



KEABLES

“The Original Bolt and Nut Specialists”

PRODUCT GUIDE



Hobson Engineering Co. Pty. Ltd

A.B.N. 38 000 289 958

Quality Fasteners Since 1935



KEABLES

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Using this Guide

Z/P AS 1110.1 Class 8.8	▶	Finish Specification Material
	▶	Image
METRIC HEX BOLT	▶	SHORT DESCRIPTION
BH88ZCM	▶	PART No. prefix























Go to the Hobson Portal
and enter the
PART No. prefix **1**

BH88ZCM	
<input type="checkbox"/> ▶	Part <input checked="" type="checkbox"/> Allow Editing
<input type="checkbox"/>	BH88ZCM060016
<input type="checkbox"/>	BH88ZCM060020
<input type="checkbox"/>	BH88ZCM060025
<input type="checkbox"/>	BH88ZCM060030
<input type="checkbox"/>	BH88ZCM060035
<input type="checkbox"/>	BH88ZCM060040
<input type="checkbox"/>	BH88ZCM060045

The Portal will then display
all available sizes **2**

OR Go to the Hobson Home Page
and enter the
PART No. prefix

Click here to Login	
Search	
Search for Test & NATA Certificates	
Type Heat Number	Find
Search Technical Documents	
	Go
Search entire Site	
BH88ZCM	<input type="button" value="x"/> <input type="button" value="Q"/>

New Products	-		02
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HDG
EN14399-3: 2005
Class 8.8



K2
STRUCTURAL
ASSEMBLY
KBHK2GCM

HDG
HEC
Class 5.8



HEX WASHER
HEAD POLE
STEP STEEL
KBW58GCM

HDG
HEC
Class 5.8



HEX WASHER
HEAD POLE
STEP TIMBER
BW58GLM

SS 316
DIN 931



HEX BOLT
BLANK
BH16PBM

PLN
AS 1110.1
Class 10.9



HEX BOLT
BLANK
BH10PBM

PLN
AS 1252
Class 8.8



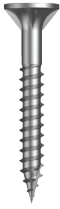
STRUCTURAL
BOLT BLANK
BHSTPBM

PLN
ASTM A193
Grade B7



HEAVY HEX
BOLT BLANK
BPB7PB

Type 17
SS 316



BUGLE BATTEN
4 RIBS
HEX DR
T16WSBH

Type 17
TYKOTE



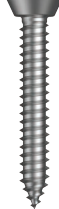
WASHER HEAD
TORX DR
T9PWTGO

Class 3
jmax



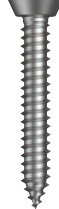
HEX HEAD
FLANGE
T9PJ3FH

SS 304
ANSI B18.6.4



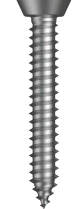
UNDERCUT CSK
SELF TAPPING
PHILLIPS
T04SSDP

SS 304
ANSI B18.6.4



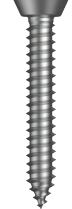
UNDERCUT CSK
SELF TAPPING
SQUARE DR
T04SSDQ

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



Product Guide New Products

Security
SS 304



PAN HEAD
EYE DRIVE
IMS04PEM

Security
SS 304



CSK HEAD
EYE DRIVE
IMS04CEM

Security
SS 304



PAN HEAD
SELF TAPPING
EYE DRIVE
I04SSPE

Security
SS 304



CSK HEAD
SELF TAPPING
EYE DRIVE
I04SSCE

Security
PLN
HEC



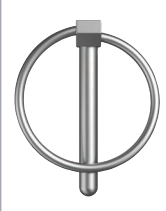
SOCKET EYE
DRIVE BIT
ISBED

Security
SS 304
ISO 7380



BARREL NUT
BUTTON HEAD
POST TORX
INB04BTM

SS 316
HEC



LINCH PIN
QPL16PM

ZYP
HEC
Carbon Steel



TY9aBolt®
CSK SLEEVE
ANCHOR
MTCMSYM

SS 316
HEC



CHEMICAL
ANCHOR KIT
EXT. HEX
MCA16PCM

SS 316
HEC



POST HEAD
COUNTERSUNK
INT THREAD
MPC16PM

VMU PLUS
MKT®
Vinylester Resin



CARTRIDGE
280ML
+ 2 MIXERS
MCMVU0280

Z/P
MKT®
Carbon Steel



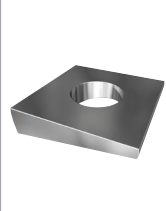
E/ES DROP-IN
ANCHOR
SETTING TOOL
MDTESSM

Black
HEC
25µm



SHRINK
WRAP
500mm
XSWB

PLN
AS 1252
35-45HRC




TAPER WASHER
8° SQUARE
WTSTPM

Z/P DIN 982 Class 8 NYLOC  METRIC HEAVY NYLOC® NUT NN08ZHCM	Z/P DIN 982 Class 10 NYLOC  METRIC HEAVY NYLOC® NUT NN10ZHCM	Z/P IFI-100NE Grade 2 NYLOC  UNF NYLOC® NUT NNG2ZF	Z/P ASME B18.2.2 Grade 2  UNF SLOTTED HEX NUT NOG2ZF	Z/P DIN 935 Class 5  METRIC FINE SLOTTED HEX NUT NO05ZFM	Brass AS 1112  METRIC HEX NUT NHBRPCM	Brass HEC AS 1237  METRIC FLAT ROUND WRBRPM
ZYP ISO 4161 Class 8  METRIC FINE SERRATED HEX FLANGE NUT NF08YFM	SS 316 ISO 4161  SERRATED HEX FLANGE NUT NF16PCM	Z/P AS 1112.1 Class 10  METRIC FINE HEX NUT NH10ZFM	SS 316 DIN 934  HEX NUT LEFT HAND NH16PDM	PLN ISO 4161 Class 10  NO SERRATION HEX FLANGE NUT NF10PPM	Brass AS 1427:1996  METAL THREAD COUNTERSUNK SLOT MSBRPCS	Brass AS 1427:1996  METAL THREAD PAN SLOT MSBRPPS

Product Guide New Products



HEC  ALLTHREAD CUTTER M10 / M12 XTBAB-M	Black HEC  ALLTHREAD CUTTER M10 / M12 REPL DIE XTBD-M	HDG ISO 898-1 Class 4.6 UTS  FORGED EYEBOLT KIT KEFMSGCM	HDG Mild Steel Class 4.8  FOUNDATION L-BOLT LB48GCM	HDG HEC Mild Steel  VOLUTE SPRING WASHER WVMSGM	SS 316 HEC  VOLUTE SPRING WASHER WV16PM	
SS 316 DIN 94  METRIC SPLIT PIN QPS16PM	SS 304  COUNTERSUNK OPEN RIVET R0472OLL	SS 304  DOME HEAD OPEN RIVET R0473OLL	5052 Aluminium  DOME HEAD OPEN RIVET R9P730AA	5056 AL Steel ZP  DOME HEAD SEALED RIVET R9673T6S	Z/P ISO 7380 Class 8.8  METRIC BUTTON HEAD SOCKET SB88ZCM	Z/P DIN 912 Class 8.8  METRIC SOCKET HEAD CAP SCREW SH88ZCM



Product Guide

TRADE PAX™



All of your favourite fasteners are now available in handy hang packs.



Product Guide
TRADE PAX™



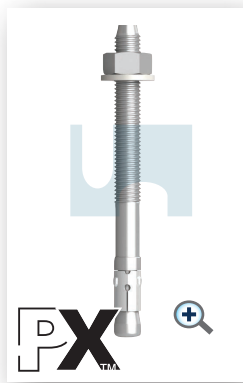
**How to find
 TRADE PAX™**

If you would like a product packaged in the **TRADE PAX™** hang packs, just add **FS** to the start of the item number in your online order.

Metal Class 4



HEX HEAD FLANGE
FST9PM4FH



Look for the **TRADE PAX™** logo when you select a product online.























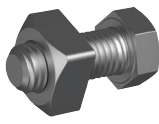









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High-Tensile































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

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



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High-Tensile

<p>PLN AS 2465 Grade 8</p>  <p>UNF HEX SET SCREW</p> <p>BSG8PF</p>	<p>Z/P AS 2465 Grade 8</p>  <p>UNF HEX BOLT</p> <p>BHG8ZF</p>	<p>PLN AS 2465 Grade 8</p>  <p>UNF HEX BOLT</p> <p>BHG8PF</p>	<p>Z/P DIN 980 Class 10</p>  <p>METRIC CONE LOCK HCL NUT</p> <p>NC10ZCM</p>	<p>Z/P DIN 980 Class 10</p>  <p>METRIC FINE CONE LOCK HCL NUT</p> <p>NC10ZFM</p>	<p>Z/P IFI 100-107 Grade C</p>  <p>UNC CONE LOCK HCL NUT</p> <p>NCGCZC</p>	<p>Z/P IFI 100-107 Grade C</p>  <p>UNF CONE LOCK HCL NUT</p> <p>NCGCZF</p>
<p>HDG ISO 4161 Class 8</p>  <p>METRIC SERRATED HEX FLANGE NUT</p> <p>NF08GCM</p>	<p>ZYP ISO 4161 Class 8</p>  <p>METRIC SERRATED HEX FLANGE NUT</p> <p>NF08YCM</p>	<p>PLN ISO 4161 Class 10</p>  <p>SERRATED HEX FLANGE NUT</p> <p>NF10PCM</p>	<p>ZYP HEC Class 10</p> <p>NYLOC</p>  <p>METRIC NYLOC® FLANGE NUT</p> <p>NF10YNM</p>	<p>ZYP IFI 145 Grade 5</p>  <p>UNC SERRATED HEX FLANGE NUT</p> <p>NFG5YC</p>	<p>PLN IFI 145 Grade 8</p>  <p>UNF SERRATED HEX FLANGE NUT</p> <p>NFG8PF</p>	<p>Z/P IFI 145 Grade 8</p>  <p>UNC SERRATED HEX FLANGE NUT</p> <p>NFG8ZC</p>
<p>Z/P IFI 145 Grade 8</p>  <p>UNF SERRATED HEX FLANGE NUT</p> <p>NFG8ZF</p>	<p>HDG AS 1112.1 Class 8</p>  <p>METRIC HEX NUT</p> <p>NH08GCM</p>	<p>HDG AS 1112.1 Class 8</p>  <p>METRIC HEX NUT LEFT HAND</p> <p>NH08GDM</p>	<p>PLN AS 1112.1 Class 8</p>  <p>METRIC HEX NUT</p> <p>NH08PCM</p>	<p>PLN AS 1112.1 Class 8</p>  <p>METRIC FINE HEX NUT</p> <p>NH08PFM</p>	<p>Z/P AS 1112.1 Class 8</p>  <p>METRIC HEX NUT</p> <p>NH08ZCM</p>	<p>Z/P AS 1112.1 Class 8</p>  <p>METRIC FINE HEX NUT</p> <p>NH08ZFM</p>
<p>PLN AS1112.1 Class 10</p>  <p>METRIC HEX NUT</p> <p>NH10PCM</p>	<p>PLN AS1112.1 Class 10</p>  <p>METRIC FINE HEX NUT</p> <p>NH10PFM</p>	<p>Z/P AS1112.1 Class 10</p>  <p>METRIC HEX NUT</p> <p>NH10ZCM</p>	<p>PLN AS 2465 Grade 5</p>  <p>UNC HEX NUT</p> <p>NHG5PC</p>	<p>PLN AS 2465 Grade 5</p>  <p>UNF HEX NUT</p> <p>NHG5PF</p>	<p>Z/P AS 2465 Grade 5</p>  <p>UNC HEX NUT</p> <p>NHG5ZC</p>	<p>Z/P AS 2465 Grade 5</p>  <p>UNF HEX NUT</p> <p>NHG5ZF</p>

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<p>PLN AS 2465 Grade 8</p> <p>UNC HEX NUT</p> <p>NHG8PC</p>	<p>PLN AS 2465 Grade 8</p> <p>UNF HEX NUT</p> <p>NHG8PF</p>	<p>Z/P AS 2465 Grade 8</p> <p>UNC HEX NUT</p> <p>NHG8ZC</p>	<p>Z/P AS 2465 Grade 8</p> <p>UNF HEX NUT</p> <p>NHG8ZF</p>	<p>HDG AS 1112.4 Use with Class 8</p> <p>METRIC THIN HEX LOCK NUT</p> <p>NL08GCM</p>	<p>Structural Hex Nut</p> <p>Thin Hex Lock Nut</p> <p>Structural Washer</p>	
<p>Z/P AS 1112.4 Use with Class 8</p> <p>METRIC THIN HEX LOCK NUT</p> <p>NL08ZCM</p>	<p>HDG ISO 4161 Class 8</p> <p>METRIC FLANGED HEX NUT</p> <p>NF08GPM</p>	<p>Z/P ISO 4161 Class 8</p> <p>METRIC FLANGED HEX NUT</p> <p>NF08ZPM</p>	<p>MGAL DIN 985 Class 8</p> <p>NYLOC</p> <p>METRIC NYLOC® NUT</p> <p>NN08GCM</p>	<p>ZYP DIN 985 Class 8</p> <p>NYLOC</p> <p>METRIC NYLOC® NUT</p> <p>NN08YCM</p>	<p>ZYP DIN 985 Class 8</p> <p>NYLOC</p> <p>METRIC FINE NYLOC® NUT</p> <p>NN08YFM</p>	<p>Z/P DIN 985 Class 8</p> <p>NYLOC</p> <p>METRIC NYLOC® NUT</p> <p>NN08ZCM</p>
<p>NYLOC®</p> <p>Nylon insert locknuts</p> <p>Anti-vibration solution.</p>			<p>Z/P DIN 985 Class 8</p> <p>NYLOC</p> <p>METRIC FINE NYLOC® NUT</p> <p>NN08ZFM</p>	<p>ZYP DIN 985 Class 10</p> <p>NYLOC</p> <p>METRIC NYLOC® NUT</p> <p>NN10YCM</p>	<p>Z/P DIN 985 Class 10</p> <p>NYLOC</p> <p>METRIC NYLOC® NUT</p> <p>NN10ZCM</p>	<p>Z/P IFI-100NE Grade 5</p> <p>NYLOC</p> <p>UNC NYLOC® NUT</p> <p>NNG5Z</p>
<p>Z/P IFI-100NE Grade 5</p> <p>NYLOC</p> <p>UNF NYLOC® NUT</p> <p>NNG5ZF</p>	<p>Z/P IFI-100NE Grade 8</p> <p>NYLOC</p> <p>UNC NYLOC® NUT</p> <p>NNG8ZC</p>	<p>Z/P IFI-100NE Grade 8</p> <p>NYLOC</p> <p>UNF NYLOC® NUT</p> <p>NNG8ZF</p>	<p>HDG DIN 557 Class 8</p> <p>METRIC SQUARE NUT</p> <p>NQ08GCM</p>	<p>Z/P HEC Class 8.8</p> <p>STARTER BAR L BOLT</p> <p>LB88ZCM</p>	<p>PLN AS 1085.4 Class 8.8</p> <p>FISHBOLT & NUT</p> <p>DBD88PCM</p>	<p>PLN AS 1085.4/7 Class 8.8</p> <p>FISHBOLT NUT & SPRING WASHER</p> <p>DBD88PSM</p>



Technical info Structural

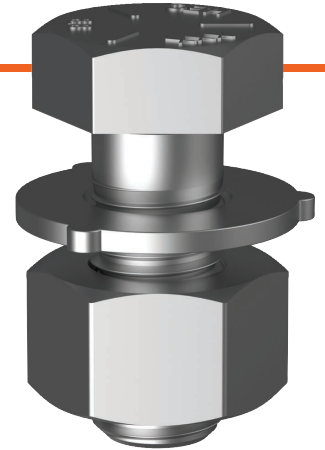
AS 1252: 2016 K0 8.8 HR Structural Assembly

» 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.**



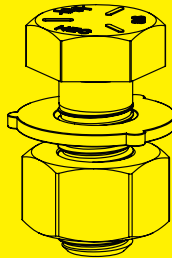
**HOT DIP GALVANISED
K0 STRUCTURAL ASSEMBLY
AS1252:2016 K0 / CLASS 8.8**

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



LOT: A123456

PO: 99999 NS1

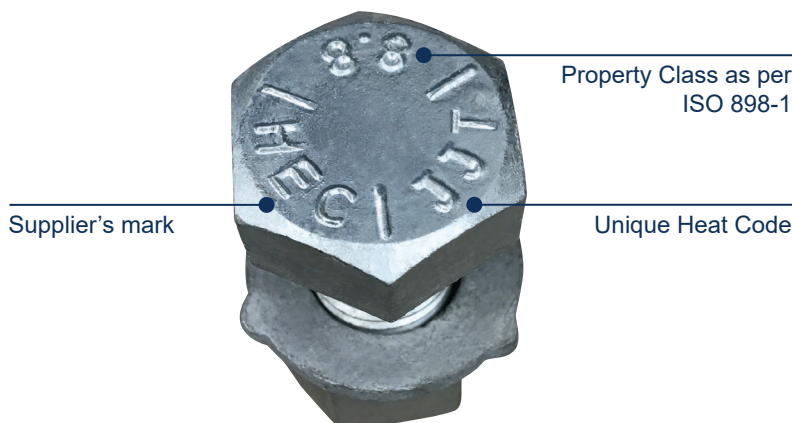
CTN WGT: 16.00kg



9 350629 060574

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

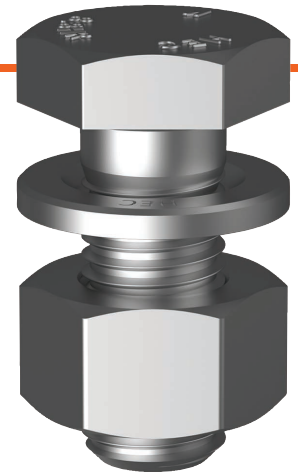
Part	Size	Length (mm)
KBHK0GCM120	M12	30-200
KBHK0GCM160	M16	40-700
KBHK0GCM200	M20	40-800
KBHK0GCM220	M22	55-200
KBHK0GCM240	M24	50-750
KBHK0GCM270	M27	80-200
KBHK0GCM300	M30	75-725
KBHK0GCM330	M33	130-230
KBHK0GCM360	M36	90-600




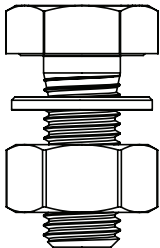


EN 14399: 2005 K2 8.8 HR Structural Assembly

- » 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.

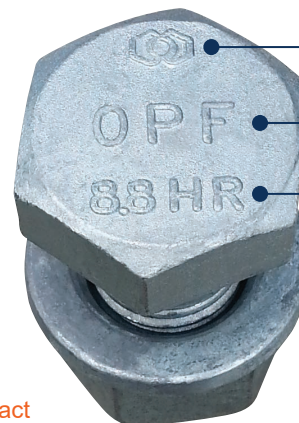


Carton Label

HR, HDG (EN14399-3 8.8 BOLT/ (1) EN14399-3 CL.8 NUT/ (1) EN14399-5 WASHER)		
KBHK2GCM240080 PO# 58949 Heat Code: 2MT	LOT# 2015351400 Hobson Engineering 10 Clay Place Eastern Creek NSW 2766 AUSTRALIA	Quantity: 30 PCS
 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.

ONLINE 

Technical Article link:
[k2-structural-assembly.pdf](http://www.hobson.com.au/k2-structural-assembly.pdf)



Technical info 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 KO 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 **KO** assemblies arriving in Australia.

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

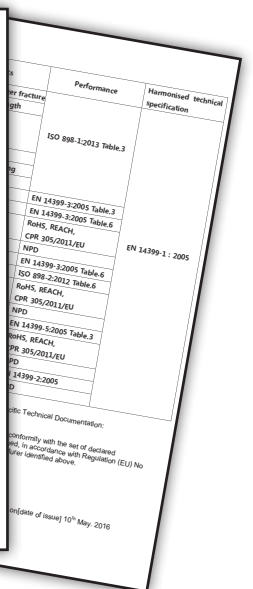
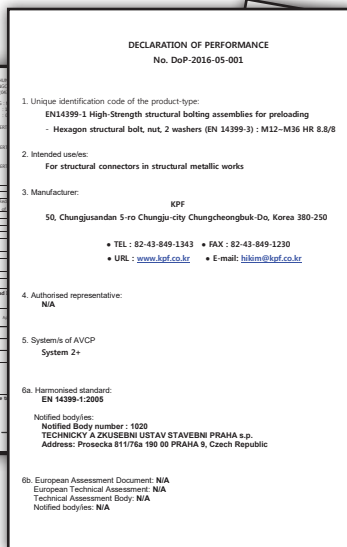
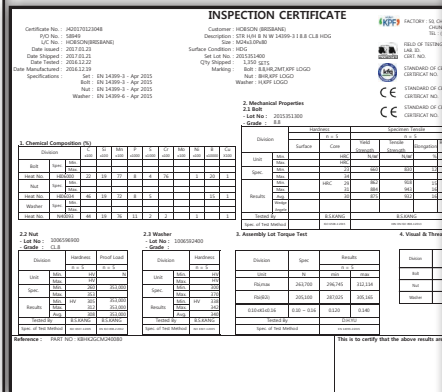
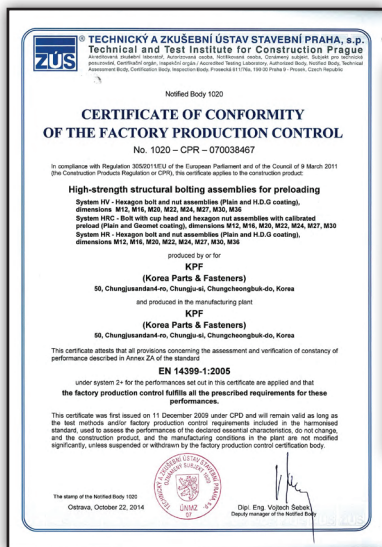
K2 Quality Assurance Documentation Online

2MT

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
2015351400-2MT	EN 8.8 K2 HDG BNV:M24 X 80	AS1252 Structural	KBHK2GCM240080	CE F D



CE The European Union's Certificate of conformity

D Declaration of Performance (DoP)

Technical info Structural



KO 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	ITTTFS

Certificate of Conformity of Factory Production Control
This certificate is issued to:
Manufacturer: Hobson Engineering approved Factory No.02

In compliance with Regulation 2005/2011/EC of the European Parliament and of the Council of 9 March 2011 the Construction Products Regulation or CPR, this certificate applies to the construction product:
Structural Bolting Assemblies

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performance described in Annex ZA of the standards:
EN 14399-1:2005 High-strength Structural Bolting Assemblies for Preloading - Part 1: General Requirements

under system 2+ are applied and that the product fulfills all the prescribed requirements set out above.

The attached Schedule, of the same date, details the manufacturing location(s), harmonised product standard and product parameters and shall form a part of this certificate.

This Certificate will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the products, and the manufacturing conditions in the plant are not modified significantly.

Certificate No: 0038/CPR/SHA0071051/2
Original Approval: 03 January 2008
Current Certificate: 03 January 2017
Expiry Date: 02 January 2020
LW Notified Body Number 0038

Amanda Wu on behalf of Lloyd's Register Verification

Certificate of Conformity of Factory Production Control No. 0038/CPR/SHA0071051/2 Schedule
Manufacturer: Hobson Engineering approved Factory No.02

Manufacturing Location and Products

Standard, Grade and Size

EN14399-1:2005
M12-300 X (D5-200) 8.8 B10-9 HR (Finish)
M12-300 8.8 HR (Finish)

EN14399-4
M12-300 X (D5-200) 10.9 HV (Finish)
M12-300-10 HV (Finish)

EN14399-5; EN14399-6
D12-300 (Finish)

Washer type: SC, HDG, B07, BLACK and GEOMET

Lot issue: 02
Date issue: 03 January 2017
Body Number 0038

Amanda Wu on behalf of Lloyd's Register Verification

Customer: Hobson
Product: K0 AS1252:2016 HDG BNW/M20x50
Order: M20 X 50
Marking: HEC, 8.8, J18
Washer: H

Invoice No: INV3388
PO No: 2338
Part No: R0M00000000110
Production Date: 27-Apr-17
Sublot Condition: HDG
Assembly Trace No.: 201552840
Qty Shipped: 200

FACTORY: Hobson Engineering approved Factory No.02
Certificate No.: J42017012353
Date Shipped: 27-Apr-17

Specifications: Std: AS1252:2016 K0/AS1252
Bolt: AS1252:2016
Nut: AS1252:2016
Washer: AS1252:2016

2 Mechanical Properties		2.1 Bolt		2.2 Nut	
Division	Property	Unit	Value	Unit	Value
1	Yield Strength	MPa	510	MPa	510
	Tensile Strength	MPa	630	MPa	630
2	Yield Strength	MPa	510	MPa	510
	Tensile Strength	MPa	630	MPa	630

4 Assembly Test

Division	Property	Unit	Value
1	Yield Strength	MPa	510
	Tensile Strength	MPa	630
2	Yield Strength	MPa	510
	Tensile Strength	MPa	630

5 Visual & Thread Inspection

Division	Property	Unit	Value
1	Yield Strength	MPa	510
	Tensile Strength	MPa	630
2	Yield Strength	MPa	510
	Tensile Strength	MPa	630

Signature: *Han Kun*
Quality Control Manager

F Factory Production Control (FPC)

ITTT Initial Type Testing (ITT)

161120341352

TEST REPORT

Report number: ZMTC/JC-2017-4-WG2-2(Z)
Sample name: Assembly (Bolt,Nut,Washer)
Customer: HOBSON ENGINEERING CO PTY. LTD.

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Page 1 of 6

Test Category	Client's designation	Test Results	Item Conclusion
Trademark	/	1# 232 100	Pass
Grade	N/A	2# 233 700	Pass
Receiving Number of Samples	6 PCS	3# 234 000	Pass
Properties Grade	Bolt Grade 8.8 Nut Grade 8	1# +5 μm	Pass
Receiving Date of Samples	17. Mar. 2017	2# +4 μm	Pass
		3# +6 μm	Pass
		4#	Pass
		5#	Pass
		6#	Pass

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Page 2 of 6

Test Results	Item Conclusion
59.0	Average
58.6	
76.0	87
93.0	
89.5	Average
90.5	
75.0	80
80.3	
61.3	Average
92.8	
87.1	90
88.0	
92.5	Average
89.4	
90.5	90
92.5	

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Page 3 of 6

Test Results	Item Conclusion
1# 30.2	Pass
2# 31.2	
3# 31.0	Pass
4# 31.6	
5# 31.4	Pass
6# 30.4	
1# 34.4	Pass
2# 34.8	
3# 34.4	Pass
4# 34.8	
5# 34.0	Pass
6# 34.2	
1# 203 kN	Pass
2# 212 kN	
3# 192 kN	Pass
4# 245 kN	

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Page 4 of 6

Test Results	Item Conclusion
1# 30.2	Pass
2# 31.2	
3# 31.0	Pass
4# 31.6	
5# 31.4	Pass
6# 30.4	
1# 34.4	Pass
2# 34.8	
3# 34.4	Pass
4# 34.8	
5# 34.0	Pass
6# 34.2	
1# 203 kN	Pass
2# 212 kN	
3# 192 kN	Pass
4# 245 kN	

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

Page 5 of 6

TEST REPORT

Signature: *Han Kun*
Quality Control Manager

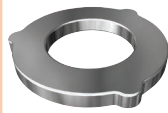



S Suppliers Declaration of Conformity (SDoC)



Product Guide Structural



American Quality

<p>HDG AS 1252: 1983 Class 8.8</p>  <p>STRUCTURAL ASSEMBLY</p> <p>KBHSTGCM</p>	<p>HDG AS 1252: 2016 Class 8.8</p>  <p>K0 STRUCTURAL ASSEMBLY</p> <p>KBHK0GCM</p>	<p>HDG EN 14399: 2005 Class 8.8</p>  <p>K2 STRUCTURAL ASSEMBLY</p> <p>KBHK2GCM</p>	<p>HDG AS 1252 Class 8</p>  <p>STRUCTURAL HEX NUT</p> <p>NHSTGCM</p>	<p>PLN AS 1252 Class 8</p>  <p>STRUCTURAL HEX NUT</p> <p>NHSTPCM</p>	<p>MGAL ASTM F959M Class 8.8</p>  <p>METRIC SQUIRTER® DTI WASHER</p> <p>WDSTGM</p>	<p>PLN ASTM F959M Class 10.9</p>  <p>METRIC SQUIRTER® DTI WASHER</p> <p>WD10PM</p>
<p>MGAL ASTM F959M Class 10.9</p>  <p>METRIC SQUIRTER® WASHER</p> <p>WD10MM</p>	<p>MGAL ASTM F959M Class 8.8</p>  <p>METRIC LOAD INDICATOR</p> <p>WISTGM</p>	<p>HDG AS 1252 32-45HRC</p>  <p>STRUCTURAL WASHER</p> <p>WRSTGM</p>	<p>PLN AS 1252 35-45HRC</p>  <p>STRUCTURAL WASHER</p> <p>WRSTPM</p>	<p>HDG AS 1252 26-45HRC</p>  <p>TAPER WASHER 8° SQUARE</p> <p>WTSTGM</p>	<p>SS 301 HEC</p>  <p>FEELER GAUGE 0.13MM</p> <p>XGF013</p>	<p>Cartridge 425g</p>  <p>STICK WAX LUBRICANT</p> <p>XXWSC</p>

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



orange is good

Bolting made Safe, Easy and Accurate

- » Sqrter® Direct Tension Indicator Washer.
- » TONE® Electric Torque Control Wrench.



TONE®

TONE® Electric Torque Control Wrench

PART: XT-STC7TE PART: XT-STC12TE

Sqrter® DTI Washers



Japanese Engineering



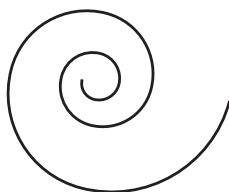
Structural Bolts Installation

AS4100-1998

Working definitions:

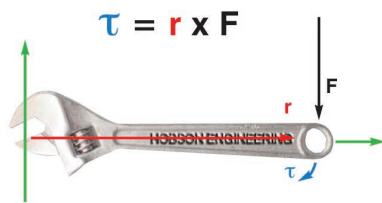
Torque

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 AS4100.

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 (AS4100-1998) is approximately equivalent to the minimum proof loads shown in AS1252-1996.

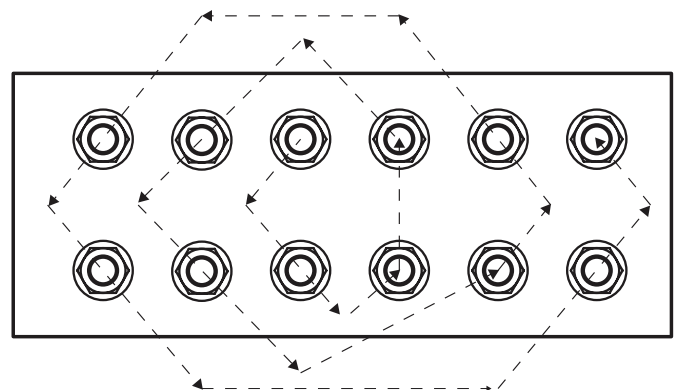
Snug tight

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 AS1252-1996 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.



Product Guide



<p>Z/P DIN 912 Class 12.9</p>  <p>METRIC CAP SCREW SOCKET SHSOZCM</p>	<p>PLN DIN 912 Class 12.9</p>  <p>METRIC CAP SCREW SOCKET SHSOPCM</p>	<p>PLN DIN 7984 Alloy Steel</p>  <p>METRIC LOW HEAD SOCKET SLSOPCM</p>	<p>Z/P DIN 7991 Class 12.9*</p>  <p>METRIC CSK SOCKET SCSOZCM</p>	<p>PLN DIN 7991 Class 12.9*</p>  <p>METRIC CSK SOCKET SCSOPCM</p>	<p>Z/P ISO 7380 Class 12.9*</p>  <p>METRIC BUTTON HEAD SOCKET SBSOZCM</p>	<p>PLN ISO 7380 Class 12.9*</p>  <p>METRIC BUTTON HEAD SOCKET SBSOPCM</p>
<p>PLN ANSI B18.3 ASTM A574</p>  <p>UNC CAP SCREW SOCKET SHSOP</p>	<p>PLN BS 2470 ASTM A574</p>  <p>BSW CAP SCREW SOCKET SHSOPW</p>	<p>PLN ANSI B18.3 ASTM A574</p>  <p>UNF CAP SCREW SOCKET SHSOPF</p>	<p>PLN ANSI B18.3 Alloy Steel</p>  <p>UNC LOW HEAD SOCKET SLSOP</p>	<p>PLN ANSI B18.3 ASTM F835</p>  <p>UNC CSK SOCKET SCSOP</p>	<p>PLN BS 2470 ASTM F835</p>  <p>BSW CSK SOCKET SCSOPW</p>	<p>PLN ANSI B18.3 ASTM F835</p>  <p>UNF CSK SOCKET SCSOPF</p>
<p>PLN ANSI B18.3 ASTM F835</p>  <p>UNC BUTTON HEAD SOCKET SBSOP</p>	<p>PLN BS 2470 Class 12.9*</p>  <p>BSW BUTTON HEAD SOCKET SBSOPW</p>	<p>PLN ANSI B18.3 ASTM F835</p>  <p>UNF BUTTON HEAD SOCKET SBSOPF</p>	<p>PLN ISO 4029 Alloy Steel</p>  <p>METRIC PLN PT SOCKET SSSPPCM</p>	<p>PLN ISO 4029 Alloy Steel</p>  <p>METRIC KNURL CUP PT SOCKET SSSKPCM</p>	<p>PLN DIN 915 Alloy Steel</p>  <p>METRIC DOG PT SOCKET SSSDPCM</p>	<p>PLN ANSI B18.3 ASTM F912</p>  <p>UNC PLN PT SOCKET SSSPPC</p>
<p>PLN ANSI B18.3 ASTM F912</p>  <p>UNC KNURL CUP PT SOCKET SSSKP</p>	<p>PLN BS2470 Alloy Steel</p>  <p>BSW KNURL CUP PT SOCKET SSSKPW</p>	<p>PLN ANSI B18.3 ASTM F912</p>  <p>UNF KNURL CUP PT SOCKET SSSKPF</p>	<p>PLN ANSI B18.3 ASTM F912</p>  <p>UNF PLN PT SOCKET SSSPPF</p>	<p>PLN AS1112.1 Class 12</p>  <p>METRIC HEX NUT NH12PCM</p>	<p>PLN ANSI B18.3 Alloy Steel</p>  <p>UNC SHOULDER SOCKET SOSOPC</p>	<p>PLN ISO 7379 Class 12.9</p>  <p>METRIC SHOULDER SOCKET SOSOPCM</p>

Product Guide










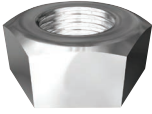
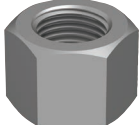
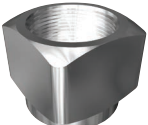
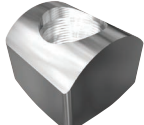
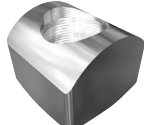
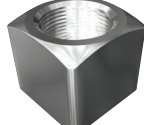
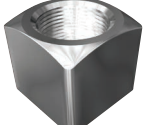
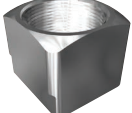
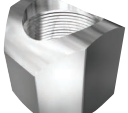

<p>PLN BS2470 Alloy Steel</p> <p>BSW SHOULDER SOCKET</p> <p>SOSOPW</p>	<p>PLN Alloy Steel</p> <p>NPTF PRESSURE PLUG HEX</p> <p>PPSOPN</p>	<p>PLN Alloy Steel</p> <p>BSP PRESSURE PLUG HEX</p> <p>PPSOPB</p>	<p>PLN Alloy Steel</p> <p>LEVEL SEAL PRESSURE PLUG HEX</p> <p>PPSOPL</p>	<p>PLN Alloy Steel</p> <p>METRIC PRESSURE PLUG HEX</p> <p>PPSOPTM</p>	<p>Z/P ISO 4029 Alloy Steel</p> <p>METRIC KNURL CUP PT SOCKET</p> <p>SSSKZCM</p>	<p>Z/P HEC</p> <p>SEL-LOCK SPRING PIN</p> <p>PLSOZ</p>
<p>PLN HEC ISO Class 10.9</p> <p>METRIC T-BOLT</p> <p>BTSOPCM</p>	<p>PLN HEC ISO Class 10.9</p> <p>BSW T-BOLT</p> <p>BTSOPW</p>	<p>PLN ANSI B18.3 Alloy Steel</p> <p>LONG ARM HEX WRENCH</p> <p>UXWL</p>	<p>PLN ANSI B18.3 Alloy Steel</p> <p>SHORT ARM HEX WRENCH</p> <p>UXWS</p>	<p>Reliable Precision High Tensile</p>		





Product Guide

Earthmoving

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



Product Guide

Petrochemical



STUD BOLT & NUT KITS – ASTM A193 / A194

PLN	Grade B7 / 2H	UNC	KSPB7PC	HDG	Grade B7 / 2H	UN8	KSPB7GU
PLN	Grade B7 / 2H	UN8	KSPB7PU	XYB	Grade B7 / 2H	UNC	KSPB7BC
HDG	Grade B7 / 2H	UNC	KSPB7GC	XYB	Grade B7 / 2H	UN8	KSPB7BU



STUD BOLT – ASTM A193

PLN	Grade B8 CL2	UNC	SP82PC	XYB	Grade B7	UNC	SPB7BC
PLN	Grade B8 CL2	UN8	SP82PU	XYB	Grade B7	UN8	SPB7BU
PLN	Grade B8M CL2	UNC	SPM2PC	CAD	Grade B7	UNC	SPB7CC
PLN	Grade B8M CL2	UN8	SPM2PU	CAD	Grade B7	UN8	SPB7CU
PLN	Grade B7	UNC	SPB7PC	Z/P	Grade B7	UNC	SPB7ZC
PLN	Grade B7	UN8	SPB7PU	Z/P	Grade B7	UN8	SPB7ZU
HDG	Grade B7	UNC	SPB7GC	ZYP	Grade B7	UNC	SPB7YC
HDG	Grade B7	UN8	SPB7GU	ZYP	Grade B7	UN8	SPB7YU



ALLTHREAD ROD – ASTM A193

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

PLN	Grade 8	UNC	NPG8PC	XYB	Grade 2H	UNC	NP2HBC
PLN	Grade 8	UN8	NPG8PU	XYB	Grade 2H	UN8	NP2HBU
PLN	Grade 8M	UNC	NP8MPC	CAD	Grade 2H	UNC	NP2HCC
PLN	Grade 8M	UN8	NP8MPU	CAD	Grade 2H	UN8	NP2HCU
PLN	Grade 2H	UNC	NP2HPC	Z/P	Grade 2H	UNC	NP2HZC
PLN	Grade 2H	UN8	NP2HPU	Z/P	Grade 2H	UN8	NP2HZU
HDG	Grade 2H	UNC	NP2HGC	ZYP	Grade 2H	UNC	NP2HYC
HDG	Grade 2H	UN8	NP2HGU	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



Product Guide

Stainless Hardware

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

Product Guide

Stainless Hardware


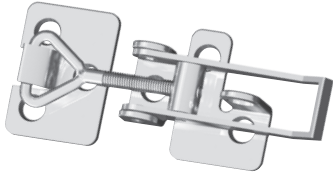










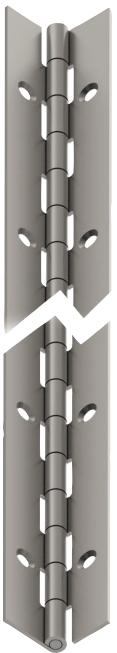

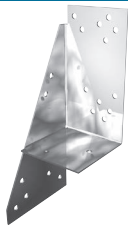
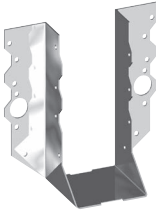
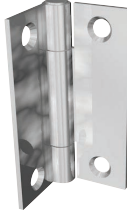








<p>SS304 HEC</p>  <p>PAD EYE ROUND BOLT</p> <p>HEP04RB</p>	<p>SS304 HEC</p>  <p>PAD EYE ROUND</p> <p>HEP04RD</p>	<p>SS304 HEC</p>  <p>PAD EYE ROUND OPEN</p> <p>HEP04RO</p>	<p>SS316 HEC</p>  <p>EYE NUT</p> <p>HEN16PM</p>	<p>SS 316 HEC</p>  <p>EYE BOLT KIT COLLAR</p> <p>HEC16KM</p>	<p>SS 316 HEC</p>  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



Product Guide

Stainless Hardware

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

Product Guide

Stainless Balustrade



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



Product Guide

Stainless Balustrade

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



Product Guide

Stainless Balustrade



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



Product Guide

Stainless Fasteners

<p>SS 304 DIN 975</p>  <p>METRIC ALLTHREAD 1m & 3m</p> <p>AL04PCM</p>	<p>SS 304 IFI 136C</p>  <p>UNC ALLTHREAD 3ft</p> <p>AL04PC</p>	<p>SS 304 AS 3501</p>  <p>BSW ALLTHREAD 3ft</p> <p>AL04PW</p>	<p>SS 316 DIN 975</p>  <p>METRIC ALLTHREAD 1m & 3m</p> <p>AL16PCM</p>	<p>SS 316 IFI 136C</p>  <p>UNC ALLTHREAD 3ft</p> <p>AL16PC</p>	<p>SS 316 IFI 136C</p>  <p>UNF ALLTHREAD 3ft</p> <p>AL16PF</p>	<p>SS 316 AS 3501</p>  <p>BSF ALLTHREAD 3ft</p> <p>AL16PS</p>
<p>SS 316 AS 3501</p>  <p>BSW ALLTHREAD 3ft</p> <p>AL16PW</p>	<p>SS 316 HEC</p>  <p>METRIC COUPLER HEX</p> <p>AXHC16PCM</p>	<p>SS 304 DIN 933</p>  <p>METRIC HEX SET SCREW</p> <p>BS04PCM</p>	<p>SS 316 DIN 933</p>  <p>METRIC HEX SET SCREW</p> <p>BS16PCM</p>	<p>SS 304 ANSI B18.2.1</p>  <p>UNC HEX SET SCREW</p> <p>BS04P</p>	<p>SS 316 ANSI B18.2.1</p>  <p>UNC HEX SET SCREW</p> <p>BS16PC</p>	<p>SS 304 ANSI B18.2.1 / B18.6.3</p>  <p>UNF HEX SET SCREW</p> <p>BS04PF</p>
<p>SS 304 BS 1083</p>  <p>BSW HEX SET SCREW</p> <p>BS04PW</p>	<p>SS 316 BS 1083</p>  <p>BSW HEX SET SCREW</p> <p>BS16PW</p>	<p>SS 304 DIN 931</p>  <p>METRIC HEX BOLT</p> <p>BH04PCM</p>	<p>SS 316 DIN 931</p>  <p>METRIC HEX BOLT</p> <p>BH16PCM</p>	<p>SS 304 ANSI B18.2.1</p>  <p>UNC HEX BOLT</p> <p>BH04PC</p>	<p>SS 316 ANSI B18.2.1</p>  <p>UNC HEX BOLT</p> <p>BH16PC</p>	<p>SS 304 ANSI B18.2.1</p>  <p>UNF HEX BOLT</p> <p>BH04PF</p>
<p>SS 316 BS 1083</p>  <p>BSW HEX BOLT</p> <p>BH16PW</p>	<p>SS 304 DIN 603</p>  <p>METRIC CUP HEAD SQUARE</p> <p>BC04PCM</p>	<p>SS 316 DIN 603</p>  <p>METRIC CUP HEAD SQUARE</p> <p>BC16PCM</p>	<p>SS 304 ANSI B18.5</p>  <p>UNC CUP HEAD SQUARE</p> <p>BC04PC</p>	<p>SS 316 DIN 571</p>  <p>METRIC COACH SCREW</p> <p>BH16PLM</p>	<p>SS 304 HEC</p>  <p>UNC HEX DOME</p> <p>ND04P</p>	<p>SS 304 DIN 1587</p>  <p>METRIC HEX DOME</p> <p>ND04PCM</p>

Product Guide

Stainless Fasteners



<p>SS 316 DIN 1587</p>  <p>METRIC HEX DOME</p> <p>ND16PCM</p>	<p>SS 304 HEC</p>  <p>METRIC 2PC DOME HEX NUT</p> <p>ND04WCM</p>	<p>SS 304 HEC</p>  <p>METRIC SHEAR NUT</p> <p>NS04PCM</p>	<p>SS 304 ISO 4161</p>  <p>METRIC SERRATED FLANGE NUT</p> <p>NF04PCM</p>	<p>SS 316 IFI-145</p>  <p>UNC SERRATED FLANGE NUT</p> <p>NF16PC</p>	<p>SS 304 DIN 929</p>  <p>METRIC WELD HEX NUT</p> <p>NH04WCM</p>	<p>SS 316 ANSI B18.2.2</p>  <p>UNC HEX NUT</p> <p>NH16P</p>
<p>SS 316 DIN 934</p>  <p>METRIC HEX NUT</p> <p>NH16PCM</p>	<p>SS 316 ANSI B18.2.2</p>  <p>UNF HEX NUT</p> <p>NH16PF</p>	<p>SS 316 BS1083</p>  <p>BSW HEX NUT</p> <p>NH16PW</p>	<p>SS 304 ANSI B18.2.2</p>  <p>UNC HEX NUT</p> <p>NH04P</p>	<p>SS 304 DIN 934</p>  <p>METRIC HEX NUT</p> <p>NH04PCM</p>	<p>SS 304 DIN 934</p>  <p>METRIC FINE HEX NUT</p> <p>NH04PFM</p>	<p>SS 304 ANSI B18.2.2</p>  <p>UNF HEX NUT</p> <p>NH04PF</p>
<p>SS 304 BS1083</p>  <p>BSW HEX NUT</p> <p>NH04PW</p>	<p>SS 304 ANSI B18.2.2</p>  <p>UNC THIN HEX LOCK NUT</p> <p>NL04PC</p>	<p>SS 304 DIN 439</p>  <p>METRIC THIN HEX LOCK NUT</p> <p>NL04PCM</p>	<p>SS 316 DIN 439</p>  <p>METRIC THIN HEX LOCK NUT</p> <p>NL16PCM</p>	<p>SS 316 ANSI B18.2.2</p>  <p>UNC THIN HEX LOCK NUT</p> <p>NL16PC</p>	<p>SS 316 ANSI B18.2.2</p>  <p>UNF THIN HEX LOCK NUT</p> <p>NL16PF</p>	<p>SS 304 HEC</p>  <p>METRIC FINE HOBLOCH™ HEX NUT</p> <p>NN04HFM</p>
<p>SS 304 HEC</p>  <p>METRIC HOBLOCH™ HEX NUT</p> <p>NN04HCM</p>	<p>SS 304 IFI-100/107</p> <p>NYLOC</p>  <p>UNC NYLOC® NUT</p> <p>NN04P</p>	<p>SS 304 DIN 985</p> <p>NYLOC</p>  <p>METRIC NYLOC® NUT</p> <p>NN04PCM</p>	<p>SS 304 HEC</p> <p>NYLOC</p>  <p>UNF NYLOC® NUT</p> <p>NN04PF</p>	<p>SS 304 HEC</p> <p>NYLOC</p>  <p>BSW NYLOC® NUT</p> <p>NN04PW</p>	<p>SS 304 HEC</p> <p>NYLOC</p>  <p>UNC NYLOC® NUT THIN</p> <p>NN04TC</p>	<p>SS 304 HEC</p> <p>NYLOC</p>  <p>UNF NYLOC® NUT THIN</p> <p>NN04TF</p>

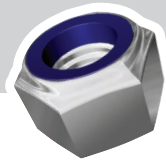
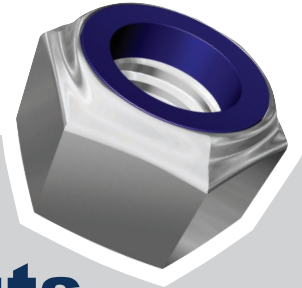


Product Guide

Stainless Fasteners

NYLOC®

Nylon insert locknuts



Anti-vibration solution.

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 B18.7

UNC
WING NUT

NW04P

SS 304
ANSI B18.17

METRIC
WING NUT

NW04PCM

SS 316
ANSI B18.7

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

SS 316
DIN 912

METRIC
SOCKET HEAD
CAP SCREW

SH16PCM

SS 304
ANSI B18.6.3

UNC
CSK HEAD
PHILLIPS

MS04CP

SS 304
DIN 965 (H)

METRIC
CSK HEAD
PHILLIPS

MS04CPM

Product Guide

Stainless Fasteners



<p>SS 304 BS 450</p> <p>BSW CSK HEAD PHILLIPS</p> <p>MS04CPW</p>	<p>SS 304 ANSI B18.6.3</p> <p>UNF CSK HEAD PHILLIPS</p> <p>MS04CPF</p>	<p>SS 316 DIN 965 (H)</p> <p>METRIC CSK HEAD PHILLIPS</p> <p>MS16CPM</p>	<p>SS 316 BS450</p> <p>BSW CSK HEAD PHILLIPS</p> <p>MS16CPW</p>	<p>SS 304 DIN 963</p> <p>METRIC CSK HEAD SLOT</p> <p>MS04CSM</p>	<p>SS 316 DIN 963</p> <p>METRIC CSK HEAD SLOT</p> <p>MS16CSM</p>	<p>SS 304 DIN 84</p> <p>METRIC CHEESE HEAD SLOT</p> <p>MS04ESM</p>
<p>SS 316 DIN 84</p> <p>METRIC CHEESE HEAD SLOT</p> <p>MS16ESM</p>	<p>SS 304 ANSI B18.6.3</p> <p>UNC PAN HEAD PHILLIPS</p> <p>MS04PP</p>	<p>SS 304 DIN 7985 (H)</p> <p>METRIC PAN HEAD PHILLIPS</p> <p>MS04PPM</p>	<p>SS 304 BS 450</p> <p>BSW PAN HEAD PHILLIPS</p> <p>MS04PPW</p>	<p>SS 304 ANSI B18.6.3</p> <p>UNF PAN HEAD PHILLIPS</p> <p>MS04PPF</p>	<p>SS 316 DIN 7985 (H)</p> <p>METRIC PAN HEAD PHILLIPS</p> <p>MS16PPM</p>	<p>SS 316 BS450</p> <p>BSW PAN HEAD PHILLIPS</p> <p>MS16PPW</p>
<p>SS 304 BS 450</p> <p>BSW ROUND HEAD SLOT</p> <p>MS04OSW</p>	<p>SS 316 BS 450</p> <p>BSW ROUND HEAD SLOT</p> <p>MS16OSW</p>	<p>SS 304 AS 1427</p> <p>METRIC MUSHROOM PHILLIPS</p> <p>MS04MPM</p>	<p>SS 304 BS 450</p> <p>BSW MUSHROOM PHILLIPS</p> <p>MS04MPW</p>	<p>SS 304 ANSI B18.6.4</p> <p>SELF TAPPING CSK HEAD PHILLIPS</p> <p>T04SSCP</p>	<p>SS 304 ANSI B18.6.4</p> <p>SELF TAPPING CSK HEAD SQUARE DR</p> <p>T04SSCQ</p>	<p>SS 304 ANSI B18.6.4</p> <p>SELF TAPPING PAN HEAD SQUARE DR</p> <p>T04SSPQ</p>
<p>SS 304 ANSI B18.6.4</p> <p>PAN HEAD SELF TAPPING PHILLIPS</p> <p>T04SSPP</p>	<p>SS 316 ANSI B18.6.4</p> <p>CSK HEAD SELF TAPPING PHILLIPS</p> <p>T16SSCP</p>	<p>SS 316 ANSI B18.6.4</p> <p>PAN HEAD SELF TAPPING PHILLIPS</p> <p>T16SSPP</p>	<p>SS 410 ANSI B18.6.4</p> <p>PAN HEAD SELF TAPPING PHILLIPS</p> <p>T41PSPP</p>	<p>SS 304 ANSI B18.6.4</p> <p>TYPE U DRIVE SCREW</p> <p>QDS04RU</p>	<p>SS 304 JIS B1112</p> <p>WOODSCREW CSK HEAD PHILLIPS</p> <p>T04DSCP</p>	<p>Security SS 304 HEC</p> <p>SELF TAPPING SKT BUTTON POST TORX®</p> <p>I04SSBT</p>



Product Guide





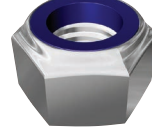

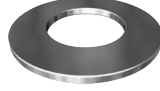
Stainless Fasteners

<p>Security SS 304 HEC</p>  <p>SELF TAPPING SKT CSK POST TORX®</p> <p>I04SSCT</p>	<p>Security SS 304 HEC</p>  <p>SELF TAPPING SKT CSK POST HEX</p> <p>I04SSCH</p>	<p>Security SS 304 HEC</p>  <p>SELF TAPPING RAISED HEAD ONE WAY</p> <p>I04SSRO</p>	<p>Security SS 304 HEC</p>  <p>METRIC SKT BUTTON POST TORX®</p> <p>IMS04BTM</p>	<p>Security SS 304 HEC</p>  <p>METRIC SKT BUTTON POST HEX</p> <p>IMS04BHM</p>	<p>Security SS 304 HEC</p>  <p>METRIC SKT CSK POST TORX®</p> <p>IMS04CTM</p>	<p>Security SS 304 HEC</p>  <p>METRIC SKT CSK POST HEX</p> <p>IMS04CHM</p>
<p>Security PLN HEC</p>  <p>SECURITY SOCKET BIT POST HEX</p> <p>ISBPH</p>	<p>Security PLN HEC</p>  <p>SECURITY SOCKET BIT POST TORX</p> <p>ISBPT</p>	<p>Security PLN HEC</p>  <p>SECURITY SOCKET KEY POST HEX</p> <p>ISKPH</p>	<p>Security PLN HEC</p>  <p>SECURITY SOCKET KEY POST TORX</p> <p>ISKPT</p>	<p>SS 420 HEC</p>  <p>SPRING WAVE PIN</p> <p>QPW20PM</p>	<p>SS 304 DIN 94</p>  <p>METRIC SPLIT PIN</p> <p>QPS04PM</p>	<p>SS 316 HEC</p>  <p>LINCH PIN</p> <p>QPL16PM</p>



Product Guide



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

Product Guide

BUMAX®

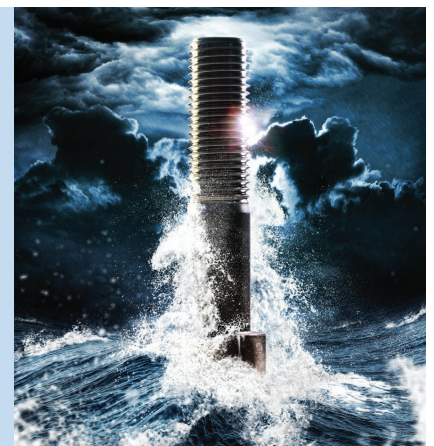


Bumax®88 DIN 976	Bumax®88 ISO 4014	Bumax®88 ISO 4017	Bumax®88 ISO 4762	Bumax®88 ISO 10642	Bumax®88 ISO 4032	Bumax®88 ISO 4161
ALLTHREAD ROD	HEX BOLT	HEX SET SCREW	SOCKET HEAD CAP SCREW	FLAT SOCKET SCREW	HEX NUT	HEX FLANGE NUT
ALB8PCM	BHB8PCM	BSB8PCM	SHB8PCM	SCB8PCM	NHB8PCM	NFB8PCM
Bumax®88 BUMAX	Bumax®88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

BUMAX®

THE WORLD'S STRONGEST STAINLESS STEEL BOLT

- » Bumax® 88 tensile strength equivalent to Class 8.8. Class 10.9 available on request.
- » 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.





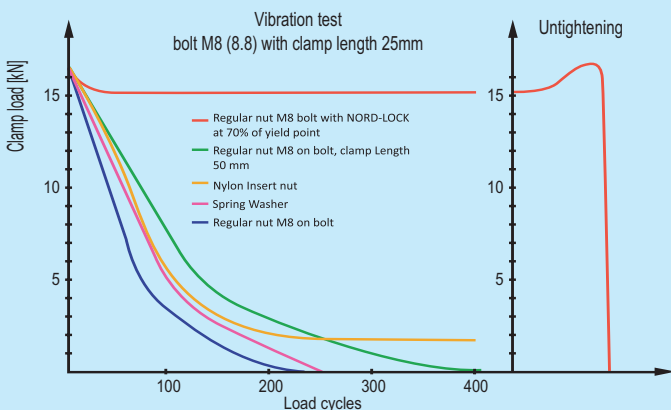
Product Guide NORD-LOCK GROUP

Swedish Engineering 

<p>Delta Protekt® Hardened Steel EN 1.7182</p>  <p>METRIC STANDARD WASHER WNHTDDM</p>	<p>Delta Protekt® Hardened Steel EN 1.7182</p>  <p>IMPERIAL STANDARD WASHER WNHTDD</p>	<p>Delta Protekt® Hardened Steel EN 1.7182</p>  <p>METRIC LARGE OD WASHER WNHTLDM</p>	<p>Delta Protekt® Hardened Steel EN 1.7182</p>  <p>IMPERIAL LARGE OD WASHER WNHTLD</p>	<p>SS 316L AISI 316L EN 1.4404</p>  <p>METRIC STANDARD WASHER WN16DPM</p>	<p>SS 316L AISI 316L EN 1.4404</p>  <p>IMPERIAL STANDARD WASHER WN16DP</p>	<p>SS 316L AISI 316L EN 1.4404</p>  <p>METRIC LARGE OD WASHER WN16LPM</p>
<p>Nord-Lock X Series™</p>	<p>Delta Protekt® Hardened Steel EN 1.7225</p>  <p>IMPERIAL X SERIES WASHER WNXTDD</p>	<p>Delta Protekt® Hardened Steel EN 1.7225</p>  <p>METRIC X SERIES WASHER WNXTDDM</p>	<p>SS 316L AISI 316L EN 1.4404</p>  <p>IMPERIAL LARGE OD WASHER WN16LP</p>	<p>Delta Protekt® Hardened Steel EN 1.7182</p>  <p>STANDARD WASHER KIT WNXAHT</p>	<p>SS 316L AISI 316L EN 1.4404</p>  <p>STANDARD WASHER KIT WNXASS</p>	<p>Delta Protekt® Class 10</p>  <p>METRIC WHEEL NUT NL10DNM</p>

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.



German Engineering

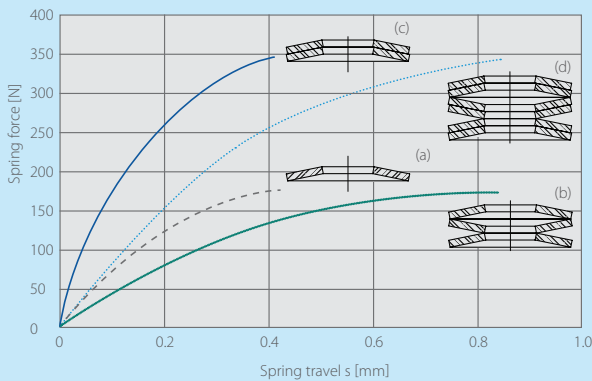
Product Guide SCHNORR®



PLN DIN 2093 DISC SPRING WOHTDP	MGAL DIN 2093 DISC SPRING WOHTDG	SS 304 DIN 2093 DISC SPRING WO04DP	Z/P Serrated TYPE S SAFETY WASHER WOHTSZM	PLN Serrated TYPE S SAFETY WASHER WOHTSPM	Z/P Serrated TYPE VS SAFETY WASHER WOHTVZM	PLN Serrated TYPE VS SAFETY WASHER WOHTVPM
SS 304 Serrated TYPE S SAFETY WASHER WO04SPM	SS 304 Serrated TYPE VS SAFETY WASHER WO04VPM	Z/P DIN 6796 HDS LOAD HEAVY DUTY WASHER WOHTHZM	PLN DIN 6796 HDS LOAD HEAVY DUTY WASHER WOHTHPM	ZYP 25µm DIN 6796 HDS LOAD HEAVY DUTY WASHER WOHTHYM	Z/P DIN 267 HS LOAD HIGH STRESS WASHER WOHTLZM	PLN DIN 267 HS LOAD HIGH STRESS WASHER WOHTLPM

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.



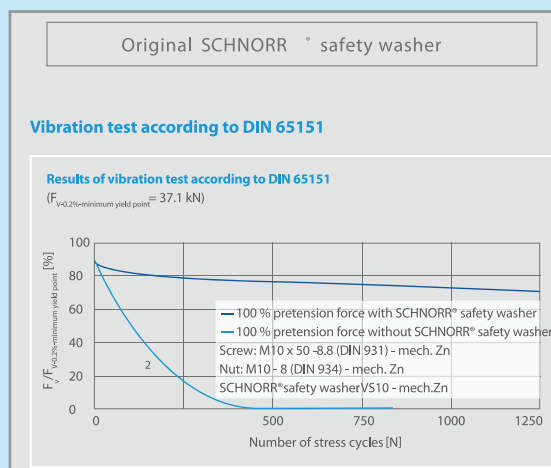
- (a) Single disc spring
- (b) Stacked in series; example 3 x 1 = triple deflection
- (c) Stacked in parallel; example 1 x 2 = double force
- (d) Parallel pairs arranged in series; example 3 x 2 = double force and triple deflection.

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


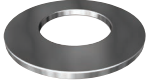
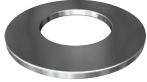
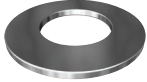
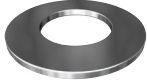
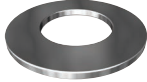
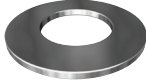
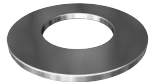
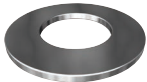
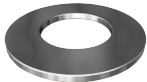
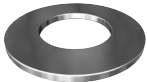
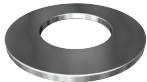
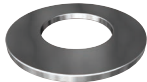

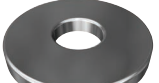
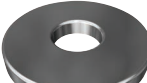
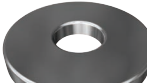
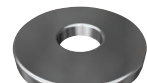
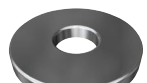
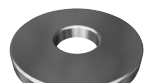










BEARING
PRELOAD
SPRING
WOHTKP



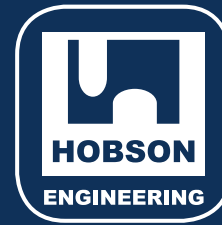
Product Guide

Washers

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

Product Guide

Washers



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

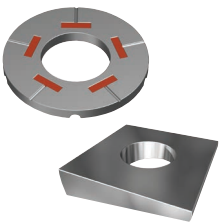


Product Guide Washers

Xylan Blue HEC 38-45 HRC	HDG AS 1237 26-45 HRC	PLN HEC 43-49 HRC	ZYP HEC 43-49 HRC	PLN AS 1085.7	HDG HEC Mild Steel	KEY
						CHR: Chrome HDG: Hot Dip Galvanised MGAL: Mechanical Galvanised PLN: Plain SS: Stainless Steel Z/P: Zinc Plated ZYP: Zinc Yellow
IMPERIAL FLAT ROUND SAMPSON™ WR43B	METRIC FLAT ROUND HARDENED WRHTGM	IMPERIAL FLAT ROUND WRH9P	IMPERIAL FLAT ROUND WRH9Y	FISHBOLT SPRING WASHER DWRHTPSM	METRIC SECURITY MESH CLIP HWCMSGM	

Other Washers

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



Structural



p10



Bumax



p31



Nord-Lock



p32



Schnorr

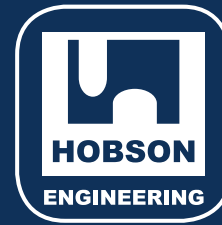


p33

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

Technical info Washers



Types of Washers

	<p>Standard Washers</p> <p>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:</p> <ol style="list-style-type: none"> 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. 		<p>Belleville Washer</p> <p>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.</p> <p>Multiple Belleville washers may be stacked to modify the spring constant or amount of deflection.</p>
	<p>Squitter Washers (DTIs)</p> <p>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.</p>		<p>Spherical Washers</p> <p>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.</p>
	<p>Load Indicating Washers (LIWs)</p> <p>Work much the same as Squitter Washers (DTIs) minus the silicone process.</p>		<p>Lock Washers</p> <p>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).</p>
	<p>Split type</p> <p>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.</p> <p>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 .</p>		<p>Lock Washers - 2 piece type (Nord-Lock)</p> <p>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"².</p>
	<p>Spring Washers</p> <p>"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"¹. There are various types of spring washers that are designed to prevent loosening of bolted assemblies.</p>	<p>References: Ajax technical note AFI/02/007 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</p>	

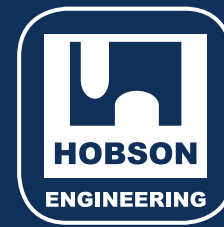





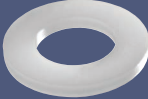
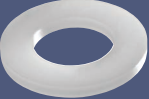
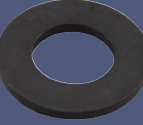

Product Guide

Nylon

Natural Nylon HEC  UNC HEX SET SCREW BS66PC	Natural Nylon DIN933  METRIC HEX SET SCREW BS66PCM	Natural Nylon HEC  UNC HEX BOLT BH66PC	Natural Nylon DIN 931  METRIC HEX BOLT BH66PCM	Natural Nylon DIN963  METRIC CSK SLOT SCREW MS66CSM	Natural Nylon HEC  UNC CSK SLOT SCREW MS66CS	Natural Nylon DIN84  METRIC CHEESE SLOT SCREW MS66ESM
Natural Nylon HEC  UNC ROUND SLOT SCREW MS66OS	Natural Nylon HEC  UNC SLOT FILLISTER SCREW MS66LS	Natural Nylon DIN316  METRIC WING SCREW MS66PWM	Natural Nylon DIN7985  BINDER HEAD PHILLIPS SCREW MS66BPM	Natural Nylon DIN913  METRIC HEX SOCKET GRUB SCREW SG66PCM	Natural Nylon DIN551  SLOTTED SOCKET GRUB SCREW SG66PSM	Natural Nylon DIN912  METRIC SOCKET HEAD CAP SCREW SH66PCM
Natural Nylon HEC  UNC ALLTHREAD ROD AN66PC	Natural Nylon DIN975  METRIC ALLTHREAD ROD AN66PCM	Natural Nylon HEC  UNC HEX NUT NH66P	Natural Nylon DIN934  METRIC HEX NUT NH66PCM	Nylon Black UV Stable HEC  METRIC HEX THIN NUT NL66UCM	Natural Nylon HEC  UNC WING NUT NW66PC	Natural Nylon DIN315  METRIC WING NUT NW66PCM
Natural Nylon HEC  UNC DOME HEX NUT ND66P	Natural Nylon Form A  METRIC DOME HEX NUT ND66PAM	Natural Nylon DIN1587  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

Product Guide Nylon



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



**BUSHING
WASHER**

WB66PSM

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



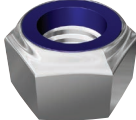
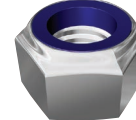
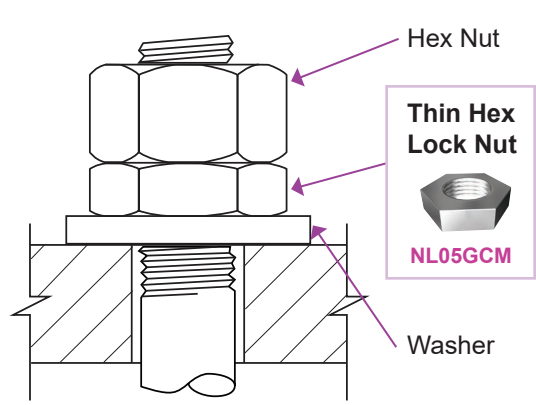
Product Guide Commercial

<p>HDG AS 1111.1 Class 4.6</p>  <p>METRIC HEX BOLT & NUT</p> <p>KBH46GCM</p>	<p>Z/P AS 1111.1 Class 4.6</p>  <p>METRIC HEX BOLT & NUT</p> <p>KBH46ZCM</p>	<p>PLN AS 1111.1 Class 4.6</p>  <p>METRIC HEX BOLT & NUT</p> <p>KBH46PCM</p>	<p>HDG AS 2451 Mild Steel</p>  <p>BSW HEX BOLT & NUT</p> <p>KBHMSGW</p>	<p>Z/P AS 2451 Mild Steel</p>  <p>BSW HEX BOLT & NUT</p> <p>KBHMSZW</p>	<p>Z/P AS 1111.1 Class 4.6</p>  <p>METRIC HEX BOLT</p> <p>BH46ZCM</p>	<p>Z/P AS 2451 Mild Steel</p>  <p>BSW HEX BOLT</p> <p>BHMSZW</p>
<p>PLN AS 2451 Mild Steel</p>  <p>BSW HEX BOLT</p> <p>BHMSZW</p>	<p>HDG AS 1111.2 Class 4.6</p>  <p>METRIC HEX SET SCREW</p> <p>BS46GCM</p>	<p>Z/P AS 1111.2 Class 4.6</p>  <p>METRIC HEX SET SCREW</p> <p>BS46ZCM</p>	<p>PLN AS 1111.2 Class 4.6</p>  <p>METRIC HEX SET SCREW</p> <p>BS46PCM</p>	<p>Z/P AS 2451 Mild Steel</p>  <p>BSW HEX SET SCREW</p> <p>BSMSZW</p>	<p>HDG AS 1390 Class 4.6</p>  <p>METRIC CUP HEAD BOLT & NUT</p> <p>KBC46GCM</p>	<p>Z/P AS 1390 Class 4.6</p>  <p>METRIC CUP HEAD BOLT & NUT</p> <p>KBC46ZCM</p>
<p>PLN AS 1390 Class 4.6</p>  <p>METRIC CUP HEAD BOLT & NUT</p> <p>KBC46PCM</p>	<p>Z/P HEC AS 2451</p>  <p>BSW CUP HEAD BOLT & NUT</p> <p>KBCMSZW</p>	<p>HDG AS 1393 Class 4.6</p>  <p>METRIC HEX COACH</p> <p>BH46GLM</p>	<p>Z/P AS 1393 Class 4.6</p>  <p>METRIC HEX COACH</p> <p>BH46ZLM</p>	<p>HDG AS 1111.1 Class 4.6</p>  <p>METRIC LONG THREAD ASSEMBLED</p> <p>KBX46GCM</p>	<p>HDG HEC Class 4.6</p>  <p>PURLIN HEX FLANGE BOLT & NUT</p> <p>KBFMSGCM</p>	<p>Z/P HEC Class 4.6</p>  <p>PURLIN HEX FLANGE BOLT & NUT</p> <p>KBFMSZCM</p>
<p>Z/P HEC Class 4.6</p>  <p>PURLIN HEX 2 WASHERS BOLT & NUT</p> <p>KBHMSZCM</p>	<p>HDG HEC Class 4.6</p>  <p>FASCIA HEX WASHER BOLT & NUT</p> <p>KBAMSGCM</p>	<p>Z/P HEC Class 4.6</p>  <p>FASCIA HEX WASHER BOLT & NUT</p> <p>KBAMSZCM</p>	<p>Z/P HEC Class 4.6</p>  <p>SHOULDER PURLIN HEX BOLT & NUT</p> <p>KBOMSZCM</p>	<p>Z/P AS 1427:1996 Mild Steel</p>  <p>METRIC METAL THREAD PAN PHIL</p> <p>MSMSZPPM</p>	<p>Zinc Black AS 1427:1996 Mild Steel</p>  <p>METRIC METAL THREAD PAN PHIL</p> <p>MSMSVPPM</p>	<p>Z/P AS 1427:1996 Mild Steel</p>  <p>METRIC METAL THREAD CSK PHIL</p> <p>MSMSZCPM</p>

Product Guide

NYLOC® Commercial



<p>HDG AS 1112.3 Class 5</p>  <p>METRIC HEX NUT</p> <p>NH05GCM</p>	<p>Z/P AS1112.3 Class 5</p>  <p>METRIC HEX NUT</p> <p>NH05ZCM</p>	<p>PLN AS 1112.3 Class 5</p>  <p>METRIC HEX NUT</p> <p>NH05PCM</p>	<p>HDG AS 2451</p>  <p>BSW HEX NUT</p> <p>NHMSGW</p>	<p>Z/P AS 2451</p>  <p>BSW HEX NUT</p> <p>NHMSZW</p>	<p>PLN AS 2451</p>  <p>BSW HEX NUT</p> <p>NHMSPW</p>	<p>PLN AS1112.3 Class 5</p>  <p>METRIC LEFT HAND HEX NUT</p> <p>NH05PDM</p>
<p>MGAL DIN 985 Class 6</p> <p>NYLOC</p>  <p>METRIC NYLOC® NUT</p> <p>NN06GCM</p>	<p>Z/P DIN 985 Class 6</p> <p>NYLOC</p>  <p>METRIC NYLOC® NUT</p> <p>NN06ZCM</p>	<p>MGAL IFI-100NE Grade 2</p> <p>NYLOC</p>  <p>BSW NYLOC® NUT</p> <p>NNG2GW</p>	<p>Z/P IFI-100NE Grade 2</p> <p>NYLOC</p>  <p>BSW NYLOC® NUT</p> <p>NNG2ZW</p>	<p>Z/P IFI-100NE Grade 2</p> <p>NYLOC</p>  <p>UNC NYLOC® NUT</p> <p>NNG2ZC</p>	<p>PLN HEC Class 5</p>  <p>ACME 6 TPI HEX NUT</p> <p>NHMSPA</p>	<p>PLN HEC Class 5</p>  <p>ACME 6 TPI LEFT HAND HEX NUT</p> <p>NHMSPB</p>
<p>Brass AS 1112</p>  <p>METRIC HEX NUT</p> <p>NHBRPCM</p>	<p>Brass HEC</p>  <p>UNC HEX NUT</p> <p>NHBRPC</p>	<p>Brass AS 2451</p>  <p>BSW HEX NUT</p> <p>NHBRPW</p>	<p>HDG AS 1112.4 Use with Class 5</p>  <p>METRIC THIN HEX LOCK NUT</p> <p>NL05GCM</p>	 <p>Hex Nut</p> <p>Thin Hex Lock Nut NL05GCM</p> <p>Washer</p>		
<p>HDG DIN 1587 Class 5</p>  <p>METRIC DOME HEX NUT</p> <p>ND05GCM</p>	<p>CHR DIN 1587 Class 5</p>  <p>METRIC DOME HEX NUT</p> <p>ND05CCM</p>	<p>HDG HEC Class 5</p>  <p>METRIC SHEAR NUT</p> <p>NS05GCM</p>	<p>NYLOC®</p> <p>Nylon insert locknuts</p> <p>Anti-vibration solution.</p>  			



Product Guide

Low-Tensile

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

Product Guide

Low-Tensile




HDG HEC Mild Steel



TURNBUCKLE EYE & EYE

HTBMSGE

HDG HEC Mild Steel



TURNBUCKLE HOOK & EYE

HTBMSGH

Z/P HEC Mild Steel



1/4" BSW U BOLT KIT ROUND

KURMSZW

HDG HEC Mild Steel



METRIC U BOLT KIT SQUARE

KUSMSGCM

HDG HEC Mild Steel



METRIC U BOLT KIT SQ WITH SPRING WASHER

KUSMSGSM

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 HEC Mild Steel



TURNBUCKLE STUB ENDS

HTBMSGG

Z/P HEC Mild Steel



BSW LAG SCREW

LSMSZW

Size	Pitch (mm)			Threads Per Inch						
	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	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	-	-	-



Product Guide Cyclone



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

Product Guide 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 GFCGF30050	FLAT CONNECTOR TIMBER M12 GFCGF45050	FLAT CONNECTOR TIMBER M12 GFCGF45065	FLAT CONNECTOR TIMBER M16 GFCGF16450	TRUSS CONNECTOR BOND BEAM GTBGB	TRUSS CONNECTOR Z BRACKET GTCGZ	TRUSS CONNECTOR Z BRACKET GTCHZ

HOBKOTE®

HOBKOTE® is a specially formulated high performance coating.



The **HOBKOTE®** coating conforms to ISO4042 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.





Product Guide 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

Product Guide Kits



Zinc Plated
Steel
HEC

SPLIT PINS
1.6 2.0 2.5 3.2
4.0 5.0 Ø

FEFK009

4.13kg / 1705pcs

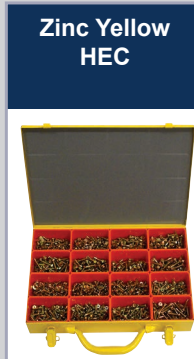


Zinc Plated
Aluminium /
Steel

BLIND RIVETS
DOME 3.2mm
4.0mm 4.8mm

FEFK010

3.54kg / 1150pcs



Zinc Yellow
HEC

SELF DRILLING
METAL SCREWS

FEFK011

4.4kg / 1180pcs

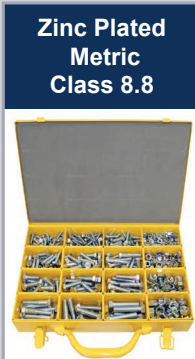


Zinc Plated
HEC

PHILLIPS SELF
TAPPING PAN
HEAD 6-12G

FEFK012

4.77kg / 1545pcs

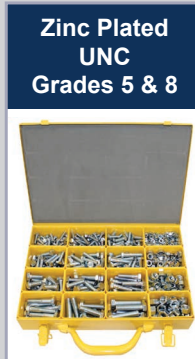


Zinc Plated
Metric
Class 8.8

BOLTS & NUTS
M6 M8 M10
M12

FEFK015

7.07kg / 513pcs



Zinc Plated
UNC
Grades 5 & 8

BOLTS & NUTS
1/4 5/16 3/8 1/2

FEFK016

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

PHILLIPS SELF
TAPPING PAN
HEAD 6-10G

FEFK018

4.38kg / 1640pcs



Zinc Plated /PLN
High Tensile
Class 8.8

M5*

SHCS BOLTS
NUTS WASHERS
(FLANGE)

FEFK019

4.93kg / 1460pcs



Zinc Plated
High Tensile
Class 8.8

M6

SET SCREWS
BOLTS NUTS &
WASHERS

FEFK020

6.17kg / 1185pcs



Zinc Plated
High Tensile
Class 8.8

M8

SET SCREWS
BOLTS NUTS &
WASHERS

FEFK021

6.58kg / 700pcs



Zinc Plated
High Tensile
Class 8.8

M10

SET SCREWS
BOLTS NUTS &
WASHERS

FEFK022

6.7kg / 430pcs



Zinc Plated
High Tensile
Class 8.8

M12

SET SCREWS
BOLTS NUTS &
WASHERS



























FEFK023

6.79kg / 290pcs



Product Guide Mungo



KEY						
<p>Z/P m1t Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER</p> <p>MUMM1T0</p>	<p>Z/P m1t-C Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER - DIN 9021</p> <p>MUMM1TC</p>	<p>SS 316 m1tr Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER</p> <p>MUMM1TR0</p>	<p>SS 316 m1tr-C Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER - DIN 9021</p> <p>MUMM1TRC</p>	<p>GreenTec® m2 Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER</p> <p>MUMM200</p>	<p>ETA</p> <p>Directly compatible with SA TS 101: 2015</p> <p>Fire Rated</p> <p>Seismic Load Approval</p>	
<p>GreenTec® m2 Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER IN MINI-BOX</p> <p>MUMM2MBP</p>	<p>Z/P m2-C Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER - DIN 9021</p> <p>MUMM2C0</p>	<p>Z/P m2-C Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER DIN 9021 MINI-BOX</p> <p>MUMM2CMB</p>	<p>HDG m2f Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER</p> <p>MUMM2F</p>	<p>SS 316 m2r Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER</p> <p>MUMM2R0</p>	<p>SS 316 m2r-C Carbon Steel</p>  <p>THROUGHBOLT WITH WASHER - DIN 9021</p> <p>MUMM2RC</p>	<p>Z/P m2-l Carbon Steel</p>  <p>INTERNALLY THREADED BOLT</p> <p>MUMM2I</p>
<p>SS 316 m2r-l Carbon Steel</p>  <p>INTERNALLY THREADED BOLT</p> <p>MUMM2RI</p>	<p>Z/P HL-S (SZ-S) Carbon Steel</p>  <p>HEAVY DUTY ANCHOR HEX</p> <p>MUMHLSZ</p>	<p>Z/P HL-B (SZ-B) Carbon Steel</p>  <p>HEAVY DUTY ANCHOR</p> <p>MUMHLBSZ</p>	<p>Z/P HL-SK (SZ-SK) Carbon Steel</p>  <p>CSK HEAD HEAVY DUTY ANCHOR</p> <p>MUMHLSK</p>	<p>Zinc Flake MCS-S Carbon Steel</p>  <p>HEX HEAD CONCRETE SCREW HEX</p> <p>MUMMCS0</p>	<p>Z/P MCS-SK Carbon Steel</p>  <p>CSK HEAD CONCRETE SCREW TORX</p> <p>MUMMCSK</p>	<p>Z/P MCS-P Carbon Steel</p>  <p>PAN HEAD CONCRETE SCREW TORX</p> <p>MUMMCS-P</p>
<p>Z/P MCS-PG Carbon Steel</p>  <p>LRG PAN HEAD CONCRETE SCREW TORX</p> <p>MUMMCS-PG</p>	<p>Z/P MCS-I Carbon Steel</p>  <p>CSK SOCKET HEAD CONCRETE SCREW HEX</p> <p>MUMMCSI</p>	<p>SS316 MCSr-S Carbon Steel</p>  <p>HEX HEAD CONCRETE SCREW HEX</p> <p>MUMMCSr-S</p>	<p>SS 316 MCSr-SK Carbon Steel</p>  <p>CSK HEAD CONCRETE SCREW TORX</p> <p>MUMMCSr-SK</p>	<p>SS 316 MCSr-P Carbon Steel</p>  <p>PAN HEAD CONCRETE SCREW TORX</p> <p>MUMMCSr-P</p>	<p>Z/P MSS Carbon Steel</p>  <p>SHIELD ANCHOR</p> <p>MUMMSS</p>	<p>Z/P MHA-S Carbon Steel</p>  <p>SLEEVE ANCHOR HEX SCREW</p> <p>MUMMHAS</p>

Product Guide

Mungo



Swiss Quality

<p>Z/P MHA-B Carbon Steel</p> <p>SLEEVE ANCHOR</p> <p>MUMMHAB</p>	<p>Z/P ESA (E) Carbon Steel</p> <p>DROP IN ANCHOR</p> <p>MUMESAE</p>	<p>Z/P ESAK (ES) Carbon Steel</p> <p>DROP IN ANCHOR WITH COLLAR</p> <p>MUMESAKE</p>	<p>SS 316 ESAr (E A4)</p> <p>DROP IN ANCHOR</p> <p>MUMESARE</p>	<p>Z/P ESA-WZ Carbon Steel</p> <p>SETTING TOOL FOR ESA</p> <p>MUMESAWZ</p>	<p>Z/P ESA-H Steel / Plastic</p> <p>SETTING TOOL FOR ESA WITH HAND GUARD</p> <p>MUMESAH</p>	<p>Brass MMD</p> <p>BRASS ANCHOR</p> <p>MUMMMD</p>
<p>Z/P MHDA Carbon Steel</p> <p>HOLLOW CEILING ANCHOR</p> <p>MUMMHDA0</p>	<p>SS 316 MHDAr</p> <p>HOLLOW CEILING ANCHOR</p> <p>MUMMHDAr</p>	<p>Z/P MAN Carbon Steel</p> <p>CEILING ANCHOR</p> <p>MUMMAN</p>	<p>Z/P MMS Carbon Steel</p> <p>CONCRETE FRAME ANCHOR POZI DR</p> <p>MUMMMS0</p>	<p>Z/P MMM Carbon Steel</p> <p>MASONRY FRAME ANCHOR MULTI POZI DR</p> <p>MUMMMM</p>	<p>Z/P MEN Carbon Steel</p> <p>EXPRESS NAIL</p> <p>MUMMEN</p>	<p>Z/P MDB-M</p> <p>METAL DISC DIAM 38MM</p> <p>MUMMDBM3</p>
<p>Z/P MDB-M</p> <p>METAL DISC DIAM 38MM WHITE</p> <p>MUMMDBMW</p>	<p>Z/P MDB-M</p> <p>METAL DISC DIAM 70MM</p> <p>MUMMDBM7</p>	<p>Z/P MRS-H Carbon Steel</p> <p>TRIM HEAD 8.3 WALL SCREW TORX DR</p> <p>MUMMRSH</p>	<p>Z/P MRS-U Carbon Steel</p> <p>CSK HEAD 11.5 WALL SCREW TORX DR</p> <p>MUMMRSU</p>	<p>Z/P MJB Carbon Steel</p> <p>ADJUSTABLE SCREW T25 TORX DR</p> <p>MUMMJB</p>	<p>Z/P TR-R Carbon Steel</p> <p>FRAME FIXING SCREW RAFIX HEX DR</p> <p>MUMTRR0</p>	<p>Z/P TR-RK Carbon Steel</p> <p>FRAME FIXING SCREW RAFIX HEX DR</p> <p>MUMTRRK</p>
<p>Z/P TR Carbon Steel</p> <p>TOPROC SPACER HEX DR</p> <p>MUMTR0</p>	<p>Z/P TR-B Carbon Steel</p> <p>TOPROC SPACER HEX DR</p> <p>MUMTRB0</p>	<p>Z/P TR-BS Carbon Steel</p> <p>TOPROC SPACER HEX DR</p> <p>MUMTRBS</p>	<p>Phosphated SBS-FG Drywall</p> <p>BUGLE HEAD PHILLIPS</p> <p>MUMSBSFG</p>	<p>Phosphated SBS-GG Drywall</p> <p>BUGLE HEAD PHILLIPS</p> <p>MUMSBSGG</p>	<p>Phosphated SBS-HG Drywall</p> <p>CSK RIBBED PHILLIPS</p> <p>MUMSBSHG</p>	<p>Phosphated SBS-TE Drywall</p> <p>BUGLE HEAD PHILLIPS</p> <p>MUMSBSTE</p>



Product Guide Mungo



Phosphated SBS-FK Drywall		Phosphated SBS-ZK Metal		Phosphated SBS-GS Drywall		Pure Epoxy MIT600RE		Pure Epoxy MIT600RE		KEY	
						 Directly compatible with SA TS 101: 2015					
LARGE WAFER PHILLIPS	LARGE WAFER PHILLIPS	CSK RIBBED PHILLIPS	CSK RIBBED PHILLIPS	CARTRIDGE 385ML	CARTRIDGE 585ML			Fire Rated	Seismic Load Approval		
MUMSBSFK	MUMSBSZK	MUMSBSGS	MUMSBSGS	MUCMT6001710001	MUCMT6001710010						
Pure Epoxy MIT600RE		MIT-K		Vinylester MIT-SE Plus		Vinylester MIT-SE Plus		Vinylester MIT-SE Plus		Vinylester MIT-KE	
CARTRIDGE 1400ML	REBAR CASE FOR MIT600RE & MIT-SE PLUS	STYRENE FREE CARTRIDGE 165ML	STYRENE FREE SELF-OPENING CARTRIDGE 280ML	STYRENE FREE CARTRIDGE 300ML	SYSTEM-CASE MIT-SE PLUS 22 X 300ML	STYRENE FREE CARTRIDGE 350ML					
MUCMT6001710012	MUCMTK0	MUCMTSEP1710024	MUCMTSEP1710015	MUCMTSEP1710017	MUCMTKE3	MUCMTSEP1710025					
Vinylester MIT-BE		Vinylester MIT-SE Plus		Vinylester MIT-SE Plus		Polyester MIT-SP		Polyester MIT-SP		Polyester MIT-SP	
MAXI-BOX MIT-SE PLUS 20 X 350ML	STYRENE FREE CARTRIDGE 400ML	STYRENE FREE CARTRIDGE 825ML	STYRENE FREE CARTRIDGE 300ML	STYRENE FREE CARTRIDGE 350ML	STYRENE FREE CARTRIDGE 400ML	SYSTEM-CASE MIT-SP 22 X 300ML					
MUCMTBE	MUCMTSEP1710026	MUCMTSEP1710022	MUCMTSP01710050	MUCMTSP01710057	MUCMTSP01710052	MUCMTKP3					
Epoxy-Acrylate MIT-E		MIT-COOL Low Temperature		MIT-COOL Low Temperature		MIT-PP-H0		MIT-PP-H1		MIT-PP-H1	
CARTRIDGE 400ML	STYRENE FREE CARTRIDGE 300ML	STYRENE FREE CARTRIDGE 400ML	INJECTION GUN 11 IN 1 FOR MIT	EASY-PRESS FOR MIT 165/280/300	EASY-PRESS FOR MIT 350	EASY-PRESS FOR MIT 400					
MUCMTE40	MUCMTC30	MUCMTC40	MUCMTPH0	MUCMTPH11710034	MUCMTPH11710035	MUCMTPH11710036					



Swiss Quality

Product Guide Mungo



MIT-PP-HK SYSTEM-CASE EASY-PRESS FOR MIT 165-300 MUCMTPHK1710201	MIT-PP-HK SYSTEM-CASE EASY-PRESS FOR MIT 350 MUCMTPHK1710202	MIT-PP-HK SYSTEM-CASE EASY-PRESS FOR MIT 400 MUCMTPHK1710203	MIT-PP-H2 INJECTION GUN FOR MIT 165/280/300 MUCMTPH21710029	MIT-PP-H2 INJECTION GUN FOR MIT 350 MUCMTPH21710033	MIT-PP-H2 INJECTION GUN FOR MIT 385/585 MUCMTPH21710019	MIT-PP-H2 INJECTION GUN FOR MIT 400 MUCMTPH21710009
MIT-PP-A CORDLESS INJECTION GUN FOR MIT 350 MUCMTPPA1710221	MIT-PP-A CORDLESS INJECTION GUN FOR MIT 165-300 MUCMTPPA1710046	MIT-PP-A CORDLESS INJECTION GUN FOR MIT 400 MUCMTPPA1710021	MIT-PP-P PNEUMATIC INJECTION GUN FOR MIT 165-350 MUCMTPPP1710040	MIT-PP-P PNEUMATIC INJECTION GUN FOR MIT 385-585 MUCMTPPP1710048	MIT-PP-P PNEUMATIC INJECTION GUN FOR MIT 400 MUCMTPPP1710020	MIT-PP-P PNEUMATIC INJECTION GUN FOR MIT 825 MUCMTPPP1710031
MIT-PP-P PNEUMATIC INJECTION GUN FOR MIT 1400 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 MUCMTMI1	Plastic MIT-MI-2 MIXER MUCMTMI2	Plastic MIT-MI-3 MIXER MUCMTMI3



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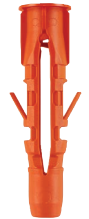













<p>Plastic MIT-MI-V1</p>  <p>MIXER EXTENSION</p> <p>MUCMTMV1</p>	<p>PVC MIT-MI-V2</p>  <p>EXTENSION 1M</p> <p>MUCMTMV2</p>	<p>Plastic MIT-SH-K0</p>  <p>SLEEVE</p> <p>MUCMTSH0</p>	<p>Plastic MIT-SH-K1</p>  <p>SLEEVE</p> <p>MUCMTSH1</p>	<p>Plastic MIT-SH-K2</p>  <p>SLEEVE</p> <p>MUCMTSH2</p>	<p>Metal MIT-SH-S0</p>  <p>SLEEVE</p> <p>MUCMTSHS</p>	<p>Z/P MIT-S Class 5.8</p>  <p>ANCHOR ROD KIT</p> <p>MUCMTS0</p>
<p>SS 316 MIT-Sr</p>  <p>ANCHOR ROD KIT</p> <p>MUCMTSR</p>	<p>Z/P MIT-IGH</p>  <p>ANCHOR SLEEVE INT THREAD</p> <p>MUCMTIGH</p>	<p>SS 304 MIT-AKH</p>  <p>ANCHOR SLEEVE</p> <p>MUCMTAKH</p>	<p>SS 304 MIT-ESH</p>  <p>INSERT ANCHOR</p> <p>MUCMTESH</p>	<p>Epoxy- Acrylate MVA</p>  <p>RESIN CAPSULE</p> <p>MUCMVA0</p>	<p>Z/P MVA-S Class 5.8</p>  <p>ANCHOR ROD KIT EXT. HEX</p> <p>MUCMVAS0</p>	<p>SS 316 MVA-Sr</p>  <p>ANCHOR ROD KIT EXT. HEX</p> <p>MUCMVASR</p>
<p>Z/P MVA-WZ</p>  <p>SETTING TOOL</p> <p>MUCMVAWZ</p>	<p>Z/P MVA-I Class 5.8</p>  <p>ANCHOR SLEEVE INT THREAD</p> <p>MUCMVAI0</p>	<p>SS 316 MVA-Ir</p>  <p>ANCHOR SLEEVE INT THREAD</p> <p>MUCMVAIR</p>	<p>PU Foam MPU-P50/B1</p>  <p>FIRE RATED DISPENSER FOAM 750ML</p> <p>MUCMPU5B</p>	<p>PU Foam MPU-P50 Universal Use</p>  <p>DISPENSER FOAM 750ML</p> <p>MUCMPU50</p>	<p>PU Foam MPU-M50 Universal Use</p>  <p>HAND HELD PU FOAM 750ML</p> <p>MUCMPUM5</p>	<p>PU Foam MPU-P40/AS</p>  <p>GUN SOFT FOAM 750ML</p> <p>MUCMPU40</p>
<p>PU Foam MPU-PS50</p>  <p>CONCRETE FRAMEWORK 750ML</p> <p>MUCMPUS5</p>	<p>PU Foam MPU-PP Perifix</p>  <p>PERIMETRE ADHESIVE 750ML</p> <p>MUCMPUPP</p>	<p>MRM-PU Cleaner</p>  <p>FOR PU-FOAM AND DISPENSER 500ML</p> <p>MUCMRMPU</p>	<p>MPP-M</p>  <p>METAL DISPENSER</p> <p>MUCMPPM</p>	<p>MPP-K</p>  <p>NYLON/METAL DISPENSER</p> <p>MUCMPPK</p>	<p>Neutral Silicone MSI-NP Universal Use</p>  <p>FUNGUS- INHIBITING 310ML</p> <p>MUCMSINP</p>	<p>Acrylic MDA Indoor/Outdoor</p>  <p>SEALANT PAINTABLE WHITE 310ML</p> <p>MUCMDA</p>

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<p>MMK-U Universal Use</p>  <p>ADHESIVE TRANSPARENT 290ML</p> <p>MUCMMKU</p>	<p>MMK-U Universal Use</p>  <p>ADHESIVE GREY 290ML</p> <p>MUCMMKU</p>	<p>Nylon MN</p>  <p>NYLON PLUG</p> <p>MUNMNP</p>	<p>Nylon MN</p>  <p>NYLON PLUG MINI-BOX BULK PACKED</p> <p>MUNMNPB</p>	<p>Nylon MN</p>  <p>NYLON PLUG MAXI-BOX</p> <p>MUNMNPX</p>	<p>Nylon MN</p>  <p>NYLON PLUG CARTON BULK PACKED</p> <p>MUNMNPL</p>	<p>Nylon MNK</p>  <p>NYLON PLUG WITH COLLAR</p> <p>MUNMNK</p>
<p>Nylon MNL</p>  <p>NYLON PLUG LONG</p> <p>MUNMNL</p>	<p>Nylon MQ</p>  <p>QUATTRO® NYLON PLUG</p> <p>MUNMQPP</p>	<p>Nylon MQ</p>  <p>QUATTRO® NYLON PLUG MINI-BOX</p> <p>MUNMQPB</p>	<p>Nylon MQ</p>  <p>QUATTRO® NYLON PLUG MAXI-BOX</p> <p>MUNMQPX</p>	<p>Nylon MQ</p>  <p>QUATTRO® NYLON PLUG BULK PACKED</p> <p>MUNMQPL</p>	<p>Nylon MOB</p>  <p>NYLON PLUG MQ/MU KIT 230 PCS</p> <p>MUNMOB</p>	<p>Nylon MU</p>  <p>MULTI PLUG NYLON</p> <p>MUNMUPP</p>
<p>Nylon MU</p>  <p>MULTI PLUG NYLON MINI-BOX</p> <p>MUNMUPB</p>	<p>Nylon MU</p>  <p>MULTI PLUG MAXI-BOX</p> <p>MUNMUPX</p>	<p>Nylon MU</p>  <p>MULTI PLUG NYLON BULK PACKED</p> <p>MUNMUPL</p>	<p>Nylon ML</p>  <p>HOLLOW BRICK PLUG DIAM 6/8</p> <p>MUNML060</p>	<p>Nylon ML</p>  <p>HOLLOW BRICK PLUG DIAM 10/14</p> <p>MUNML100</p>	<p>Nylon MLK</p>  <p>HOLLOW BRICK PLUG COLLAR DIAM 8</p> <p>MUNMLK08</p>	<p>Nylon MLK</p>  <p>HOLLOW BRICK PLUG COLLAR DIAM 14</p> <p>MUNMLK14</p>
<p>Nylon SD</p>  <p>SOUND INSULATION PLUG</p> <p>MUNSD0</p>	<p>Nylon SDK</p>  <p>COLLAR SOUND INSULATION PLUG</p> <p>MUNSDK</p>	<p>Z/P & Nylon MNA-S</p>  <p>HAMMER SCREW CSK COLLAR POZI DR</p> <p>MUNMNAS0</p>	<p>Z/P & Nylon MNA-S</p>  <p>HAMMER SCREW CSK COLLAR POZI DR</p> <p>MUNMNASN</p>	<p>Z/P & Nylon MNA-Z</p>  <p>HAMMER SCREW CYL COLLAR POZI DR</p> <p>MUNMNAZ</p>	<p>Z/P & Nylon MNA-G</p>  <p>HAMMER SCREW LARGE COLLAR POZI DR</p> <p>MUNMNAG</p>	<p>Z/P & Nylon MNA-G</p>  <p>HAMMER SCREW LARGE COLLAR TORX DR</p> <p>MUNMNAG</p>



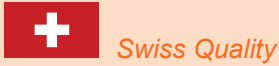
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SS 304 & Nylon MNAr-S		SS 304 & Nylon MNAr-Z		Nylon White MDB		Z/P & Nylon MNAF		Z/P & Nylon MNAF		KEY	
										 Directly compatible with SA TS 101: 2015 Fire Rated Seismic Load Approval	
HAMMER SCREW CSK COLLAR POZI DR MUNMNARS		HAMMER SCREW CYL COLLAR POZI DR MUNMNARZ		NYLON DISC WHITE MUNMDB		HAMMER SCREW WHITE POZI DR MUNMNAFW		HAMMER SCREW YELLOW POZI DR MUNMNAFY			
Z/P & Nylon MNAF		Z/P & Nylon MQL-ST		Z/P & Nylon MQL-SS		Z/P & Nylon MQLK-STB		SS 316 & Nylon MQL-STR		SS 316 & Nylon MQLK-STBr	
HAMMER SCREW DARK BROWN POZI DR MUNMNAFB		UNIVERSAL FRAME PLUG TORX DR MUNMQLST		UNIVERSAL FRAME PLUG HEX MUNMQLSS		UNIVERSAL FRAME PLUG TORX/HEX DR MUNMQLKB		UNIVERSAL FRAME PLUG TORX DR MUNMQLSR		UNIVERSAL FRAME PLUG TORX/HEX DR MUNMQLKR	
Z/P & Nylon MB-SS		HDG & Nylon MB-SSf		Z/P & Nylon MB-S		Z/P & Nylon MBK-STB		SS 316 & Nylon MB-STR		SS 316 & Nylon MB-SSr	
FRAME PLUG SOFT MATERIALS HEX MUNMBSO		FRAME PLUG SOFT MATERIALS HEX MUNMBSSF		FRAME PLUG SOFT MATERIALS POZI MUNMBSO		FRAME PLUG SOFT MATERIALS TORX/HEX MUNMBKSB		FRAME PLUG SOFT MATERIALS TORX MUNMBSTR		FRAME PLUG SOFT MATERIALS HEX MUNMBSSR	
Z/P & Nylon MB-SK		Z/P SR-SK		Z/P & Nylon MBR-ST		Z/P & Nylon MBR-SS		Z/P & Nylon MBR-S		Z/P & Nylon MBR-K-STB	
FRAME PLUG WITH HEAD HOLE TORX MUNMBSK		SAFETY SCREW WITH INTERNAL THREAD M5/T40 MUNSRSK		FRAME PLUG SOLID MATERIALS TORX MUNMBRST		FRAME PLUG SOLID MATERIALS HEX MUNMBRSS		FRAME PLUG SOLID MATERIALS POZI MUNMBRSO		FRAME PLUG SOLID MATERIALS TORX/HEX MUNMBRKS	
SS 316 & Nylon MBR-STR											
FRAME PLUG SOLID MATERIALS TORX MUNMBRTR											

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<p>SS 316 & Nylon MBR-SSr</p> <p>FRAME PLUG SOLID MATERIALS HEX</p> <p>MUNMBRSR</p>	<p>Z/P & Nylon MBR-SK</p> <p>FRAME PLUG WITH HEAD HOLE TORX</p> <p>MUNMBRSK</p>	<p>Z/P & Nylon MBR-XT</p> <p>HIGH PERFORMANCE FRAME PLUG</p> <p>MUNMBRXT</p>	<p>Z/P & Nylon MBRK-XTB</p> <p>HIGH PERFORMANCE FRAME PLUG</p> <p>MUNMBRKX</p>	<p>SS 316 & Nylon MBR-XTr</p> <p>HIGH PERFORMANCE FRAME PLUG</p> <p>MUNMBRXR</p>	<p>SS 316 & Nylon MBRK-XTBr</p> <p>HIGH PERFORMANCE FRAME PLUG</p> <p>MUNMBRKR</p>	<p>Nylon MGD</p> <p>SCAFFOLD PLUG</p> <p>MUNMGD</p>
<p>Z/P MGV</p> <p>SCAFFOLD SCREW</p> <p>MUNMGV0</p>	<p>Nylon MVS</p> <p>END CAP FOR SCAFFOLD PLUG</p> <p>MUNMVS</p>	<p>Z/P MGVm</p> <p>SCAFFOLD SCREW</p> <p>MUNMGVM</p>	<p>Plastic MDD-S Carbon Steel</p> <p>INSULATION FIXING DIAM 60MM</p> <p>MUIMDDS</p>	<p>Plastic MDD-VZ</p> <p>DISC FOR MDD-S / MDD-CE</p> <p>MUIMDDVZ</p>	<p>Plastic MDD-CE</p> <p>INSULATION FIXING DIAM 60MM</p> <p>MUIMDDCE</p>	<p>Black MDS</p> <p>INSULATION FIXING DIAM 90MM</p> <p>MUIMDS0</p>
<p>White MIS Lightweight Panel</p> <p>INSULATION FIXING DIAM 88MM</p> <p>MUIMIS0</p>	<p>Black MIS Lightweight Panel</p> <p>INSULATION FIXING DIAM 60MM</p> <p>MUIMISB0</p>	<p>White MIS-GP Lightweight Panel</p> <p>INSULATION FIXING DIAM 88MM CARTON</p> <p>MUIMISGP</p>	<p>White MIP Mineral Wool</p> <p>INSULATION FIXING DIAM 45MM</p> <p>MUIMIPO</p>	<p>White MIP-GP Mineral Wool</p> <p>INSULATION FIXING DIAM 45MM CARTON</p> <p>MUIMIPGP</p>	<p>Z/P MIDS</p> <p>INSULATION NAIL DIAM 30/35MM</p> <p>MUIMIDS0</p>	<p>Z/P MDB</p> <p>METAL DISC FOR SOFT INSULATION</p> <p>MUIMDBZ</p>
<p>SS 304 MIDSr</p> <p>INSULATION NAIL DIAM 30/35MM</p> <p>MUIMIDSR</p>	<p>SS 304 MDB</p> <p>METAL DISC FOR SOFT INSULATION</p> <p>MUIMDBA2</p>	<p>Z/P MIDS-K</p> <p>INSULATION NAIL DIAM 54MM</p> <p>MUIMIDSK</p>	<p>Nylon MDI</p> <p>INSULATION PLUG</p> <p>MUIMDI25</p>	<p>Nylon MDIm</p> <p>INSULATION PLUG FOR M8-M10</p> <p>MUIMDIM0</p>	<p>Z/P MJP32</p> <p>JET PLUG METAL</p> <p>MUSMJ32</p>	<p>Z/P MJP25</p> <p>JET PLUG METAL</p> <p>MUSMJ25</p>



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CONSTRUCT

XBolt

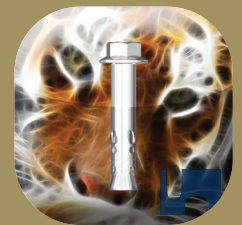
TY9aBolt®

ZYP HEC Class 5.8	ZYP HEC Class 4.6	MGAL HEC Class 5.8	MGAL HEC Class 4.6	SS 316 HEC	ZYP HEC Carbon Steel	MGAL HEC Carbon Steel
CLAWBOLT® WEDGE ANCHOR	CLAWBOLT® WEDGE ANCHOR	CLAWBOLT® WEDGE ANCHOR	CLAWBOLT® WEDGE ANCHOR	CLAWBOLT® WEDGE ANCHOR	TY9aBolt® SLEEVE ANCHOR	TY9aBolt® SLEEVE ANCHOR
MAW58YCM	MAW46YCM	MAW58GCM	MAW46GCM	MAW16PCM	MTBMSYM	MTBMSGM
SS 316 HEC	ZYP HEC Class 8.8	SS 316 HEC	MGAL HEC Carbon Steel	ZYP HEC Carbon Steel	ZYP HEC Carbon Steel	ZYP HEC Carbon Steel
TY9aBolt® SLEEVE ANCHOR	TY9aBolt® FLUSH HEAD SLEEVE ANCHOR	TY9aBolt® FLUSH HEAD SLEEVE ANCHOR	XBolt® HEX FLANGE HEAD	XBolt® HEX FLANGE HEAD	XBolt® EYE	XBolt® COUPLER
MTB16PM	MTH88YM	MTH16PM	MXHMMSGM	MXHMSYM	MXEMS YM	MXCMSYM
MGAL HEC Carbon Steel	Z/P HEC Carbon Steel	ZYP HEC Carbon Steel	ZYP HEC Carbon Steel	SS 316 HEC	Z/P HEC Carbon Steel	Red Grip HEC Carbon Steel
XBolt® COUPLER	XBolt® VERTICAL HANGER	DROP IN ANCHOR WITH LIP	DROP IN ANCHOR	DROP IN ANCHOR	DROP-IN SETTING TOOL	DROP IN SETTING TOOL WITH HANDLE
MXCMSGM	MXVMSZIM	MDLMSYCM	MDIMSYCM	MDI16PCM	MATMSZM	MATR
NYLON HEC Steel Pin	NYLON HEC SS 304 Pin	NYLON HEC Steel Pin	NYLON HEC SS 304 Pin	Z/P HEC Steel Pin	ZYP HEC Carbon Steel	ZYP HEC Carbon Steel
NAIL IN ANCHOR MUSHROOM	NAIL IN ANCHOR MUSHROOM	NAIL IN ANCHOR ROUND	NAIL IN ANCHOR ROUND	NAIL IN ANCHOR MUSHROOM	TIE WIRE SUSPENSION ANCHOR	SUSPENSION ANCHOR
MNMNM	MNMSM	MNRNM	MNRSM	MNPZM	MSTMSYM	MSAMSYM



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CONXTRACT



<p>Z/P HEC Carbon Steel</p> <p>H-IT™ TIE WIRE ANCHOR MHAHTZTM</p>	<p>MGAL HEC Carbon Steel</p> <p>H-IT™ COUNTERSUNK ANCHOR MHAHTMCM</p>	<p>MGAL HEC Carbon Steel</p> <p>H-IT™ MUSHROOM ANCHOR MHAHTMMM</p>	<p>SS 316 HEC</p> <p>H-IT™ MUSHROOM ANCHOR MHA16PMM</p>	<p>Z/P HEC Carbon Steel</p> <p>H-IT™ MINI SPLICE WEDGE MHWMSZSM</p>	<p>Z/P HEC Metal</p> <p>PANTHA PLUG® SUIT 8G SCREW MWPPM</p>	<p>NYLON HEC</p> <p>PANTHA PLUG® SUIT 8G SCREW MWPPP</p>
<p>NYLON HEC Grey</p> <p>UNIVERSAL WALL PLUG TAPERED POINT MWPNUG</p>	<p>PVC HEC Yellow</p> <p>1-2-3G SCREW TAPERED POINT MWPFY</p>	<p>PVC HEC White</p> <p>4-5G SCREW TAPERED POINT MWPFW</p>	<p>PVC HEC Red</p> <p>8-9G SCREW TAPERED POINT MWPF8</p>	<p>PVC HEC Green</p> <p>10-12G SCREW TAPERED POINT MWPF6</p>	<p>PVC HEC Blue</p> <p>14-16G SCREW TAPERED POINT MWPF4</p>	
<p>PVC HEC Orange</p> <p>16-18G SCREW TAPERED POINT MWPFO</p>	<p>PVC HEC Grey</p> <p>20-24G SCREW TAPERED POINT MWPFE</p>					



Primary applications:

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





























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.



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<p>Z/P MKT® Carbon Steel</p>  <p>WEDGE ANCHOR B</p> <p>MABM5ZSM</p>	<p>HDG MKT® Carbon Steel</p>  <p>WEDGE ANCHOR B</p> <p>MABM5GSM</p>	<p>SS 316 MKT®</p>  <p>WEDGE ANCHOR B</p> <p>MABM4PSM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>WEDGE ANCHOR BZ PLUS</p> <p>MABM5ZUM</p>	<p>SS 316 MKT®</p>  <p>WEDGE ANCHOR BZ</p> <p>MABM4PUM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>WEDGE ANCHOR B-IG</p> <p>MABM5ZGM</p>	<p>SS 316 MKT®</p>  <p>WEDGE ANCHOR B-IG</p> <p>MABM4PGM</p>
<p>Z/P MKT® Carbon Steel</p>  <p>WEDGE ANCHOR BZ-IG PRE-INSTALL</p> <p>MABM5ZIM</p>	<p>SS 316 MKT®</p>  <p>WEDGE ANCHOR BZ-IG PRE-INSTALL</p> <p>MABM4PIM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>WEDGE ANCHOR BZ-IG THROUGH</p> <p>MABM5ZTM</p>	<p>SS 316 MKT®</p>  <p>WEDGE ANCHOR BZ-IG THROUGH</p> <p>MABM4PTM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>DROP-IN ANCHOR E</p> <p>MDIM5ZEM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>DROP-IN ANCHOR ES WITH LIP</p> <p>MDLM5ZSM</p>	<p>SS 316 MKT®</p>  <p>DROP-IN ANCHOR E</p> <p>MDIM4PEM</p>
<p>SS 316 MKT®</p>  <p>DROP-IN ANCHOR ES WITH LIP</p> <p>MDLM4PSM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>SETTING TOOL BZ-IG</p> <p>MATPIM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>SETTING TOOL BZ-IG</p> <p>MATPTM</p>	<p>Z/P MKT® Steel / Plastic</p>  <p>SETTING TOOL HAND GUARD</p> <p>MDTEHM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>HIGHLOAD ANCHOR SZ-SK</p> <p>MAZM5ZKM</p>	<p>SS 316 MKT®</p>  <p>HIGHLOAD ANCHOR SZ-SK</p> <p>MAZM4PKM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>HIGHLOAD ANCHOR SZ-B</p> <p>MAZM5ZBM</p>
<p>SS 316 MKT®</p>  <p>HIGHLOAD ANCHOR SZ-B</p> <p>MAZM4PBM</p>	<p>Z/P MKT® Carbon Steel</p>  <p>HIGHLOAD ANCHOR SZ-S</p> <p>MAZM5ZSM</p>	<p>SS 316 MKT®</p>  <p>HIGHLOAD ANCHOR SZ-S</p> <p>MAZM4PSM</p>	<p>ZYP HEC Class 5.8</p>  <p>CHEMICAL ANCHOR KIT EXT. HEX</p> <p>MCA58YCM</p>	<p>HDG HEC Class 5.8</p>  <p>CHEMICAL ANCHOR KIT EXT. HEX</p> <p>MCA58GCM</p>	<p>HDG HEC Class 5.8</p>  <p>CHEMICAL ANCHOR KIT FLAT TOP STUD</p> <p>MCS58GCM</p>	<p>SS 316 HEC</p>  <p>CHEMICAL ANCHOR KIT FLAT TOP STUD</p> <p>MCS16PCM</p>



German Engineering

Product Guide CONXTRACT



What is SA TS 101:2015?



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 TS101** Appendix B

notes that anchor products with acceptable **European Technical Approvals/Assessments (ETA)** may be used with **SA TS101**.

Even before **SA TS 101: 2015**, Hobson Engineering has been supplying **MKT®** mechanical and chemical anchor products that have ETAs, specifically for customers requiring European approved anchor products. Our **MKT®** product portfolio remains strong and ready for the changes in our anchor industry, as a result of the new **NCC** requirements.



Visit www.hobson.com.au for more details.



MKT® products which include the **ETA** logo are directly compatible with **SA TS 101:2015**.

<p>PLN Steel</p>  <p>MKT® SETTING TOOL V-M</p> <p>MCTVM</p>	<p>MKT® </p>  <p>CHEMICAL CAPSULE</p> <p>MCMVPM</p>	<p>VME  MKT® Epoxy</p>  <p>CARTRIDGE 385ML</p> <p>MCVME0385</p>	<p>VME  MKT® Epoxy</p>  <p>CARTRIDGE 585ML</p> <p>MCVME0585</p>	<p>VME  MKT® Epoxy</p>  <p>CARTRIDGE 1400ML</p> <p>MCVME1400</p>	<p>VMU PLUS  MKT® Vinylester Resin</p>  <p>CARTRIDGE* 280ML</p> <p>MCVMU0280</p>	<p>VMU PLUS  MKT® Vinylester Resin</p>  <p>CARTRIDGE 345ML</p> <p>MCVMU0345</p>
<p>VMU PLUS  MKT® Vinylester Resin</p>  <p>CARTRIDGE 410ML</p> <p>MCVMU0410</p>	<p>VM-K  MKT® Polyester Resin</p>  <p>STYRENE FREE CARTRIDGE* 300ML</p> <p>MCVMK0300</p>	<p>VM-K  MKT® Polyester Resin</p>  <p>STYRENE FREE CARTRIDGE 345ML</p> <p>MCVMK0345</p>	<p>VM-K  MKT® Polyester Resin</p>  <p>STYRENE FREE CARTRIDGE 420ML</p> <p>MCVMK0420</p>	<p>VMZ  MKT® Injection Adhesive</p>  <p>CARTRIDGE* 150ML</p> <p>MCVMZ150</p>	<p>VMZ  MKT® Injection Adhesive</p>  <p>CARTRIDGE 345ML</p> <p>MCVMZ345</p>	<p>VMZ  MKT® Injection Adhesive</p>  <p>CARTRIDGE 410ML</p> <p>MCVMZ410</p>

*Can be used with standard caulking guns.

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Product Guide

CONSTRUCT



<p>VM-POLAR MKT® Vinylester Resin</p>  <p>CARTRIDGE 345ML</p> <p>MCVMP</p>	<p>Z/P  MKT® Carbon Steel</p>  <p>INT THREAD CHEMICAL STUD V-IG</p> <p>MCIM5ZGM</p>	<p>Z/P  MKT® Carbon Steel</p>  <p>VMZ-A DYNAMIC THREADED STUD</p> <p>MCZM5ZDM</p>	<p>Z/P  MKT® Carbon Steel</p>  <p>VMZ-A THREADED STUD</p> <p>MCZM5ZAM</p>	<p>SS 316  MKT®</p>  <p>VMZ-A THREADED STUD</p> <p>MCZM4PAM</p>	<p>Z/P  MKT® Carbon Steel</p>  <p>VMZ-IG INT THREADED STUD</p> <p>MCZM5ZGM</p>	<p>SS 316  MKT®</p>  <p>VMZ-IG INT THREADED STUD</p> <p>MCZM4PGM</p>
<p>Red Black Silver MKT® Metal / Plastic</p>  <p>VM-P DISPENSER 410-420ML</p> <p>MCVMP0410</p>	<p>Black MKT® Metal / Plastic</p>  <p>VM-P PROFI DISPENSER 150- 280-300-345ML</p> <p>MCVMP0345</p>	<p>Black MKT® Metal / Plastic</p>  <p>VM-P PROFI DISPENSER 385ML</p> <p>MCVMP0385</p>	<p>Black MKT® Metal / Plastic</p>  <p>VM-P PROFI DISPENSER 410-420ML</p> <p>MCVMP0380</p>	<p>Black MKT® Metal / Plastic</p>  <p>VM-P PROFI DISPENSER 585ML</p> <p>MCVMP0585</p>	<p>Red Black Silver MKT® Metal / Plastic</p>  <p>VM-P DISPENSER 385-585ML</p> <p>MCVMP0585</p>	<p>Red Black Silver MKT® Metal / Plastic</p>  <p>VM-P DISPENSER 1400ML</p> <p>MCVMP01400</p>
<p>PLN MKT® Steel</p>  <p>CLEANING BRUSH TEE HANDLE</p> <p>MCBRH</p>	<p>PLN MKT® Steel</p>  <p>CLEANING BRUSH M6 THREAD</p> <p>MCBRBM</p>	<p>MKT®</p>  <p>VM-AP BLOW-OUT PUMP</p> <p>MCXPB</p>	<p>Z/P MKT® Steel</p>  <p>CLEANING BRUSH EXTENSION</p> <p>MCRBLM6</p>	<p>Z/P MKT® Steel</p>  <p>SDS PLUS ADAPTOR RBL</p> <p>MCRBSM6</p>	<p>Plastic MKT®</p>  <p>STATIC MIXER NOZZLE VM-X</p> <p>MCVMXA</p>	<p>Plastic MKT®</p>  <p>STATIC MIXER NOZZLE VM-XL 12MM HOLE</p> <p>MCVMXL</p>
<p>Plastic MKT®</p>  <p>STATIC MIXER NOZZLE VM-XP 420ML</p> <p>MCVMXP</p>	<p>Plastic MKT®</p>  <p>PERFO SLEEVE VM-SH</p> <p>MCXSNM</p>	<p>Metal MKT®</p>  <p>PERFO SLEEVE VM-SH CUT TO LENGTH</p> <p>MCXSMM</p>	<p>Plastic MKT®</p>  <p>CENTERING SLEEVE VM-ZR</p> <p>MCXSZM</p>	<p>Plastic MKT®</p>  <p>RETAINING WASHER</p> <p>MCVMIA</p>	<p>Plastic MKT®</p>  <p>EXTENSION TUBE VM-XE</p> <p>MCVMXE</p>	<p>Plastic MKT®</p>  <p>EXTENSION TUBE VM-XLE</p> <p>MCVMXLE</p>



DRILLX[®]

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[™]






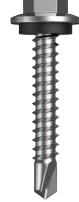

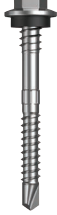
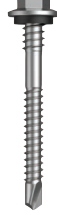



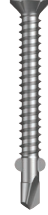

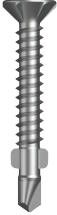







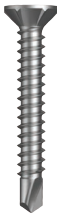
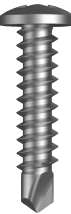
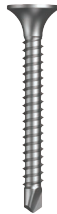
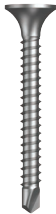
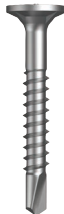
DX4[™]



Featuring
DX4TM
 &
DX3TM
 Coatings

Product Guide

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	
Metal Class 3  CSK HEAD PHILLIPS T9PM3CP	Metal ZYP  CSK RIBBED PHILLIPS T9PMYRP	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

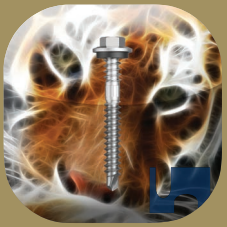
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DRILLX[®]

Featuring
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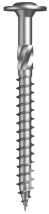
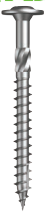

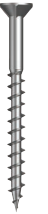
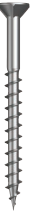
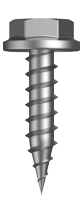
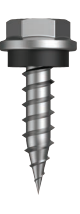
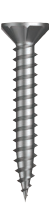
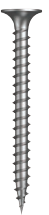

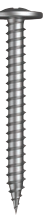


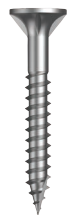
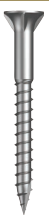

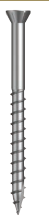
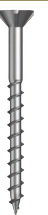
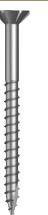
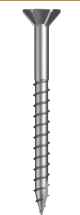
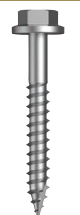
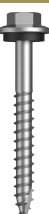
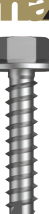

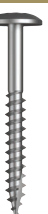



Metal Class 3	Metal Class 3	Metal ZYP	Metal Class 3	Metal ZYP	Metal Class 3	Metal ZYP
BUGLE HEAD PHILLIPS	WAFER HEAD PHILLIPS	WAFER BUTTON PHILLIPS	WAFER BUTTON PHILLIPS	FLAT HEAD PHILLIPS	FLAT HEAD PHILLIPS	FLOWER HEAD SELF EMBED PHILLIPS
T9PM3BP	T9PM3WP	T9PMYAP	T9PM3AP	T9PMYLP	T9PM3LP	T9PMYOP
	Metal Class 3	Framing Screw Class 3	Truss Framing Class 3	Class 3	Class 4 XGRiP [®] Scratchguard [®]	Class 4
	PAN HEAD TRILOBULAR DRIVE	SERRATED FLAT HEAD PHILLIPS	HEX HEAD FLANGE	BATTEN HEX HEAD FLANGE	HEX HEAD FLANGE WITH SEAL	HEX HEAD FLANGE WITH SEAL
	T9PM3PI	T9PF3EP	T9PF3FH	T9PV3FH	T9PV4XS	T9PV4SH
Poly Assembly Class 3	Type 17 Class 4	Type 17 Class 4	Type 17 Class 4 Scratchguard [®]	Type 17 Class 4 Scratchguard [®]	Type 17 Class 4 XGRiP [®]	Type 17 Class 4 XGRiP [®] Scratchguard [®]
HEX HEAD WITH CUTTER & SEAL	HEX HEAD FLANGE	HEX HEAD FLANGE WITH SEAL	HEX HEAD FLANGE	HEX HEAD FLANGE WITH SEAL	HEX HEAD FLANGE WITH SEAL	HEX HEAD FLANGE WITH SEAL
T9PV3PU	T9PW4FH	T9PW4SH	T9PW4FS	T9PW4SS	T9PW4XH	T9PW4XS
Class 3	Type 17 Cyclone Class 4	Type 17 Class 3	Type 17 ZYP	Type 17 Class 3	Type 17 Class 3	Type 17 ZYP
HEX HEAD FLANGE	HEX HEAD WITH MULTISEAL	FLAT WAFER HEAD PHILLIPS	CSK HEAD PHILLIPS	CSK HEAD PHILLIPS	BUGLE BATTEN RIB HEAD HEX DR	BUGLE BATTEN RIB HEAD HEX DR
T9PJ3FH	T9PW4YM	T9PW3WP	T9PWYCP	T9PW3CP	T9PW3BH	T9PWYBH



Featuring
DX4TM
 &
DX3TM
 Coatings

Product Guide

DRILLX[®]

<p>Type 17 Class 3</p>  <p>WASHER HEAD HEX DR</p> <p>T9PW3GI</p>	<p>Type 17</p> <p>TYKOTE</p>  <p>WASHER HEAD HEX DR</p> <p>T9PWTGI</p>	<p>Type 17</p> <p>TYKOTE</p>  <p>WASHER HEAD TORX DR</p> <p>T9PWTGO</p>	<p>Chipboard ZYP</p>  <p>CSK RIBBED PHILLIPS</p> <p>T9PDYRP</p>	<p>Treated Pine Class 3</p>  <p>CSK SELF EMBEDDING SQUARE DR</p> <p>T9PD3SQ</p>	<p>Needle Point Class 4</p>  <p>HEX HEAD FLANGE</p> <p>T9PN4FH</p>	<p>Needle Point Class 4</p>  <p>HEX HEAD FLANGE WITH SEAL</p> <p>T9PN4SH</p>
<p>Needle Point ZYP</p>  <p>CSK RIBBED PHILLIPS</p> <p>T9PNYSP</p>	<p>Needle Point Plasterboard ZYP</p>  <p>BUGLE HEAD PHILLIPS</p> <p>T9PNYBP</p>	<p>Needle Point Class 3</p>  <p>LARGE WAFER PHILLIPS</p> <p>T9PN3AP</p>	<p>Needle Point ZYP</p>  <p>LARGE WAFER PHILLIPS</p> <p>T9PNYAP</p>	<p>Needle Point Class 3</p>  <p>FLAT HEAD PHILLIPS</p> <p>T9PN3LP</p>	<p>Needle Point ZYP</p>  <p>FLAT HEAD PHILLIPS</p> <p>T9PNYLP</p>	<p>Type 17 SS 304</p>  <p>BUGLE BATTEN 4 RIBS HEX DR</p> <p>T04WSBH</p>
<p>Type 17 SS 316</p>  <p>BUGLE BATTEN 4 RIBS SQUARE DR</p> <p>T16WSBQ</p>	<p>Type 17 SS 304</p> <p>TDX</p>  <p>TRIM HEAD 4 RIBS SQUARE DR</p> <p>T04WSTD</p>	<p>Type 17 SS 304</p>  <p>TRIM HEAD 6 RIBS SQUARE DR</p> <p>T04WSTQ</p>	<p>Needle Point SS 304</p>  <p>CSK HEAD 4 RIBS SQUARE DR</p> <p>T04NS4Q</p>	<p>Type 17 SS 304</p>  <p>CSK HEAD 6 RIBS SQUARE DR</p> <p>T04WS6Q</p>	<p>Type 17 SS 316</p>  <p>CSK SELF EMBEDDING SQUARE DR</p> <p>T16WSSQ</p>	<p>Type 17 SS 316</p>  <p>HEX HEAD FLANGE</p> <p>T16WSFH</p>
<p>Type 17 SS 316</p>  <p>HEX HEAD FLANGE WITH SEAL</p> <p>T16WSSH</p>	<p>SS 316</p> <p>jmax</p>  <p>HEX HEAD FLANGE</p> <p>T16JSFH</p>	<p>Needle Point SS 304</p>  <p>BUTTON HEAD SQUARE DR</p> <p>T04NSUQ</p>	<p>Type 17 SS 316</p>  <p>BUTTON HEAD SQUARE DR</p> <p>T16WSUQ</p>	<p>Zinc Black ANSI B18.6.4</p>  <p>CSK HEAD SELF TAPPER PHILLIPS</p> <p>T9PSVCP</p>	<p>Z/P ANSI B18.6.4</p>  <p>CSK HEAD SELF TAPPER PHILLIPS</p> <p>T9PSZCP</p>	<p>Zinc Black ANSI B18.6.4</p>  <p>CSK HEAD SELF TAPPER SQUARE DR</p> <p>T9PSVCQ</p>

Product Guide

DRILLX[®]

Featuring
DX4[™]
 &
DX3[™]
 Coatings



Z/P ANSI B18.6.4	Zinc Black ANSI B18.6.4	Z/P ANSI B18.6.4	Zinc Black ANSI B18.6.4	Z/P ANSI B18.6.4	Z/P HEC	DX4[™] Class 4 AS3566 DX3[™] Class 3 AS3566
CSK HEAD SELF TAPPER SQUARE DR T9PSZCQ	PAN HEAD SELF TAPPER PHILLIPS T9PSVPP	PAN HEAD SELF TAPPER PHILLIPS T9PSZPP	PAN HEAD SELF TAPPER SQUARE DR T9PSVPQ	PAN HEAD SELF TAPPER SQUARE DR T9PSZPQ	ELECTRICAL PANEL SCREW PHILLIPS T9PPZAP	

Bi-FIX[™]

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.

Metal SS 304 BI-Metal	Metal SS 304 BI-Metal	Metal SS 304 BI-Metal	Metal SS 304 BI-Metal
HEX HEAD T4MXHH	HEX HEAD WITH AL SEAL T4MXAH	PAN HEAD PHILLIPS T4MXPP	WAFER HEAD PHILLIPS T4MXWP
BI-Metal SS 316	s500 SS 304 BI-Metal	Metal SS 304 BI-Metal	s500 SS 304 BI-Metal
WAFER HEAD SQUARE DR T6MXWQ	HEX HEAD FLANGE T4X5FH	CSK HEAD WITH WINGS SQUARE DR T4XGXRQ	CSK HEAD WITH WINGS SQUARE DR T4XHRQ

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.

Scratchguard[®]

Improves resistance to corrosion by protecting the fastener shank from severe scratching or scouring that can occur when fixing metal roofing.

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.

TYKOTE[®]

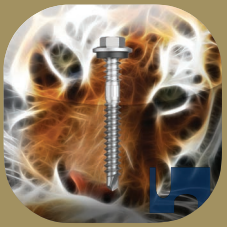
A high performance coating, specially formulated for resisting treated pine chemicals.

jmaX[™]

Engineered point for self-drilling and fixing metal plate to timber without splitting.

XGRIP[®]

XGRIP[®] holds the roofing tight against the seal, which ensures a water tight seal even when the roof is walked upon.

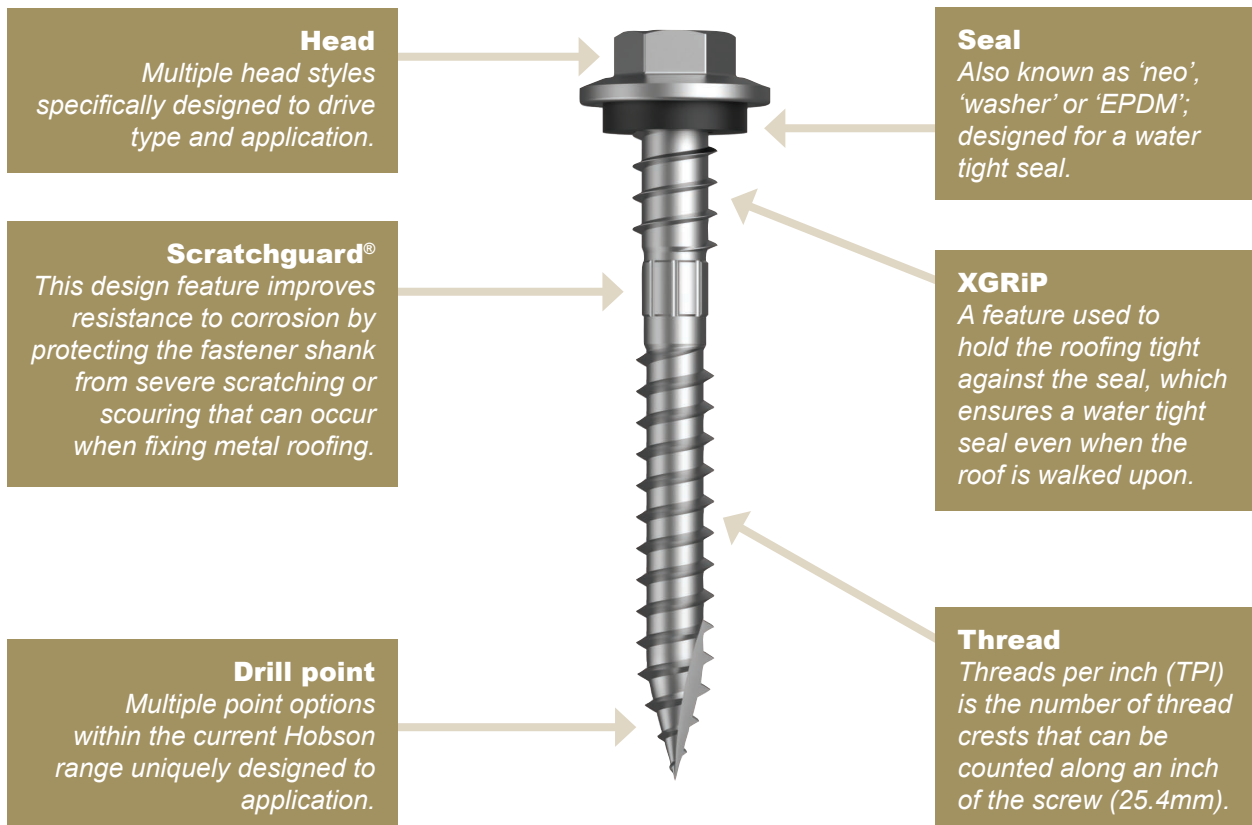


Technical info

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:



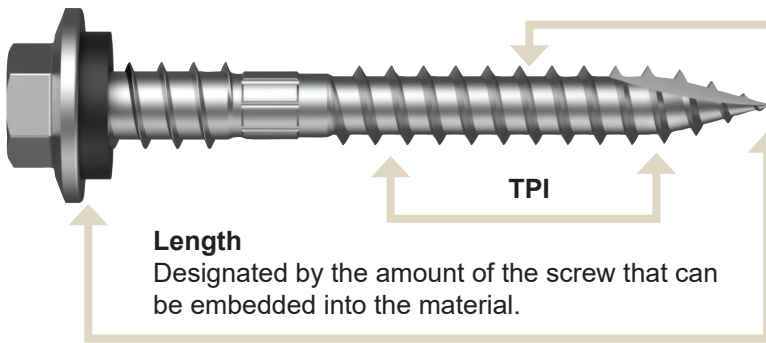
Screw Size and Type Identification

To identify the best screw for an application we require some simple information such as:

- What **materials** are being fastened to (e.g. steel or timber)?
- What is the **application** (e.g. roofing, decking, cladding)?
- What **corrosion protection** is required (e.g. internal or external)?
- What is the total **thickness** of the material(s) being fastened?
- What is the preferred **head style**?



Screw Size and Type Identification



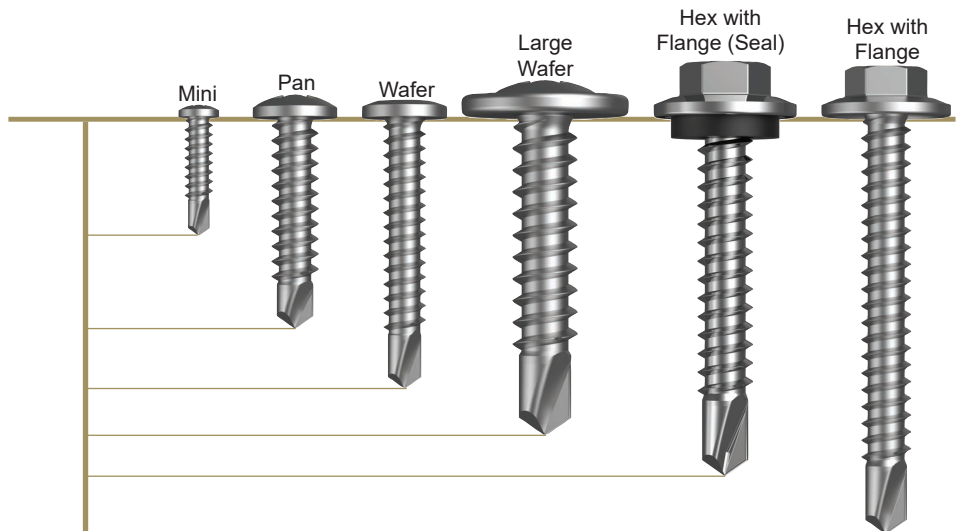
Screw Gauge

Thickness of thread major diameter.

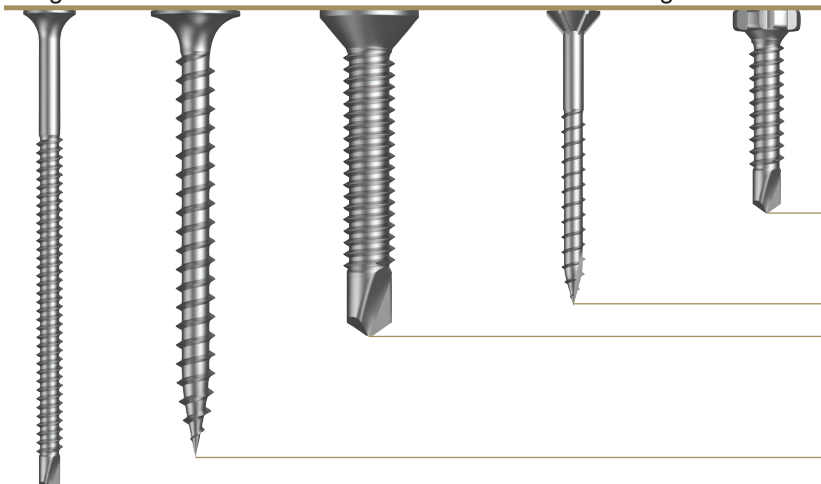
Gauge	Major Diameter
6g	3.5mm
8g	4.2mm
10g	4.8mm
12g	5.5mm
14g	6.3mm

Measuring the Length of Screws

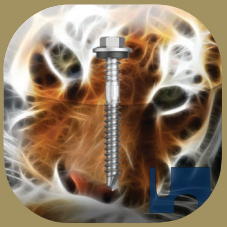
Screw types to measure from the underside of the head



Bugle Plasterboard Countersunk Self Embedding Flower



Screw types to measure from the top of the head



Technical info

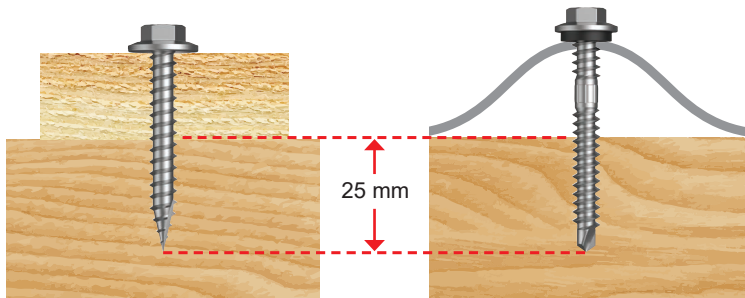
DRILLX®

Screw Embedment

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

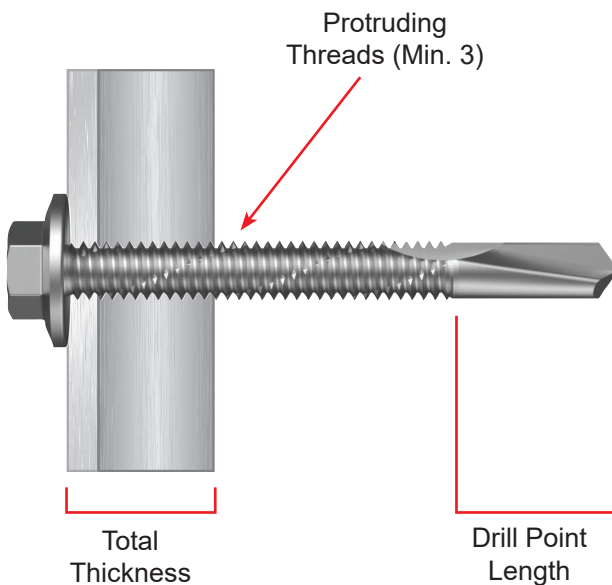
Timber

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

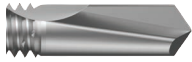
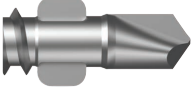



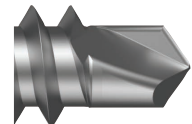



Metal

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



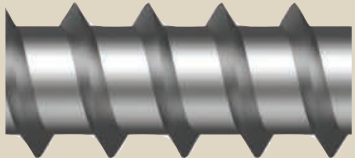
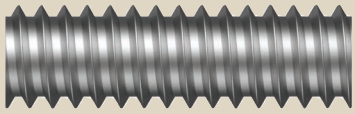
Screw Identification by Point Type:

	<p>Series 500 (S) Commonly referred to as a deep driller, this point is designed for drilling and fastening into thick steel.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Type 17 (W) This point is designed for drilling through lighter steel sections and fastening with timber.</p>
	<p>Needle Point (N) This point is used on screws of a general purpose nature.</p>
	<p>vmaX® (V) Universal drilling point, suitable for fastening steel to timber. Ideal for roofing applications.</p>
	<p>Chipboard / Treated Pine (D) This point is designed for fastening chipboard or timber.</p>



Determining Thread Type

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

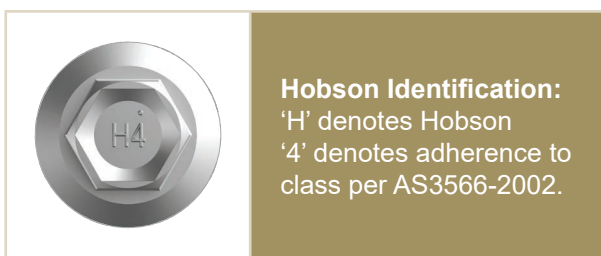
	<p>Coarse thread (up to 16TPI)</p> <p>Otherwise known as space threads, screws with a <i>coarse thread</i> are generally used for timber applications and for lighter steel sections.</p> <ul style="list-style-type: none"> → Simple rule of thumb – coarse thread secures lighter steel sections. → Typical applications in pre-engineered steel buildings include: cladding, framing and roofing. → Common sizes include 10g-16TPI; 12g-14TPI and 14g-10TPI.
	<p>Fine thread (over 16TPI)</p> <p>Generally known as <i>metal threads</i>, these screws are only used in steel applications and particularly thicker steels from 2mm upward.</p> <ul style="list-style-type: none"> → 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.

Identifying Head Stamping












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

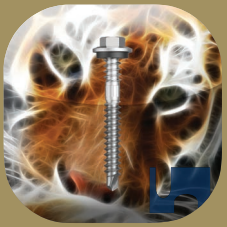
The manufacturer's identification mark and/or trademark shall be marked on the heads of the following screws:

- (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		Torx
	Phillips		Post Torx
	Combi Slot Phillips		Eye
	Square		Pozi
	Hex		Trilobular
	Post Hex		



Product Guide

Rivets, Drive Bits & Washers

<p>SS 316</p> <p>DOME HEAD OPEN RIVET</p> <p>R1673OLL</p>	<p>5052 AL Steel ZP</p> <p>DOME HEAD OPEN RIVET</p> <p>R9P73OAS</p>	<p>Steel ZP</p> <p>DOME HEAD OPEN RIVET</p> <p>R9P73OSS</p>	<p>Monel Steel ZP</p> <p>DOME HEAD OPEN RIVET</p> <p>R9P73OMS</p>	<p>5052 AL Steel ZP</p> <p>DOME HEAD OPEN RIVET LARGE FLANGE</p> <p>R9P73LAS</p>	<p>5052 AL Steel ZP</p> <p>COUNTERSUNK OPEN RIVET</p> <p>R9P72OAS</p>	<p>5052 AL Steel ZP</p> <p>DOME HEAD MULTI-GRIP RIVET</p> <p>R9P73MAS</p>																											
<p>5052 AL Steel PHOS</p> <p>DOME HEAD SEALED RIVET</p> <p>R9P73TAP</p>	<p>Copper Steel PHOS</p> <p>DOME HEAD SEALED RIVET</p> <p>R9P73TCP</p>	<p>5052 Aluminium</p> <p>DOME TRIFORM RIVET WITH WASHER</p> <p>R9P73WAA</p>	<table border="1"> <thead> <tr> <th>Shell Material</th> <th>Stem (mandrel) Material</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Aluminium 5052</td> <td>Steel Zinc Plated</td> <td>AS</td> </tr> <tr> <td>Aluminium 5056</td> <td>Steel Zinc Plated</td> <td>6S</td> </tr> <tr> <td>Steel</td> <td>Steel Zinc Plated</td> <td>SS</td> </tr> <tr> <td>Aluminium 5052</td> <td>Steel Phosphated</td> <td>AP</td> </tr> <tr> <td>Stainless Steel</td> <td>Stainless Steel</td> <td>STST (LL)</td> </tr> <tr> <td>Monel</td> <td>Steel Zinc Plated</td> <td>MS</td> </tr> <tr> <td>Copper</td> <td>Steel Phosphated</td> <td>CP</td> </tr> <tr> <td>Aluminium</td> <td>Aluminium</td> <td>AA</td> </tr> </tbody> </table>				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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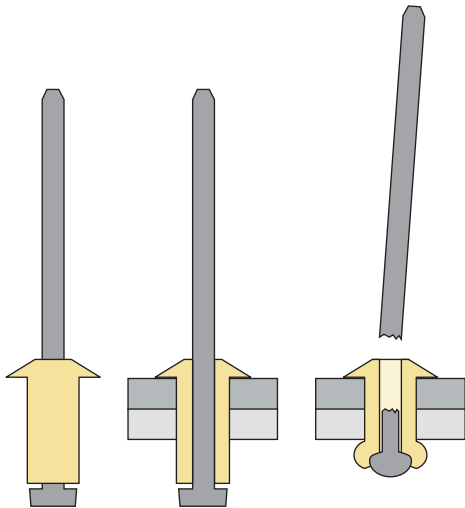
Technical info

Rivets



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.



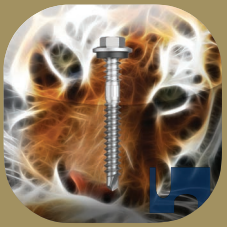
Head

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.

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	



Technical info

Paint Heads

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)	PLANTATION® (PL)
BLUE RIDGE® (BR)	IRONSTONE® (IS)	PRIMROSE™ (PR)
BUSHLAND® (BU)	JASPER® (JA)	SANDBANK® (SA)
CLASSIC CREAM™ (CC)	LOFT® (LO)	SHALE GREY™ (SG)
COTTAGE GREEN® (CG)	MANGROVE® (MA)	STONE® (ST)
COVE® (CO)	MANOR RED® (MR)	SURFMIST® (SM)
DEEP OCEAN® (DO)	MONUMENT® (MO)	TERRAIN® (TE)
DOVE WHITE™ (DW)	NIGHT SKY® (NS)	WALLABY® (WA)
DUNE® (DU)	PALE EUCALYPT® (PE)	WILDERNESS® (WI)
EVENING HAZE® (EH)	PALE TERRACOTTA™ (PT)	WINDSPRAY® (WN)
GULLY® (GU)	PAPERBARK® (PA)	WOODLAND GREY® (WG)

○ Discontinued Colours - Screws painted upon request

*Colours are representative only

Colorbond® is a registered trademark of BlueScope Steel Limited.

Did You Know

about our...



HOBSON PRESS

New and featured products

The screenshot shows the Hobson Engineering website homepage. At the top left is the Hobson Engineering logo. A navigation menu includes links for HOME, BRANDS, PRODUCTS, COMPANY, and WHERE TO BUY. A large banner features the text "You can find them all HERE" with an arrow pointing right. To the right of the banner are sections for "HOBSON ARTICLES" (Useful articles) and "HOBSON NEWS" (Newsletter archive), both with "Did You Know about our ..." sub-headers. A search box is located in the top right corner. Below the banner are three columns: "Brands" (listing Bumax®, Schnorr®, Conxtract®, Nord-Lock®, and Hobson®), "Products" (listing All Products, High-Tensile, Structural, DRILLX® Screws, Commercial, Stainless Hardware, and Washers), and "Technical" (listing Technical Search, Breaking Strength, Structural Installation, Anti-Vibration Paper, Pitch Table, Schnorr® Benefits, and Thin Lock Nut Install). On the right side, there is an "Innovation" section featuring logos for SOKO, BUMAX (THE WORLD'S STRONGEST STAINLESS STEEL BOLT), and SCHNORR (DISC SPRING ENGINEERING). At the bottom right of the screenshot, there are links for Contact Us, Terms & Conditions, and Security & Privacy.

A grid of 32 product category tiles, each with an image and a label:

- Self Tappers Zinc Black Passivate
- Machine Screws
- Cone Lock Nuts
- Square Nuts
- Security Trilobular Drive Screws
- Stainless Steel Split Pins
- Stainless Steel Hinges
- Type 17 Bugle Batten Screws
- Round Spacer
- Brass Hex Nuts
- XBolt® Vertical Hangers
- Heavy Duty Post Support
- HOBSON NEWS Clean Holes in Anchoring
- Stainless Steel Triple-Grips
- Stainless Steel Multi-Grip
- Stainless Steel Joist Hanger
- Left Hand Threaded Hex Nuts
- Socket Head Cap Screw
- Pilot Point Self Tappers
- Hex Set Screws HDG Class 8.8
- Imperial Sampson® Washers
- Slotted Angle Bracket
- Security Specials
- Reduced Head Framing Screw
- Type 17 Washer Head TORX
- Type 17 Washer Head iHEX
- Purlin Flange Bolt Kit
- Suspension Anchors
- Fascia Purlins
- M10 Threaded Rod Cutter
- Nylon Universal Wall Plugs
- Timber Insert CSK Hex Socket

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