,00	3523-50.00	51.00	50.00			75.00	56,78		100.00			1
M 52 x 3,00	3523-52.00	53.00	52.00			78.00	60,84		104.00			1
M 52 x 5,00	3520-52.00	53.50	52.00			78.00	60,84		104.00			1

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



FREE RUNNING INSERT



		L mm	2.5D		3.0D		Unit		
			€		€				
			<100	100-500	<100	100-500			
M 15 x 1.50	3521-15.00	15.25	37.50	2,93	2,45	45.00	3,40	2,81	50
M 15 x 2.00	3520-15.00	15.50	37.50	2,93	2,45	45.00	3,40	2,81	50
M 16 x 1.50	3521-16.00	16.50	40.00	1,74	1,49	48.00	2,06	1,67	50
M 16 x 2.00	3520-16.00	16.50	40.00	1,74	1,54	48.00	2,06	1,76	50
M 18 x 1.50	3523-18.00	18.50	45.00	3,22	2,75	54.00	3,79	3,22	50
M 18 x 2.00	3521-18.00	18.50	45.00	3,22	2,58	54.00	3,79	2,97	50
M 18 x 2.50	3520-18.00	19.00	45.00	3,22	2,68	54.00	3,79	3,15	50
M 20 x 1.50	3523-20.00	20.50	50.00	3,79	3,22	60.00	4,35	3,70	25
M 20 x 2.00	3521-20.00	20.50	50.00	3,79	3,22	60.00	4,35	3,70	25
M 20 x 2.50	3520-20.00	20.75	50.00	3,79	3,22	60.00	4,35	3,70	25
M 22 x 1.50	3523-22.00	22.50	55.00	4,11	3,50	66.00	4,96	4,22	25
M 22 x 2.00	3521-22.00	22.50	55.00	4,11	3,50	66.00	4,96	4,22	25
M 22 x 2.50	3520-22.00	22.75	55.00	4,11	3,50	66.00	4,96	4,22	25
M 24 x 1.50	3523-24.00	24.50	60.00	4,97	4,13	72.00	5,30	4,85	25
M 24 x 2.00	3521-24.00	24.50	60.00	4,97	4,23	72.00	5,30	4,96	25
M 24 x 3.00	3520-24.00	25.00	60.00	4,97	4,23	72.00	6,07	5,33	25
M 26 x 1.50	3523-26.00	26.50	65.00	8,52	7,23	78.00	10,65	9,05	10
M 27 x 1.50	3523-27.00	27.50	67.50	7,80	6,63	81.00	9,21	7,83	10
M 27 x 2.00	3521-27.00	27.50	67.50	7,09	6,03	81.00	8,36	7,12	10
M 27 x 3.00	3520-27.00	28.00	67.50	7,37	6,27	81.00	8,70	7,41	10
M 28 x 1.50	3523-28.00	28.50	70.00	9,15	7,79	84.00	10,98	9,35	10
M 30 x 1.50	3523-30.00	30.50	75.00	9,32	7,93	90.00	11,17	9,50	10
M 30 x 2.00	3521-30.00	30.50	75.00	8,28	7,06	90.00	9,53	8,12	10
M 30 x 3.50	3520-30.00	31.00	75.00	8,24	7,00	90.00	9,07	7,72	10
M 33 x 2.00	3521-33.00	33.50	82.50	9,25	7,86	99.00	10,17	8,65	10
M 33 x 3.50	3520-33.00	34.00	82.50	10,78	9,17	99.00	12,16	10,34	10
M 36 x 1.50	3524-36.00	36.50	90.00	11,31	9,63	108.00	12,46	10,59	10
M 36 x 2.00	3523-36.00	36.50	90.00	10,67	9,07	108.00	11,69	9,94	10
M 36 x 3.00	3521-36.00	37.00	90.00	10,51	8,95	108.00	11,58	9,85	10
M 36 x 4.00	3520-36.00	37.00	90.00	12,18	10,36	108.00	15,70	13,35	10






Coding example:




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

FREE RUNNING INSERT

LEFT HAND THREAD INSERT


			 1.5D	L mm	€		€
M 3 x 0.50	3520-3.00x1.5D-LH	3.20	4.50	4,24	3520-3.00I-LH	25,31	
M 4 x 0.70	3520-4.00x1.5D-LH	4.20	6.00	4,24	3520-4.00I-LH	25,31	
M 5 x 0.80	3520-5.00x1.5D-LH	5.20	7.50	4,24	3520-5.00I-LH	25,31	
M 6 x 1.00	3520-6.00x1.5D-LH	6.30	9.00	2,92	3520-6.00I-LH	25,31	
M 8 x 1.25	3520-8.00x1.5D-LH	8.30	12.00	2,92	3520-8.00I-LH	31,52	
M 10 x 1.50	3520-10.00x1.5D-LH	10.40	15.00	3,90	3520-10.00I-LH	38,63	
M 12 x 1.75	3520-12.00x1.5D-LH	12.50	18.00	5,84	3520-12.00I-LH	43,72	


AISI 316


			 1.5D	L mm	€
M 3 x 0.50	3520-3.00x1.5DY	3.20	4.50	2,18	
M 4 x 0.70	3520-4.00x1.5DY	4.20	6.00	2,29	
M 5 x 0.80	3520-5.00x1.5DY	5.20	7.50	2,37	
M 6 x 1.00	3520-6.00x1.5DY	6.30	9.00	2,42	
M 8 x 1.25	3520-8.00x1.5DY	8.30	12.00	2,91	
M 10 x 1.50	3520-10.00x1.5DY	10.40	15.00	3,00	
M 12 x 1.75	3520-12.00x1.5DY	12.50	18.00	3,27	

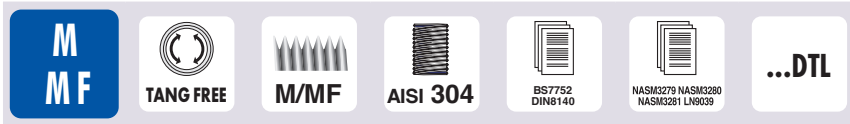


Coding example:

M 6 x 1.00

 1.0D
 3520-6.00x1.5DY

TANGLESS INSERTS



			1.0D			1.5D			2.0D			Unit			
			L mm	€			L mm	€			L mm		€		
		Ø		<500	500-999	1000-...		<500	500-999	1000-...		<500	500-999	1000-...	
M 3 x 0.50	3520-3.00DTL	3.20	3.00	0,42	0,37	0,36	4.50	0,44	0,39	0,37	6.00	1,08	0,40	0,39	100
M 4 x 0.70	3520-4.00DTL	4.20	4.00	0,40	0,34	0,32	6.00	0,42	0,37	0,36	8.00	0,48	0,40	0,39	100
M 5 x 0.80	3520-5.00DTL	5.20	5.00	0,48	0,40	0,39	7.50	0,40	0,39	0,37	10.00	0,56	0,45	0,42	100
M 6 x 1.00	3520-6.00DTL	6.30	6.00	0,50	0,42	0,39	9.00	0,42	0,39	0,37	12.00	0,62	0,56	0,51	100
M 8 x 1.25	3520-8.00DTL	8.30	8.00	0,50	0,45	0,42	12.00	0,56	0,47	0,44	16.00	0,76	0,62	0,59	100
M 10 x 1.50	3520-10.00DTL	10.40	10.00	0,65	0,56	0,51	15.00	0,76	0,62	0,59	20.00	0,87	0,74	0,68	100
M 12 x 1.75	3520-12.00DTL	12.50	12.00	0,92	0,77	0,72	18.00	1,10	0,96	0,89	24.00	1,29	1,10	1,02	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	579,98
3520-4MITTL	579,98
3520-5MITTL	579,98
3520-6MITTL	579,98
3520-8MITTL	579,98
3520-10MITTL	579,98
3520-12MITTL	579,98



FREE RUNNING INSERT


		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	0,62	0,57	0,51	3.30	0,72	0,66	0,62	4.32	0,95	0,85	0,79	100
UNC N°3-48	3532-3G	2.51	2.70	2.54	0,63	0,59	0,55	3.81	0,68	0,62	0,58	5.08	0,71	0,67	0,63	100
UNC N°4-40	3532-4G	2.84	3.00	2.79	0,33	0,29	0,27	4.32	0,34	0,30	0,28	5.59	0,35	0,32	0,29	100
UNC N°5-40	3532-5G	3.17	3.40	3.30	0,36	0,32	0,29	4.83	0,37	0,33	0,30	6.35	0,39	0,36	0,34	100
UNC N°6-32	3532-6G	3.50	3.70	3.56	0,27	0,25	0,24	5.33	0,29	0,27	0,25	7.11	0,33	0,28	0,26	100
UNC N°8-32	3532-8G	4.17	4.40	4.06	0,28	0,26	0,25	6.35	0,32	0,28	0,26	8.38	0,35	0,29	0,27	100
UNC N°10-24	3532-10G	4.83	5.10	4.83	0,32	0,28	0,26	7.37	0,35	0,29	0,27	9.65	0,37	0,33	0,30	100
UNC N°12-24	3532-12G	5.49	5.70	5.59	0,36	0,32	0,29	8.13	0,39	0,36	0,34	10.92	0,42	0,38	0,36	100
UNC 1/4-20	3532-1/4	6.35	6.70	6.35	0,36	0,32	0,29	9.65	0,39	0,36	0,34	12.70	0,42	0,38	0,36	100
UNC 5/16-18	3532-5/16	7.94	8.30	7.87	0,47	0,40	0,38	11.94	0,58	0,49	0,46	15.75	0,60	0,51	0,48	100
UNC 3/8-16	3532-3/8	9.52	9.90	9.65	0,66	0,60	0,56	14.48	0,71	0,63	0,59	19.30	0,95	0,82	0,76	100
UNC 7/16-14	3532-7/16	11.11	11.60	11.18	0,80	0,70	0,65	16.76	0,96	0,84	0,78	22.35	1,08	0,96	0,87	100
UNC 1/2-13	3532-1/2	12.70	13.00	12.70	0,85	0,75	0,69	19.05	0,96	0,84	0,78	25.40	1,08	0,96	0,87	100
UNC 9/16-12	3532-9/16	14.28	15.00	14.22	1,66	1,46	1,35	21.34	1,93	1,71	1,58	28.45	2,47	2,17	2,01	50
UNC 5/8-11	3532-5/8	15.87	16.50	16.00	1,67	1,47	1,37	24.13	1,94	1,72	1,59	32.00	2,49	2,19	2,03	50
UNC 3/4-10	3532-3/4	19.05	20.00	19.05	1,84	1,63	1,49	28.70	2,29	2,03	1,87	38.10	2,74	2,42	2,23	50
UNC 7/8-9	3532-7/8	22.22	23.00	22.35	2,39	2,11	1,94	33.53	2,98	2,63	2,43	44.70	3,56	3,14	2,89	25
UNC 1-8	3532-1	25.40	26.25	25.40	3,49	3,40	3,14	38.10	5,21	5,09	4,69	50.80	6,62	6,48	5,97	25
UNC 1.1/8-7	3532-1.1/8	28.57	29.50	28.70	5,54	4,89	4,49	42.93	7,33	6,46	5,95	57.15	7,60	6,70	6,16	25
UNC 1.1/4-7	3532-1.1/4	31.75	32.50	31.75	6,05	5,32	4,90	47.75	7,68	6,76	6,22	63.50	8,66	7,62	7,01	10
UNC 1.3/8-6	3532-1.3/8	34.92	36.00	35.05	6,63	5,84	5,38	52.58	8,18	7,20	6,63	69.85	9,70	8,55	7,86	10
UNC 1.1/2-6	3532-1.1/2	38.10	39.50	38.10	7,68	6,76	6,22	57.15	10,55	9,29	8,56	76.20	12,20	10,74	9,88	10

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



Coding example:

UNC 1/4-20

1.0D

3532-1/4x1.0D

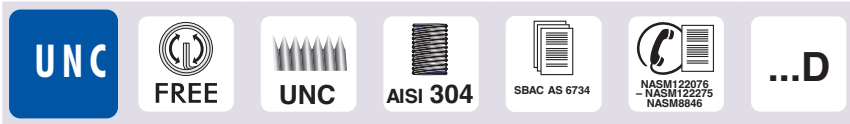
1.5D






3532-1/4x1.5D

2.0D

3532-1/4x2.0D



FREE RUNNING INSERT



		D1 mm		L mm	 2.5D			 3.0D			Unit		
					€	€	€	€	€	€			
UNC	N°2-56	3532-2G	2.18	2.40	5.59	1,06	0,97	0,88	6.60	1,32	1,19	1,10	100
UNC	N°3-48	3532-3G	2.51	2.70	6.35	0,75	0,69	0,64	7.62	0,83	0,76	0,70	100
UNC	N°4-40	3532-4G	2.84	3.00	9.65	0,39	0,36	0,34	8.64	0,47	0,40	0,38	100
UNC	N°5-40	3532-5G	3.17	3.40	7.87	0,47	0,40	0,38	9.65	0,58	0,49	0,46	100
UNC	N°6-32	3532-6G	3.50	3.70	8.89	0,36	0,32	0,29	10.41	0,42	0,37	0,35	100
UNC	N°8-32	3532-8G	4.17	4.40	10.41	0,37	0,34	0,32	12.45	0,44	0,39	0,37	100
UNC	N°10-24	3532-10G	4.83	5.10	12.19	0,45	0,39	0,37	14.48	0,55	0,47	0,44	100
UNC	N°12-24	3532-12G	5.49	5.70	13.72	0,50	0,46	0,43	16.51	0,63	0,57	0,51	100
UNC	1/4-20	3532-1/4	6.35	6.70	16.00	0,50	0,46	0,43	19.05	0,63	0,57	0,51	100
UNC	5/16-18	3532-5/16	7.94	8.30	19.81	0,71	0,62	0,58	23.62	0,85	0,75	0,69	100
UNC	3/8-16	3532-3/8	9.52	9.90	24.13	1,07	0,95	0,87	28.96	1,28	1,12	1,04	100
UNC	7/16-14	3532-7/16	11.11	11.60	27.94	1,30	1,14	1,06	33.53	1,59	1,40	1,29	100
UNC	1/2-13	3532-1/2	12.70	13.00	31.75	1,30	1,14	1,06	38.10	1,59	1,40	1,29	100
UNC	9/16-12	3532-9/16	14.28	15.00	35.56	3,09	2,72	2,50	42.67	3,33	2,94	2,72	50
UNC	5/8-11	3532-5/8	15.87	16.50	40.13	3,13	2,76	2,54	48.01	3,37	2,97	2,74	50
UNC	3/4-10	3532-3/4	19.05	20.00	47.75	3,57	3,15	2,90	57.15	3,93	3,47	3,19	50
UNC	7/8-9	3532-7/8	22.22	23.00	55.88	4,64	4,08	3,76	67.06	5,10	4,49	4,14	25
UNC	1-8	3532-1	25.40	26.25	63.50	7,82	7,65	7,06	76.20	9,49	9,27	8,54	25
UNC	1.1/8-7	3532-1.1/8	28.57	29.50	71.37	9,48	8,35	7,69	85.85	10,55	9,29	8,56	25
UNC	1.1/4-7	3532-1.1/4	31.75	32.50	79.50	10,86	9,57	8,80	95.25	12,21	10,75	9,89	10
UNC	1.3/8-6	3532-1.3/8	34.92	36.00	87.38	12,26	10,79	9,94	104.90	13,37	11,77	10,83	10
UNC	1.1/2-6	3532-1.1/2	38.10	39.50	95.25	15,95	14,04	12,93	114.30	18,14	15,97	14,70	10

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

FREE RUNNING INSERT


	D1 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°3 - 56	3534-3G	2.51	2.70	2.54	0,48	0,43	0,40	3.81	0,60	0,53	0,49	5.08	0,72	0,64	0,60	100
UNF N°4 - 48	3534-4G	2.84	3.00	2.79	0,48	0,43	0,40	4.32	0,60	0,53	0,49	5.59	0,72	0,64	0,60	100
UNF N°6 - 40	3534-6G	3.50	3.70	3.56	0,48	0,43	0,40	5.33	0,60	0,53	0,49	7.11	0,72	0,64	0,60	100
UNF N°8 - 36	3534-8G	4.17	4.40	4.06	0,48	0,43	0,40	6.35	0,60	0,53	0,49	8.38	0,72	0,64	0,60	100
UNF N°10 - 32	3534-10G	4.83	5.10	4.83	0,35	0,29	0,27	7.37	0,36	0,32	0,29	9.65	0,42	0,37	0,35	100
UNF N°12 - 28	3534-12G	5.49	5.70	5.59	0,57	0,49	0,46	8.13	0,59	0,55	0,49	10.92	0,61	0,58	0,53	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	6.35	0,35	0,29	0,27	9.65	0,36	0,32	0,29	12.70	0,42	0,37	0,35	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	7.87	0,46	0,40	0,38	11.94	0,49	0,43	0,40	15.75	0,60	0,50	0,47	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	9.65	0,69	0,60	0,56	14.48	0,71	0,62	0,58	19.30	0,85	0,75	0,69	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	11.18	0,84	0,74	0,68	16.76	0,96	0,83	0,77	22.35	1,07	0,95	0,87	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	12.70	0,84	0,74	0,68	19.05	0,96	0,83	0,77	25.40	1,07	0,95	0,87	100
UNF 9/16 - 18	3534-9/16	14.29	14.70	14.22	1,89	1,67	1,53	21.34	2,00	1,76	1,63	28.45	2,38	2,11	1,94	50
UNF 5/8 - 18	3534-5/8	15.87	16.30	16.00	1,93	1,71	1,58	24.13	2,10	1,85	1,71	32.00	2,38	2,11	1,94	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	19.05	2,13	1,88	1,74	28.70	2,29	2,03	1,87	38.10	2,61	2,30	2,12	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	22.35	4,44	3,91	3,60	33.53	6,54	5,76	5,31	44.70	8,33	7,33	6,75	25
UNF 1-12	3534-1	25.40	26.00	25.40	4,44	3,91	3,60	38.10	6,54	5,76	5,31	50.80	8,33	7,33	6,75	25
UNF 1-14	3535-1	25.40	26.00	25.40	4,62	4,05	3,73	38.10	6,81	6,00	5,51	50.80	8,66	7,61	7,00	25
UNF 1.1/8 - 12	3534-1.1/8	28.57	29.50	28.70	6,36	5,61	5,16	43.18	8,40	7,40	6,81	57.15	8,72	7,68	7,08	10
UNF 1.1/4 - 12	3534-1.1/4	31.75	32.50	31.75	6,91	6,09	5,61	47.75	9,14	8,04	7,41	63.50	9,92	8,73	8,03	10
UNF 1.3/8 - 12	3534-1.3/8	34.92	35.50	35.05	7,58	6,68	6,14	52.58	9,38	8,25	7,59	69.85	11,11	9,78	9,00	10
UNF 1.1/2 - 12	3534-1.1/2	38.10	38.50	38.10	8,78	7,73	7,12	57.15	11,42	11,09	10,20	76.20	13,97	12,30	11,32	10

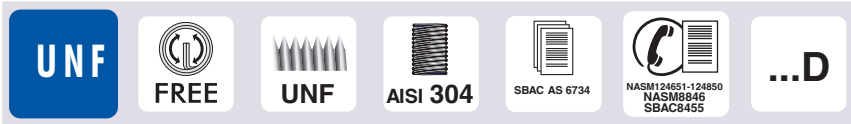
Important note: Theoretical insert length is referred to length after insert installation.



Coding example:

	 1.0D	 1.5D	 2.0D
UNF N°3 - 56	3534-3Gx1.0D	3534-3Gx1.5D	3534-3Gx2.0D

FREE RUNNING INSERT



D	D1	D	L	2.5D			3.0D			Unit		
				<500	500-999	1000-...	<500	500-999	1000-...			
UNF N°3 - 56	3534-3G	2.51	2.70	6.35	0,83	0,74	0,68	7.62	0,97	0,85	0,79	100
UNF N°4 - 48	3534-4G	2.84	3.00	7.11	0,83	0,74	0,68	8.64	0,97	0,85	0,79	100
UNF N°6 - 40	3534-6G	3.50	3.70	8.89	0,83	0,74	0,68	10.41	0,97	0,85	0,79	100
UNF N°8 - 36	3534-8G	4.17	4.40	10.41	0,83	0,74	0,68	12.45	0,97	0,85	0,79	100
UNF N°10 - 32	3534-10G	4.83	5.10	12.19	0,55	0,47	0,44	14.48	0,63	0,57	0,51	100
UNF N°12 - 28	3534-12G	5.49	5.70	13.72	0,64	0,60	0,56	16.51	0,71	0,67	0,63	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	16.00	0,55	0,47	0,44	19.05	0,63	0,57	0,51	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	19.81	0,72	0,64	0,60	23.62	0,85	0,75	0,69	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	24.13	1,08	0,96	0,87	28.96	1,28	1,12	1,04	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	27.94	1,33	1,17	1,08	33.53	1,59	1,40	1,29	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	31.75	1,33	1,17	1,08	38.10	1,59	1,40	1,29	100
UNF 9/16 - 18	3534-9/16	14.29	14.70	35.56	3,02	2,66	2,46	42.67	3,39	2,98	2,75	50
UNF 5/8 - 18	3534-5/8	15.87	16.30	40.13	2,84	2,50	2,30	48.01	3,39	2,98	2,75	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	47.75	3,57	3,15	2,90	57.15	3,93	3,47	3,19	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	55.88	9,95	8,76	8,06	67.06	11,59	10,20	9,39	25
UNF 1 - 12	3534-1	25.40	26.00	63.50	9,95	8,76	8,06	76.20	11,59	10,20	9,39	25
UNF 1 - 14	3535-1	25.40	26.00	63.50	9,95	8,76	8,06	76.20	11,93	10,50	9,67	25
UNF 1.1/8 - 12	3534-1.1/8	28.57	29.50	71.37	10,86	9,57	8,80	85.85	12,10	10,65	9,80	10
UNF 1.1/4 - 12	3534-1.1/4	31.75	32.50	79.50	12,41	10,93	10,07	95.25	13,99	12,31	11,32	10
UNF 1.3/8 - 12	3534-1.3/8	34.92	35.50	87.38	14,04	12,36	11,38	104.90	15,30	13,47	12,40	10
UNF 1.1/2 - 12	3534-1.1/2	38.10	38.50	95.25	18,25	16,07	14,78	114.30	20,78	18,29	16,83	10



Other contents available on demand.

FREE RUNNING INSERT

BSW



...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	3528-1/8	3.17	3.40	3.30	0,42	5.08	0,46	6.60	0,55	8.38	0,70	9.91	0,91	100
BSW 3/16 - 24	3528-3/16	4.76	5.00	4.83	0,42	7.37	0,46	9.65	0,55	12.19	0,70	14.48	0,91	100
BSW 1/4 - 20	3528-1/4	6.35	6.70	6.35	0,38	9.65	0,42	12.70	0,48	16.00	0,63	19.05	0,68	100
BSW 5/16 - 18	3528-5/16	7.94	8.30	7.87	0,44	11.94	0,50	15.75	0,56	19.81	0,66	23.62	0,81	100
BSW 3/8 - 16	3528-3/8	9.52	10.00	9.65	0,79	14.48	0,84	19.30	1,00	24.13	1,17	28.96	1,40	100
BSW 7/16 - 14	3528-7/16	11.11	11.60	11.18	0,96	16.76	1,05	22.35	1,21	27.94	1,43	33.53	1,75	100
BSW 1/2 - 12	3528-1/2	12.70	13.00	12.70	0,96	19.05	1,05	25.40	1,21	31.75	1,43	38.10	1,75	100
BSW 9/16 - 12	3528-9/16	14.29	14.75	14.22	2,38	21.34	3,33	28.45	3,91	35.56	4,65	42.67	5,69	50
BSW 5/8 - 11	3528-5/8	15.87	16.50	16.00	2,38	24.13	3,33	32.00	3,91	40.13	4,65	48.01	5,69	50
BSW 3/4 - 10	3528-3/4	19.05	20.00	19.05	3,09	28.70	3,96	38.10	4,82	47.75	5,79	57.15	6,93	50
BSW 7/8 - 9	3528-7/8	22.22	23.25	22.35	3,96	33.53	5,52	44.70	6,91	55.88	8,32	67.06	9,98	25
BSW 1 - 8	3528-1	25.40	26.50	25.40	4,27	38.10	6,33	50.80	6,91	63.50	8,32	76.20	9,98	25

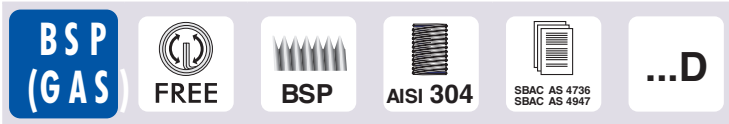
BSF



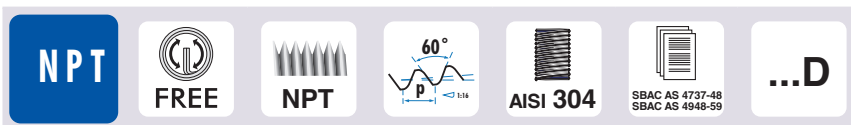
...D

	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	3530-3/16	4.76	5.00	4.83	0,42	7.37	0,46	9.65	0,56	12.19	0,65	14.48	0,77	100
BSF 1/4 - 26	3530-1/4	6.35	6.60	6.35	0,40	9.65	0,42	12.70	0,49	16.00	0,60	19.05	0,69	100
BSF 5/16 - 22	3530-5/16	7.94	8.30	7.87	0,42	11.94	0,51	15.75	0,57	19.81	0,69	23.62	0,83	100
BSF 3/8 - 20	3530-3/8	9.52	9.80	9.65	0,80	14.48	0,86	19.30	1,02	24.13	1,19	28.96	1,43	100
BSF 7/16 - 18	3530-7/16	11.11	11.60	11.18	0,98	16.76	1,07	22.35	1,23	27.94	1,46	33.53	1,79	100
BSF 1/2 - 16	3530-1/2	12.70	13.25	12.70	0,98	19.05	1,07	25.40	1,23	31.75	1,46	38.10	1,79	100
BSF 9/16 - 16	3530-9/16	14.29	14.75	14.22	2,44	21.34	3,23	28.45	3,99	35.56	4,75	42.67	6,46	50
BSF 5/8 - 14	3530-5/8	15.88	16.50	16.00	2,44	24.13	3,23	32.00	3,99	40.13	4,75	48.01	5,82	50
BSF 3/4 - 12	3530-3/4	19.05	19.50	19.05	3,15	28.70	4,04	38.10	4,94	47.75	5,91	57.15	7,10	50
BSF 7/8 - 11	3530-7/8	22.23	22.75	22.35	4,04	33.53	5,66	44.70	7,07	55.88	8,51	67.06	10,19	25
BSF 1 - 10	3530-1	25.40	26.25	25.40	4,04	38.10	5,66	50.80	7,07	63.50	8,51	76.20	10,19	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	0,59	4.83	0,83	6.35	0,92	100
BSP	1/4 - 19	3546-1/4	13.16	13.75	6.35	0,79	9.65	1,13	12.70	1,28	100
BSP	3/8 - 19	3546-3/8	16.66	17.00	9.65	0,70	14.22	1,29	19.05	1,46	100
BSP	1/2 - 14	3546-1/2	20.95	21.50	12.70	1,83	19.05	1,85	25.40	2,93	50
BSP	5/8 - 14	3546-5/8	22.91	23.50	16.00	2,80	23.88	4,13	31.75	4,31	50
BSP	3/4 - 14	3546-3/4	26.44	27.00	19.05	2,80	28.70	4,13	38.10	4,31	50
BSP	7/8 - 14	3546-7/8	30.20	30.50	22.35	7,19	33.53	12,64	44.45	15,76	25
BSP	1 - 11	3546-1	33.25	33.75	25.40	8,06	38.10	14,15	50.80	16,21	25



		L mm	€	Unit	
					1.5D
NPT	1/8 - 27	3552-1/8	4.78	1,18	100
NPT	1/4 - 18	3552-1/4	9.53	1,70	100
NPT	3/8 - 18	3552-3/8	14.30	2,14	100
NPT	1/2 - 14	3552-1/2	19.05	3,51	50
NPT	3/4 - 14	3552-3/4	28.58	5,04	50
NPT	1 - 11.1/2	3552-1	38.10	6,76	25



Coding example:

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

FREE RUNNING INSERT
UN x 8

...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	10,61	42.93	12,51	57.15	13,35	10
UN 1.1/4 - 8	3570-1.1/4	31.75	32.00	31.75	12,71	47.75	15,34	63.50	17,36	10
UN 1.3/8 - 8	3570-1.3/8	34.92	35.00	35.05	14,35	52.32	19,07	69.85	20,99	10
UN 1.1/2 - 8	3570-1.1/2	38.10	38.00	38.10	16,01	57.15	21,25	76.20	24,92	10
UN 1.5/8 - 8	3570-1.5/8	41.27	41.00	41.40	17,54	61.98	22,54	82.55	27,78	10
UN 1.3/4 - 8	3570-1.3/4	44.45	44.50	44.45	19,01	66.80	24,49	88.90	28,16	10
UN 1.7/8 - 8	3570-1.7/8	47.62	47.50	47.75	20,52	71.37	26,27	95.25	32,42	10
UN 2 - 8	3570-2	50.80	51.00	50.80	21,96	76.20	28,21	101.60	34,74	10

BA

...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	2,63	8.89	3,48	11.94	4,17	14.99	4,79	18.03	5,51	100
BA 2	3544-2	4.70	4.90	4.83	1,37	7.11	1,52	9.40	1,68	11.68	1,97	14.22	2,13	100
BA 4	3544-4	3.60	3.80	3.56	1,37	5.33	1,52	7.11	1,68	8.89	1,97	10.92	2,13	100
BA 6	3544-6	2.80	2.90	2.79	1,37	4.32	1,52	5.59	1,68	7.11	1,97	8.38	2,13	100



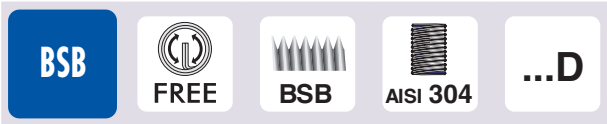
Coding example:

UN 1.1/8 - 8

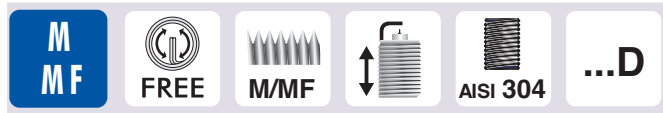
 1.0D
 3570-1.1/8x1.0D

 1.5D
 3570-1.1/8x1.5D

FREE RUNNING INSERT



D	T	D1	Ø	1.0D		1.5D		2.0D		Unit	
				L mm	€	L mm	€	L mm	€		
BSB	1/4 - 26	3560-1/4	6,35	6.60	6,35	1,61	9.53	2,22	12.70	2,22	100
BSB	5/16 - 26	3560-5/16	7,94	8.20	7,95	0,72	11.91	0,87	15.88	1,17	100
BSB	3/8 - 26	3560-3/8	9,52	9.80	9,53	0,84	14.30	1,01	19.05	1,37	100
BSB	7/16 - 26	3560-7/16	11,11	11.30	11,13	0,89	16.66	1,37	22.23	1,86	100
BSB	1/2 - 26	3560-1/2	12,70	12.70	12,70	1,82	19.05	2,30	25.40	2,93	50



D	T	D1	Ø	L			Unit
				8.40mm	12.40mm	16.40mm	
14x1.25	3522-14.00	14.25		0,98	0,98	0,98	50

D	T	D1	Ø	L		Unit
				1/2"	3/4"	
10x1.00	3522-10.00	10.30		0,49	0,71	100
12x1.25	3522-12.00	12.30		0,59	0,71	100
14x1.25	3522-14.00	14.25		0,85	1,31	50
18x1.50	3522-18.00	18.50		1,14		50



D	T	D1	Ø	L			Unit
				0.339"	3/8"	7/16"	
10x1.00	3522-10.00	10.30		0,41		100	
14x1.25	3522-14.00	14.25			0,92	1,01	50

M
MF

FREE

M/MF

AISI 304

**BS7752
DIN8140**
...DP
FREE RUNNING INSERT

		€	D1 mm	L mm		mm	Accessories			
M 3 x 0.50	3520-3.00X1.0DP	3,84	1.00	3.00	10	3.20	3520-3.00I	3500-HIT4	3500-TB4	
M 3 x 0.50	3520-3.00X1.5DP	4,01	1.50	4.50	10	3.20	3520-3.00I	3500-HIT4	3500-TB4	
M 3 x 0.50	3520-3.00X2.0DP	4,54	2.00	6.00	10	3.20	3520-3.00I	3500-HIT4	3500-TB4	
M 4 x 0.70	3520-4.00X1.0DP	3,65	1.00	4.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6	
M 4 x 0.70	3520-4.00X1.5DP	3,84	1.50	6.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6	
M 4 x 0.70	3520-4.00X2.0DP	4,54	2.00	8.00	10	4.20	3520-4.00I	3500-HIT6	3500-TB6	
M 5 x 0.80	3520-5.00X1.0DP	4,54	1.00	5.00	10	5.20	3520-5.00I	3500-HIT8	3500-TB8	
M 5 x 0.80	3520-5.00X1.5DP	3,65	1.50	7.50	10	5.20	3520-5.00I	3500-HIT8	3500-TB8	
M 5 x 0.80	3520-5.00X2.0DP	5,05	2.00	10.00	10	5.20	3520-5.00I	3500-HIT8	3500-TB8	
M 6 x 1.00	3520-6.00X1.0DP	4,70	1.00	6.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9	
M 6 x 1.00	3520-6.00X1.5DP	3,84	1.50	9.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9	
M 6 x 1.00	3520-6.00X2.0DP	5,75	2.00	12.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9	
M 6 x 1.00	3520-6.00X2.5DP	6,96	2.50	15.00	10	6.30	3520-6.00I	3500-HIT9	3500-TB9	
M 8 x 1.00	3521-8.00X1.0DP	5,40	1.00	8.00	10	8.30	3521-8.00I	3500-HIT11	3500-TB12	
M 8 x 1.00	3521-8.00X1.5DP	5,75	1.50	12.00	10	8.30	3521-8.00I	3500-HIT11	3500-TB12	
M 8 x 1.00	3521-8.00X2.0DP	7,31	2.00	16.00	10	8.30	3521-8.00I	3500-HIT11	3500-TB12	
M 8 x 1.25	3520-8.00X1.0DP	4,70	1.00	8.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12	
M 8 x 1.25	3520-8.00X1.5DP	5,05	1.50	12.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12	
M 8 x 1.25	3520-8.00X2.0DP	6,96	2.00	16.00	10	8.30	3520-8.00I	3500-HIT11	3500-TB12	
M 10 x 1.25	3521-10.00X1.5DP	6,73	1.50	15.00	10	10.30	3521-10.00I	3500-HIT13	3500-TB13	
M 10 x 1.50	3520-10.00X1.0DP	5,88	1.00	10.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13	
M 10 x 1.50	3520-10.00X1.5DP	6,73	1.50	15.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13	
M 10 x 1.50	3520-10.00X2.0DP	7,73	2.00	20.00	10	10.40	3520-10.00I	3500-HIT13	3500-TB13	
M 12 x 1.50	3521-12.00X1.5DP	9,92	1.50	18.00	10	12.40	3521-12.00I	3500-HIT15	3500-TB15	
M 12 x 1.75	3520-12.00X1.0DP	8,24	1.00	12.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15	
M 12 x 1.75	3520-12.00X1.5DP	9,92	1.50	18.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15	
M 12 x 1.75	3520-12.00X2.0DP	11,66	2.00	24.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15	
M 14 x 1.50	3521-14.00X1.5DP	7,31	1.50	21.00	5	14.40	3521-14.00I	3500-HIT16	-	
M 14 x 2.00	3520-14.00X1.0DP	6,39	1.00	14.00	5	14.50	3520-14.00I	3500-HIT16	-	
M 14 x 2.00	3520-14.00X1.5DP	7,31	1.50	21.00	5	14.50	3520-14.00I	3500-HIT16	-	
M 14 x 2.00	3520-14.00X2.0DP	7,65	2.00	28.00	5	14.50	3520-14.00I	3500-HIT16	-	
M 16 x 1.50	3521-16.00X1.5DP	9,00	1.50	24.00	5	16.50	3521-16.00I	3500-HIT18	-	
M 16 x 2.00	3520-16.00X1.0DP	8,58	1.00	16.00	5	16.50	3520-16.00I	3500-HIT18	-	
M 16 x 2.00	3520-16.00X1.5DP	9,00	1.50	24.00	5	16.50	3520-16.00I	3500-HIT18	-	
M 16 x 2.00	3520-16.00X2.0DP	11,10	2.00	32.00	5	16.50	3520-16.00I	3500-HIT18	-	
M 18 x 2.00	3521-18.00X1.5DP	14,63	1.50	27.00	5	18.50	3521-18.00I	3500-HIT20	-	
M 18 x 2.50	3520-18.00X1.0DP	11,63	1.00	18.00	5	19.00	3520-18.00I	3500-HIT20	-	
M 18 x 2.50	3520-18.00X1.5DP	13,59	1.50	27.00	5	19.00	3520-18.00I	3500-HIT20	-	
M 18 x 2.50	3520-18.00X2.0DP	18,42	2.00	36.00	5	19.00	3520-18.00I	3500-HIT20	-	
M 20 x 2.50	3520-20.00X1.0DP	13,59	1.00	20.00	5	20.75	3520-20.00I	3500-HIT21	-	
M 20 x 2.50	3520-20.00X1.5DP	17,18	1.50	30.00	5	20.75	3520-20.00I	3500-HIT21	-	
M 20 x 2.50	3520-20.00X2.0DP	22,08	2.00	40.00	5	20.75	3520-20.00I	3500-HIT21	-	
M 22 x 2.50	3520-22.00X1.5DP	11,06	1.50	33.00	3	22.75	3520-22.00I	3500-HIT22	-	
M 22 x 2.50	3520-22.00X2.0DP	14,01	2.00	44.00	3	22.75	3520-22.00I	3500-HIT22	-	
M 24 x 3.00	3520-24.00X1.5DP	17,45	1.50	36.00	3	24.50	3520-24.00I	3500-HIT23	-	

Accessories not included in listed price



M14x1,25

M12x1,25

		€	D1 mm	L		mm	Accessories			
M 12 x 1.25	3522-12.00X1/2P	8,06	-	1/2"	10	12.30	3522-12.00PN	3500-HIT15	3500-TB15	
M 12 x 1.25	3522-12.00X3/4P	9,92	-	3/4"	10	12.30	3522-12.00PN	3500-HIT15	3500-TB15	
M 14 x 1.25	3522-14.00X3/8P	12,84	-	3/8"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17	
M 14 x 1.25	3522-14.00X1/2P	11,94	-	1/2"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17	
M 14 x 1.25	3522-14.00X3/4P	18,18	-	3/4"	10	14.30	3522-14.00PN	3500-HIT17	3500-HIT17	
M 14 x 1.25	3522-14.00X8.4P	6,81	-	8.4 mm	5	14.30	3522-14.00PN	3500-HIT17	3500-HIT17	
M 14 x 1.25	3522-14.00X12.4P	6,81	-	12.4"	5	14.30	3522-14.00PN	3500-HIT17	3500-HIT17	
M 14 x 1.25	3522-14.00X16.4P	6,81	-	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	Accessories		
									
UNC N°6 - 32	3532-6GX1.5DP	4,03	1.50	5.33	10	3.80	3532-6GI	3500-HIT5	3500-TB5
UNC N°8 - 32	3532-8GX1.5DP	4,25	1.50	6.35	10	4.40	3532-8GI	3500-HIT6	3500-TB6
UNC N°10 - 24	3532-10GX1.5DP	4,71	1.50	7.11	10	5.20	3532-10GI	3500-HIT7	3500-TB8
UNC 1/4 - 20	3532-1/4X1.5DP	5,39	1.50	9.65	10	6.70	3532-1/4I	3500-HIT9	3500-TB9
UNC 5/16 - 18	3532-5/16X1.0DP	6,56	1.00	7.87	10	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 5/16 - 18	3532-5/8X1.5DP	7,91	1.50	11.94	10	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 3/8 - 16	3532-3/8X1.5DP	9,92	1.50	14.22	10	9.90	3532-3/8I	3500-HIT13	3500-TB12
UNC 3/8 - 16	3532-3/8X2.0DP	13,11	2.00	19.05	10	9.90	3532-3/8I	3500-HIT13	3500-TB12
UNC 7/16 - 14	3532-7/16X1.5DP	13,28	1.50	16.76	10	11.60	3532-7/16I	3500-HIT14	3500-TB14
UNC 1/2 - 13	3532-1/2X1.5DP	13,28	1.50	19.05	10	13.00	3532-1/2I	3500-HIT15	3500-TB15
UNC 5/8 - 11	3532-5/8X1.5DP	13,63	1.50	23.88	5	16.50	3532-5/8I	3500-HIT18	-
UNC 3/4 - 10	3532-3/4X1.5DP	16,05	1.50	28.70	5	20.00	3532-3/4I	3500-HIT20	-
UNC 7/8 - 9	3532-7/8X1.5DP	12,53	1.50	33.27	3	23.00	3532-7/8I	3500-HIT22	-
UNC 1 - 8	3532-1X1.5DP	21,90	1.50	38.10	3	26.25	3532-1I	3500-HIT23	-

		€	D1 mm	L mm		mm	Accessories		
									
UNF N°10 - 32	3534-10GX1.5DP	4,88	1.50	7.11	10	5.10	3534-10GI	3500-HIT8	3500-TB8
UNF 1/4 - 28	3534-1/4X1.5DP	4,88	1.50	9.65	10	6.70	3534-1/4I	3500-HIT9	3500-TB9
UNF 5/16 - 24	3534-5/16X1.5DP	6,90	1.50	11.94	10	8.30	3534-5/16I	3500-HIT11	3500-TB12
UNF 3/8 - 24	3534-3/8X1.5DP	9,92	1.50	14.22	10	9.80	3534-3/8I	3500-HIT13	3500-TB13
UNF 7/16 - 20	3534-7/16X1.5DP	13,28	1.50	16.76	10	11.50	3534-7/16I	3500-HIT14	3500-TB14
UNF 1/2 - 20	3534-1/2X1.5DP	13,28	1.50	19.05	10	13.00	3534-1/2I	3500-HIT15	3500-TB15
UNF 5/8 - 18	3534-5/8X1.5DP	14,69	1.50	24.13	5	16.50	3534-5/8I	3500-HIT18	-
UNF 3/4 - 16	3534-3/4X1.5DP	16,05	1.50	28.70	5	19.50	3534-3/4I	3500-HIT21	-

Accessories not included in listed price

UNC UNF

FREE

UNC/UNF

SAI 304

SBAC AS 6734
SBAC AS 8456

SBAC AS 6733
SBAC AS 8455

...DP

BSP (GAS) **FREE** **BSP** **SAI 304** **BS84** **...DP**






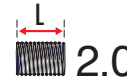



		€	D1 mm	L mm		mm	Accessories		
									
BSP 1/8 - 28	3546-1/8X1.5DP	11,58	1.50	4.83	10	10.00	3546-1/8I	3500-HIT14	
BSP 1/4 - 19	3546-1/4X1.5DP	15,87	1.50	9.65	10	13.75	3546-1/4I	3500-HIT16	
BSP 3/8 - 19	3546-3/8X1.5DP	18,00	1.50	14.22	10	17.00	3546-3/8I	3500-HIT20	
BSP 1/2 - 14	3546-1/2X1.5DP	25,84	1.50	19.05	10	21.50	3546-1/2I	3500-HIT23	
BSP 3/4 - 14	3546-3/4X1.5DP	28,86	1.50	28.70	5	27.00	3546-3/4I	3500-HIT24	
BSP 1 - 11	3546-1X1.5DP	53,08	1.50	38.10	3	33.75	3546-1I	3500-HIT27	

Accessories not included in listed price



SCREW LOCKING INSERTS


			 1.0D				 1.5D				 2.0D				
			L mm	€			L mm	€			L mm	€			
				<500	500-999	1000-...		<500	500-999	1000-...		<500	500-999	1000-...	Unit
M 2 x 0.40	3520-2.00	2.10	2.00	0,63	0,57	0,51	3.00	0,82	0,72	0,67	4.00	0,96	0,84	0,78	100
M 2.20 x 0.45	3520-2.20	2.30	2.20	0,60	0,53	0,49	3.30	0,78	0,69	0,64	4.40	0,89	0,80	0,75	100
M 2.50 x 0.45	3520-2.50	2.60	2.50	0,40	0,35	0,33	3.75	0,41	0,38	0,36	5.00	0,42	0,39	0,37	100
M 3 x 0.50	3520-3.00	3.20	3.00	0,30	0,27	0,25	4.50	0,35	0,30	0,28	6.00	0,36	0,33	0,30	100
M 3.50 x 0.60	3520-3.50	3.70	3.50	0,36	0,33	0,30	5.25	0,38	0,36	0,34	7.00	0,40	0,38	0,36	100
M 4 x 0.70	3520-4.00	4.20	4.00	0,30	0,28	0,26	6.00	0,35	0,30	0,28	8.00	0,36	0,32	0,29	100
M 5 x 0.80	3520-5.00	5.20	5.00	0,36	0,32	0,29	7.50	0,37	0,33	0,30	10.00	0,40	0,36	0,34	100
M 6 x 1.00	3520-6.00	6.30	6.00	0,39	0,35	0,33	9.00	0,41	0,36	0,34	12.00	0,46	0,41	0,38	100
M 7 x 1.00	3520-7.00	7.30	7.00	0,46	0,41	0,38	10.50	0,55	0,48	0,45	14.00	0,61	0,55	0,49	100
M 8 x 1.00	3521-8.00	8.30	8.00	0,49	0,44	0,41	12.00	0,53	0,45	0,42	16.00	0,62	0,53	0,49	100
M 8 x 1.25	3520-8.00	8.30	8.00	0,40	0,36	0,34	12.00	0,46	0,41	0,38	16.00	0,55	0,46	0,43	100
M 9 x 1.25	3520-9.00	9.40	9.00	0,99	0,88	0,82	13.50	1,27	1,05	0,98	18.00	1,33	1,11	1,03	100
M 10 x 1.00	3523-10.00	10.30	10.00	0,53	0,46	0,43	15.00	0,65	0,56	0,50	20.00	0,67	0,60	0,55	100
M 10 x 1.25	3521-10.00	10.30	10.00	0,50	0,45	0,42	15.00	0,64	0,59	0,55	20.00	0,66	0,63	0,59	100
M 10 x 1.50	3520-10.00	10.40	10.00	0,53	0,45	0,42	15.00	0,64	0,55	0,49	20.00	0,67	0,60	0,56	100
M 11 x 1.50	3520-11.00	11.40	11.00	1,04	0,87	0,81	16.50	1,05	0,89	0,83	22.00	1,06	0,97	0,88	100
M 12 x 1.25	3523-12.00	12.30	12.00	0,85	0,70	0,65	18.00	0,92	0,77	0,71	24.00	1,00	0,89	0,82	100
M 12 x 1.50	3521-12.00	12.40	12.00	0,86	0,75	0,69	18.00	0,93	0,81	0,75	24.00	1,03	0,96	0,87	100
M 12 x 1.75	3520-12.00	12.50	12.00	0,77	0,65	0,61	18.00	0,92	0,78	0,72	24.00	1,00	0,87	0,81	100
M 14 x 1.50	3521-14.00	14.50	14.00	1,18	1,05	0,98	21.00	1,37	1,11	1,03	28.00	1,50	1,25	1,17	50
M 14 x 2.00	3520-14.00	14.50	14.00	1,08	0,96	0,87	21.00	1,24	1,16	1,07	28.00	1,52	1,45	1,34	50
M 16 x 1.50	3521-16.00	16.50	16.00	1,60	1,43	1,35	24.00	1,72	1,54	1,43	32.00	2,08	1,91	1,76	50
M 16 x 2.00	3520-16.00	16.50	16.00	1,49	1,33	1,23	24.00	1,55	1,44	1,33	32.00	1,92	1,79	1,65	50
M 18 x 1.50	3523-18.00	18.50	18.00	2,59	2,15	2,00	27.00	2,63	2,27	2,10	36.00	4,02	3,30	3,03	50
M 18 x 2.00	3521-18.00	18.50	18.00	2,21	1,97	1,83	27.00	2,47	2,30	2,19	36.00	3,36	2,94	2,72	50
M 18 x 2.50	3520-18.00	19.00	18.00	2,23	1,97	1,83	27.00	2,53	2,24	2,07	36.00	3,45	3,11	2,87	50
M 20 x 1.50	3523-20.00	20.50	20.00	2,93	2,55	2,36	30.00	3,47	3,13	2,88	40.00	4,05	3,52	3,23	25
M 20 x 2.00	3521-20.00	20.50	20.00	2,55	2,21	2,04	30.00	3,13	2,77	2,55	40.00	4,02	3,51	3,23	25
M 20 x 2.50	3520-20.00	20.75	20.00	2,68	2,36	2,17	30.00	3,23	2,88	2,65	40.00	4,17	3,69	3,39	25
M 22 x 1.50	3523-22.00	22.50	22.00	2,97	2,82	2,52	33.00	3,33	3,17	2,76	44.00	4,44	4,29	3,34	25
M 22 x 2.00	3521-22.00	22.50	22.00	2,69	2,45	2,25	33.00	3,36	3,03	2,76	44.00	4,26	3,94	3,71	25
M 22 x 2.50	3520-22.00	22.75	22.00	2,79	2,58	2,38	33.00	3,49	3,17	2,92	44.00	4,41	4,03	3,72	25
M 24 x 1.50	3523-24.00	24.50	24.00	3,41	3,23	2,72	36.00	3,90	3,41	3,27	48.00	4,64	4,03	3,80	25
M 24 x 2.00	3521-24.00	24.50	24.00	3,36	3,10	2,90	36.00	4,04	3,71	3,45	48.00	4,47	4,22	4,07	25
M 24 x 3.00	3520-24.00	25.00	24.00	3,52	3,29	3,02	36.00	4,22	3,94	3,62	48.00	4,67	4,38	4,03	25



Coding example:






M 14 x 2.00


 1.0D
 3520-14.00x1.0DSL


 1.5D
 3520-14.00x1.5DSL

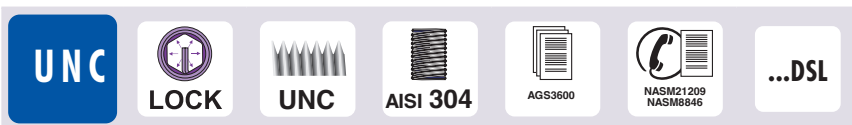
SCREW LOCKING INSERTS






		 2.5D				 3.0D					
		L mm	€			L mm	€				
	Ø	L mm	<500	500-999	1000-...	L mm	<500	500-999	1000-...	Unit	
M 2 x 0.40	3520-2.00	2.10	5.00	1,08	0,96	0,87	6.00	1,35	1,19	1,10	100
M 2.20 x 0.45	3520-2.20	2.30	5.50	1,02	0,89	0,83	6.60	1,28	1,12	1,04	100
M 2.50 x 0.45	3520-2.50	2.60	6.25	0,44	0,41	0,38	9.00	0,53	0,50	0,47	100
M 3 x 0.50	3520-3.00	3.20	7.50	0,41	0,39	0,37	9.00	0,49	0,45	0,42	100
M 3.50 x 0.60	3520-3.50	3.70	8.75	0,46	0,44	0,41	10.50	0,57	0,51	0,48	100
M 4 x 0.70	3520-4.00	4.20	10.00	0,41	0,39	0,37	12.00	0,46	0,42	0,39	100
M 5 x 0.80	3520-5.00	5.20	12.50	0,48	0,45	0,42	15.00	0,59	0,53	0,49	100
M 6 x 1.00	3520-6.00	6.30	15.00	0,57	0,51	0,48	18.00	0,67	0,61	0,57	100
M 7 x 1.00	3520-7.00	7.30	17.50	0,66	0,63	0,59	21.00	0,79	0,75	0,69	100
M 8 x 1.00	3521-8.00	8.30	20.00	0,71	0,64	0,60	24.00	0,87	0,82	0,78	100
M 8 x 1.25	3520-8.00	8.30	20.00	0,66	0,61	0,57	24.00	0,79	0,71	0,66	100
M 9 x 1.25	3520-9.00	9.40	22.50	1,48	1,31	1,21	27.00	1,92	1,76	1,63	100
M 10 x 1.00	3523-10.00	10.30	25.00	0,79	0,68	0,63	30.00	1,08	0,97	0,88	100
M 10 x 1.25	3521-10.00	10.30	25.00	0,80	0,76	0,70	30.00	1,10	1,06	0,99	100
M 10 x 1.50	3520-10.00	10.40	25.00	0,79	0,70	0,65	30.00	1,08	0,99	0,91	100
M 11 x 1.50	3520-11.00	11.40	27.50	1,31	1,20	1,11	33.00	1,61	1,54	1,43	100
M 12 x 1.25	3523-12.00	12.30	30.00	1,29	1,24	1,14	36.00	1,61	1,53	1,50	100
M 12 x 1.50	3521-12.00	12.40	30.00	1,29	1,09	1,01	36.00	1,66	1,64	1,50	100
M 12 x 1.75	3520-12.00	12.50	30.00	1,29	1,23	1,13	36.00	1,61	1,58	1,46	100
M 14 x 1.50	3521-14.00	14.50	35.00	1,84	1,46	1,35	42.00	3,06	3,01	2,78	50
M 14 x 2.00	3520-14.00	14.50	35.00	1,84	1,74	1,61	42.00	2,21	2,14	1,97	50
M 16 x 1.50	3521-16.00	16.50	40.00	2,28	2,13	1,96	48.00	2,94	2,86	2,63	50
M 16 x 2.00	3520-16.00	16.50	40.00	2,31	2,23	2,06	48.00	2,87	2,81	2,59	50
M 18 x 1.50	3523-18.00	18.50	45.00	4,29	3,63	3,35	54.00	4,80	4,22	3,89	50
M 18 x 2.00	3521-18.00	18.50	45.00	3,82	3,37	3,12	54.00	4,47	4,22	3,89	50
M 18 x 2.50	3520-18.00	19.00	45.00	3,92	3,56	3,28	54.00	4,60	4,44	3,98	50
M 20 x 1.50	3523-20.00	20.50	50.00	4,46	4,10	3,77	60.00	5,69	5,20	4,79	25
M 20 x 2.00	3521-20.00	20.50	50.00	4,47	4,12	3,85	60.00	5,69	5,39	5,25	25
M 20 x 2.50	3520-20.00	20.75	50.00	4,63	4,34	3,99	60.00	5,79	5,61	5,16	25
M 22 x 1.50	3523-22.00	22.50	55.00	5,19	4,56	4,20	66.00	6,59	6,32	5,74	25
M 22 x 2.00	3521-22.00	22.50	55.00	5,21	4,95	4,81	66.00	7,49	6,97	6,68	25
M 22 x 2.50	3520-22.00	22.75	55.00	5,40	5,05	4,65	66.00	7,30	6,77	6,23	25
M 24 x 1.50	3523-24.00	24.50	60.00	6,38	5,36	4,94	72.00	8,05	6,81	6,27	25
M 24 x 2.00	3521-24.00	24.50	60.00	6,49	5,87	5,33	72.00	7,74	7,40	7,30	25
M 24 x 3.00	3520-24.00	25.00	60.00	6,77	6,09	5,61	72.00	7,32	7,12	6,55	25



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

SCREW LOCKING INSERTS


		D1 mm		L mm	€			L mm	€			L mm	€			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	0,78	0,68	0,63	3.30	0,91	0,79	0,74	4.32	1,18	1,02	0,95	100
UNC N°4 - 40	3532-4G	2.84	3.00	2.79	0,35	0,30	0,28	4.32	0,38	0,33	0,30	5.59	0,40	0,35	0,33	100
UNC N°5 - 40	3532-5G	3.17	3.40	3.30	0,47	0,41	0,38	4.83	0,49	0,44	0,41	6.35	0,51	0,46	0,43	100
UNC N°6 - 32	3532-6G	3.50	3.70	3.56	0,30	0,27	0,25	5.33	0,36	0,32	0,29	7.11	0,38	0,34	0,32	100
UNC N°8 - 32	3532-8G	4.17	4.40	4.06	0,30	0,27	0,25	6.35	0,36	0,32	0,29	8.38	0,38	0,34	0,32	100
UNC N°10 - 24	3532-10G	4.83	5.10	4.83	0,37	0,33	0,30	7.37	0,40	0,35	0,33	9.65	0,44	0,38	0,36	100
UNC N°12 - 24	3532-12G	5.49	5.70	5.59	0,41	0,36	0,34	8.13	0,46	0,40	0,38	10.92	0,49	0,42	0,39	100
UNC 1/4 - 20	3532-1/4	6.35	6.70	6.35	0,41	0,36	0,34	9.65	0,46	0,40	0,38	12.70	0,49	0,42	0,39	100
UNC 5/16 - 18	3532-5/16	7.94	8.30	7.87	0,57	0,47	0,44	11.94	0,66	0,57	0,51	15.75	0,69	0,61	0,57	100
UNC 3/8 - 16	3532-3/8	9.52	9.90	9.65	0,80	0,69	0,64	14.48	0,84	0,74	0,68	19.05	1,10	0,97	0,88	100
UNC 7/16 - 14	3532-7/16	11.11	11.60	11.18	0,93	0,81	0,75	16.76	1,12	0,98	0,89	22.35	1,28	1,10	1,02	100
UNC 1/2 - 13	3532-1/2	12.70	13.00	12.70	1,01	0,87	0,81	19.05	1,12	0,98	0,89	25.40	1,28	1,10	1,02	100
UNC 9/16 - 12	3532-9/16	14.28	15.00	14.22	2,49	2,15	2,00	21.34	3,31	2,86	2,63	28.45	4,25	3,68	3,38	50
UNC 5/8 - 11	3532-5/8	15.87	16.50	16.00	2,26	1,94	1,80	23.88	3,01	2,60	2,40	31.75	3,74	3,24	2,98	50
UNC 3/4 - 10	3532-3/4	19.05	19.80	19.05	2,61	2,27	2,10	28.70	3,55	3,08	2,84	38.10	4,43	3,84	3,54	50
UNC 7/8 - 9	3532-7/8	22.22	23.00	22.35	3,63	3,15	2,90	33.53	5,44	4,69	4,33	44.45	6,90	5,97	5,49	25
UNC 1 - 8	3532-1	25.40	26.20	25.40	4,92	4,25	3,92	38.10	7,36	6,36	5,85	50.80	9,35	8,06	7,43	25

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



Coding example:





UNC 1/4 - 20

 1.0D
 3532-1/4x1.0DSL

 1.5D
 3532-1/4x1.5DSL

SCREW LOCKING INSERTS





		D1 mm		 2.5D					 3.0D					Unit
				L mm	€			L mm	€					
			∅		<500	500-999	1000-...		<500	500-999	1000-...			
UNC N°2 - 56	3532-2G	2.18	2.40	5.59	1,33	1,14	1,06	6.60	1,43	1,23	1,13	100		
UNC N°4 - 40	3532-4G	2.84	3.00	7.11	0,46	0,40	0,38	8.64	0,57	0,47	0,44	100		
UNC N°5 - 40	3532-5G	3.17	3.40	7.87	0,57	0,47	0,44	9.65	0,78	0,67	0,63	100		
UNC N°6 - 32	3532-6G	3.50	3.70	8.89	0,41	0,36	0,34	10.41	0,48	0,42	0,39	100		
UNC N°8 - 32	3532-8G	4.17	4.40	10.41	0,41	0,36	0,34	12.45	0,48	0,42	0,39	100		
UNC N°10 - 24	3532-10G	4.83	5.10	12.19	0,51	0,45	0,42	14.48	0,63	0,56	0,50	100		
UNC N°12 - 24	3532-12G	5.49	5.70	13.72	0,61	0,53	0,49	16.51	0,74	0,64	0,60	100		
UNC 1/4 - 20	3532-1/4	6.35	6.70	16.00	0,61	0,53	0,49	19.05	0,74	0,64	0,60	100		
UNC 5/16 - 18	3532-5/16	7.94	8.30	19.81	0,83	0,71	0,66	23.62	1,01	0,87	0,81	100		
UNC 3/8 - 16	3532-3/8	9.52	9.90	23.88	1,27	1,09	1,01	28.70	1,49	1,29	1,19	100		
UNC 7/16 - 14	3532-7/16	11.11	11.60	27.94	1,52	1,32	1,22	33.53	1,86	1,61	1,49	100		
UNC 1/2 - 13	3532-1/2	12.70	13.00	31.75	1,52	1,32	1,22	38.10	1,86	1,61	1,49	100		
UNC 9/16 - 12	3532-9/16	14.28	15.00	35.56	4,87	4,21	3,87	42.93	5,87	5,07	4,67	50		
UNC 5/8 - 11	3532-5/8	15.87	16.50	39.62	4,47	3,87	3,57	47.75	5,34	4,62	4,25	50		
UNC 3/4 - 10	3532-3/4	19.05	19.80	47.75	5,27	4,55	4,19	57.15	6,30	5,45	5,02	50		
UNC 7/8 - 9	3532-7/8	22.22	23.00	55.63	8,18	7,06	6,49	66.80	9,92	8,57	7,89	25		
UNC 1 - 8	3532-1	25.40	26.20	63.50	11,07	9,54	8,79	76.20	13,42	11,59	10,68	25		

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



SCREW LOCKING INSERTS


		D1 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	0,70	0,63	0,59	4.32	0,81	0,71	0,66	5.59	0,95	0,83	0,77	100
UNF N°6 - 40	3534-6G	3.50	3.70	3.56	0,70	0,63	0,59	5.33	0,81	0,71	0,66	7.11	0,95	0,83	0,77	100
UNF N°8 - 36	3534-8G	4.17	4.40	4.06	0,70	0,63	0,59	6.35	0,81	0,71	0,66	8.38	0,95	0,83	0,77	100
UNF N°10 - 32	3534-10G	4.83	5.10	4.83	0,40	0,35	0,33	7.37	0,41	0,36	0,34	9.65	0,49	0,42	0,39	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	6.35	0,40	0,35	0,33	9.65	0,41	0,36	0,34	12.70	0,49	0,42	0,39	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	7.87	0,57	0,47	0,44	11.94	0,60	0,49	0,46	16.00	0,69	0,61	0,57	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	9.65	0,81	0,69	0,64	14.48	0,84	0,74	0,68	19.05	1,01	0,87	0,81	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	11.18	1,01	0,87	0,81	16.76	1,12	0,98	0,89	22.35	1,28	1,10	1,02	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	12.70	1,01	0,87	0,81	19.05	1,12	0,98	0,89	25.40	1,28	1,10	1,02	100
UNF 9/16 - 18	3534-9/16	14.29	14.75	14.22	2,22	1,90	1,75	21.34	2,36	1,96	1,82	28.70	2,84	2,44	2,24	50
UNF 5/8 - 18	3534-5/8	15.87	16.50	16.00	2,26	1,91	1,76	23.88	2,36	2,04	1,87	31.75	2,84	2,44	2,24	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	19.05	2,97	2,56	2,37	28.70	4,14	3,57	3,29	38.10	5,01	4,31	3,97	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	22.35	5,06	4,36	4,01	33.27	7,47	6,44	5,92	44.45	9,49	8,18	7,53	25
UNF 1 - 12	3534-1	25.40	26.00	25.40	5,06	4,36	4,01	38.10	7,47	6,44	5,92	50.80	9,49	8,18	7,53	25
UNS 1 - 14	3535-1	25.40	26.00	25.40	5,06	4,41	4,06	38.10	7,47	6,51	6,00	50.80	9,49	8,28	7,62	25

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



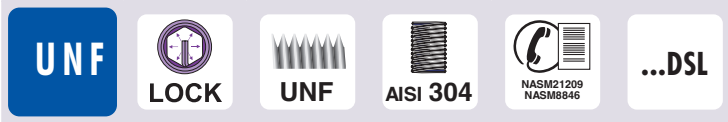
Coding example:

UNF N°4 - 48

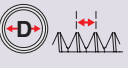



 1.0D
 3534-4Gx1.0DSL

 1.5D
 3534-4Gx1.5DSL

SCREW LOCKING INSERTS



powercoil
by CELESA
Pink

		D1 mm		 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	1,07	0,96	0,87	8.64	1,50	1,33	1,23	100
UNF N°6 - 40	3534-6G	3.50	3.70	8.89	1,07	0,96	0,87	10.41	1,50	1,33	1,23	100
UNF N°8 - 36	3534-8G	4.17	4.40	10.41	1,07	0,96	0,87	12.45	1,50	1,33	1,23	100
UNF N°10 - 32	3534-10G	4.83	5.10	12.19	0,61	0,53	0,49	14.48	0,74	0,64	0,60	100
UNF 1/4 - 28	3534-1/4	6.35	6.60	16.00	0,61	0,53	0,49	19.05	0,74	0,64	0,60	100
UNF 5/16 - 24	3534-5/16	7.94	8.20	19.81	0,83	0,74	0,68	23.88	1,01	0,87	0,81	100
UNF 3/8 - 24	3534-3/8	9.52	9.80	23.88	1,24	1,09	1,01	28.70	1,49	1,29	1,19	100
UNF 7/16 - 20	3534-7/16	11.11	11.50	27.69	1,52	1,33	1,23	33.27	1,86	1,61	1,49	100
UNF 1/2 - 20	3534-1/2	12.70	13.00	31.75	1,52	1,33	1,23	38.10	1,86	1,61	1,49	100
UNF 9/16 - 18	3534-9/16	14.29	14.75	35.81	3,45	3,01	2,78	42.93	3,98	3,44	3,17	50
UNF 5/8 - 18	3534-5/8	15.87	16.50	39.62	3,62	3,19	2,94	47.75	3,98	3,44	3,17	50
UNF 3/4 - 16	3534-3/4	19.05	19.50	47.75	6,06	5,29	4,87	57.15	7,26	6,27	5,78	50
UNF 7/8 - 14	3534-7/8	22.22	22.50	55.63	10,91	9,50	8,75	66.80	13,07	11,29	10,40	25
UNF 1 - 12	3534-1	25.40	26.00	63.50	13,01	11,34	10,45	76.20	15,66	13,53	12,45	25
UNS 1 - 14	3535-1	25.40	26.00	63.50	13,01	11,34	10,45	76.20	15,66	13,66	12,57	25

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



FREE RUNNING INSERT KITS

M
MF

FREE

M/MF

1.5D

AISI 304

HSS

HSS
...K

 M D x L	 Code	€	 D L mm		 Content				
			D	L	mm	mm	Code	Code	Code
M 2 x 0.40	3520-2.00K	52,41	1.50	3.00	20	2.10	3520-2.00I	3500-HIT2	3500-TB2
M 2.20 x 0.45	3520-2.20K	70,16	1.50	3.30	20	2.30	3520-2.20I	3500-HIT2	3500-TB2
M 2.50 x 0.45	3520-2.50K	48,45	1.50	3.75	20	2.60	3520-2.50I	3500-HIT3	3500-TB3
M 3 x 0.50	3520-3.00K	48,45	1.50	4.50	20	3.20	3520-3.00I	3500-HIT4	3500-TB4
M 3.50 x 0.60	3520-3.50K	48,45	1.50	5.25	20	3.70	3520-3.50I	3500-HIT5	3500-TB5
M 4 x 0.70	3520-4.00K	48,45	1.50	6.00	20	4.20	3520-4.00I	3500-HIT6	3500-TB6
M 5 x 0.80	3520-5.00K	48,21	1.50	7.50	20	5.20	3520-5.00I	3500-HIT8	3500-TB8
M 6 x 1.00	3520-6.00K	51,92	1.50	9.00	20	6.30	3520-6.00I	3500-HIT9	3500-TB9
M 7 x 1.00	3520-7.00K	66,02	1.50	10.50	20	7.30	3520-7.00I	3500-HIT10	3500-TB11
M 8 x 1.00	3521-8.00K	66,02	1.50	12.00	20	8.30	3521-8.00I	3500-HIT11	3500-TB12
M 8 x 1.25	3520-8.00K	66,02	1.50	12.00	20	8.30	3520-8.00I	3500-HIT11	3500-TB12
M 9 x 1.25	3520-9.00K	73,23	1.50	13.50	15	9.40	3520-9.00I	3500-HIT13	3500-TB12
M 10 x 1.00	3523-10.00K	70,70	1.50	15.00	15	10.30	3523-10.00I	3500-HIT13	3500-TB13
M 10 x 1.25	3521-10.00K	70,70	1.50	15.00	15	10.30	3521-10.00I	3500-HIT13	3500-TB13
M 10 x 1.50	3520-10.00K	70,70	1.50	15.00	15	10.40	3520-10.00I	3500-HIT13	3500-TB13
M 11 x 1.00	3523-11.00K	97,99	1.50	16.50	10	11.30	3523-11.00I	3500-HIT14	3500-TB14
M 11 x 1.25	3521-11.00K	97,99	1.50	16.50	10	11.30	3521-11.00I	3500-HIT14	3500-TB14
M 11 x 1.50	3520-11.00K	81,06	1.50	16.50	10	11.40	3520-11.00I	3500-HIT14	3500-TB14
M 12 x 1.00	3524-12.00K	81,06	1.50	18.00	10	12.30	3524-12.00I	3500-HIT15	3500-TB15
M 12 x 1.25	3523-12.00K	81,06	1.50	18.00	10	12.30	3523-12.00I	3500-HIT15	3500-TB15
M 12 x 1.50	3521-12.00K	81,06	1.50	18.00	10	12.40	3521-12.00I	3500-HIT15	3500-TB15
M 12 x 1.75	3520-12.00K	81,06	1.50	18.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15
M 13 x 1.25	3523-13.00K	116,66	1.50	19.50	10	-	3523-13.00I	3500-HIT15	-
M 13 x 1.50	3521-13.00K	116,66	1.50	19.50	10	-	3521-13.00I	3500-HIT15	-
M 13 x 1.75	3520-13.00K	116,66	1.50	19.50	10	-	3520-13.00I	3500-HIT15	-
M 14 x 1.00	3524-14.00K	93,18	1.50	21.00	10	-	3524-14.00I	3500-HIT16	-
M 14 x 1.25	3523-14.00K	93,18	1.50	21.00	10	-	3523-14.00I	3500-HIT16	-
M 14 x 1.50	3521-14.00K	93,18	1.50	21.00	10	-	3521-14.00I	3500-HIT16	-
M 14 x 2.00	3520-14.00K	93,18	1.50	21.00	10	-	3520-14.00I	3500-HIT16	-
M 15 x 1.50	3521-15.00K	139,43	1.50	22.50	10	-	3521-15.00I	3500-HIT16	-
M 15 x 2.00	3520-15.00K	139,43	1.50	22.50	10	-	3520-15.00I	3500-HIT16	-
M 16 x 1.50	3521-16.00K	109,75	1.50	24.00	10	-	3521-16.00I	3500-HIT18	-
M 16 x 2.00	3520-16.00K	109,75	1.50	24.00	10	-	3520-16.00I	3500-HIT18	-
M 18 x 1.50	3523-18.00K	130,37	1.50	27.00	5	-	3523-18.00I	3500-HIT20	-

FREE RUNNING INSERT KITS



D	L mm	€	D		Content	
			D	L mm		
M 18 x 2.00	3521-18.00K	130,37	1.50	27.00	5	3521-18.00I 3500-HIT20
M 18 x 2.50	3520-18.00K	132,90	1.50	27.00	5	3520-18.00I 3500-HIT20
M 20 x 1.50	3523-20.00K	142,12	1.50	30.00	5	3523-20.00I 3500-HIT21
M 20 x 2.00	3521-20.00K	142,12	1.50	30.00	5	3521-20.00I 3500-HIT21
M 20 x 2.50	3520-20.00K	142,12	1.50	30.00	5	3520-20.00I 3500-HIT21
M 22 x 1.50	3523-22.00K	163,22	1.50	33.00	5	3523-22.00I 3500-HIT22
M 22 x 2.00	3521-22.00K	163,22	1.50	33.00	5	3521-22.00I 3500-HIT22
M 22 x 2.50	3520-22.00K	163,22	1.50	33.00	5	3520-22.00I 3500-HIT22
M 24 x 1.50	3523-24.00K	187,24	1.50	36.00	5	3523-24.00I 3500-HIT23
M 24 x 2.00	3521-24.00K	187,24	1.50	36.00	5	3521-24.00I 3500-HIT23
M 24 x 3.00	3520-24.00K	187,24	1.50	36.00	5	3520-24.00I 3500-HIT23

D	L mm	€	D		Content	
			D	L mm		
M 26 x 1.50	3523-26.00K	378,90	1.50	39.00	5	3523-26.00I 3500-HIT24
M 27 x 1.50	3523-27.00K	378,90	1.50	40.50	5	3523-27.00I 3500-HIT24
M 27 x 2.00	3521-27.00K	378,90	1.50	40.50	5	3521-27.00I 3500-HIT24
M 27 x 3.00	3520-27.00K	378,90	1.50	40.50	5	3520-27.00I 3500-HIT24
M 28 x 1.50	3523-28.00K	439,06	1.50	42.00	5	3523-28.00I 3500-HIT24
M 30 x 1.50	3523-30.00K	459,36	1.50	45.00	5	3523-30.00I 3500-HIT26
M 30 x 2.00	3521-30.00K	483,43	1.50	45.00	5	3521-30.00I 3500-HIT26
M 30 x 3.50	3520-30.00K	459,36	1.50	45.00	5	3520-30.00I 3500-HIT25
M 33 x 2.00	3521-33.00K	479,68	1.50	49.50	5	3521-33.00I 3500-HIT26
M 33 x 3.50	3520-33.00K	479,68	1.50	49.50	5	3520-33.00I 3500-HIT26
M 36 x 1.50	3524-36.00K	532,32	1.50	54.00	3	3524-36.00I 3500-HIT28
M 36 x 2.00	3523-36.00K	532,32	1.50	54.00	3	3523-36.00I 3500-HIT28
M 36 x 3.00	3521-36.00K	532,32	1.50	54.00	3	3521-36.00I 3500-HIT28
M 36 x 4.00	3520-36.00K	532,32	1.50	54.00	3	3520-36.00I 3500-HIT28
M 39 x 3.00	3521-39.00K	536,43	1.50	58.50	3	3521-39.00I 3521-39.00HIM
M 39 x 4.00	3520-39.00K	544,99	1.50	58.50	3	3520-39.00I 3520-39.00HIM
M 40 x 3.00	3523-40.00K	578,99	1.50	60.00	3	3523-40.00I 3523-40.00HIM
M 42 x 3.00	3523-42.00K	599,82	1.50	63.00	3	3523-42.00I 3523-42.00HIM
M 42 x 4.50	3520-42.00K	599,82	1.50	63.00	3	3520-42.00I 3520-42.00HIM
M 45 x 3.00	3523-45.00K	773,55	1.50	67.50	3	3523-45.00I 3523-45.00HIM
M 45 x 4.50	3520-45.00K	668,94	1.50	67.50	3	3520-45.00I 3520-45.00HIM
M 48 x 3.00	3523-48.00K	761,63	1.50	72.00	3	3523-48.00I 3523-48.00HIM
M 48 x 5.00	3520-48.00K	802,18	1.50	72.00	3	3520-48.00I 3520-48.00HIM
M 50 x 3.00	3523-50.00K	849,37	1.50	75.00	3	3523-50.00I 3523-50.00HIM
M 52 x 3.00	3523-52.00K	889,94	1.50	78.00	3	3523-52.00I 3523-52.00HIM
M 52 x 5.00	3520-52.00K	889,94	1.50	78.00	3	3520-52.00I 3520-52.00HIM



FREE RUNNING INSERT KITS
UNC

FREE

UNC

1.5D

AISI 304

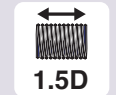
HSS

HSS
...K


		€							
			D	L mm	Content				
UNC N°2 - 56	3532-2GK	68,74	1.50	3.30	20	2.40	3532-2GI	3500-HIT2	3500-TB2
UNC N°3 - 48	3532-3GK	65,84	1.50	3.81	20	2.70	3532-3GI	3500-HIT3	3500-TB3
UNC N°4 - 40	3532-4GK	62,35	1.50	4.32	20	3.10	3532-4GI	3500-HIT4	3500-TB4
UNC N°5 - 40	3532-5GK	62,35	1.50	4.83	20	3.40	3532-5GI	3500-HIT4	3500-TB4
UNC N°6 - 32	3532-6GK	62,35	1.50	5.33	20	3.80	3532-6GI	3500-HIT5	3500-TB5
UNC N°8 - 32	3532-8GK	62,35	1.50	6.35	20	4.40	3532-8GI	3500-HIT6	3500-TB6
UNC N°10 - 24	3532-10GK	62,35	1.50	7.11	20	5.20	3532-10GI	3500-HIT7	3500-TB8
UNC N°12 - 24	3532-12GK	62,35	1.50	8.38	20	5.80	3532-12GI	3500-HIT8	3500-TB8
UNC 1/4 - 20	3532-1/4K	56,18	1.50	9.65	20	6.70	3532-1/4I	3500-HIT9	3500-TB9
UNC 5/16 - 18	3532-5/16K	68,74	1.50	11.94	20	8.30	3532-5/16I	3500-HIT10	3500-TB12
UNC 3/8 - 16	3532-3/8K	73,48	1.50	14.22	15	9.90	3532-3/8I	3500-HIT13	3500-TB12
UNC 7/16 - 14	3532-7/16K	82,50	1.50	16.76	10	11.60	3532-7/16I	3500-HIT14	3500-TB14
UNC 1/2 - 13	3532-1/2K	90,54	1.50	19.05	10	13.00	3532-1/2I	3500-HIT15	3500-TB15
UNC 9/16 - 12	3532-9/16K	120,88	1.50	21.34	10	-	3532-9/16I	3500-HIT16	-
UNC 5/8 - 11	3532-5/8K	120,88	1.50	23.88	10	-	3532-5/8I	3500-HIT18	-
UNC 3/4 - 10	3532-3/4K	154,07	1.50	28.70	5	-	3532-3/4I	3500-HIT20	-
UNC 7/8 - 9	3532-7/8K	187,24	1.50	33.27	5	-	3532-7/8I	3500-HIT22	-
UNC 1 - 8	3532-1K	186,03	1.50	38.10	5	-	3532-1I	3500-HIT23	-

		€							
			D	L mm	Content				
UNC 1.1/8 - 7	3532-1.1/8K	375,00	1.50	42.93	3	-	3532-1.1/8I	3500-HIT25	-
UNC 1.1/4 - 7	3532-1.1/4K	417,18	1.50	47.75	3	-	3532-1.1/4I	3500-HIT26	-
UNC 1.3/8 - 6	3532-1.3/8K	501,54	1.50	52.32	3	-	3532-1.3/8I	3500-HIT27	-
UNC 1.1/2 - 6	3532-1.1/2K	584,36	1.50	57.15	3	-	3532-1.1/2I	3500-HIT28	-

FREE RUNNING INSERT KITS



		€							
			D	L mm	Content				
UNF N°3 - 56	3534-3GK	68,62	1.50	3.30	20	2.70	3534-3GI	3500-HIT3	3500-TB3
UNF N°4 - 48	3534-4GK	62,35	1.50	3.81	20	3.00	3534-4GI	3500-HIT4	3500-TB4
UNF N°6 - 40	3534-6GK	62,35	1.50	4.32	20	3.80	3534-6GI	3500-HIT5	3500-TB5
UNF N°8 - 36	3534-8GK	62,35	1.50	4.83	20	4.40	3534-8GI	3500-HIT6	3500-TB6
UNF N°10 - 32	3534-10GK	62,35	1.50	5.33	20	5.10	3534-10GI	3500-HIT8	3500-TB8
UNF N°12 - 28	3534-12GK	68,30	1.50	6.35	20	5.60	3534-12GI	3500-HIT8	3500-TB8
UNF 1/4 - 28	3534-1/4K	56,18	1.50	7.11	20	6.70	3534-1/4I	3500-HIT9	3500-TB9
UNF 5/16 - 24	3534-5/16K	68,74	1.50	8.38	20	8.30	3534-5/16I	3500-HIT11	3500-TB12
UNF 3/8 - 24	3534-3/8K	73,48	1.50	9.65	15	9.80	3534-3/8I	3500-HIT13	3500-TB13
UNF 7/16 - 16	3534-7/16-16K	99,96	1.50	11.94	10	11.50	3534-7/16-16I	3500-HIT14	3500-TB14
UNF 7/16 - 20	3534-7/16K	82,50	1.50	14.22	10	11.50	3534-7/16I	3500-HIT14	3500-TB14
UNF 1/2 - 20	3534-1/2K	90,54	1.50	16.76	10	13.00	3534-1/2I	3500-HIT15	3500-TB15
UNF 9/16 - 18	3534-9/16K	120,88	1.50	19.05	10	-	3534-9/16I	3500-HIT16	-
UNF 5/8 - 18	3534-5/8K	120,88	1.50	21.34	10	-	3534-5/8I	3500-HIT18	-
UNF 3/4 - 16	3534-3/4K	154,07	1.50	23.88	5	-	3534-3/4I	3500-HIT21	-
UNF 7/8 - 14	3534-7/8K	187,24	1.50	28.70	5	-	3534-7/8I	3500-HIT22	-
UNF 1 - 12	3534-1K	183,48	1.50	33.27	5	-	3534-1I	3500-HIT23	-
UNF 1 - 14	3535-1K	205,39	1.50	38.10	5	-	3535-1I	3500-HIT23	-

		€							
			D	L mm	Content				
UNF 1.1/8 - 12	3534-1.1/8K	375,00	1.50	42.93	3	-	3534-1.1/8I	3500-HIT25	-
UNF 1.1/4 - 12	3534-1.1/4K	417,18	1.50	47.75	3	-	3534-1.1/4I	3500-HIT26	-
UNF 1.3/8 - 12	3534-1.3/8K	501,54	1.50	52.32	3	-	3534-1.3/8I	3500-HIT27	-
UNF 1.1/2 - 12	3534-1.1/2K	584,36	1.50	57.15	3	-	3534-1.1/2I	3500-HIT28	-

FREE RUNNING INSERT KITS
BSW

FREE



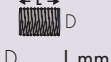
BSW

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AISI 304

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...K


 D L mm		€	 D L mm		Content				
			mm	mm	mm	mm	mm	mm	
BSW 1/8 - 40	3528-1/8K	64,02	1.50	4.83	20	3.40	3528-1/8I	3500-HIT4	3500-TB4
BSW 3/16 - 24	3528-3/16K	62,35	1.50	7.11	20	5.00	3528-3/16I	3500-HIT7	3500-TB8
BSW 1/4 - 20	3528-1/4K	57,68	1.50	9.65	20	6.70	3528-1/4I	3500-HIT9	3500-TB9
BSW 5/16 - 18	3528-5/16K	68,74	1.50	11.94	20	8.30	3528-5/16I	3500-HIT10	3500-TB11
BSW 3/8 - 16	3528-3/8K	73,48	1.50	14.22	15	9.90	3528-3/8I	3500-HIT11	3500-TB12
BSW 7/16 - 14	3528-7/16K	82,50	1.50	16.76	10	11.50	3528-7/16I	3500-HIT14	3500-TB14
BSW 1/2 - 12	3528-1/2K	90,54	1.50	19.05	10	13.00	3528-1/2I	3500-HIT15	3500-TB15
BSW 9/16 - 12	3528-9/16K	120,88	1.50	21.34	10	-	3528-9/16I	3500-HIT16	-
BSW 5/8 - 11	3528-5/8K	120,88	1.50	23.88	10	-	3528-5/8I	3500-HIT18	-
BSW 3/4 - 10	3528-3/4K	154,07	1.50	28.70	5	-	3528-3/4I	3500-HIT20	-
BSW 7/8 - 9	3528-7/8K	187,24	1.50	33.27	5	-	3528-7/8I	3500-HIT22	-
BSW 1 - 8	3528-1K	186,03	1.50	38.10	5	-	3528-1I	3500-HIT23	-

BSF

FREE



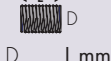
BSF

1.5D

AISI 304

HSS

HSS
...K

 D L mm		€	 D L mm		Content				
			mm	mm	mm	mm	mm	mm	
BSF 3/16 - 32	3530-3/16K	62,35	1.50	7.11	20	5.0	3530-3/16I	3500-HIT8	3500-TB6
BSF 1/4 - 26	3530-1/4K	56,18	1.50	9.65	20	6.6	3530-1/4I	3500-HIT9	3500-TB9
BSF 5/16 - 22	3530-5/16K	68,74	1.50	11.94	20	8.3	3530-5/16I	3500-HIT11	3500-TB11
BSF 3/8 - 20	3530-3/8K	73,48	1.50	14.22	15	9.9	3530-3/8I	3500-HIT13	3500-TB12
BSF 7/16 - 18	3530-7/16K	82,50	1.50	16.76	10	11.5	3530-7/16I	3500-HIT14	3500-TB14
BSF 1/2 - 16	3530-1/2K	90,54	1.50	19.05	10	13.0	3530-1/2I	3500-HIT15	3500-TB15
BSF 9/16 - 16	3530-9/16K	120,88	1.50	21.34	10	-	3530-9/16I	3500-HIT16	-
BSF 5/8 - 14	3530-5/8K	120,88	1.50	23.88	10	-	3530-5/8I	3500-HIT18	-
BSF 3/4 - 12	3530-3/4K	154,07	1.50	28.70	5	-	3530-3/4I	3500-HIT20	-
BSF 7/8 - 11	3530-7/8K	187,24	1.50	33.27	5	-	3530-7/8I	3500-HIT22	-
BSF 1 - 10	3530-1K	188,95	1.50	38.10	5	-	3530-1I	3500-HIT23	-

FREE RUNNING INSERT KITS



**BSP
(GAS)**

FREE

BSP




1.5D


AISI 304



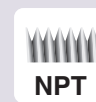

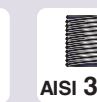



HSS




HSS


...K

		€		
			D	L mm
BSP 1/8 - 28	3546-1/8K	100,01	1.50	4.83
BSP 1/4 - 19	3546-1/4K	105,61	1.50	9.65
BSP 3/8 - 19	3546-3/8K	121,38	1.50	14.22
BSP 1/2 - 14	3546-1/2K	159,55	1.50	19.05
BSP 5/8 - 14	3546-5/8K	327,54	1.50	23.88
BSP 3/4 - 14	3546-3/4K	343,19	1.50	28.70
BSP 7/8 - 14	3546-7/8K	459,36	1.50	33.27
BSP 1 - 11	3546-1K	459,36	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

		€		
			D	L mm
NPT 1/8 - 27	3552-1/8K	243,18	1.50	4,78
NPT 1/4 - 18	3552-1/4K	274,89	1.50	9,53
NPT 3/8 - 18	3552-3/8K	348,92	1.50	14,30
NPT 1/2 - 14	3552-1/2K	456,12	1.50	19,05
NPT 3/4 - 14	3552-3/4K	557,48	1.50	28,58
NPT 1 - 11.1/2	3552-1K	739,90	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

UN x 8



...K



D	L mm	€	D L mm	
			D	L mm
UN 1.1/8 - 8	3570-1.1/8K	557,48	1.50	42.88
UN 1.1/4 - 8	3570-1.1/4K	679,11	1.50	47.63
UN 1.3/8 - 8	3570-1.3/8K	841,28	1.50	52.37
UN 1.1/2 - 8	3570-1.1/2K	739,90	1.50	57.15
UN 1.5/8 - 8	3570-1.5/8K	1.043,99	1.50	61.93
UN 1.3/4 - 8	3570-1.3/4K	1.084,53	1.50	66.68
UN 1.7/8 - 8	3570-1.7/8K	1.226,43	1.50	71.42
UN 2 - 8	3570-2K	1.368,35	1.50	76.20

Content		
3	3570-1.1/8I	3500-HIT25
3	3570-1.1/4I	3500-HIT26
3	3570-1.3/8I	3500-HIT27
3	3570-1.1/2I	3500-HIT28
3	3570-1.5/8I	3500-HIT28
3	3570-1.3/4I	3500-HIT28
3	3570-1.7/8I	3500-HIT30
3	3570-2I	3500-HIT30



BA



...K

D	L mm	€	D L mm	
			D	L mm
BA 0	3544-0K	119,04	1.50	8.99
BA 2	3544-2K	119,04	1.50	7.06
BA 4	3544-4K	119,04	1.50	5.41
BA 6	3544-6K	130,80	1.50	4.19


Content				
20	6.20	3544-0I	3500-HIT9	3500-TB11
20	4.90	3544-2I	3500-HIT7	3500-TB8
20	3.80	3544-4I	3500-HIT5	3500-TB5
20	2.90	3544-6I	3500-HIT3	3500-TB3


FREE RUNNING INSERT KITS





		€	 D L mm		Content				
			D	L mm	mm	mm	mm	mm	mm
BSB 1/4/26	3560-1/4K	145,69	1.50	9,53	20	6.6	3560-1/4I	3500-HIT10	3500-TB9
BSB 5/16 - 26	3560-5/16K	115,77	1.50	11,91	20	8.0	3560-5/16I	3500-HIT11	3500-TB12
BSB 3/8/26	3560-3/8K	125,42	1.50	14,30	15	9.8	3560-3/8I	3500-HIT13	3500-TB13
BSB 7/16 - 26	3560-7/16K	135,08	1.50	16,66	10	11.1	3560-7/16I	3500-HIT14	3500-TB14
BSB 1/2/26	3560-1/2K	144,73	1.50	19,05	10	12.7	3560-1/2I	3500-HIT15	3500-TB15


BSB


 **FREE**

 **BSB**

 **1.5D**

 **AISI 304**

 **HSS**

 **HSS**

...K

M MF

 **FREE**

 **M/MF**



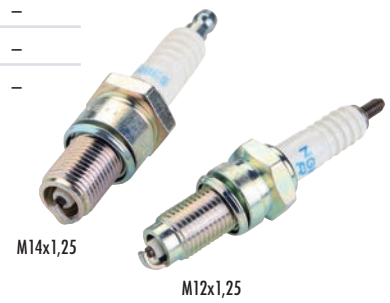
 **AISI 304**

 **HSS**

 **HSS**

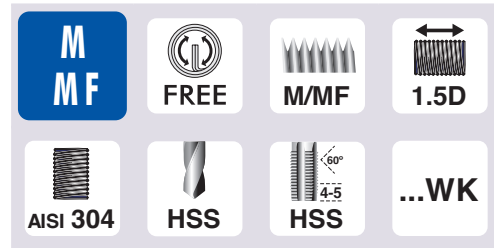
...K

		€	 D L mm		Content			
			D	L mm	mm	mm	mm	mm
M 10 x 1.00	3522-10.00K	105,67	-	1/2"	5	3522-10.00PN	3500-HIT13	3500-TB13
			-	0.339 mm	5	-	-	-
M 12 x 1.25	3522-12.00K	128,79	-	1/2"	5	3522-12.00PN	3500-HIT15	3500-TB15
			-	3/4"	5	-	-	-
M 14 x 1.25	3522-14.00K	138,15	-	3/8"	5	3522-14.00PN	3500-HIT17	-
			-	1/2"	5	-	-	-
			-	3/4"	5	-	-	-
M 18 x 1.50	3522-18.00K	209,08	-	1/2"	5	3522-18.00PN	3500-HIT20	-
M 14 x 1.25	3522-14.00K1	111,41	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	3520-5.00I	3500-HIT8	3500-TB8
	M 6 x 1.00	1.50	9.00	25	6.30	3520-6.00I	3500-HIT9	3500-TB9
	M 8 x 1.25	1.50	12.00	25	8.30	3520-8.00I	3500-HIT11	3500-TB12
3520-WK1	M 10 x 1.50	1.50	15.00	25	10.40	3520-10.00I	3500-HIT13	3500-TB13
341,40 €	M 12 x 1.75	1.50	18.00	10	12.50	3520-12.00I	3500-HIT15	3500-TB15



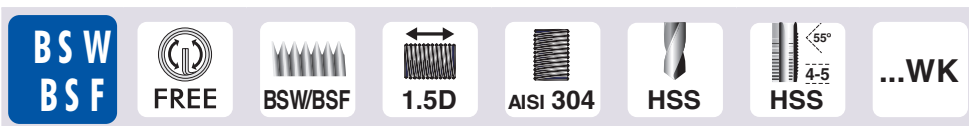
M14x1,25

		D	L mm	SPARK PLUG M6 - M12 + M14 X 1.25					
	M 6 x 1.00	1.50	9.00	25	6.30	3520-6.00I	-	3500-HIT9	3500-TB9
	M 8 x 1.25	1.50	12.00	25	8.30	3520-8.00I	-	3500-HIT11	3500-TB13
	M 10 x 1.50	1.50	15.00	25	10.40	3520-10.00I	-	3500-HIT13	3500-TB13
	M 12 x 1.75	1.50	18.00	10	12.50	3520-12.00I	-	3500-HIT15	3500-TB15
	M 14 x 1.25	-	8.40	5	14.25	-	3522-14.00PN	3500-HIT17	-
3522-WK4		-	12.40	5	-	-	-	-	-
393,41 €		-	16.40	5	-	-	-	-	-

FREE RUNNING INSERT KITS



		SET UNC 1/4" - 1/2"							
	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
3532-WK1	UNC	7/16 - 14	1.50	16.76	10	11.60	3532-7/16I	3500-HIT14	3500-TB14
426,64 €	UNC	1/2 - 13	1.50	19.05	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
3534-WK1	UNF	7/16 - 20	1.50	16.76	10	11.50	3534-7/16I	3500-HIT14	3500-TB14
426,64 €	UNF	1/2 - 20	1.50	19.05	10	13.00	3534-1/2I	3500-HIT15	3500-TB15



		SET BSW 1/4" - 1/2"							
	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
3528-WK1	BSW	7/16 - 14	1.50	16.76	10	11.60	3528-7/16I	3500-HIT14	3500-TB14
426,64 €	BSW	1/2 - 12	1.50	19.05	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
3530-WK1	BSF	7/16 - 18	1.50	16.76	10	11.60	3530-7/16I	3500-HIT14	3500-TB14
426,64 €	BSF	1/2 - 16	1.50	19.05	10	13.25	3530-1/2I	3500-HIT15	3500-TB15

FREE RUNNING INSERT DISPLAYS


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

1.771,14 €

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

1.363,43 €



330 x 360 x 515 mm

FREE RUNNING INSERT DISPLAYS



330 x 360 x 515 mm




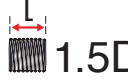
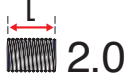
DISPLAY CONTENT

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
4	M6x1.0	3520-6.00K	5	M 6x1.0-1.0D	3520-6.00x1.0DP
3	M8x1.25	3520-8.00K	5	M 6x1.0-1.5D	3520-6.00x1.5DP
			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
SPARK PLUG					
			5	M 14x1.25-1/2"	M14x1.25-1/2P

1-89

965,68 €

FREE RUNNING INSERTS IN REEL


			 1.0D		 1.5D		 2.0D	
			L mm	€	L mm	€	L mm	€
M 2.20 x 0.45	3520-2.20	1000	2.20	412,98	3.30	418,96	4.40	451,88
M 2.50 x 0.45	3520-2.50	1000	2.50	197,81	3.75	212,48	5.00	239,41
M 3 x 0.50	3520-3.00	1000	3.00	185,55	4.50	212,48	6.00	230,42
M 4 x 0.70	3520-4.00	1000	4.00	182,55	6.00	194,51	8.00	215,46
M 5 x 0.80	3520-5.00	1000	5.00	182,55	7.50	215,76	10.00	233,88
M 6 x 1.00	3520-6.00	500	6.00	113,03	9.00	121,34	12.00	157,71
M 8 x 1.00	3521-8.00	250	8.00	84,92	12.00	90,64	16.00	115,13
M 8 x 1.25	3520-8.00	250	8.00	71,44	12.00	78,39	16.00	107,78
M 10 x 1.50	3520-10.00	250	10.00	95,03	15.00	107,78	20.00	124,94
M 12 x 1.75	3520-12.00	125	12.00	67,40	18.00	79,87	24.00	94,30



Coding example:

M 6 x 1.00

 1.0D
 3520-6.00x1.0DIR

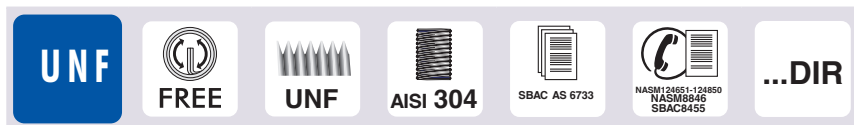
 1.5D
 3520-6.00x1.5DIR

 2.0D
 3520-6.00x2.0DIR

FREE RUNNING INSERTS IN REEL



				1.0D		1.5D		2.0D	
				L mm	€	L mm	€	L mm	€
UNC	N°2 - 56	3532-2G	1000	2.29	546,80	3.30	640,15	4.32	826,85
UNC	N°4 - 40	3532-4G	1000	2.79	200,09	4.32	208,82	5.59	213,38
UNC	N°5 - 40	3532-5G	1000	3.30	220,05	4.83	233,38	6.35	246,73
UNC	N°6 - 32	3532-6G	1000	3.56	198,27	5.33	222,05	7.11	237,92
UNC	N°8 - 32	3532-8G	1000	4.06	198,27	6.35	222,05	8.38	237,92
UNC	N°10 - 24	3532-10G	1000	4.83	213,38	7.37	224,00	9.65	233,38
UNC	1/4 - 20	3532-1/4	500	6.35	138,33	9.65	155,09	12.70	167,66
UNC	5/16 - 18	3532-5/16	250	7.87	104,79	11.94	126,22	15.75	133,36
UNC	3/8 - 16	3532-3/8	250	9.65	161,94	14.48	185,38	19.30	211,96






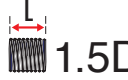
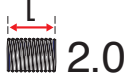
				1.0D		1.5D		2.0D	
				L mm	€	L mm	€	L mm	€
UNF	N°4 - 48	3534-4G	1000	2.79	488,28	4.32	554,26	5.59	739,02
UNF	N°6 - 40	3534-6G	1000	3.56	488,28	5.33	554,26	7.11	739,02
UNF	N°8 - 36	3534-8G	1000	4.06	488,28	6.35	554,26	8.38	739,02
UNF	N°10 - 32	3534-10G	1000	4.83	211,14	7.37	217,75	9.65	263,94
UNF	1/4 - 28	3534-1/4	500	6.35	136,85	9.65	147,21	12.70	165,90
UNF	5/16 - 24	3534-5/16	250	7.87	103,69	11.94	110,75	15.75	131,96
UNF	3/8 - 24	3534-3/8	250	9.65	153,18	14.48	160,25	19.30	193,24



Coding example:

	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


			 1.0D		 1.5D		 2.0D	
			L mm	€	L mm	€	L mm	€
M 2.20 x 0.45	3520-2.20	1000	2.20	511,76	3.30	598,50	4.40	628,44
M 2.50 x 0.45	3520-2.50	1000	2.50	264,14	3.75	270,77	5.00	359,11
M 3 x 0.50	3520-3.00	1000	3.00	227,46	4.50	261,49	6.00	299,25
M 4 x 0.70	3520-4.00	1000	4.00	255,90	6.00	269,33	8.00	275,34
M 5 x 0.80	3520-5.00	1000	5.00	255,90	7.50	284,30	10.00	329,18
M 6 x 1.00	3520-6.00	500	6.00	151,79	9.00	158,42	12.00	192,68
M 8 x 1.00	3521-8.00	250	8.00	108,86	12.00	121,32	16.00	138,16
M 8 x 1.25	3520-8.00	250	8.00	90,76	12.00	107,78	16.00	126,03
M 10 x 1.50	3520-10.00	250	10.00	114,04	15.00	148,27	20.00	149,91
M 12 x 1.75	3520-12.00	125	12.00	83,79	18.00	104,46	24.00	113,90



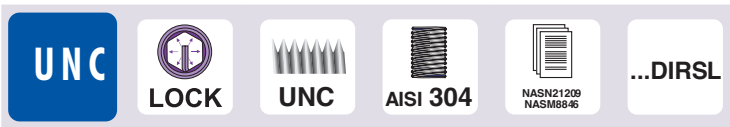
Coding example:



M 3 x 0.50
 1.0D
 3520-3.00x1.0DIRSL

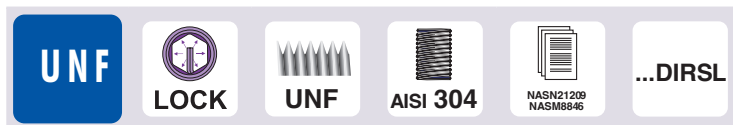
 1.5D
 3520-3.00x1.5DIRSL



 2.0D
 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	3532-2G	1000	2.29	656,16	3.30	768,18	4.32	992,24
UNC N°4 - 40	3532-4G	1000	2.79	256,05	4.32	269,38	5.59	292,49
UNC N°5 - 40	3532-5G	1000	3.30	296,08	4.83	312,43	6.35	323,75
UNC N°6 - 32	3532-6G	1000	3.56	237,92	5.33	266,46	7.11	285,51
UNC N°8 - 32	3532-8G	1000	4.06	237,92	6.35	266,46	8.38	285,51
UNC N°10 - 24	3532-10G	1000	4.83	256,05	7.37	264,96	9.65	280,07
UNC 1/4 - 20	3532-1/4	500	6.35	167,64	9.65	187,95	12.70	203,19
UNC 5/16 - 18	3532-5/16	250	7.87	129,34	11.94	155,80	15.75	164,61
UNC 3/8 - 16	3532-3/8	250	9.65	199,89	14.48	207,44	19.30	261,62

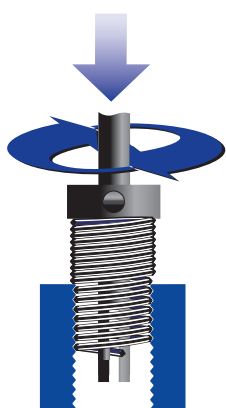



			1.0D		1.5D		2.0D	
			L mm	€	L mm	€	L mm	€
UNF N°4 - 48	3534-4G	1000	2.79	585,94	4.32	665,12	5.59	886,83
UNF N°6 - 40	3534-6G	1000	3.56	585,94	5.33	665,12	7.11	886,83
UNF N°8 - 36	3534-8G	1000	4.06	585,94	6.35	665,12	8.38	886,83
UNF N°10 - 32	3534-10G	1000	4.83	253,38	7.37	261,30	9.65	316,72
UNF 1/4 - 28	3534-1/4	500	6.35	167,76	9.65	179,91	12.70	202,48
UNF 5/16 - 24	3534-5/16	250	7.87	129,34	11.94	138,16	15.75	164,61
UNF 3/8 - 24	3534-3/8	250	9.65	191,07	14.48	199,89	19.30	241,04



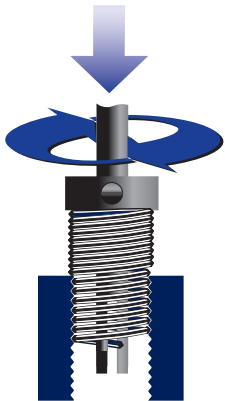
Coding example:

	 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 2.20 x 0.45	3520-2.20MIP	431,98	3520-2.20MIPM	157,67	3520-2.20MIPN	275,38	3500-MIP1	1.693,84	-	
M 2.50 x 0.45	3520-2.50MIP	275,38	3520-2.50MIPM	99,36	3520-2.50MIPN	177,10	3500-MIP1	1.693,84	-	
M 3 x 0.50	3520-3.00MIP	275,38	3520-3.00MIPM	99,36	3520-3.00MIPN	177,10	3500-MIP1	1.693,84	-	
M 3.50 x 0.60	3520-3.50MIP	431,98	3520-3.50MIPM	157,67	3520-3.50MIPN	275,38	3500-MIP1	1.693,84	-	
M 4 x 0.70	3520-4.00MIP	275,38	3520-4.00MIPM	99,36	3520-4.00MIPN	177,10	3500-MIP1	1.693,84	-	
M 5 x 0.80	3520-5.00MIP	275,38	3520-5.00MIPM	99,36	3520-5.00MIPN	177,10	3500-MIP1	1.693,84	-	
M 6 x 1.00	3520-6.00MIP	275,38	3520-6.00MIPM	99,36	3520-6.00MIPN	177,10	3500-MIP1	1.693,84	-	
M 8 x 1.00	3521-8.00MIP	588,56	3521-8.00MIPM	215,99	3521-8.00MIPN	373,66	-		3500-MIP2	2.021,19
M 8 x 1.25	3520-8.00MIP	588,56	3520-8.00MIPM	215,99	3520-8.00MIPN	373,66	-		3500-MIP2	2.021,19
M 10 x 1.00	3523-10.00MIP	588,56	3523-10.00MIPM	215,99	3523-10.00MIPN	373,66	-		3500-MIP2	2.021,19
M 10 x 1.25	3521-10.00MIP	588,56	3521-10.00MIPM	215,99	3521-10.00MIPN	373,66	-		3500-MIP2	2.021,19
M 10 x 1.50	3520-10.00MIP	588,56	3520-10.00MIPM	215,99	3520-10.00MIPN	373,66	-		3500-MIP2	2.021,19
M 12 x 1.25	3523-12.00MIP	667,40	3523-12.00MIPM	255,95	3523-12.00MIPN	412,53	-		3500-MIP2	2.021,19
M 12 x 1.50	3521-12.00MIP	667,40	3521-12.00MIPM	255,95	3521-12.00MIPN	412,53	-		3500-MIP2	2.021,19
M 12 x 1.75	3520-12.00MIP	667,40	3520-12.00MIPM	255,95	3520-12.00MIPN	412,53	-		3500-MIP2	2.021,19

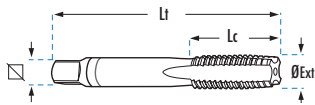
PNEUMATIC TOOL



		€		€		€		€		€
UNC N°2 - 56	3532-2GMIP	406,06	3532-2GMIPM	157,67	3532-2GMIPN	249,46	3500-MIP1	1.693,84	-	-
UNC N°4 - 40	3532-4GMIP	275,38	3532-4GMIPM	99,36	3532-4GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNC N°5 - 40	3532-5GMIP	431,98	3532-5GMIPM	157,67	3532-5GMIPN	275,38	3500-MIP1	1.693,84	-	-
UNC N°6 - 32	3532-6GMIP	275,38	3532-6GMIPM	99,36	3532-6GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNC N°8 - 32	3532-8GMIP	275,38	3532-8GMIPM	99,36	3532-8GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNC N°10 - 24	3532-10GMIP	275,38	3532-10GMIPM	99,36	3532-10GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNC N°12 - 24	3532-12GMIP	275,38	3532-12GMIPM	99,36	3532-12GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNC 1/4 - 20	3532-1/4MIP	275,38	3532-1/4MIPM	99,36	3532-1/4MIPN	177,10	3500-MIP1	1.693,84	-	-
UNC 5/16 - 18	3532-5/16MIP	588,56	3532-5/16MIPM	215,99	3532-5/16MIPN	373,66	-	-	3500-MIP2	2.021,19
UNC 3/8 - 16	3532-3/8MIP	588,56	3532-3/8MIPM	215,99	3532-3/8MIPN	373,66	-	-	3500-MIP2	2.021,19
UNC 7/16 - 14	3532-7/16MIP	667,40	3532-7/16MIPM	255,95	3532-7/16MIPN	412,53	-	-	3500-MIP2	2.021,19
UNC 1/2 - 13	3532-1/2MIP	667,40	3532-1/2MIPM	255,95	3532-1/2MIPN	412,53	-	-	3500-MIP2	2.021,19



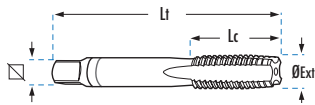
		€		€		€		€		€
UNF N°6 - 40	3534-6GMIPM	431,98	3534-6GMIPM	157,67	3534-6GMIPN	275,38	3500-MIP1	1.693,84	-	-
UNF N°8 - 36	3534-8GMIPM	431,98	3534-8GMIPM	157,67	3534-8GMIPN	275,38	3500-MIP1	1.693,84	-	-
UNF N°10 - 32	3534-10GMIPM	275,38	3534-10GMIPM	99,36	3534-10GMIPN	177,10	3500-MIP1	1.693,84	-	-
UNF 1/4 - 28	3534-1/4MIPM	275,38	3534-1/4MIPM	99,36	3534-1/4MIPN	177,10	3500-MIP1	1.693,84	-	-
UNF 5/16 - 24	3534-5/16MIPM	588,56	3534-5/16MIPM	215,99	3534-5/16MIPN	373,66	-	-	3500-MIP2	2.021,19
UNF 3/8 - 24	3534-3/8MIPM	588,56	3534-3/8MIPM	215,99	3534-3/8MIPN	373,66	-	-	3500-MIP2	2.021,19
UNF 7/16 - 20	3534-7/16MIPM	667,40	3534-7/16MIPM	255,95	3534-7/16MIPN	412,53	-	-	3500-MIP2	2.021,19
UNF 1/2 - 20	3534-1/2MIPM	667,40	3534-1/2MIPM	255,95	3534-1/2MIPN	412,53	-	-	3500-MIP2	2.021,19

STI HAND & MACHINE TAPS & GAUGES


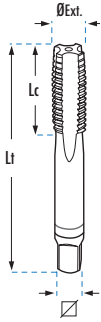
TOLERANCE			TOL 5H-6H		TOL 5H-6H		TOL 5H-6H		TOL 5H-6H		
MATERIAL			HSS		HSS-V3		HSS-V3		Gauge		
FORM			Hand		B FORM		35°		Gauge		
			Ø Ext.	Lt x Lc x Ø	€	€	€	€	€	€	
M 2 x 0.40	2.10	2.52	44x9.5x2.2	3520-2.00I	14,50	3520-2.00SP	19,13	3520-2.00SF	19,13	3520-2.00GC	213,30
M 2.20 x 0.45	2.30	2.78	48x11x2.5	3520-2.20I	17,22	3520-2.20SP	19,13	3520-2.20SF	19,13	3520-2.20GC	238,48
M 2.50 x 0.45	2.60	3.08	48x11x2.5	3520-2.50I	14,50	3520-2.50SP	19,13	3520-2.50SF	19,13	3520-2.50GC	238,48
M 3 x 0.50	3.20	3.65	53x13x3.15	3520-3.00I	12,65	3520-3.00SP	14,50	3520-3.00SF	14,50	3520-3.00GC	172,67
M 3.50 x 0.60	3.70	4.27	53x13x3.55	3520-3.50I	12,65	3520-3.50SP	14,50	3520-3.50SF	14,50	3520-3.50GC	167,58
M 4 x 0.70	4.20	4.90	58x16x4	3520-4.00I	12,65	3520-4.00SP	14,50	3520-4.00SF	14,50	3520-4.00GC	162,52
M 5 x 0.80	5.20	6.03	66x19x5	3520-5.00I	12,65	3520-5.00SP	14,50	3520-5.00SF	14,50	3520-5.00GC	157,45
M 6 x 1.00	6.30	7.29	72x22x6.3	3520-6.00I	12,65	3520-6.00SP	14,50	3520-6.00SF	14,50	3520-6.00GC	152,36
M 7 x 1.00	7.30	8.29	72x22x7.1	3520-7.00I	15,77	3520-7.00SP	18,18	3520-7.00SF	18,18	3520-7.00GC	175,20
M 8 x 1.00	8.30	9.29	80x24x8	3521-8.00I	15,77	3521-8.00SP	18,18	3521-8.00SF	18,18	3521-8.00GC	187,52
M 8 x 1.25	8.30	9.62	80x24x8	3520-8.00I	15,77	3520-8.00SP	18,18	3520-8.00SF	18,18	3520-8.00GC	157,45
M 9 x 1.25	9.40	10.62	85x25x6.3	3520-9.00I	19,32	3520-9.00SP	28,02	3520-9.00SF	28,02	3520-9.00GC	162,52
M 10 x 1.00	10.30	11.29	85x25x6.3	3523-10.00I	19,32	3523-10.00SP	21,87	3523-10.00SF	21,87	3523-10.00GC	213,30
M 10 x 1.25	10.30	11.62	85x25x6.3	3521-10.00I	19,32	3521-10.00SP	27,01	3521-10.00SF	27,01	3521-10.00GC	218,38
M 10 x 1.50	10.40	11.94	89x29x7.1	3520-10.00I	19,32	3520-10.00SP	21,87	3520-10.00SF	21,87	3520-10.00GC	167,58
M 11 x 1.00	11.30	12.29	89x29x7.1	3523-11.00I	26,17	3523-11.00SP	29,13	3523-11.00SF	29,13	3523-11.00GC	223,45
M 11 x 1.25	11.30	12.62	89x29x7.1	3521-11.00I	26,27	3521-11.00SP	29,13	3521-11.00SF	29,13	3521-11.00GC	217,79
M 11 x 1.50	11.40	12.94	89x29x7.1	3520-11.00I	21,87	3520-11.00SP	29,13	3520-11.00SF	29,13	3520-11.00GC	172,67
M 12 x 1.00	12.30	13.29	95x30x9	3524-12.00I	26,70	3524-12.00SP	33,22	3524-12.00SF	33,22	3524-12.00GC	227,02
M 12 x 1.25	12.30	13.62	95x30x9	3523-12.00I	26,70	3523-12.00SP	28,99	3523-12.00SF	28,99	3523-12.00GC	227,02
M 12 x 1.50	12.40	14.13	95x30x9	3521-12.00I	26,70	3521-12.00SP	32,66	3521-12.00SF	32,66	3521-12.00GC	203,13
M 12 x 1.75	12.50	14.27	95x30x9	3520-12.00I	21,87	3520-12.00SP	28,63	3520-12.00SF	28,63	3520-12.00GC	177,75
M 13 x 1.25	13.25	14.62	95x30x9	3521-13.00I	30,63	3521-13.00SP	41,39	3521-13.00SF	41,39	3521-13.00GC	218,38
M 13 x 1.75	13.50	15.27	102x32x10	3520-13.00I	30,63	3520-13.00SP	41,39	3520-13.00SF	41,39	3520-13.00GC	203,36
M 14 x 1.00	14.25	15.29	102x32x10	3524-14.00I	30,37	3524-14.00SP	50,91	3524-14.00SF	50,91	3524-14.00GC	243,78
M 14 x 1.25	14.25	15.62	102x32x10	3523-14.00I	30,37	3523-14.00SP	40,05	3523-14.00SF	40,05	3523-14.00GC	243,78
M 14 x 1.50	14.50	15.94	102x32x10	3521-14.00I	30,37	3521-14.00SP	40,05	3521-14.00SF	40,05	3521-14.00GC	223,45
M 14 x 2.00	14.50	16.59	102x32x10	3520-14.00I	30,37	3520-14.00SP	40,05	3520-14.00SF	40,05	3520-14.00GC	187,92
M 15 x 1.50	15.25	16.94	102x32x10	3521-15.00I	36,27	3521-15.00SP	57,10	3521-15.00SF	57,10	3521-15.00GC	233,63
M 15 x 2.00	15.50	17.59	112x37x11.2	3520-15.00I	36,27	3520-15.00SP	57,10	3520-15.00SF	57,10	3520-15.00GC	219,42
M 16 x 1.50	16.50	17.94	112x37x11.2	3521-16.00I	36,36	3521-16.00SP	50,55	3521-16.00SF	50,55	3521-16.00GC	238,70
M 16 x 2.00	16.50	18.59	112x37x11.2	3520-16.00I	36,36	3520-16.00SP	42,34	3520-16.00SF	42,34	3520-16.00GC	208,23

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

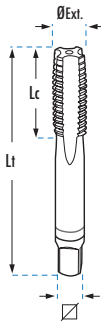


TOLERANCE				TOL 5H-6H		TOL 5H-6H		TOL 5H-6H		TOL 5H-6H	
MATERIAL				HSS		HSS-V3		HSS-V3		Gauge	
FORM											
Ø	Ø Ext.	Lt x Lc x Ø		€	€	€	€	€	€	€	
M 18 x 1.50	18.50	19.94	112x37x11.2	3523-18.00I	46,03	3523-18.00SP	63,77	3523-18.00SF	63,77	3523-18.00GC	242,82
M 18 x 2.00	18.50	20.59	112x37x11.2	3521-18.00I	46,03	3521-18.00SP	63,77	3521-18.00SF	63,77	3521-18.00GC	248,84
M 18 x 2.50	19.00	21.24	118x38x12.5	3520-18.00I	46,03	3520-18.00SP	63,77	3520-18.00SF	63,77	3520-18.00GC	223,45
M 20 x 1.50	20.50	21.94	118x38x12.5	3523-20.00I	50,62	3523-20.00SP	75,12	3523-20.00SF	75,12	3523-20.00GC	289,50
M 20 x 2.00	20.50	22.59	118x38x12.5	3521-20.00I	50,62	3521-20.00SP	75,12	3521-20.00SF	75,12	3521-20.00GC	264,10
M 20 x 2.50	20.75	23.24	118x38x12.5	3520-20.00I	50,62	3520-20.00SP	75,12	3520-20.00SF	75,12	3520-20.00GC	238,70
M 22 x 1.50	22.50	23.94	130x45x14	3523-22.00I	58,23	3523-22.00SP	106,25	3523-22.00SF	106,25	3523-22.00GC	309,55
M 22 x 2.00	22.50	24.59	130x45x14	3521-22.00I	58,23	3521-22.00SP	106,25	3521-22.00SF	106,25	3521-22.00GC	299,63
M 22 x 2.50	22.75	25.24	130x45x14	3520-22.00I	58,23	3520-22.00SP	106,25	3520-22.00SF	106,25	3520-22.00GC	253,91
M 24 x 1.50	24.50	25.94	130x45x14	3523-24.00I	73,63	3523-24.00SP	127,50	3523-24.00SF	127,50	3523-24.00GC	329,54
M 24 x 2.00	24.50	26.59	127x37x16	3521-24.00I	73,63	3521-24.00SP	127,50	3521-24.00SF	127,50	3521-24.00GC	299,88
M 24 x 3.00	25.00	27.89	135x45x16	3520-24.00I	73,63	3520-24.00SP	127,50	3520-24.00SF	127,50	3520-24.00GC	284,40
M 26 x 1.50	26.50	27.94	127x37x16	3523-26.00I	138,34	-	-	-	-	-	-
M 27 x 1.50	27.50	28.97	127x37x16	3523-27.00I	163,11	-	-	-	-	-	-
M 27 x 2.00	27.50	29.59	127x37x16	3521-27.00I	163,11	-	-	-	-	-	-
M 27 x 3.00	28.00	30.89	151x51x18	3520-27.00I	163,11	-	-	-	-	-	-
M 28 x 1.50	28.50	29.99	137x37x18	3523-28.00I	181,83	-	-	-	-	-	-
M 30 x 1.50	30.50	31.96	137x37x18	3523-30.00I	194,03	-	-	-	-	-	-
M 30 x 2.00	30.50	32.59	137x37x18	3521-30.00I	194,03	-	-	-	-	-	-
M 30 x 3.50	31.00	34.54	162x57x20	3520-30.00I	194,03	-	-	-	-	-	-
M 33 x 2.00	33.50	35.59	144x39x20	3521-33.00I	235,60	-	-	-	-	-	-
M 33 x 3.50	34.00	37.54	170x60x22.4	3520-33.00I	235,60	-	-	-	-	-	-
M 36 x 1.50	36.50	37.92	149x39x22.4	3524-36.00I	270,88	-	-	-	-	-	-
M 36 x 2.00	36.50	38.55	149x39x22.4	3523-36.00I	270,88	-	-	-	-	-	-
M 36 x 3.00	37.00	39.89	170x60x22.4	3521-36.00I	270,88	-	-	-	-	-	-
M 36 x 4.00	37.00	41.19	170x60x22.4	3520-36.00I	270,88	-	-	-	-	-	-
M 39x3,00	40.00	42.90	149x39x26	3521-39.00I	373,39	-	-	-	-	-	-
M 39x4,00	40.25	44.20	187x67x28	3520-39.00I	373,39	-	-	-	-	-	-
M 40x3,00	41.00	43.90	149x39x26	3523-40.00I	395,02	-	-	-	-	-	-
M 42x3,00	43.00	45.90	165x45x28	3523-42.00I	405,95	-	-	-	-	-	-
M 42x4,50	43.50	47.90	187x67x28	3520-42.00I	405,95	-	-	-	-	-	-
M 45x3,00	46.00	48.90	175x45x31	3523-45.00I	432,23	-	-	-	-	-	-
M 45x4,50	46.50	50.90	200x70x31	3520-45.00I	432,23	-	-	-	-	-	-
M 48x3,00	49.00	51.90	175x45x31	3523-48.00I	524,92	-	-	-	-	-	-
M 48x5,00	49.50	54.50	200x70x31	3520-48.00I	524,92	-	-	-	-	-	-
M 50x3,00	51.00	53.90	175x45x31	3523-50.00I	567,95	-	-	-	-	-	-
M 52x3,00	53.00	55.90	193x48x34	3523-52.00I	600,51	-	-	-	-	-	-
M 52x5,00	53.50	58.50	221x76x34	3520-52.00I	600,51	-	-	-	-	-	-

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											
		Ø Ext.	Lt x Lc x ø		€		€		€		€
UNC N°2 - 56	2.40	2.77	44x9.5x2.2	3532-2GI	19,32	3532-2GSP	26,38	3532-2GSF	26,38	3532-2GGC	303,37
UNC N°3 - 48	2.70	3.02	44x9.5x2.2	3532-3GI	19,32	3532-3GSP	27,91	3532-3GSF	27,91	3532-3GGC	303,37
UNC N°4 - 40	3.00	3.67	53x13x3.15	3532-4GI	19,32	3532-4GSP	26,38	3532-4GSF	26,38	3532-4GGC	304,71
UNC N°5 - 40	3.40	4.00	53x13x3.15	3532-5GI	19,32	3532-5GSP	26,38	3532-5GSF	26,38	3532-5GGC	303,40
UNC N°6 - 32	3.70	4.53	58x16x4	3532-6GI	19,32	3532-6GSP	26,38	3532-6GSF	26,38	3532-6GGC	184,67
UNC N°8 - 32	4.40	5.19	62x17x4.5	3532-8GI	19,32	3532-8GSP	26,38	3532-8GSF	26,38	3532-8GGC	180,05
UNC N°10 - 24	5.10	6.20	66x19x5	3532-10GI	19,32	3532-10GSP	24,18	3532-10GSF	24,18	3532-10GGC	175,43
UNC N°12 - 24	5.70	6.86	66x19x5.6	3532-12GI	19,32	3532-12GSP	24,18	3532-12GSF	24,18	3532-12GGC	175,43
UNC 1/4 - 20	6.70	8.00	72x22x6.3	3532-1/4I	12,65	3532-1/4SP	17,60	3532-1/4SF	17,60	3532-1/4GC	166,22
UNC 5/16 - 18	8.30	9.77	80x24x8	3532-5/16I	15,69	3532-5/16SP	20,88	3532-5/16SF	20,88	3532-5/16GC	175,43
UNC 3/8 - 16	9.90	11.58	85x25x6.3	3532-3/8I	14,50	3532-3/8SP	26,38	3532-3/8SF	26,38	3532-3/8GC	175,43
UNC 7/16 - 14	11.60	13.47	95x30x9	3532-7/16I	19,32	3532-7/16SP	30,00	3532-7/16SF	30,00	3532-7/16GC	184,67
UNC 1/2 - 13	13.00	15.23	102x32x10	3532-1/2I	21,87	3532-1/2SP	32,97	3532-1/2SF	32,97	3532-1/2GC	198,52
UNC 9/16 - 12	15.00	17.03	112x37x11.2	3532-9/16I	36,36	3532-9/16SP	54,95	3532-9/16SF	54,95	3532-9/16GC	212,37
UNC 5/8 - 11	16.50	18.87	112x37x11.2	3532-5/8I	44,89	3532-5/8SP	76,59	3532-5/8SF	76,59	3532-5/8GC	221,62
UNC 3/4 - 10	20.00	22.34	118x38x12.5	3532-3/4I	54,54	3532-3/4SP	77,68	3532-3/4SF	77,68	3532-3/4GC	253,91
UNC 7/8 - 9	23.00	25.89	130x45x14	3532-7/8I	63,65	3532-7/8SP	112,64	3532-7/8SF	112,64	3532-7/8GC	286,25
UNC 1 - 8	26.25	29.52	138x48x16	3532-1I	63,65	3532-1SP	131,88	3532-1SF	131,88	3532-1GC	323,18
UNC 1.1/8 - 7	29.50	33.28	151x51x18	3532-1.1/8I	192,72	-	-	-	-	-	-
UNC 1.1/4 - 7	32.50	36.46	162x57x20	3532-1.1/4I	231,22	-	-	-	-	-	-
UNC 1.3/8 - 6	36.00	40.42	170x60x22.4	3532-1.3/8I	289,05	-	-	-	-	-	-
UNC 1.1/2 - 6	39.50	43.59	187x67x25	3532-1.1/2I	374,63	-	-	-	-	-	-

STI HAND & MACHINE TAPS & GAUGES



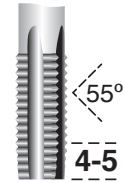
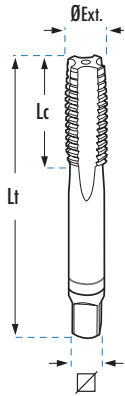
TOLERANCE				TOL 2B-3B		TOL 2B-3B		TOL 2B-3B		TOL 2B-3B	
MATERIAL				HSS		HSS-V3		HSS-V3		Gauge	
FORM				Hand		B FORM		35°		Gauge	
		Ø Ext.	Lt x Lc x ∅		€		€		€		€
UNF N°3 - 56	2.70	3.09	44x9.5x2.2	3534-3GI	20,22	3534-3GSP	27,91	3534-3GSF	27,91	3534-3GGC	304,71
UNF N°4 - 48	3.00	3.53	50x13x2.80	3534-4GI	19,32	3534-4GSP	26,38	3534-4GSF	26,38	3534-4GGC	304,71
UNF N°6 - 40	3.70	4.33	53x13x3.55	3534-6GI	19,32	3534-6GSP	26,38	3534-6GSF	26,38	3534-6GGC	184,67
UNF N°8 - 36	4.40	5.08	62x17x4.50	3534-8GI	19,32	3534-8GSP	26,38	3534-8GSF	26,38	3534-8GGC	180,05
UNF N°10 - 32	5.10	5.85	66x19x5.00	3534-10GI	19,32	3534-10GSP	24,18	3534-10GSF	24,18	3534-10GGC	175,43
UNF N°12 - 28	5.80	6.75	66x19x5.60	3534-12GI	22,14	3534-12GSP	24,21	3534-12GSF	24,21	3534-12GGC	295,47
UNF 1/4 - 28	6.60	7.52	72x22x6.30	3534-1/4I	12,65	3534-1/4SP	17,60	3534-1/4SF	17,60	3534-1/4GC	166,22
UNF 5/16 - 24	8.20	9.31	80x24x8.00	3534-5/16I	13,93	3534-5/16SP	20,88	3534-5/16SF	20,88	3534-5/16GC	175,43
UNF 3/8 - 24	9.80	10.89	85x25x6.30	3534-3/8I	14,50	3534-3/8SP	26,38	3534-3/8SF	26,38	3534-3/8GC	175,43
UNF 7/16 - 20	11.50	12.76	89x29x7.10	3534-7/16I	19,32	3534-7/16SP	30,00	3534-7/16SF	30,00	3534-7/16GC	184,67
UNF 1/2 - 20	13.00	14.35	95x30x9.00	3534-1/2I	19,88	3534-1/2SP	32,97	3534-1/2SF	32,97	3534-1/2GC	198,52
UNF 9/16 - 18	14.75	16.12	102x32x10	3534-9/16I	36,36	3534-9/16SP	54,95	3534-9/16SF	54,95	3534-9/16GC	212,37
UNF 5/8 - 18	16.50	17.00	112x37x11.2	3534-5/8I	44,89	3534-5/8SP	76,59	3534-5/8SF	76,59	3534-5/8GC	216,99
UNF 3/4 - 16	19.50	21.11	112x37x11.2	3534-3/4I	54,54	3534-3/4SP	77,68	3534-3/4SF	77,68	3534-3/4GC	175,43
UNF 7/8 - 14	22.50	24.58	130x45x14	3534-7/8I	71,27	3534-7/8SP	112,64	3534-7/8SF	112,64	3534-7/8GC	263,18
UNF 1 - 12	26.00	28.15	127x37x16	3534-1I	63,29	3534-1SP	131,88	3534-1SF	131,88	3534-1GC	240,08
UNS 1 - 14	26.00	27.76	127x37x16	3535-1I	63,29	3535-1SP	131,88	3535-1SF	131,88	3535-1GC	240,08
UNF 1.1/8 - 12	29.50	31.32	137x37x18	3534-1.1/8I	192,72	-	-	-	-	-	-
UNF 1.1/4 - 12	32.50	34.50	144x39x20	3534-1.1/4I	231,22	-	-	-	-	-	-
UNF 1.3/8 - 12	35.50	37.67	149x39x22.4	3534-1.3/8I	289,05	-	-	-	-	-	-
UNF 1.1/2 - 12	38.50	40.85	149x39x22.4	3534-1.1/2I	374,63	-	-	-	-	-	-




STI HAND TAP
BSW

BSW

TOL (3B)

HSS

STI-ISO529


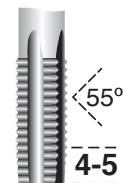
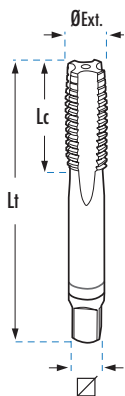
			Ø Ext.	Lt x Lc x Ø		€
BSW	1/8 - 40	3.40	3.93	53x13x3.15	3528-1/8I	12,65
BSW	3/16 - 24	5.00	6.00	66x19x5	3528-3/16I	12,65
BSW	1/4 - 20	6.70	7.84	72x22x6.3	3528-1/4I	12,65
BSW	5/16 - 18	8.30	9.59	80x24x8	3528-5/16I	13,93
BSW	3/8 - 16	10.00	11.38	85x25x6.3	3528-3/8I	14,50
BSW	7/16 - 14	11.60	13.23	95x30x9	3528-7/16I	19,32
BSW	1/2 - 12	13.00	15.17	102x32x10	3528-1/2I	22,41
BSW	9/16 - 12	14.75	16.76	102x32x10	3528-9/16I	36,36
BSW	5/8 - 11	16.50	18.57	112x37x11.2	3528-5/8I	44,89
BSW	11/16 - 11	17.50	19.60	112x37x11.2	3528-11/16I	54,54
BSW	3/4 - 10	20.00	22.01	118x38x12.5	3528-3/4I	54,54
BSW	7/8 - 9	23.25	25.52	130x45x14	3528-7/8I	63,29
BSW	1 - 8	26.50	29.10	138x48x16	3528-1I	63,29

BSF

BSF







TOL (3B)

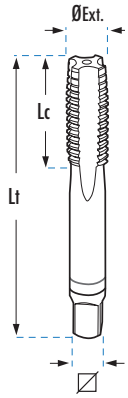
HSS




STI-ISO529


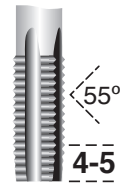
			Ø Ext.	Lt x Lc x Ø		€
BSF	3/16 - 32	5.00	5.70	66x19x5	3530-3/16I	12,65
BSF	1/4 - 26	6.60	7.51	72x22x6.3	3530-1/4I	12,65
BSF	5/16 - 22	8.30	9.30	80x24x8	3530-5/16I	13,93
BSF	3/8 - 20	9.80	11.02	85x25x6.3	3530-3/8I	14,50
BSF	7/16 - 18	11.60	12.77	89x29x7.1	3530-7/16I	19,32
BSF	1/2 - 16	13.25	14.56	95x30x9	3530-1/2I	22,41
BSF	9/16 - 16	14.75	16.15	102x32x10	3530-9/16I	36,36
BSF	5/8 - 14	16.50	18.01	112x37x11.2	3530-5/8I	44,89
BSF	11/16 - 14	17.50	19.60	112x37x11.2	3530-11/16I	54,54
BSF	3/4 - 12	19.50	21.53	118x38x12.5	3530-3/4I	54,54
BSF	7/8 - 11	22.75	24.93	130x45x14	3530-7/8I	63,29
BSF	1 - 10	26.25	28.37	138x48x16	3530-1I	63,29







STI HAND TAP

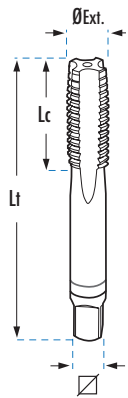
BSP (GAS)  **BSP**  **TOL (3B)**  **HSS**   **STI-ISO529** 





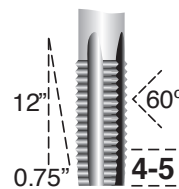
			Ø Ext.	Lt x Lc x Ø		€
BSP	1/8 - 28	10.00	10.81	85x25x6.3	3546-1/8I	19,17
BSP	1/4 - 19	13.75	14.73	95x30x9	3546-1/4I	21,76
BSP	3/8 - 19	17.00	18.24	112x37x11.2	3546-3/8I	28,63
BSP	1/2 - 14	21.50	23.09	118x38x12.5	3546-1/2I	46,39
BSP	5/8 - 14	23.50	25.05	130x45x14	3546-5/8I	68,17
BSP	3/4 - 14	27.00	28.58	127x37x16	3546-3/4I	68,17
BSP	1 - 11	33.75	35.96	162x57x20	3546-1I	106,51



NPT  **NPT**  **TOL (3B)**  **HSS**   **ANSI 949** 



		Ø Ext.	Lt x Lc x Ø		€
NPT	1/8 - 27	10.43	54x19x8.3	3552-1/8I	92,99
NPT	1/4 - 18	13.95	62x27x10.7	3552-1/4I	104,61
NPT	3/8 - 18	17.37	65x27x13.5	3552-3/8I	139,48
NPT	1/2 - 14	21.65	80x35x13.1	3552-1/2I	168,55
NPT	3/4 - 14	26.96	83x35x17.2	3552-3/4I	220,85
NPT	1 - 11.1/2	33.75	95x44x22.7	3552-1I	302,19



STI HAND TAPS

UN x 8



8-UN



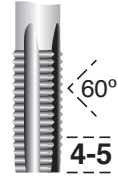
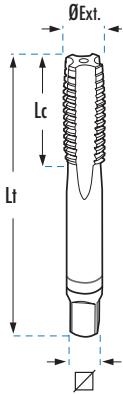
TOL (3B)






HSS



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			Ø Ext.	Lt x Lc x Ø		€
UN 1.1/8 - 8		28.50	1.26	5.9x2.0x0.7	3570-1.1/8I	331,36
UN 1.1/4 - 8		32.00	1.38	6.3x2.2x0.7	3570-1.1/4I	381,70
UN 1.3/8 - 8		35.00	1.51	6.6x2.3x0.8	3570-1.3/8I	433,19
UN 1.1/2 - 8		38.00	1.63	6.6x2.3x0.8	3570-1.1/2I	475,84
UN 1.5/8 - 8		41.00	1.76	7.3x2.6x0.9	3570-1.5/8I	556,63
UN 1.3/4 - 8		44.50	1.88	7.3x2.6x0.9	3570-1.3/4I	602,87
UN 1.7/8 - 8		47.50	2.01	7.8x2.7x1.1	3570-1.7/8I	700,86
UN 2 - 8		51.00	2.13	7.8x2.7x1.1	3570-2I	728,03

BA



BA



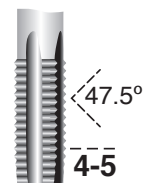
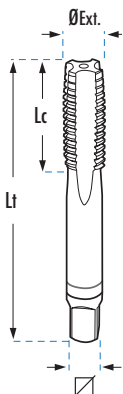
TOL (3B)





HSS

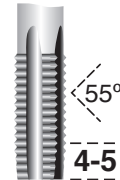
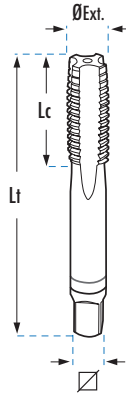


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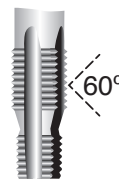
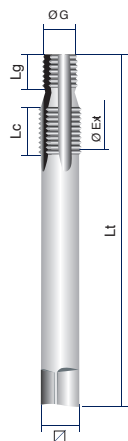
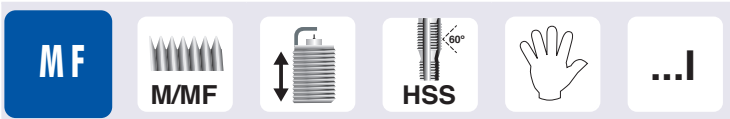


		Ø Ext.	Lt x Lc x Ø		€	
BA 0		6.20	7.12	66x19x5.6	3544-0I	12,87
BA 2		4.90	5.60	62x17x4.5	3544-2I	12,87
BA 4		3.80	4.34	53x13x3.5	3544-4I	12,87
BA 6		2.90	3.40	50x13x2.8	3544-6I	12,87

STI HAND TAPS



			Ø Ext.	Lt x Lc x Ø		€	
BSB 1/4 - 26			6.60	7.72	72x22x6.3	3560-1/4I	14,26
BSB 5/16 - 26			8.00	9.30	72x22x7.1	3560-5/16I	15,69
BSB 3/8 - 26			9.80	10.89	85x25x6.3	3560-3/8I	16,33
BSB 7/16 - 26			11.10	12.48	89x29x7.1	3560-7/16I	21,76
BSB 1/2 - 26			12.70	14.07	95x30x9	3560-1/2I	24,62



			Ø Ext.	Lg	Ø G	Lt x Lc x Ø		€	
M 6 x 1.00			6.30	7.29	7	6	70x28x6.3	3520-6.00PN	24,60
M 8 x 1.25			8.30	9.62	9	8	75x32x6.3	3520-8.00PN	24,60
M 10 x 1.00			10.30	11.29	8	10	74x30x6.3	3522-10.00PN	30,77
M 10 x 1.50			10.40	11.94	9	10	89x29x7.1	3520-10.00PN	30,77
M 12 x 1.25			12.30	13.62	9	12	75x32x7.1	3522-12.00PN	43,71
M 14 x 1.25			14.25	15.62	10	14	90x45x9.2	3522-14.00PN	50,87
M 18 x 1.50			18.50	19.94	10	18	116x47x12.5	3522-18.00PN	72,73

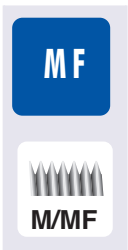


INSTALLATION TOOLS
MF

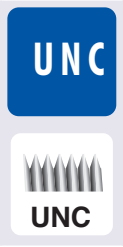
M/MF


	 FREE		 FREE LOCK		 FREE		 FREE LOCK		 FREE LOCK	
		€		€		€		€		€
M 2 x 0.40	3500-HIT2	12,65	3520-2.00HIP	122,07	-	-	3520-2.00MIT	77,12	-	-
M 2.20 x 0.45	3500-HIT2	12,65	3520-2.20HIP	122,07	-	-	3520-2.20MIT	77,12	-	-
M 2.50 x 0.45	3500-HIT3	12,65	3520-2.50HIP	122,07	-	-	3520-2.50MIT	77,12	-	-
M 3 x 0.50	3500-HIT4	12,65	3520-3.00HIP	91,00	-	-	3520-3.00MIT	70,96	-	-
M 3.50 x 0.60	3500-HIT5	12,65	3520-3.50HIP	91,00	-	-	3520-3.50MIT	70,96	-	-
M 4 x 0.70	3500-HIT6	12,65	3520-4.00HIP	91,00	-	-	3520-4.00MIT	70,96	-	-
M 5 x 0.80	3500-HIT8	12,65	3520-5.00HIP	91,00	-	-	3520-5.00MIT	70,96	-	-
M 6 x 1.00	3500-HIT9	12,65	3520-6.00HIP	94,64	-	-	3520-6.00MIT	70,96	-	-
M 7 x 1.00	3500-HIT10	14,50	3520-7.00HIP	94,64	-	-	3520-7.00MIT	70,96	-	-
M 8 x 1.00	3500-HIT11	14,50	3521-8.00HIP	90,56	-	-	3521-8.00MIT	70,96	-	-
M 8 x 1.25	3500-HIT11	14,50	3520-8.00HIP	77,03	-	-	3520-8.00MIT	70,96	-	-
M 9 x 1.25	3500-HIT13	14,50	3520-9.00HIP	76,47	-	-	3520-9.00MIT	70,95	-	-
M 10 x 1.00	3500-HIT13	14,50	3523-10.00HIP	103,43	-	-	3523-10.00MIT	77,12	-	-
M 10 x 1.25	3500-HIT13	14,50	3521-10.00HIP	112,99	-	-	3521-10.00MIT	77,12	-	-
M 10 x 1.50	3500-HIT13	14,50	3520-10.00HIP	102,63	-	-	3520-10.00MIT	77,12	-	-
M 11 x 1.00	3500-HIT14	18,18	-	-	-	-	-	-	-	-
M 11 x 1.25	3500-HIT14	18,18	-	-	-	-	-	-	-	-
M 11 x 1.50	3500-HIT14	18,18	3520-11.00HIP	114,83	-	-	3520-11.00MIT	82,27	-	-
M 12 x 1.00	3500-HIT15	18,18	-	-	-	-	-	-	-	-
M 12 x 1.25	3500-HIT15	18,18	3523-12.00HIP	107,02	-	-	3523-12.00MIT	82,27	-	-
M 12 x 1.50	3500-HIT15	18,18	3521-12.00HIP	100,44	-	-	3521-12.00MIT	82,27	-	-
M 12 x 1.75	3500-HIT15	18,18	3520-12.00HIP	98,79	-	-	3520-12.00MIT	82,27	-	-
M 13 x 1.25	3500-HIT16	21,87	-	-	-	-	-	-	-	-
M 13 x 1.50	3500-HIT15	18,18	-	-	-	-	-	-	-	-
M 13 x 1.75	3500-HIT15	18,18	-	-	-	-	3520-13.00MIT	82,26	-	-
M 14 x 1.00	3500-HIT16	21,87	-	-	-	-	-	-	-	-
M 14 x 1.25	3500-HIT16	21,87	3523-14.00HIP	208,52	-	-	3523-14.00MIT	87,40	-	-
M 14 x 1.50	3500-HIT16	21,87	3521-14.00HIP	114,78	-	-	3521-14.00MIT	87,40	-	-
M 14 x 2.00	3500-HIT16	21,87	3520-14.00HIP	87,89	-	-	3520-14.00MIT	87,40	-	-
M 15 x 1.50	3500-HIT16	21,87	-	-	-	-	-	-	-	-
M 15 x 2.00	3500-HIT16	21,87	-	-	-	-	-	-	-	-
M 16 x 1.50	3500-HIT18	24,16	3521-16.00HIP	107,02	-	-	3521-16.00MIT	87,40	-	-
M 16 x 2.00	3500-HIT18	24,16	-	-	-	-	3520-16.00MIT	87,40	-	-
M 18 x 1.50	3500-HIT20	24,16	-	-	-	-	-	-	3523-18.00HIP	200,94
M 18 x 2.00	3500-HIT20	24,16	-	-	-	-	-	-	3521-18.00HIP	200,94
M 18 x 2.50	3500-HIT20	24,16	-	-	-	-	-	-	3520-18.00HIP	96,72

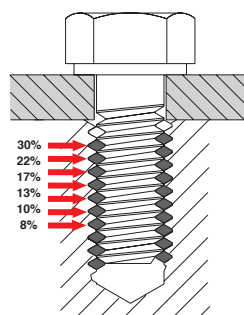
INSTALLATION TOOLS



		€		€		€		€		€
M 20 x 1.50	3500-HIT21	24,16	-	-	-	-	-	-	3523-20.00HIP	250,39
M 20 x 2.00	3500-HIT21	24,16	-	-	-	-	-	-	3521-20.00HIP	250,39
M 20 x 2.50	3500-HIT21	24,16	-	-	-	-	-	-	3520-20.00HIP	113,34
M 22 x 1.50	3500-HIT22	30,37	-	-	-	-	-	-	3523-22.00HIP	306,26
M 22 x 2.00	3500-HIT22	30,37	-	-	-	-	-	-	3521-22.00HIP	306,26
M 22 x 2.50	3500-HIT22	30,37	-	-	-	-	-	-	3520-22.00HIP	100,05
M 24 x 1.50	3500-HIT23	30,37	-	-	-	-	-	-	3523-24.00HIP	357,29
M 24 x 2.00	3500-HIT23	30,37	-	-	-	-	-	-	3521-24.00HIP	357,29
M 24 x 3.00	3500-HIT23	30,37	-	-	-	-	-	-	3520-24.00HIP	126,33
M 26 x 1.50	3500-HIT24	54,53	-	-	3523-26.00HIM	30,42	-	-	-	-
M 27 x 1.50	3500-HIT24	54,53	-	-	3523-27.00HIM	30,42	-	-	-	-
M 27 x 2.00	3500-HIT24	54,53	-	-	3521-27.00HIM	30,42	-	-	-	-
M 27 x 3.00	3500-HIT24	54,53	-	-	3520-27.00HIM	30,42	-	-	-	-
M 28 x 1.50	3500-HIT24	54,53	-	-	3523-28.00HIM	30,42	-	-	-	-
M 30 x 1.50	3500-HIT26	85,86	-	-	3523-30.00HIM	36,51	-	-	-	-
M 30 x 2.00	3500-HIT26	85,86	-	-	3521-30.00HIM	36,51	-	-	-	-
M 30 x 3.50	3500-HIT25	54,53	-	-	3520-30.00HIM	36,51	-	-	-	-
M 33 x 2.00	3500-HIT26	85,86	-	-	3521-33.00HIM	42,60	-	-	-	-
M 33 x 3.50	3500-HIT26	85,86	-	-	3520-33.00HIM	42,60	-	-	-	-
M 36 x 1.50	3500-HIT28	86,00	-	-	3524-36.00HIM	42,60	-	-	-	-
M 36 x 2.00	3500-HIT28	86,00	-	-	3523-36.00HIM	42,60	-	-	-	-
M 36 x 3.00	3500-HIT28	86,00	-	-	3521-36.00HIM	42,60	-	-	-	-
M 36 x 4.00	3500-HIT28	86,00	-	-	3520-36.00HIM	42,60	-	-	-	-
M 39x3,00	3500-HIT28	86,00	-	-	3521-39.00HIM	79,50	-	-	-	-
M 39x4,00	3500-HIT28	86,00	-	-	3520-39.00HIM	79,50	-	-	-	-
M 40 x 3,00	3500-HIT28	86,00	-	-	3523-40.00HIM	79,50	-	-	-	-
M 42 x 3,00	3500-HIT28	86,00	-	-	3523-42.00HIM	92,86	-	-	-	-
M 42 x 4,50	3500-HIT28	86,00	-	-	3520-42.00HIM	92,86	-	-	-	-
M 45 x 3,00	3500-HIT30	106,93	-	-	3523-45.00HIM	92,86	-	-	-	-
M 45 x 4,50	3500-HIT30	106,93	-	-	3520-45.00HIM	92,86	-	-	-	-
M 48 x 3,00	3500-HIT30	106,93	-	-	3523-48.00HIM	98,42	-	-	-	-
M 48 x 5,00	3500-HIT30	106,93	-	-	3520-48.00HIM	98,42	-	-	-	-
M 50 x 3,00	3500-HIT30	106,93	-	-	3523-50.00HIM	112,30	-	-	-	-
M 52 x 3,00	3500-HIT30	106,93	-	-	3523-52.00HIM	112,30	-	-	-	-
M 52 x 5,00	3500-HIT30	106,93	-	-	3520-52.00HIM	112,30	-	-	-	-

INSTALLATION TOOLS


						€			€	
UNC N°2 - 56	3500-HIT2	12,65	3532-2GHIP	127,28	-	-	3532-2GMIT	77,12	-	-
UNC N°3 - 48	3500-HIT3	12,65	-	-	-	-	3532-3GMIT	77,12	-	-
UNC N°4 - 40	3500-HIT4	12,65	3532-4GHIP	127,28	-	-	3532-4GMIT	77,12	-	-
UNC N°5 - 40	3500-HIT4	12,65	3532-5GHIP	127,28	-	-	3532-5GMIT	77,12	-	-
UNC N°6 - 32	3500-HIT5	12,65	3532-6GHIP	123,81	-	-	3532-6GMIT	70,96	-	-
UNC N°8 - 32	3500-HIT6	12,65	3532-8GHIP	123,81	-	-	3532-8GMIT	70,96	-	-
UNC N°10 - 24	3500-HIT7	12,65	3532-10GHIP	123,81	-	-	3532-10GMIT	70,96	-	-
UNC N°12 - 24	3500-HIT8	12,65	3532-12GHIP	123,81	-	-	3532-12GMIT	70,95	-	-
UNC 1/4 - 20	3500-HIT9	12,65	3532-1/4HIP	84,16	-	-	3532-1/4MIT	70,96	-	-
UNC 5/16 - 18	3500-HIT10	14,50	3532-5/16HIP	84,22	-	-	3532-5/16MIT	70,96	-	-
UNC 3/8 - 16	3500-HIT13	14,50	3532-3/8HIP	97,78	-	-	3532-3/8MIT	77,12	-	-
UNC 7/16 - 14	3500-HIT14	18,18	3532-7/16HIP	97,78	-	-	3532-7/16MIT	77,12	-	-
UNC 1/2 - 13	3500-HIT15	18,18	3532-1/2HIP	113,05	-	-	3532-1/2MIT	82,27	-	-
UNC 9/16 - 12	3500-HIT16	21,87	-	-	-	-	-	-	3532-9/16HIP	102,19
UNC 5/8 - 11	3500-HIT18	24,16	-	-	-	-	-	-	3532-5/8HIP	107,37
UNC 3/4 - 10	3500-HIT20	24,16	-	-	-	-	-	-	3532-3/4HIP	120,76
UNC 7/8 - 9	3500-HIT22	30,37	-	-	-	-	-	-	3532-7/8HIP	130,05
UNC 1 - 8	3500-HIT23	30,37	-	-	-	-	-	-	3532-1HIP	148,63
UNC 1.1/8 - 7	3500-HIT24	54,53	-	-	3532-1.1/8HIM	36,51	-	-	3532-1.1/8HIP	169,70
UNC 1.1/4 - 7	3500-HIT25	54,53	-	-	3532-1.1/4HIM	36,51	-	-	3532-1.1/4HIP	177,78
UNC 1.3/8 - 6	3500-HIT26	85,86	-	-	3532-1.3/8HIM	42,60	-	-	3532-1.3/8HIP	180,93
UNC 1.1/2 - 6	3500-HIT27	86,00	-	-	3532-1.1/2HIM	42,60	-	-	3532-1.1/2HIP	183,45



















TECHNICAL RECOMMENDATION:

Install the insert pitch and half deep at the workpiece.



INSTALLATION TOOLS



			 				 		 	
									€	€
UNF N°3 - 56	3500-HIT3	12,65	3534-3GHIP	113,31	-	-	-	-	-	-
UNF N°4 - 48	3500-HIT4	12,65	3534-4GHIP	115,62	-	-	3534-4GMIT	77,12	-	-
UNF N°6 - 40	3500-HIT5	12,65	3534-6GHIP	101,30	-	-	3534-6GMIT	70,96	-	-
UNF N°8 - 36	3500-HIT6	12,65	3534-8GHIP	101,30	-	-	3534-8GMIT	70,96	-	-
UNF N°10 - 32	3500-HIT8	12,65	3534-10GHIP	101,30	-	-	3534-10GMIT	70,96	-	-
UNF N°12 - 28	3500-HIT8	12,65	3534-12GHIP	101,30	-	-	3534-12GMIT	70,95	-	-
UNF 1/4 - 28	3500-HIT9	12,65	3534-1/4HIP	68,86	-	-	3534-1/4MIT	70,96	-	-
UNF 5/16 - 24	3500-HIT11	14,50	3534-5/16HIP	68,91	-	-	3534-5/16MIT	70,96	-	-
UNF 3/8 - 24	3500-HIT13	14,50	3534-3/8HIP	80,01	-	-	3534-3/8MIT	77,12	-	-
UNF 7/16 - 20	3500-HIT14	18,18	3534-7/16HIP	80,01	-	-	3534-7/16MIT	77,12	-	-
UNF 1/2 - 20	3500-HIT15	18,18	3534-1/2HIP	92,51	-	-	3534-1/2MIT	82,27	-	-
UNF 9/16 - 18	3500-HIT16	21,87	-	-	-	-	-	-	3534-9/16HIP	83,61
UNF 5/8 - 8	3500-HIT18	24,16	-	-	-	-	-	-	3534-5/8HIP	87,84
UNF 3/4 - 16	3500-HIT21	24,16	-	-	-	-	-	-	3534-3/4HIP	98,82
UNF 7/8 - 14	3500-HIT22	30,37	-	-	-	-	-	-	3534-7/8HIP	106,42
UNF 1-12	3500-HIT23	30,37	-	-	-	-	-	-	3534-1HIP	121,60
UNS 1-14	3500-HIT23	30,37	-	-	-	-	-	-	3535-1HIP	121,60
UNF 1.1/8 - 12	3500-HIT25	54,53	-	-	3534-1.1/8HIM	36,51	-	-	3534-1.1/8HIP	456,02
UNF 1.1/4 - 12	3500-HIT26	85,86	-	-	3534-1.1/4HIM	36,51	-	-	3534-1.1/4HIP	532,02
UNF 1.3/8 - 12	3500-HIT27	86,00	-	-	3534-1.3/8HIM	42,60	-	-	3534-1.3/8HIP	608,03
UNF 1.1/2 - 12	3500-HIT28	86,00	-	-	3534-1.1/2HIM	42,60	-	-	3534-1.1/2HIP	684,02



INSTALLATION TOOLS


FREE

€

BSW 1/8 - 40	3500-HIT4	12,65
BSW 3/16 - 24	3500-HIT7	12,65
BSW 1/4 - 20	3500-HIT9	12,65
BSW 5/16 - 18	3500-HIT10	14,50
BSW 3/8 - 16	3500-HIT11	14,50
BSW 7/16 - 14	3500-HIT14	18,18
BSW 1/2 - 12	3500-HIT15	18,18
BSW 9/16 - 12	3500-HIT16	21,87
BSW 5/8 - 11	3500-HIT18	24,16
BSW 3/4 - 10	3500-HIT20	24,16
BSW 7/8 - 9	3500-HIT22	30,37
BSW 1 - 8	3500-HIT23	30,37



FREE


FREE

€
€

BSP 1/8 - 28	3500-HIT14	18,18	3546-1/8HIM	18,26
BSP 1/4 - 19	3500-HIT16	21,87	3546-1/4HIM	18,26
BSP 3/8 - 19	3500-HIT20	24,16	3546-3/8HIM	21,30
BSP 1/2 - 14	3500-HIT23	30,37	3546-1/2HIM	24,36
BSP 5/8 - 14	3500-HIT23	30,37	3546-5/8HIM	30,42
BSP 3/4 - 14	3500-HIT24	54,53	3546-3/4HIM	30,42
BSP 7/8 - 14	3500-HIT27	86,00	3546-7/8HIM	42,60
BSP 1 - 11	3500-HIT27	86,00	3546-1HIM	42,60



FREE

€

BSF 3/16 - 32	3500-HIT8	12,65
BSF 1/4 - 26	3500-HIT9	12,65
BSF 5/16 - 22	3500-HIT11	14,50
BSF 3/8 - 20	3500-HIT13	14,50
BSF 7/16 - 18	3500-HIT14	18,18
BSF 1/2 - 16	3500-HIT15	18,18
BSF 9/16 - 16	3500-HIT16	21,87
BSF 5/8 - 14	3500-HIT18	24,16
BSF 3/4 - 12	3500-HIT20	24,16
BSF 7/8 - 11	3500-HIT22	30,37
BSF 1 - 10	3500-HIT23	30,37



FREE

€



NPT 1/8 - 27	3500-HIT13	14,50
NPT 1/4 - 18	3500-HIT16	21,87
NPT 3/8 - 18	3500-HIT18	24,16
NPT 1/2 - 14	3500-HIT22	30,37
NPT 3/4 - 14	3500-HIT24	54,53
NPT 1 - 11.1/2	3500-HIT27	86,00



INSTALLATION TOOLS

powercoil
by CEESA
Pink

UN x8








8-UN

BSB


FREE

FREE



		€		€	
UN 1.1/8 - 8	3500-HIT24	54,53	3570-1.1/8HIM	71,04	
UN 1.1/4 - 8	3500-HIT25	54,53	3570-1.1/4HIM	71,04	
UN 1.3/8 - 8	3500-HIT26	85,86	3570-1.3/8HIM	82,44	
UN 1.1/2 - 8	3500-HIT27	86,00	3570-1.1/2HIM	82,44	
UN 1.5/8 - 8	3500-HIT27	86,00	3570-1.5/8HIM	85,27	
UN 1.3/4 - 8	3500-HIT28	86,00	3570-1.3/4HIM	90,95	
UN 1.7/8 - 8	3500-HIT30	106,93	3570-1.7/8HIM	105,16	
UN 2 - 8	3500-HIT30	106,93	3570-2HIM	105,16	


BSB



FREE

FREE

		€		€	
BSB 1/4 - 26	3500-HIT9	12,65			
BSB 5/16 - 26	3500-HIT11	14,50			
BSB 3/8 - 26	3500-HIT13	14,50			
BSB 7/16 - 26	3500-HIT14	18,18			
BSB 1/2 - 26	3500-HIT15	18,18			



BA



BA

FREE

FREE




		€		€	
BA 0	3500-HIT9	12,65			
BA 2	3500-HIT7	12,65			
BA 4	3500-HIT5	12,65			
BA 6	3500-HIT3	12,65			

MF



FREE

FREE





		€		€	
10x1.00	3500-HIT13	14,50			
12x1.25	3500-HIT15	18,18			
14x1.25	3500-HIT17	21,87			
18x1.50	3500-HIT20	24,16			



M14x1,25

M12x1,25

INSTALLATION TOOL, TANG BREAKER, EXTRACTOR

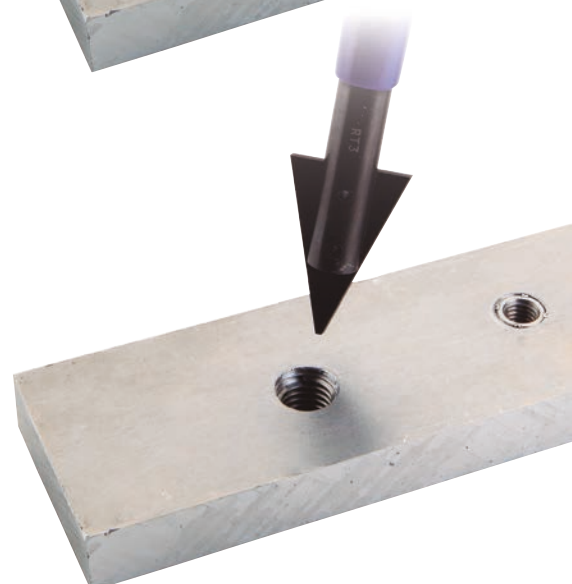

		€
UNC N°2 - 56	3500-TB2	5,43
UNC N°3 - 48	3500-TB3	5,43
UNC N°4 - 40	3500-TB4	5,43
UNC N°5 - 40	3500-TB4	5,43
UNC N°6 - 32	3500-TB5	5,43
UNC N°8 - 32	3500-TB6	5,43
UNC N°10 - 24	3500-TB8	5,43
UNC N°12 - 24	3500-TB8	5,43
UNC 1/4 - 20	3500-TB9	5,43
UNC 5/16 - 18	3500-TB12	6,01
UNC 3/8 - 16	3500-TB12	6,01
UNC 7/16 - 14	3500-TB14	7,28
UNC 1/2 - 13	3500-TB15	7,28
UNC 9/16 - 12	3500-HIT16	21,87
UNC 5/8 - 11	3500-HIT18	24,16
UNC 3/4 - 10	3500-HIT20	24,16
UNC 7/8 - 9	3500-HIT22	30,37
UNC 1 - 8	3500-HIT23	30,37
UNC 1.1/8 - 7	-	-
UNC 1.1/4 - 7	-	-
UNC 1.3/8 - 6	-	-
UNC 1.1/2 - 6	-	-


	€
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT2	26,81
3500-RT2	26,81
3500-RT2	26,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT4	60,05
3500-RT4	60,05
3500-RT4	60,05
3500-RT4	60,05

INSTALLATION TOOL, TANG BREAKER, EXTRACTOR

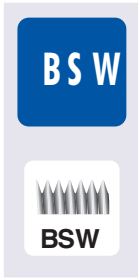


powercoil
by CELESA
Pink



		€
UNF N°3 - 56	3500-TB3	5,43
UNF N°4 - 48	3500-TB4	5,43
UNF N°6 - 40	3500-TB5	5,43
UNF N°8 - 36	3500-TB6	5,43
UNF N°10 - 32	3500-TB8	5,43
UNF N°12 - 28	3500-TB8	5,43
UNF 1/4 - 28	3500-TB9	5,43
UNF 5/16 - 24	3500-TB12	6,01
UNF 3/8 - 24	3500-TB13	6,01
UNF 7/16 - 20	3500-TB14	7,28
UNF 1/2 - 20	3500-TB15	7,28
UNF 9/16 - 18	3500-HIT16	21,87
UNF 5/8 - 18	3500-HIT18	24,16
UNF 3/4 - 16	3500-HIT21	24,16
UNF 7/8 - 14	3500-HIT22	30,37
UNF 1 - 12	3500-HIT23	30,37
UNF 1 - 14	3500-HIT23	30,37
UNF 1.1/8 - 12	-	-
UNF 1.1/4 - 12	-	-
UNF 1.3/8 - 12	-	-
UNF 1.1/2 - 12	-	-

	€
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT1	24,83
3500-RT2	26,81
3500-RT2	26,81
3500-RT2	26,81
3500-RT2	26,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT3	32,81
3500-RT4	60,05
3500-RT4	60,05
3500-RT4	60,05
3500-RT4	60,05

INSTALLATION TOOL, TANG BREAKER, EXTRACTOR


€

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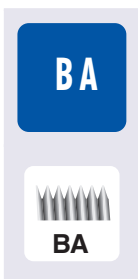
BSW 1/8 - 40	3500-TB4	5,43	3500-RT1	24,83
BSW 3/16 - 24	3500-TB8	5,43	3500-RT2	26,81
BSW 1/4 - 20	3500-TB9	5,43	3500-RT2	26,81
BSW 5/16 - 18	3500-TB11	6,01	3500-RT2	26,81
BSW 3/8 - 16	3500-TB12	6,01	3500-RT3	32,81
BSW 7/16 - 14	3500-TB14	7,28	3500-RT3	32,81
BSW 1/2 - 12	3500-TB15	7,28	3500-RT3	32,81
BSW 9/16 - 12	3500-HIT16	21,87	3500-RT3	32,81
BSW 5/8 - 11	3500-HIT18	24,16	3500-RT3	32,81
BSW 3/4 - 10	3500-HIT20	24,16	3500-RT3	32,81
BSW 7/8 - 9	3500-HIT22	30,37	3500-RT3	32,81
BSW 1 - 8	3500-HIT23	30,37	3500-RT3	32,81



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BSF 3/16 - 32	3500-TB6	5,43	3500-RT2	26,81
BSF 1/4 - 26	3500-TB9	5,43	3500-RT2	26,81
BSF 5/16 - 22	3500-TB11	6,01	3500-RT2	26,81
BSF 3/8 - 20	3500-TB12	6,01	3500-RT3	32,81
BSF 7/16 - 18	3500-TB14	7,28	3500-RT3	32,81
BSF 1/2 - 16	3500-TB15	7,28	3500-RT3	32,81
BSF 9/16 - 16	3500-HIT16	21,87	3500-RT3	32,81
BSF 5/8 - 14	3500-HIT18	24,16	3500-RT3	32,81
BSF 3/4 - 12	3500-HIT20	24,16	3500-RT3	32,81
BSF 7/8 - 11	3500-HIT22	30,37	3500-RT3	32,81
BSF 1 - 10	3500-HIT23	30,37	3500-RT3	32,81



€

€

BA 0	3500-TB11	6,01	3500-RT2	26,81
BA 2	3500-TB8	5,43	3500-RT2	26,81
BA 4	3500-TB5	5,43	3500-RT1	24,83
BA 6	3500-TB3	5,43	3500-RT1	24,83



€

€

BSB 1/4 - 26	3500-TB9	5,43	3500-RT2	26,81
BSB 5/16 - 26	3500-TB12	6,01	3500-RT2	26,81
BSB 3/8 - 26	3500-TB13	6,01	3500-RT3	32,81
BSB 7/16 - 26	3500-TB14	7,28	3500-RT3	32,81
BSB 1/2 - 26	3500-TB15	7,28	3500-RT3	32,81

SOLID CARBIDE DRILLS FOR HARDENED AND HIGH RESISTANCE STEEL

Ref. BC85

70
HRc

SOLID
CARBIDE

TO L \varnothing
h7

TO L \varnothing
h6

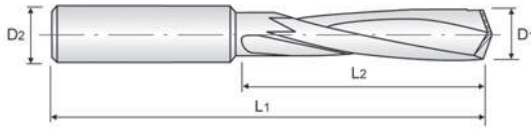



TiA IN

HARDX
600

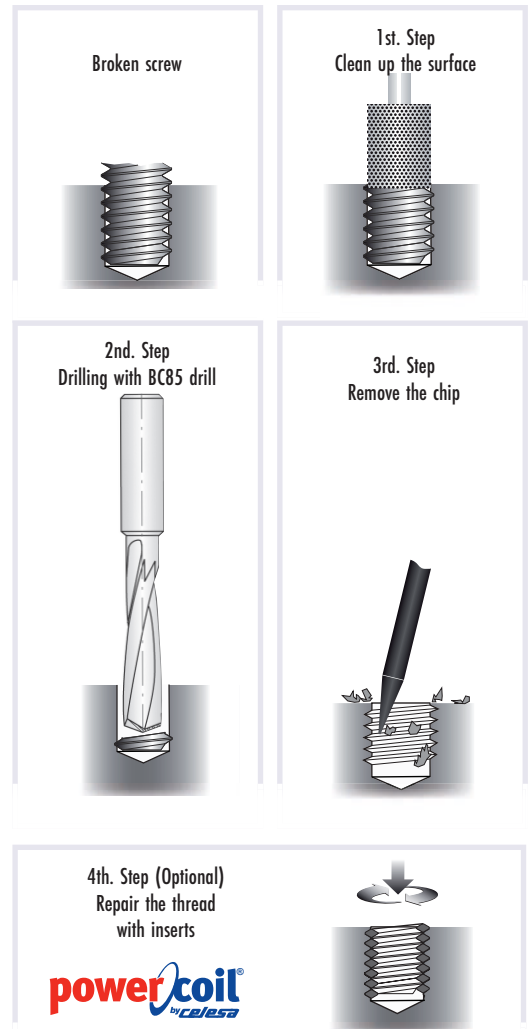


Recommended for HARDOX 600



BC85						
	D1 mm	D2 mm	L1 mm	L2 mm		
BC850300	3,0	3	46	16		48,34
BC850330	3,3	4	48	18	M4	55,48
BC850340	3,4	4	50	20		55,48
BC850350	3,5	4	50	20		55,48
BC850400	4,0	4	52	22		56,60
BC850420	4,2	6	65	25	M5	80,37
BC850430	4,3	6	68	28		80,37
BC850440	4,4	6	68	28		80,37
BC850450	4,5	6	68	28		80,37
BC850500	5,0	6	72	32	M6	80,37
BC850510	5,1	6	72	32		80,37
BC850520	5,2	6	72	32		80,37
BC850550	5,5	6	75	35		80,37
BC850600	6,0	6	75	35		80,37
BC850650	6,5	8	80	40		93,35
BC850680	6,8	8	85	45	M8	93,35
BC850690	6,9	8	85	45		93,35
BC850700	7,0	8	85	45		93,35
BC850750	7,5	8	85	45		93,35
BC850800	8,0	8	98	50		93,35
BC850850	8,5	10	98	50	M10	142,67
BC850860	8,6	10	105	57		142,67
BC850880	8,8	10	105	57		142,67
BC850900	9,0	10	105	57		142,67
BC850950	9,5	10	105	57		142,67
BC851000	10,0	10	111	63		142,67
BC851020	10,2	12	111	63	M12	184,78
BC851030	10,3	12	111	63		216,81
BC851050	10,5	12	111	63		216,81
BC851080	10,8	12	119	71		216,81
BC851100	11,0	12	119	71		216,81
BC851150	11,5	12	119	71		216,81
BC851200	12,0	12	119	71	M14	216,81
BC851400	14,0	14	125	77	M16	246,37

DRILLING THROUGH BROKEN SCREWS



HRc	50-55		55-60		60-70	
	VC (R.P.M.)	(mm/min)	VC (R.P.M.)	(mm/min)	VC (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
HSSC
5%
DIN
338

GOLD


	Ø mm.	Ø"	L1 x L2 mm	€
3520-0210	2.10	-	49x24	2,67
3520-0230	2.30	3/32	53x27	2,67
3520-0240	2.40	-	57x30	2,67
3520-0260	2.60	-	57x30	2,56
3520-0270	2.70	-	61x33	2,56
3520-0290	2.90	-	61x33	2,56
3520-0300	3.00	-	61x33	2,04
3520-0320	3.20	1/8	65x36	2,46
3520-0340	3.40	-	70x39	2,56
3520-0370	3.70	-	70x39	3,09
3520-0380	3.80	-	75x43	3,09
3520-0420	4.20	-	75x43	2,91
3520-0430	4.30	-	80x47	3,09
3520-0440	4.40	11/64	80x47	3,09
3520-0480	4.80	-	86x52	3,43
3520-0490	4.90	-	86x52	3,43
3520-0500	5.00	-	86x52	3,12
3520-0510	5.10	-	86x52	3,75
3520-0520	5.20	13/64	86x52	3,75
3520-0550	5.50	7/32	93x57	3,96
3520-0570	5.70	15/64	93x57	4,69
3520-0620	6.20	-	101x63	5,22
3520-0630	6.30	1/4	101x63	5,22
3520-0660	6.60	-	101x63	6,27
3520-0670	6.70	17/64	101x63	6,27
3520-0690	6.90	-	109x69	6,27
3520-0730	7.30	9/32	109x69	7,98
3520-0760	7.60	-	117x75	9,60
3520-0800	8.00	5/16	117x75	6,90
3520-0820	8.20	-	117x75	9,21
3520-0830	8.30	21/64	117x75	9,21

	Ø mm.	Ø"	L1 x L2 mm	€
3520-0840	8.40	-	117x75	9,21
3520-0880	8.80	-	125x81	11,70
3520-0930	9.30	23/64	125x81	12,96
3520-0940	9.40	3/8	125x81	12,92
3520-0980	9.80	-	133x87	15,19
3520-0990	9.90	25/64	133x87	15,19
3520-1000	10.00	-	133x87	10,44
3520-1010	10.10	-	133x87	17,47
3520-1030	10.30	13/32	133x87	17,50
3520-1040	10.40	-	133x87	17,47
3520-1080	10.80	-	142x94	20,31
3520-1110	11.10	7/16	142x94	23,17
3520-1130	11.30	-	142x94	23,17
3520-1140	11.40	-	142x94	23,17
3520-1150	11.50	29/64	142x94	19,50
3520-1160	11.60	-	142x94	23,94
3520-1230	12.30	-	151x101	27,79
3520-1240	12.40	31/64	151x101	27,79
3520-1250	12.50	-	151x101	25,38
3520-1270	12.70	1/2	151x101	28,92
3520-1280	12.80	-	151x101	28,92
3520-1300	13.00	33/64	151x101	25,94
3520-1325	13.25	-	160x108	35,91
3520-1350	13.50	-	160x108	28,60
3520-1375	13.75	-	160x108	35,91
3520-1425	14.25	9/16	169x114	47,19
3520-1450	14.50	-	169x114	40,11
3520-1475	14.75	-	169x114	47,19
3520-1500	15.00	19/32	169x114	40,71
3520-1525	15.25	-	178x120	65,10



FULLY GROUND REDUCED SHANK TWIST DRILLS

HSS C
5%

DIN
338



GOLD



	Ø mm.	Ø"	L1 x L2 mm	€
3520-1550	15.50	39/64	178x120	60,84
3520-1650	16.50	-	184x125	71,47
3520-1675	16.75	-	184x125	95,79
3520-1700	17.00	-	184x125	71,93
3520-1750	17.50	-	191x130	79,17
3520-1850	18.50	23/32	198x135	96,81
3520-1875	18.75	-	198x135	121,38
3520-1900	19.00	3/4	198x135	95,97
3520-1950	19.50	49/64	205x140	106,33
3520-2000	20.00	-	205x240	113,93
3520-2050	20.50	13/16	205x140	135,63



MORSE TAPER SHANK DRILLS

HSS

DIN
345



OX



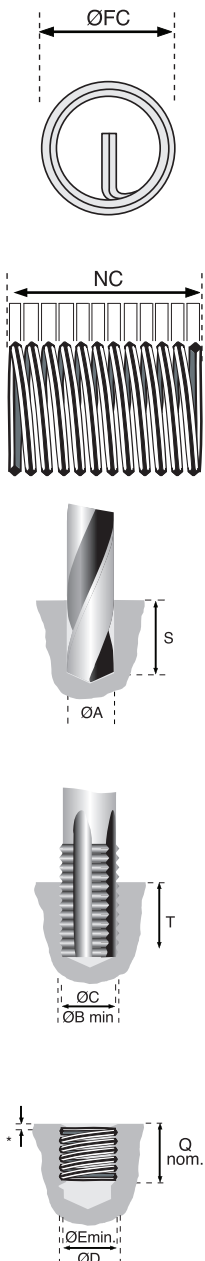
	Ø mm.	Ø"	L1 x L2 mm	€
3520-2075	20.75	-	243x145	73,47
3520-2100	21.00	-	243x145	70,21
3520-2150	21.50	27/32	248x150	70,21
3520-2250	22.50	57/64	253x155	76,97
3520-2275	22.75	-	253x155	88,73
3520-2300	23.00	29/32	253x155	76,80
3520-2325	23.25	-	276x155	97,83
3520-2350	23.50	-	276x155	85,23
3520-2450	24.50	31/32	281x160	92,82
3520-2500	25.00	-	281x160	92,44
3520-2575	25.75	1.1/64	286x165	116,10
3520-2600	26.00	-	286x165	100,59
3520-2625	26.25	-	286x165	125,73
3520-2650	26.50	-	286x165	108,89
3520-2700	27.00	1.1/16	291x170	108,99
3520-2750	27.50	1.5/64	291x170	116,59
3520-2800	28.00	1.3/32	291x170	116,94
3520-2850	28.50	1.1/8	296x175	124,99
3520-2950	29.50	1.5/32	296x175	137,62
3520-3000	30.00	1.11/64	296x175	137,73
3520-3050	30.50	1.3/16	301x180	153,66
3520-3100	31.00	1.7/32	301x180	153,79
3520-3200	32.00	1.1/4	334x185	162,02
3520-3250	32.50	1.9/32	334x185	186,10
3520-3300	33.00	1.19/64	334x185	184,98
3520-3325	33.25	-	334x185	228,17
3520-3350	33.50	1.5/16	334x185	201,81
3520-3375	33.75	-	339x190	229,39
3520-3400	34.00	1.21/64	339x190	201,18
3520-3500	35.00	1.3/8	339x190	220,82
3520-3550	35.50	1.13/32	339x190	235,73
3520-3600	36.00	-	344x195	236,32
3520-3650	36.50	-	344x195	249,94
3520-3700	37.00	1.29/64	344x195	249,59
3520-3800	38.00	1.1/2	349x200	262,15
3520-3850	38.50	-	349x200	278,95
3520-3900	39.00	1.17/32	349x200	279,20
3520-3950	39.50	1.35/64	349x200	295,68
3520-3975	39.75	-	349x200	328,48
3520-4000	40.00	1.9/16	349x200	295,30
3520-4100	41.00	1.5/8	354x205	309,93
3520-4250	42.50	1.43/64	354x205	345,49
3520-4300	43.00	1.11/16	359x210	345,52
3520-4450	44.50	1.3/8	359x210	378,57
3520-4600	46.00	-	364x215	392,01
3520-4750	47.50	1.7/8	364x215	423,47
3520-4850	48.50	1.29/32	369x220	440,27
3520-5100	51.00	2	412x225	535,96



TECHNICAL INFORMATION FOR FREE RUNNING INSERTS

M/MF	
A	Minor Diameter
B	Major Diameter
C	Pitch Diameter of Tapped Hole (Class 5H)
D	Pitch Diameter of Installed Insert (Class 4H)
E	Installed Insert Internal Diameter - min.
FC	Free Coil Diameter of Uninstalled Insert
S	Drilling Length - minimum
T	Tapping Length - minimum
Q	Nominal Length
NC	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 1.50	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 1.00	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





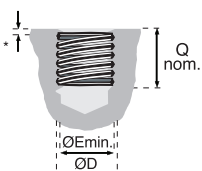
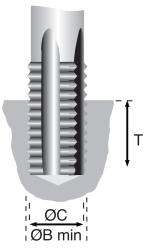
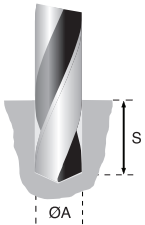
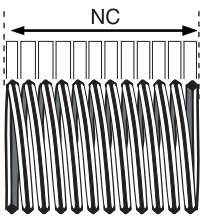
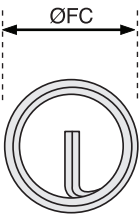
TECHNICAL INFORMATION FOR FREE RUNNING INSERTS

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	40.5														



TECHNICAL INFORMATION FOR FREE RUNNING INSERTS

	UNF/UNC	BSF
A	Minor Diameter	
B	Major Diameter	
C	Pitch Diameter of Tapped Hole (Class 5H)	
D	Pitch Diameter of Installed Insert (Class 4H)	
E	Installed Insert Internal Diameter - min.	
FC	Free Coil Diameter of Uninstalled Insert	
S	Drilling Length - minimum	
T	Tapping Length - minimum	
Q	Nominal Length	
NC	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	
UNC										
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	
BSF										
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	

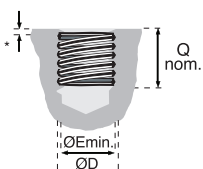
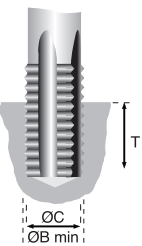
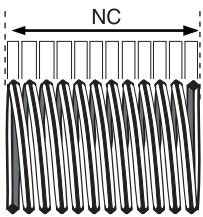
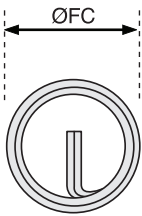
TECHNICAL INFORMATION FOR FREE RUNNING INSERTS



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 / 1.1950	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	0.2543 / 0.2531	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 / .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	0.94						


TECHNICAL INFORMATION FOR FREE RUNNING INSERTS
BSW / BSP BA / BSB / UN-8 PITCH

A	Minor Diameter
B	Major Diameter
C	Pitch Diameter of Tapped Hole (Class 5H)
D	Pitch Diameter of Installed Insert (Class 4H)
E	Installed Insert Internal Diameter - min.
FC	Free Coil Diameter of Uninstalled Insert
S	Drilling Length - minimum
T	Tapping Length - minimum
Q	Nominal Length
NC	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

BSP

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

BA

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

BSB

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

UN-8 PITCH

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


TABLEAU POUR LA RECHERCHE D'OUTILS DE POSE DE FILETS RAPPORTÉS


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



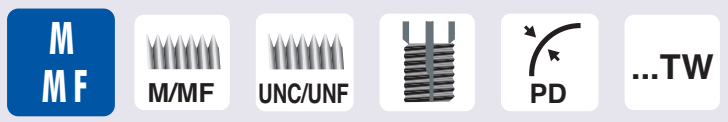
Pitch (mm)



Insert Length



KEY LOCK INSERTS



				AC	INOX
				€	€
M 5 x 0.80	8 x 1.25	8.00	6.90	3620-5.00TW 5,88	3720-5.00TW 12,82
M 6 x 1.00	10 x 1.25	10.00	8.80	3620-6.00TW 6,26	3720-6.00TW 13,08
M 8 x 1.00	12 x 1.25	12.00	10.80	3621-8.00TW 8,37	3721-8.00TW 13,93
M 8 x 1.25	12 x 1.25	12.00	10.80	3620-8.00TW 7,05	3720-8.00TW 13,58
M 10 x 1.25	14 x 1.50	14.00	12.80	3621-10.00TW 10,35	3721-10.00TW 15,84
M 10 x 1.50	14 x 1.50	14.00	12.80	3620-10.00TW 10,35	3720-10.00TW 15,84
M 12 x 1.25	16 x 1.50	16.00	14.75	3621-12.00TW 12,93	3721-12.00TW 20,42
M 12 x 1.75	16 x 1.50	16.00	14.75	3620-12.00TW 12,71	3720-12.00TW 19,93

UNC					€	€
UNC (J) N°10 - 24	5/16 x 18	7.87	6.90	3632-10GTW 4,41	3732-10GTW 11,09	
UNC (J) 1/4 - 20	3/8 x 16	9.40	8.40	3632-1/4TW 4,71	3732-1/4TW 12,17	
UNC (J) 5/16 - 18	7/16 x 14	10.92	10.10	3632-5/16TW 5,03	3732-5/16TW 13,55	
UNC (J) 3/8 - 16	1/2 x 13	12.70	11.50	3632-3/8TW 5,64	3732-3/8TW 13,93	
UNC (J) 7/16 - 14	9/16 x 12	14.22	13.00	3632-7/16TW 7,31	3732-7/16TW 16,94	
UNC (J) 1/2 - 13	5/8 x 11	15.75	14.75	3632-1/2TW 8,53	3732-1/2TW 19,54	

UNF					€	€
UNF (J) N°10 - 32	5/16 x 18	7.87	6.90	3634-10GTW 4,41	3734-10GTW 11,09	
UNF (J) 1/4 - 28	3/8 x 16	9.40	8.40	3634-1/4TW 4,71	3734-1/4TW 12,17	
UNF (J) 5/16 - 24	7/16 x 14	10.92	10.10	3634-5/16TW 5,03	3734-5/16TW 13,55	
UNF (J) 3/8 - 24	1/2 x 13	12.70	11.50	3634-3/8TW 5,64	3734-3/8TW 13,93	
UNF (J) 7/16 - 20	9/16 x 12	14.22	13.00	3634-7/16TW 7,31	3734-7/16TW 16,94	
UNF (J) 1/2 - 20	5/8 x 11	15.75	14.75	3634-1/2TW 8,53	3734-1/2TW 19,54	

- 1 Drill
- 2 Tap
- 3 Insert
- 4



KEY LOCK INSERTS

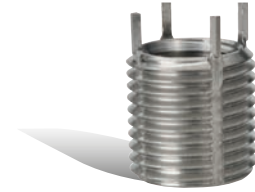








				AC	INOX	
				€	€	€
M 4 x 0.70	8 x 1.25	8.00	6.90	3620-4.00HD	11,12	3720-4.00HD 14,56
M 5 x 0.80	10 x 1.25	10.00	8.80	3620-5.00HD	6,48	3720-5.00HD 15,69
M 6 x 1.00	12 x 1.25	12.00	10.80	3620-6.00HD	6,76	3720-6.00HD 15,82
M 8 x 1.00	14 x 1.50	14.00	12.80	3621-8.00HD	8,54	3721-8.00HD 16,58
M 8 x 1.25	14 x 1.50	14.00	12.80	3620-8.00HD	7,18	3720-8.00HD 16,58
M 10 x 1.25	16 x 1.50	16.00	14.75	3621-10.00HD	10,54	3721-10.00HD 19,19
M 10 x 1.50	16 x 1.50	16.00	14.75	3620-10.00HD	10,54	3720-10.00HD 18,86
M 12 x 1.25	18 x 1.50	18.00	16.75	3621-12.00HD	13,19	3721-12.00HD 20,82
M 12 x 1.75	18 x 1.50	18.00	16.75	3620-12.00HD	13,14	3720-12.00HD 20,82
M 14 x 1.50	20 x 1.50	20.00	18.75	3621-14.00HD	15,82	3721-14.00HD 23,81
M 14 x 2.00	20 x 1.50	20.00	18.75	3620-14.00HD	15,82	3720-14.00HD 23,81
M 16 x 1.50	22 x 1.50	22.00	20.50	3621-16.00HD	18,87	3721-16.00HD 26,89
M 16 x 2.00	22 x 1.50	22.00	20.50	3620-16.00HD	18,55	3720-16.00HD 26,25
M 18 x 1.50	24 x 1.50	24.00	22.50	3621-18.00HD	27,69	3721-18.00HD 41,53
M 20 x 1.50	30 x 2.00	30.00	28.00	3621-20.00HD	33,41	3721-20.00HD 49,27
M 20 x 2.50	30 x 2.00	30.00	28.00	3620-20.00HD	32,25	3720-20.00HD 48,37
M 22 x 1.50	32 x 2.00	32.00	30.00	3621-22.00HD	39,24	3721-22.00HD 58,85
M 24 x 2.00	33 x 2.00	33.00	31.00	3621-24.00HD	59,76	3721-24.00HD 89,64
M 24 x 3.00	33 x 2.00	33.00	31.00	3620-24.00HD	58,71	3720-24.00HD 88,05







KEY LOCK INSERTS
UNC
UNF

UNC/UNF

PR
...HD


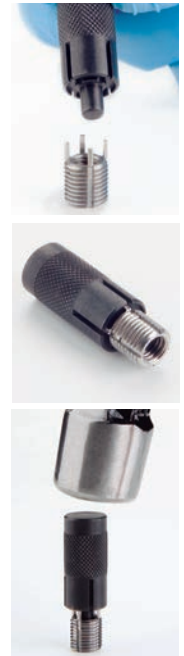
									
					€		€		€
UNC (J) N°8 - 32	5/16x18	7.87	6.90	3632-8GHD	6,09	3732-8GHD	12,17		
UNC (J) N°10 - 24	3/8x16	7.87	8.40	3632-10GHD	4,41	3732-10GHD	11,09		
UNC (J) 1/4 - 20	7/16x14	9.40	10.10	3632-1/4HD	4,71	3732-1/4HD	12,17		
UNC (J) 5/16 - 18	1/2x13	10.92	11.50	3632-5/16HD	5,02	3732-5/16HD	13,63		
UNC (J) 3/8 - 16	9/16x12	12.70	13.00	3632-3/8HD	5,63	3732-3/8HD	14,45		
UNC (J) 7/16 - 14	5/8x11	15.75	14.75	3632-7/16HD	7,30	3732-7/16HD	20,99		
UNC (J) 1/2 - 13	3/4x16	15.75	17.75	3632-1/2HD	8,53	3732-1/2HD	21,60		
UNC (J) 9/16 - 12	3/4x16	20.57	17.75	3632-9/16HD	11,71	3732-9/16HD	22,88		
UNC (J) 5/8 - 11	7/8x14	22.10	21.00	3632-5/8HD	13,55	3732-5/8HD	26,01		
UNC (J) 3/4 - 10	1-1/8x12	28.45	27.00	3632-3/4HD	19,32	3732-3/4HD	33,86		
UNC (J) 7/8 - 9	1-1/4x12	31.75	30.00	3632-7/8HD	25,10	3732-7/8HD	52,92		
UNC (J) 1 - 8	1-3/8x12	34.80	33.25	3632-1HD	50,80	3732-1HD	106,68		
UNC (J) 1.1/8 - 7	1-1/2x12	41.15	36.50	3632-1.1/8HD	243,62	3732-1.1/8HD	-		
UNC (J) 1.1/4 - 7	1-5/8x12	45.97	39.50	3632-1.1/4HD	303,09	3732-1.1/4HD	-		
UNC (J) 1.1/2 - 6	1-7/8x12	50.80	46.00	3632-1.1/2HD	525,97	3732-1.1/2HD	-		

					€		€		€
UNF (J) N°10 - 32	3/8x16	7.87	8.40	3634-10GHD	4,41	3734-10GHD	11,09		
UNF (J) 1/4 - 28	7/16x14	7.87	10.10	3634-1/4HD	4,71	3734-1/4HD	12,17		
UNF (J) 5/16 - 24	1/2x13	9.40	11.50	3634-5/16HD	5,02	3734-5/16HD	13,63		
UNF (J) 3/8 - 24	9/16x12	10.92	13.00	3634-3/8HD	5,63	3734-3/8HD	14,45		
UNF (J) 7/16 - 20	5/8x11	12.70	14.75	3634-7/16HD	7,30	3734-7/16HD	20,99		
UNF (J) 1/2 - 20	3/4x16	15.75	17.75	3634-1/2HD	8,53	3734-1/2HD	21,60		
UNF (J) 9/16 - 18	3/4x16	15.75	17.75	3634-9/16HD	11,71	3734-9/16HD	22,88		
UNF (J) 5/8 - 18	7/8x14	20.57	21.00	3634-5/8HD	13,55	3734-5/8HD	26,01		
UNF (J) 3/4 - 16	1-1/8x12	22.10	27.00	3634-3/4HD	19,32	3734-3/4HD	33,86		
UNF (J) 7/8 - 14	1-1/4x12	28.45	30.00	3634-7/8HD	25,10	3734-7/8HD	52,92		
UNF (J) 1 - 12	1-3/8x12	31.75	33.25	3634-1HD	50,80	3734-1HD	106,68		
UNF (J) 1 - 14	1-3/8x12	34.80	33.25	3635-1HD	92,20	3735-1HD	-		
UNF (J) 1.1/8 - 12	1-1/2x12	41.15	36.50	3634-1.1/8HD	243,62	3734-1.1/8HD	-		
UNF (J) 1.1/4 - 12	1-5/8x12	45.97	39.50	3634-1.1/4HD	303,09	3734-1.1/4HD	-		
UNF (J) 1.1/2 - 12	1-7/8x12	45.97	46.00	3634-1.1/2HD	525,97	3734-1.1/2HD	-		

INSTALLING TOOLS



 M MF	 PD ...TT		 PR ...HT		 PD PR ...T	
		€		€		€
M 4	-	-	3600-4.00HT	93,64	-	-
M 5	3600-5.00TT	95,13	3600-5.00HT	95,13	3600-190T	53,15
M 6	3600-6.00TT	97,86	3600-6.00HT	97,86	3600-250T	48,69
M 8	3600-8.00TT	101,60	3600-8.00HT	101,60	3600-312T	58,38
M 10	3600-10.00TT	109,80	3600-10.00HT	109,80	3600-375T	58,38
M 12	3600-12.00TT	117,74	3600-12.00HT	117,74	3600-500T	63,83
M 14	-	-	3600-14.00HT	128,17	-	-
M 16	-	-	3600-16.00HT	132,64	3600-625T	63,83
M 18	-	-	3600-18.00HT	136,11	-	-
M 20	-	-	3600-20.00HT	141,33	3600-875T	75,26
M 22	-	-	3600-22.00HT	145,79	3600-875T	75,26
M 24	-	-	3600-24.00HT	161,21	3600-875T	75,26



 UNC UNF		€		€		€
8G	-	-	3600-8GHT	111,80	-	-
10G	3600-10GTT	101,55	3600-10GHT	111,80	3600-190T	53,15
1/4	3600-1/4TT	105,15	3600-1/4HT	116,50	3600-250T	48,69
5/16	3600-5/16TT	116,50	3600-5/16HT	116,50	3600-312T	58,38
3/8	3600-3/8TT	132,71	3600-3/8HT	123,69	3600-375T	58,38
7/16	3600-7/16TT	122,59	3600-7/16HT	126,67	3600-375T	58,38
1/2	3600-1/2TT	126,67	3600-1/2HT	138,35	3600-500T	63,83
9/16	-	-	3600-9/16HT	138,35	3600-500T	63,83
5/8	-	-	3600-5/8HT	159,72	3600-625T	63,83
3/4	-	-	3600-3/4HT	184,80	3600-875T	75,26
7/8	-	-	3600-7/8HT	195,72	3600-875T	75,26
1	-	-	3600-1HT	194,25	3600-100T	75,26
1-1/8	-	-	3600-1.1/8HT	544,46	-	-
1-1/4	-	-	3600-1.1/4HT	588,67	-	-
1-1/2	-	-	3600-1.1/2HT	692,50	-	-



KEY LOCK INSERTS SETS
M
MF


				 €		 €		 mm	 mm	 60° 4-5	
M 5 x 0.80	8.00 x 1.25	8.00	3620-5.00TWK	146,40	3720-5.00TWK	176,94	5	6.9	M03M08X1,25	3600-190T	
M 6 x 1.00	10.00 x 1.25	10.00	3620-6.00TWK	185,49	3720-6.00TWK	215,52	5	8.8	M03M10X1,25	3600-250T	
M 8 x 1.25	12.00 x 1.25	12.00	3620-8.00TWK	234,98	3720-8.00TWK	262,94	5	10.8	M03M12X1,25	3600-312T	
M 10 x 1.50	14.00 x 1.50	14.00	3620-10.00TWK	292,14	3720-10.00TWK	311,67	5	12.8	M03M14X1,50	3600-375T	
M 12 x 1.75	16.00 x 1.50	16.00	3620-12.00TWK	311,06	3720-12.00TWK	334,45	5	14.75	M03M16X1,50	3600-500T	

				 €		 €		 mm	 mm	 60° 4-5	
MF 8 x 1.00	12.00 x 1.25	12.00	3621-8.00TWK	234,98	3721-8.00TWK	262,94	5	10.8	M03M12X1,25	3600-312T	
MF 10 x 1.25	14.00 x 1.50	14.00	3621-10.00TWK	292,14	3721-10.00TWK	311,67	5	12.8	M03M14X1,50	3600-375T	
MF 12 x 1.25	16.00 x 1.50	16.00	3621-12.00TWK	317,52	3721-12.00TWK	340,90	5	14.75	M03M16X1,50	3600-500T	

				 €		 €		 mm	 mm	 60° 4-5	
UNC N°10 x 24	UNC 5/16 x 18	7,87	3632-10GTWK	151,89	3732-10GTWK	196,77	5	6.90	M03NC5/16X18	3600-190T	
UNC 1/4 x 20	UNC 3/8 x 16	9,40	3632-1/4TWK	173,68	3732-1/4TWK	219,62	5	8.40	M03NC3/8X16	3600-250T	
UNC 5/16 x 18	UNC 7/16 x 14	10,92	3632-5/16TWK	229,28	3732-5/16TWK	276,33	5	10.10	M03NC7/16X14	3600-312T	
UNC 3/8 x 16	UNC 1/2 x 13	12,70	3632-3/8TWK	199,40	3732-3/8TWK	245,98	5	11.50	M03NC1/2X13	3600-375T	
UNC 7/16 x 14	UNC 9/16 x 12	14,22	3632-7/16TWK	258,90	3732-7/16TWK	303,53	5	13.00	M03NC9/16X12	3600-375T	
UNC 1/2 x 13	UNC 5/8 x 11	15,75	3632-1/2TWK	287,56	3732-1/2TWK	336,39	5	14.75	M03NC5/8X11	3600-500T	

				 €		 €		 mm	 mm	 60° 4-5	
UNF N°10 x 32	UNC 5/16 x 18	7,87	3634-10GTWK	151,89	3734-10GTWK	196,77	5	6.90	M03NC5/16X18	3600-190T	
UNF 1/4 x 28	UNC 3/8 x 16	9,40	3634-1/4TWK	173,68	3734-1/4TWK	219,62	5	8.40	M03NC3/8X16	3600-250T	
UNF 5/16 x 24	UNC 7/16 x 14	10,92	3634-5/16TWK	232,64	3734-5/16TWK	279,69	5	10.10	M03NC7/16X14	3600-312T	
UNF 3/8 x 24	UNC 1/2 x 13	12,70	3634-3/8TWK	199,40	3734-3/8TWK	245,98	5	11.50	M03NC1/2X13	3600-375T	
UNF 7/16 x 20	UNC 9/16 x 12	14,22	3634-7/16TWK	258,90	3734-7/16TWK	303,53	5	13.00	M03NC9/16X12	3600-375T	
UNF 1/2 x 20	UNC 5/8 x 11	15,75	3634-1/2TWK	287,56	3734-1/2TWK	336,39	5	14.75	M03NC5/8X11	3600-500T	

KEY LOCK INSERTS SETS

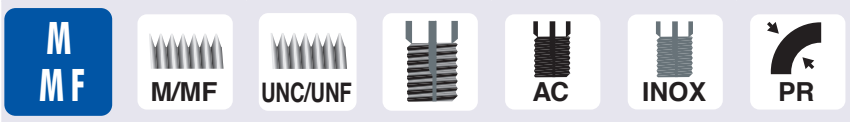
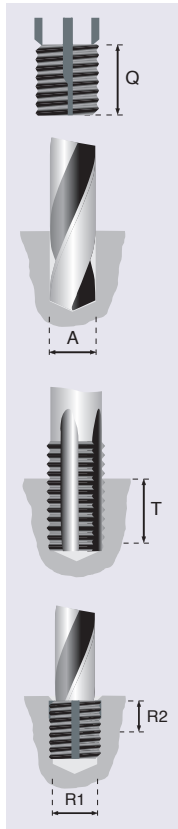
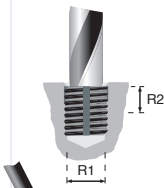


Diagram			AC	INOX	mm	mm	mm	mm
M	mm	mm	€	€	mm	mm	mm	mm
M 5 x 0.80	10.00 x 1.25	10.00	3620-5.00HDK 192,83	3720-5.00HDK 237,47	5	8.80	MO3M10X1,25	3600-190T
M 6 x 1.00	12.00 x 1.25	12.00	3620-6.00HDK 228,10	3720-6.00HDK 275,40	5	10.80	MO3M12X1,25	3600-250T
M 8 x 1.25	14.00 x 1.50	14.00	3620-8.00HDK 287,33	3720-8.00HDK 335,71	5	12.80	MO3M14X1,25	3600-312T
M 10 x 1.50	16.00 x 1.50	16.00	3620-10.00HDK 314,23	3720-10.00HDK 357,26	5	14.75	MO3M16X1,50	3600-375T
M 12 x 1.75	18.00 x 1.50	18.00	3620-12.00HDK 463,98	3720-12.00HDK 497,85	5	16.75	MO3M18X1,50	3600-500T
M 16 x 2.00	22.00 x 1.50	22.00	3620-16.00HDK 623,30	3720-16.00HDK 651,46	5	20.50	MO3M22X1,50	3600-625T

Diagram			AC	INOX	mm	mm	mm	mm
M	mm	mm	€	€	mm	mm	mm	mm
M 8 x 1.00	14.00 x 1.50	14.00	3621-8.00HDK 287,33	3721-8.00HDK 335,71	5	12.80	MO3M14X1,50	3600-312T
M 10 x 1.25	16.00 x 1.50	16.00	3621-10.00HDK 314,23	3721-10.00HDK 357,26	5	14.75	MO3M16X1,50	3600-375T
M 12 x 1.25	18.00 x 1.50	18.00	3621-12.00HDK 463,98	3721-12.00HDK 497,85	5	16.75	MO3M18X1,50	3600-500T
M 16 x 1.50	22.00 x 1.50	22.00	3621-16.00HDK 623,30	3721-16.00HDK 651,46	5	20.50	MO3M22X1,50	3600-625T

Diagram			AC	INOX	mm	mm	mm	mm
UNC	mm	mm	€	€	mm	mm	mm	mm
UNC N°10 x 24	UNC 3/8 x 16	7.87	3632-10GHDK 182,58	3732-10GHDK 241,55	5	8.40	M03NC3/8X16	3600-190T
UNC 1/4 x 20	UNC 7/16 x 14	9.40	3632-1/4HDK 225,54	3732-1/4HDK 288,74	5	10.10	M03NC7/16X14	3600-250T
UNC 5/16 x 18	UNC 1/2 x 13	10.92	3632-5/16HDK 202,58	3732-5/16HDK 270,02	5	11.50	M03NC1/2X13	3600-312T
UNC 3/8 x 16	UNC 9/16 x 12	12.70	3632-3/8HDK 261,95	3732-3/8HDK 332,04	5	13.00	M03NC9/16X12	3600-375T
UNC 7/16x14	UNC 5/8 x 11	14.22	3632-7/16HDK 250,88	3732-7/16HDK 269,80	5	14.75	M03NC5/8X11	3600-375T
UNC 1/2x13	UNF 3/4 x 16	15.75	3632-1/2HDK 381,68	3732-1/2HDK 410,49	5	17.75	M03NF3/4X16	3600-500T
UNC 9/16x12	UNF 3/4 x 16	20.57	3632-9/16HDK 381,68	3732-9/16HDK 410,49	5	17.75	M03NF3/4X16	3600-500T
UNC 5/8x11	UNF 7/8 x 14	22.10	3632-5/8HDK 516,15	3732-5/8HDK 572,96	5	21.00	M03NF7/8X14	3600-625T

Diagram			AC	INOX	mm	mm	mm	mm
UNF	mm	mm	€	€	mm	mm	mm	mm
UNF N°10 x 32	UNC 3/8 x 16	7.87	3634-10GHDK 182,58	3734-10GHDK 241,55	5	8.40	M03NC3/8X16	3600-190T
UNF 1/4 x 28	UNC 7/16 x 14	9.40	3634-1/4HDK 225,54	3734-1/4HDK 288,74	5	10.10	M03NC7/16X14	3600-250T
UNF 5/16 x 24	UNC 1/2 x 13	10.92	3634-5/16HDK 202,58	3734-5/16HDK 270,02	5	11.50	M03NC1/2X13	3600-312T
UNF 3/8 x 24	UNC 9/16 x 12	12.70	3634-3/8HDK 261,95	3734-3/8HDK 332,04	5	13.00	M03NC9/16X12	3600-375T
UNF 7/16 x 20	UNC 5/8 x 11	14.22	3634-7/16HDK 292,23	3734-7/16HDK 356,61	5	14.75	M03NC5/8X11	3600-375T
UNF 1/2 x 20	UNF 3/4 x 16	15.75	3634-1/2HDK 430,96	3734-1/2HDK 490,32	5	17.75	M03NF3/4X16	3600-500T
UNF 9/16 x 18	UNF 3/4 x 16	20.57	3634-9/16HDK 448,48	3734-9/16HDK 503,88	5	17.75	M03NF3/4X16	3600-500T
UNF 5/8 x 18	UNF 7/8 x 14	22.10	3634-5/8HDK 516,15	3734-5/8HDK 572,96	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
HEAVY DUTY	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
	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	

				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

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

AC 302

INOX 302


Diagram	Diagram	mm	Diagram	Diagram	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	0,42	0,40	0,35	3920-2.5X6SS	0,79	0,75	0,67
M 3 x 0.50	M 5 x 0.50	6.00	4.80	8.00	3920-3X6	0,47	0,43	0,40	3920-3X6SS	0,80	0,76	0,68
M 4 x 0.70	M 6.50 x 0.75	8.00	6.20	10.00	3920-4X8	0,49	0,47	0,44	3920-4X8SS	1,07	1,02	0,91
M 5 x 0.80	M 8 x 1.00	10.00	7.60	13.00	3920-5X10	0,61	0,58	0,54	3920-5X10SS	1,39	1,32	1,19
M 6 x 1.00	M 10 x 1.50	14.00	9.40	17.00	3920-6X14	0,78	0,74	0,67	3920-6X14SS	1,72	1,63	1,47
M 8 x 1.25	M 12 x 1.50	15.00	11.40	18.00	3920-8X15	0,95	0,90	0,82	3920-8X15SS	2,17	2,04	1,85
M 10 x 1.50	M 14 x 1.50	18.00	13.50	22.00	3920-10X18	1,38	1,31	1,19	3920-10X18SS	3,17	2,99	2,70
						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	2,17	2,04	1,87	3920-12X22SS	4,28	4,02	3,63
M 14 x 2.00	M 18 x 1.50	24.00	17.50	28.00	3920-14X24	2,95	2,78	2,54	3920-14X24SS	5,62	5,29	4,76
M 16 x 2.00	M 20 x 1.50	22.00	19.50	26.00	3920-16X22	3,96	3,61	3,28	3920-16X22SS	6,89	6,28	5,66
						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	5,95	5,41	4,94	3920-18X24SS	7,55	6,88	6,20
M 20 x 2.50	M 26 x 1.50	27.00	25.50	32.00	3920-20X26	6,69	6,10	5,55	3920-20X26SS	8,71	7,94	7,15
M 22 x 2.50	M 26 x 1.50	30.00	25.50	36.00	3920-22X30	7,97	7,25	6,60	3920-22X30SS	9,68	8,82	7,94
M 24 x 3.00	M 30 x 1.50	30.00	29.50	36.00	3920-24X30	9,85	8,99	8,18	3920-24X30SS	11,07	10,08	9,08

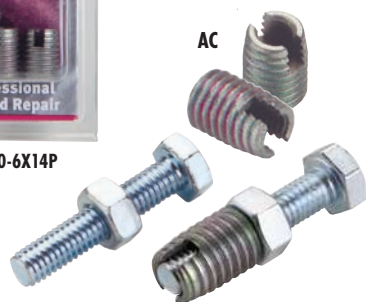
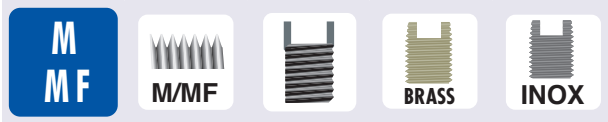

3920-6X14P


Diagram	Diagram	mm	Diagram	Diagram	Diagram	€	AC
M 2.50 x 0.45	M 4.50 x 0.50	6.00	4.30*	8.00	3920-2.5X6P	11,16	2
M 3 x 0.50	M 5 x 0.50	6.00	4.80*	8.00	3920-3X6P	11,16	2
M 4 x 0.70	M 6.50 x 0.75	8.00	6.20*	10.00	3920-4X8P	10,14	2
M 5 x 0.80	M 8 x 1.00	10.00	7.60*	13.00	3920-5X10P	10,14	2
M 6 x 1.00	M 10 x 1.50	14.00	9.40*	17.00	3920-6X14P	10,14	2
M 8 x 1.25	M 12 x 1.50	15.00	11.40*	18.00	3920-8X15P	11,16	2
M 10 x 1.50	M 14 x 1.50	18.00	13.50*	22.00	3920-10X18P	12,17	2
M 12 x 1.75	M 16 x 1.50	22.00	15.50*	26.00	3920-12X22P	14,19	2
M 14 x 2.00	M 18 x 1.50	24.00	17.50*	28.00	3920-14X24P	14,84	2
M 16 x 2.00	M 20 x 1.50	22.00	19.50*	26.00	3920-16X22P	21,29	2

* Prior drill not included in kit.

SELF TAPPING INSERTS WITH CUTTING SLOT



M	M/MF	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	0,46	0,44	0,40	-			
M 4 x 0.70	M 6.5 x 0.75	8.00	6.20	10.00	3920-4X8LAT	0,52	0,49	0,46	3920-4X8DY	1,39	1,32	1,19
M 5 x 0.80	M 8 x 1.00	10.00	7.60	13.00	3920-5X10LAT	0,65	0,61	0,56	3920-5X10DY	1,81	1,70	1,54
M 6 x 1.00	M 10 x 1.50	14.00	9.40	17.00	3920-6X14LAT	0,82	0,78	0,72	3920-6X14DY	2,24	2,11	1,90
M 8 x 1.25	M 12 x 1.50	15.00	11.40	18.00	3920-8X15LAT	1,11	1,04	0,95	3920-8X15DY	3,08	2,90	2,62
M 10 x 1.50	M 14 x 1.50	18.00	13.50	22.00	3920-10X18LAT	1,96	1,85	1,69	-			
						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	2,51	2,37	2,16				

APPLICATIONS

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



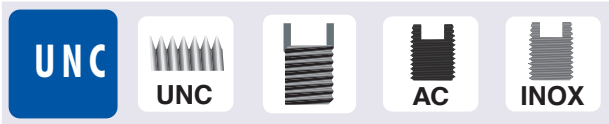
M	M/MF	mm	SOFT		L	BRASS	€		
			Ø	Ø			100-499	500-1999	2000-...
M 3 x 0.50	M 5.5 x 1.60	6.00	4.10	4.20-4.30	9.00	3925-3X6	0,84	0,79	0,75
M 4 x 0.70	M 7 x 2.50	10.00	5.10	5.20-5.30	13.00	3925-4X10	1,13	1,08	1,02
M 5 x 0.80	M 9 x 3.00	12.00	6.60	6.70-6.90	15.00	3925-5X12	1,30	1,24	1,18
M 6 x 1.00	M 10 x 4.00	14.00	7.60	7.70-7.90	17.00	3925-6X14	1,45	1,38	1,31
M 8 x 1.25	M 13 x 4.00	20.00	9.90	10.10-10.30	23.00	3925-8X20	1,98	1,88	1,79
M 10 x 1.50	M 16 x 5.00	23.00	12.40	12.60-12.80	26.00	3925-10X23	2,96	2,81	2,67
							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	4,95	4,70	4,46

Hard Material



Soft Material



SELF TAPPING INSERTS WITH CUTTING SLOT


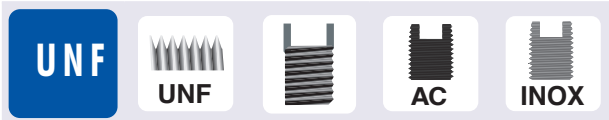
AC 302



INOX 302



		mm			AC	€	INOX AISI 303	€
UNC N°4 x 40	M 5 x 0.50	6.00	4.80	8.00	3932-4GX6	1,28	3932-4GX6SS	2,35
UNC N°6 x 32	M 6 x 0.75	8.00	5.70	10.00	3932-6GX8	1,64	3932-6GX8SS	3,07
UNC N°8 x 32	M 6.50 x 0.75	8.00	6.20	10.00	3932-8GX8	2,21	3932-8GX8SS	3,99
UNC N°10 x 24	M 8 x 1.00	10.00	7.60	13.00	3932-10GX10	2,50	3932-10GX10SS	4,64
UNC 1/4 x 20	M 10 x 1.50	14.00	9.40	17.00	3932-1/4X14	3,07	3932-1/4X14SS	5,92
UNC 5/16 x 18	M 12 x 1.50	15.00	11.40	18.00	3932-5/16X15	3,99	3932-5/16X15SS	7,85
UNC 3/8 x 16	M 14 x 1.50	18.00	13.50	22.00	3932-3/8X18	5,64	3932-3/8X18SS	11,20
UNC 7/16 x 14	M 16 x 1.50	22.00	15.50	26.00	3932-7/16X22	8,27	3932-7/16X22SS	16,34
UNC 1/2 x 13	M 18 x 1.50	22.00	17.50	26.00	3932-1/2X22	10,41	3932-1/2X22SS	21,76
UNC 5/8 x 11	M 20 x 1.50	22.00	19.50	26.00	3932-5/8X22	11,91	3932-5/8X22SS	21,76



AC 302

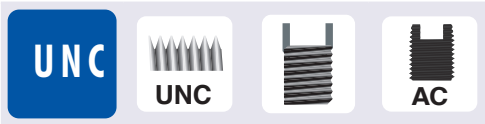


INOX 302



		mm			AC	€	INOX AISI 303	€
UNF N°10 x 32	M 8 x 1.00	10.00	7.60	13.00	3934-10GX10	2,50	3934-10GX10SS	4,64
UNF 1/4 x 28	M 10 x 1.50	14.00	9.40	17.00	3934-1/4X14	3,07	3934-1/4X14SS	5,92
UNF 5/16 x 24	M 12 x 1.50	15.00	11.40	18.00	3934-5/16X15	3,99	3934-5/16X15SS	7,85
UNF 3/8 x 24	M 14 x 1.50	18.00	13.50	22.00	3934-3/8X18	5,64	3934-3/8X18SS	11,20
UNF 7/16 x 20	M 16 x 1.50	22.00	15.50	26.00	3934-7/16X22	8,27	3934-7/16X22SS	16,34
UNF 1/2 x 20	M 18 x 1.50	22.00	17.50	26.00	3934-1/2X22	10,41	3934-1/2X22SS	21,76
UNF 5/8 x 18	M 20 x 1.50	22.00	19.50	26.00	3934-5/8X22	11,91	3934-5/8X22SS	21,76

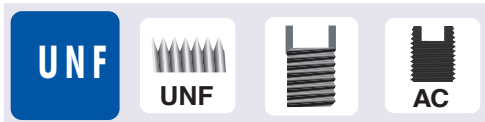
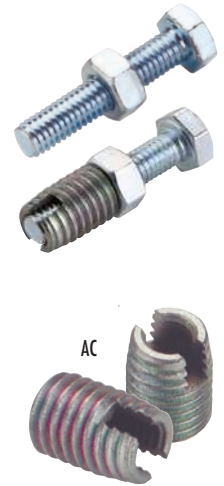
SELF TAPPING INSERTS WITH CUTTING SLOT



		mm				€	
UNC N°4 x 40	M 5 x 0.50	6.00	4.80*	8.00	3932-4GX6P	21,76	2
UNC N°6 x 32	M 6 x 0.75	8.00	5.70*	10.00	3932-6GX8P	21,76	2
UNC N°8 x 32	M 6.50 x 0.75	8.00	6.20*	10.00	3932-8GX8P	21,76	2
UNC N°10 x 24	M 8 x 1.00	10.00	7.60*	13.00	3932-10GX10P	21,76	2
UNC 1/4 x 20	M 10 x 1.50	14.00	9.40*	17.00	3932-1/4X14P	24,62	2
UNC 5/16 x 18	M 12 x 1.50	15.00	11.40*	18.00	3932-5/16X15P	27,07	2
UNC 3/8 x 16	M 14 x 1.50	18.00	13.50*	22.00	3932-3/8X18P	29,52	2
UNC 7/16 x 14	M 16 x 1.50	22.00	15.50*	26.00	3932-7/16X22P	31,97	2
UNC 1/2 x 13	M 18 x 1.50	24.00	17.50*	26.00	3932-1/2X22P	34,42	2
UNC 5/8 x 11	M 20 x 1.50	22.00	19.50*	26.00	3932-5/8X22P	38,38	2



3932-4GX6P



		mm				€	
UNF N°10 x 32	M 8 x 1.00	10.00	7.60*	13.00	3934-10GX10P	21,76	2
UNF 1/4 x 28	M 10 x 1.50	14.00	9.40*	17.00	3934-1/4X14P	24,62	2
UNF 5/16 x 24	M 12 x 1.50	15.00	11.40*	18.00	3934-5/16X15P	27,07	2
UNF 3/8 x 24	M 14 x 1.50	18.00	13.50*	22.00	3934-3/8X18P	29,52	2
UNF 7/16 x 20	M 16 x 1.50	22.00	15.50*	26.00	3934-7/16X22P	31,97	2
UNF 1/2 x 20	M 18 x 1.50	22.00	17.50*	26.00	3934-1/2X22P	34,42	2
UNF 5/8 x 18	M 20 x 1.50	22.00	19.50*	26.00	3934-5/8X22P	38,38	2



3934-1/4X14P



* Prior drill not included in kit.

REMOVAL



SELF TAPPING INSERTS WITH 3 CUTTING BORES


Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	€			Diagram	€		
						100-499	500-1999	2000-...		INOX AISI 303	25-499	500-1999
M 4 x 0.70	M 6.50 x 0.80	6.00	6.00-6.10	8.00	3333-M4X6	0,64	0,61	0,56	3333-M4X6SS	1,20	1,13	1,04
M 5 x 0.80	M 8 x 1.00	7.00	7.40-7.50	9.00	3333-M5X7	0,85	0,81	0,74	3333-M5X7SS	1,48	1,40	1,28
M 6 x 1.00	M 10 x 1.25	8.00	9.30-9.40	10.00	3333-M6X8	0,98	0,92	0,85	3333-M6X8SS	1,85	1,74	1,59
M 8 x 1.25	M 12 x 1.50	9.00	11.10-11.20	11.00	3333-M8X9	1,17	1,10	1,02	3333-M8X9SS	2,35	2,23	2,02
M 10 x 1.50	M 14 x 1.50	10.00	13.10-13.20	13.00	3333-M10X10	1,73	1,64	1,49	3333-M10X10SS	3,54	3,33	3,04
						25-499	500-1999	2000-...		1-499	500-1999	2000-...
M 12 x 1.75	M 16 x 1.75	12.00	15.00-15.10	15.00	3333-M12X12	2,73	2,57	2,34	3333-M12X12SS	5,67	5,34	4,86
M 14 x 2.00	M 18 x 2.00	14.00	17.00-17.10	17.00	3333-M14X14	3,56	3,35	3,05	3333-M14X14SS	6,51	6,12	5,57
M 16 x 2.00	M 20 x 2.00	14.00	19.00-19.10	17.00	3333-M16X14	4,84	4,55	4,15	3333-M16X14SS	8,78	8,26	7,52

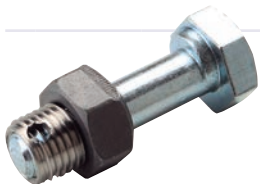
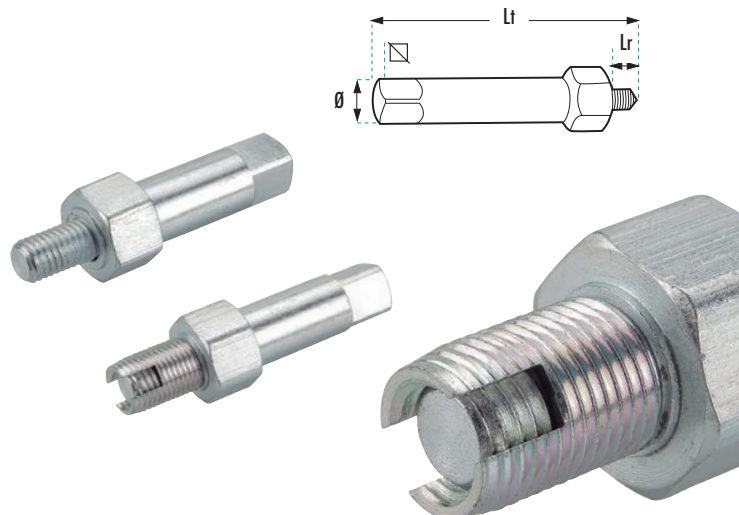


Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	€			Diagram	€		
						100-499	500-1999	2000-...		INOX AISI 303	25-499	500-1999
M 4 x 0.70	M 6.50 x 0.80	8.00	6.10-6.20	10.00	3333-M4X8	0,80	0,75	0,69	3333-M4X8SS	1,35	1,27	1,16
M 5 x 0.80	M 8 x 1.00	10.00	7.60-7.70	13.00	3333-M5X10	1,01	0,96	0,88	3333-M5X10SS	1,70	1,61	1,47
M 6 x 1.00	M 10 x 1.25	12.00	9.50-9.60	15.00	3333-M6X12	1,28	1,21	1,11	3333-M6X12SS	2,03	1,93	1,75
M 8 x 1.25	M 12 x 1.50	14.00	11.30-11.15	17.00	3333-M8X14	1,65	1,56	1,43	3333-M8X14SS	2,66	2,50	2,28
M 10 x 1.50	M 14 x 1.50	18.00	13.30-13.50	22.00	3333-M10X18	2,38	2,23	2,05	3333-M10X18SS	4,04	3,81	3,47
						25-499	500-1999	2000-...		1-499	500-1999	2000-...
M 12 x 1.75	M 16 x 1.75	22.00	15.20-15.40	26.00	3333-M12X22	3,60	3,39	3,09	3333-M12X22SS	8,69	8,17	7,45
M 14 x 2.00	M 18 x 2.00	24.00	17.20-17.40	28.00	3333-M14X24	5,17	4,87	4,43	3333-M14X24SS	10,29	9,68	8,82
M 16 x 2.00	M 20 x 2.00	24.00	19.20-19.10	28.00	3333-M16X24	6,03	5,67	5,17	3333-M16X24SS	12,19	11,46	10,44

SELF TAPPING INSERTS INSTALLATION TOOL

Diagram	L mm	Lr mm	Ø mm	∅ mm	Image	€
M 3 x 0.50	73.00	6.00	12.00	12.00	3920-M3	57,96
M 4 x 0.70	75.00	7.00	12.00	12.00	3920-M4	57,96
M 5 x 0.80	77.00	9.00	12.00	12.00	3920-M5	57,96
M 6 x 1.00	78.00	11.00	12.00	12.00	3920-M6	57,96
M 8 x 1.25	80.00	12.00	12.00	12.00	3920-M8	57,96
M 10 x 1.50	80.00	16.00	18.00	14.00	3920-M10	57,96
M 12 x 1.75	83.50	20.00	18.00	14.00	3920-M12	65,52
M 14 x 2.00	83.50	20.00	22.00	22.00	3920-M14	72,45
M 16 x 2.00	83.50	20.00	22.00	22.00	3920-M16	86,94
M 18 x 2.50	85.50	21.50	26.00	26.00	3920-M18	108,99
M 20 x 2.50	85.50	21.50	26.00	26.00	3920-M20	108,99
M 22 x 2.50	85.50	21.50	30.00	30.00	3920-M22	115,92
M 24 x 3.00	87.50	23.50	30.00	30.00	3920-M24	130,41

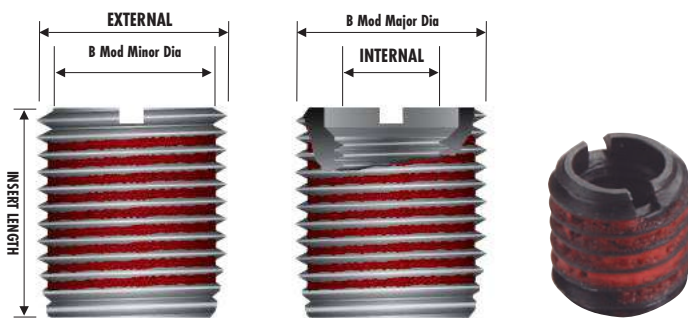


SOLID INSERTS WITH ANAEROBIC THREADLOCKER



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
M F

 PD

THIN WALL

		L mm				€
M 4 x 0.70	UNC 5/16 x 18h	7.92	6,90	9.52	3320-4.00TWF	4,87
M 5 x 0.80	UNC 5/16 x 18h	7.92	6,90	9.52	3320-5.00TWF	4,87
M 6 x 1.00	UNC 3/8 x 16h	9.52	8,40	11.10	3320-6.00TWF	6,13
M 8 x 1.25	UNC 7/16 x 14h	11.10	10,10	12.70	3320-8.00TWF	6,97
M 10 x 1.50	UNC 1/2 x 13h	12.70	11,50	14.22	3320-10.00TWF	9,85
M 12 x 1.75	UNC 5/8 x 11h	15.75	14,50	17.27	3320-12.00TWF	11,06









 AISI 303


 AC


 PR



HEAVY WALL

		L mm				€		€
M 3 x 0.50	M6 x 1.00	6.50	5.10	7.80	3320-3.00HWM	3,00	3320-3.00HWSS	6,60
M 4 x 0.70	M8 x 1.25	7.50	6.90	9.00	3320-4.00HWM	3,20	3320-4.00HWSS	8,02
M 5 x 0.80	M8 x 1.25	7.50	6.90	9.00	3320-5.00HWM	3,61	3320-5.00HWSS	8,75
M 6 x 1.00	M10 x 1.50	10.50	8.60	12.00	3320-6.00HWM	4,06	3320-6.00HWSS	6,83
M 8 x 1.25	M12 x 1.75	12.50	10.40	14.50	3320-8.00HWM	4,58	3320-8.00HWSS	10,85
M 10 x 1.50	M16 x 2.00	17.00	14.00	19.00	3320-10.00HWM	7,06	3320-10.00HWSS	10,82
M 12 x 1.75	M16 x 2.00	17.00	14.00	19.00	3320-12.00HWM	7,93	3320-12.00HWSS	12,34
M 16 x 2.00	M24 x 3.00	20.00	21.00	24.00	3320-16.00HWM	9,56	3320-16.00HWSS	20,64
M 20 x 2.50	M36 x 4.00	30.00	33.00	35.00	3320-20.00HWM	28,18		

HEAVY WALL

M 6 x 1.00	UNC 3/8 x 16h	10.31	8.00	11.90	3320-6.00HWF	2,29	3320-6.00HWSSF	9,48
M 8 x 1.25	UNC 1/2 x 13h	12.29	10.70	14.29	3320-8.00HWF	2,80	3320-8.00HWSSF	10,90
M 10 x 1.50	UNC 9/16 x 12h	13.08	12.30	15.08	3320-10.00HWF	3,20	3320-10.00HWSSF	12,46
M 10 x 1.25	UNC 9/16 x 12h	13.08	12.30	15.08	3321-10.00HWF	4,71	3321-10.00HWSSF	-
M 12 x 1.75	UNC 3/4 x 10h	16.66	16.60	19.05	3320-12.00HWF	4,12	3320-12.00HWSSF	17,76
M 14 x 2.00	UNC 7/8 x 9h	17.45	19.50	20.64	3320-14.00HWF	8,28	3320-14.00HWSSF	21,89
M 16 x 2.00	UNC 1 x 8h	19.84	22.00	22.25	3320-16.00HWF	8,25	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	
10	3320-3.00HW
10	3320-4.00HW
10	3320-5.00HW
10	3320-6.00HW
10	3320-8.00HW


 AC

3320-WK0
289,91 €

SET 50 Unit M3-M8	
10	3320-3.00HWSS
10	3320-4.00HWSS
10	3320-5.00HWSS
10	3320-6.00HWSS
10	3320-8.00HWSS


 AISI 303

3320-SSWK0
542,42 €

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	
10	3320-8.00HW
10	3320-10.00HW
8	3320-12.00HW
5	3320-16.00HW


 AC

3320-WK1
332,01 €

SET 33 Unit M8-M16	
10	3320-8.00HWSS
10	3320-10.00HWSS
8	3320-12.00HWSS
5	3320-16.00HWSS


 AISI 303

3320-SSWK1
573,41 €

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	
10	3320-5.00HWSS
10	3320-6.00HWSS
10	3320-8.00HWSS
10	3320-10.00HWSS
6	3320-12.00HWSS


 AISI 303

3320-SSWK2
557,92 €

REMOVAL


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.



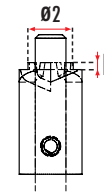
T-SERT INSERTS WITH COUNTERSINK HEAD

INSERTS

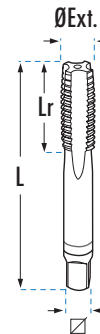
									€
M 3 x 0.50	M5 x 0.50	4.30	6.00	0.50	3.10	3.80	3910-3.00x4.3	3,85	
M 4 x 0.70	M6 x 0.70	6.00	7.00	0.50	4.20	5.50	3910-4.00x6.0	3,85	
M 5 x 0.80	M7 x 0.80	7.60	8.00	0.50	5.10	7.20	3910-5.00x7.6	3,85	
M 6 x 1.00	M8 x 1.00	9.40	9.00	0.70	6.30	8.90	3910-6.00x9.4	4,15	
M 8 x 1.25	M10 x 1.25	11.70	12.00	0.80	8.20	11.20	3910-8.00x11.7	4,29	
M 10 x 1.50	M12 x 1.50	14.00	14.00	1.00	10.30	13.50	3910-10.00x14.0	5,25	
M 12 x 1.75	M14 x 1.75	16.00	16.00	1.00	12.70	15.50	3910-12.00x16.2	5,79	

SEAT CUTTER

	∅ mm	L mm	∅ mm	∅2 mm	h mm		€
M 3 x 0.50	6.50	60.00	3.50	6.50	1.00	3910-3.00AVELL	69,36
M 4 x 0.70	7.50	65.00	3.80	7.50	1.00	3910-4.00AVELL	70,25
M 5 x 0.80	8.50	70.00	5.00	8.50	1.00	3910-5.00AVELL	74,25
M 6 x 1.00	9.50	70.00	5.00	9.50	1.20	3910-6.00AVELL	76,25
M 8 x 1.25	12.50	79.00	7.00	12.50	1.30	3910-8.00AVELL	77,92
M 10 x 1.50	14.50	89.00	8.00	14.50	1.50	3910-10.00AVELL	83,33
M 12 x 1.75	16.50	80.00	9.00	16.50	1.50	3910-12.00AVELL	88,25


THREADING TAP

	∅Ext.	L mm	Lr mm	∅ mm	∅ mm		€
M 3 x 0.50	M5 x 0.50	60.00	20.00	5.08	4.00	3910-3.00I	64,89
M 4 x 0.70	M6 x 0.70	70.00	22.00	6.09	4.90	3910-4.00I	64,89
M 5 x 0.80	M7 x 0.80	68.00	22.00	7.10	4.50	3910-5.00I	69,33
M 6 x 1.00	M8 x 1.00	72.00	22.00	8,12	4.90	3910-6.00I	72,44
M 8 x 1.25	M10 x 1.25	80.00	24.00	10,12	6.00	3910-8.00I	78,67
M 10 x 1.50	M12 x 1.50	88.00	29.00	12,14	7.10	3910-10.00I	97,78
M 12 x 1.75	M14 x 1.75	90.00	30.00	14,15	8.70	3910-12.00I	108,44


INSTALLATION TOOL

	L mm	Lr mm	∅ mm	∅ mm		€
M 3 x 0.50	54.00	15.00	3.50	3.80	3910-3.00HIP	58,25
M 4 x 0.70	62.00	18.00	5.00	3.80	3910-4.00HIP	59,69
M 5 x 0.80	71.00	30.00	5.80	5.00	3910-5.00HIP	60,00
M 6 x 1.00	72.00	22.00	7.60	5.00	3910-6.00HIP	65,25
M 8 x 1.25	79.00	25.00	10.00	6.00	3910-8.00HIP	68,00
M 10 x 1.50	90.00	30.00	12.00	7.00	3910-10.00HIP	72,00
M 12 x 1.75	95.00	30.00	15.00	9.00	3910-12.00HIP	84,00



RIVET NUTS



Features and Benefits

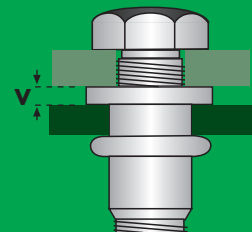
RIVETSERT Rivet nut provides strong, longlife and reliable threads into a variety of different materials including metal, plastic, fiberglass and carbon fiber. It is used in a wide array of applications in the automotive, heavy truck, and manufacturing industries as they move toward making their products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

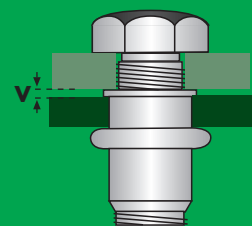
- Provides reliable threads in extra thin metal Sheets. (0,5 mm)
- Double function: Riveting two thin pieces by creating a strong thread.
- Three different heads available: FLAT, REDUCED AND SUNK HEAD.
- Easy and ergonomic installation by manual, automatic or pneumatic tools.

FLAT, REDUCED & SUNK HEADS.

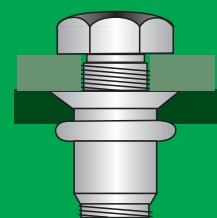
- **FLAT:** This is the most universal and useful Rivet Nut. The head provides enough surface extension for being tightened into any material unless fragile or easy breaking ones, guaranteeing high working torque. "V" space must be taken into consideration.
- **REDUCED:** These rivets have been designed 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

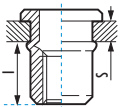
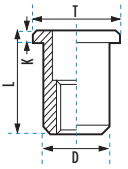
CYLINDRICAL THREADED INSERTS



M
M F

HCS
FLAT HEAD - SHORT TYPE

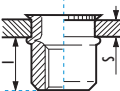
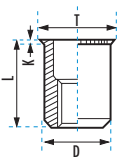
	S mm	D mm +0,07/-0,1	 mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	7.20	0.80	8.50	4.70	2.00	3850-M3	6,62	100
M 4x0.70	0.50 - 2.00	5.90	6.00	8.50	0.80	10.50	6.00	5.00	3850-M4	6,76	100
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	3850-M5	6,91	100
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3850-M6	8,34	100
M 8x1.25	1.00 - 3.50	10.90	11.00	15.00	1.50	18.50	11.50	26.00	3850-M8	13,98	50
M 10x1.50	1.00 - 3.50	11.90	12.00	16.00	1.50	19.00	11.00	50.00	3850-M10	22,86	50
M 10x1.50	1.00 - 2.50	12.90	13.00	16.30	1.60	17.00	11.50	50.00	3850-M10E1	23,05	50
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3850-M12	41,79	50
M 12x1.75	1.00 - 4.00	15.90	16.00	22.00	2.00	25.00	16.00	80.00	3850-M12E1	42,94	50





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


REDUCED COUNTERSINK HEAD - SHORT TYPE

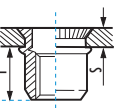
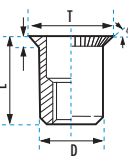
	S mm	D mm +0,07/-0,1	 mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 2.00	4.90	5.00	6.00	0.50	9.00	6.20	1.00	3851-M3	6,62	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	10.50	6.50	3.00	3851-M4	6,76	100
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.00	6.00	3851-M5	6,91	100
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	3851-M6	8,34	100
M 8x1.25	1.00 - 3.00	10.90	11.00	12.00	0.60	16.50	10.00	20.00	3851-M8	13,98	100
M 10x1.50	0.50 - 3.50	11.90	12.00	13.00	0.85	18.00	13.00	32.00	3851-M10	22,86	50
M 10x1.50	1.00 - 3.00	12.90	13.00	14.00	0.70	17.70	12.00	32.00	3851-M10E1	23,05	50
M 12x1.75	0.50 - 3.50	14.90	15.00	16.50	0.85	22.50	16.00	50.00	3851-M12	41,79	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	 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	6,62	100
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	6.50	4.00	3852-M4	6,76	100
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.50	8.00	3852-M5	6,91	100
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3852-M6	8,34	100
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	10.00	26.00	3852-M8	13,98	100
M 10x1.50	1.60 - 5.00	11.90	12.00	15.00	1.50	21.00	11.50	45.00	3852-M10	22,86	50
M 10x1.50	1.60 - 5.00	12.90	13.00	16.00	1.50	21.00	11.50	45.00	3852-M10E1	23,05	50

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

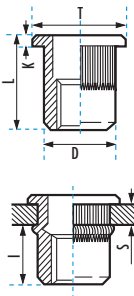






KNURLED CYLINDRICAL THREADED INSERTS



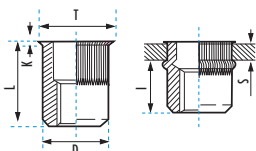
FLAT HEAD




	S mm	D mm +0,07/-0,1		T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm			€/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	6,62	100
M 3x0.50	1.50 - 3.00	4.90	5.00	7.00	0.80	11.50	8.00	2.00	3853-M3E1	7,14	100
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	10.50	6.00	5.00	3853-M4	6,76	100
M 4x0.70	2.00 - 3.50	5.90	6.00	9.00	0.80	12.00	6.00	5.00	3853-M4E1	7,89	100
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	3853-M5	6,91	100
M 5x0.80	2.50 - 5.00	6.90	7.00	10.00	1.00	16.50	8.50	8.50	3853-M5E1	8,06	100
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3853-M6	8,34	100
M 6x1.00	3.00 - 5.50	8.90	9.00	12.30	1.30	19.50	10.50	15.00	3853-M6E1	10,88	100
M 8x1.25	1.00 - 3.50	10.90	11.00	14.50	1.50	18.50	11.50	26.00	3853-M8	13,98	100
M 8x1.25	3.50 - 6.00	10.90	11.00	14.50	1.50	21.00	11.50	26.00	3853-M8E1	16,92	100
M 10x1.50	1.00 - 3.50	11.90	12.00	16.00	1.70	19.00	12.50	50.00	3853-M10	22,86	50
M 10x1.50	3.00 - 6.00	11.90	12.00	16.00	1.60	24.00	18.50	50.00	3853-M10E1	24,17	50
M 10x1.50	1.00 - 4.00	12.90	13.00	17.00	1.70	21.50	13.50	50.00	3853-M10E2	23,05	50
M 10x1.50	4.00 - 6.50	12.90	13.00	17.00	1.70	24.00	13.50	50.00	3853-M10E3	27,11	50
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3853-M12	41,79	50
M 12x1.75	4.00 - 6.50	14.90	15.00	18.00	1.70	25.00	14.00	80.00	3853-M12E1	53,54	50
M 12x1.75	1.00 - 3.50	15.90	16.00	22.00	2.00	25.00	15.00	80.00	3853-M12E2	54,98	50
M 12x1.75	3.50 - 6.00	15.90	16.00	22.00	2.00	28.00	16.50	80.00	3853-M12E3	56,99	50

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

REDUCED COUNTERSINK HEAD

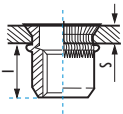
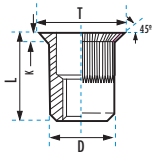






	S mm	D mm +0,07/-0,1		T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm			€/100 Unit	
M 3x0.50	0.50 - 2.00	4.90	5.00	6.00	0.50	9.00	6.50	1.00	3854-M3	6,62	100
M 3x0.50	2.00 - 3.50	4.90	5.00	6.00	0.50	11.50	5.50	1.00	3854-M3E1	7,14	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	11.20	7.00	3.00	3854-M4	6,76	100
M 4x0.70	2.00 - 4.00	5.90	6.00	7.00	0.50	13.00	7.00	3.00	3854-M4E1	7,89	100
M 5x0.80	0.50 - 2.50	6.90	7.00	8.00	0.50	11.50	7.00	6.00	3854-M5	6,91	100
M 5x0.80	2.00 - 4.00	6.90	7.00	8.00	0.50	13.00	7.00	6.00	3854-M5E1	8,06	100
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	3854-M6	8,34	100
M 6x1.00	2.50 - 4.50	8.90	9.00	10.00	0.60	16.00	8.50	11.00	3854-M6E1	10,88	100
M 8x1.25	1.00 - 3.00	10.90	11.00	12.00	0.60	16.50	10.00	20.00	3854-M8	13,98	100
M 8x1.25	3.00 - 5.00	10.90	11.00	12.00	0.60	18.50	10.00	20.00	3854-M8E1	16,92	100
M 10x1.50	1.00 - 3.50	11.90	12.00	13.00	0.70	19.50	13.00	32.00	3854-M10	22,86	50
M 10x1.50	3.50 - 6.00	11.90	12.00	13.00	0.70	22.00	17.00	32.00	3854-M10E1	24,17	50
M 10x1.50	1.00 - 3.50	12.90	13.00	14.00	0.70	19.50	12.50	32.00	3854-M10E2	25,32	50
M 10x1.50	3.50 - 6.00	12.90	13.00	14.00	0.70	22.00	12.50	32.00	3854-M10E3	27,11	50
M 12x1.75	0.50 - 3.50	14.90	15.00	16.50	0.85	22.50	16.00	50.00	3854-M12	41,79	50
M 12x1.75	1.00 - 4.00	15.90	16.00	17.60	0.75	24.20	16.00	50.00	3854-M12E1	42,94	50
M 12x1.75	4.00 - 6.00	15.90	16.00	17.15	0.60	27.00	16.00	50.00	3854-M12E2	56,99	50

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

KNURLED CYLINDRICAL THREADED INSERTS

M
M F

HCS
COUNTERSINK HEAD


	S mm	D mm +0,07/-0,1	 +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	8,46	100
M 3x0.50	2.50 - 4.00	4.90	5.00	6.60	1.50	10.50	4.50	1.00	3855-M3E1	10,08	100
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	6.50	4.00	3855-M4	8,66	100
M 4x0.70	3.00 - 5.00	5.90	6.00	9.00	1.50	14.00	6.00	4.00	3855-M4E1	11,04	100
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.50	8.00	3855-M5	8,69	100
M 5x0.80	3.50 - 6.00	6.90	7.00	10.00	1.50	16.50	8.50	8.00	3855-M5E1	12,15	100
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3855-M6	9,61	100
M 6x1.00	4.00 - 6.00	8.90	9.00	12.00	1.50	18.00	9.00	15.00	3855-M6E1	18,02	100
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	10.00	26.00	3855-M8	18,22	100
M 8x1.25	4.00 - 6.50	10.90	11.00	14.00	1.50	21.00	10.00	26.00	3855-M8E1	18,30	100
M 10x1.50	1.60 - 5.00	11.90	12.00	15.00	1.50	19.00	11.50	45.00	3855-M10	24,17	50
M 10x1.50	5.00 - 7.50	11.90	12.00	15.00	1.50	24.00	11.50	45.00	3855-M10E1	37,12	50
M 10x1.50	2.00 - 5.00	12.90	13.00	16.00	1.50	21.00	11.50	45.00	3855-M10E2	37,12	50
M 10x1.50	5.00 - 7.50	12.90	13.00	16.00	1.50	24.00	11.50	45.00	3855-M10E3	37,12	50
M 12x1.75	1.60 - 5.00	14.90	15.00	18.00	1.50	22.50	14.50	70.00	3855-M12	45,76	50
M 12x1.75	1.70 - 4.50	15.90	16.00	19.00	1.90	24.00	17.50	70.00	3855-M12E1	53,54	50
M 12x1.75	4.00 - 7.50	15.90	16.00	19.00	1.90	29.00	17.50	70.00	3855-M12E2	97,13	50

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

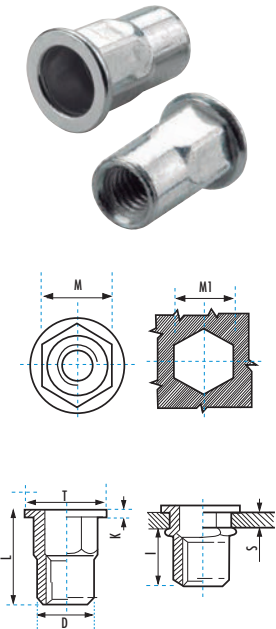







SEMI-HEXAGONAL THREADED INSERTS



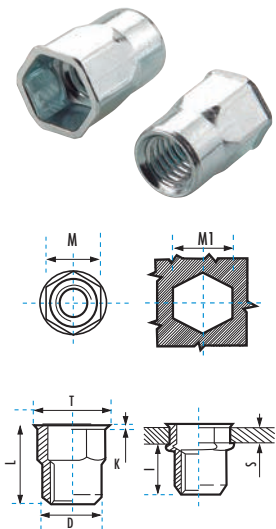
FLAT HEAD






	S mm	M mm	M1 mm	T mm	K mm	L mm	I mm			€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	7.20	0.80	8.50	5.50	2.00	3856-M3	9,21	100
M 4x0.70	0.50 - 2.00	5.90	6.00	9.00	0.80	11.00	6.50	5.00	3856-M4	9,32	100
M 4x0.70	2.50 - 4.00	5.90	6.00	9.00	0.80	13.50	6.50	5.00	3856-M4E1	16,70	100
M 5x0.80	0.50 - 3.00	6.90	7.00	10.00	1.00	13.00	8.00	8.50	3856-M5	10,08	100
M 5x0.80	3.00 - 5.50	6.90	7.00	10.00	0.80	16.00	11.00	8.50	3856-M5E1	16,70	100
M 6x1.00	0.50 - 4.00	8.90	9.00	12.00	1.50	16.50	8.50	15.00	3856-M6	11,39	100
M 6x1.00	3.00 - 5.50	8.90	9.00	13.00	1.50	18.50	10.50	15.00	3856-M6E1	28,21	100
M 8x1.25	1.00 - 4.00	10.90	11.00	15.90	1.50	18.20	10.50	20.00	3856-M8	16,17	100
M 8x1.25	4.00 - 6.00	10.90	11.00	15.00	1.50	20.50	12.50	26.00	3856-M8E1	30,28	100
M 10x1.50	1.00 - 3.50	11.90	12.00	17.00	1.60	19.00	12.00	50.00	3856-M10	25,84	50
M 10x1.50	0.50 - 3.50	12.90	13.00	17.00	1.80	21.00	12.00	50.00	3856-M10E1	26,43	50
M 12x1.75	2.00 - 5.00	15.90	16.00	23.00	2.20	27.50	16.50	80.00	3856-M12	56,99	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			€/100 Unit	
M 3x0.50	0.30 - 1.50	4.90	5.00	6.00	0.50	9.00	5.50	1.00	3857-M3	13,93	100
M 3x0.50	1.50 - 2.50	4.90	5.00	6.00	0.50	10.00	5.50	1.00	3857-M3E1	16,00	100
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	12.00	8.30	3.00	3857-M4	8,06	100
M 5x0.80	0.50 - 2.50	6.90	7.00	8.00	0.50	13.00	8.70	6.00	3857-M5	9,04	100
M 6x1.00	1.00 - 3.50	8.90	9.00	10.00	0.60	16.00	10.50	11.00	3857-M6	10,19	100
M 8x1.25	1.00 - 3.50	10.90	11.00	12.00	0.65	17.50	11.30	20.00	3857-M8	13,81	100
M 10x1.50	1.00 - 4.00	11.90	12.00	13.25	0.70	18.30	12.80	32.00	3857-M10	22,16	50
M 10x1.50	1.00 - 4.00	12.90	13.00	14.50	0.75	21.00	12.80	32.00	3857-M10E1	22,46	50
M 12x1.75	1.50 - 4.00	15.90	16.00	17.50	0.80	24.00	16.00	50.00	3857-M12	56,46	50

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

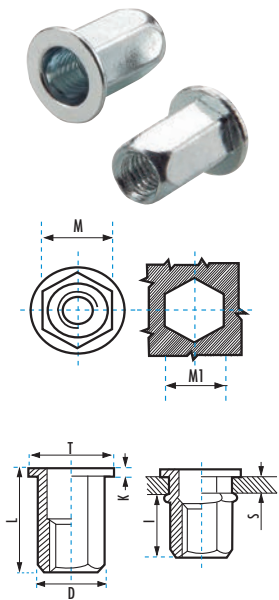
REDUCED COUNTERSINK HEAD - SPECIAL HOLE






	S mm	M mm	M1 mm	T mm	K mm	L mm	I mm			€/100 Unit	
M 4x0.70	0.50 - 2.00	6.30	6.40	7.40	0.50	10.50	6.50	3.00	3858-M4	9,21	100
M 5x0.80	0.50 - 2.50	7.10	7.20	8.20	0.50	12.00	7.50	6.00	3858-M5	10,94	100
M 6x1.00	1.00 - 3.00	9.50	9.60	10.60	0.60	15.00	9.20	11.00	3858-M6	11,80	100
M 8x1.25	1.00 - 3.50	10.50	10.60	11.60	0.60	16.50	10.50	20.00	3858-M8	16,28	100

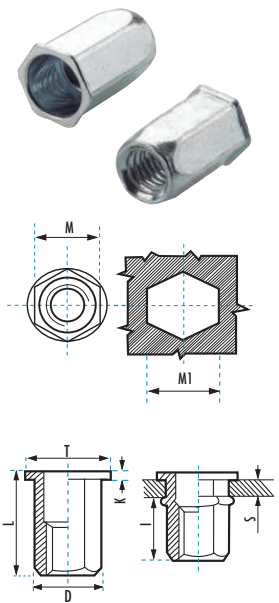
* The prices of the list are related to packs of 100 units



HEXAGONAL THREADED INSERTS

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	3859-M4	9,21	100
M 4x0.70	2.00 - 5.00	5.90	6.00	9.00	0.80	13.50	6.50	5.00	3859-M4E1	14,96	100
M 5x0.80	0.50 - 3.00	6.90	7.00	10.00	1.00	14.00	8.00	8.50	3859-M5	10,08	100
M 5x0.80	3.00 - 6.00	6.90	7.00	10.00	1.00	16.50	8.00	8.50	3859-M5E1	15,83	100
M 6x1.00	0.50 - 3.00	8.90	9.00	13.00	1.20	16.00	9.50	15.00	3859-M6	11,39	100
M 6x1.00	3.00 - 5.00	8.90	9.00	13.00	1.50	19.50	8.50	15.00	3859-M6E1	16,70	100
M 8x1.25	1.00 - 3.50	10.90	11.00	16.00	1.50	17.00	9.50	26.00	3859-M8	16,17	100
M 8x1.25	3.50 - 6.00	10.90	11.00	15.00	1.50	21.50	10.50	26.00	3859-M8E1	21,87	100
M 10x1.50	1.00 - 3.50	11.90	12.00	18.00	1.70	21.00	13.50	50.00	3859-M10	25,84	50
M 10x1.50	1.00 - 3.50	12.90	13.00	18.00	1.70	21.00	13.50	50.00	3859-M10E1	26,43	50
M 10x1.50	3.50 - 6.50	12.90	13.00	17.00	1.50	24.00	14.50	50.00	3859-M10E2	40,64	50
M 12x1.75	1.00 - 3.50	14.90	15.00	19.00	2.00	24.30	16.00	80.00	3859-M12	66,20	50
M 12x1.75	2.00 - 5.00	15.90	16.00	23.00	2.00	27.00	16.50	80.00	3859-M12E1	56,99	50

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

REDUCED COUNTERSINK HEAD


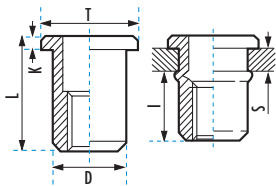
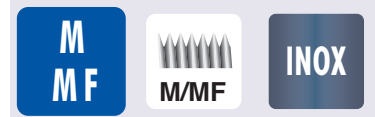
	S mm	M mm	M1 mm	T mm	K mm	L mm	I mm	 Nm		€/100 Unit	
M 3x0.50	0.50 - 1.50	4.90	5.00	6.00	0.45	8.50	5.00	1.00	3860-M3	13,93	100
M 4x0.70	0.50 - 2.50	5.90	6.00	7.00	0.50	11.00	6.70	3.00	3860-M4	8,06	100
M 4x0.70	2.50 - 5.00	5.90	6.00	7.00	0.50	13.50	6.70	3.00	3860-M4E1	12,10	100
M 5x0.80	0.50 - 3.00	6.90	7.00	8.00	0.50	14.50	9.00	6.00	3860-M5	9,04	100
M 5x0.80	3.00 - 5.00	6.90	7.00	8.00	0.50	16.00	9.00	6.00	3860-M5E1	12,95	100
M 6x1.00	1.00 - 3.50	8.90	9.00	10.00	0.60	16.00	10.00	11.00	3860-M6	10,19	100
M 6x1.00	3.50 - 6.00	8.90	9.00	10.00	0.60	18.00	10.00	11.00	3860-M6E1	13,81	100
M 8x1.25	1.00 - 4.00	10.90	11.00	12.00	0.65	18.00	11.50	20.00	3860-M8	13,81	100
M 8x1.25	4.00 - 6.00	10.90	11.00	12.00	0.65	20.00	11.50	20.00	3860-M8E1	20,25	100
M 10x1.50	0.50 - 3.50	11.90	12.00	14.50	1.00	19.00	12.50	32.00	3860-M10	22,16	50
M 10x1.50	1.00 - 3.50	12.90	13.00	14.50	0.75	19.00	12.50	32.00	3860-M10E1	22,46	50
M 10x1.50	3.50 - 6.00	12.90	13.00	14.50	0.75	23.50	14.50	32.00	3860-M10E2	35,69	50
M 12x1.75	1.00 - 4.00	14.90	15.00	17.50	1.10	22.50	-	50.00	3860-M12	71,96	50
M 12x1.75	1.00 - 5.00	15.90	16.00	17.80	1.10	25.00	-	50.00	3860-M12E1	71,37	50
M 12x1.75	5.00 - 7.50	15.90	16.00	17.80	1.10	28.00	-	50.00	3860-M12E2	71,37	50

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



rivetsert
by CELESA

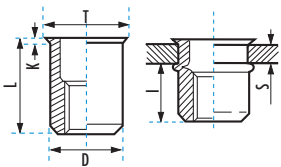
CYLINDRICAL THREADED INSERTS



FLAT HEAD

	S mm	D mm +0,07/-0,1	 mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.30 - 1.80	4.90	5.00	8.00	0.75	9.00	5.50	2.00	3950-M3	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	8.50	0.80	10.50	6.00	5.00	3950-M4	0,27	25
M 5x0.80	0.50 - 2.50	6.90	7.00	10.00	1.00	13.00	7.50	8.50	3950-M5	0,31	25
M 6x1.00	0.50 - 3.00	8.90	9.00	12.30	1.30	15.50	9.20	15.00	3950-M6	0,51	25
M 8x1.25	1.00 - 3.50	10.90	11.00	15.00	1.50	18.50	11.50	26.00	3950-M8	0,77	25
M 10x1.50	0.80 - 3.50	11.90	12.00	16.00	1.70	19.00	10.50	50.00	3950-M10	-	1
M 10x1.50	1.00 - 4.00	12.90	13.00	17.00	1.60	21.00	12.50	50.00	3950-M10E1	1,19	1
M 12x1.75	1.00 - 4.00	14.90	15.00	18.00	1.70	22.00	13.50	80.00	3950-M12	-	1
M 12x1.75	1.00 - 4.00	15.90	16.00	23.00	2.00	26.00	16.50	80.00	3950-M12E1	-	1

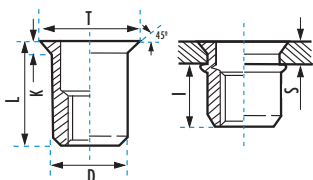
- Check price and availability







REDUCED COUNTERSINK HEAD

	S mm	D mm +0,07/-0,1	 mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	0.30 - 1.50	4.90	5.00	5.60	0.35	8.50	5.50	1.00	3951-M3	-	25
M 4x0.70	0.50 - 2.00	5.90	6.00	7.00	0.50	10.50	6.50	3.00	3951-M4	0,25	25
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.00	6.00	3951-M5	0,29	25
M 6x1.00	0.50 - 2.50	8.90	9.00	10.00	0.60	14.00	8.50	11.00	3951-M6	0,48	25
M 8x1.25	0.50 - 3.00	10.90	11.00	12.00	0.50	16.50	10.50	20.00	3951-M8	0,69	25
M 10x1.50	0.80 - 3.00	11.90	12.00	13.50	0.80	18.00	10.20	32.00	3951-M10	-	1
M 10x1.50	1.00 - 3.50	12.90	13.00	14.10	0.60	19.50	11.50	32.00	3951-M10E1	1,16	1
M 12x1.75	0.5 - 3.5	14.90	15.00	16.50	0.85	22.50	16.00	49.00	3951-M12	-	1

- Check price and availability








COUNTERSINK HEAD


	S mm	D mm +0,07/-0,1	 mm +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€/100 Unit	
M 3x0.50	1.70 - 3.00	4.90	5.00	8.00	1.50	11.50	5.50	1.00	3952-M3	-	25
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	7.50	4.00	3952-M4	0,33	25
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.80	8.00	3952-M5	0,38	25
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3952-M6	0,53	25
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	12.00	26.00	3952-M8	0,80	25
M 10x1.50	1.00 - 4.00	11.90	12.00	15.00	1.50	18.00	10.50	45.00	3952-M10	-	1
M 10x1.50	2.00 - 5.00	12.90	13.00	16.00	1.50	21.00	13.00	45.00	3952-M10E1	1,19	1





- Check price and availability


INOX





KNURLED CYLINDRICAL THREADED INSERTS
FLAT HEAD


	S mm	D mm +0,07/-0,1	 +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€	
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	0,27	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	0,31	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	0,51	25
M 6x1.00	3.50 - 6.00	8.90	9.00	13.00	1.50	19.00	9.00	15.00	3953-M6E1	0,71	25
M 8x1.25	1.00 - 3.50	10.90	11.00	14.50	1.50	18.50	11.50	26.00	3953-M8	0,77	25
M 8x1.25	3.00 - 6.00	10.90	11.00	14.50	1.50	21.00	11.50	26.00	3953-M8E1	0,97	25
M 10x1.50	0.80 - 3.50	11.90	12.00	16.00	1.70	19.00	10.50	50.00	3953-M10	1,41	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	1,19	1
M 10x1.50	3.00 - 6.00	12.90	13.00	19.00	2.00	26.00	14.50	50.00	3953-M10E3	1,69	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	2,01	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	 +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€	
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	0,25	25
M 4x0.70	2.50 - 4.00	5.90	6.00	7.00	0.50	12.50	6.50	3.00	3954-M4E1	0,49	25
M 5x0.80	0.50 - 2.00	6.90	7.00	8.00	0.50	11.50	7.20	6.00	3954-M5	0,29	25
M 5x0.80	2.50 - 4.50	6.90	7.00	8.00	0.50	13.00	6.80	6.00	3954-M5E1	0,59	25
M 6x1.00	0.50 - 3.00	8.90	9.00	10.00	0.60	14.00	9.00	11.00	3954-M6	0,48	25
M 6x1.00	3.00 - 6.00	8.90	9.00	10.00	0.50	17.50	8.60	11.00	3954-M6E1	0,73	25
M 8x1.25	1.00 - 3.50	10.90	11.00	12.00	0.50	16.50	10.50	20.00	3954-M8	0,69	25
M 8x1.25	3.50 - 6.00	10.90	11.00	12.00	0.65	19.50	10.00	20.00	3954-M8E1	1,03	25
M 10x1.50	0.80 - 3.00	11.90	12.00	13.50	0.80	18.00	11.20	32.00	3954-M10	1,41	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	1,41	1
M 10x1.50	3.00 - 6.00	12.90	13.00	14.00	0.50	23.00	13.30	32.00	3954-M10	-	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	2,01	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

COUNTERSINK HEAD


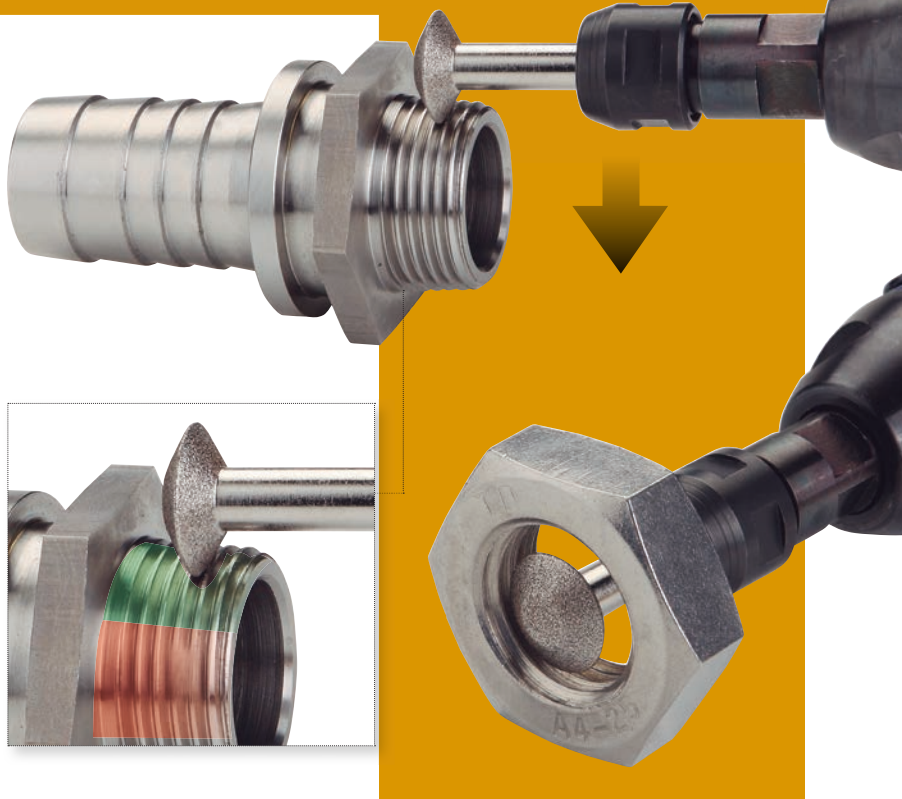
	S mm	D mm +0,07/-0,1	 +0,1/-0	T mm +/-0,3	K mm +/-0,15	L mm +/-0,3	I mm	 Nm		€	
M 3x0.50	1.70 - 3.00	4.90	5.00	8.00	1.50	11.50	11.50	1.00	3955-M3	0,33	25
M 3x0.50	3.00 - 4.00	4.90	5.00	8.00	1.50	12.50	11.50	1.00	3955-M3E1	-	25
M 4x0.70	1.50 - 3.00	5.90	6.00	9.00	1.50	12.00	7.50	4.00	3955-M4	0,35	25
M 4x0.70	3.50 - 5.00	5.90	6.00	9.00	1.50	13.00	7.50	4.00	3955-M4E1	0,47	25
M 5x0.80	1.50 - 3.50	6.90	7.00	10.00	1.50	13.00	7.00	8.00	3955-M5	0,38	25
M 5x0.80	4.00 - 6.00	6.90	7.00	10.00	1.50	15.00	7.00	8.00	3955-M5E1	0,58	25
M 6x1.00	1.50 - 4.00	8.90	9.00	12.00	1.50	15.50	9.00	15.00	3955-M6	0,53	25
M 6x1.00	4.50 - 6.50	8.90	9.00	12.00	1.50	19.00	9.00	15.00	3955-M6E1	0,90	25
M 8x1.25	2.00 - 4.50	10.90	11.00	14.00	1.50	18.50	12.00	26.00	3955-M8	0,80	25
M 8x1.25	3.50 - 6.50	10.90	11.00	13.70	1.50	21.00	12.00	26.00	3955-M8E1	1,10	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	1,19	1
M 10x1.50	3.50 - 6.50	12.90	13.00	15.70	1.60	25.00	14.50	45.00	3955-M10E3	1,92	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	2,01	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

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.

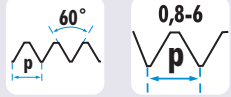
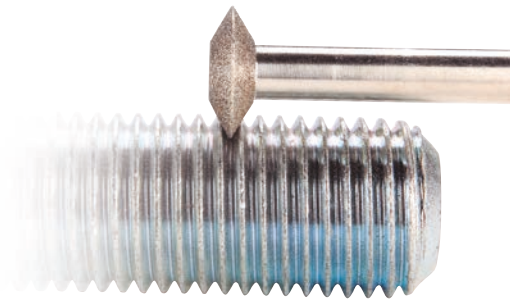


THREAD RESTORING CBN ROTARY BURRS

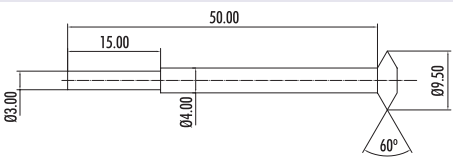


ROTA
THREAD
by CELESA

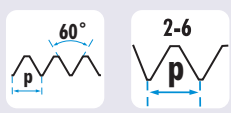
Pink



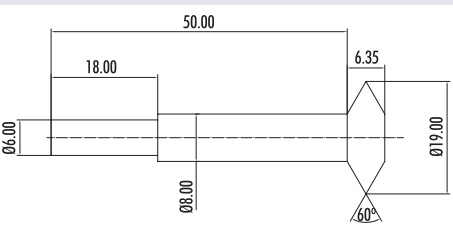
- This Tool restores both internal and external threads precisely.
- **Limitation:** Minimal pitch 0.80mm or 28tpi. In case of internal threads, minimal size to be restored is M12 or 1/2".



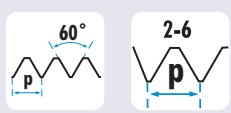
Ref. LRR1
53,20 €



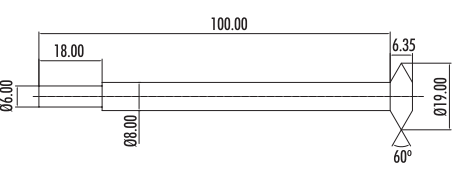
- This Tool restores both internal and external threads precisely. Specially designed for large pitches
- **Limitation:** Minimal pitch 2mm or 12tpi. In case of internal threads, minimal size to be restored is M22 or 7/8.



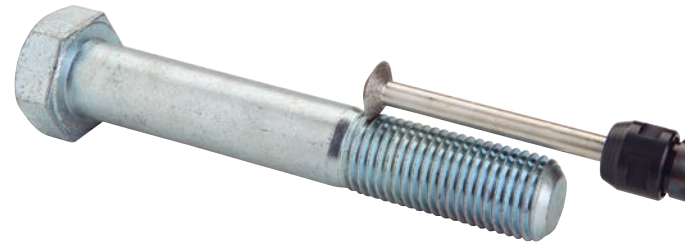
Ref. LRR2
67,39 €



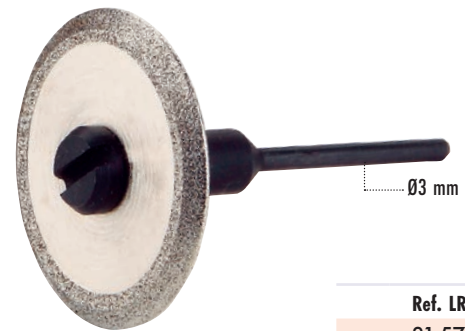
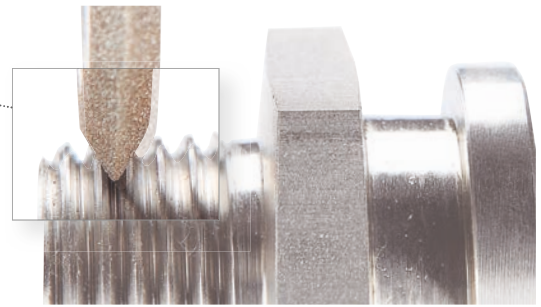
- This Tool restores both internal and external threads precisely. Specially designed for large pitches. LONG REACH TOOL.
- **Limitation:** Minimal pitch 2mm or 12tpi. In case of internal threads, minimal size to be restored is M22 or 7/8.



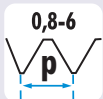
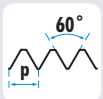
Ref. LRR3
76,26 €



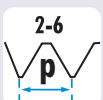
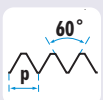
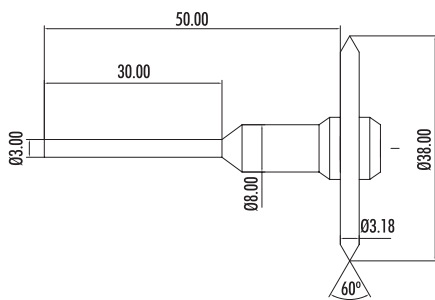
ROTA THREAD[®] by *celesa*



Ref. LRR4
81,57 €



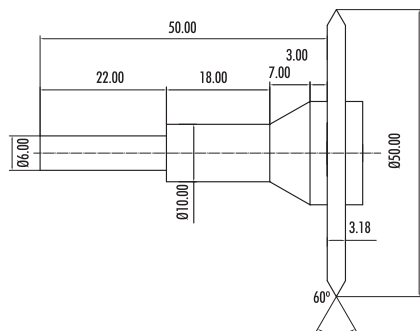
- This Tool restores both internal and external threads precisely. The 38mm diameter offers clearance when working on the threads that are damaged closer to the head of the fasteners.
- **Limitation:** Minimal pitch 0.80mm or 28tpi



- 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
97,53 €



EXTERNAL COUNTERSINKS FOR RESTORING STARTING THREADS



External Countersink

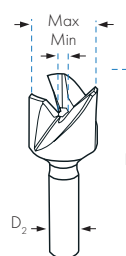
These external countersinks quickly repair starting damaged thread of screws and threaded rods. Those starting threads are usually hit or cut off with a die grinder so burr generated in those threads do not let the nut start. These countersinks shear off those threads and chamfer the thread 60° in order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



HSS



MIN.-MAX.	D1 mm	D2 mm	L1 mm		AV €
M3-M8	3,0	8,0	55	AVX1-60	61,55
M6-M14	6,0	10,0	60	AVX2-60	118,12
M10-M27	10,0	13,0	75	AVX3-60	177,02

MIN.-MAX.	Hexagon	L1 mm	AVEXT	€
M8-M18	1/4"	75	AVEXT	37,48

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

38,18 €

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

57,33 €

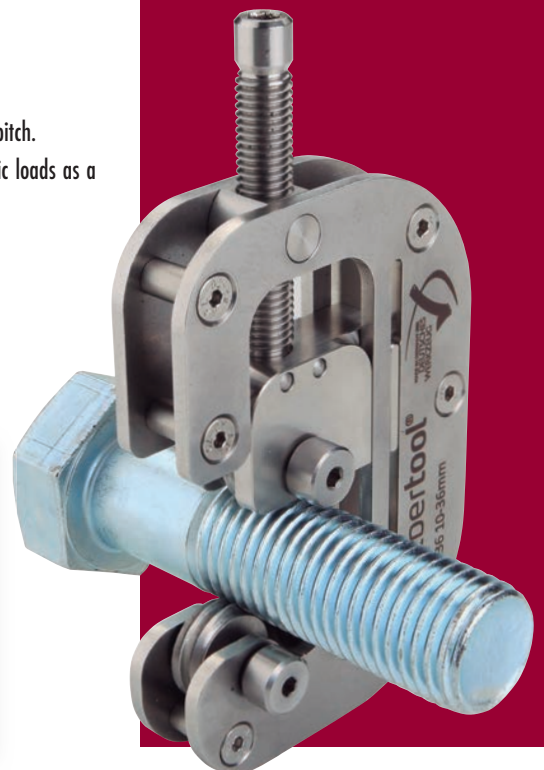
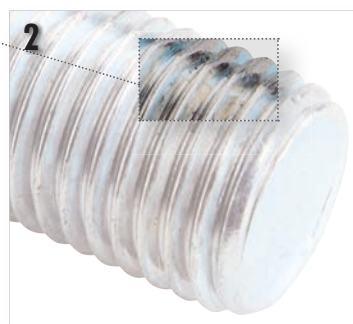
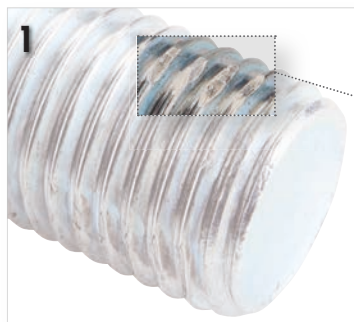
EXTERNAL THREAD REPAIR ROLLING TOOL



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



R16			
M / MF			€ / Unit
M5 - M16	0,50 - 2,00	R16	375,41

Rollers not included.



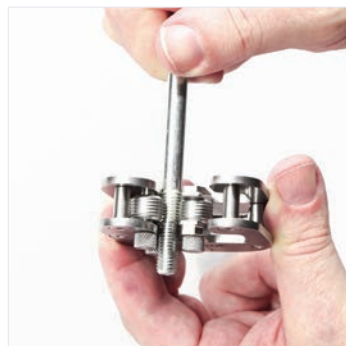
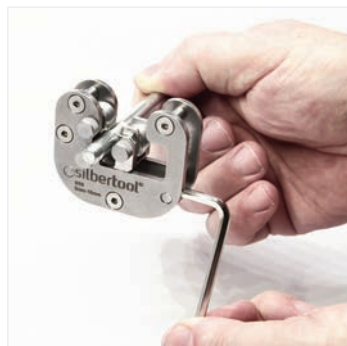
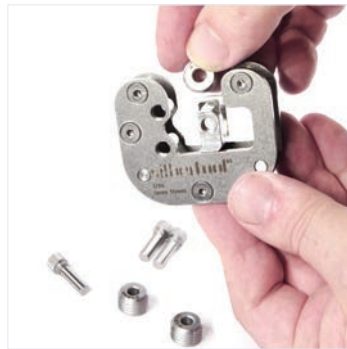
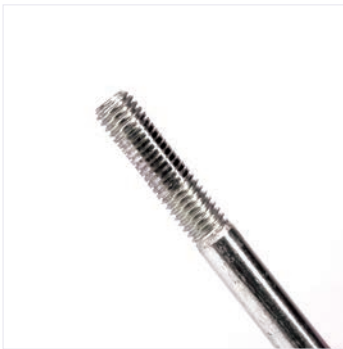
Ref. R160175



Ref. R160125

SET OF ROLLERS

M / MF			€/Unit		€/Unit
M5 - M16	0.50	R160050	80,24	R1610050	107,07
M5 - M16	0.75	R160075	80,24	R1610075	107,07
M5 - M16	0.80	R160080	80,24	R1610080	107,07
M5 - M16	1.00	R160100	80,24	R1610100	107,07
M5 - M16	1.25	R160125	80,24	R1610125	107,07
M5 - M16	1.50	R160150	80,24	R1610150	107,07
M5 - M16	1.75	R160175	80,24	R1610175	107,07
M5 - M16	2.00	R160200	80,24	R1610200	107,07



EXTERNAL THREAD REPAIR ROLLING TOOL



Ref. R360250



SET OF ROLLERS

M / MF			€/Unit		€/Unit
M10 - M36	0.50	R360050	122,26	R36I0050	146,76
M10 - M36	0.75	R360075	122,26	R36I0075	146,76
M10 - M36	1.00	R360100	122,26	R36I0100	146,76
M10 - M36	1.25	R360125	122,26	R36I0125	146,76
M10 - M36	1.50	R360150	122,26	R36I0150	146,76
M10 - M36	1.75	R360175	122,26	R36I0175	146,76
M10 - M36	2.00	R360200	122,26	R36I0200	146,76
M10 - M36	2.50	R360250	122,26	R36I0250	146,76
M10 - M36	3.00	R360300	122,26	R36I0300	146,76
M10 - M36	3.50	R360350	122,26	R36I0350	146,76
M10 - M36	4.00	R360400	122,26	R36I0400	146,76



Ref. R36

R36			
M / MF			€/Unit
M10 - M36	0.50 - 4.00	R36	857,26

Rollers not included.



Ref. R600050



SET OF ROLLERS

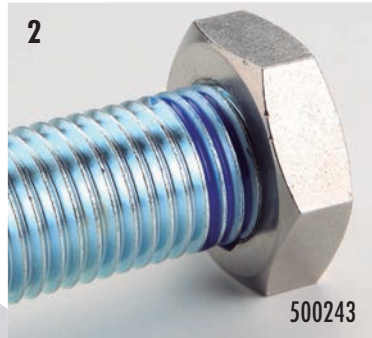
M / MF			€/Unit		€/Unit
M10 - M60 - M110	0.50	R600050	220,26	R60I0050	244,76
M10 - M60 - M110	0.80	R600080	220,26	R60I0080	244,76
M10 - M60 - M110	1.00	R600100	220,26	R60I0100	244,76
M10 - M60 - M110	1.25	R600125	220,26	R60I0125	244,76
M10 - M60 - M110	1.50	R600150	220,26	R60I0150	244,76
M10 - M60 - M110	1.75	R600175	220,26	R60I0175	244,76
M10 - M60 - M110	2.00	R600200	220,26	R60I0200	244,76
M10 - M60 - M110	2.50	R600250	220,26	R60I0250	244,76
M10 - M60 - M110	3.00	R600300	220,26	R60I0300	244,76



Ref. R60

R60/110			
M / MF			€/Unit
M10 - M60	0.50 - 3.00	R60	1.102,26
M50 - M110	0.50 - 3.00	R110	1.714,76

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)	Passive Materials (Slower curing)
<ul style="list-style-type: none"> • Bronze • Iron • Cooper • Brass • Steel 	<ul style="list-style-type: none"> • High-alloyed steel • Aluminium, nickel, zinc, gold • Oxid layers



	Colour	Application range	Viscosity at +25°C	Max. gap filling	Breakaway strength	Prevailing strength	Shear Strength (N/mm ²)	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 ² (435-725 psi)	10-20 min.	3-6 h.	-60 - +150°C (-76 - +302°F)	40,94
500243 **		M1-M36	2.000 - 7.000 mPa-s	0,25 mm	17-22 Nm	8-12 Nm	9-13 N/mm ² (1.305-1.885 psi)	10-20 min.	1-3 h.	-60 - +150°C (-76 - +302°F)	40,94
500270 ***		M1-M20	500 mPa-s	0,15 mm	28-35 Nm	50-65 Nm	15-20 N/mm ² (2.175-2.900 psi)	10-20 min.	3-6 h.	-60 - +150°C (-76 - +302°F)	40,94

* 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 POWELOCK adhesives and sealants. It cleans and evaporates leaving no residue.



500001
15,25 €



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 ²)	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 ² (1.160-1.740 psi)	10-20 min.	2-4 h.	-60 - +150°C (-76 - +302°F)	40,94
500572 ** 		G 1/8"-3"	17.000-50.000 mPa·s	0,40 mm	7-10 Nm	2-4 Nm	4-6 N/mm ² (580-870 psi)	20-40 min.	5-10 h.	-60 - +150°C (-76 - +302°F)	24,61

** PTFE

* Material safety data sheet available.



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



Insert Diameter

Pitch (mm & TPI)

Installed Length

Units of packing

No of inserts

Drill Diameter

Tap

Instal Toll Part No

Tang Break Part No