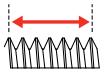
powercoil®

wire thread insert system

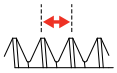
WIRE THREAD INSERTS
BUYER'S GUIDE | 2018

powercoil®

Insert Diameter
Diamètre du filet rapporté
Diámetro del inserto



Pitch (TPI)
Pas (TPI)
Paso por pulgada



Pitch (mm)
Pas (mm)
Paso en milímetros

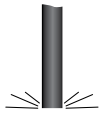
Installed Length
Longueur implantée
Longitud instalada

# of inserts
Nb de filets rapportés
Número de insertos

Drill Size
Dimension du foret
Diámetro de la broca

Tap Part #
Code pièce du taraud
Macho Nº

Install Tool Part #
Code pièce de l'outil d'installation
Herramienta de instalación Nº



Tang Break Part #
Code pièce du tenon
Rompedor Nº

FREE
Free Running Insert
Filet rapporté standard
Inserto standard

LOCK
Screw Locking Insert
Filet rapporté à frein de vis
Inserto autofrenante

MC
Metric Coarse
Métrique à pas normaux
Métrica gruesa

MF
Metric Fine
Métrique à pas fins
Métrica fina

UNC
Unified National Coarse
Pas normal américain
Rosca Americana gruesa

UNF
Unified National Fine
Pas fin américain
Rosca Americana fina

BSW
British Standard Whitworth
Pas normal britannique
Rosca inglesa gruesa

BSF
British Standard Fine
Pas fin britannique
Rosca inglesa fina

BSP
British Standard Pipe
filet de tube britannique
Rosca inglesa GAS

NPT
National Pipe Taper
tube conique américain
Rosca cónica Americana

8-UN
8-UN Constant Pitch
Pas constant 8-UN
Rosca Americana paso 8 hilos

BA
British Association
Association britannique
Rosca inglesa BA

BSC
British Standard Brass
Standard Anglais BSCY
Rosca inglesa BSC

1.0D
Installed Insert Length = Diameter x 1.0
Longueur du filet rapporté installé = Diamètre x 1.0
Longitud del inserto instalado = Diámetro x 1

1.5D
Installed Insert Length = Diameter x 1.5
Longueur du filet rapporté installé = Diamètre x 1.5
Longitud del inserto instalado = Diámetro x 1,5

2.0D
Installed Insert Length = Diameter x 2.0
Longueur du filet rapporté installé = Diamètre x 2.0
Longitud del inserto instalado = Diámetro x 2

2.5D
Installed Insert Length = Diameter x 2.5
Longueur du filet rapporté installé = Diamètre x 2.5
Longitud del inserto instalado = Diámetro x 2,5

3.0D
Installed Insert Length = Diameter x 3.0
Longueur du filet rapporté installé = Diamètre x 3.0
Longitud del inserto instalado = Diámetro x 3

HSSE
HSS-EV Spiral Flute STI Tap
Taraud STI à rainures hélicoïdales HSS-EV
Macho STI Helicoidal

HSSE
HSS-EV Spiral Point (Gun Nose) STI Tap
Taraud STI à entrée hélicoïdale (nez mitrailleuse) HSS-EV
Macho STI con entrada corregida F/B

HSS
MC, MF, UNC, UNF, 8 Pitch, NPT – HSS Bottoming STI Tap
Taraud STI finisseur MC, MF, UNC, UNF, 8 pas, NPT – HSS
Macho STI de acabado, Nº 3 – MC, MF, UNC, UNF, 8 UN, NPT

HSS
MC, MF, UNC, UNF, 8 Pitch, NPT – HSS Intermediate STI Tap
Taraud STI intermédiaire MC, MF, UNC, UNF, 8 pas, NPT – HSS
Macho STI intermedio, Nº 2 – MC, MF, UNC, UNF, 8 UN, NPT

HSS
MC, MF, UNC, UNF, 8 Pitch, NPT – HSS Taper STI Tap
Taraud STI ébaucheur MC, MF, UNC, UNF, 8 pas, NPT – HSS
Macho STI cónico, Nº 1 – MC, MF, UNC, UNF, 8 UN, NPT

HSS
Spark Plug – HSS Pilot Nose STI Tap
Taraud STI à embout pilote bougie d'allumage - HSS
Macho STI con doble entrada para bujías

PowerCoil Wire Thread Inserts strengthen tapped threads in light weight parent materials such as aluminum. They are helically wound inserts made from high quality chromium nickel stainless steel with a diamond shaped cross section.

PowerCoil inserts are used in OEM applications in a wide range of industry sectors including aerospace, automotive, military and electronics. They are inexpensive when compared to other inserts and simple to install, yet are extremely tough, wear resistant and corrosion resistant.

Most importantly, PowerCoil inserts allow the stress loading from the bolt or similar threaded part to be more evenly distributed over the threads in the parent material.

In addition to PowerCoil standard 'free running' inserts, 'screw locking' inserts are also available. These inserts have polygonal grip coils within the length of the insert which exert radial pressure on the male thread, thereby gripping the bolt and preventing it from loosening under vibration or impact.

In addition to stainless steel, PowerCoil inserts can be made from Phosphor Bronze, Inconel or Nimonic 90 depending on the application. They can also be supplied with different surface finishes and coatings including cadmium, siver and zinc plating and dry film lubricant.

The PowerCoil Wire Thread Insert System® consists of high quality wire thread inserts, quality high-speed taps, drills and easy-to-use installation tools for the repair of damaged internal threads or creation of strong new internal threads in original equipment. Bulk insert stock available to MS/NASM and MA standards.

powercoil

Part No. 3520 - 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	BSC
30	BSF	70	8-UN
00	Multifunctional		

X.X D	Insert length as a factor of nominal screw
IR	PowerCoil strip-feed reel
SL	PowerCoil screw locking
K	PowerCoil thread repair kit
P	PowerCoil Hang sell insert packet
WK	PowerCoil workshop kit
HIT	Hand installation tool
HIP	Prewinder installation tool
MIT	Machine installation tool
HIM	Hex drive installation mandrel
MIP	Pneumatic installation tool
TB	Tang break tool
STB	Spring loaded tang break tool
PTB	Pneumatic tang break tool
RT	Removal/extraction tool
LH	Left Hand
GC	Gauge STI 4H5H tolerance
GM	Gauge STI 6H tolerance

PB	Phosphor bronze
IC	Inconel X-750
NT	Nitronic 60
Y	316 Stainless Steel
CD	Cadmium plate
AG	Silver plate
W	Dry fim lubricant
XY	Xylam Formula 5230/1131 Gray Black
I	Tap Intermediate STI
T	Tap Taper STI
B	Tap Bottoming STI
SF	Tap Spiral Flute STI
SP	Tap Spiral Point STI
FT	Tap Fluteless STI
TW	Loksert Thin Wall
HD	Loksert Heavy Duty
TT	Loksert Thin Wall install tool
HT	Loksert Heavy Duty install tool
T	Loksert Universal install tool

No. De Parte 3520-12.00 X 1,5D

35	PowerCoil en acero inoxidable
36	Loksert en acero al carbón
37	Loksert en acero inoxidable

DIAMETER

XX . XX	Métrico
XX / XX	Pulgadas

20	Métrico grueso	32	UNC
21	Métrico fino	34	UNF
22	Bujía	44	BA
23	Métrico fino	46	BSP
24	Métrico fino	52	NPT
28	BSW	60	BSC
30	BSF	70	8-UN
00	Multifuncional		

X.X D	Longitud del inserto teniendo en cuenta la longitud del tornillo
IR	Power Coil, Carrete de alimentación de insertos
SL	Power Coil, insertos autoblocantes (de seguridad) (autofrenantes)
K	Power Coil, Juego de reparación de roscas
P	Power Coil, paquetes de insertos para colgar
WK	Power Coil, Juegos para taller
HIT	Herramienta de instalación manual
HIP	Herramienta de instalación de roscas
MIT	Herramienta para insertar a máquina
HIM	Herramienta para insertar con mango hexagonal
MIP	Herramienta de instalación neumática
TB	Herramienta rompe arrastre
STB	Herramienta rompe arrastre automático
PTB	Herramienta rompe arrastre neumática
RT	Herramienta extractora de insertos
LH	Giro izquierda
GC	Roscas en tolerancia STI 4H5H
GM	Roscas en tolerancia STI 6H

PB	Bronce con fósforo
IC	Iconel X-750
NT	Nitronic 60
Y	Acero Inoxidable 316
CD	Terminado en cadmio
AG	Terminado de plata
FL	lubricado en seco
XY	Terminado de Xylan Formula 5230/1131 negro gris
I	Macho 2º o intermedio STI
T	Macho 1º o cónico STI
B	Macho 3º o de acabado STI
SF	Macho helicoidal STI
SP	Macho con entrada corregida STI
FT	Macho laminación STI
TW	Loksert de pared delgada
HD	Loksert para trabajos pesados (duros)
TT	Herramienta instalación de Loksert de pared delgada
HT	Herramienta instalación de Loksert para trabajos pesados
T	Herramienta de instalación universal para Loksert

Pièce Nr. 3520 - 12.00 X 1.5D

35	PowerCoil - Acier inoxydable
36	Loksert - Acier au carbone
37	Loksert - Acier inoxydable

DIAMETER

XX . XX	Métrique
XX / XX	Impérial

20	Métrique à pas normaux	32	UNC
21	Métrique à pas fins	34	UNF
22	Bougie d'allumage	44	BA
23	Métrique à pas fins	46	BSP
24	Métrique à pas fins	52	NPT
28	BSW	60	BSC
30	BSF	70	8-UN
00	Multifonctionnel		

X.X D	Longueur du filet rapporté tel que facteur de serrage nominal
IR	Moulinet d'entraînement de bande PowerCoil
SL	PowerCoil à frein de vis
K	kit de réparation de filets PowerCoil
P	Paquet de filets rapportés PowerCoil dans un emballage à système d'accroche
WK	PowerCoil kit d'atelier
HIT	Outil d'installation manuel
HIP	outil d'installation de pré-enroulage
MIT	Outil d'installation de la machine
HIM	mandrin d'installation Hex
MIP	Outil pneumatique d'installation
TB	Tenon
STB	Tenon à ressort
PTB	Pneumatic tang break tool
RT	Outil de dépose / d'extraction
LH	Coupe à gauche
GC	Jauge STI de tolérance 4H5H
GM	Jauge STI de tolérance 6H

PB	Bronze de phosphore
IC	Inconel X-750
NT	Nitronic 60
Y	Acier inoxydable 316
CD	Plaque de cadmium
AG	Plaque d'argent
FL	film de lubrifiant hydrofuge
XY	PLaque de Xylan Formula 5230/1131 gris, noir
I	Taraud STI intermédiaire
T	Taraud STI ébaucheur
B	Taraud STI finisseur
SF	Taraud STI à rainures hélicoïdales
SP	Taraud STI à entrée hélicoïdale
FT	Taraud STI sans goujoure
TW	Loksert à paroi fine
HD	Loksert à paroi renforcée
TT	Outil d'installation de Loksert à paroi fine
HT	Outil d'installation de Loksert à paroi renforcée
T	Outil d'installation universel de Loksert

powercoil® wire thread insert system

STANDARD TERMS & CONDITIONS – POWERCOIL®, LOKSERT®, E-Z SERT®

PAYMENT TERMS: Net 30 days, no further credit after 45 days

FREIGHT: F.O.B. Noblesville, IN

Freight Prepaid Policy:

- PowerCoil: $400 net

MINIMUM ORDER: $25 Net for open account, No minimum for next day air, or credit card orders

PRICING: Prices are based on purchases of standard package quantities shown.

RETURNED GOODS/CREDIT POLICY:

1. Authorization for return of goods must be approved by our Customer Service representative. If there has been a shipping error, please contact us and we will issue a Return Goods Authorization immediately. CARTONS THAT DO NOT CARRY AN RGA NUMBER WILL NOT BE ACCEPTED.
2. Annual inventory adjustments will be negotiated individually, and would apply only to standard stock items that do not require any repackaging.
3. Items that must be repackaged are not eligible for return/credit.
4. Credit for returned goods will be processed on the basis of the prices paid, and must be substantiated by invoice copy.
5. Freight charges for returned goods (other than shipper mistakes) are to be paid by the distributor.
6. Credit for all returns is subject to inspection and acceptance.

PRICES & TERMS SUBJECT TO CHANGE WITHOUT NOTICE

NOTICE: The material presented here is for guidance only. The user assumes full responsibility for determining the suitability of our products for a particular application. Requests for more information are welcome.

DISCLAIMER: SELLER MAKES NO WARRANTY WHATSOEVER, EXPRESSED OR IMPLIED AND ALL IMPLIED WAR RANTIES OF MERCHANTIBILITY FOR A PARTICULAR PURPOSE ARE DISCLAIMED AND EXCLUDED FROM ALL TRANSACTIONS AND SHALL NOT APPLY TO GOODS SOLD.

REMEDY: Our obligation is limited to the repair or replacement for defective parts or, at our option, the refund of the purchase price. IN NO EVENT SHALL THE SELLER BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES IN THE NATURE OF PENALTIES.

powercoil® wire thread insert system

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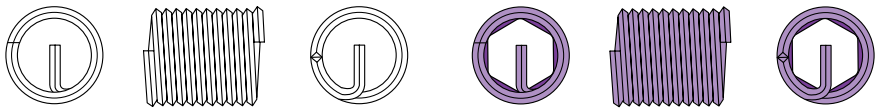


Manufactured from high quality chromium nickel stainless steel, PowerCoil Wire Thread Inserts provide high strength internal threads that resist the effects of temperature and corrosion. Their unique design ensures superior threads whose compound performance cannot be reproduced by any other single fastening 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 while retaining a measurable level of prevailing torque.

Note: It is recommended that only close fit plated or lubricated bolts or screws are used with screw locking inserts.

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 while 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.

The continuous helically coiled design negates the need for thick wall structures to support the internal and external threads - the diamond profile wire coil is the thread. PowerCoil wire thread inserts can be installed in reduced size bosses or flanges and within constricted areas – saving space and weight while providing high strength.

A boss radius equal to the nominal bolt diameter is usually sufficient.

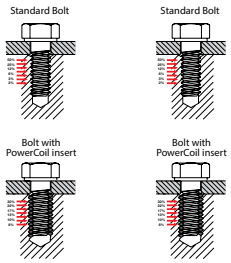
A complete range of installation tools are available to suit specific production techniques. A range of hand tools exist for small runs and repairs; electric and pneumatic tools are available for high volume production requirements.

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 75% 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 utilizing 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.



ELIMINATE STRESS

Virtually no stress is introduced into the parent material because there is no staking, locking, swaging or keying in place. The outward "spring action" of the insert holds it in place.

WEAR RESISTANCE

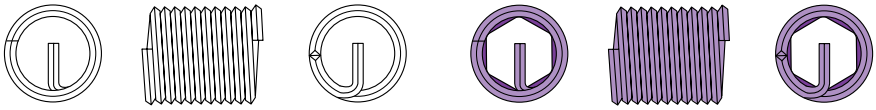
The combination of material hardness and the brilliant surface finish of wire thread inserts creates internal threads in which wear due to thread friction is virtually eliminated. This is of particular value in applications requiring repeated assembly & disassembly. The low frictional coefficient ensures that virtually all of the applied assembly torque is converted into clamping load. Thus providing threads that stay tight.

CORROSION PROTECTION

The 18/8 austenitic stainless steel wire used in PowerCoil inserts resists corrosion under normal environmental conditions. Galvanic action within the thread assembly is reduced, increasing the life of the fastening assembly.

Galvanic corrosion is most significant form of corrosion affecting inserts and fasteners. Galvanic corrosion occurs when dissimilar metals are in contact in the presence of an electrolytic solution. All metals exhibit different degrees of "activity" or "nobility" and can be arranged in a galvanic series of increasing activity. Gold and platinum are most noble while zinc and magnesium are most active. The most common electrolytic solution encountered is ordinary water. Seawater or salt spray is more damaging because of high concentrations of dissolved salts.

The best way to preclude galvanic corrosion is to use similar potential metals and eliminate the electrolyte conductor. The active



stainless steel of PowerCoil wire thread inserts are not passivated. This minimizes the possibility of galvanic corrosion occurring when they are installed in aluminum or magnesium parent materials.

Some additional precautions for reducing galvanic corrosion are:

1. Isolate the fasteners from the electrolyte. This can be done through gasketing or sealing.
2. Specify cadmium plated inserts. The cadmium plate provides a sacrificial barrier against corrosion. In addition, the cadmium plate has lubricating properties that minimize galling when stainless steel screws are used.
3. Apply corrosion inhibiting pastes or compounds to the screw. These include zinc chromate primer (MIL-P-8585) and strontium chromate primer (MIL-P-23377). Note: Pastes applied to the PowerCoil Thread Insert can become trapped between the wire and the hole and cause loss of proper tolerance. It is therefore recommended to apply the paste only to the screw, not the insert. If zinc chromate primer is applied to the tapped hole it should be thinned and applied sparingly. The insert should be installed while the primer is still wet.
4. Specify a dry film lubricant such as molybdenum disulphide on the inserts. This provides a secondary barrier against corrosion.
5. Where practical or where it will not interfere with the completed assembly, the external joint should be coated with a suitable paint.

MATERIALS

PowerCoil standard inserts are manufactured from fully certified, aircraft quality, 304 (18/8) austenitic stainless steel in accordance with AS7245. Alternative materials include 316 stainless steel and a variety of application specific surface coatings.

ALTERNATIVE MATERIALS

Phosphor Bronze

Non ferrous copper/tin alloy in accordance with BS2783 PB 102 EH – is suitable for operation in temperatures ranging from -200°C to +300°C.

Inconel X-750

Heat resisting precipitation hardenable nickel base alloy (equivalent specifications SAE AS 7246, DIN/NF 3018, W.NR 2.4669, UNS N07750). Inconel X-750 is suitable for operation in temperatures ranging from -200°C to +550° degrees celsius.

Nimonic 90

Heat resisting precipitation hardenable nickel base alloy in accordance with BS2 HR 501 (equivalent specifications W.NR 2.4632, UNS N07090).

Nimonic 90 is suitable for operation in temperatures ranging from -100°C to +650° degrees celsius.

Insert Material	Max. Temp. Peak	Cont.	Typical Applications	Coatings
Stainless 304	425°C 800°F	315°C 600°F	Most general applications in all materials	FL, AG, CD
Stainless 316	425°C 800°F	315°C 600°F	Increased corrosion resistance for salt water applications	FL, AG, CD
Phosphor Bronze	300°C 572°F	235°C 455°F	Copper parts, non-magnetic, low permeability applications	AG, CD
Iconel X-750	650°C 1200°F	550°C 1020°F	Aerospace, turbines, corrosive environments, high temp. use	AG
Nimonic 90	650°C 1200°F	550°C 1020°F	Aerospace and turbine applications	AG

ALTERNATIVE FINISHES & COATINGS

Cadmium Plate

Electro-deposited Cadmium in accordance with DTD 904/Def Stan 03-19 (equivalent specifications FED. QQ-P-416, LN 9368). Cadmium plating provides an excellent barrier between dissimilar metals dramatically reducing the effects of galvanic corrosion, its high lubricity and excellent corrosion resistance prevents seizure and galling between threaded components. Cadmium plate is suitable for operation in temperatures ranging from -200°C to +235°C.

Cadmium plated parts must not be

- subjected to temperatures exceeding 235°C (455°F)
- come into contact with fuel or hot oil
- come into contact with food or drinking water
- be used with titanium components (either directly or indirectly). At elevated temperatures embrittlement and subsequent component failure may occur.
- Cadmium is highly toxic – consequently extreme care must be taken when shipping, handling and installing.

Zinc Plate

Electrolytically deposited zinc in accordance with BS 3382. Electro-deposited zinc is the most widely applied electroplated finish in industry. Zinc is suitable for operation in temperatures ranging from -200°C to +250°C.

Silver Plate

Electrolytically deposited silver in accordance with DTD 939. Silver plating is used to prevent seizure and galling between thread components in high temperature applications and is most commonly applied to aero-engine fasteners. Silver plate is suitable for operation in temperatures ranging from -200°C to +650°C. Silver plated wire inserts may be installed in various materials including aluminum alloys, magnesium alloys, corrosion and heat resistant materials etc.

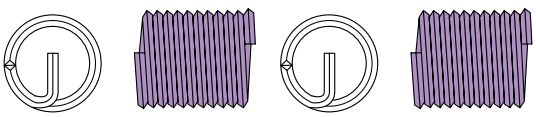
Silver plated inserts are not recommended for installation in titanium alloy which may exceed a service temperature of 300°C (570°F). Stress corrosion as a result of the combination of silver and titanium may occur in the housing material.

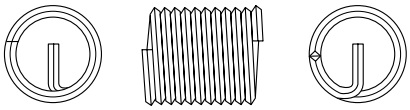
Dry Film Lubricant

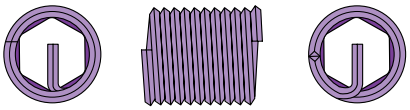
Solid film heat cured molybdenum disulphide dry film lubricant coating in accordance with MIL-L-0046010 provides a low frictional coefficient coating with excellent load bearing capabilities. Dry film lubricant prevents seizing and galling between threaded components and is particularly effective in screw locking insert applications. Dry film lubricant is suitable for operation in temperatures ranging from -100°C to +250°C.

Plating / Finish Specification	Part No. Suffix	Applicable Process
Silver Plating	AG	DTD 939
Cadmium Plating	CD	QQP-416 or DEF STD 03-19
Dry Film Lubricant	FL	MIL-L-8937 or MIL-L-46010
Red Dye	–	Applied to locking inserts for identification purposes*

* other color dyes may also be utilised for specific identification purposes







SELECTION OF CORRECT INSERT LENGTH

PowerCoil wire thread inserts are available in all popular thread types. Five insert lengths are available for each thread size. It is important to select the correct insert length in order to balance the bolt tensile strength against the shear strength of the parent material. The five insert lengths (recommended thread engagement of the PowerCoil wire thread insert), 1D, 1.5D, 2D, 2.5D and 3D are shown in the shaded area of the table below. These are calculated numbers since the inserts cannot be measured in the free (un-installed) state. The numbers are multiples of the nominal thread size, or diameter, of the insert. The actual insert lengths in the installed position are listed in the insert selection tables. There they represent the actual installed length plus 1/2 pitch. Using the table below, an insert length can be selected which will produce a thread system strong enough to fracture a bolt before it will strip or damage either the parent material or the insert.

Recommended Nominal Insert lengths Based on Parent Material Versus Bolt Material Strengths

UNIFIED (source BS7752 Part 1:1994)

Shear Strength of Parent Material (KSI)	Bolt Material Minimum Ultimate Tensile Strength (KSI)								
	54	75	96	108	125	132	160	180	220
10	2.0	2.5	3.0	3.0	–	–	–	–	–
15	1.5	1.5	2.0	2.5	2.5	3.0	–	–	–
20	1.0	1.5	1.5	2.0	2.0	2.0	2.5	3.0	3.0
25	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5	2.5
30	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5
40	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0
50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5

EXAMPLE: If parent material shear strength is 10KSI and the bolt tensile strength is 54 KSI, the correct insert length is 2.0 diameters (2D).

METRIC

Shear Strength of Parent Material (MPa)	Bolt Material Minimum Ultimate Tensile Strength (MPa)							
	300	400	500	600	800	1000	1200	1400
70	1.5	2.0	2.5	2.5	–	–	–	–
100	1.0	1.5	1.5	2.0	2.5	3.0	–	–
150	1.0	1.0	1.5	1.5	2.0	2.0	2.5	3.0
200	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.5
250	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.0
300	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5
350	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5

EXAMPLE: If parent material shear strength is 150Mpa and the bolt tensile strength is 600Mpa, the correct insert length is 1.5 diameters (1.5D).

BOLT PROJECTION

PowerCoil wire thread inserts are designed to be used with standard, readily available bolts and screws that require no special hardware.

The bolt must engage the entire insert length to achieve maximum assembly strength. To ensure against partial engagement, it is recommended that the tang always be removed. This will also guarantee that the locking coil(s) will be engaged by the full threads of the bolt. If design parameters prevent this, contact PowerCoil for assistance.

NOTES:

1. Bolt tensile strengths are specified minimums. When choosing an insert length, consideration should be given the maximum tensile strength allowed by the bolt drawing or procurement specification.
2. Service temperatures can cause significant variations in strength values, therefore compensation should be allowed.
3. The importance of shear values should be kept in mind because the parent material is subject to shear ing stress near the major diameter of the tapped threads.
4. When the strength values fall between two values in the tables, use next lower material shear value, or the next higher bolt tensile strength value.
5. To achieve maximum strength, bolt length and thread length as well as full tapped thread depth must be sufficient to assure full thread engagement over the entire length of the insert.

SCREW LOCKING (PREVAILING TORQUE) INSERTS

Screw Locking PowerCoil wire thread inserts are designed for applications subject to the effects of cyclic vibration or impact. The screw locking insert exerts a prevailing torque on male threaded fasteners to prevent loosening due to vibration or impact. They eliminate the need for other, less desirable and costly locking mechanisms. They are excellent in “adjusting screw” applications by preventing the male fastener from creeping.

HOW SCREW LOCKING INSERTS WORK

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 and exert radial pressure (prevailing torque) on the male thread.

On removal of the male thread, the locking coils relax to their original form permitting repeated assembly while retaining a measurable level of prevailing torque.

Please note:

It is recommended that only close fit plated or lubricated bolts or screws are used with screw locking PowerCoil wire thread inserts. When using heat treated unplated or stainless steel bolts, an anti-seize compound, e.g., molybdenum disulfide, must be used in order to minimize galling and assure maximum cycle life. Wear life of screw or bolt using PowerCoil screw locking wire thread inserts can also be improved by specifying dry film lubrication or cadmium plating.

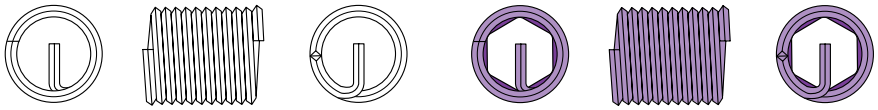
LOCATION OF LOCKING COILS

For 1D, 1.5D, and 2D diameter lengths: The center of the locking coil (or coils) equals 1/2 the number of free coils. For 2.5D and 3D diameter lengths: The locking coil is located the same distance from the tang as 2D length inserts.

Screw locking inserts are dyed red for easy identification purposes only. It is alcohol soluble and can be removed if desired.

RED DYE COATING

PowerCoil screw locking inserts are generally colour coded with an organic red dye for identification purposes. The dye does not affect



the installation or performance of the insert and does not need to be removed (in most situations). In situations requiring extreme cleanliness (such as assembly of precision instruments in clean room conditions) the dye may be removed by soaking the inserts in a denatured alcohol solution prior to installation.

Note: It is also essential that the bolt fully engages all insert coils for maximum strength.

PowerCoil screw locking inserts can be designed to suit a customer's specific needs. In certain instances and appllications prevailing torque can be lessened or increased to cater for a specific application. In these situations please contact your PowerCoil representative to discuss your specific requirements.

Please Note: Installation of PowerCoil screw locking inserts requires the use of a pre-winder tool. Please discuss other installation options with your PowerCoil agent.

POWERCOIL LOCKING INSERT TORQUE VALUES

METRIC COARSE

Thread mm x mm	Torque Max (Nm)	Torque Min (Nm)
M2.2x0.45	0.14	0.02
M2.5x0.45	0.23	0.05
M3.0x0.50	0.45	0.10
M3.5x0.60	0.68	0.12
M4.0x0.70	0.90	0.15
M5.0x0.80	1.60	0.30
M6.0x1.00	3.00	0.40
M7.0x1.00	4.50	0.60
M8.0x1.25	6.00	0.80
M10.0x1.50	10.50	1.40
M12.0x1.75	15.50	2.10
M14.0x2.00	23.50	3.00
M16.0x2.00	31.50	4.20
M18.0x2.50	42.00	5.50
M20.0x2.50	54.00	7.00
M22.0x2.50	67.50	9.00
M24.0x3.00	80.00	10.50
M27.0x3.00	94.00	12.00
M30.0x3.50	108.00	14.00
M33.0x3.50	122.00	15.50
M36.0x4.00	136.00	17.50
M39.0x4.00	150.00	19.50

METRIC FINE

Thread mm x mm	Torque Max (Nm)	Torque Min (Nm)
M8.0x1.00	6.00	0.80
M10.0x1.00	10.50	1.40
M10.0x1.25	10.50	1.40
M12.0x1.25	15.50	2.10
M12.0x1.50	15.50	2.10
M14.0x1.50	23.50	3.00
M16.0x1.50	31.50	4.20
M18.0x1.50	42.00	5.50
M20.0x1.50	54.00	7.00
M22.0x1.50	67.50	9.00
M18.0x2.00	42.00	5.50
M20.0x2.00	54.00	7.00
M22.0x2.00	67.50	9.00
M24.0x2.00	80.00	10.50
M27.0x2.00	94.00	12.00
M30.0x2.00	108.00	14.00
M33.0x2.00	122.00	15.50
M36.0x2.00	136.00	17.50
M39.0x2.00	150.00	19.50
M36.0x3.00	136.00	17.50

Locking torque values conform to MA3329, MA3330, MA3331

UNIFIED NATIONAL COARSE – UNC

Thread inch x tpi	Torque Max (lb in)	Torque Min (lb in)
2x56	1.25	0.19
3x48	2.00	0.44
4x40	3.00	0.63
5x40	4.69	0.81
6x32	6.00	1.00
8x32	9.00	1.50
10x24	13.00	2.00
12x24	24.00	3.00
1/4x20	30.00	4.50
5/16x18	60.00	7.50
3/8x18	80.00	12.00
7/16x14	100.00	16.50
1/2x13	150.00	24.00
9/16x12	200.00	30.00
5/8x11	300.00	40.00
3/4x10	400.00	60.00
7/8x9	600.00	82.00
1x8	800.00	110.00
1.1/8x7	900.00	137.00
1.1/4x7	1000.00	165.00
1.3/8x6	1150.00	185.00
1.1/2x6	1350.00	210.00

UNIFIED NATIONAL FINE – UNF

Thread inch x tpi	Torque Max (lb in)	Torque Min (lb in)
3x56	0.13	0.44
4x48	0.19	0.63
6x40	6.00	1.00
8x36	9.00	1.50
10x32	13.00	2.00
1/4x28	30.00	3.50
5/16x24	60.00	6.50
3/8x24	80.00	9.50
7/16x20	100.00	14.00
1/2x20	150.00	18.00
9/16x18	200.00	24.00
5/8x18	300.00	32.00
3/4x16	400.00	50.00
7/8x14	600.00	70.00
1x12	800.00	90.00
1.1/8x12	900.00	117.00
1.1/4x12	1000.00	143.00
1.3/8x12	1150.00	165.00
1.1/2x12	1350.00	190.00

Locking torque values conform to NASM8846

powercoil® wire thread insert system

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

MC

METRIC COARSE

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
2.00	0.40	1.5D	3.00MM	3520-2.00K	20	2.1	3520-2.00I	3500-HIT2	3500-TB1
2.20	0.45	1.5D	3.30MM	3520-2.20K	20	2.3	3520-2.20I	3500-HIT2	3500-TB2
2.50	0.45	1.5D	3.75MM	3520-2.50K	20	2.6	3520-2.50I	3500-HIT3	3500-TB3
3.00	0.50	1.5D	4.50MM	3520-3.00K	20	3.2	3520-3.00I	3500-HIT4	3500-TB4
3.50	0.60	1.5D	5.25MM	3520-3.50K	20	3.7	3520-3.50I	3500-HIT5	3500-TB5
4.00	0.70	1.5D	6.00MM	3520-4.00K	20	4.2	3520-4.00I	3500-HIT6	3500-TB6
5.00	0.80	1.5D	7.50MM	3520-5.00K	20	5.2	3520-5.00I	3500-HIT8	3500-TB8
6.00	1.00	1.5D	9.00MM	3520-6.00K	20	6.3	3520-6.00I	3500-HIT9	3500-TB9
7.00	1.00	1.5D	10.50MM	3520-7.00K	20	7.3	3520-7.00I	3500-HIT10	3500-TB11
8.00	1.25	1.5D	12.00MM	3520-8.00K	20	8.3	3520-8.00I	3500-HIT11	3500-TB12
9.00	1.25	1.5D	13.50MM	3520-9.00K	15	9.4	3520-9.00I	3500-HIT13	3500-TB12
10.00	1.50	1.5D	15.00MM	3520-10.00K	15	10.4	3520-10.00I	3500-HIT13	3500-TB13
11.00	1.50	1.5D	16.50MM	3520-11.00K	10	11.4	3520-11.00I	3500-HIT14	3500-TB14
12.00	1.75	1.5D	18.00MM	3520-12.00K	10	12.4	3520-12.00I	3500-HIT15	3500-TB15
13.00	1.75	1.5D	19.50MM	3520-13.00K	10	13.5*	3520-13.00I	3500-HIT15	–
14.00	2.00	1.5D	21.00MM	3520-14.00K	10	14.5*	3520-14.00I	3500-HIT16	–
15.00	2.00	1.5D	22.50MM	3520-15.00K	10	15.5*	3520-15.00I	3500-HIT16	–
16.00	2.00	1.5D	24.00MM	3520-16.00K	10	16.5*	3520-16.00I	3500-HIT18	–
18.00	2.50	1.5D	27.00MM	3520-18.00K	5	18.5*	3520-18.00I	3500-HIT20	–
20.00	2.50	1.5D	30.00MM	3520-20.00K	5	20.8*	3520-20.00I	3500-HIT21	–
22.00	2.50	1.5D	33.00MM	3520-22.00K	5	22.8*	3520-22.00I	3500-HIT22	–
24.00	3.00	1.5D	36.00MM	3520-24.00K	5	25.0*	3520-24.00I	3500-HIT23	–
27.00	3.00	1.5D	40.50MM	3520-27.00K	5	28.0*	3520-27.00I	3500-HIT24	–
30.00	3.50	1.5D	45.00MM	3520-30.00K	5	31.0*	3520-30.00I	3500-HIT25	–
33.00	3.50	1.5D	49.50MM	3520-33.00K	5	34.0*	3520-33.00I	3500-HIT26	–
36.00	4.00	1.5D	54.00MM	3520-36.00K	5	37.0*	3520-36.00I	3500-HIT28	–

* Tapping drill not included in thread repair kit.

IMPORTANT

It is recommended that when repairing the thread on spark plug ports that you remove the head.

If you do not remove the head it is essential that you protect the engine from the ingress of chips and swarf generated by the tapping process.

SPARK PLUG

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
10.00	1.00	–	1/2"	3522-10.00K	5	–	3520-10.00PN	3500-HIT13	3500-TB13
–	–	–	0.339"	–	5	–	–	–	–
12.00	1.25	–	1/2"	3522-12.00K	5	–	3520-10.00PN	3500-HIT15	3500-TB15
–	–	–	3/4"	–	5	–	–	–	–
14.00	1.25	–	3/8"	3522-14.00K	5	–	3522-14.00PN	3500-HIT17	–
–	–	–	1/2"	–	5	–	–	–	–
–	–	–	3/4"	–	5	–	–	–	–
14.00	1.25	8.4MM	–	3522-14.00K1	5	–	3522-14.00PN	3500-HIT17	–
–	–		–	–	5	–	–	–	–
–	–		–	–	5	–	–	–	–
18.00	1.50	–	1/2"	3522-18.00K	5	–	3522-18.00PN	3500-HIT20	–

STI Pilot Nose Taps are used to repair damaged threads and do not require the drilling of a pilot hole.

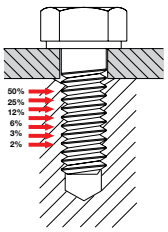
These taps use the existing thread as a guide in tapping a straight hole. STI Pilot Nose Taps are most commonly used to tap holes for the repair of spark plug threads.

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

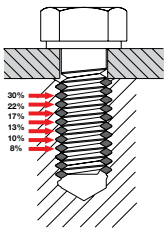
CROSSROAD DISTRIBUTOR SOURCE

MF

Standard Bolt



Bolt with PowerCoil insert



In a conventional threaded joint 75% of the load is placed on the first three threads.

The helical coil design of the PowerCoil Wire Thread Insert allows the shear loading to be transformed into a more desirable radial loading (hoop stress) over the entire length of the insert.

Use of a PowerCoil insert results in a far stronger thread than can be obtained by using conventional drilling or tapping. Improved strength allows designers to select fasteners based on minimum bolt strength and allows the use of smaller diameters and thread lengths - even in magnesium and aluminum alloys.

METRIC FINE

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
8.00	1.00	1.5D	12.00MM	3521-8.00K	20	8.3	3521-8.00I	3500-HIT11	3500-TB12
10.00	1.25	1.5D	15.00MM	3521-10.00K	15	10.3	3521-10.00I	3500-HIT13	3500-TB13
10.00	1.00	1.5D	15.00MM	3523-10.00K	15	10.3	3523-10.00I	3500-HIT13	3500-TB13
11.00	1.25	1.5D	16.50MM	3521-11.00K	10	11.3	3521-11.00I	3500-HIT14	3500-TB14
11.00	1.00	1.5D	16.50MM	3523-11.00K	10	11.3	3523-11.00I	3500-HIT14	3500-TB14
12.00	1.50	1.5D	18.00MM	3521-12.00K	10	12.4	3521-12.00I	3500-HIT15	3500-TB15
12.00	1.25	1.5D	18.00MM	3523-12.00K	10	12.3	3523-12.00I	3500-HIT15	3500-TB15
12.00	1.00	1.5D	18.00MM	3524-12.00K	10	12.3	3524-12.00I	3500-HIT15	3500-TB15
13.00	1.50	1.5D	19.50MM	3521-13.00K	10	13.2*	3521-13.00I	3500-HIT15	–
13.00	1.25	1.5D	19.50MM	3523-13.00K	10	13.2*	3523-13.00I	3500-HIT15	–
14.00	1.50	1.5D	21.00MM	3521-14.00K	10	14.4*	3521-14.00I	3500-HIT16	–
14.00	1.25	1.5D	21.00MM	3523-14.00K	10	14.3*	3523-14.00I	3500-HIT16	–
14.00	1.00	1.5D	21.00MM	3524-14.00K	10	14.3*	3524-14.00I	3500-HIT16	–
15.00	1.50	1.5D	22.50MM	3521-15.00K	10	15.3*	3521-15.00I	3500-HIT16	–
16.00	1.50	1.5D	24.00MM	3521-16.00K	10	16.5*	3521-16.00I	3500-HIT18	–
18.00	2.00	1.5D	27.00MM	3521-18.00K	5	18.5*	3521-18.00I	3500-HIT20	–
18.00	1.50	1.5D	27.00MM	3523-18.00K	5	18.5*	3523-18.00I	3500-HIT20	–
20.00	2.00	1.5D	30.00MM	3521-20.00K	5	20.5*	3521-20.00I	3500-HIT21	–
20.00	1.50	1.5D	30.00MM	3523-20.00K	5	20.5*	3523-20.00I	3500-HIT21	–
22.00	2.00	1.5D	33.00MM	3521-22.00K	5	22.5*	3521-22.00I	3500-HIT22	–
22.00	1.50	1.5D	33.00MM	3523-22.00K	5	22.5*	3523-22.00I	3500-HIT22	–
24.00	2.00	1.5D	36.00MM	3521-24.00K	5	24.5*	3521-24.00I	3500-HIT23	–
24.00	1.50	1.5D	36.00MM	3523-24.00K	5	24.5*	3523-24.00I	3500-HIT23	–
26.00	1.50	1.5D	39.00MM	3523-26.00K	5	26.5*	3523-26.00I	3500-HIT24	–
27.00	2.00	1.5D	40.50MM	3521-27.00K	5	27.5*	3521-27.00I	3500-HIT24	–
27.00	1.50	1.5D	40.50MM	3523-27.00K	5	27.5*	3523-27.00I	3500-HIT24	–
28.00	1.50	1.5D	42.00MM	3523-28.00K	5	28.5*	3523-28.00I	3500-HIT24	–
30.00	2.00	1.5D	45.00MM	3521-30.00K	5	30.5*	3521-30.00I	3500-HIT26	–
30.00	1.50	1.5D	45.00MM	3523-30.00K	5	30.5*	3523-30.00I	3500-HIT26	–
33.00	2.00	1.5D	49.50MM	3521-33.00K	5	33.5*	3521-33.00I	3500-HIT26	–
36.00	3.00	1.5D	54.00MM	3521-36.00K	3	37.0*	3521-36.00I	3500-HIT28	–
36.00	2.00	1.5D	54.00MM	3523-36.00K	3	36.5*	3523-36.00I	3500-HIT28	–
36.00	1.50	1.5D	54.00MM	3524-36.00K	3	36.5*	3524-36.00I	3500-HIT28	–

* Tapping drill not included in thread repair kit.

Bulk Free Running Inserts
Page 22

powercoil® wire thread insert system

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

UNC
UNF

UNC

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
2G	56	1.5D	0.13"	3532-2GK	20	2.4	3532-2GI	3500-HIT2	3500-TB2
3G	48	1.5D	0.15"	3532-3GK	20	2.7	3532-3GI	3500-HIT3	3500-TB3
4G	40	1.5D	0.17"	3532-4GK	20	3.1	3532-4GI	3500-HIT4	3500-TB4
5G	40	1.5D	0.19"	3532-5GK	20	3.4	3532-5GI	3500-HIT4	3500-TB4
6G	32	1.5D	0.21"	3532-6GK	20	3.8	3532-6GI	3500-HIT5	3500-TB5
8G	32	1.5D	0.25"	3532-8GK	20	4.4	3532-8GI	3500-HIT6	3500-TB6
10G	24	1.5D	0.28"	3532-10GK	20	5.2	3532-10GI	3500-HIT7	3500-TB8
12G	24	1.5D	0.33"	3532-12GK	20	5.8	3532-12GI	3500-HIT8	3500-TB8
1/4	20	1.5D	0.38"	3532-1/4K	20	6.7	3532-1/4I	3500-HIT9	3500-TB9
5/16	18	1.5D	0.47"	3532-5/16K	20	8.3	3532-5/16I	3500-HIT10	3500-TB12
3/8	16	1.5D	0.56"	3532-3/8K	15	9.9	3532-3/8I	3500-HIT13	3500-TB12
7/16	14	1.5D	0.66"	3532-7/16K	10	11.6	3532-7/16I	3500-HIT14	3500-TB14
1/2	13	1.5D	0.75"	3532-1/2K	10	13.0	3532-1/2I	3500-HIT15	3500-TB15
9/16	12	1.5D	0.84"	3532-9/16K	10	15.0*	3532-9/16I	3500-HIT16	–
5/8	11	1.5D	0.94"	3532-5/8K	10	16.5*	3532-5/8I	3500-HIT18	–
3/4	10	1.5D	1.13"	3532-3/4K	5	19.8*	3532-3/4I	3500-HIT20	–
7/8	9	1.5D	1.31"	3532-7/8K	5	23.0*	3532-7/8I	3500-HIT22	–
1	8	1.5D	1.50"	3532-1K	5	26.2*	3532-1I	3500-HIT23	–
1-1/8	7	1.5D	1.69"	3532-1.1/8K	3	29.5*	3532-1.1/8I	3500-HIT25	–
1-1/4	7	1.5D	1.88"	3532-1.1/4K	3	32.5*	3532-1.1/4I	3500-HIT26	–
1-3/8	6	1.5D	2.06"	3532-1.3/8K	3	36.0*	3532-1.3/8I	3500-HIT27	–
1-1/2	6	1.5D	2.25"	3532-1.1/2K	3	39.5*	3532-1.1/2I	3500-HIT28	–

UNF

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
3G	56	1.5D	0.15"	3534-3GK	20	2.7	3534-3GI	3500-HIT3	3500-TB3
4G	48	1.5D	0.17"	3534-4GK	20	3.0	3534-4GI	3500-HIT4	3500-TB4
6G	40	1.5D	0.21"	3534-6GK	20	3.8	3534-6GI	3500-HIT5	3500-TB5
8G	36	1.5D	0.25"	3534-8GK	20	4.4	3534-8GI	3500-HIT6	3500-TB6
10G	32	1.5D	0.28"	3534-10GK	20	5.1	3534-10GI	3500-HIT8	3500-TB8
12G	28	1.5D	0.33"	3534-12GK	20	5.6	3534-12GI	3500-HIT8	3500-TB8
1/4	28	1.5D	0.38"	3534-1/4K	20	6.7	3534-1/4I	3500-HIT9	3500-TB9
5/16	24	1.5D	0.47"	3534-5/16K	20	8.3	3534-5/16I	3500-HIT11	3500-TB12
3/8	24	1.5D	0.56"	3534-3/8K	15	9.8	3534-3/8I	3500-HIT13	3500-TB13
7/16	16	1.5D	0.66"	3534-7/16-16K	10	11.5	3534-7/16-16I	3500-HIT14	3500-TB14
7/16	20	1.5D	0.66"	3534-7/16K	10	11.5	3534-7/16I	3500-HIT14	3500-TB14
1/2	20	1.5D	0.75"	3534-1/2K	10	13.0	3534-1/2I	3500-HIT15	3500-TB15
9/16	18	1.5D	0.84"	3534-9/16K	10	14.7*	3534-9/16I	3500-HIT16	–
5/8	18	1.5D	0.94"	3534-5/8K	10	16.3*	3534-5/8I	3500-HIT18	–
3/4	16	1.5D	1.13"	3534-3/4K	5	19.5*	3534-3/4I	3500-HIT21	–
7/8	14	1.5D	1.31"	3534-7/8K	5	22.5*	3534-7/8I	3500-HIT22	–
1	12	1.5D	1.50"	3534-1K	5	26.0*	3534-1I	3500-HIT23	–
1	14	1.5D	1.50"	3535-1K	5	26.0*	3535-1I	3500-HIT23	–
1-1/8	12	1.5D	1.69"	3534-1.1/8K	3	29.5*	3534-1.1/8I	3500-HIT25	–
1-1/4	12	1.5D	1.88"	3534-1.1/4K	3	32.5*	3534-1.1/4I	3500-HIT26	–
1-3/8	12	1.5D	2.06"	3534-1.3/8K	3	35.5*	3534-1.3/8I	3500-HIT27	–
1-1/2	12	1.5D	2.25"	3534-1.1/2K	3	38.5*	3534-1.1/2I	3500-HIT28	–

* Tapping drill not included in thread repair kit.

CROSSROAD DISTRIBUTOR SOURCE

BSW
BSF
BSP

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

BSW

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/8	40	1.5D	0.19"	3528-1/8K	20	3.4	3528-1/8I	3500-HIT4	3500-TB4
3/16	24	1.5D	0.28"	3528-3/16K	20	5.0	3528-3/16I	3500-HIT7	3500-TB8
1/4	20	1.5D	0.38"	3528-1/4K	20	6.7	3528-1/4I	3500-HIT9	3500-TB9
5/16	18	1.5D	0.47"	3528-5/16K	20	8.3	3528-5/16I	3500-HIT10	3500-TB11
3/8	16	1.5D	0.56"	3528-3/8K	15	9.9	3528-3/8I	3500-HIT11	3500-TB12
7/16	14	1.5D	0.66"	3528-7/16K	10	11.5	3528-7/16I	3500-HIT14	3500-TB14
1/2	12	1.5D	0.75"	3528-1/2K	10	13.0	3528-1/2I	3500-HIT15	3500-TB15
9/16	12	1.5D	0.84"	3528-9/16K	10	14.8*	3528-9/16I	3500-HIT16	–
5/8	11	1.5D	0.94"	3528-5/8K	10	16.7*	3528-5/8I	3500-HIT18	–
3/4	10	1.5D	1.13"	3528-3/4K	5	20.0*	3528-3/4I	3500-HIT20	–
7/8	9	1.5D	1.31"	3528-7/8K	5	23.2*	3528-7/8I	3500-HIT22	–
1	8	1.5D	1.50"	3528-1K	5	26.5*	3528-1I	3500-HIT23	–

BSF

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
3/16	32	1.5D	0.28"	3530-3/16K	20	5.0	3530-3/16I	3500-HIT8	3500-TB6
1/4	26	1.5D	0.38"	3530-1/4K	20	6.6	3530-1/4I	3500-HIT9	3500-TB9
5/16	22	1.5D	0.47"	3530-5/16K	20	8.3	3530-5/16I	3500-HIT11	3500-TB11
3/8	20	1.5D	0.56"	3530-3/8K	15	9.9	3530-3/8I	3500-HIT13	3500-TB12
7/16	18	1.5D	0.66"	3530-7/16K	10	11.5	3530-7/16I	3500-HIT14	3500-TB14
1/2	16	1.5D	0.75"	3530-1/2K	10	13.0	3530-1/2I	3500-HIT15	3500-TB15
9/16	16	1.5D	0.84"	3530-9/16K	10	14.8*	3530-9/16I	3500-HIT16	–
5/8	14	1.5D	0.94"	3530-5/8K	10	16.3*	3530-5/8I	3500-HIT18	–
3/4	12	1.5D	1.13"	3530-3/4K	5	19.5*	3530-3/4I	3500-HIT20	–
7/8	11	1.5D	1.31"	3530-7/8K	5	22.8*	3530-7/8I	3500-HIT22	–
1	10	1.5D	1.50"	3530-1K	5	26.2*	3530-1I	3500-HIT23	–

BSP

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/8	28	1.5D	0.19"	3546-1/8K	10	10.0*	3546-1/8I	3500-HIT14	–
1/4	19	1.5D	0.38"	3546-1/4K	10	13.6*	3546-1/4I	3500-HIT16	–
3/8	19	1.5D	0.56"	3546-3/8K	10	17.1*	3546-3/8I	3500-HIT20	–
1/2	14	1.5D	0.75"	3546-1/2K	10	21.5*	3546-1/2I	3500-HIT23	–
5/8	14	1.5D	0.94"	3546-5/8K	10	23.4*	3546-5/8I	3500-HIT23	–
3/4	14	1.5D	1.13"	3546-3/4K	10	27.0*	3546-3/4I	3500-HIT24	–
7/8	14	1.5D	1.31"	3546-7/8K	5	30.5*	3546-7/8I	3500-HIT27	–
1	11	1.5D	1.50"	3546-1K	5	33.7*	3546-1I	3500-HIT27	–

* Tapping drill not included in thread repair kit.

powercoil® wire thread insert system

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

NPT
8-UN
BSC
BA

NPT

INCH	TPI	INSTALLED LENGTH		PART #	#		PART #	PART #	PART #
1/16	27	1.5D	0.09"	3552-1/16K	10	K*	3552-1/16I	3500-HIT10	–
1/8	27	1.5D	0.19"	3552-1/8K	10	U*	3552-1/8I	3500-HIT13	–
1/4	18	1.5D	0.38"	3552-1/4K	10	31/64*	3552-1/4I	3500-HIT16	–
3/8	18	1.5D	0.56"	3552-3/8K	10	5/8*	3552-3/8I	3500-HIT18	–
1/2	14	1.5D	0.75"	3552-1/2K	10	35/32*	3552-1/2I	3500-HIT22	–
3/4	14	1.5D	1.13"	3552-3/4K	10	63/64*	3552-3/4I	3500-HIT24	–
1	11.5	1.5D	1.50"	3552-1K	10	1-1/4*	3552-1I	3500-HIT27	–

8-UN

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1-1/8	8	1.5D	1.69"	3570-1.1/8K	3	28.5*	3570-1.1/8I	3500-HIT25	–
1-1/4	8	1.5D	1.88"	3570-1.1/4K	3	32.0*	3570-1.1/4I	3500-HIT26	–
1-3/8	8	1.5D	2.06"	3570-1.3/8K	3	35.0*	3570-1.3/8I	3500-HIT27	–
1-1/2	8	1.5D	2.25"	3570-1.1/2K	3	38.0*	3570-1.1/2I	3500-HIT28	–
1-5/8	8	1.5D	2.44"	3570-1.5/8K	3	41.0*	3570-1.5/8I	3500-HIT28	–
1-3/4	8	1.5D	2.63"	3570-1.3/4K	3	44.5*	3570-1.3/4I	3500-HIT28	–
1-7/8	8	1.5D	2.81"	3570-1.7/8K	3	47.5*	3570-1.7/8I	3500-HIT30	–
2	8	1.5D	3.00"	3570-2K	3	50.8*	3570-2I	3500-HIT30	–

BSC

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/4	26	1.5D	0.38"	3560-1/4K	20	6.6	3560-1/4I	3500-HIT10	3500-TB9
5/16	26	1.5D	0.47"	3560-5/16K	20	8.0	3560-5/16I	3500-HIT11	3500-TB12
3/8	26	1.5D	0.56"	3560-3/8K	15	9.8	3560-3/8I	3500-HIT13	3500-TB13
7/16	26	1.5D	0.66"	3560-7/16K	10	11.1	3560-7/16I	3500-HIT14	3500-TB14
1/2	26	1.5D	0.75"	3560-1/2K	10	12.7	3560-1/2I	3500-HIT15	3500-TB15

BA

	INCH	MM	INCH	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
0	0.236	6.0	0.0394	1.5D	0.35"	3544-0K	20	6.2	3544-0I	3500-HIT9	3500-TB11
2	0.185	4.7	0.0319	1.5D	0.28"	3544-2K	20	4.9	3544-2I	3500-HIT7	3500-TB8
4	0.142	3.6	0.0260	1.5D	0.21"	3544-4K	20	3.8	3544-4I	3500-HIT5	3500-TB5
6	0.110	2.8	0.0209	1.5D	0.17"	3544-6K	20	2.9	3544-6I	3500-HIT3	3500-TB3

* Tapping drill not included in thread repair kit.

CROSSROAD DISTRIBUTOR SOURCE

MC
MF

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS
STYLE	FREE RUNNING

METRIC COARSE M5-M12

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
5.00	0.80	1.5D	7.5MM	3520-WK1	25	5.2	3520-5.00I	3500-HIT8	3500-TB8
6.00	1.00	1.5D	9.0MM		25	6.3	3520-6.00I	3500-HIT9	3500-TB9
8.00	1.25	1.5D	12.0MM		25	8.3	3520-8.00I	3500-HIT11	3500-TB12
10.00	1.50	1.5D	15.0MM		25	10.4	3520-10.00I	3500-HIT13	3500-TB13
12.00	1.75	1.5D	18.0MM		10	12.4	3520-12.00I	3500-HIT15	3500-TB15

METRIC COARSE M6-M12 + M14 SPARK PLUG

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
6.00	1.00	1.5D	9.0MM	3522-WK4	25	6.3	3520-6.00I	3500-HIT9	3500-TB9
8.00	1.25	1.5D	12.0MM		25	8.3	3520-8.00I	3500-HIT11	3500-TB12
10.00	1.50	1.5D	15.0MM		25	10.4	3520-10.00I	3500-HIT13	3500-TB13
12.00	1.75	1.5D	18.0MM		10	12.4	3520-12.00I	3500-HIT15	3500-TB15
14.00	1.25	–	8.4MM		5	–	3522-14.00PN	3500-HIT17	–
14.00	1.25	–	12.4MM		5	–	–	–	–
14.00	1.25	–	16.4MM		5	–	–	–	–

SPARK PLUG

MM	MM	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
10.00	1.00	–	0.339"	3522-WK1	5	–	3522-10.00PN	3500-HIT13	3500-TB13
–	–	–	1/2"		5	–	–	–	–
12.00	1.25	–	1/2"		5	–	3522-12.00PN	3500-HIT15	3500-TB15
–	–	–	3/4"		5	–	–	–	–
14.00	1.25	–	3/8"		5	–	3522-14.00PN	3500-HIT17	–
–	–	–	1/2"		5	–	–	–	–
–	–	–	3/4"		5	–	–	–	–

powercoil® wire thread insert system

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

UNC
UNF
BSW
BSF

UNC 1/4" – UNC 1/2"

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/4	20	1.5D	0.38"	3532-WK1	25	6.7	3532-1/4I	3500-HIT9	3500-TB9
5/16	18	1.5D	0.47"		25	8.3	3532-5/16I	3500-HIT10	3500-TB12
3/8	16	1.5D	0.56"		25	9.9	3532-3/8I	3500-HIT13	3500-TB12
7/16	14	1.5D	0.66"		10	11.6	3532-7/16I	3500-HIT14	3500-TB14
1/2	13	1.5D	0.75"		10	13.0	3532-1/2I	3500-HIT15	3500-TB15

UNF 1/4" – UNF 1/2"

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/4	28	1.5D	0.38"	3534-WK1	25	6.7	3534-1/4I	3500-HIT9	3500-TB9
5/16	24	1.5D	0.47"		25	8.3	3534-5/16I	3500-HIT11	3500-TB12
3/8	24	1.5D	0.56"		25	9.8	3534-3/8I	3500-HIT13	3500-TB13
7/16	20	1.5D	0.66"		10	11.5	3534-7/16I	3500-HIT14	3500-TB14
1/2	20	1.5D	0.75"		10	13.0	3534-1/2I	3500-HIT15	3500-TB15

BSW 1/4" – BSW 1/2"

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/4	20	1.5D	0.38"	3528-WK1	25	6.7	3528-1/4I	3500-HIT9	3500-TB9
5/16	18	1.5D	0.47"		25	8.3	3528-5/16I	3500-HIT10	3500-TB11
3/8	16	1.5D	0.56"		25	9.9	3528-3/8I	3500-HIT11	3500-TB12
7/16	14	1.5D	0.66"		10	11.5	3528-7/16I	3500-HIT14	3500-TB14
1/2	12	1.5D	0.75"		10	13.0	3528-1/2I	3500-HIT15	3500-TB15

BSF 1/4" – BSF 1/2"

INCH	TPI	INSTALLED LENGTH		PART #	#	MM	PART #	PART #	PART #
1/4	26	1.5D	0.38"	3530-WK1	25	6.6	3530-1/4I	3500-HIT9	3500-TB9
5/16	22	1.5D	0.47"		25	8.3	3530-5/16I	3500-HIT11	3500-TB11
3/8	20	1.5D	0.56"		25	9.9	3530-3/8I	3500-HIT13	3500-TB12
7/16	18	1.5D	0.66"		10	11.5	3530-7/16I	3500-HIT14	3500-TB14
1/2	16	1.5D	0.75"		10	13.0	3530-1/2I	3500-HIT15	3500-TB15

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

METRIC COARSE

MM	MM	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
2.00	0.40	1.0D	2.00MM	10	3520-2.00X1.0DP	–	–
2.00	0.40	1.5D	3.00MM	10	–	3520-2.00X1.5DP	–
2.00	0.40	2.0D	4.00MM	10	–	–	3520-2.00X2.0DP
2.20	0.45	1.0D	2.20MM	10	3520-2.20X1.0DP	–	–
2.20	0.45	1.5D	3.30MM	10	–	3520-2.20X1.5DP	–
2.20	0.45	2.0D	4.40MM	10	–	–	3520-2.20X2.0DP
2.50	0.45	1.0D	2.50MM	10	3520-2.50X1.0DP	–	–
2.50	0.45	1.5D	3.75MM	10	–	3520-2.50X1.5DP	–
2.50	0.45	2.0D	5.00MM	10	–	–	3520-2.50X2.0DP
3.00	0.50	1.0D	3.00MM	10	3520-3.00X1.0DP	–	–
3.00	0.50	1.5D	4.50MM	10	–	3520-3.00X1.5DP	–
3.00	0.50	2.0D	6.00MM	10	–	–	3520-3.00X2.0DP
3.50	0.60	1.0D	3.50MM	10	3520-3.50X1.0DP	–	–
3.50	0.60	1.5D	5.25MM	10	–	3520-3.50X1.5DP	–
3.50	0.60	2.0D	7.00MM	10	–	–	3520-3.50X2.0DP
4.00	0.70	1.0D	4.00MM	10	3520-4.00X1.0DP	–	–
4.00	0.70	1.5D	6.00MM	10	–	3520-4.00X1.5DP	–
4.00	0.70	2.0D	8.00MM	10	–	–	3520-4.00X2.0DP
5.00	0.80	1.0D	5.00MM	10	3520-5.00X1.0DP	–	–
5.00	0.80	1.5D	7.50MM	10	–	3520-5.00X1.5DP	–
5.00	0.80	2.0D	10.00MM	10	–	–	3520-5.00X2.0DP
6.00	1.00	1.0D	6.00MM	10	3520-6.00X1.0DP	–	–
6.00	1.00	1.5D	9.00MM	10	–	3520-6.00X1.5DP	–
6.00	1.00	2.0D	12.00MM	10	–	–	3520-6.00X2.0DP
7.00	1.00	1.0D	7.00MM	10	3520-7.00X1.0DP	–	–
7.00	1.00	1.5D	10.50MM	10	–	3520-7.00X1.5DP	–
7.00	1.00	2.0D	14.00MM	10	–	–	3520-7.00X2.0DP
8.00	1.25	1.0D	8.00MM	10	3520-8.00X1.0DP	–	–
8.00	1.25	1.5D	12.00MM	10	–	3520-8.00X1.5DP	–
8.00	1.25	2.0D	16.00MM	10	–	–	3520-8.00X2.0DP
9.00	1.25	1.0D	9.00MM	10	3520-9.00X1.0DP	–	–
9.00	1.25	1.5D	13.50MM	10	–	3520-9.00X1.5DP	–
9.00	1.25	2.0D	18.00MM	10	–	–	3520-9.00X2.0DP
10.00	1.50	1.0D	10.00MM	10	3520-10.00X1.0DP	–	–
10.00	1.50	1.5D	15.00MM	10	–	3520-10.00X1.5DP	–
10.00	1.50	2.0D	20.00MM	10	–	–	3520-10.00X2.0DP
11.00	1.50	1.0D	11.00MM	10	3520-11.00X1.0DP	–	–
11.00	1.50	1.5D	16.50MM	10	–	3520-11.00X1.5DP	–
11.00	1.50	2.0D	22.00MM	10	–	–	3520-11.00X2.0DP
12.00	1.75	1.0D	12.00MM	10	3520-12.00X1.0DP	–	–
12.00	1.75	1.5D	18.00MM	10	–	3520-12.00X1.5DP	–
12.00	1.75	2.0D	24.00MM	10	–	–	3520-12.00X2.0DP
13.00	1.75	1.0D	13.00MM	5	3520-13.00X1.0DP	–	–
13.00	1.75	1.5D	19.50MM	5	–	3520-13.00X1.5DP	–
13.00	1.75	2.0D	26.00MM	5	–	–	3520-13.00X2.0DP
14.00	2.00	1.0D	14.00MM	5	3520-14.00X1.0DP	–	–
14.00	2.00	1.5D	21.00MM	5	–	3520-14.00X1.5DP	–
14.00	2.00	2.0D	28.00MM	5	–	–	3520-14.00X2.0DP
15.00	2.00	1.0D	15.00MM	5	3520-15.00X1.0DP	–	–
15.00	2.00	1.5D	22.50MM	5	–	3520-15.00X1.5DP	–
15.00	2.00	2.0D	30.00MM	5	–	–	3520-15.00X2.0DP

MC

powercoil® wire thread insert system

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

MC

METRIC COARSE

MM	MM	INSTALLED LENGTH		#	PART # 1.0D	PART # 1.5D	PART # 2.0D
16.00	2.00	1.0D	16.00MM	5	3520-16.00X1.0DP	–	–
16.00	2.00	1.5D	24.00MM	5	–	3520-16.00X1.5DP	–
16.00	2.00	2.0D	32.00MM	5	–	–	3520-16.00X2.0DP
18.00	2.50	1.0D	18.00MM	5	3520-18.00X1.0DP	–	–
18.00	2.50	1.5D	27.00MM	5	–	3520-18.00X1.5DP	–
18.00	2.50	2.0D	36.00MM	5	–	–	3520-18.00X2.0DP
20.00	2.50	1.0D	20.00MM	5	3520-20.00X1.0DP	–	–
20.00	2.50	1.5D	30.00MM	5	–	3520-20.00X1.5DP	–
20.00	2.50	2.0D	40.00MM	5	–	–	3520-20.00X2.0DP
22.00	2.50	1.0D	22.00MM	3	3520-22.00X1.0DP	–	–
22.00	2.50	1.5D	33.00MM	3	–	3520-22.00X1.5DP	–
22.00	2.50	2.0D	44.00MM	3	–	–	3520-22.00X2.0DP
24.00	3.00	1.0D	24.00MM	3	3520-24.00X1.0DP	–	–
24.00	3.00	1.5D	36.00MM	3	–	3520-24.00X1.5DP	–
24.00	3.00	2.0D	48.00MM	3	–	–	3520-24.00X2.0DP

METRIC COARSE

MM	MM	INSTALLED LENGTH		#	PART # 2.5D	PART # 3.0D
3.00	0.50	2.5D	7.50MM	10	3520-3.00X2.5DP	–
4.00	0.70	2.5D	10.00MM	10	3520-4.00X2.5DP	–
4.00	0.70	3.0D	12.00MM	10	–	3520-4.00X3.0DP
6.00	1.00	2.5D	15.00MM	10	3520-6.00X2.5DP	–
6.00	1.00	3.0D	18.00MM	10	–	3520-6.00X3.0DP
7.00	1.00	3.0D	21.00MM	10	–	3520-7.00X3.0DP
8.00	1.25	2.5D	20.00MM	10	3520-8.00X2.5DP	–
8.00	1.25	3.0D	24.00MM	10	–	3520-8.00X3.0DP
9.00	1.25	3.0D	27.00MM	10	–	3520-9.00X3.0DP
10.00	1.50	2.5D	25.00MM	10	3520-10.00X2.5DP	–
10.00	1.50	3.0D	30.00MM	10	–	3520-10.00X3.0DP
12.00	1.75	2.5D	30.00MM	10	3520-12.00X2.5DP	–
12.00	1.75	3.0D	36.00MM	10	–	3520-12.00X3.0DP
14.00	2.00	2.5D	35.00MM	5	3520-14.00X2.5DP	–
14.00	2.00	3.0D	42.00MM	5	–	3520-14.00X3.0DP
16.00	2.00	2.5D	40.00MM	5	3520-16.00X2.5DP	–
24.00	3.00	2.5D	60.00MM	3	3520-24.00X2.5DP	–

CROSSROAD DISTRIBUTOR SOURCE

MF

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

METRIC FINE

MM	MM	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
6.00	0.75	1.0D	6.00	10	3521-6.00X1.0DP	–	–
6.00	0.75	1.5D	9.00	10	–	3521-6.00X1.5DP	–
6.00	0.75	2.0D	12.00	10	–	–	3521-6.00X2.0DP
8.00	1.00	1.0D	8.00	10	3521-8.00X1.0DP	–	–
8.00	1.00	1.5D	12.00	10	–	3521-8.00X1.5DP	–
8.00	1.00	2.0D	16.00	10	–	–	3521-8.00X2.0DP
8.00	0.75	1.0D	8.00	10	3523-8.00X1.0DP	–	–
8.00	0.75	1.5D	12.00	10	–	3523-8.00X1.5DP	–
8.00	0.75	2.0D	16.00	10	–	–	3523-8.00X2.0DP
9.00	1.00	1.0D	9.00	10	3521-9.00X1.0DP	–	–
9.00	1.00	1.5D	13.50	10	–	3521-9.00X1.5DP	–
9.00	1.00	2.0D	18.00	10	–	–	3521-9.00X2.0DP
10.00	1.25	1.0D	10.00	10	3521-10.00X1.0DP	–	–
10.00	1.25	1.5D	15.00	10	–	3521-10.00X1.5DP	–
10.00	1.25	2.0D	20.00	10	–	–	3521-10.00X2.0DP
10.00	1.00	1.0D	10.00	10	3523-10.00X1.0DP	–	–
10.00	1.00	1.5D	15.00	10	–	3523-10.00X1.5DP	–
10.00	1.00	2.0D	20.00	10	–	–	3523-10.00X2.0DP
11.00	1.25	1.0D	11.00	10	3521-11.00X1.0DP	–	–
11.00	1.25	1.5D	16.50	10	–	3521-11.00X1.5DP	–
11.00	1.25	2.0D	22.00	10	–	–	3521-11.00X2.0DP
11.00	1.00	1.0D	11.00	10	3523-11.00X1.0DP	–	–
11.00	1.00	1.5D	16.50	10	–	3523-11.00X1.5DP	–
11.00	1.00	2.0D	22.00	10	–	–	3523-11.00X2.0DP
12.00	1.50	1.0D	12.00	10	3521-12.00X1.0DP	–	–
12.00	1.50	1.5D	18.00	10	–	3521-12.00X1.5DP	–
12.00	1.50	2.0D	24.00	10	–	–	3521-12.00X2.0DP
12.00	1.25	1.0D	12.00	10	3523-12.00X1.0DP	–	–
12.00	1.25	1.5D	18.00	10	–	3523-12.00X1.5DP	–
12.00	1.25	2.0D	24.00	10	–	–	3523-12.00X2.0DP
12.00	1.00	1.0D	12.00	10	3524-12.00X1.0DP	–	–
12.00	1.00	1.5D	18.00	10	–	3524-12.00X1.5DP	–
12.00	1.00	2.0D	24.00	10	–	–	3524-12.00X2.0DP
13.00	1.50	1.0D	13.00	5	3521-13.00X1.0DP	–	–
13.00	1.50	1.5D	19.50	5	–	3521-13.00X1.5DP	–
13.00	1.50	2.0D	26.00	5	–	–	3521-13.00X2.0DP
13.00	1.25	1.0D	13.00	5	3523-13.00X1.0DP	–	–
13.00	1.25	1.5D	19.50	5	–	3523-13.00X1.5DP	–
13.00	1.25	2.0D	26.00	5	–	–	3523-13.00X2.0DP
14.00	1.50	1.0D	14.00	5	3521-14.00X1.0DP	–	–
14.00	1.50	1.5D	21.00	5	–	3521-14.00X1.5DP	–
14.00	1.50	2.0D	28.00	5	–	–	3521-14.00X2.0DP
14.00	1.25	1.0D	14.00	5	3523-14.00X1.0DP	–	–
14.00	1.25	1.5D	21.00	5	–	3523-14.00X1.5DP	–
14.00	1.25	2.0D	28.00	5	–	–	3523-14.00X2.0DP
14.00	1.00	1.0D	14.00	5	3524-14.00X1.0DP	–	–
14.00	1.00	1.5D	21.00	5	–	3524-14.00X1.5DP	–
14.00	1.00	2.0D	28.00	5	–	–	3524-14.00X2.0DP
15.00	1.50	1.0D	15.00	5	3521-15.00X1.0DP	–	–
15.00	1.50	1.5D	22.50	5	–	3521-15.00X1.5DP	–
15.00	1.50	2.0D	30.00	5	–	–	3521-15.00X2.0DP

powercoil® wire thread insert system

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

MF

METRIC FINE

MM	MM	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
16.00	1.50	1.0D	16.00MM	5	3521-16.00X1.0DP	–	–
16.00	1.50	1.5D	24.00MM	5	–	3521-16.00X1.5DP	–
16.00	1.50	2.0D	32.00MM	5	–	–	3521-16.00X2.0DP
18.00	2.00	1.0D	18.00MM	5	3521-18.00X1.0DP	–	–
18.00	2.00	1.5D	27.00MM	5	–	3521-18.00X1.5DP	–
18.00	2.00	2.0D	36.00MM	5	–	–	3521-18.00X2.0DP
18.00	1.50	1.0D	18.00MM	5	3523-18.00X1.0DP	–	–
18.00	1.50	1.5D	27.00MM	5	–	3523-18.00X1.5DP	–
18.00	1.50	2.0D	36.00MM	5	–	–	3523-18.00X2.0DP
20.00	2.00	1.0D	20.00MM	5	3521-20.00X1.0DP	–	–
20.00	2.00	1.5D	30.00MM	5	–	3521-20.00X1.5DP	–
20.00	2.00	2.0D	40.00MM	5	–	–	3521-20.00X2.0DP
20.00	1.50	1.0D	20.00MM	5	3523-20.00X1.0DP	–	–
20.00	1.50	1.5D	30.00MM	5	–	3523-20.00X1.5DP	–
20.00	1.50	2.0D	40.00MM	5	–	–	3523-20.00X2.0DP
20.00	1.25	1.5D	30.00MM	5	–	3524-20.00X1.5DP	–
22.00	2.00	1.0D	22.00MM	3	3521-22.00X1.0DP	–	–
22.00	2.00	1.5D	33.00MM	3	–	3521-22.00X1.5DP	–
22.00	2.00	2.0D	44.00MM	3	–	–	3521-22.00X2.0DP
22.00	1.50	1.0D	22.00MM	3	3523-22.00X1.0DP	–	–
22.00	1.50	1.5D	33.00MM	3	–	3523-22.00X1.5DP	–
22.00	1.50	2.0D	44.00MM	3	–	–	3523-22.00X2.0DP
24.00	2.00	1.0D	24.00MM	3	3521-24.00X1.0DP	–	–
24.00	2.00	1.5D	36.00MM	3	–	3521-24.00X1.5DP	–
24.00	2.00	2.0D	48.00MM	3	–	–	3521-24.00X2.0DP
24.00	1.50	1.0D	24.00MM	3	3523-24.00X1.0DP	–	–
24.00	1.50	1.5D	36.00MM	3	–	3523-24.00X1.5DP	–
24.00	1.50	2.0D	48.00MM	3	–	–	3523-24.00X2.0DP

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

SPARK PLUG

MM	MM	LENGTH	#	0.339" PART #	1/2" PART #	3/4" PART #
10.00	1.00	0.339"	10	3522-10.00X.339P	–	–
10.00	1.00	1/2"	10	–	3522-10.00X1/2P	–
12.00	1.25	1/2"	10	–	3522-12.00X1/2P	–
12.00	1.25	3/4"	10	–	–	3522-12.00X3/4P
18.00	1.25	1/2"	10	–	3522-18.00X1/2P	–

SPARK PLUG

MM	MM	LENGTH	#	3/8" PART #	7/16" PART #	1/2" PART #	3/4" PART #
14.00	1.25	3/8"	10	3522-14.00X3/8P	–	–	–
14.00	1.25	7/16"	10	–	3522-14.00X7/16P	–	–
14.00	1.25	1/2"	10	–	–	3522-14.00X1/2P	–
14.00	1.25	3/4"	10	–	–	–	3522-14.00X3/4P

SPARK PLUG

MM	MM	LENGTH	#	8.4mm PART #	12.4mm PART #	16.4mm PART #
14	1.25	8.4MM	10	3522-14.00X8.4P	–	–
14	1.25	12.4MM	10	–	3522-14.00X12.4P	–
14	1.25	16.4MM	10	–	–	3522-14.00X16.4P

powercoil® wire thread insert system

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

UNC

UNC

INCH	TPI	INSTALLED LENGTH		#	PART # 1.0D	PART # 1.5D	PART # 2.0D
2G	56	1.0D	0.09"	10	3532-2GX1.0DP	–	–
2G	56	1.5D	0.13"	10	–	3532-2GX1.5DP	–
2G	56	2.0D	0.17"	10	–	–	3532-2GX2.0DP
3G	48	1.0D	0.10"	10	3532-3GX1.0DP	–	–
3G	48	1.5D	0.15"	10	–	3532-3GX1.5DP	–
3G	48	2.0D	0.20"	10	–	–	3532-3GX2.0DP
4G	40	1.0D	0.11"	10	3532-4GX1.0DP	–	–
4G	40	1.5D	0.17"	10	–	3532-4GX1.5DP	–
4G	40	2.0D	0.22"	10	–	–	3532-4GX2.0DP
5G	40	1.0D	0.13"	10	3532-5GX1.0DP	–	–
5G	40	1.5D	0.19"	10	–	3532-5GX1.5DP	–
5G	40	2.0D	0.25"	10	–	–	3532-5GX2.0DP
6G	32	1.0D	0.14"	10	3532-6GX1.0DP	–	–
6G	32	1.5D	0.21"	10	–	3532-6GX1.5DP	–
6G	32	2.0D	0.28"	10	–	–	3532-6GX2.0DP
8G	32	1.0D	0.16"	10	3532-8GX1.0DP	–	–
8G	32	1.5D	0.25"	10	–	3532-8GX1.5DP	–
8G	32	2.0D	0.33"	10	–	–	3532-8GX2.0DP
10G	24	1.0D	0.19"	10	3532-10GX1.0DP	–	–
10G	24	1.5D	0.29"	10	–	3532-10GX1.5DP	–
10G	24	2.0D	0.38"	10	–	–	3532-10GX2.0DP
12G	24	1.0D	0.22"	10	3532-12GX1.0DP	–	–
12G	24	1.5D	0.32"	10	–	3532-12GX1.5DP	–
12G	24	2.0D	0.43"	10	–	–	3532-12GX2.0DP
1/4	20	1.0D	0.25"	10	3532-1/4X1.0DP	–	–
1/4	20	1.5D	0.38"	10	–	3532-1/4X1.5DP	–
1/4	20	2.0D	0.50"	10	–	–	3532-1/4X2.0DP
5/16	18	1.0D	0.31"	10	3532-5/16X1.0DP	–	–
5/16	18	1.5D	0.47"	10	–	3532-5/16X1.5DP	–
5/16	18	2.0D	0.63"	10	–	–	3532-5/16X2.0DP
3/8	16	1.0D	0.38"	10	3532-3/8X1.0DP	–	–
3/8	16	1.5D	0.56"	10	–	3532-3/8X1.5DP	–
3/8	16	2.0D	0.75"	10	–	–	3532-3/8X2.0DP
7/16	14	1.0D	0.44"	10	3532-7/16X1.0DP	–	–
7/16	14	1.5D	0.66"	10	–	3532-7/16X1.5DP	–
7/16	14	2.0D	0.88"	10	–	–	3532-7/16X2.0DP
1/2	13	1.0D	0.50"	10	3532-1/2X1.0DP	–	–
1/2	13	1.5D	0.75"	10	–	3532-1/2X1.5DP	–
1/2	13	2.0D	1.00"	10	–	–	3532-1/2X2.0DP
9/16	12	1.0D	0.56"	5	3532-9/16X1.0DP	–	–
9/16	12	1.5D	0.84"	5	–	3532-9/16X1.5DP	–
9/16	12	2.0D	1.13"	5	–	–	3532-9/16X2.0DP
5/8	11	1.0D	0.63"	5	3532-5/8X1.0DP	–	–
5/8	11	1.5D	0.94"	5	–	3532-5/8X1.5DP	–
5/8	11	2.0D	1.25"	5	–	–	3532-5/8X2.0DP
3/4	10	1.0D	0.75"	5	3532-3/4X1.0DP	–	–
3/4	10	1.5D	1.13"	5	–	3532-3/4X1.5DP	–
3/4	10	2.0D	1.50"	5	–	–	3532-3/4X2.0DP
7/8	9	1.0D	0.88"	3	3532-7/8X1.0DP	–	–
7/8	9	1.5D	1.31"	3	–	3532-7/8X1.5DP	–
7/8	9	2.0D	1.75"	3	–	–	3532-7/8X2.0DP
1	8	1.0D	1.00"	3	3532-1X1.0DP	–	–
1	8	1.5D	1.50"	3	–	3532-1X1.5DP	–
1	8	2.0D	2.00"	3	–	–	3532-1X2.0DP

CROSSROAD DISTRIBUTOR SOURCE

UNF

GROUP	PCRP
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

UNF

INCH	TPI	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
3G	56	1.0D	0.10"	10	3534-3GX1.0DP	–	–
3G	56	1.5D	0.15"	10	–	3534-3GX1.5DP	–
3G	56	2.0D	0.20"	10	–	–	3534-3GX2.0DP
4G	48	1.0D	0.11"	10	3534-4GX1.0DP	–	–
4G	48	1.5D	0.17"	10	–	3534-4GX1.5DP	–
4G	48	2.0D	0.22"	10	–	–	3534-4GX2.0DP
6G	40	1.0D	0.14"	10	3534-6GX1.0DP	–	–
6G	40	1.5D	0.21"	10	–	3534-6GX1.5DP	–
6G	40	2.0D	0.28"	10	–	–	3534-6GX2.0DP
8G	36	1.0D	0.16"	10	3534-8GX1.0DP	–	–
8G	36	1.5D	0.25"	10	–	3534-8GX1.5DP	–
8G	36	2.0D	0.33"	10	–	–	3534-8GX2.0DP
10G	32	1.0D	0.19"	10	3534-10GX1.0DP	–	–
10G	32	1.5D	0.29"	10	–	3534-10GX1.5DP	–
10G	32	2.0D	0.38"	10	–	–	3534-10GX2.0DP
12G	28	1.0D	0.22"	10	3534-12GX1.0DP	–	–
12G	28	1.5D	0.32"	10	–	3534-12GX1.5DP	–
12G	28	2.0D	0.43"	10	–		3534-12GX2.0DP
1/4	32	1.5D	0.38"	10	–	3535-1/4X1.5DP	–
1/4	28	1.0D	0.25"	10	3534-1/4X1.0DP	–	–
1/4	28	1.5D	0.38"	10	–	3534-1/4X1.5DP	–
1/4	28	2.0D	0.50"	10	–	–	3534-1/4X2.0DP
1/4	24	1.0D	0.25"	10	3534-1/4X1.0DP	–	–
1/4	24	1.5D	0.38"	10	–	3534-1/4X1.5DP	–
1/4	24	2.0D	0.50"	10	–	–	3534-1/4X2.0DP
5/16	24	1.0D	0.31"	10	3534-5/16X1.0DP	–	–
5/16	24	1.5D	0.47"	10	–	3534-5/16X1.5DP	–
5/16	24	2.0D	0.62"	10	–	–	3534-5/16X2.0DP
3/8	24	1.0D	0.38"	10	3534-3/8X1.0DP	–	–
3/8	24	1.5D	0.57"	10	–	3534-3/8X1.5DP	–
3/8	24	2.0D	0.76"	10	–	–	3534-3/8X2.0DP
7/16	20	1.0D	0.44"	10	3534-7/16X1.0DP	–	–
7/16	20	1.5D	0.66"	10	–	3534-7/16X1.5DP	–
7/16	20	2.0D	0.88"	10	–		3534-7/16X2.0DP
7/16	16	1.5D	0.66"	10	–	3534-7/16X1.5DP	–
1/2	20	1.0D	0.50"	10	3534-1/2X1.0DP	–	–
1/2	20	1.5D	0.75"	10	–	3534-1/2X1.5DP	–
1/2	20	2.0D	1.00"	10	–	–	3534-1/2X2.0DP
9/16	18	1.0D	0.56"	5	3534-9/16X1.0DP	–	–
9/16	18	1.5D	0.84"	5	–	3534-9/16X1.5DP	–
9/16	18	2.0D	1.12"	5	–	–	3534-9/16X2.0DP
5/8	18	1.0D	0.63"	5	3534-5/8X1.0DP	–	–
5/8	18	1.5D	0.95"	5	–	3534-5/8X1.5DP	–
5/8	18	2.0D	1.26"	5	–	–	3534-5/8X2.0DP
3/4	16	1.0D	0.75"	5	3534-3/4X1.0DP	–	–
3/4	16	1.5D	1.13"	5	–	3534-3/4X1.5DP	–
3/4	16	2.0D	1.50"	5	–	–	3534-3/4X2.0DP
7/8	14	1.0D	0.88"	3	3534-7/8X1.0DP	–	–
7/8	14	1.5D	1.32"	3	–	3534-7/8X1.5DP	–
7/8	14	2.0D	1.76"	3	–	–	3534-7/8X2.0DP
1	14	1.0D	1.00"	3	3535-1X1.0DP	–	–
1	14	1.5D	1.50"	3	–	3535-1X1.5DP	–
1	14	2.0D	2.00"	3	–	–	3535-1X2.0DP
1	12	1.0D	1.00"	3	3534-1X1.0DP	–	–
1	12	1.5D	1.50"	3	–	3534-1X1.5DP	–
1	12	2.0D	2.00"	3	–	–	3534-1X2.0DP

powercoil® wire thread insert system

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

MERCHANDISER	PART #
POWER COIL HANG SELL MERCHANDISER	3500-D1

CONTENTS

#	MM / INCH	PART #	PART #
	METRIC COARSE		
1	4 x 0.7	3520-4.00K	3520-4.00 x 1.5DP
1	5 x 0.8	3520-5.00K	3520-5.00 x 1.5DP
1	6 x 1.0	3520-6.00K	3520-6.00 x 1.5DP
1	6 x 1.0	–	3520-6.00 x 2.0DP
1	8 x 1.25	3520-8.00K	3520-8.00 x 1.5DP
1	8 x 1.25	–	3520-8.00 x 2.0DP
1	10 x 1.5	3520-10.00K	3520-10.00 x 1.5DP
1	12 x 1.75	3520-12.00K	3520-12.00 x 1.5DP
1	12 x 1.75	–	3520-12.00 x 2.0DP
1	16 x 2.0	3520-16.00K	3520-16.00 x 1.5DP
1	10 x 1.25	3521-10.00K	3521-10.00 x 1.5DP
1	12 x 1.5	3521-12.00K	3521-12.00 x 1.5DP
	SPARK PLUG		
1	12 x 1.25	3522-12.00K	3522-12.00 x 1/2P
1	12 x 1.25	–	3522-12.00 x 3/4P
1	14 x 1.25	3522-14.00K	3522-14.00 x 3/8P
1	14 x 1.25	–	3522-14.00 x 1/2P
1	14 x 1.25	–	3522-14.00 x 3/4P
	UNC		
1	1/4 x 20	3532-1/4K	3532-1/4 x 1.5DP
1	5/16 x 18	3532-5/16K	3532-5/16 x 1.5DP
1	3/8 x 16	3532-3/8K	3532-3/8 x 1.5DP
1	3/8 x 16	–	3532-3/8 x 2.0DP
1	7/16 x 14	3532-7/16K	3532-7/16 x 1.5DP
1	1/2 x 13	3532-1/2K	3532-1/2 x 1.5DP
1	5/8 x 11	3532-5/8K	3532-5/8 x 1.5DP
1	3/4 x 10	3532-3/4K	3532-3/4 x 1.5DP
	UNF		
1	1/4 x 28	3534-1/4K	3534-1/4 x 1.5DP
1	5/16 x 24	3534-5/16K	3534-5/16 x 1.5DP
1	3/8 x 24	3534-3/8K	3534-3/8 x 1.5DP
1	7/16 x 20	3534-7/16K	3534-7/16 x 1.5DP
1	1/2 x 20	3534-1/2K	3534-1/2 x 1.5DP
	BSW		
1	1/2 x 12	3528-1/2K	3528-1/2 x 1.5DP

Picture is representative of merchandiser appearance. Actual contents as listed.

PowerCoil bench merchandisers are double sided units that
display thread repair kits on one side and replacement insert packets on the other.

GROUP	PCRK
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

MERCHANDISER	PART #
POWERCOIL BENCH MERCHANDISER	3500-CS1

CONTENTS

#	MM / INCH	PART #	PART #
	METRIC COARSE		
1	5 x 0.8	3520-5.00K	3520-5.00 x 1.5DP
1	6 x 1.0	3520-6.00K	3520-6.00 x 1.0DP
1	6 x 1.0	–	3520-6.00 x 1.5DP
1	6 x 1.0	–	3520-6.00 x 2.0DP
1	8 x 1.25	3520-8.00K	3520-8.00 x 1.0DP
1	8 x 1.25	–	3520-8.00 x 1.5DP
1	8 x 1.25	–	3520-8.00 x 2.0DP
1	10 x 1.5	3520-10.00K	3520-10.00 x 1.5DP
1	10 x 1.5	–	3520-10.00 x 2.0DP
1	12 x 1.75	3520-12.00K	3520-12.00 x 1.5DP
1	16 x 2.0	3520-16.00K	3520-16.00 x 1.5DP
	SPARK PLUG		
1	14 x 1.25	3522-14.00K	3522-14.00 x 3/8P
1	14 x 1.25	–	3522-14.00 x 1/2P
1	14 x 1.25	–	3522-14.00 x 3/4P

MERCHANDISER	PART #
POWERCOIL HANG SELL MERCHANDISER	3500-CS2

CONTENTS

#	MM / INCH	PART #	PART #
	METRIC COARSE		
1	6 x 1.0	3520-6.00K	3520-6.00 x 1.0DP
1	6 x 1.0	–	3520-6.00 x 1.5DP
1	6 x 1.0	–	3520-6.00 x 2.0DP
1	8 x 1.25	3520-8.00K	3520-8.00 x 1.0DP
1	8 x 1.25	–	3520-8.00 x 1.5DP
1	8 x 1.25	–	3520-8.00 x 2.0DP
1	10 x 1.5	3520-10.00K	3520-10.00 x 1.5DP
1	12 x 1.75	3520-12.00K	3520-12.00 x 1.5DP
	UNC		
1	1/4 x 20	3532-1/4K	3532-1/4 x 1.5DP
1	5/16 x 18	3532-5/16K	3532-5/16 x 1.5DP
1	3/8 x 16	3532-3/8K	3532-3/8 x 1.5DP
1	3/8 x 16	–	3532-3/8 x 2.0DP
1	1/2 x 13	3532-1/2K	3532-1/2 x 1.5DP

CROSSROAD DISTRIBUTOR SOURCE

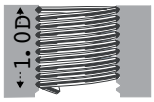
MC

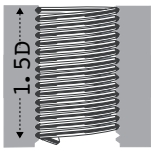
powercoil® wire thread insert system

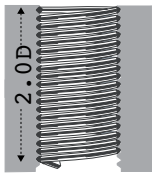
GROUP	PCWI
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

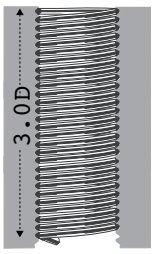
CROSSROAD DISTRIBUTOR SOURCE

MC

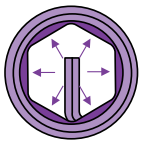








METRIC COARSE		1.0D BULK INSERTS		1.5D BULK INSERTS		2.0D BULK INSERTS		2.5D BULK INSERTS		3.0D BULK INSERTS	
D			1.0D		1.5D		2.0D		2.5D		3.0D
MM	MM	MM	PART #	MM	PART #	MM	PART #	MM	PART #	MM	PART #
2.00	0.40	2.00	3520-2.00X1.0D	3.00	3520-2.00X1.5D	4.00	3520-2.00X2.0D	5.00	3520-2.00X2.5D	6.00	3520-2.00X3.0D
2.20	0.45	2.20	3520-2.20X1.0D	3.30	3520-2.00X1.5D	4.40	3520-2.20X2.0D	5.50	3520-2.20X2.5D	6.60	3520-2.20X3.0D
2.50	0.45	2.50	3520-2.50X1.0D	3.75	3520-2.50X1.5D	5.00	3520-2.50X2.0D	6.25	3520-2.50X2.5D	7.50	3520-2.50X3.0D
3.00	0.50	3.00	3520-3.00X1.0D	4.50	3520-3.00X1.5D	6.00	3520-3.00X2.0D	7.50	3520-3.00X2.5D	9.00	3520-3.00X3.0D
3.50	0.60	3.50	3520-3.50X1.0D	5.25	3520-3.50X1.5D	7.00	3520-3.50X2.0D	8.75	3520-3.50X2.5D	10.50	3520-3.50X3.0D
4.00	0.70	4.00	3520-4.00X1.0D	6.00	3520-4.00X1.5D	8.00	3520-4.00X2.0D	10.00	3520-4.00X2.5D	12.00	3520-4.00X3.0D
5.00	0.80	5.00	3520-5.00X1.0D	7.50	3520-5.00X1.5D	10.00	3520-5.00X2.0D	12.50	3520-5.00X2.5D	15.00	3520-5.00X3.0D
6.00	1.00	6.00	3520-6.00X1.0D	9.00	3520-6.00X1.5D	12.00	3520-6.00X2.0D	15.00	3520-6.00X2.5D	18.00	3520-6.00X3.0D
7.00	1.00	7.00	3520-7.00X1.0D	10.50	3520-7.00X1.5D	14.00	3520-7.00X2.0D	17.50	3520-7.00X2.5D	21.00	3520-7.00X3.0D
8.00	1.25	8.00	3520-8.00X1.0D	12.00	3520-7.00X1.5D	16.00	3520-8.00X2.0D	20.00	3520-8.00X2.5D	24.00	3520-8.00X3.0D
9.00	1.25	9.00	3520-9.00X1.0D	13.50	3520-9.00X1.5D	18.00	3520-9.00X2.0D	22.50	3520-9.00X2.5D	27.00	3520-9.00X3.0D
10.00	1.50	10.00	3520-10.00X1.0D	15.00	3520-10.00X1.5D	20.00	3520-10.00X2.0D	25.00	3520-10.00X2.5D	30.00	3520-10.00X3.0D
11.00	1.50	11.00	3520-11.00X1.0D	16.50	3520-11.00X1.5D	22.00	3520-11.00X2.0D	27.50	3520-11.00X2.5D	33.00	3520-11.00X3.0D
12.00	1.75	12.00	3520-12.00X1.0D	18.00	3520-12.00X1.5D	24.00	3520-12.00X2.0D	30.00	3520-12.00X2.5D	36.00	3520-12.00X3.0D
13.00	1.75	13.00	3520-13.00X1.0D	19.50	3520-13.00X1.5D	26.00	3520-13.00X2.0D				
14.00	2.00	14.00	3520-14.00X1.0D	21.00	3520-14.00X1.5D	28.00	3520-14.00X2.0D	35.00	3520-14.00X2.5D	42.00	3520-14.00X3.0D
15.00	2.00	15.00	3520-15.00X1.0D	22.50	3520-15.00X1.5D	30.00	3520-15.00X2.0D				
16.00	2.00	16.00	3520-16.00X1.0D	24.00	3520-16.00X1.5D	32.00	3520-16.00X2.0D	40.00	3520-16.00X2.5D	48.00	3520-16.00X3.0D
18.00	2.50	18.00	3520-18.00X1.0D	27.00	3520-18.00X1.5D	36.00	3520-18.00X2.0D	45.00	3520-18.00X2.5D	54.00	3520-18.00X3.0D
20.00	2.50	20.00	3520-20.00X1.0D	30.00	3520-20.00X1.5D	40.00	3520-20.00X2.0D	50.00	3520-20.00X2.5D	60.00	3520-20.00X3.0D
22.00	2.50	22.00	3520-22.00X1.0D	33.00	3520-22.00X1.5D	44.00	3520-22.00X2.0D	55.00	3520-22.00X2.5D	66.00	3520-22.00X3.0D
24.00	3.00	24.00	3520-24.00X1.0D	36.00	3520-24.00X1.5D	48.00	3520-24.00X2.0D	60.00	3520-24.00X2.5D	72.00	3520-24.00X3.0D
27.00	3.00			40.50	3520-27.00X1.5D						
30.00	3.50			45.00	3520-30.00X1.5D						
33.00	3.50			49.50	3520-33.00X1.5D						
36.00	4.00			54.00	3520-36.00X1.5D						



Screw Locking Wire Thread Inserts

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 while retaining a measurable level of prevailing torque.

Note: It is recommended that only close fit plated or lubricated bolts or screws are used with screw locking inserts.

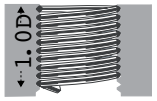
Call for the latest pricing and availability.

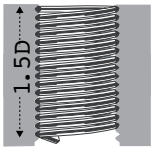
GROUP	PCWI
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

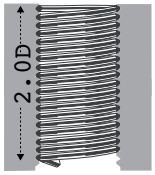
METRIC FINE		1.0D BULK INSERT		1.5D BULK INSERTS		2.0D BULK INSERTS		2.5D BULK INSERTS		3.0D BULK INSERTS	
D	M		1.0D		1.5D		2.0D		2.5D		3.0D
MM	MM	MM	PART #		PART #		PART #		PART #		PART #
6.00	0.75	6.00	3521-6.00X1.0D	9.00	3521-6.00X1.5D	12.00	3521-6.00X2.0D	15.00	3521-6.00X2.5D	18.00	3521-6.00X3.0D
8.00	1.00	8.00	3521-8.00X1.0D	12.00	3521-8.00X1.5D	16.00	3521-8.00X2.0D	20.00	3521-8.00X2.5D	24.00	3521-8.00X3.0D
8.00	0.75	8.00	3523-8.00X1.0D	12.00	3523-8.00X1.5D	16.00	3523-8.00X2.0D	20.00	3523-8.00X2.5D	24.00	3523-8.00X3.0D
9.00	1.00	9.00	3521-9.00X1.0D	13.50	3521-9.00X1.5D	18.00	3521-9.00X2.0D	22.50	3521-9.00X2.5D	27.00	3521-9.00X3.0D
10.00	1.25	10.00	3521-10.00X1.0D	15.00	3521-10.00X1.5D	20.00	3521-10.00X2.0D	25.00	3521-10.00X2.5D	30.00	3521-10.00X3.0D
10.00	1.00	10.00	3523-10.00X1.0D	15.00	3523-10.00X1.5D	20.00	3523-10.00X2.0D	25.00	3523-10.00X2.5D	30.00	3523-10.00X3.0D
11.00	1.25	11.00	3521-11.00X1.0D	16.50	3521-11.00X1.5D	22.00	3521-11.00X2.0D	27.50	3521-11.00X2.5D	33.00	3521-11.00X3.0D
11.00	1.00	11.00	3523-11.00X1.0D	16.50	3523-11.00X1.5D	22.00	3523-11.00X2.0D	27.50	3523-11.00X2.5D	33.00	3523-11.00X3.0D
12.00	1.50	12.00	3521-12.00X1.0D	18.00	3521-12.00X1.5D	24.00	3521-12.00X2.0D	30.00	3521-12.00X2.5D	36.00	3521-12.00X3.0D
12.00	1.25	12.00	3523-12.00X1.0D	18.00	3523-12.00X1.5D	24.00	3523-12.00X2.0D	30.00	3523-12.00X2.5D	36.00	3523-12.00X3.0D
12.00	1.00	12.00	3524-12.00X1.0D	18.00	3524-12.00X1.5D	24.00	3524-12.00X2.0D	30.00	3524-12.00X2.5D	36.00	3524-12.00X3.0D
13.00	1.50	13.00	3521-13.00X1.0D	19.50	3521-13.00X1.5D	26.00	3521-13.00X2.0D				
13.00	1.25	13.00	3523-13.00X1.0D	19.50	3523-13.00X1.5D	26.00	3523-13.00X2.0D				
14.00	1.50	14.00	3521-14.00X1.0D	21.00	3521-14.00X1.5D	28.00	3521-14.00X2.0D	35.00	3521-14.00X2.5D	42.00	3521-14.00X3.0D
14.00	1.25	14.00	3523-14.00X1.0D	21.00	3523-14.00X1.5D	28.00	3523-14.00X2.0D	35.00	3523-14.00X2.5D	42.00	3523-14.00X3.0D
14.00	1.00	14.00	3524-14.00X1.0D	21.00	3524-14.00X1.5D	28.00	3524-14.00X2.0D	35.00	3524-14.00X2.5D	42.00	3524-14.00X3.0D
15.00	1.50	15.00	3521-15.00X1.0D	22.50	3521-15.00X1.5D	30.00	3521-15.00X2.0D				
16.00	1.50	16.00	3521-16.00X1.0D	24.00	3521-16.00X1.5D	32.00	3521-16.00X2.0D	40.00	3521-16.00X2.5D	48.00	3521-16.00X3.0D
18.00	2.00	18.00	3521-18.00X1.0D	27.00	3521-18.00X1.5D	36.00	3521-18.00X2.0D	45.00	3521-18.00X2.5D	54.00	3521-18.00X3.0D
18.00	1.50	18.00	3523-18.00X1.0D	27.00	3523-18.00X1.5D	36.00	3523-18.00X2.0D	45.00	3523-18.00X2.5D	54.00	3521-20.00X3.0D
20.00	2.00	20.00	3521-20.00X1.0D	30.00	3521-20.00X1.5D	40.00	3523-20.00X2.0D	50.00	3521-20.00X2.5D	60.00	3521-20.00X3.0D
20.00	1.50	20.00	3523-20.00X1.0D	30.00	3523-20.00X1.5D	40.00	3523-20.00X2.0D	50.00	3523-20.00X2.5D	60.00	3523-20.00X3.0D
22.00	2.00	22.00	3521-22.00X1.0D	33.00	3521-22.00X1.5D	44.00	3521-22.00X2.0D	55.00	3521-22.00X2.5D	66.00	3521-22.00X3.0D
22.00	1.50	22.00	3523-22.00X1.0D	33.00	3523-22.00X1.5D	44.00	3523-22.00X2.0D	55.00	3523-22.00X2.5D	66.00	3523-22.00X3.0D
24.00	2.00	24.00	3521-24.00X1.0D	36.00	3521-24.00X1.5D	48.00	3521-24.00X2.0D	60.00	3521-24.00X2.5D	72.00	3521-24.00X3.0D
24.00	1.50	24.00	3523-24.00X1.0D	36.00	3523-24.00X1.5D	48.00	3523-24.00X2.0D	60.00	3523-24.00X2.5D	72.00	3523-24.00X3.0D
26.00	1.50	39.00		39.00	3523-26.00X1.5D						
27.00	2.00	40.50		40.50	3521-27.00X1.5D						
27.00	1.50	40.50		40.50	3523-27.00X1.5D						
28.00	1.50	42.00		42.00	3523-28.00X1.5D						
30.00	2.00	45.00		45.00	3521-30.00X1.5D						
30.00	1.50	45.00		45.00	3523-30.00X1.5D						
33.00	2.00	49.50		49.50	3521-33.00X1.5D						
36.00	3.00	54.00		54.00	3521-36.00X1.5D						
36.00	2.00	54.00		54.00	3523-36.00X1.5D						
36.00	1.50	54.00		54.00	3524-36.00X1.5D						

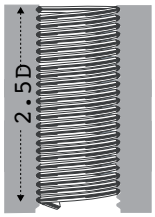
Strip Feed
Free Running Inserts
Page 27

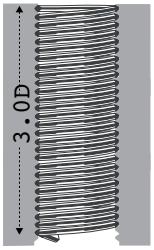
MF









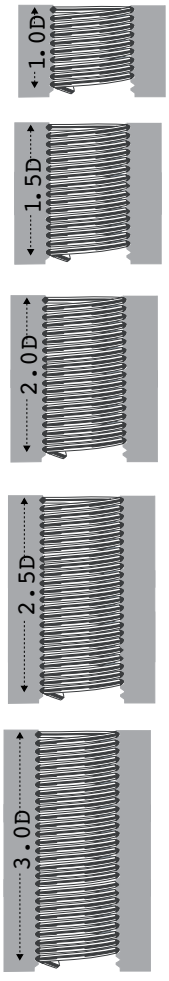


powercoil® wire thread insert system

GROUP	PCWI
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

UNC



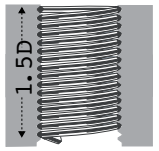
UNC		1.0D BULK INSERT		1.5D BULK INSERTS		2.0D BULK INSERTS		2.5D BULK INSERTS		3.0D BULK INSERTS	
D			1.0D		1.5D		2.0D		2.5D		3.0D
INCH	TPI	INCH	PART #	INCH	PART #	INCH	PART #	INCH	PART #	INCH	PART #
2G	56	0.09	3532-2GX1.0D	0.14	3532-2GX1.5D	0.18	3532-2GX2.0D	0.23	3532-2GX2.5D	0.27	3532-2GX3.0D
3G	48	0.10	3532-3GX1.0D	0.15	3532-3GX1.5D	0.20	3532-3GX2.0D				
4G	40	0.11	3532-4GX1.0D	0.17	3532-4GX1.5D	0.22	3532-4GX2.0D	0.25	3532-4GX2.5D	0.33	3532-4GX3.0D
5G	40	0.13	3532-5GX1.0D	0.20	3532-5GX1.5D	0.26	3532-5GX2.0D	0.28	3532-5GX2.5D	0.39	3532-5GX3.0D
6G	32	0.14	3532-6GX1.0D	0.21	3532-6GX1.5D	0.28	3532-6GX2.0D	0.33	3532-6GX2.5D	0.42	3532-6GX3.0D
8G	32	0.16	3532-8GX1.0D	0.24	3532-8GX1.5D	0.32	3532-8GX2.0D	0.35	3532-8GX2.5D	0.48	3532-8GX3.0D
10G	24	0.19	3532-10GX1.0D	0.29	3532-10GX1.5D	0.38	3532-10GX2.0D	0.40	3532-10GX2.5D	0.57	3532-10GX3.0D
12G	24	0.22	3532-12GX1.0D	0.33	3532-12GX1.5D	0.44	3532-12GX2.0D	0.48	3532-12GX2.5D	0.66	3532-12GX3.0D
1/4	20	0.25	3532-1/4X1.0D	0.38	3532-1/4X1.5D	0.50	3532-1/4X2.0D	0.55	3532-1/4X2.5D	0.75	3532-1/4X3.0D
5/16	18	0.31	3532-5/16X1.0D	0.47	3532-5/16X1.5D	0.62	3532-5/16X2.0D	0.63	3532-5/16X2.5D	0.93	3532-5/16X3.0D
3/8	16	0.38	3532-3/8X1.0D	0.57	3532-3/8X1.5D	0.76	3532-3/8X2.0D	0.78	3532-3/8X2.5D	1.14	3532-3/8X3.0D
7/16	14	0.44	3532-7/16X1.0D	0.66	3532-7/16X1.5D	0.88	3532-7/16X2.0D	0.95	3532-7/16X2.5D	1.32	3532-7/16X3.0D
1/2	13	0.50	3532-1/2X1.0D	0.75	3532-1/2X1.5D	1.00	3532-1/2X2.0D	1.10	3532-1/2X2.5D	1.50	3532-1/2X3.0D
9/16	12	0.56	3532-9/16X1.0D	0.84	3532-9/16X1.5D	1.12	3532-9/16X2.0D	1.25	3532-9/16X2.5D	1.68	3532-9/16X3.0D
5/8	11	0.63	3532-5/8X1.0D	0.95	3532-5/8X1.5D	1.26	3532-5/8X2.0D	1.40	3532-5/8X2.5D	1.89	3532-5/8X3.0D
3/4	10	0.75	3532-3/4X1.0D	1.13	3532-3/4X1.5D	1.50	3532-3/4X2.0D	1.58	3532-3/4X2.5D	2.25	3532-3/4X3.0D
7/8	9	0.88	3532-7/8X1.0D	1.32	3532-7/8X1.5D	1.76	3532-7/8X2.0D	1.88	3532-7/8X2.5D	2.64	3532-7/8X3.0D
1	8	1.00	3532-1X1.0D	1.50	3532-1X1.5D	2.00	3532-1X2.0D	2.50	3532-1X2.5D	3.00	3532-1X3.0D
1-1/8	7			1.70	3532-1.1/8X1.5D						
1-1/4	7			1.88	3532-1.1/4X1.5D						
1-3/8	6			2.07	3532-1.3/8X1.5D						
1-1/2	6			2.25	3532-1.1/2X1.5D						

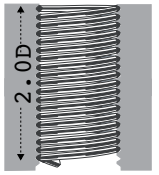
CROSSROAD DISTRIBUTOR SOURCE

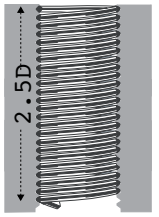
GROUP	PCWI
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

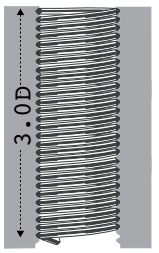
UNF		1.0D BULK INSERT		1.5D BULK INSERTS		2.0D BULK INSERTS		2.5D BULK INSERTS		3.0D BULK INSERTS	
D			1.0D		1.5D		2.0D		2.5D		3.0D
INCH	TPI	INCH	PART #	INCH	PART #	INCH	PART #				
3G	56	0.10	3534-3GX1.0D	0.15	3534-3GX1.5D	0.20	3534-3GX2.0D				
4G	48	0.11	3534-4GX1.0D	0.17	3534-4GX1.5D	0.22	3534-4GX2.0D	0.28	3534-4GX2.5D	0.33	3534-4GX3.0D
6G	40	0.14	3534-6GX1.0D	0.21	3534-6GX1.5D	0.28	3534-6GX2.0D	0.35	3534-6GX2.5D	0.42	3534-6GX3.0D
8G	36	0.16	3534-8GX1.0D	0.24	3534-8GX1.5D	0.32	3534-8GX2.0D	0.40	3534-8GX2.5D	0.48	3534-8GX3.0D
10G	32	0.19	3534-10GX1.0D	0.29	3534-10GX1.5D	0.38	3534-10GX2.0D	0.48	3534-10GX2.5D	0.57	3534-10GX3.0D
12G	28	0.22	3534-12GX1.0D	0.32	3534-12GX1.5D	0.43	3534-12GX2.0D	0.54	3534-12GX2.5D	0.65	3534-12GX3.0D
1/4	28	0.25	3534-1/4X1.0D	0.38	3534-1/4X1.5D	0.50	3534-1/4X2.0D	0.63	3534-1/4X2.5D	0.75	3534-1/4X3.0D
5/16	24	0.31	3534-5/16X1.0D	0.47	3534-5/16X1.5D	0.62	3534-5/16X2.0D	0.78	3534-5/16X2.5D	0.93	3534-5/16X3.0D
3/8	24	0.38	3534-3/8X1.0D	0.57	3534-3/8X1.5D	0.76	3534-3/8X2.0D	0.95	3534-3/8X2.5D	1.14	3534-3/8X3.0D
7/16	20	0.44	3534-7/16X1.0D	0.66	3534-7/16X1.5D	0.88	3534-7/16X2.0D	1.10	3534-7/16X2.5D	1.32	3534-7/16X3.0D
1/2	20	0.50	3534-1/2X1.0D	0.75	3534-1/2X1.5D	1.00	3534-1/2X2.0D	1.25	3534-1/2X2.5D	1.50	3534-1/2X3.0D
9/16	18	0.56	3534-9/16X1.0D	0.84	3534-9/16X1.5D	1.12	3534-9/16X2.0D	1.40	3534-9/16X2.5D	1.68	3534-9/16X3.0D
5/8	18	0.63	3534-5/8X1.0D	0.95	3534-5/8X1.5D	1.26	3534-5/8X2.0D	1.58	3534-5/8X2.5D	1.89	3534-5/8X3.0D
3/4	16	0.75	3534-3/4X1.0D	1.13	3534-3/4X1.5D	1.50	3534-3/4X2.0D	1.88	3534-3/4X2.5D	2.25	3534-3/4X3.0D
7/8	14	0.88	3534-7/8X1.0D	1.32	3534-7/8X1.5D	1.76	3534-7/8X2.0D	2.20	3534-7/8X2.5D	2.64	3534-7/8X3.0D
1	12	1.00	3534-1X1.0D	1.50	3534-1X1.5D	2.00	3534-1X2.0D	2.50	3534-1X2.5D	3.00	3534-1X3.0D
1	14			1.50	3535-1X1.5D						
1-1/8	12			1.70	3534-1.1/8X1.5D						
1-1/4	12			1.88	3534-1.1/4X1.5D						
1-3/8	12			2.07	3534-1.3/8X1.5D						
1-1/2	12			2.25	3534-1.1/2X1.5D						

UNF









powercoil® wire thread insert system

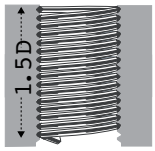
GROUP	PCWI
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

CROSSROAD DISTRIBUTOR SOURCE

SPARK PLUGS- BULK INSERTS

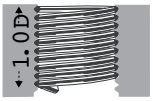
MM DIAMETER	MM PITCH	UNIFIED LENGTH	PART #
10.00	1.00	0.339"	3522-10.00X.339
10.00	1.00	1/2"	3522-10.00X1/2
12.00	1.25	1/2"	3522-12.00X1/2
12.00	1.25	3/4"	3522-12.00X3/4
14.00	1.25	3/8"	3522-14.00X3/8
14.00	1.25	7/16"	3522-14.00X7/16
14.00	1.25	1/2"	3522-14.00X1/2
14.00	1.25	3/4"	3522-14.00X3/4
18.00	1.50	1/2"	3522-18.00X1/2
DIAMETER	PITCH	METRIC LENGTH	
14.00	1.25	8.4MM	3522-14.00X8.4
14.00	1.25	12.4MM	3522-14.00X12.4
14.00	1.25	16.4MM	3522-14.00X16.4

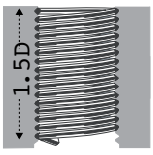
NPT

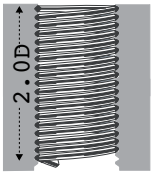


NPT - BULK INSERTS

INCH	TPI	INCH	LENGTH PART #
1/16	27	0.271	3552-1/16X.271
1/8	27	0.273	3552-1/8X.273
1/4	18	0.394	3552-1/4X.394
3/8	18	0.407	3552-3/8X.407
1/2	14	0.534	3552-1/2X.534
3/4	14	0.553	3552-3/4X.553
1	11.5	0.661	3552-1X.661







8-UN - BULK INSERTS

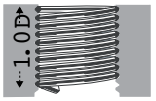
INCH	TPI	INCH	1.0D BULK INSERTS 1.0D PART #	INCH	1.5D BULK INSERTS 1.5D PART #	INCH	2.0D BULK INSERTS 2.0D PART #
1-1/8	8	1.13	3570-1.1/8X1.0D	1.69	3570-1.1/8X1.5D	2.25	3570-1.1/8X2.0D
1-1/4	8	1.25	3570-1.1/4X1.0D	1.88	3570-1.1/4X1.5D	2.50	3570-1.1/4X2.0D
1-3/8	8	1.38	3570-1.3/8X1.0D	2.06	3570-1.3/8X1.5D	2.75	3570-1.3/8X2.0D
1-1/2	8	1.50	3570-1.1/2X1.0D	2.25	3570-1.1/2X1.5D	3.00	3570-1.1/2X2.0D
1-5/8	8	1.63	3570-1.5/8X1.0D	2.44	3570-1.5/8X1.5D	3.25	3570-1.5/8X2.0D
1-3/4	8	1.75	3570-1.3/4X1.0D	2.63	3570-1.3/4X1.5D	3.50	3570-1.3/4X2.0D
1-7/8	8	1.88	3570-1.7/8X1.0D	2.81	3570-1.7/8X1.5D	3.75	3570-1.7/8X2.0D
2	8	2.00	3570-2X1.0D	3.00	3570-2X1.5D	4.00	3570-2X2.0D

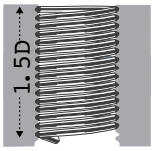
GROUP	PCIR
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

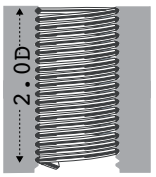
METRIC

MM	MM	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
2.20	0.45	1.0D	2.20MM	1000	3520-2.20X1.0DSF	–	–
2.20	0.45	1.5D	3.30MM	1000	–	3520-2.20X1.5DSF	–
2.20	0.45	2.0D	4.40MM	1000	–	–	3520-2.20X2.0DSF
2.50	0.45	1.0D	2.50MM	1000	3520-2.50X1.0DSF	–	–
2.50	0.45	1.5D	3.75MM	1000	–	3520-2.50X1.5DSF	–
2.50	0.45	2.0D	5.00MM	1000	–	–	3520-2.50X2.0DSF
3.00	0.50	1.0D	3.00MM	1000	3520-3.00X1.0DSF	–	–
3.00	0.50	1.5D	4.50MM	1000	–	3520-3.00X1.5DSF	–
3.00	0.50	2.0D	6.00MM	1000	–	–	3520-3.00X2.0DSF
4.00	0.70	1.0D	4.00MM	1000	3520-4.00X1.0DSF	–	–
4.00	0.70	1.5D	6.00MM	1000	–	3520-4.00X1.5DSF	–
4.00	0.70	2.0D	8.00MM	1000	–	–	3520-4.00X2.0DSF
5.00	0.80	1.0D	5.00MM	1000	3520-5.00X1.0DSF	–	–
5.00	0.80	1.5D	7.50MM	1000	–	3520-5.00X1.5DSF	–
5.00	0.80	2.0D	10.00MM	1000	–	–	3520-5.00X2.0DSF
6.00	1.00	1.0D	6.00MM	500	3520-6.00X1.0DSF	–	–
6.00	1.00	1.5D	9.00MM	500	–	3520-6.00X1.5DSF	–
6.00	1.00	2.0D	12.00MM	500	–	–	3520-6.00X2.0DSF
8.00	1.00	1.0D	8.00MM	250	3521-8.00X1.0DSF	–	–
8.00	1.00	1.5D	12.00MM	250	–	3521-8.00X1.5DSF	–
8.00	1.00	2.0D	16.00MM	250	–	–	3521-8.00X2.0DSF
8.00	1.25	1.0D	8.00MM	250	3520-8.00X1.0DSF	–	–
8.00	1.25	1.5D	12.00MM	250	–	3520-8.00X1.5DSF	–
8.00	1.25	2.0D	16.00MM	250	–	–	3520-8.00X2.0DSF
10.00	1.50	1.0D	10.00MM	250	3520-10.00X1.0DSF	–	–
10.00	1.50	1.5D	15.00MM	250	–	3520-10.00X1.5DSF	–
10.00	1.50	2.0D	20.00MM	250	–	–	3520-10.00X2.0DSF
12.00	1.75	1.0D	12.00MM	125	3520-12.00X1.0DSF	–	–
12.00	1.75	1.5D	18.00MM	125	–	3520-12.00X1.5DSF	–
12.00	1.75	2.0D	24.00MM	125	–	–	3520-12.00X2.0DSF

MC
MF







powercoil® wire thread insert system

UNC & UNF

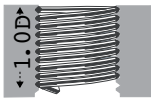
1.0D, 1.5D, 2.0D

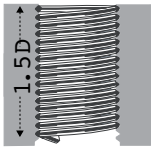
CROSSROAD DISTRIBUTOR SOURCE

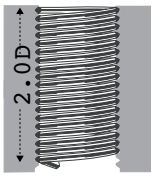
GROUP	PCIR
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING

UNC

UNF







INCH	TPI	INSTALLED LENGTH		#	1.0D PART #	1.5D PART #	2.0D PART #
2G	56	1.0D	0.09"	1000	3532-2GX1.0DSF	–	–
2G	56	1.5D	0.13"	1000	–	3532-2GX1.5DSF	–
2G	56	2.0D	0.17"	1000	–	–	3532-2GX2.0DSF
4G	40	1.0D	0.11"	1000	3532-4GX1.0DSF	–	–
4G	40	1.5D	0.17"	1000	–	3532-4GX1.5DSF	–
4G	40	2.0D	0.22"	1000	–	–	3532-4GX2.0DSF
5G	40	1.0D	0.13"	1000	3532-5GX1.0DSF	–	–
5G	40	1.5D	0.19"	1000	–	3532-5GX1.5DSF	–
5G	40	2.0D	0.25"	1000	–	–	3532-5GX2.0DSF
6G	32	1.0D	0.14"	1000	3532-6GX1.0DSF	–	–
6G	32	1.5D	0.21"	1000	–	3532-6GX1.5DSF	–
6G	32	2.0D	0.28"	1000	–	–	3532-6GX2.0DSF
8G	32	1.0D	0.16"	1000	3532-8GX1.0DSF	–	–
8G	32	1.5D	0.25"	1000	–	3532-8GX1.5DSF	–
8G	32	2.0D	0.33"	1000	–	–	3532-8GX2.0DSF
10G	24	1.0D	0.19"	1000	3532-10GX1.0DSF	–	–
10G	24	1.5D	0.29"	1000	–	3532-10GX1.5DSF	–
10G	24	2.0D	0.38"	1000	–	–	3532-10GX2.0DSF
12G	24	1.0D	0.22"	500	3532-12Gx1.0DSF	–	–
12G	24	1.5D	0.32"	500	–	3532-12GX1.5DSF	–
12G	24	2.0D	0.43"	500	–	–	3532-12GX2.0DSF
1/4	20	1.0D	0.25"	500	3532-1/4X1.0DSF	–	–
1/4	20	1.5D	0.38"	500	–	3532-1/4X1.5DSF	–
1/4	20	2.0D	0.50"	500	–	–	3532-1/4X2.0DSF
5/16	18	1.0D	0.31"	250	3532-5/16X1.0DSF	–	–
5/16	18	1.5D	0.47"	250	–	3532-5/16X1.5DSF	–
5/16	18	2.0D	0.62"	250	–	–	3532-5/16X2.0DSF
3/8	16	1.0D	0.38"	250	3532-3/8X1.0DSF	–	–
3/8	16	1.5D	0.57"	250	–	3532-3/8X1.5DSF	–
3/8	16	2.0D	0.76"	250	–	–	3532-3/8X2.0DSF
UNF							
4G	48	1.0D	0.11"	1000	3534-4GX1.0DSF	–	–
4G	48	1.5D	0.17"	1000	–	3534-4GX1.5DSF	–
4G	48	2.0D	0.22"	1000	–	–	3534-4GX2.0DSF
6G	40	1.0D	0.14"	1000	3534-6GX1.0DSF		
6G	40	1.5D	0.21"	1000	–	3534-6GX1.5DSF	–
6G	40	2.0D	0.28"	1000	–	–	3534-6GX2.0DSF
8G	36	1.0D	0.16"	1000	3534-8GX1.0DSF	–	–
8G	36	1.5D	0.25"	1000	–	3534-8GX1.5DSF	–
8G	36	2.0D	0.33"	1000	–	–	3534-8GX2.0DSF
10G	32	1.0D	0.19"	1000	3534-10GX1.0DSF	–	–
10G	32	1.5D	0.29"	1000	–	3534-10GX1.5DSF	–
10G	32	2.0D	0.38"	1000	–	–	3534-10GX2.0DSF
1/4	28	1.0D	0.25"	500	3534-1/4X1.0DSF	–	–
1/4	28	1.5D	0.38"	500	–	3534-1/4X1.5DSF	–
1/4	28	2.0D	0.50"	500	–	–	3534-1/4X2.0DSF
5/16	24	1.0D	0.31"	250	3534-5/16X1.0DSF	–	–
5/16	24	1.5D	0.47"	250	–	3534-5/16X1.5DSF	–
5/16	24	2.0D	0.62"	250	–	–	3534-5/16X2.0DSF
3/8	24	1.0D	0.38"	250	3534-3/8X1.0DSF	–	–
3/8	24	1.5D	0.57"	250	–	3534-3/8X1.5DSF	–
3/8	24	2.0D	0.76"	250	–	–	3534-3/8X2.0DSF

GROUP	PCTP	PCTP
MATERIAL	HSS	HSSE
TOLERANCE	4H5H	4H5H
TYPE	STI	STI

METRIC COARSE – STI TAPS

							
MM	MM	MM	PART #	PART #	PART #	PART #	PART #
2.00	0.40	44.50	3520-2.00T	3520-2.00I	3520-2.00B	3520-2.00SP	3520-2.00SF
2.20	0.45	44.50	3520-2.20T	3520-2.20I	3520-2.20B	3520-2.20SP	3520-2.20SF
2.50	0.45	48.00	3520-2.50T	3520-2.50I	3520-2.50B	3520-2.50SP	3520-2.50SF
3.00	0.50	53.00	3520-3.00T	3520-3.00I	3520-3.00B	3520-3.00SP	3520-3.00SF
3.50	0.60	53.00	3520-3.50T	3520-3.50I	3520-3.50B	3520-3.50SP	3520-3.50SF
4.00	0.70	58.00	3520-4.00T	3520-4.00I	3520-4.00B	3520-4.00SP	3520-4.00SF
5.00	0.80	66.00	3520-5.00T	3520-5.00I	3520-5.00B	3520-5.00SP	3520-5.00SF
6.00	1.00	72.00	3520-6.00T	3520-6.00I	3520-6.00B	3520-6.00SP	3520-6.00SF
7.00	1.00	72.00	3520-7.00T	3520-7.00I	3520-7.00B	3520-7.00SP	3520-7.00SF
8.00	1.25	80.00	3520-8.00T	3520-8.00I	3520-8.00B	3520-8.00SP	3520-8.00SF
9.00	1.25	85.00	3520-9.00T	3520-9.00I	3520-9.00B	–	–
10.00	1.50	89.00	3520-10.00T	3520-10.00I	3520-10.00B	3520-10.00SP	3520-10.00SF
11.00	1.50	89.00	3520-11.00T	3520-11.00I	3520-11.00B	3520-11.00SP	3520-11.00SF
12.00	1.75	95.00	3520-12.00T	3520-12.00I	3520-12.00B	3520-12.00SP	3520-12.00SF
13.00	1.75	95.00	3520-13.00T	3520-13.00I	3520-13.00B	–	–
14.00	2.00	102.00	3520-14.00T	3520-14.00I	3520-14.00B	3520-14.00SP	3520-14.00SF
15.00	2.00	112.00	3520-15.00T	3520-15.00I	3520-15.00B	–	–
16.00	2.00	112.00	3520-16.00T	3520-16.00I	3520-16.00B	3520-16.00SP	3520-16.00SF
18.00	2.50	118.00	3520-18.00T	3520-18.00I	3520-18.00B	3520-18.00SP	3520-18.00SF
20.00	2.50	118.00	3520-20.00T	3520-20.00I	3520-20.00B	3520-20.00SP	3520-20.00SF
22.00	2.50	130.00	3520-22.00T	3520-22.00I	3520-22.00B	3520-22.00SP	3520-22.00SF
24.00	3.00	138.00	3520-24.00T	3520-24.00I	3520-24.00B	3520-24.00SP	3520-24.00SF
27.00	3.00	151.00	–	3520-27.00I	–	–	–
30.00	3.50	162.00	–	3520-30.00I	–	3520-30.00SP	3520-30.00SF
33.00	3.50	162.00	–	3520-33.00I	–	3520-33.00SP	3520-33.00SF
36.00	4.00	170.00	–	3520-36.00I	–	–	–

CROSSROAD DISTRIBUTOR SOURCE

GROUP	PCTP	PCTP
MATERIAL	HSS	HSSE
TOLERANCE	4H5H	4H5H
TYPE	STI	STI

METRIC FINE – STI TAPS

MM	MM	MM	PART #	PART #	PART #	PART #	PART #
8.00	1.00	80.00	3521-8.00T	3521-8.00I	3521-8.00B	3521-8.00SP	3521-8.00SF
10.00	1.25	85.00	3521-10.00T	3521-10.00I	3521-10.00B	3521-10.00SP	3521-10.00SF
10.00	1.00	85.00	3523-10.00T	3523-10.00I	3523-10.00B	3523-10.00SP	3523-10.00SF
11.00	1.25	88.00	3521-11.00T	3521-11.00I	3521-11.00B	–	–
11.00	1.00	88.00	3523-11.00T	3523-11.00I	3523-11.00B	–	–
12.00	1.50	95.00	3521-12.00T	3521-12.00I	3521-12.00B	3521-12.00SP	3521-12.00SF
12.00	1.25	95.00	3523-12.00T	3523-12.00I	3523-12.00B	3523-12.00SP	3523-12.00SF
12.00	1.00	95.00	3524-12.00T	3524-12.00I	3524-12.00B	–	–
13.00	1.25	95.00	3523-13.00T	3523-13.00I	3523-13.00B	–	–
14.00	1.50	102.00	3521-14.00T	3521-14.00I	3521-14.00B	3521-14.00SP	3521-14.00SF
14.00	1.25	102.00	3523-14.00T	3523-14.00I	3523-14.00B	3523-14.00SP	3523-14.00SF
14.00	1.00	102.00	3524-14.00T	3524-14.00I	3524-14.00B	–	–
15.00	1.50	104.00	3521-15.00T	3521-15.00I	3521-15.00B	–	–
16.00	1.50	104.00	3521-16.00T	3521-16.00I	3521-16.00B	–	–
18.00	2.00	104.00	3521-18.00T	3521-18.00I	3521-18.00B	–	–
18.00	1.50	104.00	3523-18.00T	3523-18.00I	3523-18.00B	–	–
20.00	2.00	113.00	3521-20.00T	3521-20.00I	3521-20.00B	–	–
20.00	1.50	113.00	3523-20.00T	3523-20.00I	3523-20.00B	–	–
22.00	2.00	120.00	3521-22.00T	3521-22.00I	3521-22.00B	–	–
22.00	1.50	120.00	3523-22.00T	3523-22.00I	3523-22.00B	–	–
24.00	2.00	127.00	3521-24.00T	3521-24.00I	3521-24.00B	–	–
24.00	1.50	120.00	3523-24.00T	3523-24.00I	3523-24.00B	–	–
26.00	1.50	127.00	3523-26.00T	3523-26.00I	3523-26.00B	–	–
27.00	2.00	127.00	3521-27.00T	3521-27.00I	3521-27.00B	–	–
27.00	1.50	127.00	3523-27.00T	3523-27.00I	3523-27.00B	–	–
28.00	1.50	127.00	3523-28.00T	3523-28.00I	3523-28.00B	–	–
30.00	2.00	137.00	3521-30.00T	3521-30.00I	3521-30.00B	–	–
30.00	1.50	137.00	3523-30.00T	3523-30.00I	3523-30.00B	–	–
33.00	2.00	144.00	3521-33.00T	3521-33.00I	3521-33.00B	–	–
36.00	3.00	170.00	3521-36.00T	3521-36.00I	3521-36.00B	–	–
36.00	2.00	150.00	3523-36.00T	3523-36.00I	3523-36.00B	–	–
36.00	1.50	150.00	3524-36.00T	3524-36.00I	3524-36.00B	–	–

SPARK PLUG – PILOT NOSE STI TAPS

MM	MM	MM	PART #
6.00	1.00	70.00	3520-6.00PN
8.00	1.25	75.00	3520-8.00PN
10.00	1.50	80.00	3520-10.00PN
10.00	1.00	74.00	3522-10.00PN
12.00	1.25	75.00	3522-12.00PN
14.00	1.25	90.00	3522-14.00PN
18.00	1.50	116.00	3522-18.00PN

GROUP	PCTP	PCTP
MATERIAL	HSS	HSSE
TOLERANCE	3B	3B
TYPE	STI	STI

UNC – STI TAPS

INCH	TPI	MM	PART #	PART #	PART #	PART #	PART #
2G	56	48.00	3532-2GT	3532-2GI	3532-2GB	3532-2GSP	3532-2GSF
3G	48	48.00	3532-3GT	3532-3GI	3532-3GB	3532-3GSP	3532-3GSF
4G	40	53.00	3532-4GT	3532-4GI	3532-4GB	3532-4GSP	3532-4GSF
5G	40	53.00	3532-5GT	3532-5GI	3532-5GB	3532-5GSP	3532-5GSF
6G	32	58.00	3532-6GT	3532-6GI	3532-6GB	3532-6GSP	3532-6GSF
8G	32	62.00	3532-8GT	3532-8GI	3532-8GB	3532-8GSP	3532-8GSF
10G	24	66.00	3532-10GT	3532-10GI	3532-10GB	3532-10GSP	3532-10GSF
12G	24	66.00	3532-12GT	3532-12GI	3532-12GB	3532-12GSP	3532-12GSF
1/4	20	72.00	3532-1/4T	3532-1/4I	3532-1/4B	3532-1/4SP	3532-1/4SF
5/16	18	80.00	3532-5/16T	3532-5/16I	3532-5/16B	3532-5/16SP	3532-5/16SF
3/8	16	85.00	3532-3/8T	3532-3/8I	3532-3/8B	3532-3/8SP	3532-3/8SF
7/16	14	95.00	3532-7/16T	3532-7/16I	3532-7/16B	3532-7/16SP	3532-7/16SF
1/2	13	102.00	3532-1/2T	3532-1/2I	3532-1/2B	3532-1/2SP	3532-1/2SF
9/16	12	112.00	3532-9/16T	3532-9/16I	3532-9/16B	–	–
5/8	11	112.00	3532-5/8T	3532-5/8I	3532-5/8B	3532-5/8SP	3532-5/8SF
3/4	10	118.00	3532-3/4T	3532-3/4I	3532-3/4B	3532-3/4SP	3532-3/4SF
7/8	9	130.00	3532-7/8T	3532-7/8I	3532-7/8B	3532-7/8SP	3532-7/8SF
1	8	138.00	3532-1T	3532-1I	3532-1B	3532-1SP	3532-1SF
1-1/8	7	151.00	3532-1.1/8T	3532-1.1/8I	3532-1.1/8B	–	–
1-1/4	7	162.00	3532-1.1/4T	3532-1.1/4I	3532-1.1/4B	–	–
1-3/8	6	170.00	3532-1.3/8T	3532-1.3/8I	3532-1.3/8B	–	–
1-1/2	6	187.00	3532-1.1/2T	3532-1.1/2I	3532-1.1/2B	–	–

UNF – STI TAPS

INCH	TPI	MM	PART #	PART #	PART #	PART #	PART #
3G	56	48.00	3534-3GT	3534-3GI	3534-3GB	3534-3GSP	3534-3GSF
4G	48	53.00	3534-4GT	3534-4GI	3534-4GB	3534-4GSP	3534-4GSF
6G	40	53.00	3534-6GT	3534-6GI	3534-6GB	3534-6GSP	3534-6GSF
8G	36	62.00	3534-8GT	3534-8GI	3534-8GB	3534-8GSP	3534-8GSF
10G	32	66.00	3534-10GT	3534-10GI	3534-10GB	3534-10GSP	3534-10GSF
12G	28	66.00	3534-12GT	3534-12GI	3534-12GB	3534-12GSP	3534-12GSF
1/4	28	69.00	3534-1/4T	3534-1/4I	3534-1/4B	3534-1/4SP	3534-1/4SF
5/16	24	76.00	3534-5/16T	3534-5/16I	3534-5/16B	3534-5/16SP	3534-5/16SF
3/8	24	82.00	3534-3/8T	3534-3/8I	3534-3/8B	3534-3/8SP	3534-3/8SF
7/16	20	84.00	3534-7/16T	3534-7/16I	3534-7/16B	3534-7/16SP	3534-7/16SF
1/2	20	90.00	3534-1/2T	3534-1/2I	3534-1/2B	3534-1/2SP	3534-1/2SF
9/16	18	104.00	3534-9/16T	3534-9/16I	3534-9/16B	3534-9/16SP	3534-9/16SF
5/8	18	104.00	3534-5/8T	3534-5/8I	3534-5/8B	3534-5/8SP	3534-5/8SF
3/4	16	104.00	3534-3/4T	3534-3/4I	3534-3/4B	3534-3/4SP	3534-3/4SF
7/8	14	120.00	3534-7/8T	3534-7/8I	3534-7/8B	3534-7/8SP	3534-7/8SF
1	12	127.00	3534-1T	3534-1I	3534-1B	3534-1SP	3534-1SF
1	14	127.00	3535-1T	3535-1I	3535-1B	3535-1SP	3535-1SF
1-1/8	12	137.00	3534-1.1/8T	3534-1.1/8I	3534-1.1/8B	–	–
1-1/4	12	144.00	3534-1.1/4T	3534-1.1/4I	3534-1.1/4B	–	–
1-3/8	12	150.00	3534-1.3/8T	3534-1.3/8I	3534-1.3/8B	–	–
1-1/2	12	150.00	3534-1.1/2T	3534-1.1/2I	3534-1.1/2B	–	–

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GROUP	PCTP
MATERIAL	HSS
TOLERANCE	3B
TYPE	STI

NPT – STI TAPS

INCH	TPI	MM	PART #	PART #	PART #
1/8	27	54.00	3552-1/8T	3552-1/8I	3552-1/8B
1/4	18	62.00	3552-1/4T	3552-1/4I	3552-1/4B
3/8	18	65.00	3552-3/8T	3552-3/8I	3552-3/8B
1/2	14	80.00	3552-1/2T	3552-1/2I	3552-1/2B
3/4	14	83.00	3552-3/4T	3552-3/4I	3552-3/4B
1	11.5	95.00	3552-1T	3552-1I	3552-1B

8-UN – STI TAPS

INCH	TPI	MM	PART #	PART #	PART #
1-1/8	8	151.00	3570-1.1/8T	3570-1.1/8I	3570-1.1/8B
1-1/4	8	162.00	3570-1.1/4T	3570-1.1/4I	3570-1.1/4B
1-3/8	8	170.00	3570-1.3/8T	3570-1.3/8I	3570-1.3/8B
1-1/2	8	170.00	3570-1.1/2T	3570-1.1/2I	3570-1.1/2B
1-5/8	8	187.00	3570-1.5/8T	3570-1.5/8I	3570-1.5/8B
1-3/4	8	187.00	3570-1.3/4T	3570-1.3/4I	3570-1.3/4B
1-7/8	8	200.00	3570-1.7/8T	3570-1.7/8I	3570-1.7/8B
2	8	200.00	3570-2T	3570-2I	3570-2B

GROUP	PCIT
USAGE	GENERAL
INSERT TYPE	WIRE THREAD
INSERT STYLE	FREE RUNNING
APPLICATION	LOW VOLUME

HAND INSTALLATION TOOLS – HIT

MC	MF	SPARK	UNC	UNF	BSW	BSF	BA	BSC	NPT	BSP	UN-8	PART #
2X0.40	–	–	–	–	–	–	–	–	–	–	–	3500-HIT2
	–	–	2GX56	–	–	–	–	–	–	–	–	3500-HIT2
	–	–	3GX48	3GX56	–	–	#6	–	–	–	–	3500-HIT3
3X0.50	–	–	4GX40	4GX48	1/8X40	–	–	–	–	–	–	3500-HIT4
–	–	–	5GX40	–	–	–	–	–	–	–	–	3500-HIT4
	–	–	6GX32	6GX40	–	–	#4		–	–	–	3500-HIT5
4X0.70	–	–	8GX32	8GX36	–	–	–	–	–	–	–	3500-HIT6
5X0.80	–	–	12GX24	10GX32	–	3/16X32	#1	–	–	–	–	3500-HIT8
6X1.00	–	–	1/4X20	1/4X28	1/4X20	1/4X26	#0	1/4X26	–	–	–	3500-HIT9
7X1.00	–	–	5/16X18	–	5/16X18	–	–	–	1/16X27	–	–	3500-HIT10
8X1.25	8X1.00	–	–	5/16X24	3/8X16	5/16X22	–	5/16X26	–	–	–	3500-HIT11
9X1.25	10X1.25	10X1.00	3/8X16	3/8X24	–	3/8X20	–	3/8X26	–	–	–	3500-HIT13
9X1.00	10X1.00	–	–	–	–	–	–	–	–	–	–	3500-HIT13
10X1.50	–	–	–	–	–	–	–	–	1/8X27	–	–	3500-HIT13
11X1.50	11X1.25	–	7/16X14	7/16X20	7/16X14	7/16X18	–	7/16X26	–	1/8X28	–	3500-HIT14
–	11X1.00	–	–	–	–	–	–	–	–	–	–	3500-HIT14
12X1.75	12X1.50	10X1.25	1/2X13	1/2X20	1/2X12	1/2X16	–	1/2X26	–	–	–	3500-HIT15
12X1.00	12X1.25	–	–	–	–	–	–	–	–	–	–	3500-HIT15
14X2.00	14X1.00	–	9/16X12	9/16X18	9/16X12	9/16X16	–	–	–	1/4X19	–	3500-HIT16
15X2.00	14X1.50	–	–	–	–	–	–	–	1/4X18	–	–	3500-HIT16
–	–	14X1.25	–	–	–	–	–	–	–	–	–	3500-HIT17
16X2.00	16X1.50	–	5/8X11	5/8X18	5/8X11	5/8X14	–	–	3/8X18	–	–	3500-HIT18
18X2.50	18X2.00	18X1.50	3/4X10	–	3/4X10	3/4X12	–	–	–	3/8X19	–	3500-HIT20
–	18X1.50	–	–	–	–	–	–	–	–	–	–	3500-HIT20
20X2.50	20X2.00	–	–	3/4X16	–	–	–	–	–	–	–	3500-HIT21
–	20X1.50	–	–	–	–	–	–	–	–	–	–	3500-HIT21
22X2.50	22X2.00	–	7/8X9	7/8X14	7/8X9	7/8X11	–	–	1/2X14	–	–	3500-HIT22
–	22X1.50	–	–	–	–	–	–	–	–	–	–	3500-HIT22
24X3.00	24X2.00	–	1X8	1X12	1X8	1X10	–	–	–	1/2X14	–	3500-HIT23
–	24X1.50	–	–	1X14	–	–	–	–	–	5/8X14	–	3500-HIT23
27X3.00	26X1.50	–	–	–	–	–	–	–	3/4X14	3/4X14	–	3500-HIT24
30X3.00	–	–	1.1/8-7	1.1/8-12	–	–	–	–	–	–	1.1/8X8	3500-HIT25
33X3.50	30X2.00	–	1.1/4-7	1.1/4-12	–	–	–	–	–	–	1.1/4X8	3500-HIT26
–	–	–	1.3/8-6	1.3/8-12	–	–	–	–	1X11.5	7/8X14	1.3/8X8	3500-HIT27
–	–	–	–	–	–	–	–	–	–	1X11	–	3500-HIT27
36X4.00	36X2.00		1.1/2-6	1.1/2-12	–	–	–	–	–	–	1.1/2X8	3500-HIT28
–	–	–	–	–	–	–	–	–	–	–	1.5/8X8	3500-HIT28
–	–	–	–	–	–	–	–	–	–	–	1.3/4X8	3500-HIT28
–	–	–	–	–	–	–	–	–	–	–	1.7/8X8	3500-HIT30
–	–	–	–	–	–	–	–	–	–	–	2X8	3500-HIT30

powercoil® wire thread insert system

GROUP	PCIT
USAGE	GENERAL
INSERT TYPE	WIRE THREAD
INSERT STYLE	ALL
APPLICATION	LOW VOLUME

TANG BREAK TOOLS – TB : INSERT REMOVAL TOOLS – RT

MC	MF	SPARK	UNC	UNF	BSW	BSF	BA	BSC	 PART #	 PART #
2X0.40	–	–	–	–	–	–	–	–	3500-TB1	3500-RT1
2.20X0.45	–	–	2GX56	–	–	–	–	–	3500-TB2	3500-RT1
2.50X0.45	–	–	3GX48	3GX56	–	–	#6	–	3500-TB3	3500-RT1
–	–	–	4GX40	4GX48	1/8X40	–	–	–	3500-TB4	3500-RT1
3X0.50	–	–	–	4GX48	–	–	–	–	3500-TB4	3500-RT2
–	–	–	5GX40	–	–	–	–	–	3500-TB4	3500-RT1
3.50X0.60	–	–	–	–	–	–	–	–	3500-TB5	3500-RT2
–	–	–	6GX32	6GX40	–	–	#4	–	3500-TB5	3500-RT1
4X0.70	–	–	–	–	–	3/16X32	–	–	3500-TB6	3500-RT2
–	–	–	8GX32	8GX36	–	–	–	–	3500-TB6	3500-RT1
5X0.80	–	–	10GX24	10GX32	3/16X24	–	#2	–	3500-TB8	3500-RT2
–	–	–	12GX24	12GX28	–	–	–	–	3500-TB8	3500-RT2
6X1.00	–	–	1/4X20	1/4X28	1/4X20	1/4X26	–	1/4X26	3500-TB9	3500-RT2
7X1.00	–	–	–	–	5/16X18	5/16X22	#0	–	3500-TB11	3500-RT2
8X1.25	8X1.00	–	5/16X18	5/16X24	–	–	–	5/16X26	3500-TB12	3500-RT2
9X1.25	9X1.00	10X1.00	–	–	–	–	–	–	3500-TB12	3500-RT2
–	–	–	3/8X16	–	3/8X16	3/8X20	–	–	3500-TB12	3500-RT3
10X1.50	10X1.25	–	–	–	–	–	–	–	3500-TB13	3500-RT2
–	–	–	–	3/8X24	–	–	–	3/8X26	3500-TB13	3500-RT3
–	10X1.00	–	–	–	–	–	–	–	3500-TB13	3500-RT2
11X1.50	11X1.25	–	7/16X14	7/16X20	7/16X14	7/16X18	–	7/16X26	3500-TB14	3500-RT3
–	11X1.00	–	–	–	–	–	–	–	3500-TB14	3500-RT3
12X1.75	12X1.50	10X1.25	1/2X13	1/2X20	1/2X12	1/2X16	–	1/2X26	3500-TB15	3500-RT3
–	12X1.00	12X1.25	–	–	–	–	–	–	3500-TB15	3500-RT3
13X1.75	13X1.50	–	–	–	–	–	–	–	3500-TB15	3500-RT3
–	13X1.25	–	–	–	–	–	–	–	–	3500-RT3
14X2.00	14X1.50	14X1.25	9/16X12	9/16X18	9/16X12	9/16X16	–	–	–	3500-RT3
–	14X1.00	–	–	–	–	–	–	–	–	3500-RT3
15X2.00	15X1.50	–	–	–	–	–	–	–	–	3500-RT3
16X2.00	16X1.50	–	5/8X11	5/8X18	5/8X11	5/8X14	–	–	–	3500-RT3
18X2.50	18X2.00	18X1.50	3/4X10	–	3/4X10	3/4X12	–	–	–	3500-RT3
20X2.50	20X2.00	–	–	3/4X16	–	–	–	–	–	3500-RT3
–	20X1.50	–	–	–	–	–	–	–	–	3500-RT3
22X2.50	22X2.00	–	7/8X9	7/8X14	7/8X9	7/8X11	–	–	–	3500-RT3
–	22X1.50	–	–	–	–	–	–	–	–	3500-RT3
24X3.00	24X2.00	–	1X8	1X12	1X8	1X10	–	–	–	3500-RT3
–	24X1.50	–	–	1X14	–	–	–	–	–	3500-RT3
–	26X1.50	–	–	–	–	–	–	–	–	3500-RT4
27X3.00	27X2.00	–	–	–	–	–	–	–	–	3500-RT4
–	27X1.50	–	–	–	–	–	–	–	–	3500-RT4
–	28X1.50	–	–	–	–	–	–	–	–	3500-RT4
30X3.50	30X2.00	–	1.1/8X7	1.1/8X12	–	–	–	–	–	3500-RT4
–	30X1.50	–	1.1/4X7	1.1/4X12	–	–	–	–	–	3500-RT4
33X3.50	33X2.00	–	1.3/8X6	1.3/8X12	–	–	–	–	–	3500-RT4
36X4.00	36X3.00	–	1.1/2X6	1.1/2X12	–	–	–	–	–	3500-RT4
–	36X2.00	–	–	–	–	–	–	–	–	3500-RT4
–	36X1.50	–	–	–	–	–	–	–	–	3500-RT4

Note: For larger insert sizes, where a TB (Tang Break) tool is not listed, the tang break operation is performed using the HIT (Hand Installation Tool).

GROUP	PCIT
USAGE	GENERAL
INSERT TYPE	WIRE THREAD
INSERT STYLE	ALL
APPLICATION	HIGH VOLUME




PNEUMATIC TOOLS AND FRONT END ASSEMBLIES

					
MC	MF	PART #	PART #	PART #	PART #
2X0.40	–	3520-2.20MIP	3520-2.20MIPM	3520-2.20MIPN	3500-MIP1
2.50X0.45	–	3520-2.50MIP	3520-2.50MIPM	3520-2.50MIPN	3500-MIP1
3X0.50	–	3520-3.00MIP	3520-3.00MIPM	3520-3.00MIPN	3500-MIP1
3.50X0.60	–	3520-3.50MIP	3520-3.50MIPM	3520-3.50MIPN	3500-MIP1
4X0.70	–	3520-4.00MIP	3520-4.00MIPM	3520-4.00MIPN	3500-MIP1
5X0.80	–	3520-5.00MIP	3520-5.00MIPM	3520-5.00MIPN	3500-MIP1
6X1.00	–	3520-6.00MIP	3520-6.00MIPM	3520-6.00MIPN	3500-MIP1
8X1.25	–	3520-8.00MIP	3520-8.00MIPM	3520-8.00MIPN	3500-MIP2
–	8X1.00	3521-8.00MIP	3521-8.00MIPM	3521-8.00MIPN	3500-MIP2
10X1.50	–	3520-10.00MIP	3520-10.00MIPM	3520-10.00MIPN	3500-MIP2
–	10X1.25	3521-10.00MIP	3521-10.00MIPM	3521-10.00MIPN	3500-MIP2
–	10X1.00	3523-10.00MIP	3523-10.00MIPM	3523-10.00MIPN	3500-MIP2
12X1.75	–	3520-12.00MIP	3520-12.00MIPM	3520-12.00MIPN	3500-MIP2
–	12X1.50	3521-12.00MIP	3521-12.00MIPM	3521-12.00MIPN	3500-MIP2
–	12X1.25	3523-12.00MIP	3523-12.00MIPM	3523-12.00MIPN	3500-MIP2

PNEUMATIC TOOLS AND FRONT END ASSEMBLIES

					
UNC	UNF	PART #	PART #	PART #	PART #
2GX56	–	3532-2GMIP	3532-2GMIPM	3532-2GMIPN	3500-MIP1
4GX40	–	3532-4GMIP	3532-4GMIPM	3532-4GMIPN	3500-MIP1
5GX40	–	3532-5GMIP	3532-5GMIPM	3532-5GMIPN	3500-MIP1
6GX32	–	3532-6GMIP	3532-6GMIPM	3532-6GMIPN	3500-MIP1
–	6GX40	3534-6GMIP	3534-6GMIPM	3534-6GMIPN	3500-MIP1
8GX32	–	3532-8GMIP	3532-8GMIPM	3532-8GMIPN	3500-MIP1
–	8GX36	3534-8GMIP	3534-8GMIPM	3534-8GMIPN	3500-MIP1
10GX24	–	3532-10GMIP	3532-10GMIPM	3532-10GMIPN	3500-MIP1
–	10GX32	3534-10GMIP	3534-10GMIPM	3534-10GMIPN	3500-MIP1
12GX24	–	3532-12GMIP	3532-12GMIPM	3532-12GMIPN	3500-MIP1
1/4X20	–	3532-1/4MIP	3532-1/4MIPM	3532-1/4MIPN	3500-MIP1
–	1/4X28	3534-1/4MIP	3534-1/4MIPM	3534-1/4MIPN	3500-MIP1
5/16X18	–	3532-5/16MIP	3532-5/16MIPM	3532-5/16MIPN	3500-MIP2
–	5/16X24	3534-5/16MIP	3534-5/16MIPM	3534-5/16MIPN	3500-MIP2
3/8X16	–	3532-3/8MIP	3532-3/8MIPM	3532-3/8MIPN	3500-MIP2
–	3/8X24	3534-3/8MIP	3534-3/8MIPM	3534-3/8MIPN	3500-MIP2
7/16X14	–	3532-7/16MIP	3532-7/16MIPM	3532-7/16MIPN	3500-MIP2
–	7/16X20	3534-7/16MIP	3534-7/16MIPM	3534-7/16MIPN	3500-MIP2
1/2X13	–	3532-1/2MIP	3532-1/2MIPM	3532-1/2MIPN	3500-MIP2
–	1/2X20	3534-1/2MIP	3534-1/2MIPM	3534-1/2MIPN	3500-MIP2

Front End Assemblies (MIP) include the Mandrel (MIPM), Nozzle (MIPN), spacers to suit 1.0D, 1.5D and 2.0D inserts plus a set of shim washers for fine adjustment of installation depth.

powercoil® wire thread insert system

Pneumatic Wire Thread Installation Tools and Front End Assemblies Overview

Detailed instructions are included with every Pneumatic Tool and Front End Assembly.

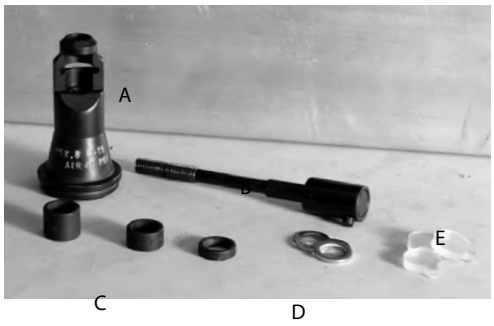
You will need

- A front-end assembly appropriate to the WIre Thread Inserts you wish to install and the applicable pneumatic tool.
- An air supply providing air pressure up to 100psi (7 bar) incorporating a filtered and lubricated air regulator. Your air supply should also incorporate an isolating switch to stop the air supply to the tool and connectors/couplings.
- PTFE tape should be wound around the threaded end of the air connector prior to screwing into air tool to ensure a good seal.
- If tool is to be used with a work arm assembly please ensure that the instructions supplied with that equipment are read in conjunction with these instructions.

Front-end assembly

The front-end assembly is used in conjunction with the pneumatic installation tool to aid the installation of Wire Thread Inserts. The front-end assembly winds a mandrel through the insert (1.0D, 1.5D or 2.0D) and through the pre-winder nozzle. When the insert emerges from the nozzle the diameter has been reduced (pre-wound) to facilitate easy entry into the prepared and threaded hole in the parent material.

Th e front-end assembly consists of two main components • Nozzle • Mandrel



A Nozzle
B Mandrel
C Thickness spacers
D Shim washers
E Cushions
(for use in the adaptor of an ARO® brand pneumatic tool only)

Three different mandrel types are used depending on the size of the inserts being installed.

Check that the front-end assembly pack also contains 2 or 3 thickness spacers (to suit different length inserts) and at least 3 shim washers. Wire Thread Inserts should be installed 3/4 to 1-1/2 pitches below the surface of a countersunk hole or 1/4 to 1/2 coil below the surface of a flush hole. The Wire Thread Insert must be fully engaged with the thread in the hole throughout its length.

Separate mandrel from nozzle by rotating the mandrel anti-clockwise until the mandrel disengages. You can now assemble the correct combination of spacers and shims (if necessary) between the clutch seat and nozzle.

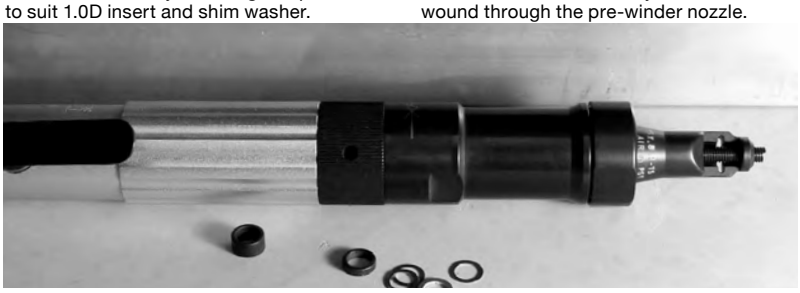
Identify the length of the insert to be installed and select spacers to adjust insertion depth eg: for 1.0D inserts select the longest spacer - the longer the insert the shorter the required spacer. Once the spacers and shims have been positioned on the shaft of the mandrel lubricate the mandrel thread with light machine oil and wind the mandrel through the nozzle. Locate the mandrel pin in the slot of the driving spline (inside the adaptor case) and slide the front end assembly into the case. Tighten the retaining ring (anti-clockwise) finger tight only - over tightening will restrict free movement of the mandrel, possibly resulting in damage. The mandrel should always be wound through the nozzle so that the threaded section is fully disengaged prior to assembling the tool.

Front end assembly with longest spacer to suit 1.0D insert.

Front end assembly with longest spacer to suit 1.0D insert and shim washer.

Finished front end asembly with mandrel wound through the pre-winder nozzle.

Locate mandrel pin in the slot of the driving spline and slide the front end assembly into the case.



Ensure the front end assembly insert chamber opening is aligned with the trigger of the air motor. Final adjustments may still need to be made (using shim washers) to ensure that the inserts are installed to the optimum depth.

Recommended air pressures

Insert size – inch	#2	#3	#6	#8	#10	1/4"	5/16"	3/8"	7/16"	1/2"
Insert size – metric	M2.0-2.2	M2.5	M3.0	M3.5	M4.0-4.5	M6.0-7.0	M8.0	M10.0	M11.0	M12.0
Recommended pressure – psi	25	25-30	25-30	40	45	50-60	60	70	70-80	90
Recommended pressure – bar	1.7	1.7-2.0	1.7-2.0	2.8	3.0	3.5-4.1	4.1	4.8	4.8-5.5	6.2

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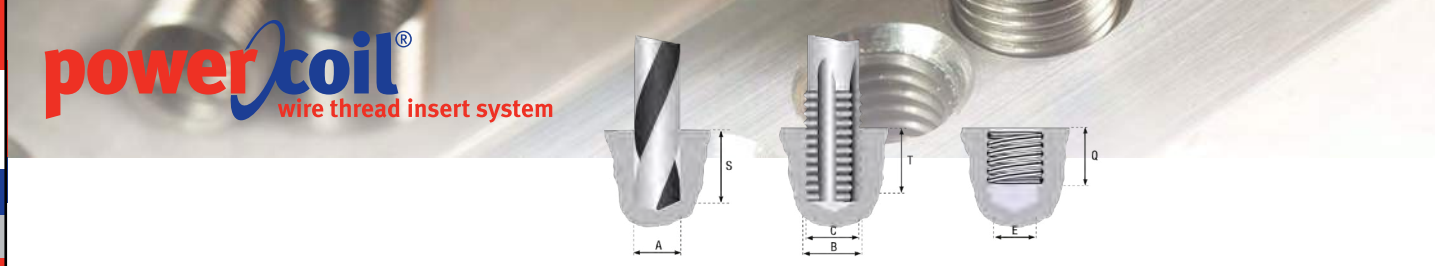

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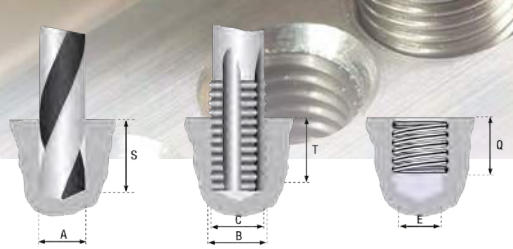
Optimum thread performance with Wire Thread Inserts is achieved when the inserts are installed 1/2 to 1 pitch below the surface of the tapped hole. This means that the actual length of an installed insert is equal to dimension Q less 1/2 to 1 pitch. Dimensions S and T allow for tap end clearance of intermediate taps. When using Bottoming and Spiral Flute Taps these dimensions maybe reduced by an amount equal to 2 thread pitches. Any countersink depths must be added to these dimensions.

Nominal Thread Size	DRILLED HOLE DIMENSIONS									Nominal Thread Size	TAPPED HOLE DIMENSIONS									E Fitted Minor Dia.
	Drill				S Min. Drilling Depth Inter/Plug Tap						B Major Dia.	C Pitch Diameter			T Minimum Tapping Depth					
	Size		A Minor Dia.		1D	1.5D	2D	2.5D	3D			Min	5H Max	6H Max	1D	1.5D	2D	2.5D	3D	
	mm	inch	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
METRIC										METRIC										
M2 X 0.40	2.10	#45	2.087	2.177	3.80	4.80	5.80	6.80	7.80	M2 X 0.40	2.520	2.260	2.296	2.311	3.40	4.40	5.40	6.40	7.40	1.567
M2.2 X 0.45	2.30	#42	2.297	2.397	4.23	5.33	6.43	7.53	8.63	M2.2 X 0.45	2.785	2.492	2.532	2.547	3.78	4.88	5.98	7.08	8.18	1.713
M2.5 X 0.45	2.60	#37	2.597	2.697	4.53	5.78	7.03	8.28	9.53	M2.5 X 0.45	3.085	2.792	2.832	2.847	4.08	5.33	6.58	7.83	9.08	2.013
M3 X 0.50	3.20	1/8	3.108	3.220	5.25	6.75	8.25	9.75	11.25	M3 X 0.50	3.650	3.325	3.367	3.384	4.75	6.25	7.75	9.25	10.75	2.459
M3.5 X 0.60	3.70	#27	3.630	3.755	6.20	7.95	9.70	11.45	13.20	M3.5 X 0.60	4.279	3.890	3.940	3.959	5.60	7.35	9.10	10.85	12.60	2.850
M4 x 0.70	4.20	11/64	4.152	4.292	7.15	9.15	11.15	13.15	15.15	M4 x 0.70	4.909	4.455	4.509	4.529	6.45	8.45	10.45	12.45	14.45	3.242
M5 X 0.80	5.20	13/64	5.173	5.333	8.60	11.10	13.60	16.10	18.60	M5 X 0.80	6.039	5.520	5.577	5.597	7.80	10.30	12.80	15.30	17.80	4.134
M6 X 1.00	6.30	1/4	6.216	6.406	10.50	13.50	16.50	19.50	22.50	M6 X 1.00	7.299	6.650	6.719	6.742	9.50	12.50	15.50	18.50	21.50	4.917
M7 X 1.00	7.30	9/32	7.216	7.406	11.50	15.00	18.50	22.00	25.50	M7 X 1.00	8.299	7.650	7.719	7.742	10.50	14.00	17.50	21.00	24.50	5.917
M8 X 1.25	8.30	21/64	8.271	8.483	13.63	17.63	21.63	25.63	29.63	M8 X 1.25	9.624	8.812	8.886	8.912	12.38	16.38	20.38	24.38	28.38	6.647
M8 X 1.00	8.30	21/64	8.216	8.406	12.50	16.50	20.50	24.50	28.50	M8 X 1.00	9.299	8.650	8.719	8.742	11.50	15.50	19.50	23.50	27.50	6.917
M9 X 1.25	9.40	3/8	9.271	9.483	14.63	19.13	23.63	28.13	32.63	M9 X 1.25	10.624	9.812	9.886	9.912	13.38	17.88	22.38	26.88	31.38	7.647
M9 x 1.00	9.30	23/64	9.216	9.406	13.50	18.00	22.50	27.00	31.50	M9 x 1.00	10.299	9.650	9.719	9.742	12.50	17.00	21.50	26.00	30.50	7.917
M10 X 1.50	10.40	13/32	10.325	10.561	16.75	21.75	26.75	31.75	36.75	M10 X 1.50	11.949	10.974	11.061	11.089	15.25	20.25	25.25	30.25	35.25	8.376
M10 X 1.25	10.30	13/32	10.271	10.483	15.63	20.63	25.63	30.63	35.63	M10 X 1.25	11.624	10.812	10.886	10.912	14.38	19.38	24.38	29.38	34.38	8.647
M10 x 1.00	10.30	13/32	10.216	10.406	14.50	19.50	24.50	29.50	34.50	M10 x 1.00	11.299	10.650	10.724	10.742	13.50	18.50	23.50	28.50	33.50	8.917
M11 X 1.50	11.40	7/16	11.325	11.561	17.75	23.25	28.75	34.25	39.75	M11 X 1.50	12.949	11.974	12.061	12.089	16.25	21.75	27.25	32.75	38.25	9.376
M11 X 1.25	11.30	7/16	11.271	11.483	16.63	22.13	27.63	33.13	38.63	M11 X 1.25	12.624	11.812	11.898	11.926	15.38	20.88	26.38	31.88	37.38	9.647
M11 X 1.00	11.30	7/16	11.216	11.406	15.50	21.00	26.50	32.00	37.50	M11 X 1.00	12.299	11.650	11.724	11.742	14.50	20.00	25.50	31.00	36.50	9.917
M12 X 1.75	12.50	31/64	12.379	12.644	19.88	25.88	31.88	37.88	43.88	M12 X 1.75	14.273	13.137	13.236	13.271	18.13	24.13	30.13	36.13	42.13	10.106
M12 X 1.50	12.40	31/64	12.325	12.561	18.75	24.75	30.75	36.75	42.75	M12 X 1.50	13.949	12.974	13.067	13.099	17.25	23.25	29.25	35.25	41.25	10.376
M12 X 1.25	12.30	31/64	12.271	12.483	17.63	23.63	29.63	35.63	41.63	M12 X 1.25	13.624	12.812	12.898	12.926	16.38	22.38	28.38	34.38	40.38	10.647
M12 X 1.00	12.30	31/64	12.216	12.406	16.50	22.50	28.50	34.50	40.50	M12 X 1.00	13.299	12.649	12.724	12.749	15.50	21.50	27.50	33.50	39.50	10.917
M13 X 1.75	13.50	33/64	13.379	13.644	20.88	27.38	33.88	40.38	46.88	M13 X 1.75	15.273	14.137	14.236	14.271	19.13	25.63	32.13	38.63	45.13	11.106
M13 X 1.50	13.20	33/64	13.325	13.561	19.75	26.25	32.75	39.25	45.75	M13 X 1.50	14.949	13.974	14.067	14.099	18.25	24.75	31.25	37.75	44.25	11.376
M13 X 1.25	13.20	33/64	13.271	13.483	18.63	25.13	31.63	38.13	44.63	M13 X 1.25	14.624	13.812	13.898	13.926	17.38	23.88	30.38	36.88	43.38	11.647
M14 X 2.00	14.50	37/64	14.433	14.733	23.00	30.00	37.00	44.00	51.00	M14 X 2.00	16.598	15.299	15.406	15.444	21.00	28.00	35.00	42.00	49.00	11.835
M14 X 1.50	14.40	9/16	14.325	14.561	20.75	27.75	34.75	41.75	48.75	M14 X 1.50	15.949	14.974	15.067	15.099	19.25	26.25	33.25	40.25	47.25	12.376
M14 X 1.25	14.30	9/16	14.271	14.483	19.63	26.63	33.63	40.63	47.63	M14 X 1.25	15.624	14.812	14.898	14.926	18.38	25.38	32.38	39.38	46.38	12.674
M14 X 1.00	14.30	9/16	14.216	14.406	18.50	25.50	32.50	39.50	46.50	M14 X 1.00	15.299	14.649	14.724	14.749	17.50	24.50	31.50	38.50	45.50	12.917
M15 X 2.00	15.50	39/64	15.433	15.733	24.00	31.50	39.00	46.50	54.00	M15 X 2.00	17.598	16.299	16.406	16.444	22.00	29.50	37.00	44.50	52.00	12.835
M15 X 1.50	15.30	39/64	15.325	15.561	21.75	29.25	36.75	44.25	51.75	M15 X 1.50	16.949	15.974	16.067	16.099	20.25	27.75	35.25	42.75	50.25	13.376
M16 X 2.00	16.50	21/32	16.433	16.733	25.00	33.00	41.00	49.00	57.00	M16 X 2.00	18.598	17.299	17.406	17.444	23.00	31.00	39.00	47.00	55.00	13.835
M16 X 1.50	16.50	21/32	16.325	16.561	22.75	30.75	38.75	46.75	54.75	M16 X 1.50	17.949	16.974	17.067	17.099	21.25	29.25	37.25	45.25	53.25	14.376
M18 X 2.50	18.80	47/64	18.541	18.896	29.25	38.25	47.25	56.25	65.25	M18 X 2.50	21.248	19.624	19.738	19.778	26.75	35.75	44.75	53.75	62.75	15.294
M18 X 2.00	18.50	23/32	18.433	18.733	27.00	36.00	45.00	54.00	63.00	M18 X 2.00	20.598	19.299	19.406	19.444	25.00	34.00	43.00	52.00	61.00	15.835
M18 X 1.50	18.50	23/32	18.325	18.561	24.75	33.75	42.75	51.75	60.75	M18 X 1.50	19.949	18.974	19.067	19.099	23.25	32.25	41.25	50.25	59.25	16.376
M20 X 2.50	20.80	13/16	20.541	20.896	31.25	41.25	51.25	61.25	71.25	M20 X 2.50	23.248	21.624	21.738	21.778	28.75	38.75	48.75	58.75	68.75	17.294
M20 X 2.00	20.50	13/16	20.433	20.733	29.00	39.00	49.00	59.00	69.00	M20 X 2.00	22.598	21.299	21.406	21.444	27.00	37.00	47.00	57.00	67.00	17.835
M20 X 1.50	20.50	13/16	20.325	20.561	26.75	36.75	46.75	56.75	66.75	M20 X 1.50	21.949	20.974	21.067	21.099	25.25	35.25	45.25	55.25	65.25	18.376
M22 X 2.50	22.80	57/64	22.541	22.896	33.25	44.25	55.25	66.25	77.25	M22 X 2.50	25.248	23.624	23.738	23.778	30.75	41.75	52.75	63.75	74.75	19.294
M22 X 2.00	22.50	57/64	22.433	22.733	31.00	42.00	53.00	64.00	75.00	M22 X 2.00	24.598	23.299	23.406	23.444	29.00	40.00	51.00	62.00	73.00	19.835
M22 X 1.50	22.50	57/64	22.325	22.561	28.75	39.75	50.75	61.75	72.75	M22 X 1.50	23.949	22.974	23.067	23.099	27.25	38.25	49.25	60.25	71.25	20.376
M24 X 3.00	25.00	31/32	24.650	25.050	37.50	49.50	61.50	73.50	85.50	M24 X 3.00	27.897	25.948	26.093	26.135	34.50	46.50	58.50	70.50	82.50	20.752
M24 X 2.00	24.50	31/32	24.433	24.733	33.00	45.00	57.00	69.00	81.00	M24 X 2.00	26.598	25.299	25.414	25.454	31.00	43.00	55.00	67.00	79.00	21.835
M24 X 1.50	24.50	31/32	24.325	24.561	30.75	42.75	54.75	66.75	78.75	M24 X 1.50	25.949	24.975	25.044	25.135	29.25	41.25	53.25	65.25	77.25	22.376
M26 X 1.50	26.50	1.1/32	26.325	26.561	32.75	45.75	58.75	71.75	84.75	M26 X 1.50	27.949	26.975	27.044	27.135	31.25	44.25	57.25	70.25	83.25	24.376
M27 X 3.00	28.00	1.3/32	27.650	28.050	40.50	54.00	67.50	81.00	94.50	M27 X 3.00	30.897	28.498	29.093	29.135	37.50	51.00	64.50	78.00	91.50	23.752
M27 X 2.00	27.50	1.5/64	27.433	27.733	36.00	49.50	63.00	76.50	90.00	M27 X 2.00	29.598	28.299	28.414	28.454	34.00	47.50	61.00	74.50	88.00	24.835
M30 X 3.50	31.00	1.7/32	30.758	31.208	45.75	60.75	75.75	90.75	105.75	M30 X 3.50	34.547	32.273	32.428	32.472	42.25	57.25	72.25	87.25	102.25	26.211
M30 X 3.00	31.00	1.7/32	30.650	31.050	43.50	58.50	73.50	88.50	103.50	M30 X 3.00	33.897	31.948	32.093	32.135	40.50	55.50	70.50	85.50	100.50	26.752
M30 X 2.00	30.50	1.3/16	30.433	30.733	39.00	54.00	69.00	84.00	99.00	M30 X 2.00	32.598	31.299	31.414	31.454	37.00	52.00	67.00	82.00	97.00	27.835
M33 X 3.50	34.00	1.21/64	33.758	34.208	48.75	65.25	81.75	98.25	114.75	M33 X 3.50	37.547	35.273	35.428	35.472	45.25	61.75	78.25	94.75	111.25	29.211
M33 X 3.00	33.50	1.5/16	33.650	34.050	46.50	63.00	79.50	96.00	112.50	M33 X 3.00	36.897	34.948	35.093	35.135	43.50	60.00	76.50	93.00	109.50	29.752
M33 X 2.00	33.50	1.5/16	33.433	33.733	42.00	58.50	75.00	91.50	108.00	M33 X 2.00	35.598	34.299	34.414	34.454	40.00	56.50	73.00	89.50	106.00	30.835
M36 X 4.00	37.00	1.29/64	36.866	37.341	54.00	72.00	90.00	108.00	126.00	M36 X 4.00	41.196	38.598	38.763	38.809	50.00	68.00	86.00	104.00	122.00	31.670
M36 X 3.00	37.00	1.29/64	36.650	37.050	49.50	67.50	85.50	103.50	121.50	M36 X 3.00	39.897	37.948	38.093	38.135	46.50	64.50	82.50	100.50	118.50	32.752
M39 X 4.00	40.00	1.9/16	39.866	40.341	57.00	76.50	96.00	115.50	135.00	M39 X 4.00	44.196	41.598	41.763	41.809	53.00	72.50	92.00	111.50	131.00	34.670
M42 X 4.50	43.00	1.11/16	42.975	43.505	62.25	83.25	104.25	125.25	146.25	M42 X 4.50	47.846	44.923	45.098	45.147	57.75	78.75	99.75	120.75	141.75	37.129
M42 X 3.00	42.50	1.11/16	42.650	43.050	55.50	76.50	97.50	118.50	139.50	M42 X 3.00	45.897	43.948	44.093	44.135	52.50	73.50	94.50	115.50	136.50	38.752



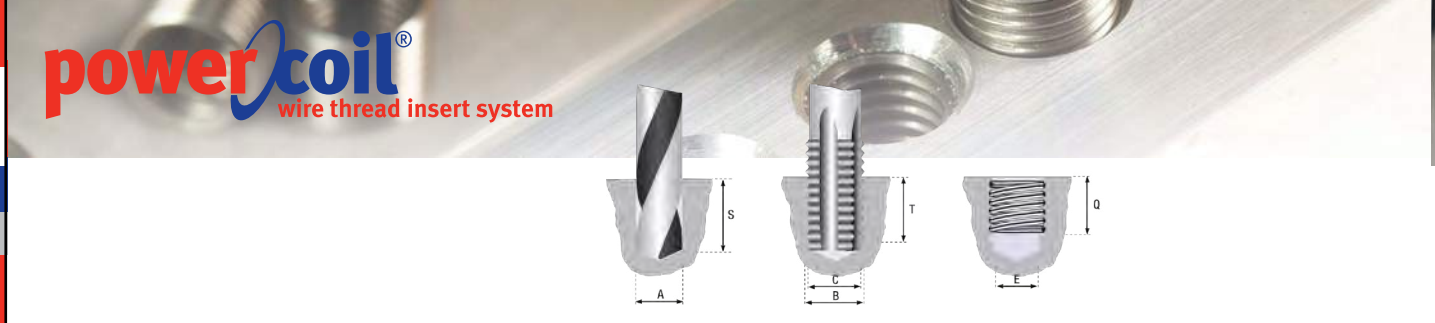
Nominal Thread Size	INSERT SPECIFICATIONS																		Nominal Thread Size
	Q Nominal Length – installed					Free Coil Diameter		Number of Free Coils ± 1/4 coil counted 90° from Tang											
	1D	1.5D	2D	2.5D	3D	Min	Max	1D		1.5D		2D		2.5D		3D			
	mm	mm	mm	mm	mm	mm	mm	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
METRIC																			METRIC
M2 X 0.40	2.00	3.00	4.00	5.00	6.00	2.49	2.70	3.00	3.30	5.20	5.70	7.40	8.10	9.60	10.50	11.80	13.00		M2 X 0.40
M2.2 X 0.45	2.20	3.30	4.40	5.50	6.60	2.76	3.00	2.90	3.20	5.00	5.50	7.10	7.90	9.30	10.30	11.40	12.60		M2.2 X 0.45
M2.5 X 0.45	2.50	3.75	5.00	6.25	7.50	3.05	3.70	3.10	3.80	5.20	6.50	7.40	9.20	9.50	11.90	11.70	14.60		M2.5 X 0.45
M3 X 0.50	3.00	4.50	6.00	7.50	9.00	3.61	4.35	3.40	4.30	5.80	7.20	8.20	10.10	10.50	13.10	12.90	16.00		M3 X 0.50
M3.5 X 0.60	3.50	5.25	7.00	8.75	10.50	4.24	4.95	3.40	4.10	5.80	7.00	8.20	9.80	10.50	12.60	12.90	15.50		M3.5 X 0.60
M4 x 0.70	4.00	6.00	8.00	10.00	12.00	4.86	5.60	3.40	4.00	5.70	6.80	8.10	9.60	10.50	12.30	12.80	15.10		M4 x 0.70
M5 X 0.80	5.00	7.50	10.00	12.50	15.00	5.98	6.80	3.90	4.50	6.50	7.60	9.20	10.60	11.80	13.70	14.40	16.70		M5 X 0.80
M6 X 1.00	6.00	9.00	12.00	15.00	18.00	7.23	7.95	3.80	4.30	6.40	7.20	9.10	10.10	11.70	13.10	14.30	16.00		M6 X 1.00
M7 X 1.00	7.00	10.50	14.00	17.50	21.00	8.22	9.20	4.60	5.30	7.70	8.70	10.70	12.10	13.70	15.60	16.70	19.00		M7 X 1.00
M8 X 1.25	8.00	12.00	16.00	20.00	24.00	9.53	10.35	4.20	4.70	7.10	7.80	9.90	10.90	12.80	14.10	15.60	17.20		M8 X 1.25
M8 X 1.00	8.00	12.00	16.00	20.00	24.00	9.39	10.25	5.60	6.10	9.10	10.00	12.50	13.80	16.00	17.70	19.50	21.50		M8 X 1.00
M9 X 1.25	9.00	13.50	18.00	22.50	27.00	10.52	11.16	5.10	5.50	8.40	9.00	11.70	12.50	15.00	16.10	18.30	19.60		M9 X 1.25
M9 x 1.00	9.00	13.50	18.00	22.50	27.00	10.40	11.23	6.50	7.10	10.50	11.50	14.50	15.80	18.50	20.20	22.50	24.50		M9 x 1.00
M10 X 1.50	10.00	15.00	20.00	25.00	30.00	11.83	12.50	4.60	4.90	7.70	8.20	10.80	11.50	13.80	14.70	16.90	18.00		M10 X 1.50
M10 X 1.25	10.00	15.00	20.00	25.00	30.00	11.74	12.65	5.60	6.10	9.20	10.00	12.70	13.80	16.30	17.70	19.80	21.50		M10 X 1.25
M10 x 1.00	10.00	15.00	20.00	25.00	30.00	11.41	12.50	7.30	8.10	11.70	12.90	16.10	17.80	20.50	22.60	24.90	27.50		M10 x 1.00
M11 X 1.50	11.00	16.50	22.00	27.50	33.00	12.82	13.59	5.20	5.60	8.60	9.20	12.00	12.80	15.40	16.40	18.70	20.00		M11 X 1.50
M11 X 1.25	11.00	16.50	22.00	27.50	33.00	12.75	13.76	6.40	6.90	10.30	11.20	14.20	15.40	18.10	19.70	22.00	23.90		M11 X 1.25
M11 X 1.00	11.00	16.50	22.00	27.50	33.00	12.42	13.41	8.40	9.10	13.30	14.40	18.20	19.80	23.10	25.10	28.00	30.40		M11 X 1.00
M12 X 1.75	12.00	18.00	24.00	30.00	36.00	14.13	15.00	4.80	5.10	7.90	8.50	11.10	11.90	14.20	15.20	17.30	18.60		M12 X 1.75
M12 X 1.50	12.00	18.00	24.00	30.00	36.00	14.09	15.20	5.60	6.10	9.20	10.00	12.70	13.80	16.20	17.70	19.80	21.50		M12 X 1.50
M12 X 1.25	12.00	18.00	24.00	30.00	36.00	13.76	15.00	7.00	7.70	11.20	12.40	15.50	17.00	19.70	21.60	23.90	26.30		M12 X 1.25
M12 X 1.00	12.00	18.00	24.00	30.00	36.00	13.43	14.49	9.30	10.10	14.70	15.90	20.00	21.70	25.40	27.60	30.80	33.40		M12 X 1.00
M13 X 1.75	13.00	19.50	26.00	32.50	39.00	15.12	16.04	5.30	5.70	8.70	9.40	12.20	13.00	15.60	16.70	19.00	20.30		M13 X 1.75
M13 X 1.50	13.00	19.50	26.00	32.50	39.00	15.10	16.29	6.20	6.80	10.10	11.00	13.90	15.20	17.80	19.30	21.60	23.50		M13 X 1.50
M13 X 1.25	13.00	19.50	26.00	32.50	39.00	14.77	15.94	7.80	8.50	12.50	13.50	17.10	18.60	21.70	23.60	26.40	28.70		M13 X 1.25
M14 X 2.00	14.00	21.00	28.00	35.00	42.00	16.43	17.35	5.00	5.30	8.20	8.70	11.40	12.10	14.60	15.60	17.90	19.00		M14 X 2.00
M14 X 1.50	14.00	21.00	28.00	35.00	42.00	16.11	17.25	6.90	7.50	11.10	12.00	15.30	16.50	19.40	21.00	23.60	25.50		M14 X 1.50
M14 X 1.25	14.00	21.00	28.00	35.00	42.00	15.78	17.03	8.60	9.30	13.60	14.70	18.60	20.20	23.60	25.60	28.60	31.00		M14 X 1.25
M14 X 1.00	14.00	21.00	28.00	35.00	42.00	15.45	16.68	11.10	12.10	17.40	18.90	23.70	25.70	30.00	32.50	36.20	39.30		M14 X 1.00
M15 X 2.00	15.00	22.50	30.00	37.50	45.00	17.42	18.48	5.40	5.80	8.80	9.50	12.30	13.10	15.70	16.80	19.20	20.50		M15 X 2.00
M15 X 1.50	15.00	22.50	30.00	37.50	45.00	17.12	18.47	7.50	8.10	11.90	12.90	16.40	17.80	20.80	22.60	25.30	27.50		M15 X 1.50
M16 X 2.00	16.00	24.00	32.00	40.00	48.00	18.41	19.60	5.90	6.30	9.50	10.20	13.20	14.20	16.90	18.10	20.50	22.00		M16 X 2.00
M16 X 1.50	16.00	24.00	32.00	40.00	48.00	18.13	19.60	8.00	8.80	12.80	13.90	17.50	19.10	22.30	24.30	27.00	29.40		M16 X 1.50
M18 X 2.50	18.00	27.00	36.00	45.00	54.00	21.04	22.00	5.20	5.50	8.60	9.00	11.90	12.50	15.30	16.10	18.60	19.60		M18 X 2.50
M18 X 2.00	18.00	27.00	36.00	45.00	54.00	20.80	21.85	6.70	7.10	10.90	11.50	15.00	15.80	19.10	20.20	23.20	24.50		M18 X 2.00
M18 X 1.50	18.00	27.00	36.00	45.00	54.00	20.15	21.75	9.30	10.10	14.60	15.90	20.00	21.70	25.40	27.60	30.70	33.40		M18 X 1.50
M20 X 2.50	20.00	30.00	40.00	50.00	60.00	23.02	24.40	5.90	6.30	9.60	10.20	13.30	14.20	16.90	18.10	20.60	22.00		M20 X 2.50
M20 X 2.00	20.00	30.00	40.00	50.00	60.00	22.82	24.05	7.70	8.10	12.20	12.90	16.80	17.80	21.40	22.60	25.90	27.50		M20 X 2.00
M20 X 1.50	20.00	30.00	40.00	50.00	60.00	22.17	24.00	10.50	11.40	16.40	17.90	22.40	24.40	28.30	30.90	34.30	37.40		M20 X 1.50
M22 X 2.50	22.00	33.00	44.00	55.00	66.00	25.00	26.90	6.50	7.10	10.50	11.40	14.50	15.80	18.50	20.10	22.50	24.50		M22 X 2.50
M22 X 2.00	22.00	33.00	44.00	55.00	66.00	24.84	26.50	8.50	9.10	13.40	14.40	18.40	19.80	23.40	25.10	28.40	30.40		M22 X 2.00
M22 X 1.50	22.00	33.00	44.00	55.00	66.00	24.19	26.45	11.60	12.70	18.10	19.90	24.60	27.00	31.10	34.20	37.60	41.30		M22 X 1.50
M24 X 3.00	24.00	36.00	48.00	60.00	72.00	27.62	29.00	5.90	6.30	9.70	10.20	13.40	14.20	17.10	18.10	20.90	22.00		M24 X 3.00
M24 X 2.00	24.00	36.00	48.00	60.00	72.00	26.86	29.10	9.20	10.10	14.60	15.90	19.90	21.70	25.30	27.60	30.60	33.40		M24 X 2.00
M24 X 1.50	24.00	36.00	48.00	60.00	72.00	26.21	28.28	12.90	14.00	20.10	21.80	27.30	29.70	34.50	37.50	41.70	45.30		M24 X 1.50
M26 X 1.50	26.00	39.00	52.00	65.00	78.00	28.23	30.46	14.20	15.40	22.00	23.80	29.80	32.30	37.60	40.80	45.40	49.20		M26 X 1.50
M27 X 3.00	27.00	40.50	54.00	67.50	81.00	30.59	32.40	6.80	7.30	11.00	11.70	15.20	16.20	19.30	20.60	23.50	25.10		M27 X 3.00
M27 X 2.00	27.00	40.50	54.00	67.50	81.00	29.89	32.30	10.60	11.60	16.70	18.10	22.70	24.70	28.80	31.30	34.80	37.90		M27 X 2.00
M30 X 3.50	30.00	45.00	60.00	75.00	90.00	34.20	35.81	6.50	6.90	10.50	11.10	14.50	15.30	18.60	19.50	22.60	23.80		M30 X 3.50
M30 X 3.00	30.00	45.00	60.00	75.00	90.00	34.24	36.10	7.60	8.10	12.20	12.90	16.80	17.80	21.30	22.60	25.90	27.50		M30 X 3.00
M30 X 2.00	30.00	45.00	60.00	75.00	90.00	32.92	35.70	12.00	13.00	18.70	20.40	25.40	27.70	32.10	35.00	38.80	42.30		M30 X 2.00
M33 X 3.50	33.00	49.50	66.00	82.50	99.00	37.17	38.80	7.40	7.70	11.80	12.40	16.20	17.00	20.70	21.70	25.10	26.40		M33 X 3.50
M33 X 3.00	33.00	49.50	66.00	82.50	99.00	37.27	39.50	8.50	9.10	13.50	14.40	18.50	19.80	23.60	25.10	28.60	30.40		M33 X 3.00
M33 X 2.00	33.00	49.50	66.00	82.50	99.00	35.95	39.20	13.30	14.50	20.60	22.60	28.00	30.60	35.30	38.70	42.70	46.80		M33 X 2.00
M36 X 4.00	36.00	54.00	72.00	90.00	108.00	40.78	42.67	6.90	7.30	11.20	11.70	15.40	16.20	19.60	20.60	23.80	25.10		M36 X 4.00
M36 X 3.00	36.00	54.00	72.00	90.00	108.00	40.30	42.70	9.50	10.10	14.90	15.90	20.40	21.70	25.90	27.60	31.40	33.40		M36 X 3.00
M39 X 4.00	39.00	58.50	78.00	97.50	117.00	43.75	45.75	7.70	8.00	12.20	12.90	16.80	17.70	21.40	22.50	26.00	27.30		M39 X 4.00
M42 X 4.50	42.00	63.00	84.00	105.00	126.00	47.37	49.00	7.30	7.60	11.80	12.20	16.20	16.80	20.70	21.50	25.10	26.10		M42 X 4.50
M42 X 3.00	42.00	63.00	84.00	105.00	126.00	46.36	49.00	11.40	12.10	17.80	18.90	24.20	25.70	30.60	32.50	37.10	39.30		M42 X 3.00

IMPORTANT
The success of any drilling and tapping operation is dependant upon many factors –type of material being cut, cutting speed, coolant, equipment being used – and it is not possible to give specific drill sizes for each material. Drill sizes shown are recommendations only and PowerCoil would strongly suggest that independent testing be performed for specific and critical applications.

When using wire thread inserts it is important that the drilling and tapping diameters and lengths listed below are adhered to.

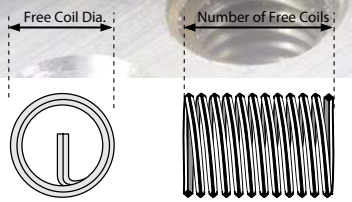
The figures outlined in these tables encompass effective free coil tolerances for most globally recognized standards and manufacturers, including those of reduced diameter wire thread inserts.

PowerCoil wire thread inserts can be manufactured to different standards upon request. Technical data on these standards can be obtained from our website – www.powercoil.com.au.



Optimum thread performance with Wire Thread Inserts is achieved when the inserts are installed 1/2 to 1 pitch below the surface of the tapped hole. This means that the actual length of an installed insert is equal to dimension Q less 1/2 to 1 pitch. Dimensions S and T allow for tap end clearance of intermediate taps. When using Bottoming and Spiral Flute Taps these dimensions maybe reduced by an amount equal to 2 thread pitches. Any countersink depths must be added to these dimensions.

Nominal Thread Size	DRILLED HOLE DIMENSIONS									Nominal Thread Size	TAPPED HOLE DIMENSIONS									E
	Drill				S Min. Drilling Depth Inter/Plug						B	C Pitch Diameter			T Minimum Tapping Depth					Fitted
	Size		A Minor Dia.		1D	1.5D	2D	2.5D	3D		Major	Min	2B Max	1B Max	1D	1.5D	2D	2.5D	3D	Minor Dia.
	mm	inch	inch	inch	inch	inch	inch	inch	inch		inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
UNC										UNC										
2 X 56	2.40	#41	0.090	0.094	0.166	0.209	0.252	0.295	0.338	2 X 56	0.109	0.098	0.099	0.100	0.148	0.191	0.234	0.277	0.320	0.0667
3 X 48	2.70	#36	0.104	0.108	0.193	0.242	0.292	0.341	0.391	3 X 48	0.126	0.113	0.114	0.115	0.172	0.221	0.271	0.320	0.370	0.0764
4 X 40	3.00	#31	0.117	0.122	0.224	0.280	0.336	0.392	0.448	4 X 40	0.145	0.128	0.130	0.131	0.199	0.255	0.311	0.367	0.423	0.0849
5 X 40	3.40	#29	0.130	0.135	0.237	0.300	0.362	0.425	0.487	5 X 40	0.158	0.141	0.143	0.144	0.212	0.275	0.337	0.400	0.462	0.0979
6 X 32	3.70	#25	0.145	0.150	0.279	0.348	0.417	0.486	0.555	6 X 32	0.179	0.158	0.160	0.161	0.247	0.316	0.385	0.454	0.523	0.1040
8 X 32	4.40	11/64	0.171	0.176	0.305	0.387	0.469	0.551	0.633	8 X 32	0.205	0.184	0.186	0.187	0.273	0.355	0.437	0.519	0.601	0.1300
10 X 24	5.10	13/64	0.199	0.205	0.377	0.472	0.567	0.662	0.757	10 X 24	0.244	0.217	0.219	0.220	0.336	0.431	0.526	0.621	0.716	0.1450
12 X 24	5.70	15/64	0.225	0.231	0.403	0.511	0.619	0.727	0.835	12 X 24	0.270	0.243	0.245	0.247	0.362	0.470	0.578	0.686	0.794	0.1710
1/4 X 20	6.70	17/64	0.261	0.270	0.475	0.600	0.725	0.850	0.975	1/4 X 20	0.315	0.283	0.285	0.286	0.425	0.550	0.675	0.800	0.925	0.1959
5/16 X 18	8.30	21/64	0.325	0.334	0.562	0.718	0.875	1.031	1.187	5/16 X 18	0.385	0.349	0.352	0.353	0.507	0.663	0.819	0.975	1.132	0.2524
3/8 X 16	9.90	25/64	0.389	0.399	0.656	0.844	1.031	1.219	1.406	3/8 X 16	0.456	0.416	0.419	0.420	0.594	0.781	0.969	1.156	1.344	0.3073
7/16 X 14	11.60	29/64	0.453	0.464	0.758	0.977	1.196	1.415	1.633	7/16 X 14	0.530	0.484	0.488	0.489	0.687	0.906	1.125	1.344	1.562	0.3602
1/2 X 13	13.00	33/64	0.517	0.528	0.846	1.096	1.346	1.596	1.846	1/2 X 13	0.600	0.550	0.554	0.555	0.769	1.019	1.269	1.519	1.769	0.4167
9/16 X 12	15.00	19/32	0.581	0.592	0.937	1.219	1.500	1.781	2.062	9/16 X 12	0.671	0.617	0.621	0.623	0.854	1.135	1.417	1.698	1.979	0.4723
5/8 X 11	16.50	21/32	0.645	0.657	1.034	1.347	1.659	1.972	2.284	5/8 X 11	0.743	0.684	0.689	0.690	0.943	1.256	1.568	1.881	2.193	0.5266
3/4 X 10	19.80	25/32	0.772	0.784	1.200	1.575	1.950	2.325	2.700	3/4 X 10	0.880	0.815	0.820	0.822	1.100	1.475	1.850	2.225	2.600	0.6417
7/8 X 9	23.00	29/32	0.899	0.912	1.375	1.812	2.250	2.687	3.125	7/8 X 9	1.019	0.947	0.952	0.954	1.264	1.701	2.139	2.576	3.014	0.7547
1 X 8	26.20	1.1/32	1.027	1.042	1.562	2.062	2.562	3.062	3.562	1 X 8	1.162	1.081	1.087	1.089	1.437	1.937	2.437	2.937	3.437	0.8647
1-1/8 X 7	29.50	1.5/32	1.156	1.171	1.768	2.330	2.893	3.455	4.018	1-1/8 X 7	1.311	1.218	1.224	1.226	1.625	2.187	2.750	3.312	3.875	0.9704
1-1/4 X 7	32.50	1.9/32	1.281	1.296	1.893	2.518	3.143	3.768	4.393	1-1/4 X 7	1.436	1.343	1.349	1.351	1.750	2.375	3.000	3.625	4.250	1.0954
1-3/8 X 6	36.00	1.13/32	1.411	1.431	2.125	2.812	3.500	4.187	4.875	1-3/8 X 6	1.591	1.483	1.490	1.493	1.958	2.646	3.333	4.021	4.708	1.1946
1-1/2 X 6	39.50	1.35/64	1.536	1.556	2.250	3.000	3.750	4.500	5.250	1-1/2 X 6	1.716	1.608	1.615	1.618	2.083	2.833	3.583	4.333	5.083	1.3196
UNF										UNF										
2 X 64	2.30	3/32	0.089	0.093	0.156	0.199	0.242	0.285	0.328	2 X 64	0.106	0.096	0.097	0.098	0.141	0.184	0.227	0.270	0.313	0.0691
3 X 56	2.70	#37	0.103	0.107	0.179	0.229	0.278	0.328	0.377	3 X 56	0.122	0.111	0.112	0.113	0.161	0.210	0.260	0.310	0.359	0.0797
4 X 48	3.00	#31	0.117	0.121	0.206	0.262	0.318	0.374	0.430	4 X 48	0.139	0.126	0.127	0.128	0.185	0.241	0.297	0.353	0.409	0.0894
5 X 44	3.40	#30	0.130	0.134	0.227	0.290	0.352	0.414	0.477	5 X 44	0.155	0.140	0.141	0.142	0.204	0.267	0.329	0.391	0.454	0.1004
6 X 40	3.70	#26	0.143	0.148	0.250	0.319	0.388	0.457	0.526	6 X 40	0.171	0.154	0.156	0.157	0.225	0.294	0.363	0.432	0.501	0.111
8 X 36	4.40	11/64	0.170	0.175	0.289	0.371	0.453	0.535	0.617	8 X 36	0.200	0.182	0.184	0.185	0.261	0.343	0.425	0.507	0.589	0.134
10 X 32	5.10	13/64	0.197	0.202	0.331	0.426	0.521	0.616	0.711	10 X 32	0.231	0.210	0.212	0.213	0.299	0.394	0.489	0.584	0.679	0.156
1/4 X 28	6.60	17/64	0.258	0.265	0.411	0.536	0.661	0.786	0.911	1/4 X 28	0.296	0.273	0.275	0.277	0.375	0.500	0.625	0.750	0.875	0.2113
5/16 X 24	8.20	21/64	0.322	0.329	0.500	0.656	0.812	0.969	1.125	5/16 X 24	0.367	0.340	0.342	0.343	0.458	0.614	0.771	0.927	1.083	0.2674
3/8 X 24	9.80	25/64	0.384	0.391	0.562	0.750	0.937	1.124	1.312	3/8 X 24	0.429	0.402	0.405	0.406	0.521	0.708	0.896	1.083	1.271	0.3299
7/16 X 20	11.50	29/64	0.448	0.456	0.662	0.881	1.100	1.319	1.537	7/16 X 20	0.503	0.470	0.473	0.474	0.612	0.831	1.050	1.269	1.487	0.3834
1/2 X 20	13.00	33/64	0.511	0.518	0.725	0.975	1.225	1.475	1.725	1/2 X 20	0.565	0.533	0.536	0.537	0.675	0.925	1.175	1.425	1.675	0.4459
9/16 X 18	14.70	37/64	0.575	0.582	0.811	1.093	1.374	1.655	1.936	9/16 X 18	0.635	0.599	0.602	0.604	0.756	1.038	1.319	1.600	1.881	0.5024
5/8 X 18	16.30	41/64	0.637	0.645	0.874	1.187	1.500	1.812	2.124	5/8 X 18	0.697	0.661	0.665	0.666	0.819	1.132	1.444	1.757	2.069	0.5649
3/4 X 16	19.50	49/64	0.764	0.772	1.031	1.406	1.781	2.156	2.531	3/4 X 16	0.831	0.791	0.795	0.796	0.969	1.344	1.719	2.094	2.469	0.6823
7/8 X 14	22.50	57/64	0.891	0.899	1.196	1.634	2.071	2.509	2.946	7/8 X 14	0.968	0.921	0.926	0.927	1.125	1.562	2.000	2.437	2.875	0.7977
1 X 12	26.00	1.1/64	1.018	1.028	1.375	1.875	2.375	2.875	3.375	1 X 12	1.108	1.054	1.059	1.061	1.292	1.792	2.292	2.792	3.292	0.9098
1 X 14	26.00	1.1/64	1.016	1.024	1.320	1.820	2.320	2.820	3.320	1 X 14	1.093	1.046	1.051	1.053	1.250	1.750	2.250	2.750	3.250	0.9277
1-1/8 X 12	29.50	1.5/32	1.143	1.154	1.500	2.062	2.625	3.187	3.750	1-1/8 X 12	1.233	1.179	1.184	1.186	1.417	1.979	2.542	3.104	3.667	1.0348
1-1/4 X 12	32.50	1.9/32	1.268	1.279	1.625	2.250	2.875	3.500	4.125	1-1/4 X 12	1.358	1.304	1.309	1.311	1.542	2.167	2.792	3.417	4.042	1.1598
1-3/8 X 12	35.50	1.13/32	1.393	1.404	1.750	2.438	3.125	3.813	4.500	1-3/8 X 12	1.483	1.429	1.434	1.436	1.667	2.354	3.042	3.729	4.417	1.2848
1-1/2 X 12	38.50	1.17/32	1.518	1.529	1.875	2.625	3.375	4.125	4.875	1-1/2 X 12	1.608	1.554	1.560	1.562	1.792	2.542	3.292	4.042	4.792	1.4098



CROSSROAD DISTRIBUTOR SOURCE

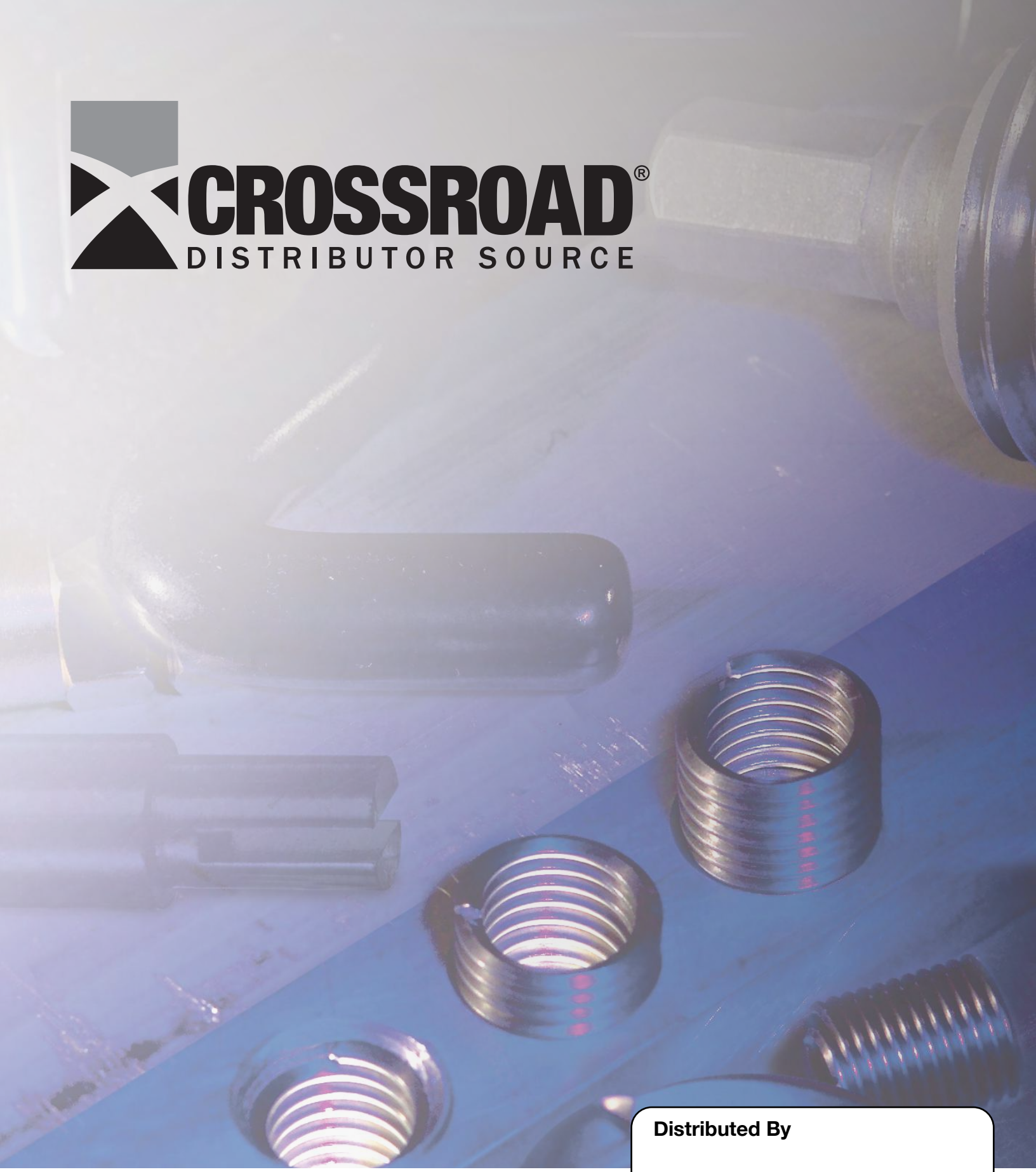
Nominal Thread Size	INSERT SPECIFICATIONS																		Nominal Thread Size
	Q Nominal Length – installed					Free Coil		Number of Free Coils ± 1/4 coil counted 90° from Tang											
	1D	1.5D	2D	2.5D	3D	Min	Max	1D		1.5D		2D		2.5D		3D			
	inch	inch	inch	inch	inch	inch	inch	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
UNC																			UNC
2 X 56	0.086	0.129	0.172	0.215	0.258	0.11	0.12	2.80	3.10	4.80	5.40	6.90	7.80	9.00	10.10	11.10	12.50		2 X 56
3 X 48	0.099	0.148	0.198	0.247	0.297	0.12	0.14	2.80	3.20	4.90	5.50	7.00	7.90	9.00	10.30	11.20	12.70		3 X 48
4 X 40	0.112	0.168	0.224	0.280	0.336	0.14	0.16	2.40	2.80	4.30	4.90	6.20	7.10	8.10	9.20	10.00	11.40		4 X 40
5 X 40	0.125	0.187	0.250	0.312	0.375	0.16	0.17	2.90	3.30	5.00	5.70	7.20	8.10	9.30	10.50	11.50	13.00		5 X 40
6 X 32	0.138	0.207	0.276	0.345	0.414	0.18	0.19	2.40	2.70	4.30	4.80	6.20	7.00	8.20	9.10	10.10	11.20		6 X 32
8 X 32	0.164	0.246	0.328	0.410	0.492	0.20	0.22	3.20	3.50	5.50	6.10	7.80	8.60	10.10	11.20	12.40	13.70		8 X 32
10 X 24	0.190	0.285	0.380	0.475	0.570	0.24	0.26	2.60	2.80	4.60	5.00	6.70	7.20	8.70	9.40	10.70	11.60		10 X 24
12 X 24	0.216	0.324	0.432	0.540	0.648	0.27	0.28	3.20	3.50	5.60	6.00	7.90	8.50	10.30	11.00	12.60	13.50		12 X 24
1/4 X 20	0.250	0.375	0.500	0.625	0.750	0.31	0.33	3.10	3.30	5.30	5.70	7.60	8.10	9.90	10.50	12.10	13.00		1/4 X 20
5/16 X 18	0.312	0.469	0.625	0.781	0.937	0.38	0.40	3.70	3.90	6.30	6.70	8.90	9.50	11.50	12.20	14.10	15.00		5/16 X 18
3/8 X 16	0.375	0.562	0.750	0.937	1.125	0.45	0.47	4.10	4.30	6.80	7.20	9.60	10.10	12.40	13.10	15.20	16.00		3/8 X 16
7/16 X 14	0.437	0.656	0.875	1.094	1.312	0.52	0.55	4.10	4.40	7.00	7.40	9.80	10.40	12.60	13.40	15.50	16.30		7/16 X 14
1/2 X 13	0.500	0.750	1.000	1.250	1.500	0.59	0.62	4.50	4.80	7.50	8.00	10.60	11.10	13.60	14.30	16.60	17.50		1/2 X 13
9/16 X 12	0.562	0.844	1.125	1.406	1.687	0.66	0.69	4.80	5.00	7.90	8.40	11.10	11.70	14.20	15.00	17.40	18.30		9/16 X 12
5/8 X 11	0.625	0.937	1.250	1.562	1.875	0.74	0.77	4.90	5.10	8.10	8.50	11.30	11.90	14.50	15.20	17.70	18.60		5/8 X 11
3/4 X 10	0.750	1.125	1.500	1.875	2.250	0.87	0.91	5.50	5.80	9.00	9.50	12.60	13.10	16.10	16.80	19.60	20.50		3/4 X 10
7/8 X 9	0.875	1.312	1.750	2.187	2.625	1.01	1.05	5.90	6.20	9.60	10.00	13.30	13.90	17.00	17.80	20.70	21.70		7/8 X 9
1 X 8	1.000	1.500	2.000	2.500	3.000	1.15	1.20	6.00	6.30	9.80	10.20	13.60	14.20	17.30	18.10	21.10	22.00		1 X 8
1-1/8 X 7	1.125	1.687	2.250	2.812	3.375	1.30	1.36	5.90	6.20	9.60	10.10	13.30	14.00	17.00	17.90	20.70	21.80		1-1/8 X 7
1-1/4 X 7	1.250	1.875	2.500	3.125	3.750	1.42	1.48	6.70	7.10	10.90	11.40	15.00	15.80	19.20	20.10	23.30	24.40		1-1/4 X 7
1-3/8 X 6	1.375	2.062	2.750	3.437	4.125	1.58	1.64	6.20	6.50	10.10	10.60	14.00	14.60	17.80	18.70	21.70	22.70		1-3/8 X 6
1-1/2 X 6	1.500	2.250	3.000	3.750	4.500	1.70	1.77	6.90	7.30	11.20	11.70	15.40	16.10	19.60	20.60	23.90	25.00		1-1/2 X 6
UNF																			UNF
2 X 64	0.086	0.129	0.172	0.215	0.258	0.11	0.12	3.40	3.70	5.80	6.30	8.20	8.90	10.50	11.60	12.90	14.20		2 X 64
3 X 56	0.099	0.148	0.198	0.247	0.297	0.12	0.15	3.10	3.70	5.20	6.40	7.40	9.00	9.60	11.60	11.80	14.30		3 X 56
4 X 48	0.112	0.168	0.224	0.280	0.336	0.14	0.16	3.20	3.70	5.40	6.40	7.60	9.00	9.80	11.60	12.10	14.20		4 X 48
5 X 44	0.125	0.187	0.250	0.312	0.375	0.16	0.17	3.40	3.70	5.80	6.30	8.20	8.90	10.60	11.50	13.00	14.20		5 X 44
6 X 40	0.138	0.207	0.276	0.345	0.414	0.17	0.19	3.20	3.70	5.50	6.30	7.80	9.00	10.10	11.60	12.40	14.20		6 X 40
8 X 36	0.164	0.246	0.328	0.410	0.492	0.20	0.22	3.60	4.10	6.10	6.90	8.60	9.70	11.10	12.50	13.60	15.30		8 X 36
10 X 32	0.190	0.285	0.380	0.475	0.570	0.23	0.26	3.80	4.30	6.40	7.20	9.00	10.10	11.60	13.00	14.20	15.90		10 X 32
1/4 X 28	0.250	0.375	0.500	0.625	0.750	0.30	0.33	4.70	5.20	7.70	8.50	10.80	11.90	13.80	15.20	16.90	18.60		1/4 X 28
5/16 X 24	0.312	0.469	0.625	0.781	0.937	0.37	0.40	5.10	5.60	8.50	9.20	11.70	12.80	15.00	16.40	18.30	20.00		5/16 X 24
3/8 X 24	0.375	0.562	0.750	0.937	1.125	0.43	0.47	6.50	7.10	10.50	11.40	14.50	15.80	18.50	20.10	22.50	24.50		3/8 X 24
7/16 X 20	0.437	0.656	0.875	1.094	1.312	0.51	0.55	6.30	6.90	10.20	11.10	14.00	15.30	17.90	19.50	21.70	23.70		7/16 X 20
1/2 X 20	0.500	0.750	1.000	1.250	1.500	0.57	0.62	7.40	8.10	11.90	12.90	16.30	17.80	20.80	22.60	25.20	27.50		1/2 X 20
9/16 X 18	0.562	0.844	1.125	1.406	1.687	0.64	0.69	7.60	8.30	12.20	13.30	16.80	18.20	21.30	23.10	25.90	28.10		9/16 X 18
5/8 X 18	0.625	0.937	1.250	1.562	1.875	0.70	0.76	8.70	9.40	13.80	14.90	18.90	20.50	24.00	26.00	29.10	31.50		5/8 X 18
3/4 X 16	0.750	1.125	1.500	1.875	2.250	0.84	0.90	9.30	10.10	14.70	15.90	20.10	21.70	25.50	27.60	30.90	33.40		3/4 X 16
7/8 X 14	0.875	1.312	1.750	2.187	2.625	0.98	1.05	9.60	10.30	15.10	16.30	20.60	22.20	26.10	28.20	31.60	34.20		7/8 X 14
1 X 12	1.000	1.500	2.000	2.500	3.000	1.12	1.20	9.40	10.10	14.80	16.00	20.30	21.80	25.70	27.70	31.10	33.50		1 X 12
1 X 14	1.000	1.500	2.000	2.500	3.000	1.10	1.19	11.20	12.10	17.50	18.90	23.80	25.70	30.10	32.50	36.40	39.40		1 X 14
1-1/8 X 12	1.125	1.687	2.250	2.812	3.375	1.25	1.33	10.80	11.60	16.90	18.20	23.00	24.80	29.20	31.40	35.30	38.00		1-1/8 X 12
1-1/4 X 12	1.250	1.875	2.500	3.125	3.750	1.37	1.47	12.20	13.10	19.00	20.40	25.80	27.80	32.70	35.10	39.50	42.50		1-1/4 X 12
1-3/8 X 12	1.375	2.062	2.750	3.437	4.125	1.50	1.61	13.50	14.60	21.00	22.70	28.50	30.80	36.00	38.80	43.50	46.90		1-3/8 X 12
1-1/2 X 12	1.500	2.250	3.000	3.750	4.500	1.62	1.75	14.90	16.10	23.10	24.90	31.30	33.70	39.50	42.60	47.70	51.40		1-1/2 X 12

IMPORTANT
The success of any drilling and tapping operation is dependant upon many factors –type of material being cut, cutting speed, coolant, equipment being used – and it is not possible to give specific drill sizes for each material. Drill sizes shown are recommendations only and PowerCoil would strongly suggest that independent testing be performed for specific and critical applications.

When using wire thread inserts it is important that the drilling and tapping diameters and lengths listed below are adhered to.

The figures outlined in these tables encompass effective free coil tolerances for most globally recognized standards and manufacturers, including those of reduced diameter wire thread inserts.

PowerCoil wire thread inserts can be manufactured to different standards upon request. Technical data on these standards can be obtained from our website – www.powercoil.com.au.



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