



*Australian Bolt
Suppliers*



FASTENER PRODUCT GUIDE

HIGH-TENSILE



STRUCTURAL



SOKO



EARTHMOVING



PETROCHEMICAL



**STAINLESS
HARDWARE**



**STAINLESS
FASTENERS**



NEPTUNE



BUMAX



NORD-LOCK



SCHNORR



WASHERS



NYLON



COMMERCIAL



LOW-TENSILE



CYCLONE



TRADE PAX & KITS



MUNGO



CONXTRACT



DRILLX





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**Welcome to Australian Bolt Suppliers, your GO TO store
for all your fastener and industrial needs.**

We at Aussie Bolts don't just stock a huge range of fasteners, we also have Abrasives, Adhesives, PPE, Workwear, Handtools and much more...

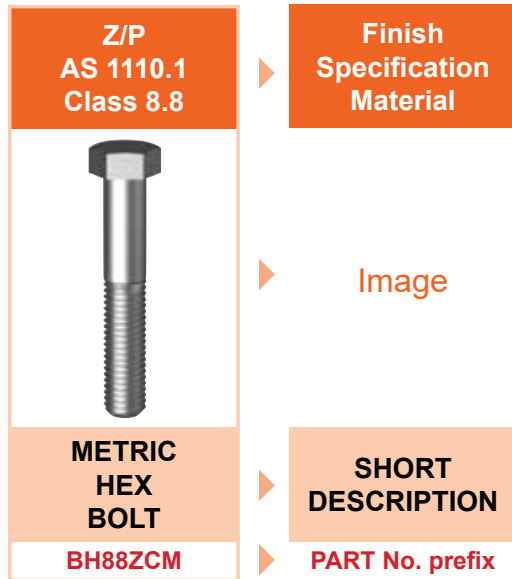
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Using this Guide



BH88ZCM =

Stock Code	Size	Length
BH88ZCM060016	M6	16
BH88ZCM060020	M6	20
BH88ZCM060025	M6	25
BH88ZCM060030	M6	30
BH88ZCM060035	M6	35
BH88ZCM060040	M6	40
BH88ZCM060045	M6	45
BH88ZCM060050	M6	50

Accreditation



Memberships



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CONSTRUCT 68

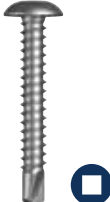
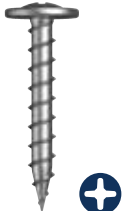
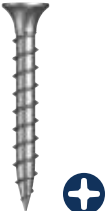
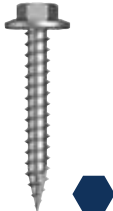
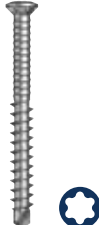
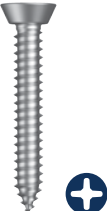
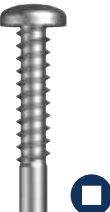
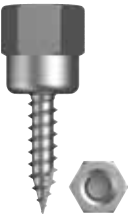


DRILLX 72





NEW PRODUCTS

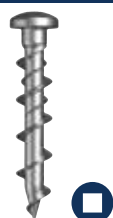
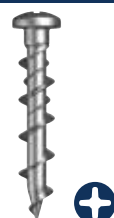
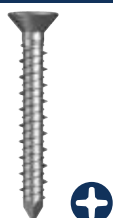
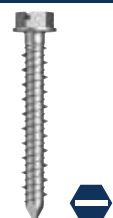
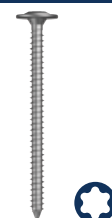
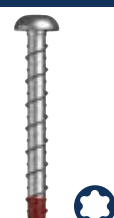
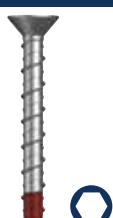
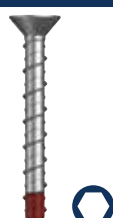
Metal SS 304 BI-Metal   PAN HEAD SQUARE DR T4XMXPQ	Needle Point Coarse ZYP  LARGE WAFER PHILLIPS T9PCYAP	Needle Point Coarse Drywall ZYP  BUGLE BATTEN PHILLIPS T9PCYBP	HVAC Framing Z/P  HEX HEAD WASHER T9PFZWH	Type 17 ZYP  HEX HEAD FLANGE T9PWYFH	SS 304   TRIM HEAD TORX DR T04VSTT	SS 410 ANSI B18.6.4  UNDERCUT CSK SELF TAPPING PHILLIPS T41SSDP				
SS 410 ANSI B18.6.4  PAN HEAD SELF TAPPING SQUARE T41PSPQ	HEC EZ Drill Bit  KIT PRE-DRILL & COUNTERSINK TXDEZPK	HEC EZ Drill Bit  REPLACEMENT PRE-DRILL & COUNTERSINK TXDEZRK	Z/P HEC Carbon Steel  VERTICAL HANGER METAL MVMMSZIM	Z/P HEC Carbon Steel  VERTICAL SIDE HANGER METAL MVMMSZSM	Z/P HEC Carbon Steel  VERTICAL HANGER T17 TIMBER MVWMSZIM	Blue HEC For M6/M8/M10  VERTICAL HANGER SOCKET MXSVS-SI				
304 SS Steel ZP  DOME HEAD OPEN RIVET R0473OLS	304 SS  DOME HEAD SEALED RIVET R0473TLL	5056 AL Steel ZP  DOME HEAD PEEL RIVET R9673P6S	Monel Steel ZP  COUNTERSUNK OPEN RIVET R9P72OMS	5056 AL Steel ZP  DOME HEAD OPEN RIVET R9P73O6S	S2 Alloy TitaN Bit 1/4  INSERT PHILLIPS TXDTIPH	S2 Alloy TitaN Bit 1/4  POWER HEX TXDTPHX				
 Drive Bits designed for high impact forces of modern power tools.							S2 Alloy Black impaX Bit 1/4  INSERT PHILLIPS TXDIIPH	S2 Alloy Black impaX Bit 1/4  INSERT BIT HOLDER MAG COLLAR TXDIIBM	S2 Alloy Black impaX Bit 1/4  MAGNETIC NUT SETTER TXDIPNS	S2 Alloy Black impaX Bit 1/4  POWER HEX TXDIPHX

impaX™

Drive Bits designed for high impact forces of modern power tools.



NEW PRODUCTS

R1000 hrs HEC Carbon Steel  WALL KATT™ UNIVERSAL PAN SQUARE MWKXRPQ	Z/P HEC Carbon Steel  WALL KATT™ UNIVERSAL PAN PHILLIPS MWKXZPP	R1000 hrs HEC Carbon Steel  TX-CON™ ANCHOR CSK PHILLIPS MTXTRCP	R1000 hrs HEC Carbon Steel  TX-CON™ ANCHOR HEX SLOT MTXTRHL	Z/P HEC Carbon Steel  TX-CON™ FRAMING ANCHOR TORX MTXSZGO	Z/P HEC Carbon Steel  HOLLOW WALL ANCHOR STANDARD MWHDZPCM	Wall Anchor Tool HEC Carbon Steel  SETTING TOOL RATCHET STYLE MATWHR	
ZYP HEC Carbon Steel  TY9aBolt® CSK SLEEVE ANCHOR MTC88YM	MGAL HEC Carbon Steel  XBolt® BUTTON HEAD TORX DR MXDMSGM	MGAL HEC Carbon Steel  XBolt® CSK HEAD HEX DR MXKMSGM	ZYP HEC Carbon Steel  XBolt® CSK HEAD HEX DR MXKMSSYM	Blue HEC For M10 XBolt®  VERTICAL HANGER SOCKET MXSVSM	ZYP HEC CARBON STEEL  500 x DROP-IN ANCHOR KNURLED BODY WITH LIP 2 x BITS / 1 x HANDLE IN BUCKET MDKMSSYM		
PLASTIC HEC  PACKING SHIMS WINDOW MIX 1.5: WHITE / 3.2: BLUE / 5.0: RED 6.4: GREEN / 10.0: BLACK FTMPWPLX				Vinylester MIT-TROPICAL  CARTRIDGE 350ML MUNGO MUCMTTRO	Vinylester urethane MIT-HYBRID  CARTRIDGE 400ML MUNGO MUCMTHYB1710094	MFB  DIAMOND DRILL BIT MUNGO MUDMFB00	SDS-PLUS JET-TRAC TRIPLO  DRILL BIT 3 CUTTER MUNGO MUDJTTPR
MPC Pro Cut  CUTTING DISC 1.0 - 1.9 MUNGO MUDMPCP1	MPG Pro Grind  GRINDING DISC 6.5 MUNGO MUDMPGPG	MDC Laser Beton  DIAMOND BLADE MUNGO MUDMDCLB	MDC Power M  DIAMOND BLADE MUNGO MUDMDCPM	SDS-PLUS MPM  FLAT CHISEL MUNGO MUDMPMFC	SDS-PLUS MPM  POINTED CHISEL MUNGO MUDMPMPC	SDS-MAX MXM  SPADE CHISEL MUNGO MUDMXMSC	

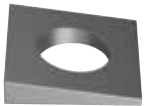
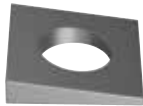
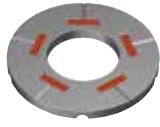
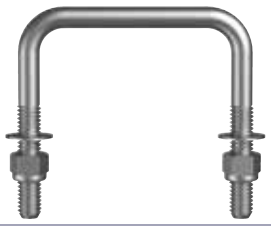


NEW PRODUCTS

ZYP DIN 6921 Class 8.8 FINE FLANGED HEX BOLT SERRATED BF88Y6FM	Z/P DIN 6921 Class 8.8 FLANGED HEX BOLT SERRATED BF88ZCM	ZYP JIS B1189 Type 2 Class 8.8 FLANGED HEX BOLT NO SERRATION BF88YCM	ZYP JIS B1189 Type 2 Class 8.8 FINE FLANGED HEX BOLT NO SERRATION BF88YFM	SS 304 ISO 14579 METRIC COUNTERSUNK TORX SC04POCM	SS 304 ISO 7380 METRIC BUTTON HEAD TORX SCREW SB04POCM	PLN ASTM A193 Grade B7 HEAVY HEX BOLT BLANK BPB7PB
Z/P HEC Class 10.9 CSK SOCKET SC10ZCM	Z/P ANSI B18.3 ASTM F835 UNC CSK SOCKET SCSOZC	Z/P ANSI B18.3 ASTM A574 UNC CAP SCREW SOCKET SHSOZC	Z/P ANSI B18.3 ASTM A574 FINE CAP SCREW SOCKET SHSOZFM	Z/P HEC Class 10.9 METRIC BUTTON HEAD SOCKET SCREW SB10ZCM	Z/P ANSI B18.3 ASTM F835 UNC BUTTON HEAD SOCKET SCREW SBSOZC	Bumax®129 ISO 4762 DUPLEX SOCKET HEAD CAP SCREW SHX9PCM
Z/P AS 1427: 1996 Mild Steel METAL THREAD PAN HEAD COMBI MSMSZPCM	Security SS 304 ISO 7380 BARREL NUT BUTTON HEAD POST TORX INB04BTM	Z/P AS 1390 Class 10.9 METRIC CUP HEAD BOLT & NUT KBC10ZCM	HDG AS 1390 Class 8.8 METRIC CUP HEAD BOLT & NUT KBC88GCM	Z/P ASME B18.5 Grade 8 UNC CUP HEAD BOLT & NUT KBCG8ZC	SS 316 DIN 975 FINE ALLTHREAD 1m AL16PFM	ZYP DIN 6924 Class 8 METRIC HEAVY NYLOC® NUT NN08Y6CM
Z/P ISO 10511 NYLOC® NUT THIN NN05ZTCM	Z/P DIN 985 Class 6 METRIC FINE NYLOC® NUT NN06ZFM	Z/P ASME B18.16.6 Type NTE / NTM UNC NYLOC® NUT THIN NNG2ZTC	Z/P ASME B18.16.6 Type NTE / NTM UNF NYLOC® NUT THIN NNG2ZTF	Z/P ISO 4161 Class 8 METRIC SERRATED HEX FLANGE NUT NF08ZCM	1PX1 (MOLY) DIN 934 SS 316 METRIC HEX NUT NH16LCM	SS 304 HEC UNF HEX DOME ND04PF

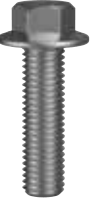
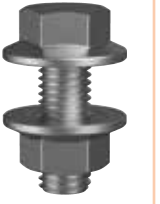
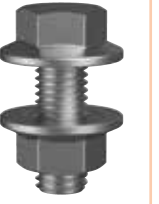
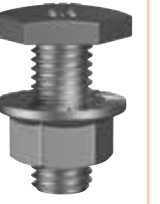
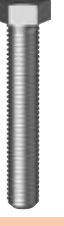
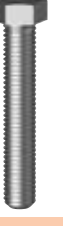
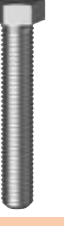


NEW PRODUCTS

Delta Protekt® Hardened Steel EN 1.7182 NORD-LOCK PART OF THE NORD-LOCK GROUP  STANDARD SC WASHER WNSCDD	Delta Protekt® Hardened Steel EN 1.7225 NORD-LOCK PART OF THE NORD-LOCK GROUP  METRIC X SERIES LARGE OD WASHER WNXTLD	HDG AS1252 33-41HRC  TAPER WASHER 8° SQUARE WTK0GM	PLN AS1252 33-41HRC  TAPER WASHER 8° SQUARE WTK0PM	MGAL ASTM F959 Grade 5 applied bolting TECHNOLOGY  SQUIRTER® DTI WASHER WDSTG	HDG HEC 35-41HRC  METRIC SQUARE WASHER WSHTGM	Z/P HEC Mild Steel  METRIC SQUARE WASHER WSMSZM
Wall Mount HEC Imperial / Metric  THREAD CHECK DISPLAY XXTHREADCHECK	SS 304 HEC  SKID PLATE CUP WASHER WR04KM	Natural Nylon HEC  FLAT ADHESIVE WASHER WR66PDM	Nylon Black HEC UV Resistant  FINISHING WASHER RCC WR66UCM	HDG HEC Mild Steel  D ANCHOR BRACKET PLATE M6 / 4 HOLES GDAGP4M	HDG HEC Mild Steel  BSW U BOLT SQUARE KIT NYLOC & WASHER KUSMSGN	
	Z/P HEC  IMPERIAL THREAD CHECK DISPLAY CABLE XXTHREADCHKCAB-I	Nylon Natural HEC  UNC HEX SOCKET GRUB SCREW SG66PC	Z/P HEC Mild Steel  R CLIP HUMPBAC PIN QPRMSZM	Z/P HEC Mild Steel  METRIC SPLIT PIN QPSMSZM	Black HEC 25µm  SHRINK WRAP 500mm x 400m XSWB	
	PLN HEC  METRIC THREAD CHECK DISPLAY CABLE XXTHREADCHKCAB-M	Polyethylene HEC UV Resistant  PLUG HEAD COVER FOR HEX SCREW PHCPEUM	SS 304 HEC  FLUSH FITTING HINGE 6 HOLE FIXED PIN HHF04D-100	ALUM HEC  FLUSH FITTING HINGE 7 HOLE FIXED PIN HHFALD-100	SS 304 HEC  BUTT HINGE 8 HOLE FIXED PIN HHB04D-100	

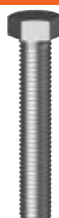
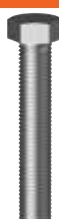
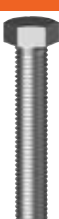


HIGH-TENSILE

HDG DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC SAMPSONROD® 1m & 3m AS88GCM	HDG DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC FOUNDATION STUD AS88GCM	HDG DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC FINE SAMPSONROD® AS88GFM	PLN DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC SAMPSONROD® 1m & 3m AS88PCM	PLN DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC FINE SAMPSONROD® AS88PFM	ZYP DIN 975 Class 8.8 SAMPSONROD High Tensile Steel Rod  METRIC SAMPSONROD® 1m & 3m AS88YCM	HDG IFI 136C Grade 5 SAMPSONROD High Tensile Steel Rod  UNC SAMPSONROD® 3ft ASG5GC
PLN IFI 136C Grade 5 SAMPSONROD High Tensile Steel Rod  UNC SAMPSONROD® 3ft ASG5PC	PLN IFI 136C Grade 5 SAMPSONROD High Tensile Steel Rod  UNF SAMPSONROD® 3ft ASG5PF	PLN AS 3501 Grade 5 SAMPSONROD High Tensile Steel Rod  BSF SAMPSONROD® 3ft ASG5PS	PLN IFI 136C Grade 5 SAMPSONROD High Tensile Steel Rod  UN8 SAMPSONROD® 3ft ASG5PU	PLN AS 3501 Grade 5 SAMPSONROD High Tensile Steel Rod  BSW SAMPSONROD® 3ft ASG5PW	PLN DIN 975 Class 10.9  METRIC HOBROD™ 1m AS10PCM	PLN IFI 136C Grade 8  UNC HOBROD™ 3ft ASG8PC
HDG HEC Class 8  HEX COUPLER AXHC08GCM	PLN DIN 6921 Class 10.9  FLANGED HEX BOLT BF10PCM	HDG HEC Class 8.8  PURLIN HEX 2 WASHER BOLT & NUT KBHHTGCM	Z/P HEC Class 8.8  PURLIN HEX 2 WASHER BOLT & NUT KBHHTZCM	HDG HEC Class 8.8  PURLIN HEX FLANGE BOLT & NUT KBFHTGCM	Z/P HEC Class 8.8  PURLIN HEX FLANGE BOLT & NUT KBFHTZCM	HDG HEC Class 8.8  METRIC FASCIA BOLT KIT KBIHTGCM
HDG HEC Class 8.8  TRAILER ADJ BOLT ASSEMBLY KBS88GQM	PLN AS 1110.1 Class 10.9  HEX BOLT BLANK BH10PBM	HDG AS 1110.2 Class 8.8  METRIC HEX SET SCREW BS88GCM	Z/P AS 1110.2 Class 8.8  METRIC HEX SET SCREW BS88ZCM	PLN AS 1110.2 Class 8.8  METRIC HEX SET SCREW BS88PCM	HDG AS 1110.1 Class 8.8  METRIC HEX BOLT BH88GCM	PLN AS 1110.1 Class 8.8  METRIC HEX BOLT BH88PCM

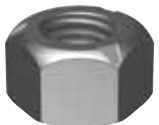
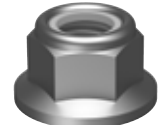
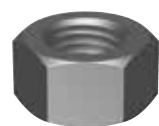


HIGH-TENSILE

Z/P AS 1110.1 Class 8.8  METRIC HEX BOLT BH88ZCM	HDG AS 1110.1 Class 8.8  METRIC HEX BOLT & NUT KBH88GCM	Z/P AS 1110.1 Class 8.8  METRIC HEX BOLT & NUT KBH88ZCM	PLN AS 1110.1 Class 8.8  METRIC HEX BOLT & NUT KBH88PCM	Z/P AS 1110.2 Class 8.8  METRIC FINE HEX SET SCREW BS88ZFM	PLN AS 1110.2 Class 8.8  METRIC FINE HEX SET SCREW BS88PFM	Z/P AS 1110.1 Class 8.8  METRIC FINE HEX BOLT BH88ZFM
PLN AS 1110.1 Class 8.8  METRIC FINE HEX BOLT BH88PFM	Z/P AS 1110.1 Class 10.9  METRIC HEX BOLT BH10ZCM	PLN AS 1110.1 Class 10.9  METRIC HEX BOLT BH10PCM	Z/P AS 1110.1 Class 10.9  METRIC FINE HEX BOLT BH10ZFM	Z/P AS 2465 Grade 5  UNC HEX SET SCREW BSG5ZC	PLN AS 2465 Grade 5  UNC HEX SET SCREW BSG5PC	Z/P AS 2465 Grade 5  UNC HEX BOLT BHG5ZC
PLN AS 2465 Grade 5  UNC HEX BOLT BHG5PC	Z/P AS 2465 Grade 5  UNC HEX BOLT & NUT KBHG5ZC	PLN AS 2465 Grade 5  UNC HEX BOLT & NUT KBHG5PC	Z/P AS 2465 Grade 5  UNF HEX SET SCREW BSG5ZF	PLN AS 2465 Grade 5  UNF HEX SET SCREW BSG5PF	Z/P AS 2465 Grade 5  UNF HEX BOLT BHG5ZF	PLN AS 2465 Grade 5  UNF HEX BOLT BHG5PF
Z/P AS 2465 Grade 8  UNC HEX SET SCREW BSG8ZC	PLN AS 2465 Grade 8  UNC HEX SET SCREW BSG8PC	Z/P AS 2465 Grade 8  UNC HEX BOLT BHG8ZC	PLN AS 2465 Grade 8  UNC HEX BOLT BHG8PC	Z/P AS 2465 Grade 8  UNC HEX BOLT & NUT KBHG8ZC	PLN AS 2465 Grade 8  UNC HEX BOLT & NUT KBHG8PC	Z/P AS 2465 Grade 8  UNF HEX SET SCREW BSG8ZF

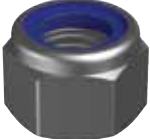
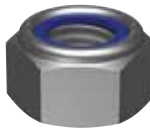
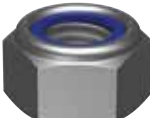
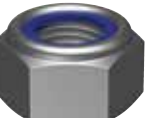
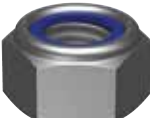
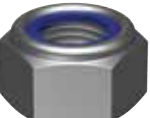
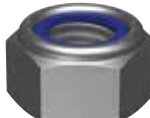
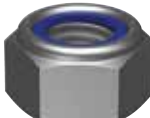
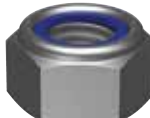
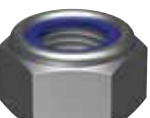
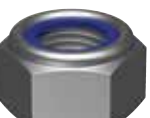


HIGH-TENSILE

PLN AS 2465 Grade 8  UNF HEX SET SCREW BSG8PF	Z/P AS 2465 Grade 8  UNF HEX BOLT BHG8ZF	PLN AS 2465 Grade 8  UNF HEX BOLT BHG8PF	Z/P DIN 980 Class 10  METRIC CONE LOCK HCL NUT NC10ZCM	Z/P DIN 980 Class 10  METRIC FINE CONE LOCK HCL NUT NC10ZFM	Z/P IFI 100-107 Grade C  UNC CONE LOCK HCL NUT NCGCZ	Z/P IFI 100-107 Grade C  UNF CONE LOCK HCL NUT NCGCZF
HDG ISO 4161 Class 8  METRIC SERRATED HEX FLANGE NUT NF08GCM	ZYP ISO 4161 Class 8  METRIC SERRATED HEX FLANGE NUT NF08YCM	PLN ISO 4161 Class 10  METRIC SERRATED HEX FLANGE NUT NF10PCM	ZYP HEC Class 10 NYLOC  METRIC NYLOC® FLANGE NUT NF10YNM	ZYP IFI 145 / B18 2.2 Grade 5  UNC SERRATED HEX FLANGE NUT NFG5YC	PLN IFI 145 / B18 2.2 Grade 8  UNF SERRATED HEX FLANGE NUT NFG8PF	Z/P IFI 145 / B18 2.2 Grade 8  UNC SERRATED HEX FLANGE NUT NFG8ZC
Z/P IFI 145 / B18 2.2 Grade 8  UNF SERRATED HEX FLANGE NUT NFG8ZF	ZYP ISO 4161 Class 8  METRIC FINE SERRATED HEX FLANGE NUT NF08YFM	PLN ISO 4161 Class 10  NO SERRATION HEX FLANGE NUT NF10PPM	HDG AS 1112.1 Class 8  METRIC HEX NUT NH08GCM	HDG AS 1112.1 Class 8  METRIC HEX NUT LEFT HAND NH08GDM	PLN AS 1112.1 Class 8  METRIC HEX NUT NH08PCM	PLN AS 1112.1 Class 8  METRIC FINE HEX NUT NH08PFM
Z/P AS 1112.1 Class 8  METRIC HEX NUT NH08ZCM	Z/P AS 1112.1 Class 8  METRIC FINE HEX NUT NH08ZFM	PLN AS1112.1 Class 10  METRIC HEX NUT NH10PCM	PLN AS1112.1 Class 10  METRIC FINE HEX NUT NH10PFM	Z/P AS1112.1 Class 10  METRIC HEX NUT NH10ZCM	Z/P AS 1112.1 Class 10  METRIC FINE HEX NUT NH10ZFM	PLN AS 2465 Grade 5  UNC HEX NUT NHG5PC



HIGH-TENSILE

PLN AS 2465 Grade 5  UNF HEX NUT NHG5PF	Z/P AS 2465 Grade 5  UNC HEX NUT NHG5ZC	Z/P AS 2465 Grade 5  UNF HEX NUT NHG5ZF	PLN AS 2465 Grade 8  UNC HEX NUT NHG8PC	PLN AS 2465 Grade 8  UNF HEX NUT NHG8PF	Z/P AS 2465 Grade 8  UNC HEX NUT NHG8ZC	Z/P AS 2465 Grade 8  UNF HEX NUT NHG8ZF
HDG AS 1112.4 Use with Class 8  METRIC THIN HEX LOCK NUT NL08GCM	Z/P AS 1112.4 Use with Class 8  METRIC THIN HEX LOCK NUT NL08ZCM	NYLOC® Nylon insert locknuts Anti-vibration solution.		Z/P DIN 982 Class 8  METRIC HEAVY NYLOC® NUT NN08ZHCM	Z/P DIN 982 Class 10  METRIC HEAVY NYLOC® NUT NN10ZHCM	MGAL DIN 985 Class 8  METRIC NYLOC® NUT NN08GCM
ZYP DIN 985 Class 8  METRIC NYLOC® NUT NN08YCM	ZYP DIN 985 Class 8  METRIC FINE NYLOC® NUT NN08YFM	Z/P DIN 985 Class 8  METRIC NYLOC® NUT NN08ZCM	Z/P DIN 985 Class 8  METRIC FINE NYLOC® NUT NN08ZFM	ZYP DIN 985 Class 10  METRIC NYLOC® NUT NN10YCM	Z/P DIN 985 Class 10  METRIC NYLOC® NUT NN10ZCM	Z/P IFI-100NE Grade 5  UNC NYLOC® NUT NNG5Z
Z/P IFI-100NE Grade 5  UNF NYLOC® NUT NNG5ZF	Z/P IFI-100NE Grade 8  UNC NYLOC® NUT NNG8ZC	Z/P IFI-100NE Grade 8  UNF NYLOC® NUT NNG8ZF	HDG DIN 557 Class 8  METRIC SQUARE NUT NQ08GCM	Z/P HEC Class 8.8  STARTER BAR L BOLT LB88ZCM	PLN AS 1085.4 Class 8.8  FISHBOLT & NUT DBD88PCM	PLN AS 1085.4/7 Class 8.8  FISHBOLT NUT & SPRING WASHER DBD88PSM



STRUCTURAL

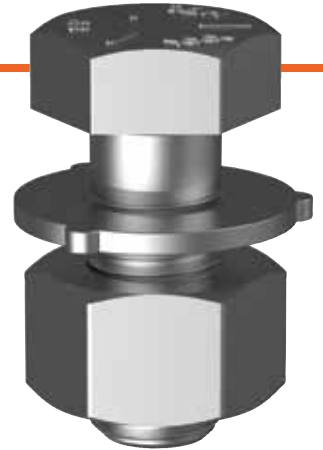
AS 1252: 2016 K0 8.8 HR Structural Assembly

» **AS 1252: 2016 K0 8.8 HR replaces
AS 1252: 1983 dimensional (1996 mechanical)**

- » Fully adhering to the new standard.
- » Unique Batch head marking. See photo below
- » Verification Testing Reports included in the Supplier Declaration of Conformance [SDoC].
- » Full Quality Assurance documentation online.



Assembly testing was made to be 'normative' in AS 1252: 2016. **This makes it compulsory to do assembly testing for K0 assemblies.**



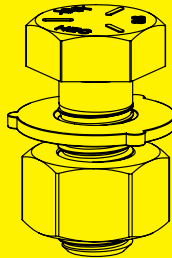
**HOT DIP GALVANISED
K0 STRUCTURAL ASSEMBLY
AS1252:2016 K0 / CLASS 8.8**

M20 x 50

50 pcs

Q:K02050

SDoC: This product complies to AS1252:2016 Part 1 and 2 (mandatory). ALL conforming documentation and quantity production units are available online at hobson.com.au/k0 or scan the below QR code.



KBHK0GCM200050

HEAT: JJT-E987654

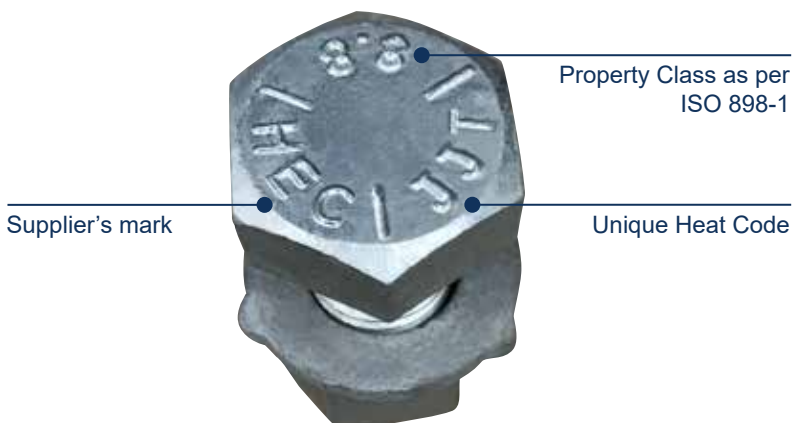


9 350629 060574

LOT: A123456
PO: 99999 NS1
CTN WGT: 16.00kg

**K0 8.8 HR STRUCTURAL ASSEMBLY
HOT DIP GALVANISED / AS1252:2016 K0 / CLASS 8.8**

Part	Size	Length (mm)
KBHK0GCM120	M12	30-200
KBHK0GCM160	M16	40-700
KBHK0GCM200	M20	40-800
KBHK0GCM220	M22	55-200
KBHK0GCM240	M24	50-750
KBHK0GCM270	M27	80-200
KBHK0GCM300	M30	75-725
KBHK0GCM330	M33	130-230
KBHK0GCM360	M36	90-600



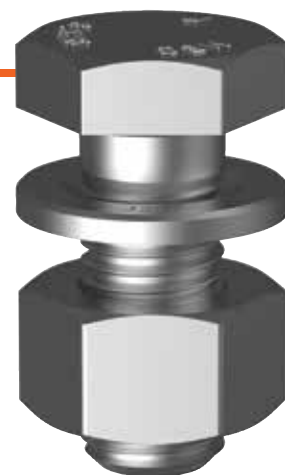
K0



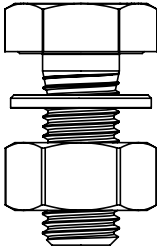
STRUCTURAL

EN 14399: 2005 K2 8.8 HR Structural Assembly

- » EN 14399: 2005 K2 8.8 HR [AS 1252: 2016 states that EN 14399 can be used as an 'alternative assembly type'].
- » Premium Range.
- » Unique batch head marking. See photo below.
- » Friction tightly controlled during manufacture. Refer details on the label for k factor and torque method.
- » Torque able to be used for tensioning.
- » Full Quality Assurance documentation online.



Carton Label

HR, HDG (EN14399-3 8.8 BOLT/ (1) EN14399-3 CL.8 NUT/ (1) EN14399-5 WASHER)		
KBHK2GCM240080	LOT# 2015351400	Quantity: 30 PCS
PO# 58949	Hobson Engineering 10 Clay Place Eastern Creek NSW 2766 AUSTRALIA	
Heat Code: 2MT		
		
935062901642		
M24x3.0Px80		
Torque Method according to EN1090-2		
① 1st : 430 Nm ② 2nd : 630 Nm		
k - class K2		
③ k_m : 0.120		
④ V_k : 0.06		
		KEG NO: 1
		PLT NO: 155

K2 8.8 HR STRUCTURAL ASSEMBLY HOT DIP GALVANISED / EN14399:2005 K2 / CLASS 8.8

Part	Size	Length (mm)
KBHK2GCM160	M16	40-100
KBHK2GCM200	M20	45-350
KBHK2GCM220	M22	65-130
KBHK2GCM240	M24	50-150
KBHK2GCM300	M30	75-500
KBHK2GCM360	M36	90-200



Manufacturer's mark

Unique Heat Code

Property Class as per
ISO 898-1 and HR

- ① The rated torque value required to bring the steel plies to firm contact (Snug or Bearing Joint).
- ② The rated torque value required to reach the correct tension in the assembly (Friction Joint).
- ③ The mean value of the k-factor obtained through testing.
- ④ V_k is the coefficient of variation of the k-factor values obtained in testing.



STRUCTURAL

Required Documentation

EN 14399: 2005 **K2** 8.8 HR
Assembly document structure.

» European Conformity (CE) Certificate.

The European Conformity (CE) mark is given to a manufacturer who has been assessed by a notified body and audited to the Harmonised European Standard (hEN) stating that they have the fabrication processes and quality management in place which is acceptable for the products manufactured. It is a requirement in the European Union to have the required CE marking on their products. A CE mark is only required in AS 1252: 2016 for the alternative and additional assembly types.

» Factory Production Control (FPC).

Inspection Certificate.

» Declaration of Performance (DoP).

AS 1252: 2016 **K0** 8.8 HR
Assembly document structure.

» Initial Type Testing Certificate (ITT) as demonstrated by the European Conformity (CE) Certificate.

» Factory Production Control (FPC).

Inspection Certificate.

» Verification Testing Report must be included in the Supplier Declaration of Conformance (SDoC).

Verification Testing is an additional layer to the quality assurance of the **K0** assemblies arriving in Australia.

Verification Testing must be completed by an independent ILAC (NATA equivalent global body) accredited laboratory.

K2 Quality Assurance Documentation Online

Find Test Certificates by typing at least 3 characters of a Heat Number. Then press the FIND button to retrieve links to all matching certificates.

Heat Number	Description	Category	Part Number	Certificates
2015351400-2MT	EN 8.8 K2 HDG BNW:M24 X 80	AS1252 Structural	KBHK2GCM240080	CE F D

F **Factory Production Control (FPC)**

D **Declaration of Performance (DoP)**

The European Union's Certificate of conformity

STRUCTURAL



K0 Quality Assurance Documentation Online

JJT

FIND

Find Test Certificates by typing at least 3 characters of a Heat Number. Then press the FIND button to retrieve links to all matching certificates.

Heat Number	Description	Category	Part Number	Certificates
JJT-E987654	K0 AS1252:2016 HDG BNW:M20 X 50	AS1252 Structural	KBHK0GCM200050	ITT F S



INSPECTION CERTIFICATE																																																	
Customer: Hobson	Invoice No: INV0389	FACTORY: Hobson Engineering approved Factory No 02																																															
Product: K0 AS1252:2016 HDG BNW:M20 X 50	PO No: 23398	Certificate No: J42617012353																																															
Size: M20 x 50	Part No: KBHK0GCM200050	Date Shipped: 27 Apr 17																																															
Marking: HEC 8.8 J88	Production Date: 27-Apr-17																																																
Washer: H	Sublot Condition: HDG																																																
	Assembly Trace No: 201552640																																																
	City Shipped: 10																																																
Specifications: Std: AS1252:2016 K0 Class-K0 Std: AS1252:2016 Std: AS1252:2016 Washer: AS1252:2016																																																	
2 Mechanical Properties <table border="1"> <thead> <tr> <th rowspan="2">Division</th> <th colspan="2">Mechanical Properties</th> <th colspan="2">Specification Limits</th> <th colspan="2">Proof Load</th> <th rowspan="2">Wedge Tensile</th> </tr> <tr> <th>Yield Strength</th> <th>Tensile Strength</th> <th>Elongation</th> <th>Reduction of Area</th> <th>Load</th> <th>Elongation</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>MPa</td> <td>MPa</td> <td>%</td> <td>%</td> <td>N</td> <td>%</td> <td>mm</td> </tr> <tr> <td>Spec</td> <td>235</td> <td>420</td> <td>25</td> <td>50</td> <td>215000</td> <td>12.5</td> <td>100</td> </tr> <tr> <td>Results</td> <td>235</td> <td>420</td> <td>25</td> <td>50</td> <td>215000</td> <td>12.5</td> <td>100</td> </tr> <tr> <td>Remarks</td> <td colspan="7">AS1252:2016</td> </tr> </tbody> </table>				Division	Mechanical Properties		Specification Limits		Proof Load		Wedge Tensile	Yield Strength	Tensile Strength	Elongation	Reduction of Area	Load	Elongation	Unit	MPa	MPa	%	%	N	%	mm	Spec	235	420	25	50	215000	12.5	100	Results	235	420	25	50	215000	12.5	100	Remarks	AS1252:2016						
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	Yield Strength	Tensile Strength	Elongation	Reduction of Area	Load	Elongation																																											
Unit	MPa	MPa	%	%	N	%	mm																																										
Spec	235	420	25	50	215000	12.5	100																																										
Results	235	420	25	50	215000	12.5	100																																										
Remarks	AS1252:2016																																																
3 Assembly Test <table border="1"> <thead> <tr> <th rowspan="2">Division</th> <th colspan="2">Assembly Test</th> <th colspan="2">Weld & Thread Inspection</th> </tr> <tr> <th>Clamped Length</th> <th>Spec. Net Retention</th> <th>Division</th> <th>Appearance</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>mm</td> <td>mm</td> <td>Washer</td> <td>OK</td> </tr> <tr> <td>Spec</td> <td>210</td> <td>210</td> <td></td> <td></td> </tr> <tr> <td>Results</td> <td>210</td> <td>210</td> <td></td> <td></td> </tr> <tr> <td>Remarks</td> <td colspan="4">Specification of Test Method: AS1252:2016</td> </tr> </tbody> </table>				Division	Assembly Test		Weld & Thread Inspection		Clamped Length	Spec. Net Retention	Division	Appearance	Unit	mm	mm	Washer	OK	Spec	210	210			Results	210	210			Remarks	Specification of Test Method: AS1252:2016																				
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Remarks	Specification of Test Method: AS1252:2016																																																

F Factory Production Control (FPC)

ITT Initial Type Testing (ITT)



S Suppliers Declaration of Conformity (SDoC)



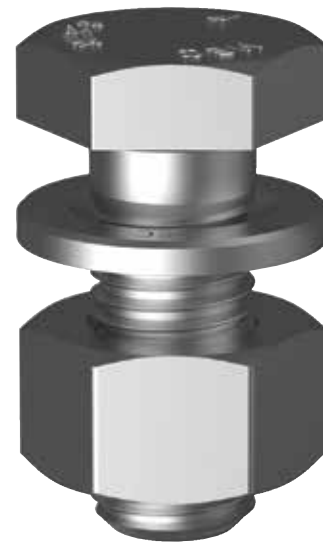
STRUCTURAL

K Classification of Bolt Systems

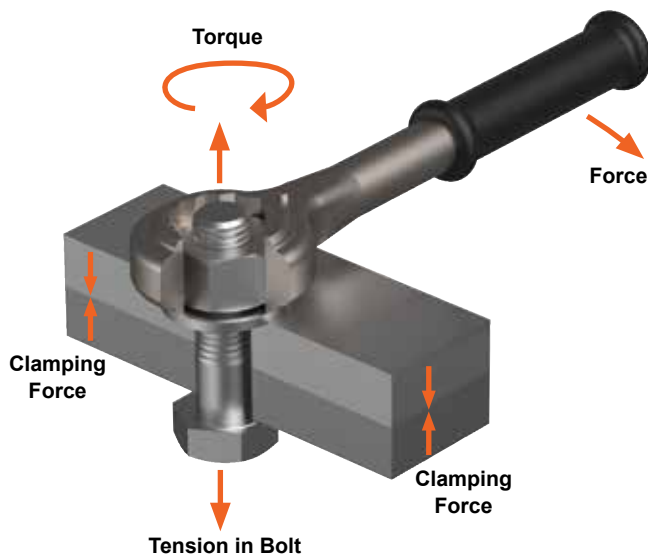
EN 14399 documentation provides performance values for designers along with tests to ensure that the assembly will perform as intended by the standard.

This European standard allows torque to be used when tightening structural bolts. This only applies for K1 and K2 assemblies where the torque-tension relationship is calibrated.

Structural Bolt assemblies that are manufactured to EN 14399 8.8 Type HR with K2 classification comply to the requirement of AS 1252: 2016 and can be used directly in the Australian market.



Torque and Tension?



Forces at play when a bolt is torqued.

Torque is the *rotational* force applied to a solid body.

Tension is the *axial* (along the shank) force applied to a solid body.

We can relate the torque applied to the nut to the tension achieved by the bolt. However, the effect of friction on surfaces that are in contact (threads and nut face) must be calibrated!

Friction

The formula below is applied to relate the tension achieved by the bolt from a specific torque on the nut.

$$M = F \cdot k \cdot d$$

M = torque required on the nut to achieve 'F'

F = required tension on the bolt

k = a factor applied to account for the torque loss primarily due to friction.

d = the thread diameter of the bolt

K Class

The K class of a bolt refers to the control of friction between the threads.

k-class and k-factor

k-class	k-factor
K0	—
K1	$0,10 \leq k_f \leq 0,16$
K2	$0,10 \leq k_m \leq 0,23 \quad V_k \leq 0,06$

From EN 14399: 2005-04.



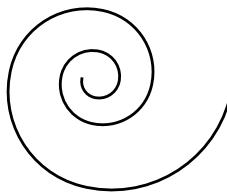
Structural Bolts Installation

AS 4100-1998

Working definitions:

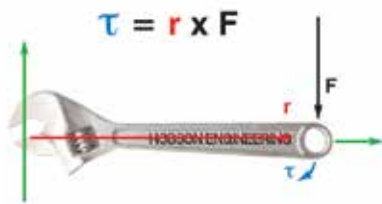
Torque

The energy taken to twist the nut up the thread of the bolt (Measured in Nm).



Torque is not used as a measure for the tensioning of structural bolting. Bolt torque values are not shown in AS 4100/NZS 3404.

Mathematically, torque can be defined as:



Tension

The force generated in the bolt to clamp the steel plies together (Measured in kN).



Nominal Size	Pitch	Minimum Bolt Tension Kn
M12	1.75	51
M16	2.0	95
M20	2.5	145
M24	3.0	210
M30	3.5	335
M36	4.0	490

Note: the minimum bolt tension shown (AS 4100-1998) is approximately equivalent to the minimum proof loads shown in AS 1252.

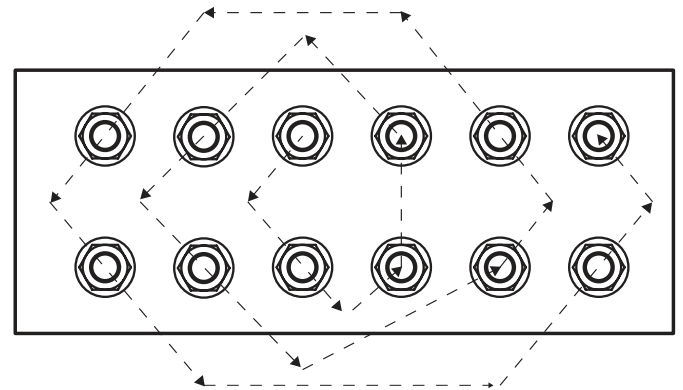
Snug tight

Prior to final tensioning of structural bolts the steel plies must be brought into effective contact. This is referred to as Snug-tight i.e. no gap between the steel plies.

Snug-tight can be achieved by a few impacts of an impact wrench or by the full effort of a person using a standard podger spanner. Correct bolt tension is required to ensure effective load transmission on the joint. Effective load transmission will not be achieved if a gap between the steel plates remains, which can occur if there is deformation from welding.

Tightening pattern

Snug-tightening and final tensioning of the bolts in a connection shall proceed from the stiffest part of the connection towards the free edges. An example interpretation of a systematic pattern for tightening is provided:



Delivery, storage and handling

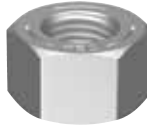
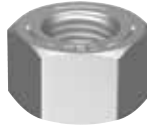
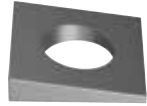
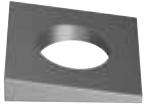
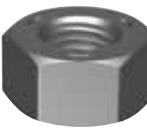
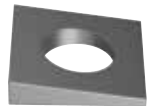
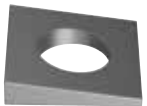
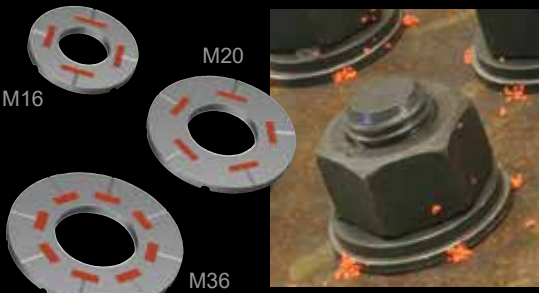
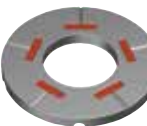
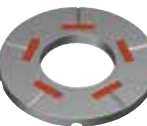
Structural bolt assemblies supplied to AS 1252 must be stored in the manufacturers carton protected from wet weather. White rusting on the galvanised surface, dust and removal of the water soluble lubricant on the nut can severely effect installation and correct tensioning.

Re-use of structural assemblies

Under no circumstances can a structural bolt which has been fully tensioned (i.e. the minimum values shown above) be re-used. If a bolt has been tensioned and then has to be removed it must be marked accordingly and destroyed.



STRUCTURAL

HDG AS 1252: 2016 Class 8.8  K0 STRUCTURAL ASSEMBLY KBHK0GCM	HDG AS 1252: 2016 35-41 HRC  K0 STRUCTURAL WASHER WRK0GM	PLN AS 1252: 2016 35-41 HRC  K0 STRUCTURAL WASHER WRK0PM	HDG AS 1252: 2016 Class 8.8  K0 STRUCTURAL NUT NHK0GCM	PLN AS 1252: 2016 Class 8.8  K0 STRUCTURAL NUT NHK0PCM	HDG AS 1252: 2016 33-41 HRC  K0 TAPER WASHER 8° SQUARE WTK0GM	PLN AS 1252: 2016 33-41 HRC  K0 TAPER WASHER 8° SQUARE WTK0PM
HDG AS 1252: 1983 Class 8.8  STRUCTURAL ASSEMBLY KBHSTGCM	HDG AS 1252: 1983 26-45 HRC  STRUCTURAL WASHER WRSTGM	PLN AS 1252: 1983 35-45 HRC  STRUCTURAL WASHER WRSTPM	HDG AS 1252: 1983 Class 8  STRUCTURAL HEX NUT NHSTGCM	PLN AS 1252: 1983 Class 8  STRUCTURAL HEX NUT NHSTPCM	HDG AS 1252: 1983 26-45 HRC  TAPER WASHER 8° SQUARE WTSTGM	PLN AS 1252: 1983 35-45 HRC  TAPER WASHER 8° SQUARE WTSTPM
HDG EN 14399: 2005 Class 8.8  K2 STRUCTURAL ASSEMBLY KBHK2GCM	HDG EN14399-6 K2 32-45 HRC  K2 STRUCTURAL WASHER WRK2GM	PLN AS 1252: 1983 Class 8.8  STRUCTURAL BOLT BLANK BHSTPBM	SS 301 HEC  FEELER GAUGE 0.13MM XGF013	Cartridge 425g  STICK WAX LUBRICANT XXWSC		
 SQUIRTER® WASHER Direct Tension Indicator			MGAL ASTM F959M Class 8.8  METRIC SQUIRTER® DT WASHER WDSTGM	PLN ASTM F959M Class 10.9  METRIC SQUIRTER® DT WASHER WD10PM	MGAL ASTM F959M Class 10.9  METRIC SQUIRTER® WASHER WD10MM	MGAL ASTM F959M Class 8.8  METRIC LOAD INDICATOR WISTGM

STRUCTURAL



**Save 25% on your bolting installation cost.
Ask us how.**

Bolting made Safe, Easy and Accurate

TONE® Electric Torque Control Wrench



PART: XT-STC7TE



PART: XT-STC12TE

Featuring:

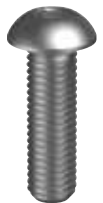
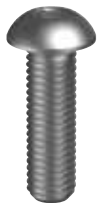
- » 2 x Safety Reaction Arms
- » L-Shape Arm + Long Bar Arm 230mm
- » Light Weight (7TE 6.2kg, 12TE 9.0kg)
- » Non Impacting
- » Low Noise
- » Automatic Shut-off at Pre-set Torque
- » Torque Range 7TE 350-700Nm
- » Torque Range 12TE 500-1100Nm
- » 1" Square Drive (Both Models)

TONE®



Japanese Engineering



Z/P DIN 912 Class 12.9  METRIC CAP SCREW SOCKET SHSOZCM	PLN DIN 912 Class 12.9  METRIC CAP SCREW SOCKET SHSOPCM	PLN DIN 7984 Alloy Steel  METRIC LOW HEAD SOCKET SLSOPCM	Z/P DIN 7991 Class 12.9*  METRIC CSK SOCKET SCSOZCM	PLN DIN 7991 Class 12.9*  METRIC CSK SOCKET SCSOPCM	Z/P ISO 7380 Class 12.9*  METRIC BUTTON HEAD SOCKET SBSOZCM	PLN ISO 7380 Class 12.9*  METRIC BUTTON HEAD SOCKET SBSOPCM
Z/P DIN 912 Class 8.8  METRIC CAP SCREW SOCKET SH88ZCM	PLN ANSI B18.3 ASTM A574  UNC CAP SCREW SOCKET SHSOP	PLN BS 2470 ASTM A574  BSW CAP SCREW SOCKET SHSOPW	PLN ANSI B18.3 ASTM A574  UNF CAP SCREW SOCKET SHSOPF	PLN ANSI B18.3 Alloy Steel  UNC LOW HEAD SOCKET SLSOP	PLN ANSI B18.3 ASTM F835  UNC CSK SOCKET SCSOP	PLN BS 2470 ASTM F835  BSW CSK SOCKET SCSOPW
PLN ANSI B18.3 ASTM F835  UNF CSK SOCKET SCSOPF	PLN ANSI B18.3 ASTM F835  UNC BUTTON HEAD SOCKET SBSOP	PLN BS 2470 Class 12.9*  BSW BUTTON HEAD SOCKET SBSOPW	PLN ANSI B18.3 ASTM F835  UNF BUTTON HEAD SOCKET SBSOPF	PLN ISO 4029 Alloy Steel  METRIC PLN PT SOCKET SSSPPCM	Z/P ISO 4029 Alloy Steel  METRIC KNURL CUP PT SOCKET SSSKZCM	PLN ISO 4029 Alloy Steel  METRIC KNURL CUP PT SOCKET SSSKPCM
PLN DIN 915 Alloy Steel  METRIC DOG PT SOCKET SSSDPCM	PLN ANSI B18.3 ASTM F912  UNC PLN PT SOCKET SSSPPC	PLN ANSI B18.3 ASTM F912  UNC KNURL CUP PT SOCKET SSSKP	PLN BS2470 Alloy Steel  BSW KNURL CUP PT SOCKET SSSKPW	PLN ANSI B18.3 ASTM F912  UNF KNURL CUP PT SOCKET SSSKPF	PLN ANSI B18.3 ASTM F912  UNF PLN PT SOCKET SSSPPF	PLN AS1112.1 Class 12  METRIC HEX NUT NH12PCM

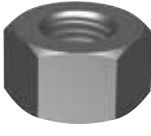
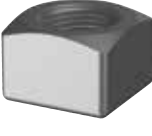
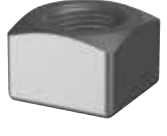


PLN ANSI B18.3 Alloy Steel  UNC SHOULDER SOCKET SOSOPC	PLN ISO 7379 Class 12.9  METRIC SHOULDER SOCKET SOSOPCM	PLN BS 2470 Alloy Steel  BSW SHOULDER SOCKET SOSOPW	PLN Alloy Steel  NPTF PRESSURE PLUG HEX PPSOPN	PLN Alloy Steel  BSP PRESSURE PLUG HEX PPSOPB	PLN Alloy Steel  LEVEL SEAL PRESSURE PLUG HEX PPSOPL	PLN Alloy Steel  METRIC PRESSURE PLUG HEX PPSOPTM
Z/P HEC  SEL-LOCK SPRING PIN PLSOZ	PLN HEC ISO Class 10.9  METRIC T-BOLT BTSOPCM	PLN HEC ISO Class 10.9  BSW T-BOLT BTSOPW	 Reliable Precision High Tensile			

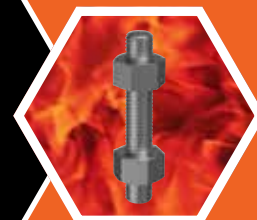




EARTHMOVING

PLN HEC Grade 9  UNC PLOW BOLT CBPG9PC	PLN HEC Grade 9  UNC STEPPED PLOW BOLT CBXG9PC	PLN HEC Grade 8  UNC PLOW BOLT CBPG8PC	PLN HEC Grade 9  METRIC FINE DOME HEX TRACK BOLT CBTG9DFM	PLN HEC Grade 9  UNF DOME HEX TRACK BOLT CBTG9DF	PLN HEC Grade 9  METRIC FINE HEX TRACK BOLT CBTG9HFM	PLN HEC Grade 9  UNF HEX TRACK BOLT CBTG9HF
PLN HEC Grade 8  UNC HEX PLOW NUT CNPG8PC	PLN HEC Grade 8  UNF HEX TRACK NUT CNTG8HF	PLN HEC Grade 8  METRIC FINE SQ COLLAR TRACK NUT CNTG8CFM	PLN HEC Grade 8  UNF SQ RND FACE TRACK NUT CNTG8RF	PLN HEC Grade 8  METRIC FINE SQ RND FACE TRACK NUT CNTG8RFM	PLN HEC Grade 8  UNF SQUARE TRACK NUT CNTG8QF	PLN HEC Grade 8  METRIC FINE SQUARE TRACK NUT CNTG8QFM
PLN HEC Grade 8  UNF SQ STEPPED TRACK NUT CNTG8SF	PLN HEC Grade 8  UNF HEX RND FACE TRACK NUT CNTG8EF					





STUD BOLT & NUT KITS – ASTM A193 / A194

PLN	Grade B7 / 2H	UNC	KSPB7PC
PLN	Grade B7 / 2H	UN8	KSPB7PU
HDG	Grade B7 / 2H	UNC	KSPB7GC

HDG	Grade B7 / 2H	UN8	KSPB7GU
XYB	Grade B7 / 2H	UNC	KSPB7BC
XYB	Grade B7 / 2H	UN8	KSPB7BU



STUD BOLT – ASTM A193

PLN	Grade B8 CL2	UNC	SP82PC
PLN	Grade B8 CL2	UN8	SP82PU
PLN	Grade B8M CL2	UNC	SPM2PC
PLN	Grade B8M CL2	UN8	SPM2PU
PLN	Grade B7	UNC	SPB7PC
PLN	Grade B7	UN8	SPB7PU
HDG	Grade B7	UNC	SPB7GC
HDG	Grade B7	UN8	SPB7GU

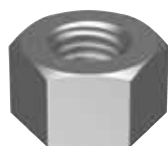
XYB	Grade B7	UNC	SPB7BC
XYB	Grade B7	UN8	SPB7BU
CAD	Grade B7	UNC	SPB7CC
CAD	Grade B7	UN8	SPB7CU
Z/P	Grade B7	UNC	SPB7ZC
Z/P	Grade B7	UN8	SPB7ZU
ZYP	Grade B7	UNC	SPB7YC
ZYP	Grade B7	UN8	SPB7YU



ALLTHREAD ROD – ASTM A193

PLN	Grade B7	UNC	APB7PC
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PLN	Grade B7	UN8	APB7PU
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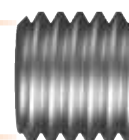
HEAVY HEX NUT – ASTM A194 / M

PLN	Grade 8	UNC	NPG8PC
PLN	Grade 8	UN8	NPG8PU
PLN	Grade 8	METRIC	NPG8PCM
PLN	Grade 8M	UNC	NP8MPC
PLN	Grade 8M	UN8	NP8MPU
PLN	Grade 8M	METRIC	NP8MPCM
PLN	Grade 2H	UNC	NP2HPC
PLN	Grade 2H	UN8	NP2HPU
HDG	Grade 2H	UNC	NP2HGC

HDG	Grade 2H	UN8	NP2HGU
XYB	Grade 2H	UNC	NP2HBC
XYB	Grade 2H	UN8	NP2HBU
CAD	Grade 2H	UNC	NP2HCC
CAD	Grade 2H	UN8	NP2HCU
Z/P	Grade 2H	UNC	NP2HZC
Z/P	Grade 2H	UN8	NP2HZU
ZYP	Grade 2H	UNC	NP2HYC
ZYP	Grade 2H	UN8	NP2HYU



Hobson hold an **extensive range of L7 and B16 materials** ex-stock and source special materials on request.



UNC ≤ 1 Inch

UN8 > 1 Inch

KEY

CAD: Cadmium

XYB: Xylan Blue



STAINLESS HARDWARE

SS 316 HEC  D SHACKLE STANDARD HSH16DSM	SS 316 HEC  D SHACKLE CAPTIVE PIN HSH16CPM	SS 316 HEC  D SHACKLE LONG HSH16LGM	SS 304 HEC  D SHACKLE LIGHTWEIGHT HSH04LWM	SS 316 HEC  D SHACKLE INTERNAL HEX PIN HSH16HPM	SS 316 HEC  D SHACKLE WIDE MOUTH HSH16WMM	SS 316 HEC  D SHACKLE BOW HSH16BWM
SS 316 HEC  SHACKLE TWISTED HSH16TWM	SS 316 HEC  D SHACKLE DOUBLE BAR HSH16DBM	SS 316 HEC  SHACKLE REPLACEMENT PIN HXPINS	SS 316 HEC  SWIVEL EYE SNAP HSW16EP	SS 316 HEC  SWIVEL EYE + EYE HSW16EE	SS 316 HEC  SWIVEL JAW + JAW HSW16JJ	SS 316 HEC  SWIVEL EYE SNAP SHACKLE HSW16EK
SS 316 HEC  SWIVEL JAW SNAP SHACKLE HSW16JK	SS 304 HEC  S HOOK HHK04S	SS 316 HEC  SNAP HOOK CAST HHK16CP	SS 316 HEC  SPRING HOOK ASYMMETRIC HHK16SA	SS 316 HEC  SNAP HOOK SAFETY LATCH HHK16CL	SS 316 HEC  SNAP HOOK RIGID EYE HHK16CR	SS 316 HEC  SPRING HOOK HHK16SP
SS 316 HEC  SPRING HOOK EYE HHK16SE	SS 316 HEC  SPRING HOOK EYE & NUT HHK16SN	SS 316 HEC  PELICAN HOOK HHK16PEM	SS304 HEC  PAD EYE DIAMOND HEP04DI	SS304 HEC  PAD EYE OVAL HEP04OV	SS304 HEC  PAD EYE OBLONG HEP04OB	SS304 HEC  PAD EYE OBLONG RING HEP04OR

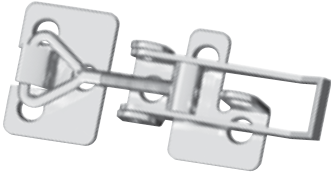
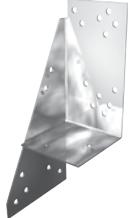
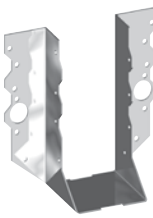
STAINLESS HARDWARE



SS304 HEC  PAD EYE ROUND BOLT HEP04RB	SS304 HEC  PAD EYE ROUND HEP04RD	SS304 HEC  PAD EYE ROUND OPEN HEP04RO	SS316 HEC  EYE NUT HEN16PM	SS 316 HEC  EYE BOLT KIT COLLAR HEC16KM	SS 316 HEC  LAG SCREW EYE COLLAR HES16CL	SS 304 HEC  EYE BOLT KIT HEB04PM
SS 316 HEC  EYE BOLT COLLAR HEC16PM	SS 316 HEC  U BOLT KIT ROUND KUR16PCM	SS 304 HEC  U BOLT KIT + PLATE CRIMP HUR04KPM	SS 316 HEC  U BOLT KIT SQUARE KUS16PCM			
SS 316 HEC  U BOLT KIT SQ WITH SPRING WASHER KUS16PSM						

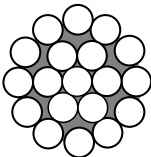
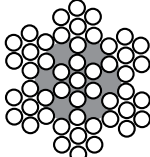
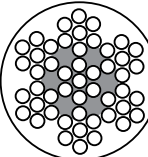
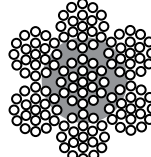


STAINLESS HARDWARE

SS 316 HEC  CHAIN LINK REGULAR POLISHED HCH16LP	SS 304 HEC  TOGGLE LATCH ADJUSTABLE HLT04A	SS 316 HEC  PULLEY NYLON BLOCK HPB16RP	SS 316 HEC  PULLEY NYLON BLOCK SWIVEL HPB16BP	SS 304 HEC  WELDED RING DEE HRG04WD	SS 304 HEC  WELDED RING TRIANGLE HRG04WT
	SS 304 HEC  WELDED RING ROUND HRG04WR	SS 316 HEC  WELDED RING ROUND HRG16WR	SS 316 HEC  CHAIN LINK CLIP POLISHED HCH16LC	SS 316 HEC  CHAIN LINK QUICK POLISHED HCH16LQ	SS 316 HEC  MULTI-GRIP HGM16D
		SS 316 HEC  TRIPLE-GRIP LEFT HAND HGT16L			
SS 304 HEC  PIANO HINGE DRILLED HHP04D	SS 304 HEC  PIANO HINGE UNDRILLED HHP04U	SS 316 HEC  TRIPLE-GRIP RIGHT HAND HGT16R	SS 316 HEC  JOIST HANGER HHJ16D	SS 304 HEC Screws included  BUTT HINGE 4 HOLE FIXED PIN HHB04D-050	SS 304 HEC Screws included  BUTT HINGE 6 HOLE FIXED PIN HHB04D-075
		SS 304 HEC Screws included  BUTT HINGE 8 HOLE LOOSE PIN HHB04L	SS 304 HEC  HATCH HINGE EVEN HHH04E	SS 304 HEC  HATCH HINGE UNEVEN HHH04U	SS 316 HEC  HATCH HINGE EVEN HHH16E
		SS 316 HEC  HATCH HINGE UNEVEN HHH16U			

STAINLESS BALUSTRADE



SS 316 HEC  WIRE ROPE 1 x 19 RIGID HRW16119	SS 316 HEC  WIRE ROPE 7 x 7 WORKABLE HRW16707	SS 316 HEC  WIRE ROPE 7 x 7 PVC COATED HRW16707P	SS 316 HEC  WIRE ROPE 7 x 19 FLEXIBLE HRW16719	SS 316 HEC  WIRE ROPE 3.2mm 305m per roll 100m and 1000m rolls also available HRW16						
						SS 316 HEC  TERMINAL SWAGE FORK HTS16FK	SS 316 HEC  TERMINAL SWAGE FORK MINI TYPE HTS16FM	SS 316 HEC  TERMINAL SWAGE FORK TOGGLE HTS16FT	SS 316 HEC  TERMINAL SWAGE STUD MINI HTS16MT	SS 316 HEC  TERMINAL SWAGE EYE HTS16EY
						Nickel Plate Copper HEC  MACHINE FERRULE HXFEM	Nickel Plate Copper HEC  HAND FERRULE HXFEH	SS 316 HEC  TERMINAL SWAGE BUTTON HEAD HTS16BH	SS 304 HEC  WIRE ROPE THIMBLE HXTH04	SS 304 HEC  SADDLE EYE STRAP HED04ST
						SS 316 HEC  WIRE ROPE GRIP HXRW16G	SS 304 HEC  HEAD TENSIONER ALLEN KEY HXHT04AK	SS 304 HEC  HEAD TENSIONER HEX HEAD HXHT04HH	SS 304 HEC  CROSS CONNECTOR HXCC04	Nylon HEC  BLACK BUSH SPLIT TYPE HXNBB
						Chrome Plate Brass HEC  BEVELLED WASHER HXWBBC	SS 316 HEC  WIRE ROPE SHELF SUPPORT CLIP HXSS16			

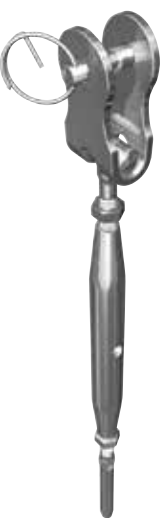


STAINLESS HARDWARE

SS 316 HEC  ROUND BALL INTERNAL THREAD HXRB16TM	SS 316 HEC  ROUND BALL HXRB16			SS 316 HEC  TIMBER INS CSK HEX SOCKET L/H HXTI16CLM	SS 316 HEC  TIMBER INS CSK HEX SOCKET R/H HXTI16CRM
SS 316 HEC  EYE SCREW METAL THREAD HES16PCM	SS 316 HEC  LAG EYE SCREW HES16PL	SS 316 HEC  CLEVIS REPLACEMENT PIN HXPINC	SS 316 HEC  RETAINING CLIP HXRC	MGAL HEC  SOCKET DRIVE HXSD	KEY CHR: Chrome HDG: Hot Dip Galvanised MGAL: Mechanical Galvanised PLN: Plain SS: Stainless Steel Z/P: Zinc Plated ZYP: Zinc Yellow Passivate
WIRE ROPE CUTTER  Suits up to 5mm wire rope HTHRC-008	WIRE ROPE CUTTER  Suits up to 12mm wire rope HTHRC-450	WIRE ROPE CUTTER  Suits up to 16mm wire rope HTHRC-800	Chrome Plate HEC  RIGGING SCREW SPANNER HXRSS		
CUTTING AND SWAGING COMBO  Suits up to 3.5mm wire rope HTHSC-350	CUTTING AND SWAGING COMBO  Suits up to 5.0mm wire rope HTHSC-600	CUTTING 	SWAGING 		

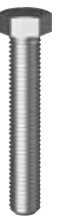
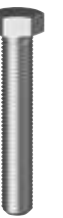
STAINLESS HARDWARE



SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC
						
RIGGING SCREW LAG + SWAGE	TERMINAL SWAGE INT. THREAD	TERMINAL SWAGE LAG SCREW LEFT	TERMINAL SWAGE LAG SCREW RIGHT	TERMINAL SWAGE STUD RIGHT HAND	TERMINAL SWAGE STUD LEFT HAND	RIGGING SCREW EYE + EYE
HRS16LS	HTS16IT	HTS16LL	HTS16RL	HTS16ST	HTS16SL	HRS16EE
SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC	SS 316 HEC
						
RIGGING SCREW JAW + JAW	RIGGING SCREW JAW + SWAGE	RIGGING SCREW TOG + SWAGE	TURNBUCKLE OPEN BODY JAW + JAW	TURNBUCKLE OPEN BODY HOOK + EYE	TURNBUCKLE OPEN BODY HOOK + HOOK	TURNBUCKLE OPEN BODY EYE + EYE
HRS16JJ	HRS16JS	HRS16TS	HTB16JJ	HTB16HE	HTB16HH	HTB16EE

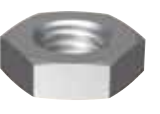
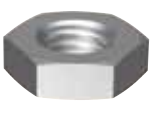
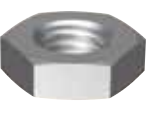
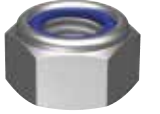
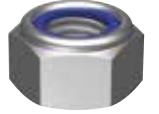
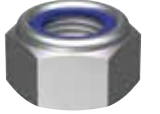


STAINLESS FASTENERS

SS 304 DIN 975  METRIC ALLTHREAD 1m & 3m AL04PCM	SS 304 IFI 136C  UNC ALLTHREAD 3ft AL04PC	SS 304 AS 3501  BSW ALLTHREAD 3ft AL04PW	SS 316 DIN 975  METRIC ALLTHREAD 1m & 3m AL16PCM	SS 316 IFI 136C  UNC ALLTHREAD 3ft AL16PC	SS 316 IFI 136C  UNF ALLTHREAD 3ft AL16PF	SS 316 AS 3501  BSF ALLTHREAD 3ft AL16PS
SS 316 AS 3501  BSW ALLTHREAD 3ft AL16PW	SS 316 HEC  METRIC COUPLER HEX AXHC16PCM	SS 304 DIN 933  METRIC HEX SET SCREW BS04PCM	SS 316 DIN 933  METRIC HEX SET SCREW BS16PCM	SS 304 ANSI B18.2.1  UNC HEX SET SCREW BS04P	SS 316 ANSI B18.2.1  UNC HEX SET SCREW BS16PC	SS 304 ANSI B18.2.1  UNF HEX SET SCREW BS04PF
SS 304 BS 1083  BSW HEX SET SCREW BS04PW	SS 316 BS 1083  BSW HEX SET SCREW BS16PW	SS 304 DIN 931  METRIC HEX BOLT BH04PCM	SS 316 DIN 931  METRIC HEX BOLT BH16PCM	SS 304 ANSI B18.2.1  UNC HEX BOLT BH04PC	SS 316 ANSI B18.2.1  UNC HEX BOLT BH16PC	SS 304 ANSI B18.2.1  UNF HEX BOLT BH04PF
SS 316 BS 1083  BSW HEX BOLT BH16PW	SS 316 DIN 931  HEX BOLT BLANK BH16PBM	SS 304 DIN 603  METRIC CUP HEAD SQUARE BC04PCM	SS 316 DIN 603  METRIC CUP HEAD SQUARE BC16PCM	SS 304 ANSI B18.5  UNC CUP HEAD SQUARE BC04PC	SS 316 DIN 571  METRIC COACH SCREW BH16PLM	SS 304 HEC  UNC HEX DOME ND04P

STAINLESS FASTENERS



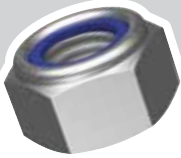
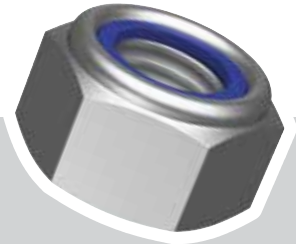
SS 304 DIN 1587  METRIC HEX DOME ND04PCM	SS 316 DIN 1587  METRIC HEX DOME ND16PCM	SS 304 HEC  METRIC 2PC DOME HEX NUT ND04WCM	SS 304 HEC  METRIC SHEAR NUT NS04PCM	SS 304 ISO 4161  METRIC SERRATED FLANGE NUT NF04PCM	SS 316 IFI 145 / B18 2.2  UNC SERRATED FLANGE NUT NF16PC	SS 316 ISO 4161  METRIC SERRATED FLANGE NUT NF16PCM
SS 304 DIN 929  METRIC WELD HEX NUT NH04WCM	SS 316 ANSI B18.2.2  UNC HEX NUT NH16P	SS 316 DIN 934  METRIC HEX NUT NH16PCM	SS 316 DIN 934  LEFT HAND HEX NUT NH16PDM	SS 316 ANSI B18.2.2  UNF HEX NUT NH16PF	SS 316 BS1083  BSW HEX NUT NH16PW	SS 304 ANSI B18.2.2  UNC HEX NUT NH04P
SS 304 DIN 934  METRIC HEX NUT NH04PCM	SS 304 DIN 934  METRIC FINE HEX NUT NH04PFM	SS 304 ANSI B18.2.2  UNF HEX NUT NH04PF	SS 304 BS1083  BSW HEX NUT NH04PW	SS 304 ANSI B18.2.2  UNC THIN HEX LOCK NUT NL04PC	SS 304 DIN 439  METRIC THIN HEX LOCK NUT NL04PCM	SS 316 DIN 439  METRIC THIN HEX LOCK NUT NL16PCM
SS 316 ANSI B18.2.2  UNC THIN HEX LOCK NUT NL16PC	SS 316 ANSI B18.2.2  UNF THIN HEX LOCK NUT NL16PF	SS 304 HEC  METRIC FINE HOBLOCH™ HEX NUT NN04HFM	SS 304 HEC  METRIC HOBLOCH™ HEX NUT NN04HCM	SS 304 IFI-100/107 NYLOC  UNC NYLOC® NUT NN04P	SS 304 DIN 985 NYLOC  METRIC NYLOC® NUT NN04PCM	SS 304 HEC NYLOC  UNF NYLOC® NUT NN04PF



STAINLESS FASTENERS

NYLOC®

Nylon insert locknuts

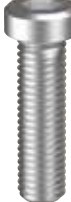
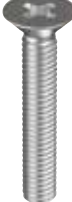
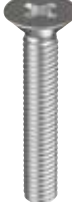
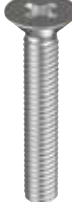
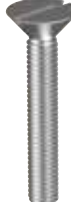
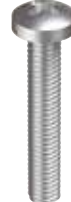
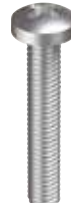
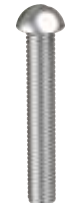
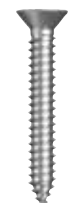
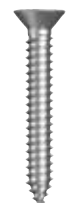
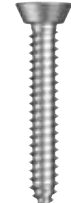
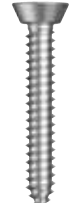
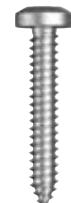
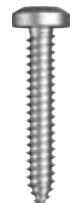


Anti-vibration solution.

SS 304 HEC NYLOC BSW NYLOC® NUT NN04PW	SS 304 HEC NYLOC UNC NYLOC® NUT THIN NN04TC	SS 304 HEC NYLOC UNF NYLOC® NUT THIN NN04TF				
SS 316 IFI 100/107 NYLOC UNC NYLOC® NUT NN16P	SS 316 DIN 985 NYLOC METRIC NYLOC® NUT NN16PCM	SS 316 HEC NYLOC UNF NYLOC® NUT NN16PF	SS 316 HEC NYLOC BSW NYLOC® NUT NN16PW	SS 316 DIN 557 METRIC SQUARE NUT NQ16PCM	SS 304 ANSI B18.17 UNC WING NUT NW04P	SS 304 ANSI B18.17 METRIC WING NUT NW04PCM
SS 316 ANSI B18.17 UNC WING NUT NW16P	SS 316 ANSI B18.17 METRIC WING NUT NW16PCM	SS 316 ANSI B18.17 BSW WING NUT NW16PW	SS 304 ANSI B18.3 UNC BUTTON HEAD SOCKET SB04P	SS 304 ISO 7380 METRIC BUTTON HEAD SOCKET SB04PCM	SS 316 ISO 7380 METRIC BUTTON HEAD SOCKET SB16PCM	SS 304 ANSI B18.3 UNC CSK FLAT SOCKET SC04P
SS 304 DIN 7991 METRIC CSK FLAT SOCKET SC04PCM	SS 316 DIN 7991 METRIC CSK FLAT SOCKET SC16PCM	SS 304 ANSI B18.3 UNC CUP POINT SOCKET SG04P	SS 304 DIN 916 METRIC CUP POINT SOCKET SG04PCM	SS 304 ANSI B18.3 UNC SOCKET HEAD CAP SCREW SH04P	SS 304 DIN 912 METRIC SOCKET HEAD CAP SCREW SH04PCM	SS 316 ANSI B18.3 UNC SOCKET HEAD CAP SCREW SH16PC

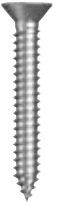
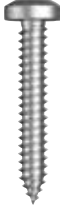
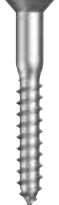
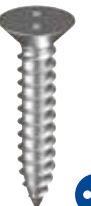
STAINLESS FASTENERS



SS 316 DIN 912  METRIC SOCKET HEAD CAP SCREW SH16PCM	SS 304 DIN 7984  METRIC LOW HEAD SOCKET SL04PCM	SS 304 ANSI B18.6.3  UNC CSK HEAD PHILLIPS MS04CP	SS 304 DIN 965 (H)  METRIC CSK HEAD PHILLIPS MS04CPM	SS 304 BS 450  BSW CSK HEAD PHILLIPS MS04CPW	SS 304 ANSI B18.6.3  UNF CSK HEAD PHILLIPS MS04CPF	SS 316 DIN 965 (H)  METRIC CSK HEAD PHILLIPS MS16CPM
SS 316 BS 450  BSW CSK HEAD PHILLIPS MS16CPW	SS 304 DIN 963  METRIC CSK HEAD SLOTTED MS04CSM	SS 316 DIN 963  METRIC CSK HEAD SLOTTED MS16CSM	SS 304 DIN 84  METRIC CHEESE HEAD SLOTTED MS04ESM	SS 316 DIN 84  METRIC CHEESE HEAD SLOTTED MS16ESM	SS 304 ANSI B18.6.3  UNC PAN HEAD PHILLIPS MS04PP	SS 304 DIN 7985 (H)  METRIC PAN HEAD PHILLIPS MS04PPM
SS 304 BS 450  BSW PAN HEAD PHILLIPS MS04PPW	SS 304 ANSI B18.6.3  UNF PAN HEAD PHILLIPS MS04PPF	SS 316 DIN 7985 (H)  METRIC PAN HEAD PHILLIPS MS16PPM	SS 316 BS 450  BSW PAN HEAD PHILLIPS MS16PPW	SS 304 BS 450  BSW ROUND HEAD SLOTTED MS04OSW	SS 316 BS 450  BSW ROUND HEAD SLOTTED MS16OSW	SS 304 AS 1427  METRIC MUSHROOM PHILLIPS MS04MPM
SS 304 BS 450  BSW MUSHROOM PHILLIPS MS04MPW	SS 304 ANSI B18.6.4  SELF TAPPING CSK HEAD PHILLIPS T04SSCP	SS 304 ANSI B18.6.4  SELF TAPPING CSK HEAD SQUARE DR T04SSCQ	SS 304 ANSI B18.6.4  SELF TAPPING UNDERCUT CSK PHILLIPS T04SSDP	SS 304 ANSI B18.6.4  SELF TAPPING UNDERCUT CSK SQUARE DR T04SSDQ	SS 304 ANSI B18.6.4  SELF TAPPING PAN HEAD SQUARE DR T04SSPQ	SS 304 ANSI B18.6.4  SELF TAPPING PAN HEAD PHILLIPS T04SSPP

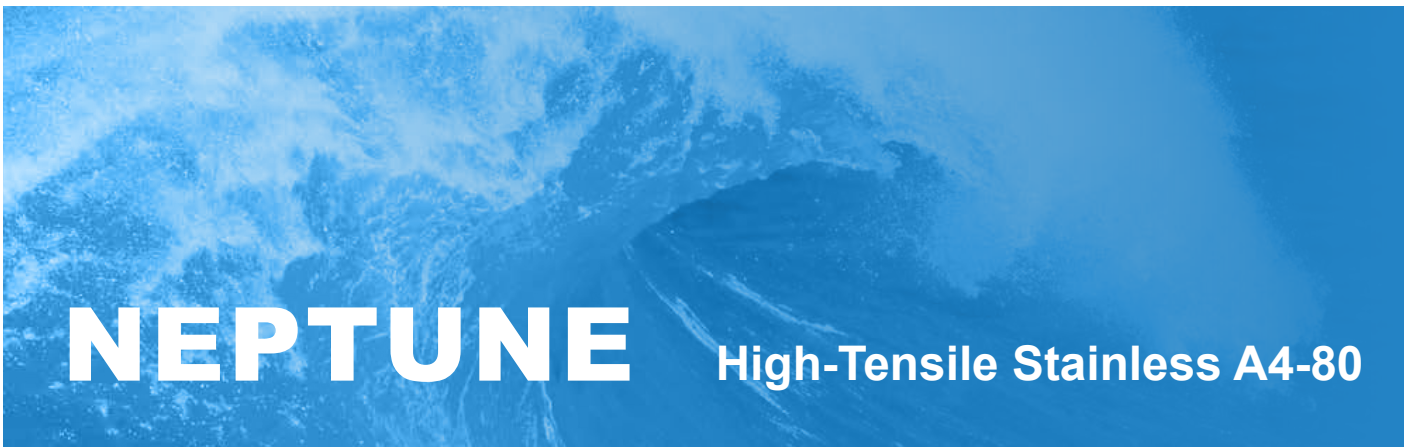


STAINLESS FASTENERS

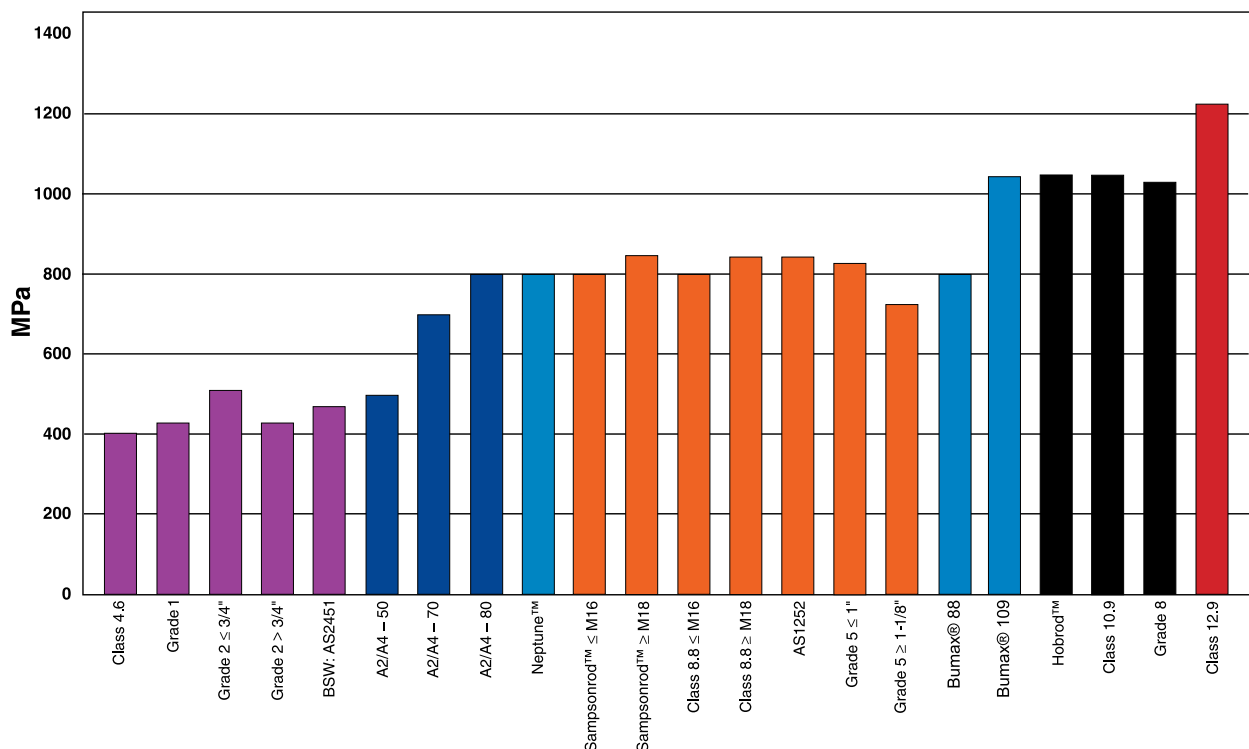
SS 316 ANSI B18.6.4  SELF TAPPING CSK HEAD PHILLIPS T16SSCP	SS 316 ANSI B18.6.4  SELF TAPPING PAN HEAD PHILLIPS T16SSPP	SS 410 ANSI B18.6.4  SELF TAPPING PAN HEAD PHILLIPS T41PSP	SS 304 ANSI B18.6.4  TYPE U DRIVE SCREW QDS04RU	SS 304 JIS B1112  WOOD SCREW CSK HEAD PHILLIPS T04DSCP	Security SS 304 HEC  SELF TAPPING SKT BUTTON POST TORX® I04SSBT	Security SS 304 HEC  SELF TAPPING SKT CSK POST TORX® I04SSCT
Security SS 304 HEC  SELF TAPPING SKT CSK POST HEX I04SSCH	Security SS 304 HEC  SELF TAPPING RAISED HEAD ONE WAY I04SSRO	Security SS 304 HEC  METRIC SKT BUTTON POST TORX® IMS04BTM	Security SS 304 HEC  METRIC SKT BUTTON POST HEX IMS04BHM	Security SS 304 HEC  METRIC SKT CSK POST TORX® IMS04CTM	Security SS 304 HEC  METRIC SKT CSK POST HEX IMS04CHM	Security SS 304 HEC  METRIC PAN HEAD EYE DRIVE IMS04PEM
Security SS 304 HEC  METRIC CSK HEAD EYE DRIVE IMS04CEM	Security SS 304 HEC  SELF TAPPING PAN HEAD EYE DRIVE I04SSPE	Security SS 304 HEC  SELF TAPPING CSK HEAD EYE DRIVE I04SSCE	Security PLN HEC  SECURITY SOCKET BIT POST HEX ISBPH	Security PLN HEC  SECURITY SOCKET BIT POST TORX ISBPT	Security PLN HEC  SOCKET EYE DRIVE BIT ISBED	Security PLN HEC  SECURITY SOCKET KEY POST HEX ISKPH
Security PLN HEC  SECURITY SOCKET KEY POST TORX ISKPT	SS 420 HEC  SPRING WAVE PIN QPW20PM	SS 304 DIN 94  METRIC SPLIT PIN QPS04PM	SS 316 DIN 94  METRIC SPLIT PIN QPS16PM	SS 316 HEC  LINCH PIN QPL16PM	KEY CHR: Chrome HDG: Hot Dip Galvanised MGAL: Mechanical Galvanised PLN: Plain SS: Stainless Steel Z/P: Zinc Plated ZYP: Zinc Yellow Passivate	



SS 316 DIN 975 A4-80	SS 316 DIN 931 A4-80	SS 316 DIN 933 A4-80	SS 316 DIN 912 A4-80	SS 316 DIN 985 A4-80	SS 316 DIN 934 A4-80	SS 316 DIN 125A A4-80
METRIC NEPTUNEROD®	METRIC HEX BOLT	METRIC SET SCREW	METRIC SOCKET SCREW	NYLOC METRIC NYLOC® NUT	METRIC HEX NUT	METRIC FLAT ROUND WASHER
AL16NCM	BH16NCM	BS16NCM	SH16NCM	NN16NCM	NH16NCM	WR16NM



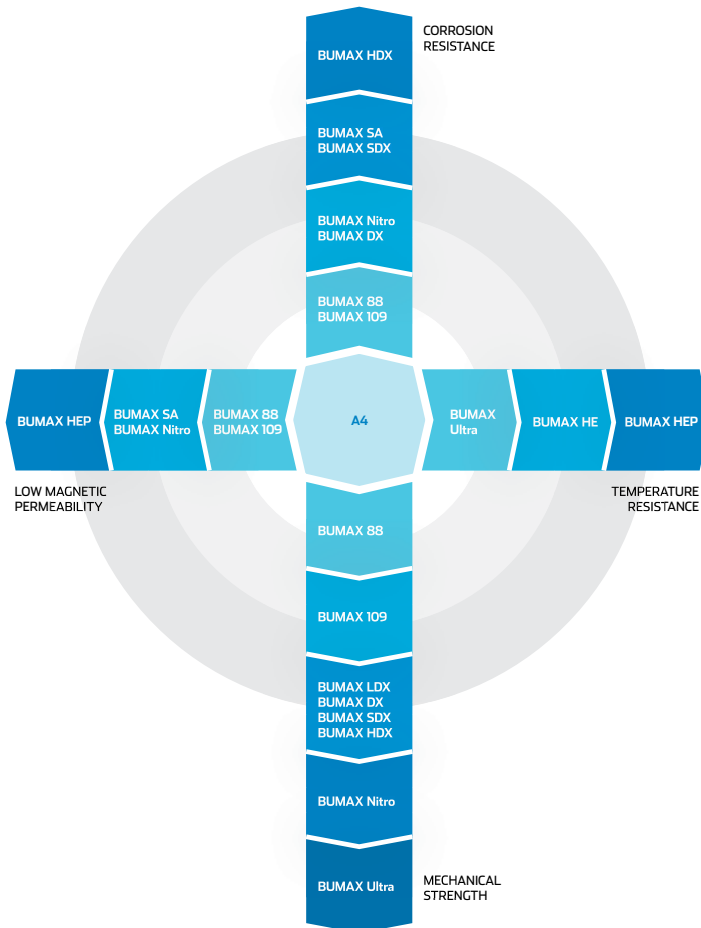
Breaking Strength Comparison





Swedish Engineering

BUMAX[®]
THE WORLD'S STRONGEST
STAINLESS STEEL BOLT



BUMAX 88 is a premium A4 fastener that offers better corrosion resistance than standard A4 due to higher molybdenum content. The PRE value of Bumax 88 is 27 and of a standard A4 only 23. Bumax 88 offers higher strength and lower amount of inclusions than standard A4 fasteners, that gives superior mechanical properties and fatigue resistance and less variations compared to standard A4. Bumax 88 fasteners are used in many applications that demands very low magnetic permeability, it has lower magnetic permeability and less variation from batch to batch compared to standard A4 fasteners. Bumax 88 is also widely used in cryogenic applications down to -269°C (4 K) and can also be provided with a pre-approval PMA for PED certificate for pressure vessels.

BUMAX 109 is the strongest A4 fastener on the market. We use the same material as Bumax 88 but achieve higher strength due to a special manufacturing process.

BUMAX Nitro, an austenitic stainless steel with high nitrogen content, characterized by very high strength and fatigue resistance, in combination with good corrosion resistance. It is an excellent choice for marine applications and can be supplied in strength class up to 12.9. PRE value 35.

BUMAX Super Austenite (SA), Grade EN 1.4547; UNS S31254 (254 SMO) is a 6Mo high-alloy aus-

tenitic stainless steel for seawater and other aggressive chloride bearing medias. Excellent resistance to general, crevice, pitting and stress corrosion with a PRE value of 43. Strength class up to 10.9.

BUMAX Lean Duplex (LDX), Grade EN 1.4162; UNS S32101 (LDX 2101) offers an economical solution for high strength fasteners (up to 12.9) in low -medium corrosive environments. PRE 26.

BUMAX Duplex (DX), Grade EN 1.4462; UNS S32205 (2205) is characterized by excellent strength, ductility and fatigue resistance in combination with good general, pitting, crevice and stress corrosion properties. Strength class up to 12.9 with an excellent ductility giving an elongation of >0,3 x diameter and PRE >34.

BUMAX Super Duplex (SDX), Grades EN 1.4410, UNS S32750 & EN 1.4501, UNS S32760; is characterized by excellent mechanical properties and very good corrosion resistance. Excellent resistance to general crevice, pitting and stress corrosion in chloride bearing medias with a PRE of 42. Strength class up to 12.9 with an excellent ductility giving an elongation of >0,3 x diameter.

BUMAX Hyper Duplex (HDX), Grade EN 1.4658, UNS S32707; a ground-breaking alloy used in the most demanding applications. Suited for use in severe corrosive environments such as hot chlorinated sea-water

and for aggressive acidic chloride containing media in chemical, oil & gas, marine and petrochemical industry.

BUMAX Ultra, a unique precipitation hardenable stainless steel that can be delivered in ultra-high strength levels. Offers a unique combination of ultra-high strength combined with excellent ductility and good corrosion resistance in chloride environments, PRE 25. Strongest stainless steel fastener on the market with a strength class up to 16.9.

BUMAX Heat (HE), Grade EN 1.4980, UNS S66286 (A286); a high temperature resistant material for applications requiring high strength and good oxidation resistance at temperatures up to 700°C. Can be precipitation hardened.

BUMAX Heat Plus (HEP), Grade EN 2.4952, UNS N07080 (Nimonic 80). A nickel base alloy which is a precipitation hardenable high temperature resistant material with excellent oxidation resistance and high tensile and creep properties at temperatures up to 815°C.

BUMAX Lock, all-metal lock nut made out of the same steel grade as Bumax 88.

BUMAX Hard, is a thread forming and self-tapping screw made out of the same steel grade as Bumax 88 and a hardened thread profile with a surface hardness > HV 1200.



Bumax®88 DIN 976  ALLTHREAD ROD ALB8PCM	Bumax®88 ISO 4014  HEX BOLT BHB8PCM	Bumax®88 ISO 4017  HEX SET SCREW BSB8PCM	Bumax®88 ISO 4762  SOCKET HEAD CAP SCREW SHB8PCM	Bumax®88 ISO 10642  FLAT SOCKET SCREW SCB8PCM	Bumax®88 ISO 4032  HEX NUT NHB8PCM	Bumax®88 ISO 4161  HEX FLANGE NUT NFB8PCM
Bumax®88 BUMAX  COLLARED HEX LOCK NUT NLB8CCM	Bumax®88 BUMAX  FLANGE HEX LOCK NUT NLB8FCM	Bumax®88 ISO 7089  METRIC FLAT ROUND WASHER WRB8PM	Bumax®88 ISO 7089 Geomet  METRIC FLAT ROUND WASHER WRB8EM	Bumax®88 ISO 7093  METRIC MUDGUARD WASHER WRB8MM	Bumax®88 DIN 931  UNC HEX BOLT BHB8PC	Bumax®88 ISO 4762  UNC SOCKET HEAD CAP SCREW SHB8PC
Bumax®88 DIN 934  UNC HEX NUT NHB8PC	Bumax®88 ISO 7089  IMPERIAL FLAT ROUND WASHER WRB8P	Bumax®109 ISO 4014  HEX BOLT BHB9PCM	Bumax®109 ISO 4017  HEX SET SCREW BSB9PCM	Bumax®109 ISO 4762  SOCKET HEAD CAP SCREW SHB9PCM	Bumax®109 ISO 4032  HEX NUT NHB9PCM	Bumax®109 ISO 7089  FLAT ROUND WASHER WRB9PM

Bumax®129 ISO 4762 DUPLEX  SOCKET HEAD CAP SCREW SHX9PCM
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BUMAX®

- » Bumax® 88 tensile strength equivalent to Class 8.8.
- » Bumax® 109 tensile strength equivalent to Class 10.9.
- » Unmatched corrosion resistance.
- » Guaranteed traceability. Test certificates online.
- » Lower install cost solution. Smaller bolt with greater strength.
- » Low and High Temperature Applications (-200°C to +400°C).
- » Non Magnetic.





Swedish Engineering



NORD-LOCK GROUP

Delta Protekt® Hardened Steel EN 1.7182	Delta Protekt® Hardened Steel EN 1.7182	Delta Protekt® Hardened Steel EN 1.7182	Delta Protekt® Hardened Steel EN 1.7182	 SC Washer Nord-Lock® SC-washers are specially designed for steel construction applications and to fit EN 14399: 2005 K2 8.8 HR Structural Assemblies (refer to page 11).	Delta Protekt® Hardened Steel EN 1.7182
 METRIC STANDARD WASHER WNHTDDM	 IMPERIAL STANDARD WASHER WNHTDD	 METRIC LARGE OD WASHER WNHTLDM	 IMPERIAL LARGE OD WASHER WNHTLD		 STANDARD SC WASHER WNSCDD



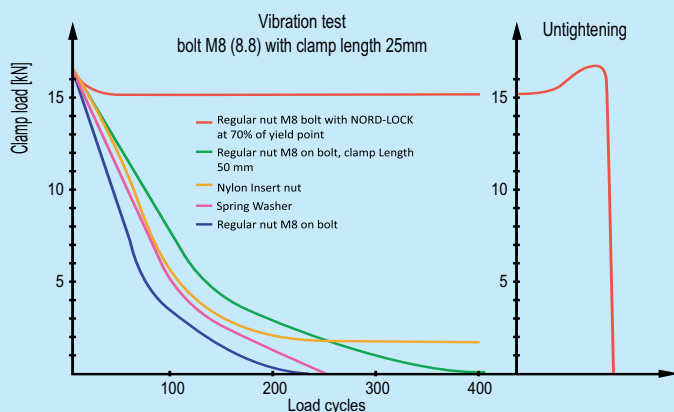
Utilising a unique multifunctional design, Nord-Lock X-series™ washers offer the highest security against both spontaneous bolt loosening and slackening. Combining Nord-Lock's unrivaled wedge-effect solution (to prevent spontaneous loosening) with an exceptional spring effect (to compensate for loss of preload due to slackening), Nord-Lock X-series™ washers give you a total security option for those situations in which there can be no compromise.

Delta Protekt® Hardened Steel EN 1.7225	Delta Protekt® Hardened Steel EN 1.7225	Delta Protekt® Hardened Steel EN 1.7225
 IMPERIAL X SERIES WASHER WNXTDD	 METRIC X SERIES WASHER WNXTDDM	 METRIC X SERIES LARGE OD WASHER WNXTLD

NORD-LOCK®

PART OF THE NORD-LOCK GROUP

- » Anti-vibration solution. Wedge-locking action meeting DIN25201 using tension not friction.
- » Zinc Plate coated (Delta Protekt®) and stainless steel. Large OD available.
- » Laser traceability on each product.
- » Wheel nut safety. M22-1.5 pitch.



SUPERBOLT™

PART OF THE NORD-LOCK GROUP

Superbolt™ multi-jackbolt tensioners (MJTs) from Nord-Lock offer an innovative technology for tightening bolts & studs

The multi-jackbolt tensioners offer you simple and cost effective tightening for large size bolts.



Superbolt™ tensioners are designed as direct replacements for conventional nuts and bolts. These devices can be threaded onto a new or existing bolt, stud, threaded rod or shaft. The main thread serves to position the tensioner on the bolt or stud against the hardened washer and the load bearing surface. Once it is positioned, actual tensioning of the bolt or stud is accomplished with simple hand tools by torquing the jackbolts which encircle the main thread. The jackbolts transfer the preload evenly into the main thread and, consequently, onto the joint. The main thread is tightened in pure tension.



Swedish Engineering

NORD-LOCK GROUP



Delta Protekt® Hardened Steel EN 1.7182	SS 316L AISI 316L EN 1.4404	Delta Protekt® Class 10	SS 316L AISI 316L EN 1.4404	SS 316L AISI 316L EN 1.4404	SS 316L AISI 316L EN 1.4404	SS 316L AISI 316L EN 1.4404
STANDARD WASHER KIT	STANDARD WASHER KIT	METRIC WHEEL NUT	METRIC STANDARD WASHER	IMPERIAL STANDARD WASHER	METRIC LARGE OD WASHER	IMPERIAL LARGE OD WASHER
WNXAHT	WNXASS	NL10DNM	WN16DPM	WN16DP	WN16LPM	WN16LP



Expander®
*A permanent solution
for pivot wear*

The System consists of an assembly that includes: an axle which is tapered at both ends, two expansion sleeves, two tension washers and two fasteners. When the fasteners are torqued, the tension washers push the expansion sleeves up the tapered part of the pin, thereby locking the system into the lug ears and eliminating movement that causes pivot wear.

The double-sided locking mechanism provides increased stability, security and a backlash-free joint. Installation can be easily done in the field, reducing downtime and cost.



Nord-Lock® washer material / type guide

Application parameter	Steel washers	Stainless steel (ss) washers	254 SMO® washers	INCONEL®/HASTELLOY® C-276 washers	INCONEL® 718 washers
Steel type (EN)	1.7182 or equivalent	1.4404 or equivalent	1.4547 or equivalent	2.4819 or equivalent	2.4667 or equivalent
Examples of applications	General steel applications	General stainless steel applications. Non chlorine / acid environments	General salt water applications, pumps, chloride applications, heat exchangers, nuclear, desalination, food processing & medical equipment	General acidic environments, process and chemical industry, evaporators, offshore downhole tooling	Applications with high temperatures, gas turbines, turbo charges, incinerators
Available for bolt sizes	M3-M130	M3-M80	M3-M39	M3-M39	M3-M39
Washer types	Regular outer diameter (NL3-NL130)	Regular outer diameter (NL3ss-NL80ss)	Regular outer diameter (NL3ss-254-NL39ss-254)	Regular outer diameter (NL3ss-276-NL39ss-276)	Regular outer diameter (NL3ss-718-NL39ss-718)
	Enlarged outer diameter (NL3,5sp-NL36sp)	Enlarged outer diameter (NL3,5spss-NL30spss)	Enlarged outer diameter (NL3,5spss-254-NL-27spss-254)	Enlarged outer diameter (NL3,5spss-276-NL-27spss-276)	Enlarged outer diameter (NL3,5spss-718-NL-27spss-718)
Treatment	Through hardened	Surface hardened	Surface hardened	Surface hardened	Surface hardened
Surface coating	Delta Protekt® base coat (KL100) and top coat (VH302GZ)				
Washer hardness*	≥ 465 HV1	≥ 520HV0,05	≥ 600HV0,05	≥ 520HV0,05	≥ 620HV0,05
Corrosion resistance	Minimum 600 hours in salt spray test (according to ISO9227)	PREN 27**	PREN 45**	PREN 68**	PREN 29**
Bolt grades	Up to 12.9	Up to A4-80	Up to A4-80	Up to A4-80	Up to A4-80
Temperature range***	-50°C to 200°C	-160°C to 500°C	-160°C to 500°C	-160°C to 500°C	-160°C to 700°C

* In order to assure the unique mechanical locking function of the Nord-Lock washers, the hardness of the mating surfaces must be lower than the hardness of the Nord-Lock washers (see table above).

** PREN (Pitting Resistance Equivalent Number) = %Cr + 3,3x%Mo + 16x%N. Figures in table valid for base material. A higher PRE number indicates better corrosion resistance.

*** Temperature recommendations based on information from the raw material supplier and from tests. Locking function not affected within the specification.



German Engineering



SCHNORR[®]
DISC SPRING ENGINEERING

MANAGING MAXIMUM FORCE – EVEN IN EXTREME CONDITIONS



SCHNORR[®]
DISC SPRING ENGINEERING

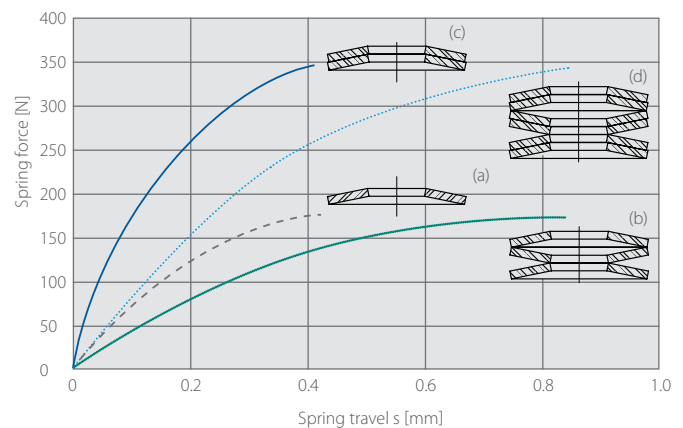
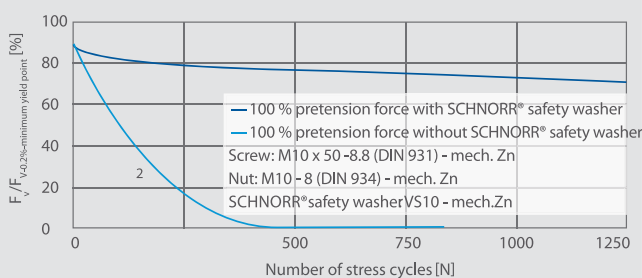
SCHNORR[®] is an international leader in the engineering and manufacturing of safety washers and disc springs for the automotive, aerospace and machine construction industries.

Original SCHNORR[®] safety washer

Vibration test according to DIN 61511

Results of vibration test according to DIN 61511

($F_{V-0.2\%}$ = minimum yield point = 37.1 kN)





German Engineering

SCHNORR®

DISC SPRING ENGINEERING



PLN DIN EN 16983*	MGAL DIN EN 16983*	SS 304 DIN EN 16983*	Z/P Serrated	PLN Serrated	Z/P Serrated	PLN Serrated
DISC SPRING	DISC SPRING	DISC SPRING	TYPE S SAFETY WASHER	TYPE S SAFETY WASHER	TYPE VS SAFETY WASHER	TYPE VS SAFETY WASHER
WOHTDP	WOHTDG	WO04DP	WOHTSZM	WOHTSPM	WOHTVZM	WOHTVPM
SS 304 Serrated	SS 304 Serrated	Z/P DIN 6796	PLN DIN 6796	ZYP 25µm DIN 6796	Z/P DIN 267	PLN DIN 267
TYPE S SAFETY WASHER	TYPE VS SAFETY WASHER	HDS LOAD HEAVY DUTY WASHER	HDS LOAD HEAVY DUTY WASHER	HDS LOAD HEAVY DUTY WASHER	HS LOAD HIGH STRESS WASHER	HS LOAD HIGH STRESS WASHER
WO04SPM	WO04VPM	WOHTHZM	WOHTHPM	WOHTHYM	WOHTLZM	WOHTLPM

SCHNORR®

DISC SPRING ENGINEERING

Disc Springs:

- » Space saver with high spring force.
- » No setting or fatigue under normal loads.
- » Long service life.

Safety Washers:

- » High resistance to vibration.
- » Patented technology.
- » Extensive range.



Geomet 321B
DIN 267



HS LOAD
HIGH STRESS
WASHER
WOHTLEM

PLN
Type K
Non-slotted



BEARING
PRELOAD
SPRING
WOHTKP

*DIN EN 16983 replaces DIN 2093 effective 1 February 2017.



WASHERS

Red Fibre HEC  METRIC FLAT ROUND WRRFPM	Z/P AS1237:1973 Mild Steel  METRIC ENGINEERS WASHER WEMSZM	HDG HEC Mild Steel  METRIC FLAT ROUND WRMSGM	Z/P HEC Mild Steel  METRIC FLAT ROUND WRMSZM	PLN HEC Mild Steel  METRIC FLAT ROUND WRMSPM	Z/P HEC Mild Steel  IMPERIAL FLAT ROUND WRMSZ	ZYP DIN 125A Mild Steel  METRIC FLAT ROUND WRMSYM
SS 304 HEC  METRIC FLAT ROUND WR04PM	SS 304 DIN 125A  METRIC FLAT ROUND WR04TM	SS 304 HEC  IMPERIAL FLAT ROUND WR04P	SS 316 HEC  METRIC FLAT ROUND WR16PM	SS 316 DIN 125A  METRIC FLAT ROUND WR16TM	SS 316 HEC  IMPERIAL FLAT ROUND WR16P	Brass HEC BS 3410  IMPERIAL FLAT ROUND WRBRP
HDG AS1237.1-2002 Mild Steel  METRIC X LARGE FLAT ROUND WXMSGM	Z/P AS1237.1-2002 Mild Steel  METRIC X LARGE FLAT ROUND WXMSZM	Z/P AS 1237.1-2002 Mild Steel  METRIC PANEL WPMSZM	Z/P HEC Mild Steel  IMPERIAL MUDGUARD WRMSZU	SS 304 DIN 9021  METRIC MUDGUARD WR04MM	SS 316 DIN 9021  METRIC MUDGUARD WR16MM	Brass HEC AS 1237  METRIC FLAT ROUND WRBRPM
Z/P HEC Mild Steel  LARGE FLAT RND SUPA® WASHER WRMSZLM	PLN HEC Mild Steel  LARGE FLAT RND SUPA® WASHER WRMSPLM	HDG HEC Mild Steel  LARGE FLAT RND SUPA® WASHER WRMSGLM	SS 304 ANSI B18.21.1  IMPERIAL SPRING FLAT SECTION WR04S0	SS 304 HEC 127B  METRIC SPRING FLAT SECTION WR04SM	SS 316 ANSI B18.21.1  IMPERIAL SPRING FLAT SECTION WR16S	SS 316 HEC 127B  METRIC SPRING FLAT SECTION WR16SM



WASHERS

HDG HEC 127B Spring Steel  METRIC SPRING FLAT SECTION WRMSGSM	Z/P HEC 127B Spring Steel  METRIC SPRING FLAT SECTION WRMSZSM	ZYP HEC 127B Spring Steel  METRIC SPRING FLAT SECTION WRMSYSM	Z/P ANSI B18.21.1 Spring Steel  IMPERIAL SPRING FLAT SECTION WRMSZS	Z/P HEC 7980 Spring Steel  METRIC SPRING SQ SECTION WRMSZSQM	ZYP HEC 7980 Spring Steel  METRIC SPRING SQ SECTION WRMSYSQM	HDG ANSI B18.21.1 Spring Steel  IMPERIAL SPRING SQ SECTION WRMSGSQ
Z/P ANSI B18.21.1 Spring Steel  IMPERIAL SPRING SQ SECTION WRMSZSQ	Z/P IFI 532 Type A  LOCK INTERNAL TOOTH WLMSZTIM	Z/P IFI 532 Type A  LOCK EXTERNAL TOOTH WLMSZTEM	Z/P ASME B18.21.1 Type A  LOCK INTERNAL TOOTH WLMSZTI	Z/P ASME B18.21.1 Type A  LOCK EXTERNAL TOOTH WLMSZTE	SS 304 DIN 6797 Type A  LOCK EXTERNAL TOOTH WL04TEM	SS 304 DIN 6797 Type J  LOCK INTERNAL TOOTH WL04TIM
SS 316 DIN 6798 Type A  LOCK EXT SERR TOOTH WL16SEM	SS 304 DIN 6798 Type A  LOCK EXT SERR TOOTH WL04SEM	SS 304 DIN 6798 Type J  LOCK INT SERR TOOTH WL04SIM	SS 304 HEC  CUP WASHER WR04C	SS 304 HEC  METRIC BELLEVILLE WASHER WR04BM	SS 316 HEC  METRIC SQUARE WS16PM	HDG HEC Mild Steel  METRIC SQUARE WSMSGM
ZYP HEC Mild Steel  METRIC SQUARE WSMSYM	HOBKOTE® HEC Mild Steel  METRIC SQUARE WSMSHM	HDG HEC Mild Steel  SQUARE WASHER SQUARE HOLE WSMSGQ	PLN HEC 38-45 HRC  METRIC FLAT ROUND SAMPSON™ WR43PM	Z/P ASTM F436M 38-45 HRC  METRIC FLAT ROUND SAMPSON™ WR43ZM	PLN ASTM F436 38-45 HRC  IMPERIAL FLAT ROUND SAMPSON™ WR43P	ZYP ASTM F436 38-45 HRC  IMPERIAL FLAT ROUND SAMPSON™ WR43Y



WASHERS

**Xylan Blue
HEC
38-45 HRC**



**IMPERIAL
FLAT ROUND
SAMPSON™**

WR43B

**HDG
AS 1237
35-41 HRC**



**METRIC
FLAT ROUND
HARDENED**

WRHTGM

**H9
IMPACT™
43-49 HRC**



**PLN
HEC
43-49 HRC**



**IMPERIAL
FLAT ROUND**

WRH9P

**ZYP
HEC
43-49 HRC**



**IMPERIAL
FLAT ROUND**

WRH9Y

**PLN
AS 1085.7**



**FISHBOLT
SPRING
WASHER**

DWRHTPSM

**HDG
HEC
Mild Steel**



**METRIC
SECURITY
MESH CLIP**

HWCMSGM

**SS 316
HEC**



**VOLUTE
SPRING
WASHER**

WV16PM

Other Washers

Hobson Engineering have a wide variety of specialised Washers, more of which can be found here:

Structural  **p10**

Bumax  **p34**

Nord-Lock  **p36**

Schnorr  **p38**

Nylon  **p44**

Washers Gauge Converter

gauge no.	inch	mm
8	0.1570"	3.988
9	0.1398"	3.551
10	0.1250"	3.175
12	0.0991"	2.517
14	0.0785"	1.994
16	0.0625"	1.588
18	0.0495"	1.257
19	0.0420"	1.0668
20	0.0350"	0.8890
21	0.0320"	0.8128
22	0.0290"	0.7366
30	0.0123"	0.3124



WASHERS

Types of Washers

	Standard Washers A standard washer is a thin plate typically round or square with a hole that is normally in the centre. They are used for two main reasons: 1. To minimise scouring or scratch damage to mating material as a result of nut rotation. 2. To increase the effective bearing surface of the bolt and or nut. That is, to distribute the load of a threaded fastener over a larger area and prevent deformation of the bearing surfaces.		Belleville Washer A Belleville washer, also known as a coned-disc spring or conical washer and cupped spring washer, is a type of spring shaped like a washer. It has a frusto-conical shape which gives the washer a spring characteristic. The Belleville name comes from the inventor Jullian F. Belleville. In the initial tightening, the effect on the joint is similar to a split type spring washer. However, as the tightening continues and the washer is flattened, it actually reduces the applied load in the bolt assembly. In this way, if the joint is loosened, the load will increase and hence counteract the loosening of the joint. Multiple Belleville washers may be stacked to modify the spring constant or amount of deflection.
	Squirter Washers (DTIs) Direct tension indicating (DTI) washers are used to ensure the required pre-load tension in a joint is achieved. They are hardened washers with protruding lugs or bumps on the bearing face. When the bolt assembly is tightened, these lugs are deformed to a prescribed level and hence indicate that the required tension in the assembly has been achieved. During the lug deformation process, silicone is squeezed out, giving a visible sign of correct tension in the bolt assembly.		Spherical Washers Spherical washers are designed to accommodate a 10-15 degree variation in the alignment of a joint. A cone washer fits inside a cup washer and they slide against each other to reduce bending stresses in the bolt. One application for these washers is in racing kart seats where the chassis twists dramatically.
	Load Indicating Washers (LIWs) Work much the same as Squirter Washers (DTIs) minus the silicone process.		Lock Washers A toothed lock washer, also known as a star washer, has teeth or prongs which extend radially inward and/or outward. This maintains tension and opposes any loosening influence on the fastener. The flexed teeth absorb shock, vibration and slipping. These washers are designed to retain fasteners by achieving an increased friction between the fastener and the mating material through mechanical interlocking or interference. They also provide some tension, as with spring washers but at a vastly reduced magnitude. There are two main types, teeth twisted out of plane (Type A) and edges of the teeth folded in opposite directions (Type B).
	Split type Developed 110 years ago, the split type spring washer was the first washer that offered a solution to the loosening of bolted assemblies. These are hardened washers that are split with out of plane deformations. They should be used under the head of the bolt with the assembly being tensioned by rotating the nut. If they need to be used on the nut side, another hardened flat round washer should be used between the nut and the split washer. When the washers are flattened, a prescribed tension is achieved in the assembly. Naturally, these washers do not indicate any over-tightening of the bolt assembly. The split-lock washers are made from hardened spring steel that strongly resists compression. When the threaded fasteners are tightened, the protruding corner edges of the split-lock washers bite into both compressing surfaces in a manner that resists counter-clockwise rotation to vibration in a manner similar to a ratchet.		Lock Washers – 2 piece type (Nord-Lock) Two piece lock washers that are designed to prevent bolt assemblies loosening through vibration. They consist of two disks with interposing ramps. "Sharp ridges on the upper and lower surfaces of the disks grab the nut and joint surfaces. If the nut backs off a little it drags its disc along with it; the ramps on its disk climb the ramps on the lower disk. The interaction of these ramp or cam surfaces prevent loss of tension in the bolt".
	Spring Washers "Threaded assemblies inherently involve the mating of inclined planes under load. These inclined planes consist of the lead and flank angle of the screw or bolt thread and the angle of the mating thread in the nut plate. There is a natural tendency for these mating threads to slide "downhill" until tension is lost in an assembly. If assembled materials are soft or yield under load, or if thermocycling causes expansion and contraction of the materials, essential tension dissipates fairly quickly". There are various types of spring washers that are designed to prevent loosening of bolted assemblies.		

References:

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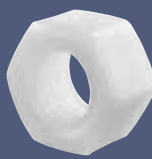
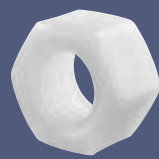
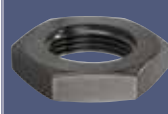
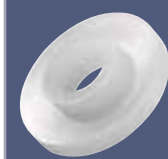
¹ Charles F Jacobs. American Fastener Journal 1997

² An Introduction to the design and behaviour of bolted joints. John H Bickford Nuts, Bolts, Fasteners and Plumbing Handbook. Carroll Smith

Wikipedia

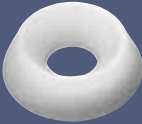
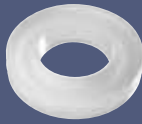
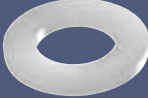
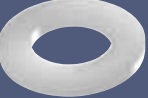
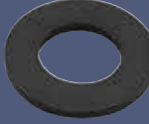


NYLON

Natural Nylon HEC  UNC HEX SET SCREW BS66PC	Natural Nylon DIN 933  METRIC HEX SET SCREW BS66PCM	Natural Nylon HEC  UNC HEX BOLT BH66PC	Natural Nylon DIN 931  METRIC HEX BOLT BH66PCM	Natural Nylon DIN 963  METRIC CSK SLOT SCREW MS66CSM	Natural Nylon HEC  UNC CSK SLOT SCREW MS66CS	Natural Nylon DIN 84  METRIC CHEESE SLOT SCREW MS66ESM
Natural Nylon HEC  UNC ROUND SLOT SCREW MS66OS	Natural Nylon HEC  UNC SLOT FILLISTER SCREW MS66LS	Natural Nylon DIN 316  METRIC WING SCREW MS66PWM	Natural Nylon DIN 7985  BINDER HEAD PHILLIPS SCREW MS66BPM	Natural Nylon DIN 913  METRIC HEX SOCKET GRUB SCREW SG66PCM	Natural Nylon DIN 551  SLOTTED SOCKET GRUB SCREW SG66PSM	Natural Nylon DIN 912  METRIC SOCKET HEAD CAP SCREW SH66PCM
Natural Nylon HEC  UNC ALLTHREAD ROD AN66PC	Natural Nylon DIN 975  METRIC ALLTHREAD ROD AN66PCM	Natural Nylon HEC  UNC HEX NUT NH66P	Natural Nylon DIN 934  METRIC HEX NUT NH66PCM	Nylon Black UV Stable HEC  METRIC HEX THIN NUT NL66UCM	Natural Nylon HEC  UNC WING NUT NW66PC	Natural Nylon DIN 315  METRIC WING NUT NW66PCM
Natural Nylon HEC  UNC DOME HEX NUT ND66P	Natural Nylon Form A  METRIC DOME HEX NUT ND66PAM	Natural Nylon DIN 1587  METRIC DOME HEX NUT ND66PCM	Natural Nylon HEC  METRIC HEX FLANGE NUT NF66PCM	Natural Nylon HEC  SPACER ROUND SR66P	Nylon Black UV Stable HEC  SPACER ROUND SR66U	Natural Nylon HEC  METRIC SCREW INSULATOR WB66PIM

NYLON



Natural Nylon Flat Round + Taper  METRIC ANTI-LOSS WASHER WR66PAM	Natural Nylon HEC  METRIC CUP WASHER WR66PCM	Natural Nylon Locking + Sealing  METRIC HUBO™ WASHER WR66PHM	Natural Nylon HEC  METRIC FLAT ROUND WASHER WR66PM	Natural Nylon HEC  IMPERIAL FLAT ROUND WASHER WR66P	Nylon Black UV Stable HEC  METRIC WASHER WR66UM	Natural Nylon HEC  METRIC HOLDING WASHER WR66POM
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Natural Nylon HEC  BUSHING WASHER WB66PSM

Electrical Properties

	PA	PA	PP	POM	PE	PVDF
Transversal resistance ohm.cm	10 ¹²	10 ¹⁵	10 ¹⁷	10 ¹⁵	10 ¹⁷	10 ¹⁴
Dielectric strength Kv/mm	30	60	50	20	50	20

Resistance Chart

	Good Resistance
	Limited Resistance
	Not Resistant

Types of Polymer

Glass Fibre Reinforced Nylon (GFR PA6.6):

Same properties as PA6.6 with enhanced mechanical properties of tensile strength, fatigue strength, impact strength, friction and abrasion resistance.

Polypropylene (PP)

Polypropylene is very resistant to fatigue and complies with food standards. A major use is in piping systems where rigidity and resistance to corrosion and chemical leaching are required.

Polyethylene (PE)

Is the most widely used plastic in the world with annual production of approximately 80 million tonnes and is used extensively in packaging applications such as foam, shrink wrapping and plastic bags.

Polycarbonate (PC)

It is a very durable transparent material with high impact resistance but low scratch resistance.

Polyvinylidene Fluoride (PVDF)

Is a highly non-reactive thermoplastic fluoropolymer. It has excellent resistance to solvents and acids.

Acetal (POM)

Acetal resins are odourless, tasteless and non-toxic. Acetal is widely used in the automotive, electrical, machinery, equipment and watch making industries.

Polyamide Nylon (PA, PA6.6, 66)

Is the standard polymer used in the Hobson range of fasteners and is recognised worldwide for being the most suitable material for fasteners. It offers excellent filling qualities and hence is easily moulded even into very difficult long shapes such as threaded rod.

It provides good toughness, tensile strength and resistance to creep, particularly in the high temperature range. Nylon has excellent wear properties, low coefficient of friction and exceptional chemical resistance to aromatic hydrocarbons, greases and oils.

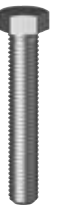
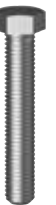
Nylon is a hygroscopic material which has a tendency to absorb water or moisture from the surrounding environment. The amount of absorption will depend on the environmental conditions. When water or moisture is absorbed by Nylon, it behaves like a plasticizer in plastics reducing the tensile strength, stiffness; and increasing elongation, impact strength and energy absorbing characteristics.

Outdoor weathering can be improved by the addition of carbon black. Nylon will perform well in long range service in most applications. Nylon is a translucent to off white in colour. Depending on the raw material used, there will always be slight colour differences from bright white to a very dull off white to light grey.

PVDF	PC	PA6 / 6.6 / 66	PP	POM	PE - LD	PE - HD	Material
							Substances
							Cold Water
							Hot Water
							Diluted acid
							Concentrated acid
							Oxidized acid
							Hydrofluoric acids
							Diluted potassium
							Concentrated potassium
							Inorganic bases
							Dry halogen
							Hydrocarbons
							Hydrocarbons (chlorinated)
							Alcohols
							Ester
							Ketone
							Ether
							Aldehyde
							Amino acids
							Organic acids
							Aromatic hydrocarbons
							Petrol
							Mineral oils
							Greases and oils
							Hydrocarbons (non-saturated chlorinated)
							Oil of turpentine
0.03	0.1 - 0.2	1.3 - 1.9	0.01 - 0.03	0.22 - 0.25	<0.01	<0.01	Humidity absorption % to ASTM d 570

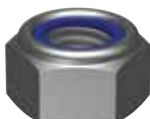
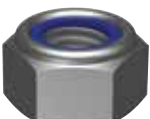
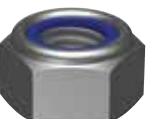
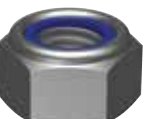
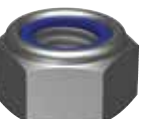
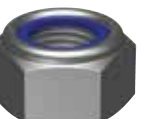
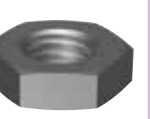


COMMERCIAL

HDG AS 1111.1 Class 4.6  METRIC HEX BOLT & NUT KBH46GCM	Z/P AS 1111.1 Class 4.6  METRIC HEX BOLT & NUT KBH46ZCM	PLN AS 1111.1 Class 4.6  METRIC HEX BOLT & NUT KBH46PCM	HDG AS 2451 Mild Steel  BSW HEX BOLT & NUT KBHMSGW	Z/P AS 2451 Mild Steel  BSW HEX BOLT & NUT KBHMSZW	HDG AS 1111.1 Class 4.6  METRIC LONG THREAD ASSEMBLED KBX46GCM	Z/P AS 1111.1 Class 4.6  METRIC HEX BOLT BH46ZCM
Z/P AS 2451 Mild Steel  BSW HEX BOLT BHMSZW	PLN AS 2451 Mild Steel  BSW HEX BOLT BHMSPW	HDG AS 1111.2 Class 4.6  METRIC HEX SET SCREW BS46GCM	Z/P AS 1111.2 Class 4.6  METRIC HEX SET SCREW BS46ZCM	PLN AS 1111.2 Class 4.6  METRIC HEX SET SCREW BS46PCM	Z/P AS 2451 Mild Steel  BSW HEX SET SCREW BSMSZW	HDG AS 1390 Class 4.6  METRIC CUP HEAD BOLT & NUT KBC46GCM
Z/P AS 1390 Class 4.6  METRIC CUP HEAD BOLT & NUT KBC46ZCM	PLN AS 1390 Class 4.6  METRIC CUP HEAD BOLT & NUT KBC46PCM	Z/P HEC AS 2451  BSW CUP HEAD BOLT & NUT KBCMSZW	HDG AS 1393 Class 4.6  METRIC HEX COACH BH46GLM	Z/P AS 1393 Class 4.6  METRIC HEX COACH BH46ZLM	HDG HEC Class 5.8  HEX WASHER HEAD POLE STEP STEEL KBW58GCM	HDG HEC Class 5.8  HEX WASHER HEAD POLE STEP TIMBER BW58GLM
HDG HEC Class 4.6  PURLIN HEX FLANGE BOLT & NUT KBFMSGCM	Z/P HEC Class 4.6  PURLIN HEX FLANGE BOLT & NUT KBFMSZCM	Z/P HEC Class 4.6  PURLIN HEX 2 WASHERS BOLT & NUT KBHMSZCM	HDG HEC Class 4.6  FASCIA HEX WASHER BOLT & NUT KBAMSGCM	Z/P HEC Class 4.6  FASCIA HEX WASHER BOLT & NUT KBAMSZCM	Z/P HEC Class 4.6  SHOULDER PURLIN HEX BOLT & NUT KBOMSZCM	

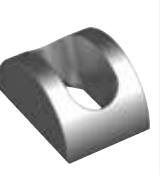
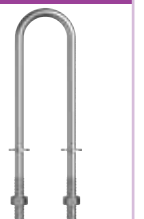


COMMERCIAL

HDG AS 1112.3 Class 5  METRIC HEX NUT NH05GCM	Z/P AS1112.3 Class 5  METRIC HEX NUT NH05ZCM	PLN AS 1112.3 Class 5  METRIC HEX NUT NH05PCM	HDG AS 2451  BSW HEX NUT NHMSGW	Z/P AS 2451  BSW HEX NUT NHMSZW	PLN AS 2451  BSW HEX NUT NHMSPW	PLN AS1112.3 Class 5  METRIC LEFT HAND HEX NUT NH05PDM
MGAL DIN 985 Class 6 NYLOC  METRIC NYLOC® NUT NN06GCM	Z/P DIN 985 Class 6 NYLOC  METRIC NYLOC® NUT NN06ZCM	MGAL IFI-100NE Grade 2 NYLOC  BSW NYLOC® NUT NNG2GW	Z/P IFI-100NE Grade 2 NYLOC  BSW NYLOC® NUT NNG2ZW	Z/P IFI-100NE Grade 2 NYLOC  UNC NYLOC® NUT NNG2ZC	Z/P IFI-100NE Grade 2 NYLOC  UNF NYLOC® NUT NNG2ZF	HDG AS 1112.4 Use with Class 5  METRIC THIN HEX LOCK NUT NL05GCM
PLN HEC Class 5  ACME 6 TPI HEX NUT NHMSPA	PLN HEC Class 5  ACME 6 TPI LEFT HAND HEX NUT NHMSPB	Brass AS 1112.3  METRIC HEX NUT NHBRPCM	Brass HEC  UNC HEX NUT NHBRPC	Brass AS 2451  BSW HEX NUT NHBRPW	Brass AS 1427: 1996  METAL THREAD COUNTERSUNK SLOTTED MSBRPCS	Brass AS 1427: 1996  METAL THREAD PAN SLOTTED MSBRPPS
Z/P AS 1427: 1996 Mild Steel  METRIC METAL THREAD PAN PHILLIPS MSMSZPPM	Zinc Black AS 1427: 1996 Mild Steel  METRIC METAL THREAD PAN PHILLIPS MSMSVPPM	Z/P AS 1427:1996 Mild Steel  METRIC METAL THREAD CSK PHILLIPS MSMSZCPM	HDG DIN 1587 Class 5  METRIC DOME HEX NUT ND05GCM	Chrome DIN 1587 Class 5  METRIC DOME HEX NUT ND05CCM	HDG HEC Class 5  METRIC SHEAR NUT NS05GCM	Z/P DIN 935 Class 5  METRIC FINE SLOTTED HEX NUT NO05ZFM

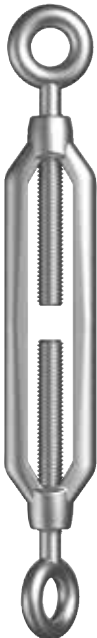
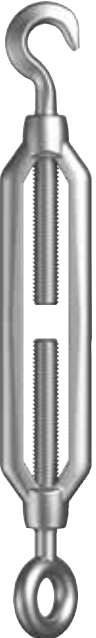
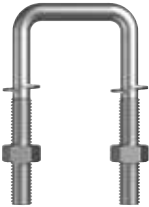
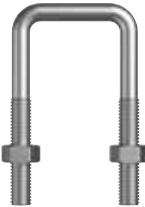
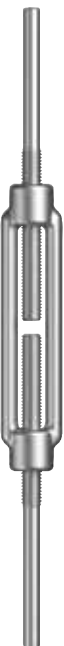


LOW-TENSILE

Z/P DIN 975 Class 4.6  METRIC ALLTHREAD 1m & 3m ASMSZCM	HDG DIN 975 Class 4.6  METRIC ALLTHREAD 1m & 3m ASMSGCM	HDG DIN 975 Class 4.6  METRIC FOUNDATION STUD ASMSGCM	PLN DIN 975 Class 4.6  METRIC ALLTHREAD 1m & 3m ASMSPCM	PLN DIN 975 Class 4.6  METRIC ALLTHREAD LEFT HAND ASMSPDM	PLN DIN 975 Class 4.6  METRIC FINE ALLTHREAD 1m ASMSPFM	Z/P AS 2451 Mild Steel  BSW ALLTHREAD ASMSZW
PLN HEC Grade 1  ACME 6 TPI ALLTHREAD 12ft ASMSPA	PLN HEC Grade 1  ACME 6 TPI ALLTHREAD LEFT HAND 12ft ASMSPB	PLN AS 2451 Mild Steel  BSW ALLTHREAD ASMSPW	PLN AS 2451 Mild Steel  BSW ALLTHREAD LEFT HAND ASMSPX	PLN IFI 136C Grade 1  UNC ALLTHREAD 3ft ASMSPC	PLN IFI 136C Grade 1  UNF ALLTHREAD 3ft ASMSPF	PLN AS 2451 Mild Steel  BSF ALLTHREAD 3ft ASMSPS
PLN AS 2451 Mild Steel  2BA ALLTHREAD 3ft ASMSPS2BA	PLN AS 2451 Mild Steel  4BA ALLTHREAD 3ft ASMSPS4BA	Brass HEC DIN 975  METRIC ALLTHREAD 1m ABBRPCM	Brass HEC AS 3501  BSW ALLTHREAD 3ft ABBRPW	HDG HEC Class 5  METRIC HEX COUPLER AXHC05GCM	Z/P HEC Class 5  METRIC HEX COUPLER AXHC05ZCM	Z/P HEC Mild Steel  BSW HEX COUPLER AXHCMSZW
Z/P HEC Cast Iron  METRIC WIND BRACE D BRACKET AXWWCIZ	HDG HEC Mild Steel  FISH PLATE FOR 40-50mm TRAILER AXLE HPFGS	HDG HEC Mild Steel  METRIC U BOLT KIT ROUND KURMSGCM	HDG HEC Mild Steel  BSW U BOLT KIT ROUND KURMSGW	HDG HEC Mild Steel  METRIC U BOLT KIT ROUND WITH WASHER KURMSGWM	Z/P HEC Mild Steel  1/4" BSW U BOLT KIT ROUND KURMSZW	HDG HEC Class 4.8  FOUNDATION L-BOLT LB48GCM

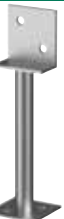


LOW-TENSILE

HDG HEC Mild Steel  TURNBUCKLE EYE & EYE HTBMSGE	HDG HEC Mild Steel  TURNBUCKLE HOOK & EYE HTBMSGH	HDG HEC Mild Steel  METRIC U BOLT KIT SQ WITH SPRING WASHER KUSMSGSM	HDG HEC Mild Steel  METRIC U BOLT KIT SQUARE KUSMSGCM	Z/P HEC Mild Steel  METRIC U BOLT KIT SQUARE KUSMSZCM	Z/P HEC Mild Steel  BSW EYE BOLT KIT LARGE KELMSZW	HDG HEC Mild Steel  BSW EYE BOLT KIT KENMSGW																																																																																																																																																																																																																																																																																																																																																									
		Z/P HEC Mild Steel  BSW EYE BOLT KIT KENMSZW	Z/P HEC Mild Steel  1/4" BSW HOOK BOLT KIT KHBMSZW	Z/P HEC Mild Steel  HEAVY EYE SCREW WOOD SEMSZL	Z/P HEC Mild Steel  HEAVY HOOK SCREW WOOD SHMSZL	HDG ISO 898-1 Class 4.6 UTS  FORGED EYEBOLT KIT KEFMSGCM																																																																																																																																																																																																																																																																																																																																																									
HDG HEC Mild Steel  TURNBUCKLE STUB ENDS HTBMSGGS	Z/P HEC Mild Steel  BSW LAG SCREW LSMSZW	Black HEC Replacement Die  ALLTHREAD CUTTER M10 / M12 XTBD-M	<table><tr><th colspan="3"></th><th colspan="3">Pitch (mm)</th><th colspan="5">Threads Per Inch</th></tr><tr><th colspan="3">Size</th><th>Coarse</th><th>Fine</th><th>Extra Fine</th><th>UNC</th><th>UN8</th><th>UNF</th><th>BSW</th><th>BSF</th></tr><tr><td>M1.6</td><td>-</td><td>#0</td><td>0.35</td><td>-</td><td>-</td><td>-</td><td>-</td><td>80</td><td>-</td><td>-</td></tr><tr><td>M2</td><td>-</td><td>#1</td><td>0.4</td><td>-</td><td>-</td><td>-</td><td>-</td><td>72</td><td>-</td><td>-</td></tr><tr><td>-</td><td>-</td><td>#2</td><td>-</td><td>-</td><td>-</td><td>56</td><td>-</td><td>64</td><td>-</td><td>-</td></tr><tr><td>M2.5</td><td>-</td><td>#3</td><td>0.45</td><td>-</td><td>-</td><td>48</td><td>-</td><td>56</td><td>-</td><td>-</td></tr><tr><td>-</td><td>-</td><td>#4</td><td>-</td><td>-</td><td>-</td><td>40</td><td>-</td><td>48</td><td>-</td><td>-</td></tr><tr><td>M3</td><td>1/8"</td><td>#5</td><td>0.5</td><td>-</td><td>-</td><td>40</td><td>-</td><td>44</td><td>40</td><td>-</td></tr><tr><td>M3.5</td><td>-</td><td>#6</td><td>0.6</td><td>-</td><td>-</td><td>32</td><td>-</td><td>40</td><td>-</td><td>-</td></tr><tr><td>M4</td><td>-</td><td>#8</td><td>0.7</td><td>-</td><td>-</td><td>32</td><td>-</td><td>36</td><td>-</td><td>-</td></tr><tr><td>M5</td><td>3/16"</td><td>#10</td><td>0.8</td><td>-</td><td>-</td><td>24</td><td>-</td><td>32</td><td>24</td><td>32</td></tr><tr><td>-</td><td>-</td><td>#12</td><td>-</td><td>-</td><td>-</td><td>24</td><td>-</td><td>28</td><td>-</td><td>-</td></tr><tr><td>M6</td><td>1/4"</td><td>-</td><td>1</td><td>-</td><td>-</td><td>20</td><td>-</td><td>28</td><td>20</td><td>26</td></tr><tr><td>M8</td><td>5/16"</td><td>-</td><td>1.25</td><td>1</td><td>-</td><td>18</td><td>-</td><td>24</td><td>18</td><td>22</td></tr><tr><td>M10</td><td>3/8"</td><td>-</td><td>1.5</td><td>1.25</td><td>1</td><td>16</td><td>-</td><td>24</td><td>16</td><td>20</td></tr><tr><td>-</td><td>7/16"</td><td>-</td><td>-</td><td>-</td><td>-</td><td>14</td><td>-</td><td>20</td><td>14</td><td>18</td></tr><tr><td>M12</td><td>1/2"</td><td>-</td><td>1.75</td><td>1.5</td><td>1.25</td><td>13</td><td>-</td><td>20</td><td>12</td><td>16</td></tr><tr><td>M14</td><td>9/16"</td><td>-</td><td>2</td><td>1.5</td><td>-</td><td>12</td><td>-</td><td>18</td><td>12</td><td>16</td></tr><tr><td>M16</td><td>5/8"</td><td>-</td><td>2</td><td>1.5</td><td>-</td><td>11</td><td>-</td><td>18</td><td>11</td><td>14</td></tr><tr><td>M18</td><td>-</td><td>-</td><td>2.5</td><td>1.5</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>M20</td><td>3/4"</td><td>-</td><td>2.5</td><td>1.5</td><td>-</td><td>10</td><td>-</td><td>16</td><td>10</td><td>12</td></tr><tr><td>M22</td><td>7/8"</td><td>-</td><td>2.5</td><td>1.5</td><td>-</td><td>9</td><td>-</td><td>14</td><td>9</td><td>11</td></tr><tr><td>M24</td><td>1"</td><td>-</td><td>3</td><td>2</td><td>-</td><td>8</td><td>8</td><td>12 (14)</td><td>8</td><td>10</td></tr><tr><td>M27</td><td>1 1/8"</td><td>-</td><td>3</td><td>2</td><td>-</td><td>7</td><td>8</td><td>12</td><td>7</td><td>9</td></tr><tr><td>M30</td><td>1 1/4"</td><td>-</td><td>3.5</td><td>2</td><td>-</td><td>7</td><td>8</td><td>12</td><td>7</td><td>9</td></tr><tr><td>M33</td><td>1 3/8"</td><td>-</td><td>3.5</td><td>2</td><td>-</td><td>6</td><td>8</td><td>12</td><td>6</td><td>8</td></tr><tr><td>M36</td><td>1 1/2"</td><td>-</td><td>4</td><td>3</td><td>-</td><td>6</td><td>8</td><td>12</td><td>6</td><td>8</td></tr><tr><td>M39</td><td>1 5/8"</td><td>-</td><td>4</td><td>3</td><td>-</td><td>-</td><td>8</td><td>-</td><td>5</td><td>8</td></tr><tr><td>M42</td><td>-</td><td>-</td><td>4.5</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>M45</td><td>1 3/4"</td><td>-</td><td>4.5</td><td>-</td><td>-</td><td>5</td><td>8</td><td>-</td><td>5</td><td>7</td></tr><tr><td>M48</td><td>1 7/8"</td><td>-</td><td>5</td><td>-</td><td>-</td><td>-</td><td>8</td><td>-</td><td>-</td><td>-</td></tr></table>							Pitch (mm)			Threads Per Inch					Size			Coarse	Fine	Extra Fine	UNC	UN8	UNF	BSW	BSF	M1.6	-	#0	0.35	-	-	-	-	80	-	-	M2	-	#1	0.4	-	-	-	-	72	-	-	-	-	#2	-	-	-	56	-	64	-	-	M2.5	-	#3	0.45	-	-	48	-	56	-	-	-	-	#4	-	-	-	40	-	48	-	-	M3	1/8"	#5	0.5	-	-	40	-	44	40	-	M3.5	-	#6	0.6	-	-	32	-	40	-	-	M4	-	#8	0.7	-	-	32	-	36	-	-	M5	3/16"	#10	0.8	-	-	24	-	32	24	32	-	-	#12	-	-	-	24	-	28	-	-	M6	1/4"	-	1	-	-	20	-	28	20	26	M8	5/16"	-	1.25	1	-	18	-	24	18	22	M10	3/8"	-	1.5	1.25	1	16	-	24	16	20	-	7/16"	-	-	-	-	14	-	20	14	18	M12	1/2"	-	1.75	1.5	1.25	13	-	20	12	16	M14	9/16"	-	2	1.5	-	12	-	18	12	16	M16	5/8"	-	2	1.5	-	11	-	18	11	14	M18	-	-	2.5	1.5	-	-	-	-	-	-	M20	3/4"	-	2.5	1.5	-	10	-	16	10	12	M22	7/8"	-	2.5	1.5	-	9	-	14	9	11	M24	1"	-	3	2	-	8	8	12 (14)	8	10	M27	1 1/8"	-	3	2	-	7	8	12	7	9	M30	1 1/4"	-	3.5	2	-	7	8	12	7	9	M33	1 3/8"	-	3.5	2	-	6	8	12	6	8	M36	1 1/2"	-	4	3	-	6	8	12	6	8	M39	1 5/8"	-	4	3	-	-	8	-	5	8	M42	-	-	4.5	-	-	-	-	-	-	-	M45	1 3/4"	-	4.5	-	-	5	8	-	5	7	M48	1 7/8"	-	5	-	-	-	8	-	-	-				
			Pitch (mm)			Threads Per Inch																																																																																																																																																																																																																																																																																																																																																									
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M2	-	#1	0.4	-	-	-	-	72	-	-																																																																																																																																																																																																																																																																																																																																																					
-	-	#2	-	-	-	56	-	64	-	-																																																																																																																																																																																																																																																																																																																																																					
M2.5	-	#3	0.45	-	-	48	-	56	-	-																																																																																																																																																																																																																																																																																																																																																					
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M3	1/8"	#5	0.5	-	-	40	-	44	40	-																																																																																																																																																																																																																																																																																																																																																					
M3.5	-	#6	0.6	-	-	32	-	40	-	-																																																																																																																																																																																																																																																																																																																																																					
M4	-	#8	0.7	-	-	32	-	36	-	-																																																																																																																																																																																																																																																																																																																																																					
M5	3/16"	#10	0.8	-	-	24	-	32	24	32																																																																																																																																																																																																																																																																																																																																																					
-	-	#12	-	-	-	24	-	28	-	-																																																																																																																																																																																																																																																																																																																																																					
M6	1/4"	-	1	-	-	20	-	28	20	26																																																																																																																																																																																																																																																																																																																																																					
M8	5/16"	-	1.25	1	-	18	-	24	18	22																																																																																																																																																																																																																																																																																																																																																					
M10	3/8"	-	1.5	1.25	1	16	-	24	16	20																																																																																																																																																																																																																																																																																																																																																					
-	7/16"	-	-	-	-	14	-	20	14	18																																																																																																																																																																																																																																																																																																																																																					
M12	1/2"	-	1.75	1.5	1.25	13	-	20	12	16																																																																																																																																																																																																																																																																																																																																																					
M14	9/16"	-	2	1.5	-	12	-	18	12	16																																																																																																																																																																																																																																																																																																																																																					
M16	5/8"	-	2	1.5	-	11	-	18	11	14																																																																																																																																																																																																																																																																																																																																																					
M18	-	-	2.5	1.5	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																					
M20	3/4"	-	2.5	1.5	-	10	-	16	10	12																																																																																																																																																																																																																																																																																																																																																					
M22	7/8"	-	2.5	1.5	-	9	-	14	9	11																																																																																																																																																																																																																																																																																																																																																					
M24	1"	-	3	2	-	8	8	12 (14)	8	10																																																																																																																																																																																																																																																																																																																																																					
M27	1 1/8"	-	3	2	-	7	8	12	7	9																																																																																																																																																																																																																																																																																																																																																					
M30	1 1/4"	-	3.5	2	-	7	8	12	7	9																																																																																																																																																																																																																																																																																																																																																					
M33	1 3/8"	-	3.5	2	-	6	8	12	6	8																																																																																																																																																																																																																																																																																																																																																					
M36	1 1/2"	-	4	3	-	6	8	12	6	8																																																																																																																																																																																																																																																																																																																																																					
M39	1 5/8"	-	4	3	-	-	8	-	5	8																																																																																																																																																																																																																																																																																																																																																					
M42	-	-	4.5	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																					
M45	1 3/4"	-	4.5	-	-	5	8	-	5	7																																																																																																																																																																																																																																																																																																																																																					
M48	1 7/8"	-	5	-	-	-	8	-	-	-																																																																																																																																																																																																																																																																																																																																																					
	HEC  ALLTHREAD CUTTER M10 / M12 XTBAB-M																																																																																																																																																																																																																																																																																																																																																														



CYCLONE

HOBKOTE® DIN 975 Class 4.6  METRIC ALLTHREAD ASMSHCM	Z/P DIN 975 Class 4.6  METRIC ALLTHREAD ASMSZCM	HDG DIN 975 Class 4.6  METRIC ALLTHREAD ASMSGCM	HOBKOTE® HEC Class 5  METRIC HEX COUPLER AXHC05HCM	HOBKOTE® AS 1112.3 Class 5  METRIC HEX NUT NH05HCM	HOBKOTE® HEC Mild Steel  METRIC FLAT ROUND WASHER WRMSHM	HDG HEC Mild Steel  METRIC STARTER BAR L BOLT LBMSGCM
HOBKOTE® HEC Mild Steel  METRIC STARTER BAR L BOLT LBMSHCM	HOBKOTE® HEC Mild Steel  METRIC SQUARE WSMSHM	HDG HEC Mild Steel  U SHAPE WITH BAR GUPGB	SS 316 HEC  U SHAPE WITH BAR GUPSB	HDG HEC Mild Steel  U SHAPE BOLT ON GUPGT	HDG HEC Mild Steel  U STIRRUP ROD STEM GUSGR	HDG HEC Mild Steel  L STIRRUP ROD STEM GLSGR
HDG HEC Mild Steel  L STIRRUP ROD STEM GLSGR035	HDG HEC Mild Steel  T STIRRUP ROD STEM GTSGR	HDG HEC Mild Steel  T BLADE BOLT ON GTPGB	HDG HEC Mild Steel  T BLADE BOLT ON EXTRA H/DUTY GTXGB	HDG HEC Mild Steel  ANGLE BRACKET M10 / 2 HOLES GABGS10	HDG HEC Mild Steel  ANGLE BRACKET M12 / 2 HOLES GABGS12	HDG HEC Mild Steel  ANGLE BRACKET M12 / 3 HOLES GABGS12
HDG HEC Mild Steel  ANGLE BRACKET M12 / 4 HOLES GABGS12	HDG HEC Mild Steel  ANGLE BRACKET M16 / 2 HOLES GABGS16	HDG HEC Mild Steel  ANGLE CONNECTOR TIMBER M6 GACGT06	HDG HEC Mild Steel  ANGLE CONNECTOR TIMBER M12 GACGT12	HDG HEC Mild Steel  ANGLED CONNECTOR TIMBER M16 GACGT16	HDG HEC Mild Steel  ANGLE CONNECTOR TIMBER M12/16 GACGT12016	HDG HEC Mild Steel  FISH TAIL POST SUPPORT GFTG



CYCLONE

HDG HEC Mild Steel	HDG HEC Mild Steel	HDG HEC Mild Steel	HDG HEC Mild Steel	HDG HEC Mild Steel	HDG HEC Mild Steel	HOBKOTE® HEC Mild Steel
						
FLAT CONNECTOR TIMBER M12	FLAT CONNECTOR TIMBER M12	FLAT CONNECTOR TIMBER M12	FLAT CONNECTOR TIMBER M16	TRUSS CONNECTOR BOND BEAM	TRUSS CONNECTOR Z BRACKET	TRUSS CONNECTOR Z BRACKET
GFCGF30050	GFCGF45050	GFCGF45065	GFCGF16450	GTBGB	GTCGZ	GTCHZ

Builder's Guide

Hobson stock Metric Class 4.6 UTS Builders Allthread rod and accessories in Zinc Plated, Hobkote® and Hot Dip Galvanised finish.

Zinc Plated product conforms to ISO 4042 [Fasteners – Electroplated coatings] with 5 micron in thickness.

The Hobkote® coating conforms to ISO 4042 with between 5-8 micron in thickness and a specially formulated passivation. The Hobkote® coating performs with 33% more corrosion resistance than Zinc Plated product.

Hot Dip Galvanised product conforms to AS 1214 [Hot-Dip Galvanised Coatings On Threaded Fasteners] with 42 micron in thickness and Mechanically Galvanised product conforms to ASTM B695 Class 40 [Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel] with 40 micron in thickness.

Hobson Galvanised products comply with AS 1684 [Residential timber-framed construction – Cyclonic areas] requirement of 40 micron from AS 1397 [Steel sheet and strip--Hot-dip zinc-coated or aluminium/zinc-coated] coating class Z275.





KITS

Assortment Kits

Hobson Engineering have a wide variety of Assortment Kits. All available in a **handy, tough, metal case**.

Each Kit has a selection of mixed or similar items, in various sizes.

They look **professional**, are extremely **useful** and incredibly **compact**.



Zinc Plated Metric Flange Class 8.8	Zinc Plated Metric Fine Class 8.8	Stainless 316 Metric HEC	Stainless 316 Metric HEC	Zinc Plated HEC	PLN Metric Class 12.9
SERRATED BOLTS & NUTS M5 M6 M8 M10	BOLTS & NUTS M8 M10 M12	BOLTS NUTS & WASHERS M5 M6	BOLTS NUTS & WASHERS M8 M10	WASHERS RND/ MUDGUARD/ SPRING	SOCKET HEAD CAP SCREWS M5 M6 M8 M10
FEFK003	FEFK004	FEFK005	FEFK006	FEFK007	FEFK008
5.74kg / 579pcs	6.55kg / 303pcs	3.19kg / 810pcs	3.65kg / 324pcs	6.06kg / 1770pcs	4.55kg / 354pcs

KITS



Zinc Plated Steel HEC	Zinc Plated Aluminium / Steel	Zinc Yellow HEC	Zinc Plated HEC	Zinc Plated Metric Class 8.8	Zinc Plated UNC Grades 5 & 8
SPLIT PINS 1.6 2.0 2.5 3.2 4.0 5.0 Ø	BLIND RIVETS DOME 3.2mm 4.0mm 4.8mm	SELF DRILLING METAL SCREWS	PHILLIPS SELF TAPPING PAN HEAD 6-12G	BOLTS & NUTS M6 M8 M10 M12	BOLTS & NUTS 1/4 5/16 3/8 1/2
FEFK009	FEFK010	FEFK011	FEFK012	FEFK015	FEFK016
4.13kg / 1705pcs	3.54kg / 1150pcs	4.4kg / 1180pcs	4.77kg / 1545pcs	7.07kg / 513pcs	6.59kg / 420pcs



Assortment MASTER Kits

Contain the following:

Bolts: Set Screw

Nuts: Hex, NYLOC®, Dome, Flanged

Washers: Round, Spring, Mudguard

*M5 also contains **Socket Screws**

M5, M6, M8,
M10 or M12

Black Zinc Plated HEC	Zinc Plated /PLN High Tensile Class 8.8	Zinc Plated High Tensile Class 8.8	Zinc Plated High Tensile Class 8.8	Zinc Plated High Tensile Class 8.8	Zinc Plated High Tensile Class 8.8
PHILLIPS SELF TAPPING PAN HEAD 6-10G	SHCS BOLTS NUTS WASHERS (FLANGE)	SET SCREWS BOLTS NUTS & WASHERS	SET SCREWS BOLTS NUTS & WASHERS	SET SCREWS BOLTS NUTS & WASHERS	SET SCREWS BOLTS NUTS & WASHERS
FEFK018	FEFK019	FEFK020	FEFK021	FEFK022	FEFK023
4.38kg / 1640pcs	4.93kg / 1460pcs	6.17kg / 1185pcs	6.58kg / 700pcs	6.7kg / 430pcs	6.79kg / 290pcs



Swiss Quality



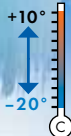
Z/P m1t Carbon Steel THROUGHBOLT WITH WASHER MUMM1T0	Z/P m1t-C Carbon Steel THROUGHBOLT WITH WASHER - DIN 9021 MUMM1TC	SS 316 m1tr Carbon Steel THROUGHBOLT WITH WASHER MUMM1TR0	SS 316 m1tr-C Carbon Steel THROUGHBOLT WITH WASHER - DIN 9021 MUMM1TRC	GreenTec® m2 Carbon Steel THROUGHBOLT WITH WASHER MUMM200	KEY Directly compatible with SA TS 101: 2015 and AS 5216 Fire Rated Seismic Load Approval	
GreenTec® m2 Carbon Steel THROUGHBOLT WITH WASHER IN MINI-BOX MUMM2MBP	Z/P m2-C Carbon Steel THROUGHBOLT WITH WASHER - DIN 9021 MUMM2C0	HDG m2f Carbon Steel THROUGHBOLT WITH WASHER MUMM2F	SS 316 m2r Carbon Steel THROUGHBOLT WITH WASHER MUMM2R0	SS 316 m2r-C Carbon Steel THROUGHBOLT WITH WASHER - DIN 9021 MUMM2RC	Z/P m2-l Carbon Steel INTERNALLY THREADED BOLT MUMM2I	SS 316 m2r-l Carbon Steel INTERNALLY THREADED BOLT MUMM2RI
SS 316 HL-B Carbon Steel HEAVY DUTY ANCHOR HEX MUMHL4SZ	Z/P HL-S (SZ-S) Carbon Steel HEAVY DUTY ANCHOR HEX MUMHLSSZ	Z/P HL-B (SZ-B) Carbon Steel HEAVY DUTY ANCHOR MUMHLBSZ	Z/P HL-SK (SZ-SK) Carbon Steel CSK HEAD HEAVY DUTY ANCHOR MUMHLSK	Zinc Flake MCS-S Carbon Steel HEX HEAD CONCRETE SCREW HEX MUMMCSS0	Z/P MCS-SK Carbon Steel CSK HEAD CONCRETE SCREW TORX MUMMCSSK	Z/P MCS-P Carbon Steel PAN HEAD CONCRETE SCREW TORX MUMMCSP
Z/P MCS-PG Carbon Steel LRG PAN HEAD CONCRETE SCREW TORX MUMMCSPG	Z/P MCS-I Carbon Steel CSK SOCKET HEAD CONCRETE SCREW HEX MUMMC SI	SS 316 MCSr-S Carbon Steel HEX HEAD CONCRETE SCREW HEX MUMMC SRS	SS 316 MCSr-SK Carbon Steel CSK HEAD CONCRETE SCREW TORX MUMMC SRK	SS 316 MCSr-P Carbon Steel PAN HEAD CONCRETE SCREW TORX MUMMC SRP	Z/P MSS Carbon Steel SHIELD ANCHOR MUMMSS	Z/P MHA-S Carbon Steel SLEEVE ANCHOR HEX SCREW MUMMHAS

Z/P MHA-B Carbon Steel  SLEEVE ANCHOR MUMMHAB	Z/P ESA (E) Carbon Steel  DROP IN ANCHOR MUMESAE	Z/P ESAK (ES) Carbon Steel  DROP IN ANCHOR WITH COLLAR MUMESAKE	SS 316 ESAr (E A4)  DROP IN ANCHOR MUMESARE	Z/P MEA Carbon Steel  DROP IN ANCHOR MUMMEAE0	SS 316 MEAr  DROP IN ANCHOR MUMMEARE	Z/P MEA-WZ  SETTING TOOL FOR MEA WITH HAND GUARD MUMMEAWZ
Z/P MEA-SDS-PLUS Carbon Steel  SETTING TOOL FOR MEA MUMMEASD	Z/P MEA-BB Carbon Steel  STOP DRILL BIT MUMMEABB	Brass MMD  BRASS ANCHOR MUMMMD	Z/P MHDA Carbon Steel  HOLLOW CEILING ANCHOR MUMMHDA0	SS 316 MHDAr  HOLLOW CEILING ANCHOR MUMMH DAR	Z/P MAN Carbon Steel  CEILING ANCHOR MUMMAN	MANr  CEILING ANCHOR MUMMANR0
Z/P MMS Carbon Steel  CONCRETE FRAME ANCHOR POZI DR MUMMMSO	Z/P MMM Carbon Steel  MASONRY FRAME ANCHOR MULTI POZI DR MUMMMM	Z/P MEN Carbon Steel  EXPRESS NAIL MUMMMEN	Z/P MDB-M  METAL DISC DIAM 38MM MUMMDBM3	Z/P MDB-M  METAL DISC DIAM 38MM WHITE MUMMDBMW	Z/P MDB-M  METAL DISC DIAM 70MM MUMMDBM7	Z/P MRS-H Carbon Steel  TRIM HEAD 8.3 WALL SCREW TORX DR MUMMRSH
Z/P MRS-U Carbon Steel  CSK HEAD 11.5 WALL SCREW TORX DR MUMMRSU	Z/P MJB Carbon Steel  ADJUSTABLE SCREW T25 TORX DR MUMMJB	Z/P TR-R Carbon Steel  FRAME FIXING SCREW RAFIX HEX DR MUMTRR0	Z/P TR-RK Carbon Steel  FRAME FIXING SCREW RAFIX HEX DR MUMTRRK	Z/P TR Carbon Steel  TOPLOC SPACER HEX DR MUMTR0	Z/P TR-B Carbon Steel  TOPLOC SPACER HEX DR MUMTRB0	Z/P TR-BS Carbon Steel  TOPLOC SPACER HEX DR MUMTRBS



Swiss Quality



MIT-Hybrid	MIT600RE	MIT-SE Plus	MIT-SP	MIT-Rock	MIT-Cool Plus	MIT-Tropical
Mortar for highest performance in concrete	Pure Epoxy for highest loads in concrete	Mortar for use in concrete	Mortar for use in masonry	Mortar for use in natural stone	Mortar for low temperatures	Mortar for high temperatures
280 ml 	385 ml 	165 ml 	300 ml 	400 ml 	300 ml 	350 ml 
350 ml 	585 ml 	280 ml 	350 ml 		400 ml 	
400 ml 	1400 ml 	300 ml 	400 ml 			
825 ml 		350 ml 				
		400 ml 				
		825 ml 				
						
						
						
						
						
						



recommended



suitable

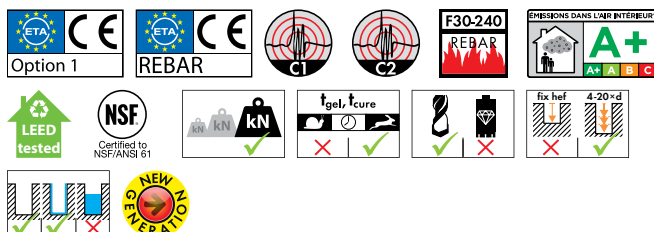


Swiss Quality



MIT-Hybrid Mortar for highest performance in concrete

HOBSON Part prefix: MUCMTHYB <<



Features

- European Technical Approval Option 1 for cracked and non-cracked concrete with anchor rod and with rebar used as anchor
- European Technical Approval for post-installed rebar connections
- The anchor may also be used under seismic influence for performance category C1 + C2
- Fire resistance test certification F30-F240 (Rebar)
- VOC free according to Swiss legislation and certified A+ according to DEVL 1101903D / DEVL 1104875A
- LEED - Test Report
- Certification for drinking water systems
- High loads
- Fast curing
- Variable setting depth
- Dry and damp drill holes
- Suitable for overhead fixings
- Styrene free and low odour
- Colour of mortar: grey
- Indoor (zinc plated) and outdoor (stainless steel) applications



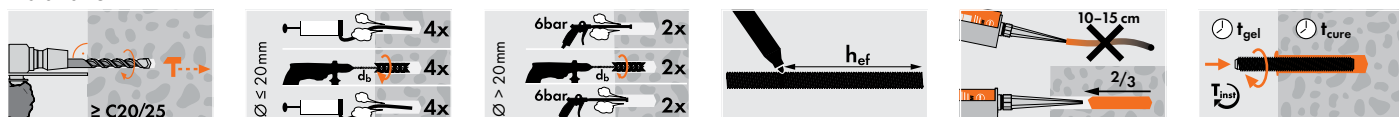
Applications

steel constructions, wooden constructions, façades, façade scaffolds, railings, high-racks, machines, staircases, ladders, cable trays, canopies, hand-rails, consoles

Temperatures

	-5÷+1°C	0÷+4°C	5÷+9°C	10÷+14°C	15÷+19°C	20÷+29°C	30÷+40°C
Working time, in minutes (t_{gel})	50	25	15	10	6	3	2
Curing time, dry in minutes (t_{cure})	5 h	3.5 h	2 h	1 h	40	30	30
Curing time, wet in minutes (t_{cure})	10 h	7 h	4 h	2 h	80	60	60

Installation



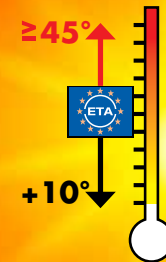


Swiss Quality



MIT-Tropical Mortar for high temperatures

HOBSON Part prefix: MUCMTTRO <<

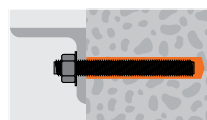


MIT-Tropical



Applications

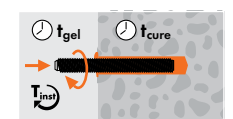
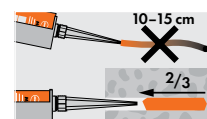
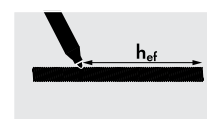
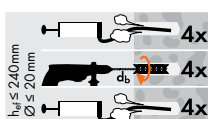
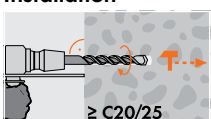
steel constructions, wooden constructions, façades, façade scaffolds, railings, high-racks, machines, staircases, ladders, cable trays, canopies, hand-rails, consoles



Temperatures

	10+14°C	15+19°C	20+29°C	30+34°C	35+39°C	40+44°C	>45°C
Working time, in minutes (t_{gel})	30	20	15	10	6	4	2
Curing time, in minutes (t_{cure})	300	210	145	80	45	25	20

Installation





Swiss Quality

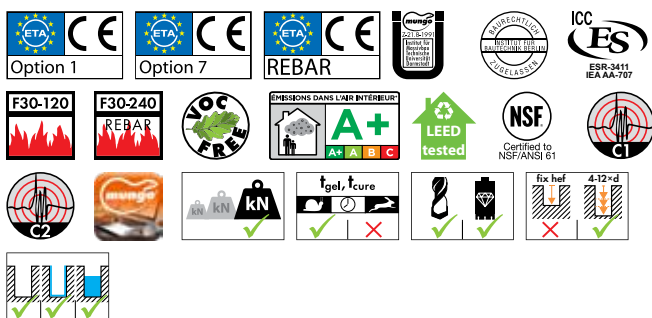


MIT600RE Pure Epoxy for highest loads in concrete

HOBSON Part prefix: MUCMT600 <<



MIT600RE



Features

- European Technical Approval Option 1 for cracked and non-cracked concrete with anchor rod and with rebar used as anchor
- European Technical Approval Option 7 for diamond drilled holes in non-cracked concrete
- European Technical Approval for post-installed rebar connections
- German National Approval for post-installed rebar connections
- ICC-ES Report ESR-3411
- Fire resistance test certification F30-F120
- Fire resistance test certification F30-F240 (Rebar)
- VOC free according to Swiss legislation and certified A+ according to DEVL 1101903D / DEVL 1104875A
- LEED - Test Report
- Certification for drinking water systems
- The anchor may also be used under seismic influence for performance category C1 + C2 (M12-M30)
- High loads
- Long working time for filling of big and deep drill holes
- Variable setting depth
- Application also in damp and water-filled drill holes
- Suitable for overhead fixings
- Shelf life: 24 months
- Colour of mortar: grey
- Indoor (zinc plated) and outdoor (stainless steel) applications

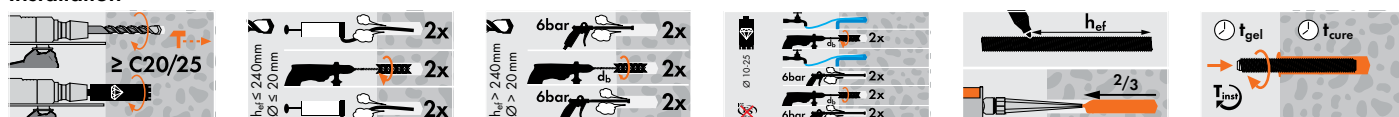
Applications

post-installed rebar connections, steel constructions, profiles, closing of ceilings, repair works

Temperatures

	5±9°C	10±19°C	20±29°C	30±39°C	≥ +40°C
Working time, in minutes (t_{gel})	120	90	30	20	12
Curing time, dry in hours (t_{cure})	50	30	10	6	4
Curing time, wet in hours (t_{cure})	100	60	20	12	8

Installation





Swiss Quality



Vinylester urethane MIT-HYBRID CARTRIDGE 280ML MUCMTHYB1710091	Vinylester urethane MIT-HYBRID CARTRIDGE 350ML MUCMTHYB1710093	Vinylester urethane MIT-HYBRID CARTRIDGE 400ML MUCMTHYB1710094	Vinylester urethane MIT-HYBRID CARTRIDGE 825ML MUCMTHYB1710095	Pure Epoxy MIT600RE CARTRIDGE 385ML MUCMT6001710001	Pure Epoxy MIT600RE CARTRIDGE 585ML MUCMT6001710010	Pure Epoxy MIT600RE CARTRIDGE 1400ML MUCMT6001710012
MIT-K REBAR CASE FOR MIT600RE & MIT-SE PLUS MUCMTK0	Vinylester MIT-SE Plus STYRENE FREE CARTRIDGE 165ML MUCMTSEP1710024	Vinylester MIT-SE Plus STYRENE FREE SELF-OPENING CARTRIDGE 280ML MUCMTSEP1710015	Vinylester MIT-SE Plus STYRENE FREE CARTRIDGE 300ML MUCMTSEP1710017	Vinylester MIT-KE SYSTEM-CASE MIT-SE PLUS 22 X 300ML MUCMTKE3	Vinylester MIT-SE Plus STYRENE FREE CARTRIDGE 350ML MUCMTSEP1710025	Vinylester MIT-BE MAXI-BOX MIT-SE PLUS 20 X 350ML MUCMTBE
Vinylester MIT-SE Plus STYRENE FREE CARTRIDGE 400ML MUCMTSEP1710026	Vinylester MIT-SE Plus STYRENE FREE CARTRIDGE 825ML MUCMTSEP1710022	Polyester MIT-SP STYRENE FREE CARTRIDGE 300ML MUCMTSP01710050	Polyester MIT-SP STYRENE FREE CARTRIDGE 350ML MUCMTSP01710057	Polyester MIT-SP STYRENE FREE CARTRIDGE 400ML MUCMTSP01710052	Polyester MIT-KP SYSTEM-CASE MIT-SP 22 X 300ML MUCMTKP3	Epoxy-Acrylate MIT-ROCK CARTRIDGE 400ML MUCMTE40
Vinylester MIT-TROPICAL CARTRIDGE 350ML MUCMTTRO	Vinylester MIT-COOL PLUS Low Temperature STYRENE FREE CARTRIDGE 300ML MUCMTC30	Vinylester MIT-COOL PLUS Low Temperature STYRENE FREE CARTRIDGE 400ML MUCMTC40	MIT-PP-H0 11 IN 1 FOR ALL MIT INJECTION GUN MUCMTPH0	MIT-PP-H1 FOR MIT 165/280/300ML EASY-PRESS MUCMTPH11710034	MIT-PP-H1 FOR MIT 350ML EASY-PRESS MUCMTPH11710035	MIT-PP-H1 FOR MIT 400ML EASY-PRESS MUCMTPH11710036

MIT-PP-HK FOR MIT 165-300ML  SYSTEM-CASE EASY-PRESS MUCMTPHK1710201	MIT-PP-HK FOR MIT 350ML  SYSTEM-CASE EASY-PRESS MUCMTPHK1710202	MIT-PP-HK FOR MIT 400ML  SYSTEM-CASE EASY-PRESS MUCMTPHK1710203	MIT-PP-H2 FOR MIT 165/280/300ML  INJECTION GUN MUCMTPH21710029	MIT-PP-H2 FOR MIT 350ML  INJECTION GUN MUCMTPH21710033	MIT-PP-H2 FOR MIT 300/385/585ML  INJECTION GUN MUCMTPH21710019	MIT-PP-H2 FOR MIT 400ML  INJECTION GUN MUCMTPH21710009
MIT-PP-A FOR MIT 350ML  CORDLESS INJECTION GUN MUCMTPPA1710221	MIT-PP-A FOR MIT 165-300ML  CORDLESS INJECTION GUN MUCMTPPA1710046	MIT-PP-A FOR MIT 400ML  CORDLESS INJECTION GUN MUCMTPPA1710021	MIT-PP-P FOR MIT 165-350ML  PNEUMATIC INJECTION GUN MUCMTPPP1710040	MIT-PP-P FOR MIT 385-585ML  PNEUMATIC INJECTION GUN MUCMTPPP1710048	MIT-PP-P FOR MIT 400ML  PNEUMATIC INJECTION GUN MUCMTPPP1710020	MIT-PP-P FOR MIT 825ML  PNEUMATIC INJECTION GUN MUCMTPPP1710031
MIT-PP-P FOR MIT 1400ML  PNEUMATIC INJECTION GUN MUCMTPPP1710049	MIT-BN-H1  NYLON BRUSH MUCMTBNH	MIT-BS-H0  UNIVERSAL STEEL BRUSH MUCMTBH0	MIT-BS-H1  STEEL BRUSH MUCMTBH1	MIT-BS-M1  STEEL BRUSH MUCMTBM1	MIT-BS-MV  BRUSH EXTENSION MUCMTBMV	MIT-BS-MA  SDS-PLUS ADAPTER M6 MUCMTBMA
MIT-AP-HG1  PURGING PUMP 840ML MUCMTAPG	MIT-AP-HK0  PURGING PUMP 320ML MUCMTAPK	MIT-AP-D1  COMPRESSED AIR TOOL MUCMTAPD	MIT-VS  PISTON PLUGS MUCMTVS	Plastic MIT-MI-1  MIXER IN TWO PARTS FOR MIT600RE MUCMTMI1	Plastic MIT-MI-2  MIXER UNIVERSAL MUCMTMI2	Plastic MIT-MI-3  MIXER FOR MIT-COOL MIT-ROCK MUCMTMI3



Swiss Quality



Plastic MIT-MI-V1  MIXER EXTENSION MUCMTMV1	PVC MIT-MI-V2  EXTENSION 1M MUCMTMV2	Plastic MIT-SH-K0  SLEEVE MUCMTSH0	Plastic MIT-SH-K1  SLEEVE MUCMTSH1	Plastic MIT-SH-K2  SLEEVE MUCMTSH2	Metal MIT-SH-S0  SLEEVE MUCMTSHS	Z/P MIT-S Class 5.8  ANCHOR ROD KIT MUCMTS0
SS 316 MIT-Sr  ANCHOR ROD KIT MUCMTSR	Z/P MIT-IGH  ANCHOR SLEEVE INT THREAD MUCMTIGH	SS 316 MIGr-M  ANCHOR SLEEVE WITH INTERNAL THREAD MUCMIGRM	Z/P MIG-M  ANCHOR SLEEVE WITH INTERNAL THREAD MUCMIGM0	SS 304 MIT-AKH  ANCHOR SLEEVE MUCMTAKH	SS 304 MIT-ESH  INSERT ANCHOR MUCMTESH	Epoxy- Acrylate MVA  RESIN CAPSULE MUCMVA0
Z/P MVA-S Class 5.8  ANCHOR ROD KIT EXT. HEX MUCMVAS0	SS 316 MVA-Sr  ANCHOR ROD KIT EXT. HEX MUCMVASR	Z/P MVA-WZ  SETTING TOOL MUCMVAWZ	Z/P MVA-I Class 5.8  ANCHOR SLEEVE INT THREAD MUCMVAI0	SS 316 MVA-Ir  ANCHOR SLEEVE INT THREAD MUCMVAIR	PU Foam MPU-P50/B1  FIRE RATED DISPENSER FOAM 750ML MUCMPU5B	PU Foam MPU-P50 Universal Use  DISPENSER FOAM 750ML MUCMPU50
PU Foam MPU-M50 Universal Use  HAND HELD PU FOAM 750ML MUCMPUM5	PU Foam MPU-PS50  CONCRETE FRAMEWORK 750ML MUCMPUS5	PU Foam MPU-M45/B2  HAND HELD PU FOAM 750ML MUCMPUM4	PU Foam MPU-PP Perifix  PERIMETRE ADHESIVE 750ML MUCMPUPP	MRM-PU Cleaner  FOR PU-FOAM AND DISPENSER 500ML MUCMRMPU	MPP-M  METAL DISPENSER MUCMPPM	MPP-K  NYLON/METAL DISPENSER MUCMPPK

Neutral Silicone MSI-NP Universal Use  FUNGUS-INHIBITING 310ML MUCMSINP	Acrylic MDA Indoor/Outdoor  SEALANT PAINTABLE WHITE 310ML MUCMDA	MMK-U Universal Use  ADHESIVE TRANSPARENT 290ML MUCMMKU	MMK-U Universal Use  ADHESIVE GREY 290ML MUCMMKU	Nylon MN  ALL ROUNDER NYLON PLUG MUNMNPP	Nylon MN  NYLON PLUG MINI-BOX BULK PACKED MUNMNPB	Nylon MN  NYLON PLUG MAXI-BOX MUNMNPX
Nylon MN  NYLON PLUG CARTON BULK PACKED MUNMNPL	Nylon MNK  NYLON PLUG WITH COLLAR MUNMNK	Nylon MNL  NYLON PLUG LONG MUNMNL	Nylon MQ  QUATTRO® 80% > MN NYLON PLUG MUNMQPP	Nylon MQ  QUATTRO® NYLON PLUG MINI-BOX MUNMQPB	Nylon MQ  QUATTRO® NYLON PLUG MAXI-BOX MUNMQPX	Nylon MQ  QUATTRO® NYLON PLUG BULK PACKED MUNMQPL
Nylon MOB  NYLON PLUG MQ/MU KIT 230 PCS MUNMOB	Nylon MU  HOLLOW WALL MULTI PLUG NYLON MUNMUPP	Nylon MU  MULTI PLUG NYLON MINI-BOX MUNMUPB	Nylon MU  MULTI PLUG MAXI-BOX MUNMUPX	Nylon MQ QUATTRO Nylon Plug Kit  KIT IN MUNGO BOX MUNMQPM		
Nylon MU  MULTI PLUG NYLON BULK PACKED MUNMUPL	Nylon ML  HOLLOW BRICK PLUG DIAM 6/8 MUNML060	Nylon ML  HOLLOW BRICK PLUG DIAM 10/14 MUNML100	Nylon MLK  HOLLOW BRICK PLUG COLLAR DIAM 8 MUNMLK08	Nylon MLK  HOLLOW BRICK PLUG COLLAR DIAM 14 MUNMLK14	Nylon SD  SOUND INSULATION PLUG MUNSD0	Nylon SDK  COLLAR SOUND INSULATION PLUG MUNSDK



Swiss Quality

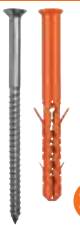
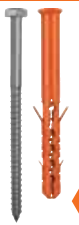
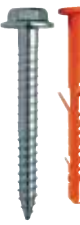


Z/P & Nylon MNA-S HAMMER SCREW CSK COLLAR POZI DR MUNMNAS0	Z/P & Nylon MNA-S HAMMER SCREW CSK COLLAR POZI DR MUNMNASN	Z/P & Nylon MNA-Z HAMMER SCREW CYL COLLAR POZI DR MUNMNAZ	Z/P & Nylon MNA-G HAMMER SCREW LARGE COLLAR POZI DR MUNMNAGZ	Z/P & Nylon MNA-G HAMMER SCREW LARGE COLLAR TORX DR MUNMNAGO	SS 304 & Nylon MNAr-S HAMMER SCREW CSK COLLAR POZI DR MUNMNARS	SS 304 & Nylon MNAr-Z HAMMER SCREW CYL COLLAR POZI DR MUNMNARZ
Nylon White MDB NYLON DISC WHITE MUNMDB	Z/P & Nylon MNAF HAMMER SCREW WHITE POZI DR MUNMNAFW	Z/P & Nylon MNAF HAMMER SCREW YELLOW POZI DR MUNMNAFY	Z/P & Nylon MNAF HAMMER SCREW DARK BROWN POZI DR MUNMNAFB	Z/P & Nylon MQL-ST UNIVERSAL FRAME PLUG TORX DR MUNMQLST	Z/P & Nylon MQL-SS UNIVERSAL FRAME PLUG HEX MUNMQLSS	Z/P & Nylon MQLK-STB UNIVERSAL FRAME PLUG TORX/HEX DR MUNMQLKB
HDG & Nylon MQLK-STBf UNIVERSAL FRAME PLUG TORX/HEX DR MUNMQLKF	SS 316 & Nylon MQL-Str UNIVERSAL FRAME PLUG TORX DR MUNMQLSR	SS 316 & Nylon MQLK-STBr UNIVERSAL FRAME PLUG TORX/HEX DR MUNMQLKR	Z/P & Nylon MB-ST FRAME PLUG SOFT MATERIALS TORX DR MUNMBST0	Z/P & Nylon MB-SS FRAME PLUG SOFT MATERIALS HEX MUNMBSS0	HDG & Nylon MB-SSf FRAME PLUG SOFT MATERIALS HEX MUNMBSSF	Z/P & Nylon MB-S FRAME PLUG SOFT MATERIALS POZI DR MUNMBS0
	Z/P & Nylon MBK-STB FRAME PLUG SOFT MATERIALS TORX/HEX DR MUNMBKSB	SS 316 & Nylon MB-STr FRAME PLUG SOFT MATERIALS TORX DR MUNMBSTR	SS 316 & Nylon MB-SSr FRAME PLUG SOFT MATERIALS HEX MUNMBSSR	SS 316 & Nylon MBK-STBr FRAME PLUG SOFT MATERIALS TORX/HEX MUNMBKSR	Z/P & Nylon MB-SK MN5 Plug FRAME PLUG WITH HEAD HOLE TORX MUNMBSK	Z/P & Nylon MB-SK M5 Thread FRAME PLUG WITH HEAD HOLE TORX MUNMBSKM



Swiss Quality

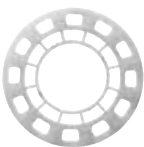


Z/P & Nylon MBR-ST  FRAME PLUG SOLID MATERIALS TORX MUNMBRST	Z/P & Nylon MBR-SS  FRAME PLUG SOLID MATERIALS HEX MUNMBRSS	Z/P & Nylon MBR-S  FRAME PLUG SOLID MATERIALS POZI MUNMBRS0	Z/P & Nylon MBRK-STB  FRAME PLUG SOLID MATERIALS TORX/HEX MUNMBRKS	SS 316 & Nylon MBR-STr  FRAME PLUG SOLID MATERIALS TORX MUNMBRTR	SS 316 & Nylon MBR-SSr  FRAME PLUG SOLID MATERIALS HEX MUNMBRSR	Z/P & Nylon MBR-SK MN5 Plug  FRAME PLUG WITH HEAD HOLE TORX MUNMBRSK
Z/P & Nylon MBR-SKm M5 Thread  FRAME PLUG WITH HEAD HOLE TORX MUNMBRSM	Z/P & Nylon MBR-XT  HIGH PERFORMANCE FRAME PLUG MUNMBRXT	Z/P & Nylon MBRK-XTB  HIGH PERFORMANCE FRAME PLUG MUNMBRKX	SS 316 & Nylon MBR-XTr  HIGH PERFORMANCE FRAME PLUG MUNMBRXX	SS 316 & Nylon MBRK-XTr  HIGH PERFORMANCE FRAME PLUG MUNMBRKR	Nylon MGD  SCAFFOLD PLUG MUNMGD	Z/P MGV  SCAFFOLD SCREW MUNMGV0
Phosphated SBS-FG Drywall  BUGLE HEAD PHILLIPS MUMSBSFG	Phosphated SBS-GG Drywall  BUGLE HEAD PHILLIPS MUMSBSGG	Phosphated SBS-HG Drywall  CSK RIBBED PHILLIPS MUMSBSHG	Phosphated SBS-TE Drywall  BUGLE HEAD PHILLIPS MUMSBSTE	Anchors and Plugs MKS-P Sample Case  MUNGO SAMPLE CASE INCLUDES A LARGE SELECTION OF MUNGO PRODUCTS IN A HANDY CARRY CASE MUXMSKP		
Phosphated SBS-FK Drywall  LARGE WAFER PHILLIPS MUMSBSFK	Phosphated SBS-ZK Metal  LARGE WAFER PHILLIPS MUMSBSZK	Phosphated SBS-GS Drywall  CSK RIBBED PHILLIPS MUMSBSGS	Nylon MVS  END CAP FOR SCAFFOLD PLUG MUNMVS			



Swiss Quality



Z/P MGVm  SCAFFOLD SCREW MUNMGVM	Plastic MDD-S Carbon Steel  INSULATION FIXING DIAM 60MM MUIMDDS	Plastic MDD-VZ  DISC FOR MDD-S / MDD-CE MUIMDDVZ	Plastic MDD-CE  INSULATION FIXING DIAM 60MM MUIMDDCE	Black MDS  INSULATION FIXING DIAM 90MM MUIMDS0	White MIS Lightweight Panel  INSULATION FIXING DIAM 88MM MUIMIS0	Black MIS Lightweight Panel  INSULATION FIXING DIAM 60MM MUIMISB0
White MIP Mineral Wool  INSULATION FIXING DIAM 45MM MUIMIPO	Z/P MIDS  INSULATION NAIL DIAM 30/35MM MUIMIDS0	Z/P MDB  METAL DISC FOR SOFT INSULATION MUIMDBZ	SS 304 MIDSr  INSULATION NAIL DIAM 30/35MM MUIMIDSR	SS 304 MDBr  METAL DISC FOR SOFT INSULATION MUIMDBA2	Z/P MIDS-K  INSULATION NAIL DIAM 54MM MUIMIDSK	Nylon MDI  INSULATION PLUG MUIMDI25
Nylon MDI  INSULATION PLUG MUIMDI00	Nylon MDIm  INSULATION PLUG FOR M8-M10 MUIMDIM0	Z/P MJP39  JET PLUG METAL MUSMJ390	Z/P MJP32  JET PLUG METAL MUSMJ32	Z/P MJP25  JET PLUG METAL MUSMJ25	Z/P MJP39-S  JET PLUG METAL POZI DR MUSMJ39S	Z/P MJP32-S  JET PLUG METAL POZI DR MUSMJ32S
Z/P MJPM  JET PLUG METAL MUSMJPM0	Natural Nylon MFJ32  JET PLUG PLASTERBOARD CHIPBOARD MUSMFJ32	Z/P & Nylon MFJ32-S  JET PLUG PLASTERBOARD CHIPBOARD MUSMFJ3S	Natural Nylon MFJ25  JET PLUG PLASTERBOARD CHIPBOARD MUSMFJ25	Z/P MSN  STEEL NAIL MUSMSN	Z/P MK-M  CAVITY TOGGLE MUSMKM00	Z/P MK-H  CAVITY TOGGLE WITH HOOK MUSMKH00

MPC Pro Cut  CUTTING DISC 1.0 - 1.9 MUDMPCP1	MPC Pro Cut  CUTTING DISC 2.5 - 3.0 MUDMPCP2	MPG Pro Grind  GRINDING DISC 6.5 MUDMPGPG	MDC Laser Beton  DIAMOND BLADE MUDMDCLB	MDC Power M  DIAMOND BLADE MUDMDCPM	DS500  DIAMOND BLADE MUDDS500	MFB  DIAMOND DRILL BIT MUDMFB00
				Z/P MEF  EASY-FIX LIGHTWEIGHT CONCRETE MUSMEF	SDS-PLUS JET-TRAC TRIPLO  DRILL BIT 3 CUTTER MUDJTTPR	KEY  SDS-PLUS  SDS-MAX
SDS-PLUS MPM  FLAT CHISEL MUDMPMFC	SDS-PLUS MPM  HOLLOW CHISEL MUDMPMHC	SDS-PLUS MPM  POINTED CHISEL MUDMPMPC	SDS-PLUS MPM  SPADE CHISEL MUDMPMSC	SDS-PLUS MPM  TILE CHISEL CRANKED MUDMPMTC	SDS-MAX MXM  BUSHING TOOL MUDMXMBT	SDS-MAX MXM  CHANNEL CHISEL MUDMXMCC
SDS-MAX MXM  FLAT CHISEL MUDMXMFC	SDS-MAX MXM  HOLLOW CHISEL MUDMXMHC	SDS-MAX MXM  SLOTTED CHISEL MUDMXMLC	SDS-MAX MXM  POINTED CHISEL MUDMXMPC	SDS-MAX MXM  SPADE CHISEL MUDMXMSC	SDS-MAX MXM  SEAM TOOL MUDMXMST	SDS-MAX MXM  WING CHISEL MUDMXMWCC



CONXTRACT



Simple, Easy, Reliable Wedge Anchor (Through Bolt)
pre-assembled single unit wedge type anchor for fixing to solid concrete.

ZYP
HEC
Class 5.8



**CLAWBOLT®
WEDGE
ANCHOR**

MAW58YCM

ZYP
HEC
Class 4.6



**CLAWBOLT®
WEDGE
ANCHOR**

MAW46YCM

MGAL
HEC
Class 5.8



**CLAWBOLT®
WEDGE
ANCHOR**

MAW58GCM

MGAL
HEC
Class 4.6



**CLAWBOLT®
WEDGE
ANCHOR**

MAW46GCM

SS 316
HEC



**CLAWBOLT®
WEDGE
ANCHOR**

MAW16PCM

ZYP
HEC
Carbon Steel



**TY9aBolt®
SLEEVE
ANCHOR**

MTBMSYM

MGAL
HEC
Carbon Steel



**TY9aBolt®
SLEEVE
ANCHOR**

MTBMSGM

SS 316
HEC



**TY9aBolt®
SLEEVE
ANCHOR**

MTB16PM

ZYP
HEC
Class 8.8



**TY9aBolt® FLUSH
HEAD SLEEVE
ANCHOR**

MTH88YM

SS 316
HEC



**TY9aBolt® FLUSH
HEAD SLEEVE
ANCHOR**

MTH16PM

TY9aBolt®

Simple, Easy, Reliable Sleeve Anchor pre-assembled single unit wedge type anchor for fixing to solid concrete.

Z/P
HEC
Carbon Steel



**HOLLOW WALL
ANCHOR
STANDARD**

MWHDZPCM

Wall Anchor Tool
HEC
Carbon Steel



**SETTING TOOL
RATCHET
STYLE**

MATWHR

ZYP
HEC
Carbon Steel



**DROP IN
ANCHOR
WITH LIP**

MDLMSYCM

ZYP
HEC
Carbon Steel



**DROP IN
ANCHOR**

MDIMSYCM

SS 316
HEC



**DROP IN
ANCHOR**

MDI16PCM

Z/P
HEC
Carbon Steel



**DROP-IN
SETTING TOOL**

MATMSZM

Red Grip
HEC
Carbon Steel



**DROP IN
SETTING TOOL
WITH HANDLE**

MATR

NYLON
HEC
Steel Pin



**NAIL IN
ANCHOR
MUSHROOM**

MNMNM

NYLON
HEC
SS 304 Pin



**NAIL IN
ANCHOR
MUSHROOM**

MMNSM

NYLON
HEC
Steel Pin



**NAIL IN
ANCHOR
ROUND**

MNRNM

NYLON
HEC
SS 304 Pin



**NAIL IN
ANCHOR
ROUND**

MNRSM

Z/P
HEC
Steel Pin



**NAIL IN
ANCHOR
MUSHROOM**

MNPZM

ZYP
HEC
Carbon Steel



**TIE WIRE
SUSPENSION
ANCHOR**

MSTMSYM

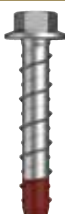
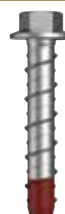
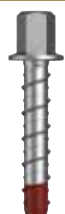
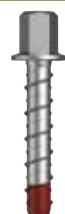
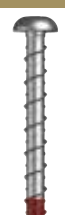
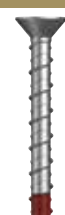
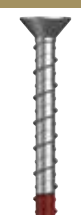
ZYP
HEC
Carbon Steel



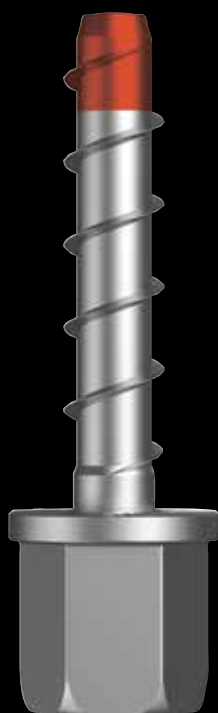
**SUSPENSION
ANCHOR**

MSAMSYM



MGAL HEC Carbon Steel  XBolt® HEX FLANGE HEAD MXHMSGM	ZYP HEC Carbon Steel  XBolt® HEX FLANGE HEAD MXHMSYM	ZYP HEC Carbon Steel  XBolt® EYE MXEMSYM	ZYP HEC Carbon Steel  XBolt® COUPLER MXCMSYM	MGAL HEC Carbon Steel  XBolt® COUPLER MXCMSGM	Blue HEC For M10 XBolt®  VERTICAL HANGER SOCKET MXSVSM
MGAL HEC Carbon Steel  XBolt® BUTTON HEAD TORX DR MXDMSGM	MGAL HEC Carbon Steel  XBolt® CSK HEAD HEX DR MXKMSGM	ZYP HEC Carbon Steel  XBolt® CSK HEAD HEX DR MXKMSYM			

XBolts® are single unit screw type anchors that are used in solid concrete applications. Fixing is achieved by screwing the anchor into a drilled hole in concrete. As it is screwed in, the anchor taps the hole, thus enabling it to produce a mechanical interlock with the concrete.



XBolt® VERTICAL HANGER

MVXMSZIM



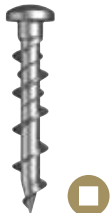
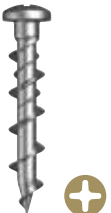
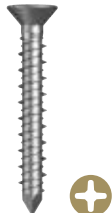
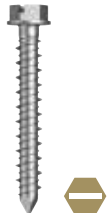
Primary applications:

- » Fastening hangers for HVAC (Heating, Ventilation and Air Conditioning) ducting, electrical cable trays, pipe brackets and pipes
- » Fastening hangers for ceiling frames





CONXTRACT

R1000 hrs HEC Carbon Steel  WALL KATT™ UNIVERSAL PAN SQUARE MWKXRPQ	Z/P HEC Carbon Steel  WALL KATT™ UNIVERSAL PAN PHILLIPS MWKXZPP	R1000 hrs HEC Carbon Steel  TX-CON™ ANCHOR CSK PHILLIPS MTXTRCP	R1000 hrs HEC Carbon Steel  TX-CON™ ANCHOR HEX SLOTTED MTXTRHL	Z/P HEC Carbon Steel  TX-CON™ FRAMING ANCHOR TORX MTXSZGO
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TX-CON™ is designed for medium duty applications when fixing to concrete, brick or block. These anchors tap the drilled concrete hole mechanically locking to the concrete. Ideal for quick installation, close anchor spacing or edge distance and removability.



Hobson - Impact Type expanded mechanical anchor for fast and easy installation in concrete, brick, block or stone.

Z/P HEC Carbon Steel  H-IT™ TIE WIRE ANCHOR MHAHTZTM	MGAL HEC Carbon Steel  H-IT™ COUNTERSUNK ANCHOR MHAHTMCM	MGAL HEC Carbon Steel  H-IT™ MUSHROOM ANCHOR MHAHTMMM	SS 316 HEC  H-IT™ MUSHROOM ANCHOR MHA16PMM	Z/P HEC Carbon Steel  H-IT™ MINI SPLICE WEDGE MHWMSZSM
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KEY CHR: Chrome HDG: Hot Dip Galvanised MGAL: Mechanical Galvanised PLN: Plain SS: Stainless Steel Z/P: Zinc Plated ZYP: Zinc Yellow	Z/P HEC Metal  PANTHA PLUG® SUIT 8G SCREW MWPPM	NYLON HEC  PANTHA PLUG® SUIT 8G SCREW MWPPP	NYLON HEC Grey  UNIVERSAL WALL PLUG TAPERED POINT MWPNUG	PVC HEC Yellow  1-2-3G SCREW TAPERED POINT MWPFY	PVC HEC White  4-5G SCREW TAPERED POINT MWPFW	PVC HEC Red  8-9G SCREW TAPERED POINT MWPFRR
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PVC HEC Green  10-12G SCREW TAPERED POINT MWPFGR	PVC HEC Blue  14-16G SCREW TAPERED POINT MWPFBR	PVC HEC Orange  16-18G SCREW TAPERED POINT MWPFOR	PVC HEC Grey  20-24G SCREW TAPERED POINT MWPFGE
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SA TS 101: 2015 – Now AS 5216



SA TS 101: 2015 is a **Standards Australia Technical Specification** that covers minimum requirements for anchorage design and product prequalification. The **2016 National Construction Code (NCC)**, officially released in May 2016, refers to **SA TS 101: 2015** as “deemed to satisfy”. Together, the revised **NCC** and **SA TS 101: 2015** further uplifts the level of safety and security in safety critical fastenings to concrete. **SA TS 101** covers both design of anchor connections and how anchor products should be prequalified, be it post-installed anchors or cast-in channels. Only anchors that have been prequalified in

accordance with the provisions of **SA TS 101** Appendix B can be used with the new standard. Furthermore, **SA TS 101** Appendix B notes that anchor products with acceptable **European Technical Approvals/Assessments (ETA)** may be used with **SA TS 101**.

SA TS 101: 2015 – Hobson Engineering supply **Mungo** mechanical and chemical anchor products that have ETAs, specifically for customers requiring European approved anchor products. Our **Mungo** product portfolio remains strong and ready for the changes in our anchor industry, as a result of the **NCC** requirements.

SA TS 101: 2015 has been transferred to AS 5216.

Visit hobson.com.au for Articles.



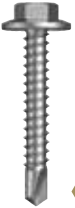
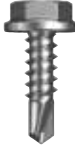
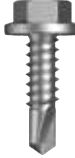
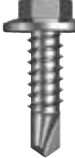
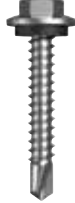
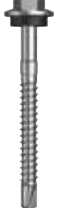
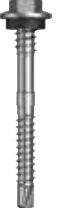
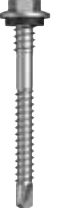
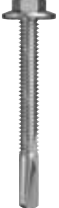
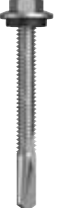
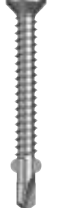
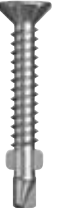
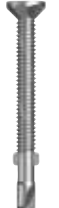
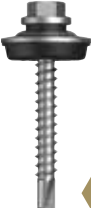
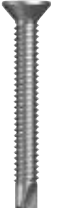
Products which include the ETA logo are directly compatible with SA TS 101: 2015 and AS 5216.

Z/P MKT® Carbon Steel  INT THREAD CHEMICAL STUD V-IG MCIM5ZGM	Z/P MKT® Carbon Steel  VMZ-A THREADED STUD MCZM5ZAM	SS 316 MKT®  VMZ-A THREADED STUD MCZM4PAM	SS 316 HEC  CHEMICAL ANCHOR KIT EXT. HEX MCA16PCM	ZYP HEC Class 5.8  CHEMICAL ANCHOR KIT EXT. HEX MCA58YCM	HDG HEC Class 5.8  CHEMICAL ANCHOR KIT EXT. HEX MCA58GCM	HDG HEC Class 5.8  CHEMICAL ANCHOR KIT FLAT TOP STUD MCS58GCM
SS 316 HEC  CHEMICAL ANCHOR KIT FLAT TOP STUD MCS16PCM	SS 316 HEC  POST HEAD COUNTERSUNK INT THREAD MPC16PM	Plastic HEC  CENTERING SLEEVE VM-ZR MCXSZM	Z/P HEC Carbon Steel  VERTICAL HANGER METAL MVMMSZIM	Z/P HEC Carbon Steel  VERTICAL SIDE HANGER METAL MVMMSZSM	Z/P HEC Carbon Steel  VERTICAL HANGER T17 TIMBER MVWMSZIM	Blue HEC For M6/M8/M10  VERTICAL HANGER SOCKET MXSVS-SI



DRILLX[®]

DRILLX[®]

Metal Class 3  HEX HEAD FLANGE T9PM3FH	Metal ZYP  HEX HEAD FLANGE T9PMYFH	Metal Z/P  HEX HEAD FLANGE T9PMZFH	Metal Class 4  HEX HEAD FLANGE T9PM4FH	Metal Class 3  REDUCED HEX HEAD FLANGE T9PM3RH	Metal Class 4  HEX HEAD FLANGE WITH SEAL T9PM4SH	Metal Class 4 Scratchguard[®]  HEX HEAD FLANGE WITH SEAL T9PM4SS
Metal Class 4 XGRiP[®] Scratchguard[®]  HEX HEAD FLANGE WITH SEAL T9PM4XS	Metal Class 4 XGRiP[®]  HEX HEAD FLANGE WITH SEAL T9PM4XH	s500 Class 4  HEX HEAD FLANGE T9P54FH	s500 Class 4  HEX HEAD FLANGE WITH SEAL T9P54SH	s500 Class 3  WAFER HEAD PHILLIPS T9P53WP	Metal ZYP  CSK RIBBED WITH WINGS SQUARE DR T9PGYRQ	s500 Class 4 XGRiP[®]  HEX HEAD FLANGE WITH SEAL T9P54XH
Metal Class 3  CSK RIBBED WITH WINGS SQUARE DR T9PG3RQ	Metal Class 3  CSK RIBBED WITH WINGS HEX DR T9PG3SI	Metal Cyclone Class 4  HEX HEAD WITH MULTISEAL T9PM4YM	s500 Cyclone Class 4  HEX HEAD WITH MULTISEAL T9P54YM	Metal Poly Assembly Class 3  HEX HEAD WITH CUTTER & SEAL T9PM3PU	Metal ZYP  CSK HEAD PHILLIPS T9PMYCP	HEX HEAD FLANGE WITH SEAL T9P54XH

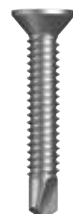
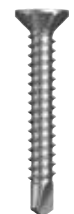
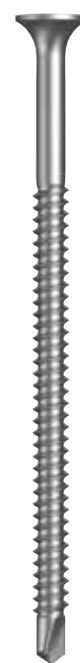
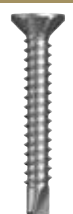
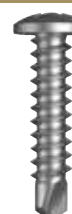
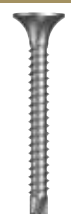
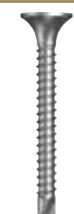
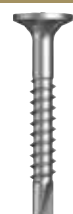
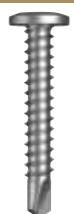
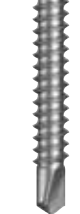
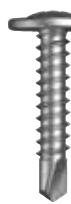
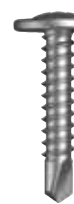
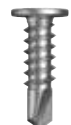
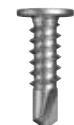
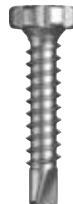
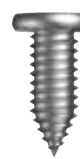
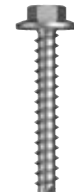
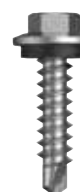


Hobson Engineering DRILLX® screws are an innovative and cost-effective Self Drilling Screw with the same Hobson high quality the Australian fastener market demands. Featuring the DX3™ & DX4™ coating*.

A massive range of painted screws are held ex-stock as well as painting on request.

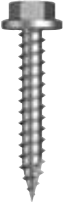
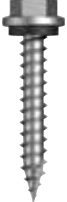
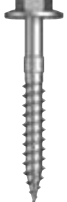
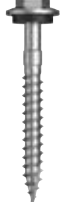
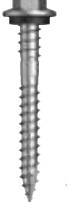
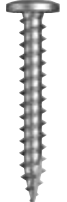
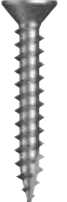
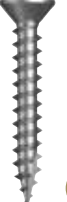
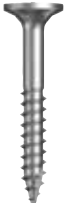
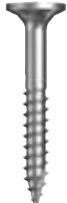
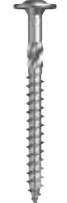
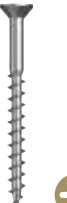
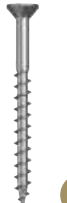
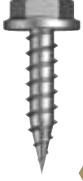
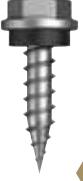
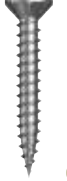
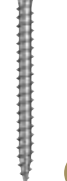
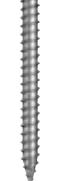
* Warranty details available online.

DX3™ DX4™

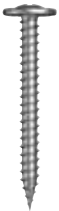
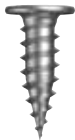
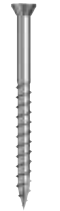
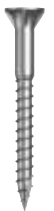
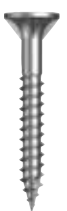
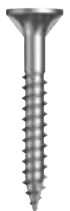
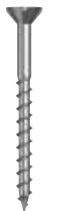
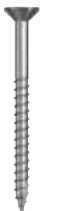
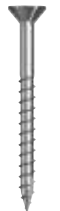
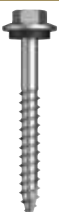
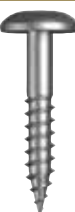
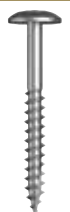
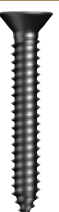
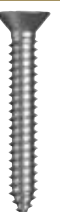
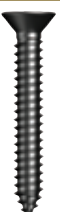
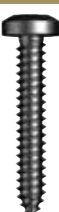
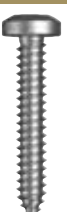
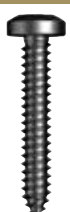
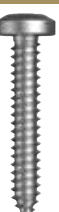
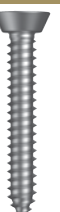
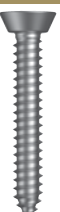
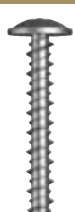
Hobson Engineering DRILLX® screws are an innovative and cost-effective Self Drilling Screw with the same Hobson high quality the Australian fastener market demands. Featuring the DX3™ & DX4™ coating*. A massive range of painted screws are held ex-stock as well as painting on request. * Warranty details available online. DX3™ DX4™				Metal Class 3  CSK HEAD PHILLIPS T9PM3CP	Metal ZYP  CSK RIBBED PHILLIPS T9PMYRP	Metal Class 3  BUGLE HEAD PHILLIPS T9PM3BP		
Metal Class 3  CSK RIBBED PHILLIPS T9PM3RP	Metal ZYP  PAN HEAD PHILLIPS T9PMYPP	Metal ZYP  BUGLE HEAD PHILLIPS T9PMYBP	Metal Z/P  BUGLE HEAD PHILLIPS T9PMZBP	Metal Class 3  BUGLE BATTEN RIB HEAD HEX DR T9PM3BH	Metal Class 3  WAFER HEAD PHILLIPS T9PM3WP	Metal Class 3  BUGLE HEAD PHILLIPS T9PM3BP		
Metal ZYP  WAFER BUTTON PHILLIPS T9PMYAP	Metal Class 3  WAFER BUTTON PHILLIPS T9PM3AP	Metal ZYP  FLAT HEAD PHILLIPS T9PMYLP	Metal Class 3  FLAT HEAD PHILLIPS T9PM3LP	Metal ZYP  FLOWER HEAD SELF EMBED PHILLIPS T9PMYOP	Framing Screw Class 3  SERRATED FLAT HEAD PHILLIPS T9PF3EP	Truss Framing Class 3  HEX HEAD FLANGE T9PF3FH		
Metal Class 3  PAN HEAD TRILOBULAR DRIVE T9PM3PI	 vmaX® vmaX® feature a universal drilling point. Suitable for fastening roof sheeting to thin metal battens, timber trusses and steel purlins up to 1.9mm thick.				Class 3  BATTEN HEX HEAD FLANGE T9PV3FH	Class 4 XGRiP® Scratchguard®  HEX HEAD FLANGE WITH SEAL T9PV4XS	Class 4  HEX HEAD FLANGE WITH SEAL T9PV4SH	Poly Assembly Class 3  HEX HEAD WITH CUTTER & SEAL T9PV3PU



DRILLX®

Type 17 Class 4  HEX HEAD FLANGE T9PW4FH	Type 17 Class 4  HEX HEAD FLANGE WITH SEAL T9PW4SH	Type 17 Class 4 Scratchguard®  HEX HEAD FLANGE T9PW4FS	Type 17 Class 4 Scratchguard®  HEX HEAD FLANGE WITH SEAL T9PW4SS	Type 17 Class 4 XGRiP®  HEX HEAD FLANGE WITH SEAL T9PW4XH	Type 17 Class 4 XGRiP® Scratchguard®  HEX HEAD FLANGE WITH SEAL T9PW4XS	Type 17 Cyclone Class 4  HEX HEAD WITH MULTISEAL T9PW4YM
 Engineered point for self-drilling and fixing metal plate to timber without splitting.		SS 316  HEX HEAD FLANGE T16JSFH	Class 3  HEX HEAD FLANGE T9PJ3FH	Type 17 Class 3  FLAT WAFER HEAD PHILLIPS T9PW3WP	Type 17 ZYP  CSK HEAD PHILLIPS T9PWYCP	Type 17 Class 3  CSK HEAD PHILLIPS T9PW3CP
Type 17 Class 3  BUGLE BATTEN RIB HEAD HEX DR T9PW3BH	Type 17 ZYP  BUGLE BATTEN RIB HEAD HEX DR T9PWYBH	Type 17 Class 3  WASHER HEAD HEX DR T9PW3GI	 A high performance coating, specially formulated for resisting treated pine chemicals.		Type 17  WASHER HEAD HEX DR T9PWTGI	Type 17  WASHER HEAD TORX DR T9PWTGO
Chipboard ZYP  CSK RIBBED PHILLIPS T9PDYRP	Treated Pine Class 3  CSK SELF EMBEDDING SQUARE DR T9PD3SQ	Needle Point Class 4  HEX HEAD FLANGE T9PN4FH	Needle Point Class 4  HEX HEAD FLANGE WITH SEAL T9PN4SH	Needle Point ZYP  CSK RIBBED PHILLIPS T9PNYSP	Needle Point Plasterboard ZYP  BUGLE HEAD PHILLIPS T9PNYBP	Needle Point Class 3  LARGE WAFER PHILLIPS T9PN3AP

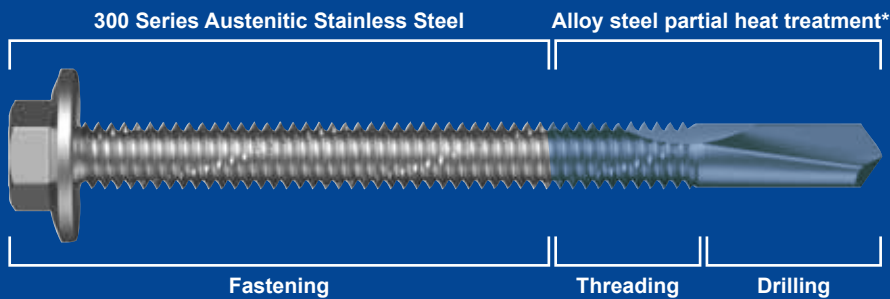


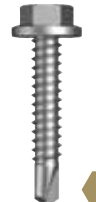
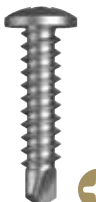
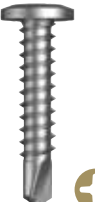
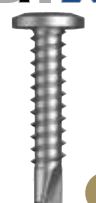
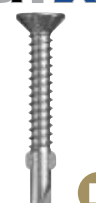
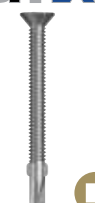
Needle Point ZYP  LARGE WAFER PHILLIPS T9PNYAP	Needle Point Class 3  FLAT HEAD PHILLIPS T9PN3LP	Needle Point ZYP  FLAT HEAD PHILLIPS T9PNYLP	 TDX[®] Timber decking screw. Featuring: corrosion resistant stainless steel; a special point, cut and thread; a trim head; a No.1 square drive and square thread for greater holding power which prevents the deck from lifting.	Type 17 SS 304  TRIM HEAD 4 RIBS SQUARE DR T04WSTD	Type 17 SS 304  TRIM HEAD 6 RIBS SQUARE DR T04WSTQ
Type 17 SS 316  BUGLE BATTEN 4 RIBS SQUARE DR T16WSBQ	Type 17 SS 316  BUGLE BATTEN 4 RIBS HEX DR T16WSBH	Type 17 SS 304  BUGLE BATTEN 4 RIBS HEX DR T04WSBH	Needle Point SS 304  CSK HEAD 4 RIBS SQUARE DR T04NS4Q	Type 17 SS 304  CSK HEAD 6 RIBS SQUARE DR T04WS6Q	Type 17 SS 316  CSK SELF EMBEDDING SQUARE DR T16WSSQ
Type 17 SS 316  HEX HEAD FLANGE WITH SEAL T16WSSH	Needle Point SS 304  BUTTON HEAD SQUARE DR T04NSUQ	Type 17 SS 316  BUTTON HEAD SQUARE DR T16WSUQ	Zinc Black ANSI B18.6.4  CSK HEAD SELF TAPPER PHILLIPS T9PSVCP	Z/P ANSI B18.6.4  CSK HEAD SELF TAPPER PHILLIPS T9PSZCP	Zinc Black ANSI B18.6.4  CSK HEAD SELF TAPPER SQUARE DR T9PSVCQ
Zinc Black ANSI B18.6.4  PAN HEAD SELF TAPPER PHILLIPS T9PSVPP	Z/P ANSI B18.6.4  PAN HEAD SELF TAPPER PHILLIPS T9PSZPP	Zinc Black ANSI B18.6.4  PAN HEAD SELF TAPPER SQUARE DR T9PSVPQ	Z/P ANSI B18.6.4  PAN HEAD SELF TAPPER SQUARE DR T9PSZPQ	Z/P ANSI B18.6.4  UNDERCUT CSK SELF TAPPING PHILLIPS T9PSZDP	Z/P ANSI B18.6.4  UNDERCUT CSK SELF TAPPING SQUARE DR T9PSZDQ
					Z/P HEC  ELECTRICAL PANEL SCREW PHILLIPS T9PPZAP



DRILLX[®]

Bi-FixTM



Metal SS 304 BI-Metal   HEX HEAD T4XMXHH	Metal SS 304 BI-Metal   HEX HEAD WITH ALUM SEAL T4XMXAH	Metal SS 304 BI-Metal   PAN HEAD PHILLIPS T4XMXPP	Metal SS 304 BI-Metal   WAFER HEAD PHILLIPS T4XMXWP
Metal SS 316 BI-Metal   WAFER HEAD SQUARE DR T6XMXWQ	s500 SS 304 BI-Metal   HEX HEAD FLANGE T4X5XFH	Metal SS 304 BI-Metal   CSK HEAD WITH WINGS SQUARE DR T4XGXRQ	s500 SS 304 BI-Metal   CSK HEAD WITH WINGS SQUARE DR T4XHXRQ

A Bi-Metallic screw, is comprised of two metal types. The point is manufactured from high carbon steel that is heat treated to give it the ability to self-drill. The head section is manufactured from a corrosion resistant stainless steel (304 or 316). The two metals are “fused together” to form a screw that offers excellent self-drilling properties, combined with exceptional corrosion resistance.

Protective Coating

Hobson Bi-metallic screws are all coated with a metallic zinc layer and then a second baked top coat that provides an extra layer of corrosion protection and lubrication. This protective coating offers an added benefit of reducing the electrolytic corrosion potential. Our 304 range is coated with a 1000hr protection coating and our 316 range is coated with a 1500hr protection coating.

*Colour for illustrative purposes only.





To find a rivet or screw in any of the colours below, simply replace the **9P** in the part number with the colour code in brackets.

Example: If you choose the colour **PAPERBARK® (PA)**

T9PM4FH1016016 (no paint)



TPAM4FH1016016 (painted)



R9P73OAS404 (no paint)



RPA73OAS404 (painted)

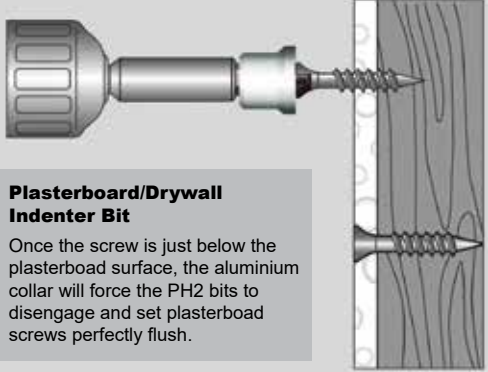
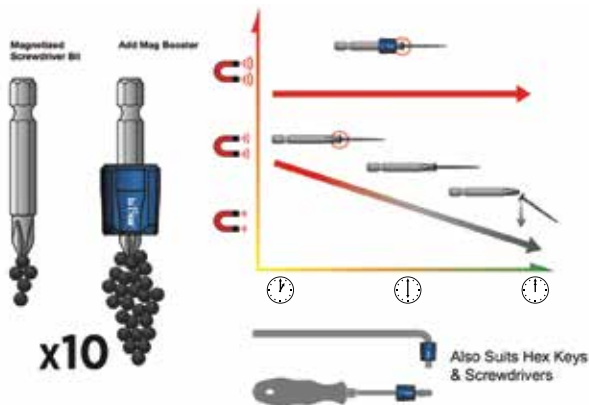


Hobson stock DRILLX® screws and rivets with painted heads in the Colorbond® range of colours.

BASALT® (BA)	HEADLAND® (HE) NZ MAPLE	PLANTATION® (PL)
BLUE RIDGE® (BR) NZ PACIFIC BLUE	IRONSTONE® (IS)	PRIMROSE™ (PR)
BUSHLAND® (BU)	JASPER® (JA) NZ SORRELL	SANDBANK® (SA) NZ STRAW
CLASSIC CREAM™ (CC) NZ SMOOTH CREAM	LOFT® (LO)	SHALE GREY™ (SG) NZ GULL GREY
COTTAGE GREEN® (CG) NZ PERMANENT GREEN	MANGROVE® (MA)	STONE® (ST) NZ RIVERSAND
COVE® (CO)	MANOR RED® (MR) NZ SCORIA	SURFMIST® (SM) NZ TITANIA
DEEP OCEAN® (DO) NZ STORM BLUE	MONUMENT® (MO)	TERRAIN® (TE)
DOVE WHITE™ (DW)	NIGHT SKY® (NS) NZ EBONY	WALLABY® (WA)
DUNE® (DU)	PALE EUCALYPT® (PE) NZ MIST GREEN	WILDERNESS® (WI) NZ RIVERGUM
EVENING HAZE® (EH)	PALE TERRACOTTA™ (PT)	WINDSPRAY® (WN) NZ SMOKEY
GULLY® (GU)	PAPERBARK® (PA)	WOODLAND GREY® (WG) NZ THUNDER GREY



DRILLX®

S2 Alloy Drive Bit 1/4  DOUBLE ENDED PHILLIPS TXDDDPH	S2 Alloy Drive Bit 1/4  INSERT BIT HOLDER TXDDIBH	S2 Alloy Drive Bit 1/4  INSERT HEX TXDDIHx	S2 Alloy Drive Bit 1/4  PLASTERBOARD INSERT PHILLIPS TXDDIPD	 Plasterboard/Drywall Indenter Bit Once the screw is just below the plasterboard surface, the aluminium collar will force the PH2 bits to disengage and set plasterboard screws perfectly flush.		
S2 Alloy Drive Bit 1/4  INSERT PHILLIPS TXDDIPH	S2 Alloy Drive Bit 1/4  INSERT SLOTTED TXDDISL	S2 Alloy Drive Bit 1/4  INSERT SQUARE TXDDISQ	S2 Alloy Drive Bit 1/4  MAGNETIC NUT SETTER TXDDPNS	S2 Alloy Drive Bit 1/4  POWER HEX TXDDPHX	S2 Alloy Drive Bit 1/4  POWER PHILLIPS TXDDPPH	S2 Alloy Drive Bit 1/4  POWER SLOTTED TXDDPSL
S2 Alloy Drive Bit 1/4  POWER SQUARE TXDDPSQ	S2 Alloy Drive Bit 1/4  POWER TRILOBULAR TXDDPTR	S2 Alloy Drive Bit 1/4  POWER TORX TXDDPTX	HEC Drive Bit 1/4  MAGNET BOOSTER TXDMPB	 Magnet Booster Also Suits Hex Keys & Screwdrivers		



Titan N™

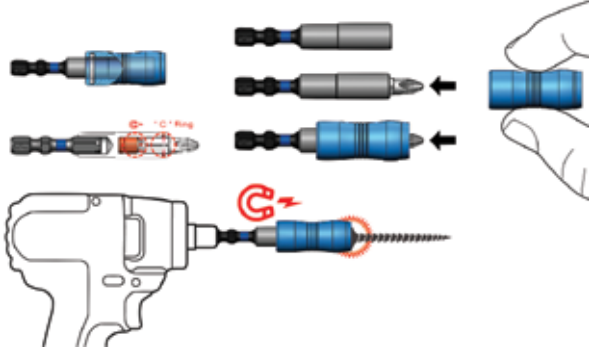
Titanium Nitride coating increases surface hardness. Extended life in general purpose applications.

S2 Alloy TitaN Bit 1/4  INSERT PHILLIPS TXDTIPH	S2 Alloy TitaN Bit 1/4  POWER HEX TXDTPHX	S2 Alloy TitaN Bit 1/4  POWER PHILLIPS TXDTPPH
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impaX[™]

Drive Bits designed for high impact forces of modern power tools.

S2 Alloy Black impaX Bit 1/4  INSERT BIT HOLDER TXDIIBH	S2 Alloy Black impaX Bit 1/4  INSERT BIT HOLDER MAG COLLAR TXDIIBM					S2 Alloy Black impaX Bit 1/4  INSERT HEX TXDIIHX	S2 Alloy Black impaX Bit 1/4  INSERT PHILLIPS TXDIIPH
S2 Alloy Black impaX Bit 1/4  INSERT SQUARE TXDIISQ	S2 Alloy Black impaX Bit 1/4  MAGNETIC NUT SETTER TXDIPNS	S2 Alloy Black impaX Bit 1/4  POWER HEX TXDIPHX	S2 Alloy Black impaX Bit 1/4  POWER PHILLIPS TXDIPPH	S2 Alloy Black impaX Bit 1/4  POWER SQUARE TXDIPSQ	S2 Alloy Black impaX Bit 1/4  POWER TORX TXDIPTX	Drive Types - PHILLIPS - HEX - SQUARE - TORX - SLOTTED - TRILOBULAR	
S2 Alloy impaX Bit 1/4  SDS-PLUS ADAPTOR TXDIPAI	 Pull-back Release					You might also be interested in... SDS-PLUS JET-TRAC TRIPLO  DRILL BIT MUDJTTPR page 67 SECURITY BITS POST HEX ISBPH POST TORX ISBPT EYE DRIVE ISBED page 32	



DRILLX®

Rivets



5052 AL
Steel ZP



**DOME HEAD
OPEN RIVET**

R9P73OAS

5056 AL
Steel ZP



**DOME HEAD
OPEN RIVET**

R9P73O6S

Steel ZP



**DOME HEAD
OPEN RIVET**

R9P73OSS

SS 304



**DOME HEAD
OPEN RIVET**

R0473OLL

SS 316



**DOME HEAD
OPEN RIVET**

R1673OLL

5052
Aluminium



**DOME HEAD
OPEN RIVET**

R9P73OAA

Monel
Steel ZP



**DOME HEAD
OPEN RIVET**

R9P73OMS

304 SS
Steel ZP



**DOME HEAD
OPEN RIVET**

R0473OLS

5052 AL
Steel ZP



**DOME HEAD
OPEN RIVET
LARGE FLANGE**

R9P73LAS

5052 AL
Steel PHOS



**DOME HEAD
SEALED RIVET**

R9P73TAP

Copper
Steel PHOS



**DOME HEAD
SEALED RIVET**

R9P73TCP

5056 AL
Steel ZP



**DOME HEAD
SEALED RIVET**

R9673T6S

304 SS



**DOME HEAD
SEALED RIVET**

R0473TLL

5056 AL
Steel ZP



**DOME HEAD
PEEL RIVET**

R9673P6S

5052 AL
Steel ZP



**DOME HEAD
MULTI-GRIP
RIVET**

R9P73MAS

5052
Aluminium



**DOME TRIFORM
RIVET WITH
WASHER**

R9P73WAA

5052 AL
Steel ZP



**COUNTERSUNK
OPEN RIVET**

R9P72OAS

SS 304



**COUNTERSUNK
OPEN RIVET**

R0472OLL

Monel
Steel ZP



**COUNTERSUNK
OPEN RIVET**

R9P72OMS

PLN
HEC



**EPDM SEAL
FLUTED**

TXW9PEFS

PLN
HEC



**EPDM SEAL
SMOOTH**

TXW9PEPS

EPDM
HEC



**DOME EPDM
WASHER**

TXW9PPCM

PLN
HEC



**CYCLONE
MULTISEAL
WASHER**

TXW9PYM

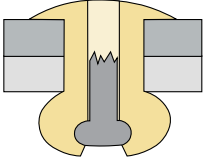
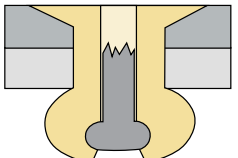
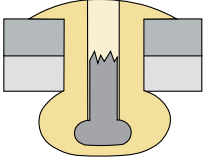
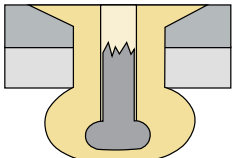
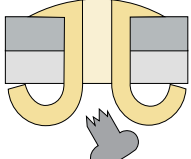
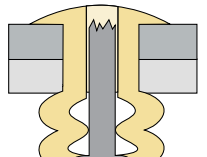
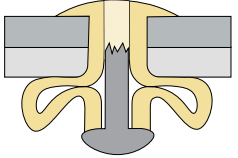
Sealing Washers

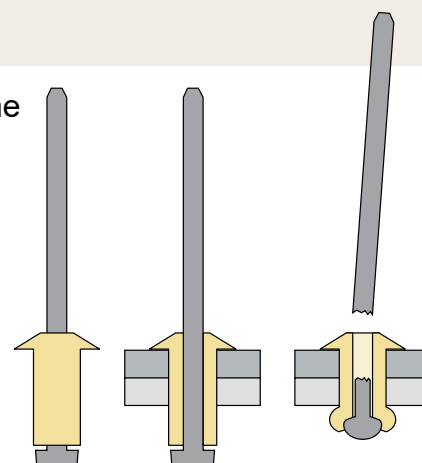




Rivet Head Types

The most common rivets are the Truss type often referred to as Dome head or type 73, and the Countersunk head, known as type 72.

Head	Type	Head Designation	
Truss Head (Dome Head) / Large Flange Head	Open	73	
Countersunk Provides a completely flush finished surface.	Open	72	
Truss Head (Dome Head) / Large Flange Head	Sealed	73	
Countersunk	Sealed	72	
Truss Head (Dome Head)	Peel	73	
Truss Head (Dome Head)	Multi-Grip	73	
Truss Head (Dome Head)	Triform	73	



Head

Truss Head (Open) Dome	O	Protrudes above the face of the job, and used in most industrial applications.
Countersunk (Open)	O	No part of the fastener protrudes from the face of the material.
Large Flange Head	L	Large head diameter used for fastening soft materials.

Type

Open	O	The set rivet is not sealed by the stem.
Sealed	T	The mandrel is attached to the inside of the shell which ensures there are no gaps for water or air.
Multi-Grip	M	Provides a secure joint across various grip ranges.
Peel	P	Provide good cohesion of soft materials without distortion. Useful for uneven surfaces.
Grooved	G	Grooves around the shell mean effective holding power when set in less stiff materials e.g. Plastic
Triform (with washer)	W	During setting, the rivet body splits into 3 parts, preventing the material from being damaged.

Shell Material	Stem (mandrel) Material	Code
Aluminium 5052	Steel Zinc Plated	AS
Aluminium 5056	Steel Zinc Plated	6S
Steel	Steel Zinc Plated	SS
Aluminium 5052	Steel Phosphated	AP
Stainless Steel	Stainless Steel	STST (LL)
Monel	Steel Zinc Plated	MS
Copper	Steel Phosphated	CP
Aluminium	Aluminium	AA



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Metal
Class 4



HEX HEAD
FLANGE

FST9PM4FH



Look for the



logo when you
select a product
online.

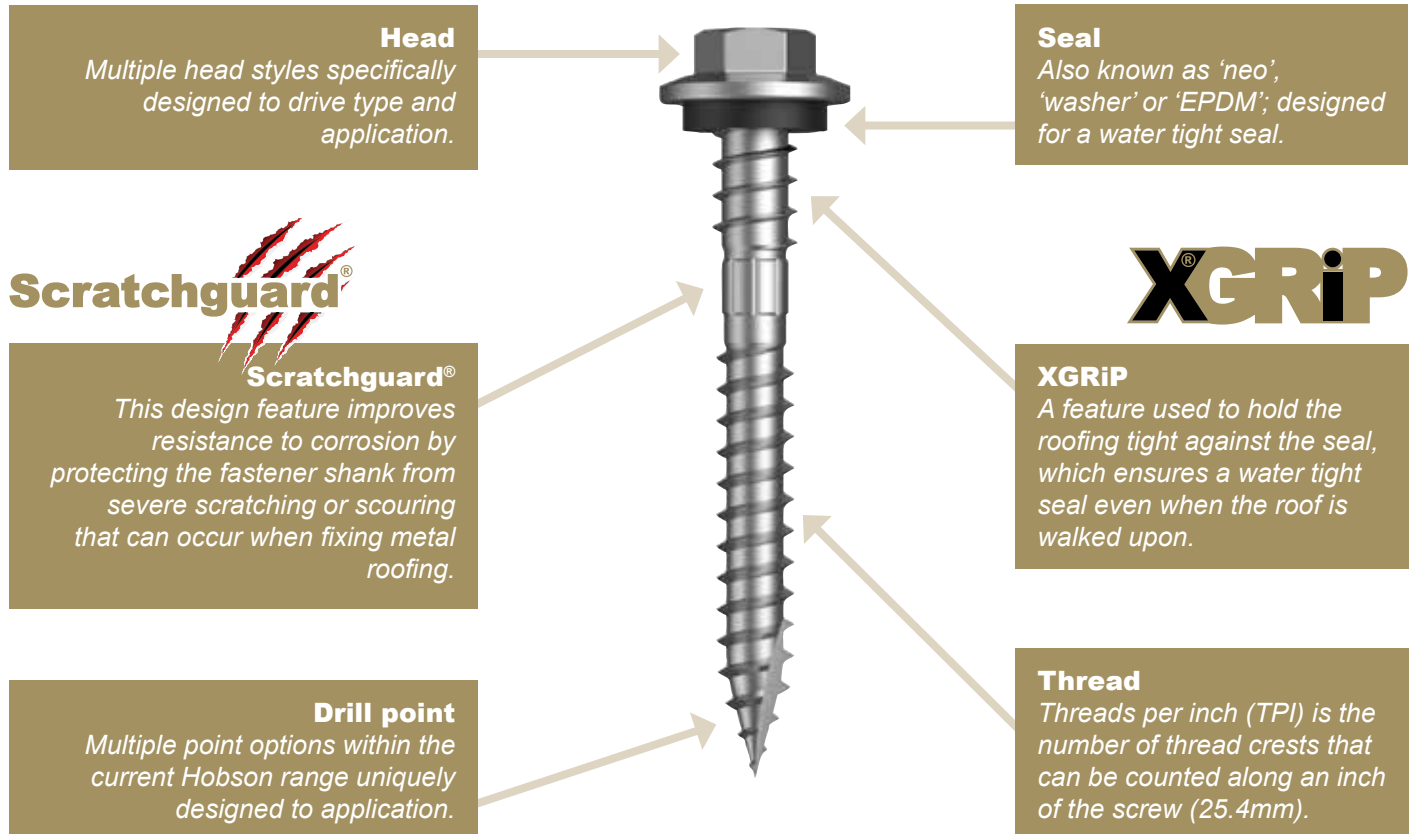
TRADEPAX™



DRILLX[®]

Self Drilling Screws

Manufactured for specific applications, these screws eliminate the need for pre-drilled holes and are engineered for ease of use. Basic features of the screw include:

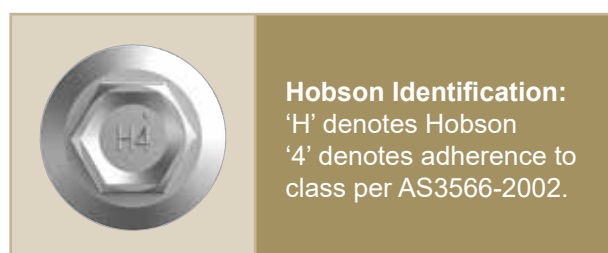


Identifying Head Stamping

As per the AS 3566.1—2002 1.12 MARKING, the requirement for head stamping follows:

The manufacturer's identification mark and/or trademark shall be marked on the heads of the following screws:

- (a) Hexagon headed screws ST 4.8 (No. 10) and larger.
- (b) Bugle head screws Type 17 ST 4.8 (No. 10) and larger.
- (c) Class 3 or Class 4 corrosion resistant screws ST 4.8 (No. 10) and larger.

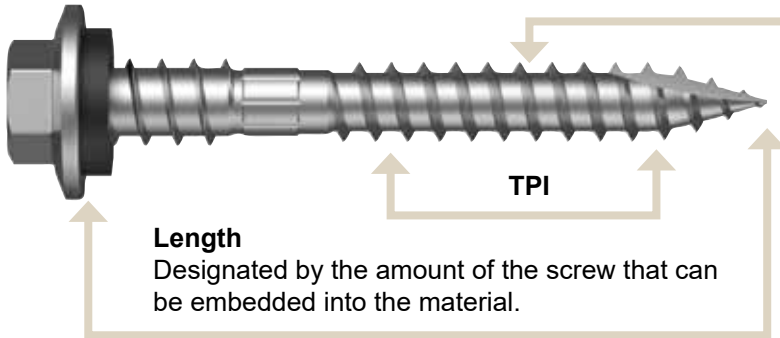


Drive Types

	Slotted		Square
	Phillips		Torx
	Combi Slot Phillips		Post Torx
	Hex Internal		Eye
	Hex External		Pozi
	Post Hex		Trilobular



Screw Size and Type Identification



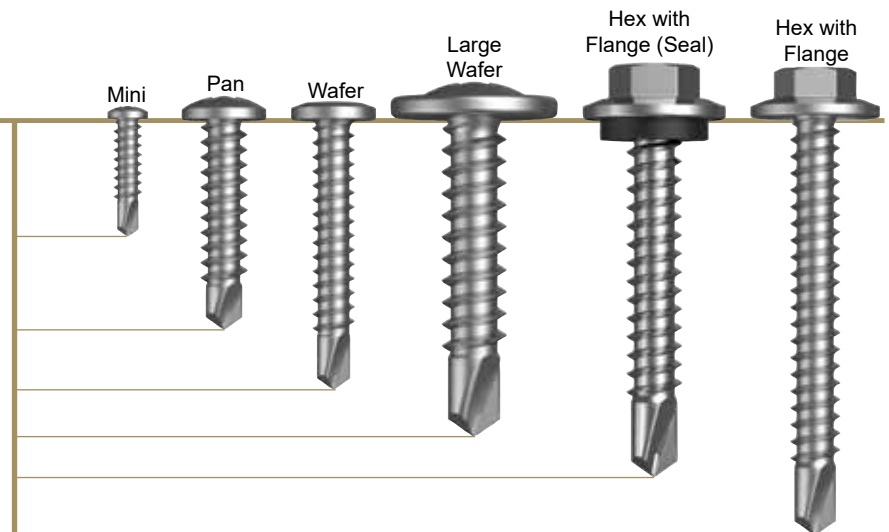
Screw Gauge

Thickness of thread major diameter.

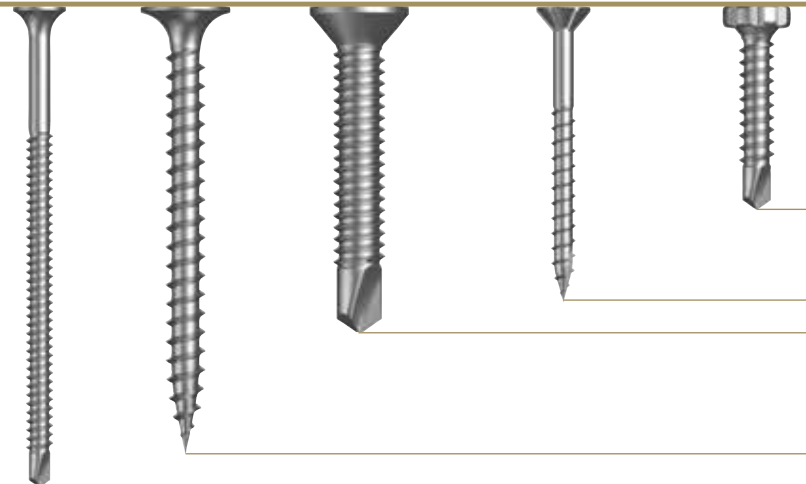
Gauge	Major Diameter
6g	3.5mm
8g	4.2mm
10g	4.8mm
12g	5.5mm
14g	6.3mm

Measuring the Length of Screws

Screw types to measure from the underside of the head



Bugle Plasterboard Countersunk Self Embedding Flower



Screw types to measure from the top of the head



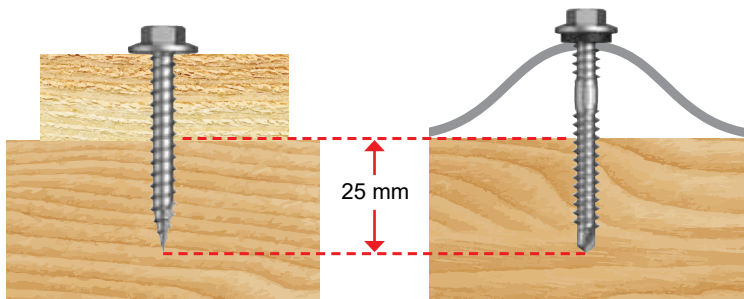
DRILLX[®]

Screw Embedment

Maximises the ability of the screw to achieve the required pull out loads.

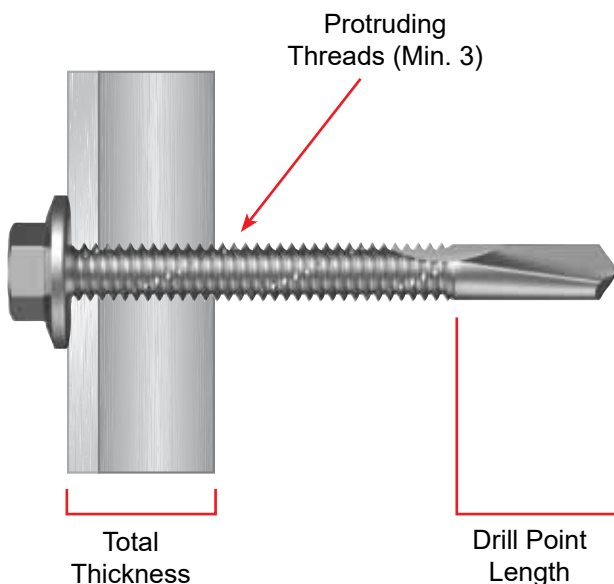
Timber

As a general rule, the minimum embedment required to achieve maximum pull out values is 25mm for #12 and 35mm for #14.



Metal

A minimum of three threads protruding to achieve maximum pull out values.



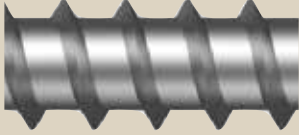
Screw Identification by Point Type:

	Series 500 (S) Commonly referred to as a deep driller, this point is designed for drilling and fastening into thick steel.
	Winged (G) This point is designed for fastening timber and/or composite materials to steel. The wings drill a hole through the timber or composite which is wider than the threads, preventing the threads from lifting the material and allowing the screw to self drill into the steel. The wings break off once the steel is engaged.
	Metal Point (M) This point is designed for drilling steel sections such as purlins, tophats, roofing and cladding. The length of the point will vary depending on steel thickness designed to drill.
	Type 17 (W) This point is designed for drilling through lighter steel sections and fastening with timber.
	Needle Point (N) This point is used on screws of a general purpose nature.
	vmaX[®] (V) Universal drilling point, suitable for fastening steel to timber. Ideal for roofing applications.
	Chipboard / Treated Pine (D) This point is designed for fastening chipboard or timber.



Determining Thread Type

Thread per inch (TPI) is the number of thread crests that can be counted along an inch (25.4mm).

	Coarse thread (up to 16TPI) Otherwise known as space threads, screws with a <i>coarse thread</i> are generally used for timber applications and for lighter steel sections. → Simple rule of thumb – coarse thread secures lighter steel sections. → Typical applications in pre-engineered steel buildings include: cladding, framing and roofing. → Common sizes include 10g-16TPI; 12g-14TPI and 14g-10TPI.
	Fine thread (over 16TPI) Generally known as <i>metal threads</i>, these screws are only used in steel applications and particularly thicker steels from 2mm upward. → Simple rule of thumb – fine thread secures heavier steel sections. → Typical applications in pre-engineered steel buildings include: framing (brackets to purlins) and roofing (lapped purlins). → Common sizes include 8g-18TPI; 10g-24TPI and 12g-24TPI.

Screw Head and Seal Styles

	Hex Flange Head		Pan Head		Washer Head
	Countersunk		Mini Pan		Large Washer Head
	Countersunk Ribbed		Large Wafer		Flower
	Undercut Countersunk		Wafer		Hex Head with Seal
	Bugle		Button Head		Hex Head with EPDM Seal
	Bugle Batten Ribbed		Flat Head		Hex Head with Multiseal
	Trim Head Ribbed		Flat Serrated		Hex Head with Aluminium Seal



PRODUCT TYPES

CATEGORY	HIGH-TENSILE	STRUCTURAL	SOKO	EARTHMOVING	PETROCHEMICAL	STAINLESS HARDWARE	STAINLESS FASTENERS	NEPTUNE	BUMAX	NORD-LOCK	SCHNORR	WASHERS	NYLON	COMMERCIAL	LOW-TENSILE	CYCLONE	MUNGO	CONSTRUCT	DRILLX
Product Types																			
Allthread	●				●		●	●	●				●		●	●			
Stud Bolts & Nuts					●														
Bolts	●	●	●	●	●		●	●	●				●	●					
Nuts	●	●	●	●	●		●	●	●	●			●	●	●	●			
Washers		●						●	●	●	●	●	●			●			●
Anchors																	●	●	
Adhesives																	●		
Machine Screws							●						●	●					
Socket Screws			●				●	●	●				●						
Self Tapping Screws							●												●
Self Drilling Screws																			●
Security Screws							●												
Hardware						●									●	●			
Bent Bolts	●					●									●	●			
Rivets																			●
Pins							●							●					
Drive & Drill Bits							●										●	●	●
Abrasives & Cutting																	●		
Sealants & Silicones																	●		
Tools		●				●									●			●	

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about our...

NEW AND FEATURED PRODUCTS

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find them
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DID YOU KNOW?

about our... **TYPE 17 TRIM HEAD – 6 RIB**



NEW PRODUCT

An effective trim head screw that adds value and finish to any timber decking project

TYPE 17 TRIM HEAD – 6 RIB
304 STAINLESS / SQUARE DRIVE

Part	QFind	Size Gauge	Major Dia (mm)	TPI	Length (mm)	Drive Size	Pack Qty	Head Size (mm)
T04WSTQ0810050	QT45	8	4.2	10.0	50	#1	1000	6.05 - 6.45
T04WSTQ0909053	QT24	9	4.5	9.0	53	#2	1000	6.05 - 6.48

NEW PRODUCT

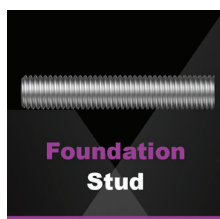
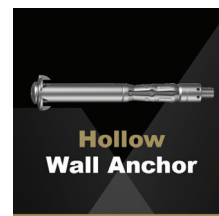
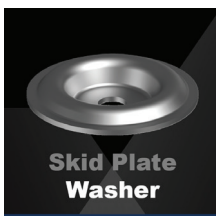
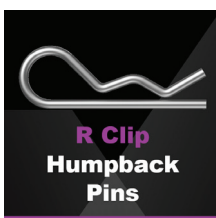
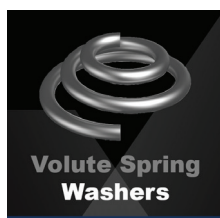



Application:
» Timber Decking
A superior decking screw that provides a sleek architectural finish. Can be used with timber and composite materials. For both conventional through fixing or concealed/hidden decking. Pre-drilling recommended prior to installation.

DRILLX

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