

**ALFAHD STEEL
FOR
IMPORT & EXPORT**



Stainless Steel Fasteners & Fittings



Bolts, Threaded Rod, Nuts, Washers 24 - 54

Socket Screws 57 - 68

Machine Screws 71 - 83

Self Tapping Screws 85 - 96

Screws for Timber & Coach Screws 99 - 111

Self Drilling Screws for Metal 113 - 115

Security Screws 117 - 123

Masonry Anchors 125 - 135

Nails & Staples 137 - 139

Rivets & Threaded Inserts 141 - 147

Hinges & Marine Hinges 149 - 156

Hose Clips, Cable Ties, Strapping 159 - 161

Circlips, Pins, Recoils, Grease Nipples, Shaft Collars 163 - 175

Pipe & Tube Fittings, BSP Valves 178 - 191

Pipe & Tube Clamps, U Bolts, Saddles 193 - 199

Latches, Padbolts, Antiluce, Ratchets 201 - 204

A-JUSTA-FOOT – Pedestal Foot 208 - 213




















Marine Hardware, Wire Rigging Fittings 217 - 266

Wire Rope, Chain, and Chain Fittings 269 - 272

Architectural Hardware & Fittings 275 - 280



















Drill Bits, Driver Tips, Tools 283 - 291

Bolts, Threaded Rod, Nuts, Washers





Hex Bolts & Set Screws – Metric – Metric Higher Tensile Bumax – UNC & BSW (1/2") – UNF		24-31 24-26 27 28-29 31
Higher Tensile Bumax Fasteners – Metric		27
Coach Bolts – Metric – UNC		32-33 32 33
Joint Connector Bolts (JCB), Nuts, Cross-Dowels		33
Threaded Rod – Metric (1, 2, 3 mtr) – UNC & BSW (1/2") – UNF		34-36 34 36 36
Threaded Studs – Metric (<1m)		35
B8/B8M Studs & Nuts for the Petrochemical Industry		37
Hex Nuts – Metric – Metric Fine – Left Hand Metric – UNC & BSW – UNF		38-43 38 40 40 42 43
Nyloc Nuts – Metric – UNC & BSW – UNF		38-43 38 42 43
Lock (Jam) Nuts – Metric – Metric Fine – Left Hand Metric – UNC – UNF		38-43 38 40 41 42 43
All Stainless Locking Nuts – Metric		38
Flange Nyloc Nuts – Metric		38
Dome Nuts – 2-Piece (Polished) – Metric – UNC		39,43 39 43
Dome Nuts – 1-Piece – Metric – UNC – UNF		39,43 39 43 43
Wing Nuts – Metric – UNC		39,43 39 43
Hank Bush Nuts – Metric – UNC		39,43 39 43
Flange Nuts – Metric		39
Coupling Nuts – Metric		39
Tee Nuts – Metric – UNC		44

continued on next page...










Bolts, Threaded Rod, Nuts, Washers cont.

Square Nuts – Metric & UNC – Metric – UNC		44
Threaded Wood Inserts		44
Csk Barrel Nuts		45
Truss Head Phillips Barrel Nuts		46
Pan Head Skt Barrel Nuts		46
JCB (for Joint Connector Bolt) Pan Socket Barrel Nut		46
Round/Flat Washers – Metric – Imperial		47-48 47 48
Square Washers – Metric		49
Spring Washers – Metric – Imperial		50
Internal/External Tooth Lock Washers		51
Belleville Washers		51
Nord-Lock Bolt Securing System		52
Push Nuts		52
Cup Washers		53
Solid Cup Washers		53
Neo Backed Stainless Washers		53
EPDM Washers		53-54
Nylon Washers – White		54











Socket Screws

Hex Socket Cap Screws – Metric – UNC – UNF		57-61 57-59 60 61
Csk Socket Screws – Metric – UNC – UNF		62-64 62-63 64 64
Button Head Socket Screws – Metric – UNC – UNF		65-66 65 66 66
Hex Socket Set Screws (Grub Screws) – Metric – UNC – UNF		67-68 67 68 68

Machine Screws







Csk Slotted – Metric – UNC & BSW		71,74 71 74
Csk Phillips – Metric – UNC		73,75 73 75
Pan Head Slotted – Metric – UNC – UNF		76-80 76 79 80
Pan Head Phillips – Metric – UNC – UNF		77-80 77 79 80
Round Head Slotted – BSW		78
Truss Head Phillips (Gutter Bolts) – UNC		80
Cheese Head Slotted – Metric		81
Raised Csk – Metric		82
Wing Screws – Metric		83

Self Tapping Screws




















Csk Self Tappers – Square Drive – Square Drive, T17 Tip – Phillips Drive – Slotted Drive		85-87 85 85 86 87
Pan Head Self Tappers – Square Drive – Square Drive, T17 Tip – Phillips Drive – Slotted Drive		88-90 88 89 89 90
Truss Head Self Tappers – Phillips Drive		91
Cap Head Self Tappers – Socket Drive		91
Hex Head Self Tappers		92
Raised Csk Self Tappers – Phillips Drive – Slotted Drive		92-93 92 93
Csk Self Tappers – T25 Tip		93
Pan Self Tappers – T25 Tip		94
Csk Trunc Self Tappers – SQ Dv (some black)		94
Csk Trunc Self Tappers – SQ Dv, T17 Tip		94

continued on next page...








Self Tapping Screws cont.

Pan Self Tapper – SQ Dv, Lead Pt, Thread Cutter		95
Csk Self Tapper – SQ Dv, with Undersized Head		95
Raised Csk Truncated Self Tappers – SQ#1, Type B		95
Csk Self Driller – SQ Dv (most black)		96
Csk Trunc Self Driller – SQ Dv, Black		96
U Drive Screws		96





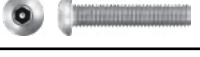




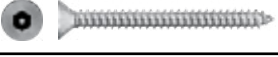




Screws for Timber & Coach Screws

Coach Screws – Metric – Imperial		99-100 99 100
Csk Coach Screws – Socket Drive		100
Lagscrews		101-102
Stainless Screw Options for Decking		103
AM Plus Decking Screws		105
Hardwood Decking Screw – Star Drive, Self Drilling		106
Hardwood Decking Screw – Star Drive, T17 Tip		106
Hardwood Decking Screw – Star Drive, Spear Tip, Self Drilling		106
Cylinder Head Decking Screw – Star Drive		106
Coarse Thread Screws – Star Drive, Csk Ribbed, T17 Tip		107
Wide Board Decking Screw – Csk Ribbed, Skt Drive, Sq Thread, T17		107
Wide Board Decking Screw – Csk Ribbed, Skt Drive, T17		107
Bugle Batten Screws – Skt Drive, Ribbed, T17 Tip		108
Bugle Head Decking Screw – Sq Drive, T17 Tip		108
Coarse Thread Screws – Sq Drive, Ribbed, T17 Tip		109
Coarse Thread Screws – Sq Drive, Pan, T17 Tip		110
Hex Washer Face – T17 Tip		110
Csk Plastite Screws – Phillips Dv		110
Pan Plastite Screws – Phillips Dv		111
Csk Woodscrews – Slotted		111















Self Drilling Screws for Metal

Self Drillers – HWF – Hardtec		113
Self Drillers – Wafer, Sq/Phil Drive		113
Self Drillers – Csk, Sq/Phil Drive		114
Csk Wingtek Self Drillers – Phillips/Square Drive		114
Self Drillers – Csk, Sq Drive, Black		114
Csk Trunc Self Driller – SQ Dv, Black		114
Self Drillers – Pan, Sq/Phil Drive		115








Security Screws

Csk Post 6 Lobe Machine Screws		117
Csk Snake Eye Machine Screws		117
Csk Post Socket Machine Screws		118
Button Post 6 Lobe Machine Screws		118
Button Post Socket Machine Screws		119
Pan Snake Eye Machine Screws		119
Shear Nuts		119
Csk Post 6 Lobe Self Tapping Screws		120
Csk Snake Eye Self Tapping Screws		120
Csk Post Socket Self Tapping Screws		121
Button Post 6 Lobe Self Tapping Screws		121
Pan, Snake Eye Self Tapping Screws		122
Pan One Way Self Tapping Screws		122
Security Bits & Keys		123















Masonry Anchors

fischer FBN II Anchor Bolts		125
fischer FBS II Concrete Screw		126-127
Sleeve Anchors		127
Flush Head Anchors		128
Wedge Anchors		128
Chemical Anchor Studs		128
fischer Internal Threaded Anchor		129
Drop-In Anchors		130
Setting Tool for Drop-In Anchors		130
Mushroom/Csk Head Spikes		130
fischer SXR Screw - Torx Drive/Csk		131
fischer SXR Screw - Torx Drive/HWF		132
Chemical Anchor Cartridges		133-134
Chemical Anchor Accessories		135










Nails & Staples

Flat Head Nails		137
Jolt Head Nails		137
Rose Head Nails		138
Pentagon Head Nails		138
Csk Decking Nails		139
Bracket & Product Nails		139
Panel Pin Nails		139

Rivets & Threaded Inserts

Rivets – Truss & Csk		141
Rivets – White & Black		142
Rivets – Large Flange		142
Long Arm Riveter Tool		142
Rimless Threaded Insert – Stainless – Aluminium		143-145 143 145
Flanged Threaded Insert – Stainless – Aluminium		143-145 143 145
Rimless Sealed Threaded Insert – Stainless		144
Flanged Sealed Threaded Insert – Stainless		144
Flanged Sealed Threaded Insert – Knurled – Stainless		145
Rimless Hex Threaded Insert – Stainless		146
Flanged Hex Threaded Insert – Stainless		146
A03 Threaded Insert Tool		147
Nylon Threaded Insert with Aluminium Thread		147
Threaded Wood Insert		147





















Hinges & Marine Hinges

Butt Hinges		149
Radius Hinges		149
Flush Fit Hinges		149
Piano Hinge		150
Strap Hinges		150
Strap Hinges – Mirror Finish		150
Tee Hinges		151
Tee Hinges – Mirror Finish		151
Marine Hinges – Polished		152-156




















Hose Clips, Cable Ties, Strapping

Perforated Hose Clips		159
Non-Perforated Hose Clips		159
Heavy Duty Hose Clamps		160
1 Ear Hose Clamp		160
Cable Ties		161
Strapping & Buckles		161

Circlips, Pins, Recoils, Grease Nipples, Shaft Collars










Internal Circlips		163-164
External Circlips		165-166
E-Type Circlips		167
R Clips		167
Retaining Clips		168
Split Pins		168
Dowel Pins		169
Quick Release Pins		169
Lynch Pins		169
Antiluce – With & without shank		169
Cotter Rings		170
Split Rings		170
Shaft Collars		170
Tension Pins (Roll Pins) – Imperial		171
Skew Proof Wave Spring Pins – Metric		172
Recoils – Metric – Imperial		173-174
Recoil Thread Repair Kits – Metric – UNC		173-174
Grease Nipples		174
Key Steel – Metric – Imperial		175
Key Steel – Rectangular – Metric		175

Pipe & Tube Fittings, BSP Valves















RJT Male Part		178
RJT Slotted Nut		178
RJT Hex Nut		178
RJT Sanitary Welder Liner		178
RJT Pressed Blank Liner		178
RJT Step Sanitary Seal – Nitrile – EPDM		178
Tri-Clamp – Tri Clover		178
Tri-Clamp – Short Ferrule		178
Tri-Clamp – Medium Ferrule		178
Tri-Clamp – Long Ferrule		178
Tri-Clamp – Expanding Ferrule		178
Tri-Clamp – Blank Liner		178
45° Bend (UNI)		179
90° Bend (UNI)		179
180° Bend		179
Concentric Reducers		180
Eccentric Reducers		180
Equal Tees		181
Pulled Tube Tees		181

continued on next page...









Pipe & Tube Fittings, BSP Valves cont.

<p>BSP Fittings</p> <ul style="list-style-type: none"> - Barrell Nipples - Hex Nipples - Weld Nipples - Reducing Weld Nipples to Tube - Crosses - Back Nuts - Round Caps - Hex Caps - 45° Elbows - 90° Elbows - Street Elbows - Equal Tees - Reducing Bushes - Reducing Hex Nipples - Reducing Sockets - Pressure Plugs - Square Plugs - Hex Plugs - Sockets - Unions - Flat Face Unions w/pdf Seal 		<p>182-186</p> <p>182 182 182 182 182 182 183 183 183 183 183 183 185 185 185 186 186 186 186 186 186</p>
<p>Negative Bush Adaptor</p> <ul style="list-style-type: none"> - NPT X BSP - BSP X BSP 		<p>183-184</p>
<p>BSP x Tri-Clamp Adaptor</p>		<p>184</p>
<p>BSP Nippling Tube</p>		<p>186</p>
<p>BSP Hose Tails</p> <ul style="list-style-type: none"> - Male Hose Tails - Female Hose Tails 		<p>187</p>
<p>BSP Ball Valves</p> <ul style="list-style-type: none"> - Mini - 1 Piece - 2 Piece - 3 Piece 		<p>188</p>
<p>E Series Butterfly Valve</p> <ul style="list-style-type: none"> - Butterfly Valve - PTFE Seal 		<p>189</p>
<p>NPT Fittings</p> <ul style="list-style-type: none"> - Weld Nipples - Half Sockets - Pressure Plugs - Hex Nipples - Full Sockets - Barrel Nipples - Hex Plugs 		<p>190</p>
<p>Camlock Fittings</p> <ul style="list-style-type: none"> - Type A, B, C, D, E, F, DC & DP - Spare Parts Set - Nitrile Rubber Gasket - A-Butt Welds & D-Butt Welds 		<p>191</p>












Pipe & Tube Clamps, U Bolts, Saddles

Pipe Clamps		193
Pipe Clamps with M10 Boss		193
Tube Clamps		193
Tube Clamps with M10 Boss		194
Saddle Clamps		194
Saddle Clamps with M10 Boss		194
Pipe Munson Rings with Boss		194
Tube Munson Rings with Boss		195
Munson Ring Backing Plate with Boss		195
Stainless Steel Down Pipe Wall Clamps		196
Tube U-Bolts – Metric Thread		197
Pipe U-Bolts – Metric Thread – UNC Thread		197-198 197 198
Tube Saddles – Metric		199
Half Tube Saddles – Metric		199



























Latches, Padbolts, Antiluce, Ratchets

Toggle Latches – Wide range available		201
Toggle Catches		202
Padbolts		202
Padbolts – Spring Loaded		203
Barrel Bolts		203
Gate Catch & Latch		203
Ratchet Tie Downs		204
Handles		204





























A-JUSTA-FOOT – Pedestal Foot

Ball Jointed 21 Series (20° adj.) – 304 Stud/Nut		208
Fixed 41 Series – 304 Stud/Nut		208
Bolt Down 31 Series (20° adj.) – 304 Stud/Nut		209
Square Plug – No Hole		209
Square Threaded Tube End 11 Series		210
Round Threaded Tube End 81 Series		211
HDA Heavy Duty Boltdown Series – 304 SS 221 Series (10° adj.) 231 Series (10° adj.)		211
HD Heavy Duty Boltdown Series – 304 SS 121 Series (55° adj.) 131 Series (55° adj.)		212
Heavy Duty Slimline (55° adj.)		213
Heavy Duty Riveted (30° adj.)		213
CF Series (Fixed)		213

Marine Hardware, Wire Rigging Fittings






















D Shackles		217-220
Twist Shackles		220
Bow Shackles		221
Double Bar D Shackles – With Captive Pin		221
Halyard Shackle – With Captive Pin		221
Shackle Keys		222
Canopy Fittings – Hand Polished		223
Hammer Lock Pin for Jaw Turnbuckles		226
Eye/Eye Turnbuckles		224
Hook/Eye Turnbuckles		227
Jaw/Jaw Pipe Turnbuckles		225
Mini Jaw/Jaw Pipe Turnbuckles		226
Hook/Eye Pipe Turnbuckles		227
Pipe Turnbuckles – Small forged eyes		228
Jaw/Swage Pipe Turnbuckles		228
Toggle/Swage Pipe Turnbuckles		229
Fork Terminals		229
Swivel Toggle Terminals		230
Eye Terminal		230
Swage Studs		231
Swage Stud Lagscrews		231
Wire Rope Thimbles		232
Crimps for Wire Rope – Copper & Nickel Plated Copper		232
Wire Rope Grips		233
Wire Cross Over Clamp		233
Eye Nuts		234

Marine Hardware, Wire Rigging Fittings cont.

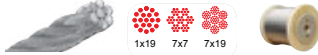





Eye Bolts		234-236
Wire Stand Offs		237
Eye Screws		237-238
Cup & Screw Hooks		238
Cast Ring Screw		239
Round Eye Pads		239-240
Rectangular Eye Pads		240
Diamond Eye Pads		241
Folding Eye Pads		242
Oval Eye Pads		243
Eye Straps		243-244
Cast Spring Snaps		244
Spring Hooks		244-245
Double Locking Spring Hooks		245
Spring Snaps		246
Swivel Snap Shackles		247
Fixed Snap Shackles		247
Swivel Snap Shackles – With Clevis Pin		247
Rope Sheet Snap Shackles (J-Lock)		248
Pelican Hooks		248
Eye Snaps – Rigid/Swivel		248-249
Swivel Eye Bolts		249
Jaw/Jaw Swivels		249-250
Jaw/Eye Swivels		250
Eye/Eye Swivels		250
Rings – Dee, Triangle, Round		251-252
Dee Rings with Thimble		251
Bar D Thimble		252

continued on next page

Marine Hardware, Wire Rigging Fittings cont.

Clew Rings with Bar		253
Slides		253
Shouldered U Bolts – With 2 Keepers and Nuts		253
U Bolts – With Keepers and Nut		254
S Hooks		254
Eye Grab Hooks		255
Eye Slip Hooks – With Safety Latch		255
Clevis Slip Hook		255
Cabin Hook – Polished		256
Cover Latch – Polished		256
Cabin & Deck Hardware		257-258
Lift Rings & Handles		259
Cabinet Latch – Round, Drop T		260
Cleats – Hollow Base, Rope, Pull Up, Low Flat		261-263
Skene Type Fairleads – Hand Polished		261
Pulley Blocks – Type G, Type K, Type Q		263-264
Mame Blocks – Single Wheels – Double Wheels		264
Double Heavy Block		265
Taruma Blocks		265
Seine Blocks – With Safety Latch		265
Rod Holders – Polished		266
















Wire Rope, Chain, and Chain Fittings

Wire Rope 316		269
Chain		271
Quick Link		271
Connecting Link		271
C Ring		272
Wire Rope Thimbles		272




















Architectural Hardware & Fittings

Wire Balustrading Systems		275-278
Handrail Tube Connectors		279
Handrail Support Fittings		280

Drill Bits, Driver Tips, Tools

















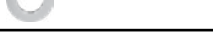

Jobber Drill Bits		283
Double End Panel Drill Bit		283
Masonry Drill Bit Range		284
SDS Plus Zentro 4-Cutter		284
Alpha Drill Sets		285
3 & 5 Flute Countersinking Bits		286
Quick Cut Decking Csk Drill Bits		286
Driver Tips		287
Nutsetter for HWF Screws		287
Allen Keys		288
Security Bits		288
1/2 Impact Sockets		289
Crimping Pliers		290
Hex Swage Tool		290
Wire Cutters		291

Bolts, Threaded Rod, Nuts, Washers

Hex Bolts & Set Screws – Metric – Metric Higher Tensile Bumax – UNC & BSW (1/2") – UNF		24-31 24-26 27 28-29 31
Higher Tensile Fasteners – Metric		27
Coach Bolts – Metric – UNC		32-33 32 33
Joint Connector Bolts (JCB), Nuts, Cross-Dowels		33
Threaded Rod – Metric (1, 2, 3 mtr) – UNC & BSW (1/2") – UNF		34-36 34 36 36
Threaded Studs – Metric (<1m)		35
B8/B8M Studs & Nuts for the Petrochemical Industry		37
Hex Nuts – Metric – Metric Fine – Left Hand Metric – UNC & BSW – UNF		38-43 38 40 40 42 43
Nyloc Nuts – Metric – UNC & BSW – UNF		38-43 38 42 43
Lock (Jam) Nuts – Metric – Metric Fine – Left Hand Metric – UNC – UNF		38-43 38 40 41 42 43
All Stainless Locking Nuts – Metric		38
Flange Nyloc Nuts – Metric		38
Dome Nuts – 2-Piece (Polished) – Metric – UNC		39,43 39 43
Dome Nuts – 1-Piece – Metric – UNC – UNF		39,43 39 43 43
Wing Nuts – Metric – UNC		39,43 39 43
Hank Bush Nuts – Metric – UNC		39,43 39 43
Flange Nuts – Metric		39
Coupling Nuts – Metric		39
Tee Nuts – Metric – UNC		44

continued on next page...

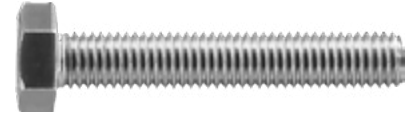
Bolts, Threaded Rod, Nuts, Washers cont.

Square Nuts – Metric & UNC – Metric – UNC		44
Threaded Wood Inserts		44
Csk Barrel Nuts		45
Truss Head Phillips Barrel Nuts		46
Pan Head Skt Barrel Nuts		46
JCB (for Joint Connector Bolt) Pan Socket Barrel Nut		46
Round/Flat Washers – Metric – Imperial		47-48 47 48
Square Washers – Metric		49
Spring Washers – Metric – Imperial		50
Internal/External Tooth Lock Washers		51
Belleville Washers		51
Nord-Lock Bolt Securing System		52
Push Nuts		52
Cup Washers		53
Solid Cup Washers		53
Neo Backed Stainless Washers		53
EPDM Washers		53-54
Nylon Washers – White		54

Hex Bolts & Set Screws – Metric



B – Bolt (DIN931)



S – Set Screw (DIN933)
Fully Threaded

304 SS **316 SS**

M3	304 SS	316 SS
M3 X 6		S
M3 X 8		S
M3 X 10		S
M3 X 12		S
M3 X 16		S
M3 X 20		S
M3 X 25		S
M3 X 30		S

M4	304 SS	316 SS
M4 X 6		S
M4 X 8	S	S
M4 X 10	S	S
M4 X 12	S	S
M4 X 16	S	S
M4 X 20	S	S
M4 X 25	S	S
M4 X 30	S	S
M4 X 35		S
M4 X 40		S
M4 X 50		S
M4 X 60		S

M5	304 SS	316 SS
M5 X 8	S	S
M5 X 10	S	S
M5 X 12	S	S
M5 X 16	S	S
M5 X 20	S	S
M5 X 25	S	S
M5 X 30	S	S
M5 X 35	S	S
M5 X 40	S	S
M5 X 45	B	
M5 X 50	S	S
M5 X 60	B	S

M5 X 70		S
M5 X 80		S

M6	304 SS	316 SS
M6 X 8	S	
M6 X 10	S	S
M6 X 12	S	S
M6 X 16	S	S
M6 X 20	S	S
M6 X 25	S	S
M6 X 30	B,S	B,S
M6 X 35	B,S	B,S
M6 X 40	B,S	B,S
M6 X 45	B,S	B,S
M6 X 50	B,S	B,S
M6 X 55	B	B
M6 X 60	B,S	B,S
M6 X 65	B,S	B
M6 X 70	B	B,S
M6 X 75	B,S	B
M6 X 80	B	B,S
M6 X 90	B	B
M6 X 100	B	B,S
M6 X 110	B	B
M6 X 120	B	B
M6 X 130	B	B
M6 X 150		B

M8	304 SS	316 SS
M8 X 10	S	
M8 X 12	S	S
M8 X 16	S	S
M8 X 20	S	S
M8 X 25	S	S
M8 X 30	B,S	S
M8 X 35	B,S	B,S
M8 X 40	B,S	B,S

M8 X 45	B,S	B,S
M8 X 50	B,S	B,S
M8 X 55	B,S	B
M8 X 60	B,S	B,S
M8 X 65	B,S	B,S
M8 X 70	B,S	B,S
M8 X 75	B	B,S
M8 X 80	B,S	B,S
M8 X 90	B	B
M8 X 100	B,S	B,S
M8 X 110	B,S	B,S
M8 X 120	B,S	B,S
M8 X 130	B	B
M8 X 140	B	B
M8 X 150	B	B
M8 X 160	B	B
M8 X 170		B
M8 X 180		B
M8 X 200		B
M8 X 220	B	

M10	304 SS	316 SS
M10 X 12		S
M10 X 16	S	S
M10 X 20	S	S
M10 X 25	S	S
M10 X 30	S	S
M10 X 35	S	S
M10 X 40	B,S	B,S
M10 X 45	B,S	B,S
M10 X 50	B,S	B,S
M10 X 55	B,S	B
M10 X 60	B,S	B,S
M10 X 65	B,S	B,S
M10 X 70	B,S	B,S
M10 X 75	B,S	B,S

continued on next page...

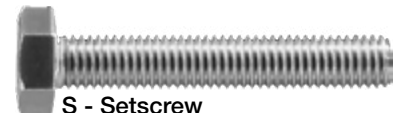
	M4	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24	M27	M30	M33	M36
Hex Head Size A/F (mm)	7	8	10	13	17	19	22	24	30	34	36	41	46	49	54.6
Pitch (mm)	0.7	0.8	1.0	1.24	1.5	1.75	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0
Hex Head Height (mm)	2.8	3.5	4.0	5.3	6.4	7.5	8.8	10.0	12.5	14.0	15.0	18.0	18.7	21	23
Thread Length ≤ 125mm	Full	16	18	22	26	30	34	38	46	50	54	60	66	72	78
Thread Length ≥ 125mm	Full	Full	24	28	32	36	40	44	52	56	66	66	72	78	84

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Bolts



B - Bolt



S - Setscrew

Heads may have head markings.
Nuts sold separately (p.38).

304 SS **316 SS**

M10	304 SS	316 SS
M10 X 80	B,S	B,S
M10 X 90	B,S	B,S
M10 X 100	B,S	B,S
M10 X 110	B,S	B
M10 X 120	B	B,S
M10 X 130	B	B,S
M10 X 140	B	B,S
M10 X 150	B	B,S
M10 X 160	B,S	B
M10 X 170		B
M10 X 180	B	B
M10 X 200		B
M10 X 210		B
M10 X 220		B
M10 X 230		B
M10 X 240		B

M12	304 SS	316 SS
M12 X 20	S	S
M12 X 25	S	S
M12 X 30	S	S
M12 X 35	S	S
M12 X 40	B,S	B,S
M12 X 45	B,S	B,S
M12 X 50	B,S	B,S
M12 X 55	B	B
M12 X 60	B,S	B,S
M12 X 65	B,S	B,S
M12 X 70	B,S	B,S
M12 X 75	B,S	B,S
M12 X 80	B,S	B,S
M12 X 85	B	
M12 X 90	B,S	B,S
M12 X 100	B,S	B,S
M12 X 110	B	B,S
M12 X 120	B,S	B,S

M12 X 130	B	B,S
M12 X 140	B	B
M12 X 150	B	B,S
M12 X 160	B	B
M12 X 170	B	B
M12 X 180	B	B
M12 X 190		B
M12 X 200	B	B
M12 X 210		B
M12 X 220	B	B
M12 X 230	B	
M12 X 240	B	B
M12 X 250	B	B
M12 X 260	B	B
M12 X 280	B	B
M12 X 300	B	B
M12 X 350		B
M12 X 400		B
M12 X 500		S
M12 X 600		S

M14	304 SS	316 SS
M14 X 25		S
M14 X 30		S
M14 X 35		S
M14 X 40	S	S
M14 X 50	S	B,S
M14 X 60	B,S	B,S
M14 X 70		B
M14 X 80	B	B,S
M14 X 90		B,S
M14 X 100		B,S
M14 X 120		B
M14 X 140		B
M14 X 150		B

M16	304 SS	316 SS
M16 X 25	S	S
M16 X 30	S	S
M16 X 35	S	S
M16 X 40	S	S
M16 X 45	S	S
M16 X 50	B,S	B,S
M16 X 55	B,S	B
M16 X 60	B,S	B,S
M16 X 65	B,S	B,S
M16 X 70	B,S	B,S
M16 X 75	B,S	B,S
M16 X 80	B	B,S
M16 X 90	B	B
M16 X 100	B,S	B,S
M16 X 110	B	B
M16 X 120	B,S	B
M16 X 130	B,S	B,S
M16 X 140	B,S	B
M16 X 150	B	B
M16 X 160	B	B
M16 X 170		B
M16 X 180	B	B
M16 X 190		B,S
M16 X 200	B	B,S
M16 X 220		B
M16 X 230		B
M16 X 240		B
M16 X 250		B
M16 X 260		B
M16 X 270		B
M16 X 280	B	B
M16 X 300	B	B
M16 X 350		B
M16 X 400		B

M20, M24, M27, M30, M33 & M36 continued on next page...

	M4	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24	M27	M30	M33	M36
Hex Head Size A/F (mm)	7	8	10	13	17	19	22	24	30	34	36	41	46	49	54.6
Pitch (mm)	0.7	0.8	1.0	1.24	1.5	1.75	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0
Hex Head Height (mm)	2.8	3.5	4.0	5.3	6.4	7.5	8.8	10.0	12.5	14.0	15.0	18.0	18.7	21	23
Thread Length ≤ 125mm	Full	16	18	22	26	30	34	38	46	50	54	60	66	72	78
Thread Length ≥ 125mm	Full	Full	24	28	32	36	40	44	52	56	66	66	72	78	84

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Bolts



304 SS **316 SS**

Size	304 SS	316 SS	Size	304 SS	316 SS	Size	304 SS	316 SS
M16			M20 X 340		B	M27 X 180		B
M16 X 500		S	M20 X 360		B	M27 X 200		B
M16 X 600		S	M24	304 SS	316 SS	M30	304 SS	316 SS
M18	304 SS	316 SS	M24 X 50	S	S	M30 X 60		S
M18 X 100		S	M24 X 55		S	M30 X 70		S
M20	304 SS	316 SS	M24 X 60	S	S	M30 X 80		S
M20 X 30		S	M24 X 65		S	M30 X 90		B,S
M20 X 35		S	M24 X 70	S	S	M30 X 100		B,S
M20 X 40	S	S	M24 X 75		S	M30 X 110		B
M20 X 45		S	M24 X 80	B	B,S	M30 X 120		B
M20 X 50	S	S	M24 X 90	B	B,S	M30 X 130		B
M20 X 55	S	S	M24 X 100	B	B,S	M30 X 140		B
M20 X 60	S	B,S	M24 X 110		B	M30 X 150		B
M20 X 65	B	B,S	M24 X 120	B	B	M30 X 160		B
M20 X 70	B,S	B,S	M24 X 130	B	B	M30 X 180		B
M20 X 75	B	B,S	M24 X 140	B	B	M30 X 200		B
M20 X 80	B,S	B,S	M24 X 150	B	B	M30 X 240		B
M20 X 90	B	B,S	M24 X 160		B	M33	304 SS	316 SS
M20 X 100	B	B,S	M24 X 170		B	M33 X 100		B
M20 X 110		B	M24 X 180		B	M33 X 120		B
M20 X 120	B	B	M24 X 200		B	M33 X 160		B
M20 X 130	B	B	M24 X 220		B	M33 X 170		B
M20 X 140	B	B	M24 X 240	B	B	M33 X 180		B
M20 X 150	B	B,S	M24 X 260		B	M33 X 200		B
M20 X 160	B	B	M24 X 280		B	M36	304 SS	316 SS
M20 X 170		B	M24 X 300		B	M36 X 80		S
M20 X 180	B	B	M27	304 SS	316 SS	M36 X 100		B
M20 X 200		B	M27 X 60		S	M36 X 120		B
M20 X 220	B	B	M27 X 80		S	M36 X 170		B
M20 X 230		B	M27 X 90		B	M36 X 180		B
M20 X 240		B	M27 X 100		B			
M20 X 250		B	M27 X 110		B			
M20 X 260		B	M27 X 120		B			
M20 X 270		B	M27 X 130		B			
M20 X 280		B	M27 X 140		B			
M20 X 300		B	M27 X 160		B			

Heads may have head markings.
Nuts sold separately (p.38).







	M4	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24	M27	M30	M33	M36
Hex Head Size A/F (mm)	7	8	10	13	17	19	22	24	30	34	36	41	46	49	54.6
Pitch (mm)	0.7	0.8	1.0	1.24	1.5	1.75	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0
Hex Head Height (mm)	2.8	3.5	4.0	5.3	6.4	7.5	8.8	10.0	12.5	14.0	15.0	18.0	18.7	21	23
Thread Length ≤ 125mm	Full	16	18	22	26	30	34	38	46	50	54	60	66	72	78
Thread Length ≥ 125mm	Full	Full	24	28	32	36	40	44	52	56	66	66	72	78	84

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.



Higher Tensile

BUMAX 88 SS

BUMAX 109 SS

	Bumax 88 & 109
Hex Head Bolts*	 (DIN931)
Hex Head Setscrews*	 (DIN933)
Threaded Rod/Studs	
Flat Washers	
Hex Nuts*	
Flange Nuts	

*Bumax nuts should be used with Bumax bolts.

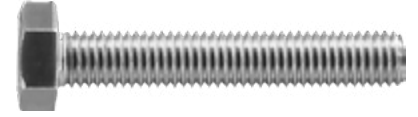
	Bumax 88 & 109
Hex Socket Capscrews	
Csk Socket Screws	

*Available on request

Hex Bolts & Set Screws – UNC & BSW*



B – Bolt



S – Set Screw (Fully Threaded)

304 SS **316 SS**

3/16 BSW (10-24 UNC)	304 SS	316 SS
3/16 X 1/2	S	S
3/16 X 3/4	S	S
3/16 X 1		S
3/16 X 1-1/4		S
3/16 X 1-1/2		S
3/16 X 2	S	S
3/16 X 3	S	

1/4 UNC	304 SS	316 SS
1/4 X 1/2	S	S
1/4 X 5/8		S
1/4 X 3/4	S	S
1/4 X 1	S	S
1/4 X 1-1/4	B,S	B,S
1/4 X 1-1/2	B,S	B,S
1/4 X 1-3/4	B,S	B,S
1/4 X 2	B,S	B,S
1/4 X 2-1/4	B	B
1/4 X 2-1/2	B,S	B,S
1/4 X 2-3/4		B
1/4 X 3	B	B,S
1/4 X 3-1/4	B	B
1/4 X 3-1/2		B
1/4 X 4		B
1/4 X 4-1/2		B
1/4 X 5		B
1/4 X 5-1/2		B
1/4 X 6		B

5/16 UNC	304 SS	316 SS
5/16 X 1/2	S	S
5/16 X 5/8		S
5/16 X 3/4	S	S
5/16 X 1	S	S
5/16 X 1-1/4	S	S
5/16 X 1-1/2	B,S	B,S
5/16 X 1-3/4	B	B
5/16 X 2	B	B,S
5/16 X 2-1/4	B	B
5/16 X 2-1/2	B	B,S
5/16 X 2-3/4	B	B
5/16 X 3	B	B,S
5/16 X 3-1/4		B
5/16 X 3-1/2		B
5/16 X 4		B
5/16 X 4-1/2		B
5/16 X 5		B
5/16 X 5-1/2		B
5/16 X 6	B	B,S

3/8 UNC	304 SS	316 SS
3/8 X 1/2		S
3/8 X 5/8		S
3/8 X 3/4	S	S
3/8 X 1	S	S
3/8 X 1-1/4	S	S
3/8 X 1-1/2	S	B,S
3/8 X 1-3/4	B	B
3/8 X 2	B,S	B,S
3/8 X 2-1/4		B
3/8 X 2-1/2	B,S	B,S
3/8 X 2-3/4		B
3/8 X 3	B,S	B,S
3/8 X 3-1/4		B

3/8 X 3-1/2	B	B
3/8 X 3-3/4		B
3/8 X 4	B	B,S
3/8 X 4-1/2		B
3/8 X 5		B
3/8 X 5-1/2		B
3/8 X 6		B
3/8 X 7		B
3/8 X 8		B

7/16 UNC	304 SS	316 SS
7/16 X 1		S
7/16 X 1-1/4		S
7/16 X 1-1/2	S	S
7/16 X 2		B
7/16 X 2-1/2		B
7/16 X 3		B
7/16 X 3-1/2		B
7/16 X 4		B

8-32 UNC	304 SS	316 SS
8-32 X 1/2		S
8-32 X 1		S
8-32 X 1-1/2		S

1/2 UNC	304 SS	316 SS
1/2 X 3/4	S	S
1/2 X 1	S	S
1/2 X 1-1/4	S	S
1/2 X 1-1/2	S	S
1/2 X 1-3/4		B,S
1/2 X 2	S	B,S
1/2 X 2-1/2	B,S	B,S
1/2 X 3	S	B,S
1/2 X 3-1/2	B	B,S
1/2 X 4	S	B,S

1/2 UNC continued on next page...

	3/16 BSW	1/4 UNC	5/16 UNC	3/8 UNC	7/16 UNC	1/2 UNC	1/2 BSW	5/8 UNC	3/4 UNC	7/8 UNC	1 UNC
T.P.I.	24	20	18	16	14	13	12	11	10	9	8
Hex Head Size A/F (inch)	0.312	0.438	0.5	0.562	0.625	0.75	0.82	0.938	1.125	1.312	1.5
Hex Head Height (inch)	0.139	0.163	0.211	0.243	0.291	0.323	0.343	0.403	0.483	0.563	0.627
Std Thread Length for Bolts (inch)⁺	Full	0.75	0.875	1	1.125	1.25	N/A	1.5	1.75	2	2.25

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

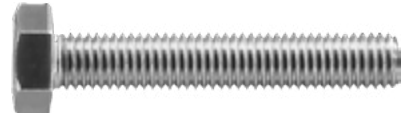
* Thread form for imperial Hex Bolts is UNC except for 1/2" for which both BSW and UNC are available.

⁺ Standard Length of Thread: The thread lengths shown above apply to bolts 6" and less. For bolts exceeding 6" in length add 1/4" to the thread length.

Hex Bolts & Set Screws - UNC & BSW (1/2") cont.*



B – Bolt



S – Set Screw (Fully Threaded)

304 SS **316 SS**

1/2 UNC	304 SS	316 SS
1/2 X 4-1/2	B	B
1/2 X 5	B	B
1/2 X 5-1/2		B
1/2 X 6		B
1/2 X 6-1/2		B
1/2 X 7		B
1/2 X 7-1/2		B
1/2 X 8		B
1/2 X 8-1/2		B
1/2 X 9		B
1/2 X 9-1/2		B
1/2 X 10		B

1/2 BSW	304 SS	316 SS
1/2 X 1	S	
1/2 X 1-1/4	S	
1/2 X 1-1/2	S	
1/2 X 2	S	
1/2 X 2-1/2	S	
1/2 X 3	B,S	
1/2 X 3-1/2	S	
1/2 X 4	B	
1/2 X 5	B	

5/8 UNC	304 SS	316 SS
5/8 X 1		S
5/8 X 1-1/4		S
5/8 X 1-1/2		S
5/8 X 1-3/4		S
5/8 X 2	S	S
5/8 X 2-1/4		B
5/8 X 2-1/2	B	B,S
5/8 X 3		B,S

5/8 X 3-1/2	S	B,S
5/8 X 4	S	B,S
5/8 X 4-1/2		B
5/8 X 5		B
5/8 X 5-1/2		B
5/8 X 6	B	B
5/8 X 7		B
5/8 X 8	B	B
5/8 X 10		B

3/4 UNC	304 SS	316 SS
3/4 X 1-1/4		S
3/4 X 1-1/2		S
3/4 X 1-3/4		S
3/4 X 2		S
3/4 X 2-1/2		S
3/4 X 3		B,S
3/4 X 3-1/2		B,S
3/4 X 4		B,S
3/4 X 4-1/2		B
3/4 X 5		B
3/4 X 6		B
3/4 X 7		B

7/8 UNC	304 SS	316 SS
7/8 X 2		S
7/8 X 2-1/2		S
7/8 X 3		B,S
7/8 X 3-1/2		B
7/8 X 4		B
7/8 X 4-1/2		B
7/8 X 5		B
7/8 X 6		B
7/8 X 7		B

1 UNC	304 SS	316 SS
1 X 2		S
1 X 2-1/2		S
1 X 3		S
1 X 3-1/2		B,S
1 X 4		B,S
1 X 4-1/2		B
1 X 5		B
1 X 6		B
1 X 7		B

	3/16 BSW	1/4 UNC	5/16 UNC	3/8 UNC	7/16 UNC	1/2 UNC	1/2 BSW	5/8 UNC	3/4 UNC	7/8 UNC	1 UNC
T.P.I.	24	20	18	16	14	13	12	11	10	9	8
Hex Head Size A/F (inch)	0.312	0.438	0.5	0.562	0.625	0.75	0.82	0.938	1.125	1.312	1.5
Hex Head Height (inch)	0.139	0.163	0.211	0.243	0.291	0.323	0.343	0.403	0.483	0.563	0.627
Std Thread Length for Bolts (inch)[†]	Full	0.75	0.875	1	1.125	1.25	N/A	1.5	1.75	2	2.25

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

* Thread form for imperial Hex Bolts is UNC except for 1/2" for which both BSW and UNC are available.
[†] Standard Length of Thread: The thread lengths shown above apply to bolts 6" and less. For bolts exceeding 6" in length add 1/4" to the thread length.

Hex Bolts & Set Screws – UNF



B – Bolt



S – Set Screw (Fully Threaded)

304 SS **316 SS**

3/16 UNF (10-32)	304 SS	316 SS
3/16 X 1/2	S	
3/16 X 3/4	S	
3/16 X 1	S	

1/4 UNF	304 SS	316 SS
1/4 X 1/2	S	
1/4 X 5/8	S	
1/4 X 3/4	S	
1/4 X 1	S	
1/4 X 1-1/4	B,S	
1/4 X 1-1/2	B	
1/4 X 2	B	
1/4 X 2-1/2	B	
1/4 X 3	B	

5/16 UNF	304 SS	316 SS
5/16 X 3/4	S	
5/16 X 1	S	
5/16 X 1-1/4	S	
5/16 X 1-1/2	B,S	
5/16 X 2	B	
5/16 X 2-1/2	B	
5/16 X 3	B	
5/16 X 4	B	

3/8 UNF	304 SS	316 SS
3/8 X 1	S	
3/8 X 1-1/4	S	
3/8 X 1-1/2	B	
3/8 X 2	B	
3/8 X 2-1/2	B	
3/8 X 3	B	
3/8 X 3-1/2	B	
3/8 X 4	B	

7/16 UNF	304 SS	316 SS
7/16 X 1	S	
7/16 X 1-1/4	S	
7/16 X 1-1/2	S	
7/16 X 3	B	
7/16 X 4	B	

1/2 UNF	304 SS	316 SS
1/2 X 1	S	
1/2 X 1-1/4	S	
1/2 X 1-1/2	S	
1/2 X 2	B,S	
1/2 X 2-1/2	B	
1/2 X 3	B	
1/2 X 3-1/2	B	
1/2 X 4	B	

5/8 UNF	304 SS	316 SS
5/8 X 1	S	S

	3/16 UNF	1/4 UNF	5/16 UNF	3/8 UNF	7/16 UNF	1/2 UNF	5/8 UNF
T.P.I.	32	28	24	24	20	20	18
Hex Size A/F (inch)	0.3110	0.438	0.5	0.562	0.625	0.75	0.938
Head Depth (inch)	0.1280	0.163	0.211	0.243	0.291	0.323	0.403

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coach Bolts – Metric (DIN 603*)



304 SS **316 SS**

Depending on the size, bolt may be fully or partially threaded.

M6	304 SS	316 SS
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 50		
M6 X 60		
M6 X 70		
M6 X 80		
M6 X 90		
M6 X 100		

M8	304 SS	316 SS
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 40		
M8 X 50		
M8 X 60		
M8 X 70		
M8 X 80		
M8 X 90		
M8 X 100		
M8 X 110		
M8 X 120		

*for lengths <150mm

M10	304 SS	316 SS
M10 X 25		
M10 X 30		
M10 X 40		
M10 X 50		
M10 X 60		
M10 X 65		
M10 X 70		
M10 X 80		
M10 X 90		
M10 X 100		
M10 X 110		
M10 X 120		
M10 X 130		
M10 X 150		

M12	304 SS	316 SS
M12 X 30		
M12 X 40		
M12 X 50		
M12 X 60		
M12 X 65		
M12 X 70		
M12 X 75		
M12 X 80		
M12 X 90		
M12 X 100		
M12 X 110		
M12 X 120		
M12 X 130		

M12 X 140		
M12 X 150		
M12 X 160		
M12 X 170		
M12 X 180		
M12 X 200		
M12 X 200		
M12 X 220		
M12 X 240		
M12 X 260		
M12 X 280		
M12 X 300		
M12 X 360		
M12 X 400		

M16	304 SS	316 SS
M16 X 80		
M16 X 100		
M16 X 120		
M16 X 150		
M16 X 180		
M16 X 200		
M16 X 220		
M16 X 240		
M16 X 260		
M16 X 300		
M16 X 360		

	M6	M8	M10	M12	M16
Head Dia (mm)	16	20	24	30	38
Square A/F (mm)	6.5	8	10	12	16

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coach Bolts – UNC

304 SS



Depending on the size, bolt may be fully or partially threaded.

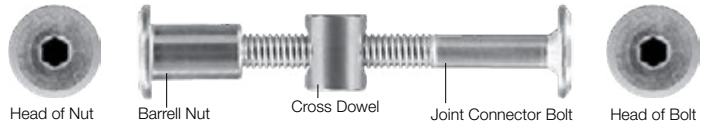
1/4	304 SS	5/16	304 SS	3/8	304 SS
1/4 X 1-1/2		5/16 X 1		3/8 X 1	
1/4 X 2-1/2		5/16 X 1-1/4		3/8 X 1-1/4	
1/4 X 3		5/16 X 2		3/8 X 1-1/2	
1/4 X 4				3/8 X 2-1/2	
1/4 X 5					

	1/4	5/16	3/8
Head Dia (inch)	0.565	0.71	0.827
Hex Head Size A/F (inch)	0.256	0.316	0.380

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Joint Connector Bolts (JCB), Nuts, Cross Dowels – Metric

ZINC **304 SS**



Joint Connector Bolt (JCB)	304 SS	Barrel Nuts	304 SS	Cross Dowels	ZINC	304 SS
M6		M6		M6		Slot
M6 X 16		M6		M6 X 12		
M6 X 20				M6 X 13	Phil	
M6 X 25				M6 X 20	Phil	
M6 X 30						
M6 X 35						
M6 X 40						
M6 X 50						
M6 X 60						
M6 X 70						
M6 X 80						
M6 X 100						

For other barrel nuts see page 45-46

Threaded Rod



304 SS	316 SS	2507 SS	A4-80 SS*	BUMAX 88*
--------	--------	---------	-----------	-----------

*Available on request

	304 SS	316 SS	2507 SS
M3			
M3 X 1 MTR			
M4			
M4 X 1 MTR			
M5			
M5 X 1 MTR			
M6			
M6 X 1 MTR			
M8			
M8 X 1 MTR			
M8 X 3 MTR			
M10			
M10 X 1 MTR			
M10 X 2 MTR			
M10 X 3 MTR			
M12			
M12 X 1 MTR			
M12 X 1.5 MTR			
M12 X 2 MTR			
M12 X 3 MTR			
M14			
M14 X 1 MTR			
M16			
M16 X 1 MTR			
M16 X 2 MTR			
M16 X 3 MTR			
M20			
M20 X 1 MTR			
M20 X 2 MTR			
M20 X 3 MTR			
M24			
M24 X 1 MTR			
M24 X 2 MTR			
M24 X 3 MTR			

Notes

- Other sizes available on request
- We recommend the use of lubricant on stainless steel threaded rod and studs – see p. 296-297
- For 2507 SS PREN value, see p.307

A4-80 (STAINLESS STEEL)*

The '80' denotes the minimum tensile strength met by the material. It is 316 stainless steel that has been cold worked to provide a minimum tensile strength of 800 N/mm² (MPa).

BUMAX 88 (STAINLESS STEEL)*

Bumax 88 stainless steel is 316 stainless steel with extra molybdenum added. It has excellent corrosion resistance (min PREN value of 25. See p.307)

2507 SS (STAINLESS STEEL)

2507 stainless steel has high strength (800 MPa tensile strength for Threaded Rod & Nuts) and is extremely corrosion resistant (min PREN value of 42. See p.307).

2507 SS is great for a wide range of applications such as:

- Chemical processing
- Oil and gas exploration
- Marine environments
- Pulp and paper machines

For more information about stainless steel grades go to page 307

Threaded Studs – Metric (DIN 976)



316 SS

M6	316 SS
M6 X 50	

M8	316 SS
M8 X 80	
M8 X 90	
M8 X 100	
M8 X 105	
M8 X 115	
M8 X 120	
M8 X 140	
M8 X 150	
M8 X 200	
M8 X 220	
M8 X 250	

M10	316 SS
M10 X 30	
M10 X 35	
M10 X 40	
M10 X 45	
M10 X 50	
M10 X 55	
M10 X 65	
M10 X 80	
M10 X 85	
M10 X 100	
M10 X 110	
M10 X 115	

M10 X 120	
M10 X 125	
M10 X 130	
M10 X 140	
M10 X 150	
M10 X 160	
M10 X 170	
M10 X 180	
M10 X 200	
M10 X 220	
M10 X 240	
M10 X 250	
M10 X 260	
M10 X 280	
M10 X 300	

M12	316 SS
M12 X 100	
M12 X 110	
M12 X 120	
M12 X 130	
M12 X 150	
M12 X 160	
M12 X 170	
M12 X 180	
M12 X 200	
M12 X 220	
M12 X 240	

M12 X 260	
M12 X 280	
M12 X 300	
M12 X 330	
M12 X 400	

M14	316 SS
M14 X 50	

M16	316 SS
M16 X 100	
M16 X 150	
M16 X 160	
M16 X 200	
M16 X 240	
M16 X 250	
M16 X 260	
M16 X 300	
M16 X 320	
M16 X 350	
M16 X 380	
M16 X 500	

M20	316 SS
M20 X 200	
M20 X 300	
M20 X 500	
M20 X 600	

NB: other sizes available on request.

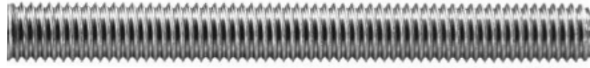
Threaded Studs – Metric Fine Pitch



316 SS

	316 SS
M6-0.75P X 300	
M8-1.00P X 300	
M10-1.25P X 300	
M12-1.50P X 300	
M16-1.50P X 300	

Threaded Rod - UNC & BSW (1/2")



316 SS

	316 SS
3/16 (10-24) X 3FT	
1/4 X 3FT	
5/16 X 3FT	
3/8 X 3FT	
7/16 X 3FT	
1/2 UNC X 3FT	
1/2 BSW X 3FT	

316 SS

	316 SS
9/16 X 3FT	
5/8 X 3FT	
3/4 X 3FT	
7/8 X 3FT	
1 X 3FT	
1-1/4 X 3FT	

Threaded Rod - UNF



316 SS

	316 SS
3/16 UNF (10-32) X 3FT	
1/4 UNF X 3FT	
5/16 UNF X 3FT	
3/8 UNF X 3FT	
7/16 UNF X 3FT	
1/2 UNF X 3FT	
5/8 UNF X 3FT	
3/4 UNF X 3FT	

B8/B8M Studs & Nuts for the Petrochemical Industry

Available to order on request.



**B8M
(316)**

Threaded Rod

– ASTM A193 B8M Class 2*

**B8M
(316)**

B8M

B8M

B8M

1/2 X 3ft

5/8 X 3ft

3/4 X 3ft

Hex Heavy Nut

– ASTM A194 GR8M

GR8M

GR8M

GR8M

GR8M

1/2

5/8

3/4

*Class 2 – strain hardened.

- Threaded rod can be cut to length as required.
- Other Sizes available on request.
- NB: lengths made to order up to 6ft.
- Also available in grades: B7, B7M, L7, L7M, B16, B8T, Duplex, Super Duplex, Monel, Inconel, Hastelloy, Titanium, Nickel, Zirconium, Carpenter 20, Incoloy.

Nuts – Metric

304 SS 316 SS DUPLEX 2507

	Hex Nut			Nyloc Nut			Lock (Jam) Nut		Flange Nyloc Nut		All Stainless Locking Nut	
	304 SS	316 SS	DUPLEX 2507	304 SS	316 SS	DUPLEX 2507	304 SS	316 SS	304 SS	304 SS	316 SS	
M2.0												
M2.5												
M3												
M4												
M5												
M6												
M8												
M10												
M12												
M14												
M16												
M18												
M20												
M22												
M24												
M27												
M30												
M33												
M36												

See also fine pitch and left hand Hex Nuts p.40

	M2.0	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
Coarse Pitch:	0.40	0.45	0.50	0.70	0.80	1.00	1.25	1.50	1.75	2.00	2.00	2.50	2.50	2.50	3.00	3.00	3.50	3.50	4.0
Hex Nuts																			
A/F	4.0	5.0	5.5	7.0	8.0	10.0	13.0	17.0	19.0	22.0	24.0	27.0	30.0	32.0	36.0	41.0	46.0	50.0	55.0
Thickness	1.6	2.0	2.4	3.2	4.0	5.0	6.5	8.0	10.0	11.0	13.0	15.0	16.0	18.0	19.0	22.0	24.0	26.0	29.0
Nyloc Nuts																			
A/F		5.0	5.5	7.0	8.0	10.0	13.0	17.0	19.0	22.0	24.0	27.0	30.0	32.0	36.0	41.0	46.0		55.0
Thickness		3.5	4.0	5.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.5	20.0	22.0	24.0	27.0	30.0		36.0
Lock Jam Nuts																			
A/F				7.0	8.0	10.0	13.0	17.0	19.0		24.0		30.0		36.0				
Thickness				2.2	2.7	3.2	4.0	5.0	6.0		8.0		10.0		12.0				

NB: these are nominal measurements and generally the maximum size of the tolerance range.
 MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Class 100 (1000 MPA Tensile Strength) 316LHiMo. See page 318 and 324 for technical information.

Nuts – Metric

304 SS 316 SS DUPLEX 2507

	Dome Nut – 2-Piece (polished)		Dome Nut – 1-Piece			Wing Nut	Hank Bush Nut		Flange Nut		
	304 SS	316 SS	304 SS	316 SS	2507	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS
M3											
M4											
M5											
M6											
M8											
M10											
M12											
M16											
M20											
M24											

Size	M3	M4	M5	M6	M8	M10	M12	M14	M16	M20	M24
Coarse Pitch:	0.50	0.70	0.80	1.00	1.25	1.50	1.75	2.00	2.00	2.50	3.00
Dome Nuts – 2-Piece											
A/F	5.5	7	8	10	13	17	19	22	24	30	36
Thickness	5.0	6.2	7.5	9.5	12.5	15.5	18.5	21	24	29	35.5
Dome Nuts – 1-Piece											
A/F	5.5	7	8	10	13	17	19	22	24	30	36
Thickness	5.0	8.0	10.0	12.0	15.0	18.0	22.0	25.0	28.0	34.0	42.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coupling Nuts (DIN 6334)





316 SS

Thread	Length	316 SS
M6	18mm	
M8	24mm	
M10	30mm	
M12	36mm	
M16	48mm	
M20	60mm	

Nuts – Metric Fine

304 SS

316 SS

	Hex Nut		Lock (Jam) Nut	
				
	304 SS	316 SS	304 SS	316 SS
M8-1.00P				
M10-1.00P				
M10-1.25P				
M12-1.25P				
M12-1.5P				
M14-1.5P				
M16-1.5P				
M20-1.5P				
M22-1.5P				
M24-2.0P				

For dimensions see p.39

Hex Nuts – Left Hand Metric (DIN 934)



304 SS

	304 SS	316 SS
M5		
M6		
M8		
M10		
M12		
M14		
M16		
M20		

For dimensions see p.39

Lock (Jam) Nuts – Left Hand Metric






304 SS

	304 SS
M5	
M6	
M8	
M10	
M12	
M16	

Nuts – UNC & BSW

304 SS **316 SS**

	Hex Nut		Nyloc Nut		Lock (Jam) Nut	
						
	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS
1/8 BSW						
5-40 UNC (1/8)						
6-32 UNC						
8-32 UNC						
5/32 BSW						
10-24 UNC (3/16)						
3/16 BSW			See 10-24 UNC			
1/4 UNC						
5/16 UNC						
3/8 UNC						
7/16 UNC						
1/2 UNC						
1/2 BSW						
9/16 UNC						
5/8 UNC						
3/4 UNC						
7/8 UNC						
1 UNC						
1-1/8 UNC						
1-1/4 UNC						
1-1/2 UNC						

Size	5-40 UNC (1/8)	6-32 UNC	5/32 BSW	10-24 UNC	3/16 BSW	1/4 UNC	5/16 UNC	3/8 UNC	7/16 UNC	1/2 UNC	1/2 BSW	5/8 UNC	3/4 UNC	7/8 UNC	1 UNC
T.P.I	40	40	32	24	24	20	18	16	14	13	12	11	10	9	8
Hex Nuts															
A/F	0.310	N/A	0.271	0.370	0.320	0.438	0.500	0.562	0.688	0.750	0.815	0.938	1.125	1.312	1.500
Thickness	0.108	N/A	0.110	0.120	0.160	0.226	0.273	0.337	0.385	0.496	0.469	0.559	0.665	0.776	0.887
Nyloc Nuts															
A/F	0.368	N/A	N/A	0.245	0.368	0.433	0.497	0.554	0.618	N/A	0.743	0.927	1.05	1.243	1.430
Thickness	0.243	N/A	N/A	0.143	0.247	0.314	0.348	0.451	0.461	N/A	0.590	0.750	0.881	0.984	1.050
Lock Jam Nuts															
A/F						N/A	0.430	0.560		0.740		0.927	1.090	N/A	
Thickness						N/A	0.161	0.279		0.314		0.368	0.424	N/A	

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Nuts – UNC

304 SS

316 SS

	Dome Nut – 2-Piece (polished)		Dome Nut – 1-Piece		Wing Nut		Hank Bush Nut	
	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS
5-40 UNC (1/8)								
10-24 UNC (3/16)								
1/4 UNC								
5/16 UNC								
3/8 UNC								
1/2 UNC								
5/8 UNC								

Size	10-24 UNC (3/16)	1/4 UNC	5/16 UNC	3/8 UNC	1/2 UNC
T.P.I	24	20	18	16	13
Dome Nuts – 2-Piece					
A/F (inch)*	0.37	0.43	0.49	0.56	0.74
Thickness (inch)*	0.30	0.43	0.49	0.56	0.78

Size	10-24 UNC (3/16)	1/4 UNC	5/16 UNC	3/8 UNC
T.P.I	24	20	18	16
Dome Nuts – 1-Piece				
A/F (inch)*	0.36	0.43	0.55	0.61
Thickness (inch)*	0.39	0.47	0.53	0.63

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

*NB: measurements shown are inch values. E.g. 0.5 = 1/2"

Nuts – UNF

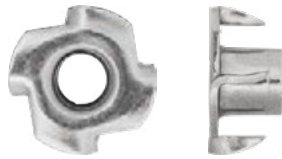
304 SS

316 SS

	Hex Nut		Nyloc Nut		Lock (Jam) Nut		Dome Nut (1-piece)	
	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS	304 SS	316 SS
10-32 (3/16 UNF)								
1/4 UNF								
5/16 UNF								
3/8 UNF								
7/16 UNF								
1/2 UNF								
5/8 UNF								
3/4 UNF								
7/8 UNF								
1 UNF								

For dimensions, see the UNC dimensions above & on p.42

Tee Nuts – Metric & UNC



304 SS

	304 SS
M5	
M6	
M8	
M10	

	304 SS
10-24 UNC (3/16)	
1/4 UNC	
5/16 UNC	

Square Nuts – Metric & UNC



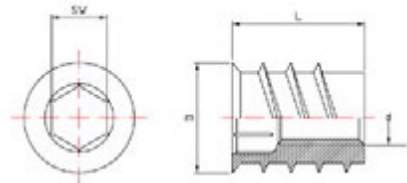
304 SS

	304 SS
M3	
M4	
M5	
M6	

	304 SS
M8	
M10	
M12	
M16	

	304 SS
10-24 UNC (3/16)	

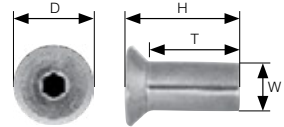
Threaded Wood Insert



304 SS

	304 SS	D (mm)	L (mm)	d (mm)	SW (mm)
M5 (internal thread)		10	12	M5	5
M6 (internal thread)		12	15	M6	6
M8 (internal thread)		16	18	M8	8

Csk Skt Barrel Nuts



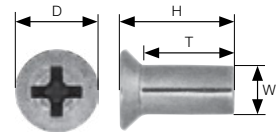
316 SS

	Hex Skt Drive	316 SS	D (mm)	H (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
M3	2mm		8	8	6	3	5
M4	2.5mm		10	12	10	3	6
M5	3mm		12	20	17	11	7
M6	4mm		14	23	19	13	8
M8*	5mm		15	27	22	16	10
M10**	6mm		20	27	22	16	12
M12	8mm		24	31	25	18	14

*Will fit on M10 sleeve anchor

**Will fit on M12 sleeve anchor

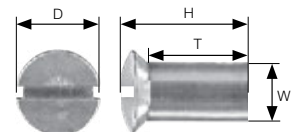
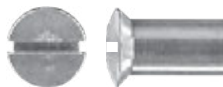
Csk Phil Barrel Nuts



316 SS

	316 SS	D (mm)	H (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
M5 (M6.5 ANCHOR)		12	20	17	11	7
M6 (M8 ANCHOR)		14	23	19	13	8
M8 (M10 ANCHOR)		15	27	22	16	10

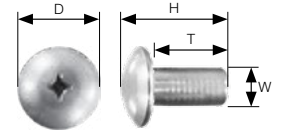
Raised Csk Slot Barrel Nuts



304 SS

	304 SS	D (mm)	H (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
M4		7.4	13.3	10.6	10.0	5.4
M5		9.0	14.8	11.9	12.9	6.4
M6		11.0	17.4	13.6	14.2	7.5
M8		14.5	22.2	16.9	17.7	10.0

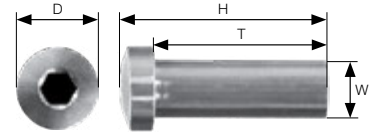
Truss Head Phillips Barrel Nuts



304 SS

	304 SS	D (mm)	H (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
3/16		13.8	16.5	12.5	13.5	6.35
1/4		17.5	20.4	15.3	15.6	7.8
5/16		20.0	24.5	18.62	19.0	9.5
3/8		23.3	25.9	19.2	21.5	11.1

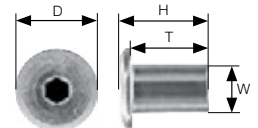
Pan Head Skt Barrel Nuts



316 SS

	Hex Skt Drive	316 SS	D (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
M3	2mm		8	12	9	5
M4	2.5mm		10	18	14	6
M5	3mm		12	30	26	7
M6	4mm		14	30	26	8
M8	5mm		16	34	27	10
M10	6mm		18	34	28	13
M12	8mm		21	40	34	15

JCB (for Joint Connector Bolt) Pan Socket Barrel Nut



304 SS

	304 SS	D (mm)	H (mm)	T (mm)	Int. Thread Length (mm)	W (mm)
M6		15.0	16.0	14.0	12.0	9.0

See p.33 for Joint Connector Bolts.

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Round/Flat Washers – Metric



304 SS	316 SS	DUPLEX 2507
---------------	---------------	--------------------

ID X OD X Thickness

	304 SS	316 SS	DUPLEX 2507
M2			
M2.0 X 5 X 0.3			
M2.5			
M2.5 X 6 X 0.5			
M3			
M3.0 X 7 X 0.5			
M4			
M4 X 9 X 0.9			
M4 X 12 X 1.0			
M4 X 16 X 1.2			
M5			
M5 X 10 X 1.0			
M5 X 15 X 1.2			
M6			
M6 X 12.5 X 1.0			
M6 X 12.5 X 1.6			
M6 X 18 X 1.6			
M6 X 25 X 1.6			
M7			
M7 X 35 X 4.0			
M8			
M8 X 14 X 0.9			
M8 X 16 X 1.2			
M8 X 16 X 1.6			
M8 X 17 X 1.2			
M8 X 24 X 2.0			
M8 X 25 X 3.0			
M8 X 32 X 2.0			
M8 X 32 X 3.0			
M10			
M10 X 20 X 2.0			
M10 X 21 X 1.2			
M10 X 21 X 2.0			
M10 X 25 X 3.0			
M10 X 28 X 2.0			
M10 X 30 X 2.5			

ID X OD X Thickness

	304 SS	316 SS	DUPLEX 2507
M12			
M12 X 24 X 1.5			
M12 X 24 X 2.5			
M12 X 36 X 3.0			
M12 X 50 X 3.0			
M14			
M14 X 28 X 2.5			
M16			
M16 X 30 X 1.5			
M16 X 30 X 2.0			
M16 X 30 X 3.0			
M16 X 48 X 3.0			
M16 X 50 X 3.0			
M18			
M18 X 34 X 3.0			
M18 X 54 X 6.0			
M20			
M20 X 37 X 2.0			
M20 X 37 X 3.0			
M20 X 60 X 4.0			
M22			
M22 X 39 X 3.0			
M24			
M24 X 44 X 3.0			
M24 X 44 X 4.0			
M24 X 60 X 4.0			
M27			
M27 X 50 X 4.0			
M30			
M30 X 55 X 4.0			
M33			
M33 X 60 X 5.0			
M36			
M36 X 66 X 5.0			

NB: for our range of Imperial Washers – see p.48

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Round/Flat Washers – Imperial



304 SS **316 SS**

ID X OD X Thickness

1/8	304 SS	316 SS
1/8 X 5/16 X 20G		
5/32	304 SS	316 SS
5/32 X 7/16 X 20G		
5/32 X 3/8 X 20G		
3/16	304 SS	316 SS
3/16 X 7/16 X 20G		
3/16 X 1/2 X 20G		
3/16 X 3/4 X 18G		
3/16 X 7/8 X 16G		
3/16 X 1 X 16G		
3/16 X 1-1/4 X 16G		
3/16 X 1-1/2 X 10G		
1/4	304 SS	316 SS
1/4 X 1/2 X 20G		
1/4 X 9/16 X 18G		
1/4 X 5/8 X 18G		
1/4 X 5/8 X 20G		
1/4 X 3/4 X 18G		
1/4 X 7/8 X 16G		
1/4 X 7/8 X 18G		
1/4 X 1 X 16G		
1/4 X 1-1/4 X 16G		
1/4 X 1-1/2 X 10G		
1/4 X 2 X 10G		
5/16	304 SS	316 SS
5/16 X 5/8 X 18G		
5/16 X 3/4 X 18G		
5/16 X 7/8 X 16G		
5/16 X 1 X 16G		
5/16 X 1-1/4 X 16G		
5/16 X 1-1/2 X 10G		
5/16 X 2 X 10G		

Metric Conversion of Gauges (g)

Gauge	Thickness (mm)
20g	0.9–1.1
18g	1.1–1.4
16g	1.4–1.8
14g	1.8–2.2
12g	2.3–2.7
10g	2.8–3.2

ID X OD X Thickness

3/8	304 SS	316 SS
3/8 X 3/4 X 18G		
3/8 X 7/8 X 16G		
3/8 X 1 X 16G		
3/8 X 1-1/4 X 16G		
3/8 X 1-1/2 X 14G		
3/8 X 2 X 10G		
7/16	304 SS	316 SS
7/16 X 7/8 X 18G		
7/16 X 1-1/8 X 16G		
1/2	304 SS	316 SS
1/2 X 1 X 16G		
1/2 X 1-1/4 X 16G		
1/2 X 1-1/4 X 14G		
1/2 X 1-1/2 X 10G		
1/2 X 2 X 10G		
5/8	304 SS	316 SS
5/8 X 1-1/4 X 16G		
5/8 X 1-1/2 X 14G		
5/8 X 1-1/2 X 10G		
5/8 X 2 X 10G		
3/4	304 SS	316 SS
3/4 X 1-3/8 X 18G		
3/4 X 1-1/2 X 14G		
3/4 X 1-7/8 X 12G		
7/8	304 SS	316 SS
7/8 X 2 X 12G		
1	304 SS	316 SS
1 X 1-3/4 X 16G		
1 X 2 X 10G		
1 X 2-1/2 X 10G		
1-1/8	304 SS	316 SS
1-1/8 X 2-1/2 X 10G		
1-1/4	304 SS	316 SS
1-1/4 X 2-3/4 X 10G		

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Square Washers - Metric



304 SS	316 SS	DUPLEX 2507*
---------------	---------------	---------------------

M10	304 SS	316 SS	DUPLEX 2507*
M10 X 50 X 3.0			
M10 X 50 X 6.0			*

M12	304 SS	316 SS	DUPLEX 2507
M12 X 50 X 3.0			
M12 X 50 X 5.0			
M12 X 65 X 5.0			

M16	304 SS	316 SS	DUPLEX 2507
M16 X 50 X 3.0			
M16 X 50 X 6.0			
M16 X 65 X 5.0			

M20	304 SS	316 SS	DUPLEX 2507
M20 X 50 X 3.0			
M20 X 50 X 5.0			
M20 X 65 X 5.0			

M24	304 SS	316 SS	DUPLEX 2507
M24 X 65 X 5.0			

*Available on request

Spring Washers - Metric (DIN 127)



304 SS **316 SS** **DUPLEX 2507**

	OD	Thickness	304 SS	316 SS	DUPLEX 2507
M2.5	4.8	0.6			
M3	6.2	0.8			
M4	7.6	0.9			
M5	9.2	1.2			
M6	11.8	1.6			
M8	14.8	2.0			
M10	18.1	2.2			
M12	21.1	2.5			
M14	24.1	3.0			
M16	27.4	3.5			
M18	28.8	3.5			
M20	33.6	4.0			
M22	35.9	4.0			
M24	40.0	5.0			
M27	41.0	4.9			
M30	48.2	6.0			
M36	57.0	6.0			

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Spring Washers - Imperial



304 SS **316 SS**

	OD	Width	Thickness	304 SS	316 SS
3/16	0.334	0.062	0.047		
1/4	0.489	0.109	0.062		
5/16	0.586	0.125	0.078		
3/8	0.683	0.141	0.094		
7/16	0.779	0.156	0.109		
1/2	0.873	0.171	0.125		

	OD	Width	Thickness	304 SS	316 SS
5/8	1.079	0.203	0.156		
3/4	1.271	0.234	0.188		
7/8	1.464	0.266	0.219		
1	1.661	0.297	0.25		
1-1/4	2.045	0.359	0.312		

Internal Tooth Lock Washers (DIN 6797J)



304 SS

	OD	Thickness	304 SS
M2.5	5.5	0.4	
M3	6.0	0.4	
M4	8.0	0.5	
M5	10.0	0.6	
M6	11.0	0.7	
M8	15.0	0.8	

	OD	Thickness	304 SS
M10	18.0	0.9	
M12	20.5	1.0	
M14	23.7	1.0	
M16	25.7	1.2	
M18	29.9	1.3	

External Tooth Lock Washers (DIN 6797A)



304 SS

	OD	304 SS
M5	9.50	
M6	10.90	
M8	14.70	
M10	17.70	

	OD	304 SS
M12	20.20	
M16	25.70	
M20	32.80	
M24	37.60	

Belleville Washers



304 SS

	OD	Thickness of washer plate	304 SS
M6	12.5	0.70	
M8	16.0	0.90	
M10	20.0	1.10	
M12	25.0	1.50	
M14	27.8	1.50	
M16	31.5	1.75	
M20	40.0	2.25	

NB: for compression data please go to www.anzor.com.au/belleville-washers

Nord-Lock Bolt Securing System



316 SS **254 SMO***

	316 SS	254 SMO*
M3		*
M4		*
M5		*
M6		*
M8		*
M10		*
M12		*
M14		*

	316 SS	254 SMO*
M16		*
M20		*
M24		*
M30		*

***254 SMO®**

- Available on request
- 254 SMO® stainless steel is fully resistant to pitting and crevice corrosion.
- Suited for high-chloride environments such as seawater and has a PREN value of 43.

Push Nuts

304 SS



	304 SS
M5	
M6	
M8	
M10	
M12	

Cup Washers

304 SS



to suit screw size **304 SS**

6G	
8G	
10G	
12G	
14G	

NB: to fit self tapping screw.

Solid Cup Washers

304 SS



to suit screw size **304 SS**

6G	
8G	

NB: to fit self tapping screw.

Neo Backed Stainless Washers

304 SS

316 SS



	304 SS	316 SS
12G X 14MM		
12G X 16MM		
14G X 16MM		
M8 X 16MM		
M8 X 20MM		

EPDM Washers for HWF Screws

EPDM



For HWF Screws see p. 110

To Fit	Thickness (mm)	EPDM
10G	2.8	
12G & 14G	3.5	

EPDM Washers

EPDM



M12

M12 X 50 X 3.0*

EPDM

M16

M16 X 50 X 3.0*

EPDM

Nylon Washers – White

NYLON



M3

M3 X 9 X 0.8

NYLON

M4

M4 X 9 X 0.8

M4 X 9 X 1.6

NYLON

M5

M5 X 15 X 0.8

NYLON

M6

M6 X 12.5 X 0.8

M6 X 18 X 1.5

NYLON

M8

M8 X 16 X 0.8

M8 X 24 X 1.5

NYLON

M10

M10 X 21 X 1.5

NYLON

M12

M12 X 24 X 1.5

M12 X 36 X 2.5

M12 X 40 X 3

NYLON

M16

M16 X 30 X 2.5

NYLON




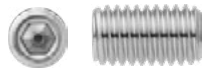
M20

M20 X 37 X 2.5

NYLON

Other sizes available on request.

Socket Screws

<p>Hex Socket Cap Screws</p> <ul style="list-style-type: none">- Metric- UNC- UNF	 <p>A hex socket cap screw shown from a top-down perspective and a side view. The top view shows a hexagonal head with a central hexagonal hole. The side view shows a hexagonal head, a smooth cylindrical neck, and a threaded shank.</p>	<p>57-61 57-59 60 61</p>
<p>Csk Socket Screws</p> <ul style="list-style-type: none">- Metric- UNC- UNF	 <p>A countersunk socket screw shown from a top-down perspective and a side view. The top view shows a hexagonal head with a central hexagonal hole. The side view shows a hexagonal head with a conical underside, a smooth cylindrical neck, and a threaded shank.</p>	<p>62-64 62-63 64 64</p>
<p>Button Head Socket Screws</p> <ul style="list-style-type: none">- Metric- UNC- UNF	 <p>A button head socket screw shown from a top-down perspective and a side view. The top view shows a circular head with a central hexagonal hole. The side view shows a circular head with a smooth cylindrical neck and a threaded shank.</p>	<p>65-66 65 66 66</p>
<p>Hex Socket Set Screws (Grub Screws)</p> <ul style="list-style-type: none">- Metric- UNC- UNF	 <p>A hex socket set screw shown from a top-down perspective and a side view. The top view shows a hexagonal head with a central hexagonal hole. The side view shows a hexagonal head and a threaded shank.</p>	<p>67-68 67 68 68</p>

Hex Socket Cap Screws – Metric (DIN 912)



NB: some sizes may have head markings.

304 SS **316 SS**

NB: some sizes are fully threaded.

M2	304 SS	316 SS
M2 X 6		
M2 X 8		
M2 X 10		
M2 X 12		
M2 X 20		

M2.5	304 SS	316 SS
M2.5 X 4		
M2.5 X 5		
M2.5 X 6		
M2.5 X 8		
M2.5 X 10		
M2.5 X 12		
M2.5 X 16		
M2.5 X 20		
M2.5 X 25		

M3	304 SS	316 SS
M3 X 3		
M3 X 4		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M3 X 30		
M3 X 35		
M3 X 40		
M3 X 45		
M3 X 50		

M4	304 SS	316 SS
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		
M4 X 45		
M4 X 50		
M4 X 60		
M4 X 70		

M5	304 SS	316 SS
M5 X 6		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 45		
M5 X 50		
M5 X 60		
M5 X 70		
M5 X 75		
M5 X 80		
M5 X 100		

continued on next page...

	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M20	M24
Skt Dv A/F (mm)	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	17.0	19.0
Head Dia (mm)	3.8	4.5	5.5	7.0	8.5	10.0	13.0	16.0	18.0	20.8	24.0	30.0	35.6
Head Height (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	13.6	16.0	20.0	24.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Cap Screws – Metric (DIN 912)



NB: some sizes may have head markings.

304 SS

316 SS

NB: some sizes are fully threaded.

M6	304 SS	316 SS
M6 X 8		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 45		
M6 X 50		
M6 X 60		
M6 X 70		
M6 X 75		
M6 X 80		
M6 X 90		
M6 X 100		
M6 X 110		
M6 X 120		

M8	304 SS	316 SS
M8 X 10		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		
M8 X 45		
M8 X 50		
M8 X 60		
M8 X 65		
M8 X 70		
M8 X 80		
M8 X 90		
M8 X 100		

M8	304 SS	316 SS
M8 X 110		
M8 X 110		
M8 X 120		
M8 X 130		
M8 X 140		
M8 X 150		
M8 X 160		

M10	304 SS	316 SS
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		
M10 X 45		
M10 X 50		
M10 X 55		
M10 X 60		
M10 X 70		
M10 X 80		
M10 X 90		
M10 X 100		
M10 X 110		
M10 X 120		
M10 X 130		
M10 X 150		

M12	304 SS	316 SS
M12 X 16		
M12 X 20		
M12 X 25		
M12 X 30		
M12 X 35		
M12 X 40		
M12 X 45		
M12 X 50		

continued on next page...

	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M20	M24
Skt Dv A/F (mm)	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	17.0	19.0
Head Dia (mm)	3.8	4.5	5.5	7.0	8.5	10.0	13.0	16.0	18.0	20.8	24.0	30.0	35.6
Head Height (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	13.6	16.0	20.0	24.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Cap Screws – Metric (DIN 912) cont.



NB: some sizes may have head markings.

304 SS **316 SS**

NB: some sizes are fully threaded.

M12 X 60		
M12 X 70		
M12 X 75		
M12 X 80		
M12 X 90		
M12 X 100		
M12 X 120		
M12 X 130		
M12 X 140		
M12 X 150		
M12 X 170		

M14 **304 SS** **316 SS**

M14 X 40		
M14 X 50		
M14 X 60		
M14 X 80		
M14 X 90		
M14 X 100		
M14 X 110		

M16 **304 SS** **316 SS**

M16 X 25		
M16 X 30		
M16 X 35		
M16 X 40		
M16 X 45		
M16 X 50		
M16 X 55		
M16 X 60		
M16 X 65		
M16 X 70		
M16 X 80		
M16 X 90		
M16 X 100		
M16 X 110		
M16 X 120		
M16 X 130		
M16 X 150		

M20 **304 SS** **316 SS**

M20 X 50		
M20 X 55		
M20 X 60		
M20 X 70		
M20 X 80		
M20 X 90		
M20 X 100		
M20 X 110		
M20 X 120		
M20 X 130		
M20 X 140		
M20 X 150		
M20 X 160		

M24 **304 SS** **316 SS**

M24 X 60		
M24 X 80		
M24 X 100		
M24 X 110		
M24 X 150		
M24 X 180		

	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M20	M24
Skt Dv A/F (mm)	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	17.0	19.0
Head Dia (mm)	3.8	4.5	5.5	7.0	8.5	10.0	13.0	16.0	18.0	20.8	24.0	30.0	35.6
Head Height (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	13.6	16.0	20.0	24.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Cap Screws – UNC



NB: some sizes may have head markings.

304 SS

316 SS

NB: some sizes are fully threaded.

5-40 UNC (1/8)	304 SS	316 SS
1/8 X 1/4		
1/8 X 3/8		
1/8 X 1/2		
1/8 X 3/4		
6-32 UNC	304 SS	316 SS
6-32 X 1/2		
6-32 X 3/4		
8-32 UNC	304 SS	316 SS
8-32 X 1/4		
8-32 X 3/8		
8-32 X 1/2		
10-24 UNC (3/16)	304 SS	316 SS
3/16 X 1/4		
3/16 X 3/8		
3/16 X 1/2		
3/16 X 5/8		
3/16 X 3/4		
3/16 X 1		
3/16 X 1-1/4		
3/16 X 1-1/2		
3/16 X 2		
1/4 UNC	304 SS	316 SS
1/4 X 1/2		
1/4 X 5/8		
1/4 X 3/4		
1/4 X 1		
1/4 X 1-1/4		
1/4 X 1-1/2		
1/4 X 1-3/4		
1/4 X 2		
1/4 X 2-1/2		
1/4 X 3		
1/4 X 4		

5/16 UNC	304 SS	316 SS
5/16 X 1/2		
5/16 X 5/8		
5/16 X 3/4		
5/16 X 1		
5/16 X 1-1/4		
5/16 X 1-1/2		
5/16 X 1-3/4		
5/16 X 2		
5/16 X 2-1/4		
5/16 X 2-1/2		
5/16 X 3		
5/16 X 4		
3/8 UNC	304 SS	316 SS
3/8 X 1/2		
3/8 X 5/8		
3/8 X 3/4		
3/8 X 1		
3/8 X 1-1/4		
3/8 X 1-1/2		
3/8 X 2		
3/8 X 2-1/2		
3/8 X 3		
3/8 X 3-1/2		
3/8 X 4		
7/16 UNC	304 SS	316 SS
7/16 X 1-1/2		
7/16 X 2		
7/16 X 2-1/2		
7/16 X 3		

1/2 UNC	304 SS	316 SS
1/2 X 3/4		
1/2 X 1		
1/2 X 1-1/4		
1/2 X 1-1/2		
1/2 X 2		
1/2 X 2-1/2		
1/2 X 3		
1/2 X 4		
5/8 UNC	304 SS	316 SS
5/8 X 1		
5/8 X 1-1/4		
5/8 X 1-1/2		
5/8 X 2		
5/8 X 2-1/2		
5/8 X 3		
5/8 X 4		
3/4 UNC	304 SS	316 SS
3/4 X 1-1/2		
3/4 X 2		
3/4 X 2-1/2		
3/4 X 3		
7/8 UNC	304 SS	316 SS
7/8 X 3		

	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
T.P.I.	40	24	20	18	16	14	13	11	10
Skt Dv A/F (inch)	3/32	5/32	3/16	1/4	5/16	3/8	3/8	1/2	5/8
Head Dia (inch)	13/64	5/16	3/8	15/32	9/16	21/32	3/4	15/16	1/8
Head Height (inch)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Cap Screws – UNF



NB: some sizes may have head markings.

304 SS

NB: some sizes are fully threaded.

10-32 (3/16 UNF) 304 SS

3/16 X 3/8	
3/16 X 1/2	
3/16 X 5/8	
3/16 X 3/4	
3/16 X 1	
3/16 X 1-1/4	
3/16 X 1-1/2	
3/16 X 2	

1/4 UNF 304 SS

1/4 X 3/8	
1/4 X 1/2	
1/4 X 3/4	
1/4 X 1	
1/4 X 1-1/4	
1/4 X 1-1/2	
1/4 X 2	
1/4 X 2-1/2	

5/16 UNF 304 SS

5/16 X 3/4	
5/16 X 1	
5/16 X 1-1/4	
5/16 X 1-1/2	
5/16 X 2	
5/16 X 2-1/2	
5/16 X 3	

3/8 UNF 304 SS

3/8 X 3/4	
3/8 X 1	
3/8 X 1-1/4	
3/8 X 1-1/2	
3/8 X 2	
3/8 X 2-1/2	

7/16 UNF 304 SS

7/16 X 1	
7/16 X 1-1/2	
7/16 X 2	

1/2 UNF 304 SS

1/2 X 1	
1/2 X 1-1/4	
1/2 X 1-1/2	
1/2 X 2	
1/2 X 2-1/2	

	3/16 UNF (10-32)	1/4 UNF	5/16 UNF	3/8 UNF	7/16 UNF	1/2 UNF
T.P.I.	32	28	24	24	20	20
Skt Dv A/F (inch)	5/32	3/16	1/4	5/16	3/8	3/8
Head Dia (inch)	5/16	3/8	15/32	9/16	21/32	3/4
Head Height (inch)	3/16	1/4	5/16	3/8	7/16	1/2

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

NB: Some sizes are fully threaded.

Csk Socket Screws – Metric (DIN 7991)



NB: some sizes may have head markings.
Countersunk Angle = 90 degrees

304 SS **316 SS**

	304 SS	316 SS
M3		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M4		
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 40		
M4 X 50		
M5		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 50		
M5 X 60		
M5 X 70		

	304 SS	316 SS
M6		
M6 X 8		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 45		
M6 X 50		
M6 X 55		
M6 X 60		
M6 X 70		
M6 X 80		
M6 X 90		
M6 X 100		
M8		
M8 X 10		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		
M8 X 45		
M8 X 50		
M8 X 55		
M8 X 60		

	304 SS	316 SS
M8		
M8 X 70		
M8 X 80		
M8 X 90		
M8 X 100		
M8 X 120		
M8 X 200		
M10		
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		
M10 X 45		
M10 X 50		
M10 X 55		
M10 X 60		
M10 X 70		
M10 X 80		
M10 X 90		
M10 X 100		
M10 X 110		
M10 X 120		
M10 X 150		
M10 X 200		

continued on next page...

BUMAX available on request.

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	M3	M4	M5	M6	M8	M10	M12	M16	M20
Hex Key A/F (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0
Head Dia (mm)	6.0	8.0	10.0	12.0	16.0	20.0	24.0	30.0	36.0
Head Height (mm)	1.7	2.3	2.8	3.3	4.4	5.5	6.5	7.5	8.5

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Socket Screws – Metric (DIN 7991) cont.



NB: some sizes may have head markings.
Countersunk Angle = 90 degrees

304 SS **316 SS**

M12	304 SS	316 SS
M12 X 20		
M12 X 25		
M12 X 30		
M12 X 35		
M12 X 40		
M12 X 45		
M12 X 50		
M12 X 60		
M12 X 70		
M12 X 80		
M12 X 90		
M12 X 100		
M12 X 120		
M12 X 130		
M12 X 150		
M12 X 180		
M12 X 200		

M16	304 SS	316 SS
M16 X 30		
M16 X 35		
M16 X 40		
M16 X 50		
M16 X 60		
M16 X 70		
M16 X 80		
M16 X 90		
M16 X 100		
M16 X 110		
M16 X 120		
M16 X 130		
M16 X 150		
M16 X 200		

M20	304 SS	316 SS
M20 X 40		
M20 X 50		
M20 X 60		
M20 X 70		
M20 X 80		
M20 X 100		
M20 X 110		
M20 X 120		
M20 X 150		

BUMAX available on request.

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	M3	M4	M5	M6	M8	M10	M12	M16	M20
Hex Key A/F (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0
Head Dia (mm)	6.0	8.0	10.0	12.0	16.0	20.0	24.0	30.0	36.0
Head Height (mm)	1.7	2.3	2.8	3.3	4.4	5.5	6.5	7.5	8.5

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Socket Screws – UNC



304 SS **316 SS**

NB: some sizes may have head markings.
Countersunk Angle = 82 degrees

4-40 UNC	304 SS	316 SS	1/4 UNC	304 SS	316 SS	3/8 UNC	304 SS	316 SS
4-40 X 1/4			1/4 X 3/8			3/8 X 3/4		
8-32 UNC	304 SS	316 SS	1/4 X 1/2			3/8 X 1		
8-32 X 3/4			1/4 X 5/8			3/8 X 1-1/4		
8-32 X 2			1/4 X 3/4			3/8 X 1-1/2		
10-24 UNC (3/16)	304 SS	316 SS	1/4 X 1			3/8 X 2		
3/16 X 1/2			1/4 X 1-1/4			3/8 X 2-1/2		
3/16 X 5/8			1/4 X 1-1/2			3/8 X 3		
3/16 X 3/4			1/4 X 2			3/8 X 4		
3/16 X 1			1/4 X 2-1/2			1/2 UNC	304 SS	316 SS
3/16 X 1-1/4			1/4 X 3			1/2 X 1		
3/16 X 1-1/2			5/16 UNC	304 SS	316 SS	1/2 X 1-1/4		
3/16 X 2			5/16 X 3/4			1/2 X 1-1/2		
3/16 X 3			5/16 X 1			1/2 X 2		
			5/16 X 1-1/4			1/2 X 2-1/2		
			5/16 X 1-1/2			5/8 UNC	304 SS	316 SS
			5/16 X 2			5/8 X 1-1/2		
			5/16 X 2-1/2					
			5/16 X 3					

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	4-40	8-32	10-24 (3/16)	1/4	5/16	3/8	1/2
Hex Key A/F (inch)	0.063	0.109	0.125	0.156	0.186	0.218	0.310
Head Dia (inch)	0.217	0.312	0.377	0.481	0.603	0.724	0.886
Head Height (inch)	0.078	0.105	0.130	0.180	0.202	0.255	0.269

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Socket Screws – UNF



304 SS

NB: some sizes may have head markings
Countersunk Angle = 82 degrees

10-32 (3/16 UNF)	304 SS	1/4 UNF	304 SS	5/16 UNF	304 SS	3/8 UNF	304 SS
3/16 X 3/8		1/4 X 1/2		5/16 X 3/4		3/8 X 1	
3/16 X 1/2		1/4 X 5/8		5/16 X 1		3/8 X 1-1/4	
3/16 X 5/8		1/4 X 3/4		5/16 X 1-1/4		3/8 X 1-1/2	
3/16 X 3/4		1/4 X 1				3/8 X 2	
3/16 X 1		1/4 X 1-1/4					

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	10-32 (3/16 UNF)	1/4 UNF	5/16 UNF	3/8 UNF
Hex Key A/F (inch)	0.125	0.156	0.186	0.218
Head Dia (inch)	0.377	0.481	0.603	0.724
Head Height (inch)	0.130	0.180	0.202	0.255

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Button Head Socket Screws – Metric (ISO 7380)



304 SS **316 SS**

M3	304 SS	316 SS
M3 X 5		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		

M4	304 SS	316 SS
M4 X 4		
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		

M5	304 SS	316 SS
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 40		
M5 X 50		
M5 X 60		

M6	304 SS	316 SS
M6 X 8		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 50		
M6 X 55		
M6 X 60		
M6 X 70		

M8	304 SS	316 SS
M8 X 10		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		
M8 X 50		
M8 X 60		
M8 X 70		
M8 X 80		
M8 X 90		

M10	304 SS	316 SS
M10 X 12		
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		
M10 X 50		
M10 X 60		
M10 X 70		
M10 X 80		

M12	304 SS	316 SS
M12 X 20		
M12 X 25		
M12 X 30		
M12 X 35		
M12 X 40		
M12 X 45		
M12 X 50		
M12 X 60		

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	M3	M4	M5	M6	M8	M10	M12
Hex Key A/F (mm)	2.0	2.5	3.0	4.0	5.0	6.0	8.0
Head Dia (mm)	5.7	7.6	9.5	10.5	14.0	17.5	21.0
Head Height (mm)	1.85	2.2	2.75	3.3	4.4	5.5	7.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Button Head Socket Screws – UNC



	304 SS	316 SS		304 SS	316 SS		304 SS	316 SS
6-32 UNC			1/4 UNC			3/8 UNC		
6-32 X 1/4			1/4 X 5/8			3/8 X 5/8		
8-32 UNC			1/4 X 3/4			3/8 X 3/4		
8-32 X 1/4			1/4 X 1			3/8 X 1		
10-24 UNC (3/16)			1/4 X 1-1/4			3/8 X 1-1/4		
3/16 X 3/8			1/4 X 1-1/2			3/8 X 1-1/2		
3/16 X 1/2			1/4 X 2			3/8 X 2		
3/16 X 5/8			1/4 X 2-1/2			3/8 X 2-1/2		
3/16 X 3/4			1/4 X 3			3/8 X 3		
3/16 X 1			5/16 UNC			1/2 UNC		
3/16 X 1-1/2			5/16 X 5/8			1/2 X 1		
3/16 X 2			5/16 X 3/4			1/2 X 1-1/4		
3/16 X 2-1/2			5/16 X 1			1/2 X 1-1/2		
1/4 UNC			5/16 X 1-1/4			1/2 X 2		
1/4 X 3/8			5/16 X 1-1/2					
1/4 X 1/2			5/16 X 2					
			5/16 X 2-1/2					
			5/16 X 3					

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	8-32	3/16	1/4	5/16	3/8	1/2
T.P.I.	32	24	20	18	16	13
Hex Key A/F (inch)	3/32	1/8	5/32	3/16	7/32	5/16
Head Dia (inch)	0.294	0.361	0.437	0.547	0.656	0.875
Head Height (inch)	0.085	0.101	0.132	0.166	0.199	0.265

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Button Head Socket Screws – UNF



	304 SS		304 SS		304 SS
10-32 (3/16 UNF)		1/4 UNF		5/16 UNF	
3/16 X 3/8		1/4 X 1/2		5/16 X 3/4	
3/16 X 1/2		1/4 X 3/4		5/16 X 1	
3/16 X 5/8		1/4 X 1		5/16 X 1-1/4	
3/16 X 3/4		1/4 X 1-1/4		5/16 X 1-1/2	
3/16 X 1		1/4 X 1-1/2		3/8 UNF	
		1/4 X 2		3/8 X 1	
				3/8 X 1-1/4	
				3/8 X 1-1/2	

NB: some sizes come with a shank/are partially threaded. If critical, please check.

	10-32 (3/16 UNF)	1/4 UNF	5/16 UNF	3/8 UNF
T.P.I.	32	28	24	24
Hex Key A/F (inch)	1/8	5/32	3/16	7/32
Head Dia (inch)	0.354	0.425	0.536	0.646
Head Height (inch)	0.101	0.132	0.166	0.199

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Set Screws (Grub Screws) – Metric (DIN 916 Cup Point)



304 SS **316 SS**

	304 SS	316 SS
M2		
M2 X 3		
M2.5		
M2.5 X 4		
M2.5 X 6		
M3		
M3 X 3		
M3 X 4		
M3 X 5		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 20		
M4		
M4 X 4		
M4 X 5		
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		

	304 SS	316 SS
M5		
M5 X 4		
M5 X 5		
M5 X 6		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		

	304 SS	316 SS
M6		
M6 X 5		
M6 X 6		
M6 X 8		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 40		
M6 X 50		

	304 SS	316 SS
M8		
M8 X 8		
M8 X 10		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 40		
M8 X 50		

	304 SS	316 SS
M10		
M10 X 10		
M10 X 12		
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		

	304 SS	316 SS
M12		
M12 X 12		
M12 X 16		
M12 X 20		
M12 X 25		
M12 X 30		
M12 X 40		

	304 SS	316 SS
M16		
M16 X 16		
M16 X 20		
M16 X 25		
M16 X 30		


	304 SS	316 SS
M20		
M20 X 25		

	M2	M3	M4	M5	M6	M8	M10	M12	M16	M20
Hex Key A/F (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0


MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

NB: also available on request:


Dog Point – DIN915



Flat Point – DIN913



Cone Point – DIN914



Hex Socket Set Screws (Grub Screws) – UNC



304 SS

316 SS

10-24 UNC (3/16)

	304 SS	316 SS
3/16 X 3/16		
3/16 X 1/4		
3/16 X 5/16		
3/16 X 3/8		
3/16 X 1/2		

1/4 UNC

	304 SS	316 SS
1/4 X 1/4		
1/4 X 5/16		
1/4 X 3/8		
1/4 X 1/2		
1/4 X 5/8		
1/4 X 3/4		
1/4 X 1		

5/16 UNC

	304 SS	316 SS
5/16 X 5/16		
5/16 X 3/8		
5/16 X 1/2		
5/16 X 5/8		
5/16 X 3/4		

3/8 UNC

	304 SS	316 SS
3/8 X 3/8		
3/8 X 1/2		
3/8 X 5/8		
3/8 X 3/4		
3/8 X 1		

1/2 UNC

	304 SS	316 SS
1/2 X 1/2		
1/2 X 5/8		
1/2 X 3/4		
1/2 X 1		

5/8 UNC

	304 SS	316 SS
5/8 X 3/4		

	10-32 (3/16) UNC	1/4	5/16	3/8	1/2	5/8
T.P.I	24	20	18	16	13	11
Hex Key A/F (inch)	3/32	1/8	5/32	3/16	1/4	5/16

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Socket Set Screws (Grub Screws) – UNF



304 SS

10-32 (3/16 UNF)

	304 SS
3/16 X 1/4	
3/16 X 3/8	

1/4 UNF

	304 SS
1/4 X 3/16	
1/4 X 1/4	
1/4 X 3/8	

5/16 UNF

	304 SS
5/16 X 5/16	
5/16 X 1/2	










3/8 UNF

	304 SS
3/8 X 3/8	
3/8 X 1/2	

	10-32 (3/16) UNF	1/4	5/16	3/8
T.P.I	32	28	24	24
Hex Key A/F (inch)	3/32	1/8	5/32	3/16

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Machine Screws

<p>Csk Slotted – Metric – UNC & BSW</p>		<p>71,74 71 74</p>
<p>Csk Phillips – Metric – UNC</p>		<p>73,75 73 75</p>
<p>Pan Head Slotted – Metric – UNC – UNF</p>		<p>76-80 76 79 80</p>
<p>Pan Head Phillips – Metric – UNC – UNF</p>		<p>77-80 77 79 80</p>
<p>Round Head Slotted – BSW</p>		<p>78</p>
<p>Truss Head Phillips (Gutter Bolts) – UNC</p>		<p>80</p>
<p>Cheese Head Slotted – Metric</p>		<p>81</p>
<p>Raised Csk – Metric</p>		<p>82</p>
<p>Wing Screws – Metric</p>		<p>83</p>

Csk Slotted - Metric (DIN 963)



304 SS **316 SS**

Countersunk Angle = 90 degrees

	304 SS	316 SS
M2		
M2 X 8		
M2 X 10		
M2 X 16		
M2.5		
M2.5 X 5		
M2.5 X 8		
M2.5 X 10		
M2.5 X 12		
M2.5 X 16		
M2.5 X 20		
M3		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M3 X 30		
M3 X 40		
M3 X 50		
M3 X 60		
M4		
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		
M4 X 50		
M4 X 60		
M4 X 70		

	304 SS	316 SS
M5		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 45		
M5 X 50		
M5 X 60		
M5 X 70		
M5 X 80		
M5 X 90		
M6		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 45		
M6 X 50		
M6 X 55		
M6 X 60		
M6 X 65		
M6 X 70		
M6 X 75		
M6 X 80		
M6 X 90		
M6 X 100		
M6 X 120		

	304 SS	316 SS
M8		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		
M8 X 45		
M8 X 50		
M8 X 55		
M8 X 60		
M8 X 70		
M8 X 80		
M8 X 90		
M8 X 100		
M8 X 110		
M8 X 120		
M10		
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		
M10 X 45		
M10 X 50		
M10 X 60		
M10 X 70		
M10 X 80		
M10 X 90		
M10 X 100		
M10 X 120		

continued on next page...

	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M16
Head Diam (mm)	3.5	4.5	5.6	7.5	9.2	11	14.5	18	22	28
Head Height (mm)	1.3	1.5	1.65	2.2	2.5	3	4	5	6	8

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Slotted - Metric (DIN 963) cont.



304 SS **316 SS**

Countersunk Angle = 90 degrees

M12	304 SS	316 SS
M12 X 25		
M12 X 30		
M12 X 35		
M12 X 40		
M12 X 45		
M12 X 50		
M12 X 55		
M12 X 60		
M12 X 70		
M12 X 80		
M12 X 100		

M16	304 SS	316 SS
M16 X 80		
M16 X 100		
M16 X 110		
M16 X 120		

• For dimensions, see p. 71

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

	M2.5	M3	M4	M5	M6	M8
Head Diam (mm)	4.7	5.6	7.5	9.2	11	14.5
Head Height (mm)	1.5	1.65	2.2	2.5	3	4

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Phillips - Metric (DIN 965)



304 SS **316 SS**

Countersunk Angle = 90 degrees

	304 SS	316 SS
M2		
M2 X 5		
M2.5		
M2.5 X 6		
M2.5 X 8		
M3		
M3 X 5		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M4		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		
M4 X 50		

	304 SS	316 SS
M5		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 50		
M5 X 60		
M6		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 50		
M6 X 60		

	304 SS	316 SS
M8		
M8 X 12		
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		
M8 X 45		
M10		
M10 X 60		

	M2	M2.5	M3	M4	M5	M6	M8	M10
Head Diam (mm)	3.8	4.7	5.6	7.5	9.2	11	14.5	18
Head Height (mm)	1.2	1.5	1.65	2.2	2.5	3	4	5

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Slotted – UNC/BSW



304 SS **316 SS**

Csk Angle = UNC - 82°, BSW - 90°

1/8 BSW (5-40 UNC)	304 SS	316 SS	3/16 BSW	304 SS	316 SS	5/16 UNC	304 SS	316 SS
1/8 X 1/4			3/16 X 1/4			5/16 X 3/4		
1/8 X 3/8			3/16 X 3/8			5/16 X 1		
1/8 X 1/2			3/16 X 1/2			5/16 X 1-1/4		
1/8 X 5/8			3/16 X 5/8			5/16 X 1-1/2		
1/8 X 3/4			3/16 X 3/4			5/16 X 2		
1/8 X 1			3/16 X 1			5/16 X 2-1/2		
1/8 X 1-1/4			3/16 X 1-1/4			5/16 X 3		
1/8 X 1-1/2			3/16 X 1-1/2			5/16 X 3-1/2		
1/8 X 2			3/16 X 1-3/4			5/16 X 4		
			3/16 X 2					
			3/16 X 2-1/2					
			3/16 X 3					
			3/16 X 3-1/2					
			3/16 X 4					
6/32 UNC	304 SS	316 SS	1/4 BSW	304 SS	316 SS	3/8 UNC	304 SS	316 SS
6-32 X 1/4			1/4 X 3/8			3/8 X 3/4		
6-32 X 3/8			1/4 X 1/2			3/8 X 1		
6-32 X 1/2			1/4 X 5/8			3/8 X 1-1/4		
6-32 X 3/4			1/4 X 3/4			3/8 X 1-1/2		
6-32 X 1			1/4 X 1			3/8 X 2		
			1/4 X 1-1/4			3/8 X 2-1/2		
			1/4 X 1-1/2			3/8 X 3		
			1/4 X 1-3/4			3/8 X 3-1/2		
			1/4 X 2			3/8 X 4		
			1/4 X 2-1/4					
			1/4 X 2-1/2					
			1/4 X 3					
			1/4 X 3-1/2					
			1/4 X 4					
8/32 UNC	304 SS	316 SS	1/2 UNC	304 SS	316 SS			
8-32 X 3/8			1/2 X 1					
8-32 X 3/4			1/2 X 1-1/4					
8-32 X 1			1/2 X 1-1/2					
8-32 X 1-1/4			1/2 X 2					
8-32 X 1-1/2			1/2 X 2-1/2					
8-32 X 2			1/2 X 3					
			1/2 X 4					
5/32 BSW	304 SS	316 SS						
5/32 X 3/8								
5/32 X 1/2								
5/32 X 5/8								
5/32 X 3/4								
5/32 X 1								
5/32 X 1-1/4								
5/32 X 1-1/2								
5/32 X 2								

	1/8 BSW	6-32 UNC	8-32 UNC	5/32 BSW	3/16	1/4	5/16	3/8	1/2 UNC
Head Diam (inch)	0.237	0.244	0.322	0.296	0.324	0.441	0.534	0.675	0.793
Head Height (inch)	0.075	0.083	0.100	0.087	0.131	0.157	0.175	0.261	0.278
T.P.I	40	32	32	32	24	20	16	13	12

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

• NB: the threads of UNC & BSW are interchangeable except in 1/2".

Csk Phillips – UNC



304 SS

Csk Angle = UNC - 82°

6-32 UNC

304 SS

- 6-32 X 3/8
- 6-32 X 1/2
- 6-32 X 3/4
- 6-32 X 1

8-32 UNC

304 SS

- 8-32 X 3/8
- 8-32 X 1/2
- 8-32 X 3/4
- 8-32 X 1
- 8-32 X 1-1/4
- 8-32 X 1-1/2

10-24 (3/16 UNC)

304 SS

- 10-24 X 3/8
- 10-24 X 1/2
- 10-24 X 5/8
- 10-24 X 3/4
- 10-24 X 1
- 10-24 X 1-1/4
- 10-24 X 1-1/2

1/4 UNC

304 SS

- 1/4 X 3/4
- 1/4 X 1

5/16 UNC

304 SS

- 5/16 X 5/8

NB: The threads of 3/16 & 1/4 UNC & BSW are interchangeable except in 1/2".

	6-32 UNC	8-32 UNC	10-24 UNC (3/16)	1/4 UNC	5/16 UNC
Head Diam (inch)	0.244	0.322	0.346	0.453	0.598
Head Height (inch)	0.098	0.118	0.132	0.153	0.197
T.P.I.	32	32	24	20	16

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Slotted – Metric (DIN 85)



304 SS **316 SS**

M3	304 SS	316 SS
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M3 X 30		
M3 X 40		
M3 X 50		

M4	304 SS	316 SS
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		
M4 X 50		

M5	304 SS	316 SS
M5 X 6		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 50		
M5 X 60		
M5 X 70		
M5 X 80		

M6	304 SS	316 SS
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 50		
M6 X 60		
M6 X 65		
M6 X 70		
M6 X 80		
M6 X 90		
M6 X 100		

M8	304 SS	316 SS
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 40		
M8 X 50		
M8 X 60		
M8 X 90		
M8 X 100		

	M3	M4	M5	M6	M8
Head Diam (mm)	5.5	7	10	13	16
Head Height (mm)	2.0	2.4	3	5	6

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Phillips – Metric (DIN 7985)



304 SS **316 SS**

M2	304 SS	316 SS
M2 X 4		
M2 X 5		
M2 X 6		
M2 X 8		
M2 X 12		
M2 X 16		

M2.5	304 SS	316 SS
M2.5 X 12		
M2.5 X 20		

M3	304 SS	316 SS
M3 X 4		
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M3 X 30		
M3 X 35		
M3 X 40		

M4	304 SS	316 SS
M4 X 5		
M4 X 6		
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 35		
M4 X 40		
M4 X 50		

M5	304 SS	316 SS
M5 X 6		
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 14		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 50		

M6	304 SS	316 SS
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 40		
M6 X 50		

M8	304 SS	316 SS
M8 X 16		
M8 X 35		
M8 X 45		
M8 X 50		

	M2	M2.5	M3	M4	M5	M6	M8
Head Diam (mm)	4	5	6	8	10	12	16
Head Height (mm)	1.6	2.0	2.4	3.1	3.8	4.6	6.0

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Slot – UNC



304 SS

6-32 UNC

304 SS

6-32 X 3/8
6-32 X 1/2
6-32 X 3/4
6-32 X 1

8-32 UNC

304 SS

8-32 X 3/8
8-32 X 1/2
8-32 X 3/4
8-32 X 1
8-32 X 1-1/4
8-32 X 1-1/2

10-24 UNC

304 SS

10-24 X 1/4
10-24 X 2
10-24 X 3

1/4 UNC

304 SS

1/4 X 2-1/2
1/4 X 3

	6-32	8-32	10-24	1/4
Head Diam (inch)	0.270	0.322	0.373	0.492
Head Height (inch)	0.082	0.096	0.110	0.144
T.P.I.	32	32	24	20

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Phillips – UNC



304 SS

6-32 UNC

304 SS

6-32 X 1/4
6-32 X 3/8
6-32 X 1/2
6-32 X 3/4
6-32 X 1
6-32 X 1-1/4
6-32 X 1-1/2

8-32 UNC

304 SS

8-32 X 1/4
8-32 X 3/8
8-32 X 1/2
8-32 X 3/4
8-32 X 1
8-32 X 1-1/4
8-32 X 1-1/2

10-24 UNC (3/16)

304 SS

10-24 X 3/8
10-24 X 1/2
10-24 X 5/8
10-24 X 3/4
10-24 X 1
10-24 X 1-1/4

1/4 UNC

304 SS

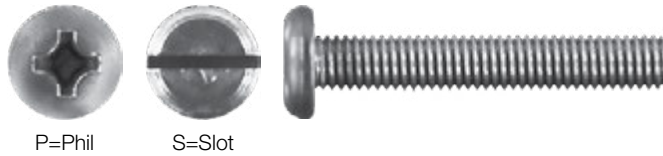
1/4 X 1-1/4

	6-32	8-32	10-24	1/4
Head Diam (inch)	0.270	0.322	0.373	0.492
Head Height (inch)	0.082	0.096	0.110	0.144
T.P.I.	32	32	24	20

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head – UNF

304 SS



10-32 (3/16 UNF)	304 SS
10-32 X 1/4	P
10-32 X 3/8	P/S
10-32 X 1/2	P/S
10-32 X 5/8	P
10-32 X 3/4	P
10-32 X 1	P
10-32 X 1-1/4	P
10-32 X 1-1/2	P
10-32 X 2	P

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Truss Head Phillips (Gutter Bolts) – UNC

304 SS



10-24 UNC (3/16)	304 SS
3/16 X 1/4	
3/16 X 3/8	
3/16 X 1/2	
3/16 X 5/8	
3/16 X 3/4	
3/16 X 1	
3/16 X 1-1/4	
3/16 X 1-1/2	
3/16 X 2	

1/4 UNC	304 SS
1/4 X 3/8	
1/4 X 1/2	
1/4 X 5/8	
1/4 X 3/4	
1/4 X 1	
1/4 X 1-1/4	
1/4 X 1-1/2	
1/4 X 2	
1/4 X 2-1/2	
1/4 X 3	

	3/16	1/4
Head Diam (inch)	0.448	0.573
Head Height (inch)	0.118	0.138

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Cheese Head Slotted – Metric (DIN 84)



304 SS

316 SS

M2

	304 SS	316 SS
M2 X 5		

M3

	304 SS	316 SS
M3 X 6		
M3 X 8		
M3 X 10		
M3 X 12		
M3 X 16		
M3 X 20		
M3 X 25		
M3 X 35		
M3 X 50		

M4

	304 SS	316 SS
M4 X 8		
M4 X 10		
M4 X 12		
M4 X 16		
M4 X 20		
M4 X 25		
M4 X 30		
M4 X 40		
M4 X 50		
M4 X 80		

M5

	304 SS	316 SS
M5 X 8		
M5 X 10		
M5 X 12		
M5 X 16		
M5 X 20		
M5 X 25		
M5 X 30		
M5 X 35		
M5 X 40		
M5 X 50		
M5 X 60		
M5 X 90		
M5 X 100		

M6

	304 SS	316 SS
M6 X 8		
M6 X 10		
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		
M6 X 35		
M6 X 60		
M6 X 90		
M6 X 100		

M8

	304 SS	316 SS
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		
M8 X 40		

M10

	304 SS	316 SS
M10 X 16		
M10 X 20		
M10 X 25		
M10 X 30		
M10 X 35		
M10 X 40		
M10 X 50		
M10 X 60		
M10 X 80		
M10 X 100		

	M2	M3	M4	M5	M6	M8	M10
Head Diam (mm)	5.5	7	7	8.5	10	13	16
Head Height (mm)	2.0	1.8	2.6	3.3	3.9	5	6

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Raised Csk – Metric DIN 964 (Slot), DIN 966 (PH)



304 SS **316 SS**

S – Slot; PH – Philips

NB: Countersunk Angle = 90°

M3	304 SS	316 SS
M3 X 16	PH	

M4	304 SS	316 SS
M4 X 10	PH	
M4 X 12		S
M4 X 16		S
M4 X 20		S
M4 X 25		S
M4 X 30		S

M5	304 SS	316 SS
M5 X 12		S
M5 X 16		S
M5 X 20		S
M5 X 25		S
M5 X 30		S, PH
M5 X 35		S
M5 X 40		S
M5 X 50		S
M5 X 70		S
M5 X 80		S
M5 X 90		S

NB: other sizes available to order on request.

M6	304 SS	316 SS
M6 X 12	S	S
M6 X 16	PH	S
M6 X 20		S
M6 X 25		S
M6 X 30		S
M6 X 35		S
M6 X 40		S
M6 X 50		S
M6 X 60		S
M6 X 70		S
M6 X 75		S
M6 X 80		S
M6 X 90		S
M6 X 100		S

M8	304 SS	316 SS
M8 X 20		S
M8 X 30		S
M8 X 35		S
M8 X 40		S
M8 X 50		S
M8 X 60		S
M8 X 65		S
M8 X 70		S
M8 X 75		S
M8 X 80		S
M8 X 90		S
M8 X 100		S

M10	304 SS	316 SS
M10 X 30		S
M10 X 40		S
M10 X 50		S
M10 X 60		S
M10 X 70		S
M10 X 80		S
M10 X 100		S

	M3	M4	M5	M6	M8	M10
Head Diam (mm)	N/A	7.3	9.2	11	14.5	18

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Wing Screws - Metric (DIN 316)



















304 SS **316 SS**

M5	304 SS	316 SS
M5 X 10		
M5 X 16		
M5 X 20		
M5 X 25		

M6	304 SS	316 SS
M6 X 12		
M6 X 16		
M6 X 20		
M6 X 25		
M6 X 30		

M8	304 SS	316 SS
M8 X 16		
M8 X 20		
M8 X 25		
M8 X 30		
M8 X 35		

Self Tapping Screws

<p>Csk Self Tappers – Square Drive – Square Drive, T17 Tip – Phillips Drive – Slotted Drive</p>		<p>85-87 85 85 86 87</p>
<p>Pan Head Self Tappers – Square Drive – Square Drive, T17 Tip – Phillips Drive – Slotted Drive</p>		<p>88-90 88 89 89 90</p>
<p>Truss Head Self Tappers – Phillips Drive</p>		<p>91</p>
<p>Cap Head Self Tappers – Socket Drive</p>		<p>91</p>
<p>Hex Head Self Tappers</p>		<p>92</p>
<p>Raised Csk Self Tappers – Phillips Drive – Slotted Drive</p>		<p>92-93 92 93</p>
<p>Csk Self Tappers – T25 Tip</p>		<p>93</p>
<p>Pan Self Tappers – T25 Tip</p>		<p>94</p>
<p>Csk Trunc Self Tappers – SQ Dv (some black)</p>		<p>94</p>
<p>Csk Trunc Self Tappers – SQ Dv, T17 Tip</p>		<p>94</p>
<p>Pan Self Tapper – SQ Dv, Lead Pt, Thread Cutter</p>		<p>95</p>
<p>Csk Self Tapper – SQ Dv, with Undersized Head</p>		<p>95</p>
<p>Raised Csk Truncated Self Tappers – SQ#1, Type B</p>		<p>95</p>
<p>Csk Self Driller – SQ Dv (most black)</p>		<p>96</p>
<p>Csk Trunc Self Driller – SQ Dv, Black</p>		<p>96</p>
<p>U Drive Screws</p>		<p>96</p>

Csk Self Tappers - Sq Drive



304 SS

316 SS

4G	304 SS	316 SS
4G X 5/16		
4G X 3/8		
4G X 1/2		
4G X 5/8		
4G X 3/4		
4G X 1		

6G	304 SS	316 SS
6G X 3/8		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		
6G X 1-1/2		
6G X 1-3/4		
6G X 2		

8G	304 SS	316 SS
8G X 3/8		
8G X 1/2		
8G X 5/8		
8G X 3/4		

8G X 1		
8G X 1-1/4		
8G X 1-1/4 (NO.1 DRV)		
8G X 1-1/2		
8G X 1-3/4		
8G X 2		
8G X 2-1/2		
8G X 3		

10G	304 SS	316 SS
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 1-3/4		
10G X 2		
10G X 2-1/2		
10G X 3		
10G X 3-1/2		
10G X 4 (available in Phillips Dv)		

12G	304 SS	316 SS
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 1-3/4		
12G X 2		
12G X 2-1/2		
12G X 3		
12G X 4 (available in Phillips Dv)		

14G	304 SS	316 SS
14G X 3/4		
14G X 1		
14G X 1-1/4		
14G X 1-1/2		
14G X 1-3/4		
14G X 2		
14G X 2-1/2		
14G X 3		
14G X 3 (AB*)		

*Finer thread
For longer sizes, see T17 Tip below.

Csk Self Tappers - Sq Drive, T17 Tip



304 SS

316 SS

8G	304 SS	316 SS
8G X 1-1/4		

10G	304 SS	316 SS
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 2		
10G X 2-1/2		

14G	304 SS	316 SS
14G X 4		
14G X 5		
14G X 6		

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Self Tappers - Phillips Drive



304 SS **316 SS**

	304 SS	316 SS
2G		
2G X 3/8		
4G		
4G X 1/2		
4G X 5/8		
4G X 3/4		
4G X 1		
6G		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		
8G		
8G X 1/2		
8G X 5/8		
8G X 3/4		
8G X 1		
8G X 1-1/4		
8G X 1-1/2		
8G X 1-3/4		
8G X 2		

	304 SS	316 SS
10G		
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 1-3/4		
10G X 2		
10G X 2-1/2		
10G X 3-1/2		
10G X 4		
12G		
12G X 1/2		
12G X 5/8		
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 1-3/4		
12G X 2		
12G X 2-1/2		
12G X 3		
12G X 3-1/2		
12G X 4		

	304 SS	316 SS
14G		
14G X 3/4		
14G X 1		
14G X 1-1/4		
14G X 1-1/2		
14G X 2		
14G X 2-1/2		
14G X 80MM		

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Self Tappers - Slotted Drive



304 SS **316 SS**

4G	304 SS	316 SS
4G X 1/2		
4G X 5/8		
4G X 3/4		
4G X 1		

6G	304 SS	316 SS
6G X 3/8		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		
6G X 1-1/2		

8G	304 SS	316 SS
8G X 3/8		
8G X 1/2		
8G X 5/8		
8G X 3/4		
8G X 1		
8G X 1-1/4		
8G X 1-1/2		
8G X 2		

10G	304 SS	316 SS
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 2		

12G	304 SS	316 SS
12G X 5/8		
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 2		

14G	304 SS	316 SS
14G X 3/4		
14G X 1		
14G X 1-1/4		
14G X 2		

See also Csk Woodscrews p. 111

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Self Tappers – Sq Drive



304 SS **316 SS**

4G	304 SS	316 SS
4G X 3/8		
4G X 1/2		
4G X 5/8		
4G X 3/4		
4G X 1		

6G	304 SS	316 SS
6G X 1/4		
6G X 3/8		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		
6G X 1-1/2		
6G X 2		

8G	304 SS	316 SS
8G X 3/8		
8G X 1/2		
8G X 5/8		
8G X 3/4		
8G X 1*		
8G X 1-1/4*		
8G X 1-1/2*		
8G X 1-3/4		
8G X 2*		
8G X 2-1/2		
8G X 3		

10G	304 SS	316 SS
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 1-3/4		
10G X 2		
10G X 2-1/2		
10G X 3		

12G	304 SS	316 SS
12G X 1/2		
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 1-3/4		
12G X 2		
12G X 2-1/2		
12G X 3		

14G	304 SS	316 SS
14G X 1/2		
14G X 3/4		
14G X 1		
14G X 1-1/4		
14G X 1-1/2		
14G X 1-3/4		
14G X 2		
14G X 2-1/2		
14G X 3		

*Also available in No.1 Dv (in addition to No.2 Dv)

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Self Tappers – Sq Drive, T17 Tip



304 SS

6G	304 SS	8G	304 SS	10G	304 SS
6G X 3/4		8G X 3/4		10G X 3/4	
6G X 1		8G X 1-1/4		10G X 1	
6G X 1-1/4		8G X 1-1/2		10G X 1-1/2	
				10G X 2	
				10G X 2-1/2	

Pan Head Self Tappers – Phillips Drive (DIN 7981H)



304 SS **316 SS**

4G	304 SS	316 SS	8G	304 SS	316 SS	12G	304 SS	316 SS
4G X 1/4			8G X 1/4			12G X 3/4		
4G X 3/8			8G X 5/8			12G X 1		
4G X 3/4			8G X 3/4			12G X 1-1/4		
4G X 1			8G X 1			12G X 1-1/2		
			8G X 1-1/4			12G X 2		
6G	304 SS	316 SS	8G X 1-1/2			12G X 2-1/2		
6G X 1/4			8G X 2			12G X 3-1/2		
6G X 3/8						12G X 4		
6G X 1/2			10G	304 SS	316 SS			
6G X 5/8			10G X 3/8			14G	304 SS	316 SS
6G X 3/4			10G X 1/2			14G X 3/4		
6G X 1			10G X 3/4			14G X 1		
6G X 1-1/2			10G X 1			14G X 1-1/4		
6G X 2			10G X 1-1/4			14G X 1-1/2		
			10G X 1-1/2			14G X 2		
			10G X 2			14G X 2-1/2		
			10G X 2-1/2			14G X 3		
			10G X 3-1/2			14G X 4		
			10G X 4					

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Head Self Tappers – Slotted Drive (DIN 7971)



304 SS **316 SS**

4G	304 SS	316 SS
4G X 3/8		
4G X 1/2		
4G X 5/8		
4G X 3/4		
4G X 1		

6G	304 SS	316 SS
6G X 3/8		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		

8G	304 SS	316 SS
8G X 3/8		
8G X 1/2		
8G X 5/8		
8G X 3/4		
8G X 1		
8G X 1-1/4		
8G X 1-1/2		
8G X 2		

10G	304 SS	316 SS
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/4		
10G X 1-1/2		
10G X 2		

12G	304 SS	316 SS
12G X 5/8		
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 2		

14G	304 SS	316 SS
14G X 3/4		
14G X 1		
14G X 1-1/4		
14G X 1-1/2		
14G X 2		

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Truss Head Self Tappers – Phillips Drive



304 SS

6G	304 SS	8G	304 SS	10G	304 SS
6G X 3/8		8G X 3/8		10G X 1/2	
6G X 1/2		8G X 1/2		10G X 3/4	
6G X 5/8		8G X 5/8		10G X 1	
6G X 3/4		8G X 3/4		10G X 1-1/4	
6G X 1		8G X 1		10G X 1-1/2	
6G X 1-1/4		8G X 1-1/4			
		8G X 1-1/2		12G	304 SS
		8G X 2		12G X 1	
				12G X 1-1/4	
				12G X 1-1/2	
				14G	304 SS
				14G X 3/4	

Cap Head Self Tappers – Socket Drive



304 SS

10G	304 SS	12G	304 SS	14G	304 SS
10G X 1/2		12G X 5/8		14G X 3/4	
10G X 5/8		12G X 3/4		14G X 1	
10G X 3/4		12G X 1		14G X 1-1/4	
10G X 1		12G X 1-1/4		14G X 1-1/2	
10G X 1-1/4		12G X 1-1/2		14G X 2	
10G X 1-1/2		12G X 50MM		14G X 60MM	
10G X 2		12G X 60MM			

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Hex Head Self Tappers (DIN 7976)



304 SS

10G

304 SS

10G X 1
10G X 1-1/2

12G

304 SS

12G X 1
12G X 1-1/2

14G

304 SS

14G X 1
14G X 1-1/2
14G X 2

Raised Csk Self Tappers – Phillips Drive (DIN7983H)



304 SS

316 SS

6G

304 SS

316 SS

6G X 1/2
6G X 3/4

10G

304 SS

316 SS

10G X 1
10G X 1-1/4
10G X 1-1/2
10G X 2

12G

304 SS

316 SS

12G X 1-1/2
12G X 2

8G

304 SS

316 SS

8G X 1/2
8G X 1

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Raised Csk Self Tappers - Slot Drive (DIN 7973)



304 SS

316 SS

4G	304 SS	316 SS
4G X 1/2		
4G X 3/4		

6G	304 SS	316 SS
6G X 3/8		
6G X 1/2		
6G X 5/8		
6G X 3/4		
6G X 1		
6G X 1-1/4		
6G X 1-1/2		

8G	304 SS	316 SS
8G X 3/8		
8G X 1/2		
8G X 5/8		
8G X 3/4		
8G X 1		
8G X 1-1/4		
8G X 1-1/2		
8G X 2		

10G	304 SS	316 SS
10G X 1/2		
10G X 5/8		
10G X 3/4		
10G X 1		
10G X 1-1/2		
10G X 2		

12G	304 SS	316 SS
12G X 3/4		
12G X 1		
12G X 1-1/4		
12G X 1-1/2		
12G X 2		

14G	304 SS	316 SS
14G X 1		
14G X 1-1/2		

Csk Self Tappers - T25 Tip



304 SS

6G	304 SS
6G X 1	SQ

8G	304 SS
8G X 3/8	PHIL
8G X 1/2	PHIL
8G X 1-1/4	SQ

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Pan Self Tappers - T25 Tip



304 SS

6G	304 SS
6G X 5/8	PHIL

See bottom of previous page for Imperial to Metric Conversion table.

Csk Trunc Self Tappers - SQ Dv (some black)



304 SS **316 SS**

8G - Sq #1Dv	304 SS	316 SS
8G (#1 Dv) X 3/8 (Black)		
8G (#1 Dv) X 1/2		
8G (#1 Dv) X 1/2 (Black)		
8G (#1 Dv) X 5/8 (Black)		
8G (#1 Dv) X 3/4 (Black)		
8G (#1 Dv) X 3/4		

10G - Sq #2Dv	304 SS	316 SS
10G X 3/4		
10G X 1		

Csk Trunc Self Tappers - SQ Dv, T17 Tip



304 SS

10G	304 SS
10G X 1/2	
10G X 1-1/2	

Pan Self Tapper – SQ Dv, Lead Pt, Thread Cutter



304 SS

6G	304 SS
6G X 3/4	
6G X 1	
6G X 1-1/2	

8G	304 SS
8G X 1	
8G X 2	

10G	304 SS
10G X 1-1/2	

Csk Self Tapper – SQ Dv, with Undersized Head



304 SS

6G	304 SS
6G X 5/8 w/ 4G head	
6G X 3/4 w/ 4G head	

Raised Csk Truncated Self Tappers – SQ#1, Type B



304 SS

8G	304 SS
8G (#1 Dv) X 3/8 (Black)	
8G (#1 Dv) X 3/8	

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Self Drillers – Csk, SQ Dv (most Black)



410 SS

M4	410 SS
M4 X 11MM	BLK
M4 X 12MM	BLK
M4 X 14MM	BLK
M4 X 16MM	BLK
M4 X 20MM	BLK

M5	410 SS
M5 X 15MM	
M5 X 17MM	BLK

Csk Trunc Self Driller – SQ Dv, Black



410 SS

10G	410 SS
10G X 5/8	

U Drive Screws



304 SS

2G	304 SS
2G X 3/16	
2G X 1/4	

4G	304 SS
4G X 3/16	
4G X 1/4	
4G X 5/16	













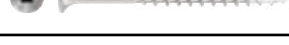
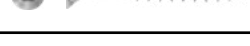
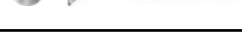
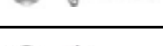



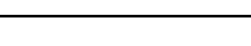
6G	304 SS
6G X 1/4	
6G X 5/16	
6G X 1/2	

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Screws for Timber & Coach Screws

Coach Screws – Metric – Imperial		99-100 99 100
Csk Coach Screws – Socket Drive		100
Lagscrews		101-102
Stainless Screw Options for Decking		103
AM Plus Decking Screws		105
Hardwood Decking Screw – Star Drive, Self Drilling		106
Hardwood Decking Screw – Star Drive, T17 Tip		106
Hardwood Decking Screw – Star Drive, Spear Tip, Self Drilling		106
Cylinder Head Decking Screw – Star Drive		106
Coarse Thread Screws – Star Drive, Csk Ribbed, T17 Tip		107
Wide Board Decking Screw – Csk Ribbed, Skt Drive, Sq Thread, T17		107
Wide Board Decking Screw – Csk Ribbed, Skt Drive, T17		107
Bugle Batten Screws – Skt Drive, Ribbed, T17 Tip		108
Bugle Head Decking Screw – Sq Drive, T17 Tip		108
Coarse Thread Screws – Sq Drive, Csk		109
Coarse Thread Screws – Sq Drive, Ribbed, T17 Tip		109
Coarse Thread Screws – Sq Drive, Pan, T17 Tip		110
Hex Washer Face – T17 Tip		110
Csk Plastite Screws – Phillips Dv		110
Pan Plastite Screws – Phillips Dv		111
Csk Woodscrews – Slotted		111

Coach Screws – Metric (DIN 571)



316 SS

M6	316 SS
M6 X 25	
M6 X 30	
M6 X 40	
M6 X 50	
M6 X 60	
M6 X 65	
M6 X 70	
M6 X 75	
M6 X 80	
M6 X 90	
M6 X 100	
M6 X 120	
M6 X 130	

M8	316 SS
M8 X 30	
M8 X 40	
M8 X 50	
M8 X 60	
M8 X 65	
M8 X 70	
M8 X 75	
M8 X 80	
M8 X 90	
M8 X 100	
M8 X 120	
M8 X 130	
M8 X 140	
M8 X 150	
M8 X 160	
M8 X 165	
M8 X 180	
M8 X 200	

M10	316 SS
M10 X 40	
M10 X 50	
M10 X 60	
M10 X 65	
M10 X 70	
M10 X 75	
M10 X 80	
M10 X 90	
M10 X 100	
M10 X 110	
M10 X 120	
M10 X 130	
M10 X 140	
M10 X 150	
M10 X 160	
M10 X 180	
M10 X 200	

M12	316 SS
M12 X 50	
M12 X 60	
M12 X 65	
M12 X 70	
M12 X 75	
M12 X 80	
M12 X 90	
M12 X 100	
M12 X 110	
M12 X 120	
M12 X 130	
M12 X 140	
M12 X 150	
M12 X 160	
M12 X 180	
M12 X 200	
M12 X 220	
M12 X 250	
M12 X 280	
M12 X 300	

M16	316 SS
M16 X 70	
M16 X 80	
M16 X 90	
M16 X 100	
M16 X 110	
M16 X 120	
M16 X 130	
M16 X 140	
M16 X 150	
M16 X 160	
M16 X 180	
M16 X 200	
M16 X 220	
M16 X 240	
M16 X 260	
M16 X 280	
M16 X 300	
M16 X 350	

M20*	316 SS
M20 X 100	
M20 X 150	
M20 X 200	
M20 X 250	
M20 X 300	

* M20 316 SS available on request

	M6	M8	M10	M12	M16
Head Diam. A/F (mm)	10	13	17	19	27

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coach Screws – Imperial



304 SS

1/4	304 SS
1/4 X 1	
1/4 X 1-1/4	
1/4 X 1-1/2	
1/4 X 2	
1/4 X 2-1/2	
1/4 X 3	
1/4 X 3-1/2	
1/4 X 4	

3/8	304 SS
3/8 X 1-1/2	
3/8 X 2	
3/8 X 2-1/2	
3/8 X 3	
3/8 X 4	
3/8 X 5	
3/8 X 6	

1/2	304 SS
1/2 X 2	
1/2 X 2-1/2	
1/2 X 3	
1/2 X 4	
1/2 X 5	
1/2 X 6	

5/16	304 SS
5/16 X 1-1/4	
5/16 X 1-1/2	
5/16 X 2	
5/16 X 2-1/2	
5/16 X 3	
5/16 X 4	
5/16 X 5	
5/16 X 6	

	1/4	5/16	3/8	1/2
Head A/F (inch)	0.433	0.498	0.555	0.734

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Csk Coach Screws – Socket Drive



316 SS

M8	316 SS
M8 X 100	
M8 X 120	
M8 X 140	

M10	316 SS
M10 X 80	
M10 X 100	
M10 X 120	
M10 X 140	
M10 X 160	

Lagscrews



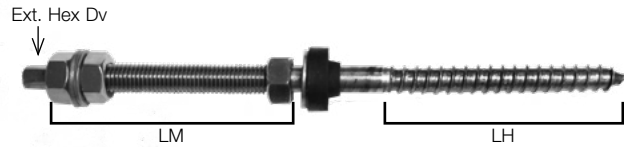
304 SS **316 SS**

M6	304 SS	316 SS	LM (mm)	LH (mm)	Drive
M6 X 50			12	36	No Drive
M6 X 70			20	45	No Drive
M6 X 90			37	50	No Drive
M8	304 SS	316 SS	LM (mm)	LH (mm)	Drive
M8 X 50			21	27	Int Hex (316)
M8 X 80			32	35	Int Hex (316)
M8 X 100			40	46	Int Hex (316)
M8 X 130			50	65	Int Hex (316)
M10	304 SS	316 SS	LM (mm)	LH (mm)	Drive
M10 X 80			20	50	Int Hex
M10 X 100			37	63	Int Hex
M10 X 120			20	100	Int Hex
M10 X 140			50	85	Int Hex
M10 X 150			67	83	Int Hex
M10 X 170			70	100	Int Hex
M12	304 SS	316 SS	LM (mm)	LH (mm)	Drive
M12 X 100			37	59	Int Hex
M12 X 120			45	72	Int Hex
M12 X 140			49	85	Int Hex
M12 X 160			61	96	Int Hex

Solar Lagscrews

(with Hex Nuts & EPDM Washer)

304 SS



	304 SS	LM (mm)	LH (mm)	Ext. Hex Dv (SW)
M10				
M10 X 160		70	67	SW7 (M10)
M10 X 200		85	67	SW7 (M10)
M12				
M12 X 250		100	100	SW9 (M12)

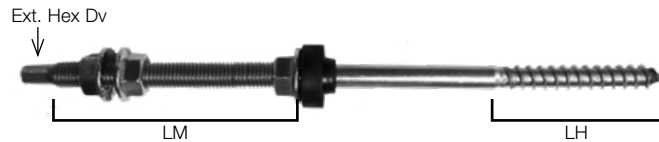


Individual EPDM Washers also available in M10 & M12.

Solar Lagscrews

(with Flange Nuts & EPDM Washer)









304 SS



	304 SS	LM (mm)	LH (mm)	Ext. Hex Dv (SW)
M10				
M10 X 160		70	67	SW7(M10)
M10 X 200		85	67	SW7(M10)
M10 X 250		85	67	SW7(M10)




Individual EPDM Washers also available in M10 & M12.

TYPE	APPLICATIONS	ADVANTAGES	TIPS FOR USE
<p>Hardwood Decking Screw 316, Star Drive, Self Drilling</p> <p>See page 106</p>  <ul style="list-style-type: none"> • 12G x 50mm • 12G x 65mm 	<p>Commonly used for hardwood up to 21mm thick.</p>	<p>Pre-drilling generally not required depending on timber and driver.</p> <p>Star Drive allows for greater torque.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use a T20 tip to drive screw.</p> <p>Pre-drilling at board ends is required.</p>
<p>Hardwood Decking Screw 316, Star Drive, T17 Tip</p> <p>See page 106</p>  <ul style="list-style-type: none"> • 12G x 50mm • 12G x 65mm 	<p>Commonly used for hardwood up to 21mm thick.</p>	<p>Pre-drilling is required but this means driving in the screws is easier on tools and gives a longer battery life than the self drilling type.</p> <p>Star Drive allows for greater torque.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use a T20 tip to drive screw.</p>
<p>Hardwood Decking Screw 316, Star Drive, Spear Tip, Self Drilling</p> <p>CODE: SSTCKCG05070AS</p> <p>See page 106</p>  <ul style="list-style-type: none"> • M5 x 55mm • M5 x 70mm 	<p>Commonly used for hardwood up to 21mm thick.</p>	<p>Pre-drilling generally not required depending on timber and driver (except on board ends).</p> <p>Star Drive allows for greater torque.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use a T20 tip to drive screw.</p> <p>Pre-drilling at board ends is required.</p>
<p>Cylinder Head Decking Screw 316, Star Drive</p> <p>See page 106</p>  <ul style="list-style-type: none"> • 9G x 65mm 	<p>Commonly used for hardwood up to 21mm thick and also composite decking.</p>	<p>Small trim cylinder head. May not need to countersink, depending on timber.</p> <p>Star Drive allows for greater torque.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use a T20 tip to drive screw.</p> <p>Pre-drilling may be required and recommended for hardwood and board ends.</p>
<p>Coarse Thread Screws, Star Drive, 316, Csk Ribbed, T17 Tip</p> <p>See page 107</p>  <ul style="list-style-type: none"> • 10G X 2 • 10G X 2½ <p>(Square drive and other sizes available)</p>	<p>Commonly used for both soft and hardwood decking.</p>	<p>Flush finish.</p> <p>Smaller head diameter.</p> <p>Star Drive allows for greater torque.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use 10g Quick Cut for counter sinking/drilling pilot hole. See pg.286</p> <p>T25 tip to drive screw.</p> <p>Pre-drilling may be required and recommended for hardwood and board ends.</p>
<p>Wide Board Decking Screw 316, Csk Ribbed, Skt Drive/Star Drive, Square Thread, T17 Tip</p> <p>See page 107</p>  <ul style="list-style-type: none"> • 12G x 65mm) • 12G x 80mm • 12G x 100mm 	<p>Commonly used for soft and hardwood wide board decking up to 30 mm thick.</p>	<p>Flush finish.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p> <p>Square threads require less torque to drive in screws.</p>	<p>Use Quick Cut for counter sinking/drilling pilot hole. See pg.286</p> <p>Use 4mm socket driver tip to drive screw. See pg.288</p> <p>Pre-drilling may be required and recommended for hardwood and board ends.</p>
<p>Wide Board Decking Screw 316, Csk, Skt Drive, T17 Tip</p> <p>See page 107</p>  <ul style="list-style-type: none"> • 12G x 2½ • 12G x 3" 	<p>Commonly used for soft and hardwood wide board decking up to 21mm thick.</p>	<p>Larger head to reduce pull-through on larger softwood boards which may experience more movement.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use Quick Cut for counter sinking/drilling pilot hole. See pg.286</p> <p>Use 4mm socket driver tip to drive screw. See pg.288</p> <p>Pre-drilling may be required and recommended for hardwood and board ends.</p>
<p>Bugle Batten Screw 316, Skt Drive, Ribbed, T17 Tip</p> <p>See page 108</p>  <ul style="list-style-type: none"> • 14G X 2 • 14G X 3 • 14G X 4 • 14G X 5 • 14G X 6 • 14G X 7 • 14G X 8 	<p>Commonly used for both soft and hardwood wide board decking up to 65mm thick.</p>	<p>Flush finish.</p> <p>Heavy duty screw with an industrial look.</p> <p>High pull out loads.</p> <p>Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use Quick Cut for counter sinking/drilling pilot hole. See pg.286</p> <p>Use 5mm socket driver tip to drive screw. See pg.288</p> <p>Pre-drilling may be required and recommended for hardwood and board ends.</p>

TYPE

APPLICATIONS ADVANTAGES

TIPS FOR USE

<p>AM Plus Decking Screws, 304, Star Drive, Self Drilling</p>  <p>See page 105</p> <ul style="list-style-type: none"> • 12G x 50mm • 12G x 65mm 	<p>Commonly used for both soft and hardwood decking.</p>	<p>Star Drive allows for a greater torque. Heads look uniform across screws, unlike Square Drive heads which need to be lined up to achieve a uniform look.</p>	<p>Use a T20 tip to drive screw. Pre-drilling and countersinking is recommended.</p>
---	--	---	--

AM Plus Decking Screw, Star Drive, Self Drilling



Other colours available on request

304 SS

12G

304 SS

12G X 50mm

12G X 60mm

AM STAR DRIVE

- Optimum torque transmission
- Tight, snug fit and fast centering

HEAD SHAPE

- Raised countersunk head with milling pockets
- Discreet, subtle appearance

STAINLESS STEEL 304/A2

- High corrosion resistance
- Increased fracture torque
- For outdoor use and close to water applications

OPTIMISED DRILLING TIP FOR DECK CONSTRUCTION

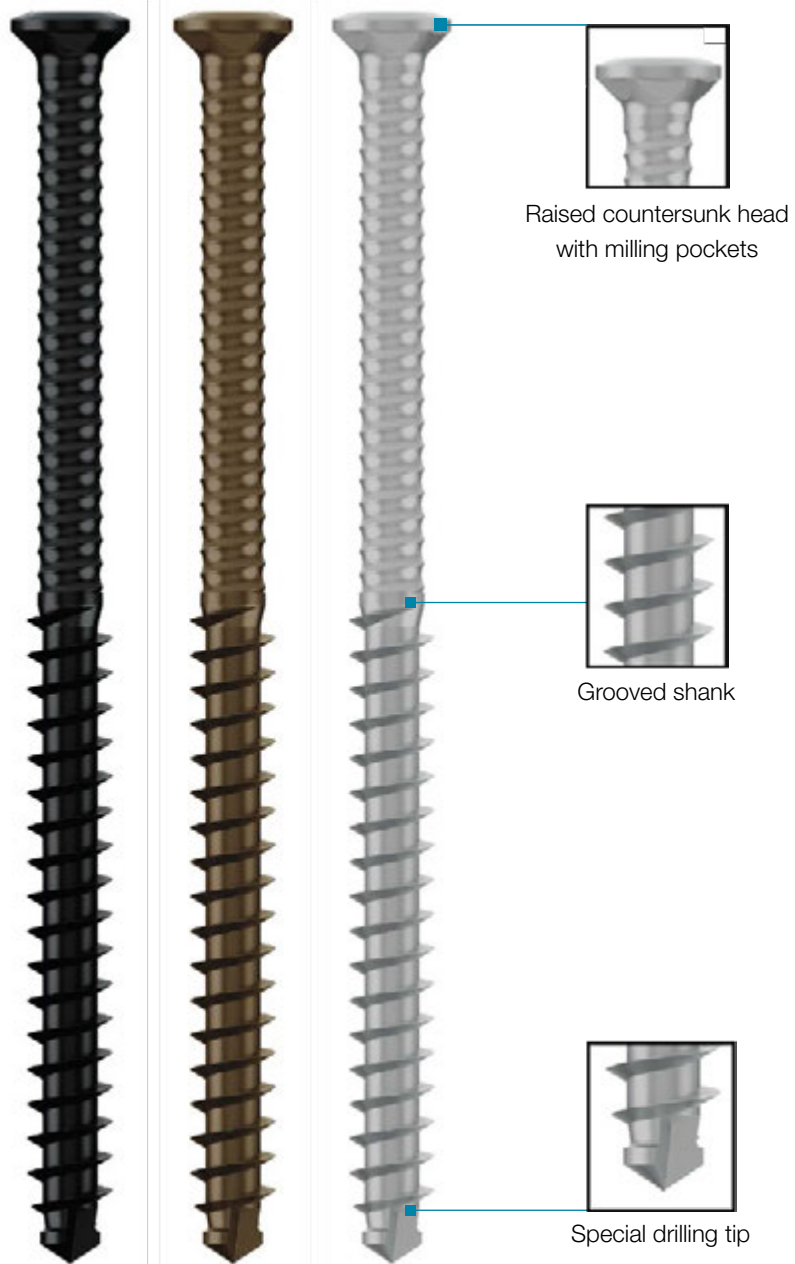
- Quick and safe positioning
- Reduced splitting

GROOVED SHANK

- Higher strength
- Suitable for use in hardwood without snapping the screw*

ASYMMETRICAL THREAD

- Reduced drive-in torque
- High overtorque
- Easy to screw in



*Pre-drilling may be required in extreme scenarios with very hard timber



Hardwood Decking Screw Star Drive, Self Drilling



316 SS



12G

316 SS

12G X 50mm

12G X 65mm

Screws sold individually and in pails.

For more information see page 103.

Hardwood Decking Screw Star Drive, T17 Tip



316 SS



12G

316 SS

12G X 50mm T17

12G X 65mm T17

Screws sold individually and in pails.

Hardwood Decking Screw, Star Drive, Spear Tip, Self Drilling



316 SS



M5

316 SS

M5 X 55mm

M5 X 70mm

Screws sold individually and in pails.

• Self drilling. For more information see page 103.

Cylinder Head Decking Screw, Star Drive



316 SS



9G

316 SS

9G X 65mm

Screws sold individually and in pails.

For more information see page 103.

Wide Board Decking Screws, Skt Drive, Csk Ribbed, Sq Thread, T17 Tip



Screws sold individually and in pails.

316 SS

12G

316 SS

12G x 65mm

Skt, Star

12G x 80mm

Skt

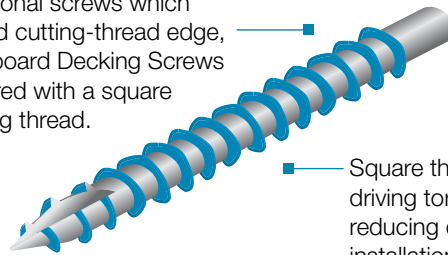
12G x 100mm

Skt

Skt = Socket Drive

Star = Star Drive

Unlike traditional screws which have a round cutting-thread edge, these Wideboard Decking Screws are engineered with a square profile cutting thread.



Square threads reduce the driving torque required, reducing driving and installation time.

For more information see page 103.

Coarse Thread Screws, Star Drive, Csk Ribbed, T17 Tip



316 SS

8G

316 SS

DRIVE

8G X 1¼

T20

8G X 1½

T20

8G X 2

T20

10G

316 SS

DRIVE

10G X 1¼

T25

10G X 1½

T25

10G X 2*

T25

10G X 2½*

T25

10G X 3

T25

*CAN ALSO BE USED FOR DECKING.

Wide Board Decking Screw, Csk, Skt Drive, T17 Tip



316 SS

12G

316 SS

12G x 2½

12G x 3

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Bugle Batten Screw, Skt Drive, Ribbed, Sq Thread, T17 Tip



304 SS **316 SS**

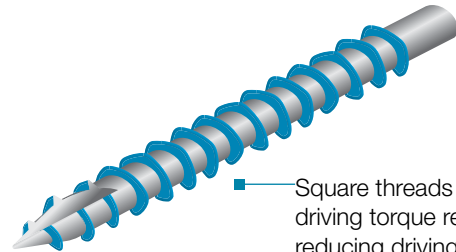


Screws sold individually and in pails.

14G	304 SS	316 SS
14G X 2		Sq Thread
14G X 3		Sq Thread
14G X 4	Sq Thread	Sq Thread
14G X 5		Sq Thread
14G X 6		Sq Thread
14G x 7		Sq Thread
14G X 8		Sq Thread

Square Thread

Unlike traditional screws which have a round cutting-thread edge, these Bugle Batten Screws are engineered with a square profile cutting thread.



■ Square threads reduce the driving torque required, reducing driving and installation time.

Bugle Head Decking Screws, Sq Drive, T17 Tip



304 SS **316 SS**

6G	304 SS	316 SS	8G	304 SS	316 SS	10G	304 SS	316 SS
6G X 1			8G X 1			10G X 1-1/2		
6G X 1-1/4			8G X 1-1/4			10G X 2		
6G X 1-1/2			8G X 1-1/2			10G X 2-1/2		
			8G X 1-5/8			10G X 3		
			8G X 2			10G X 3-1/2		
						10G X 4		

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	7	8
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm	127mm	152mm	177mm	203mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coarse Thread Screws, Sq Drive, CSK



304 SS

8G	304 SS
8G X 3/4	
8G X 1	
8G X 1-1/4	
8G X 1-1/2	
8G X 1-3/4	
8G X 2	
8G X 2-1/2	
8G X 3	

10G	304 SS
10G X 1-1/2	
10G X 2	
10G X 2-1/2	
10G X 3	
10G X 4 (TY 17*)	

Coarse Thread Screws Sq Drive, Ribbed, T17 Tip



304 SS

316 SS

8G	304 SS	316 SS
8G X 3/4		
8G X 1		
8G X 1 1/4		
8G X 1 1/2		
8G X 1 3/4		
8G X 2		
8G X 2 1/2		

10G	304 SS	316 SS
10G X 1 1/4		
10G X 1 1/2		
10G X 2*		
10G X 2 1/2*		
10G X 3*		

12G*	304 SS	316 SS
12G x 2 1/2		

14G*	304 SS	316 SS
14G X 5*		
14G X 6*		

*Can also be used for decking. This size is not ribbed.

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm	127mm	152mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Coarse Thread Screws, Sq Drive, Pan, T17 Tip



304 SS

10G

304 SS

10G X 1	
10G X 1½	
10G X 2	

Hex Washer Face, T17 Tip



316 SS

12G

316 SS

12G X 25mm	
12G X 35mm	
12G X 50mm	
12G X 65mm	

14G

316 SS

14G X 25mm	
14G X 35mm	
14G X 50mm	
14G X 65mm	
14G X 75mm	
14G X 90mm	
14G X 125mm	
14G x 150mm	

EPDM washers for HWF screws, see p. 53

Csk Plastite Screws – Phillips Dv



304 SS

3.0 (4G*)

304 SS

3.0 X 8mm	
3.0 X 10mm	
3.0 X 12mm	
3.0 X 14mm	
3.0 X 16mm	

3.5 (6G*)

304 SS

3.5 X 8mm	
3.5 X 10mm	
3.5 X 12mm	
3.5 X 14mm	
3.5 X 16mm	

4.0 (8G*)

304 SS

4.0 X 8mm	
4.0 X 10mm	
4.0 X 12mm	
4.0 X 14mm	
4.0 X 16mm	

*Approximate size in imperial gauge. For metric to imperial conversions see p. 321

Pan Plastite Screws – Phillips Dv



304 SS

3.0 (4G*)

304 SS

3.0 X 8mm	
3.0 X 10mm	
3.0 X 12mm	
3.0 X 14mm	
3.0 X 16mm	
3.0 X 20mm	
3.0 X 25mm	

3.5 (6G*)

304 SS

3.5 X 8mm	
3.5 X 10mm	
3.5 X 12mm	
3.5 X 14mm	
3.5 X 16mm	
3.5 X 20mm	
3.5 X 25mm	

4.0 (8G*)

304 SS

4.0 X 8mm	
4.0 X 10mm	
4.0 X 12mm	
4.0 X 14mm	
4.0 X 16mm	
4.0 X 20mm	
4.0 X 25mm	

*Approximate size in imperial gauge. For metric to imperial conversions see p. 321

Csk Woodscrews – Slotted

Code: SWDCKG..



304 SS







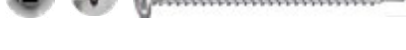
18G

304 SS

18G X 50mm	
18G X 60mm	
18G X 70mm	
18G X 80mm	
18G X 100mm	

Also see Csk Slt Coach Screws (p.100) and Csk Slot Self Tapping Screws (p.87)
18G = 8mm (see also Csk Slt Coach Screws p.100)

Self Drilling Screws for Metal

<p>Self Drillers – HWF – Hardtec</p>		<p>113</p>
<p>Self Drillers – Wafer, Sq/Phil Drive</p>		<p>113</p>
<p>Self Drillers – Csk, Sq/Phil Drive</p>		<p>114</p>
<p>Csk Wingtek Self Drillers – Phillips/Square Drive</p>		<p>114</p>
<p>Self Drillers – Csk, Sq Drive, Black</p>		<p>114</p>
<p>Csk Trunc Self Driller – SQ Dv, Black</p>		<p>114</p>
<p>Self Drillers – Pan, Sq/Phil Drive</p>		<p>115</p>

Self Drillers – HWF

HARDTEC SS



10G

HARDTEC SS

10G X 19

12G

HARDTEC SS

12G X 20

12G X 25

12G X 30

12G X 35

12G X 40

12G X 45

12G X 50

12G X 65

12G X 75

12G X 100

14G

HARDTEC SS

14G X 25

14G X 35

14G X 40

14G X 45

14G X 50

14G X 65

14G X 76

14G X 100

HARDTEC SS (premium material)

These screws are entirely stainless (as opposed to Bi-Metal), and have a corrosion resistance similar to 304 SS, and better than the 410 material commonly used for self drilling screws.

They are hardened by heat treatment (which 304 and 316 can't be) to enable drilling into metals.

For more information on stainless grades, go to page 307

Self Drillers – Wafer, Sq/Phil Drive



*316 Bi-Metal with Carbon Tip

410 SS

Bi-Metal*

SQ – Square. PH – Phillips.

10G

410 SS

Bi-Metal*

10G X 16

SQ, PH

SQ

10G X 25

SQ, PH

SQ

10G X 30

SQ, PH

SQ

Self Drillers – Csk, Sq/Phil Drive



410 SS

HARDTEC SS

SQ – Square. PH – Phillips.

8G	410 SS	10G	410 SS	12G	HARDTEC SS
8G X 3/4	SQ, PH	10G X 3/4	SQ, PH	12G X 30	SQ
8G X 1	SQ, PH	10G X 1	SQ, PH	12G X 40	SQ
8G X 1-1/4	SQ, PH	10G X 1-1/4	SQ, PH	12G X 50	SQ
8G X 1-1/2	SQ, PH	10G X 1-1/2	SQ, PH	12G X 65	SQ
		10G X 2	SQ, PH		

Csk Wingtek Self Drillers – Phil/Sq Drive



410 SS

SQ – Square. PH – Phillips.

8G	410 SS	10G	410 SS
8G X 40	PH	10G X 40	SQ, PH
		10G X 60	SQ, PH
		10G X 75	PH

Self Drillers – Csk, Sq Drive, Black



410 SS

BLK – Black Finish

M4	410 SS	M5	410 SS
M4 X 11MM	BLK	M5 X 15MM	
M4 X 12MM	BLK	M5 X 17MM	BLK
M4 X 14MM	BLK		
M4 X 16MM	BLK		
M4 X 20MM	BLK		

Csk Trunc Self Driller – SQ Dv, Black



410 SS

10G	410 SS
10G X 5/8	

For more information on stainless grades, go to page 307

Self Drillers – Pan, Sq/Phil Drive



410 SS















SQ – Square. PH – Phillips.

8G	410 SS
8G X 1/2	SQ, PH
8G X 3/4	SQ, PH
8G X 1	SQ, PH
8G X 1-1/4	SQ
8G X 1-1/2	SQ

10G	410 SS
10G X 5/8	SQ
10G X 3/4	SQ, PH
10G X 1	SQ, PH
10G X 1-1/4	SQ, PH
10G X 1-1/2	SQ, PH
10G X 2	SQ, PH

For more information on stainless grades, go to page 307

Security Screws

Csk Post 6 Lobe Machine Screws		117
Csk Snake Eye Machine Screws		117
Csk Post Socket Machine Screws		118
Button Post 6 Lobe Machine Screws		118
Button Post Socket Machine Screws		119
Pan Snake Eye Machine Screws		119
Shear Nuts		119
Csk Post 6 Lobe Self Tapping Screws		120
Csk Snake Eye Self Tapping Screws		120
Csk Post Socket Self Tapping Screws		121
Button Post 6 Lobe Self Tapping Screws		121
Pan, Snake Eye Self Tapping Screws		122
Pan One Way Self Tapping Screws		122
Security Bits & Keys		123

Csk Post 6 Lobe Machine Screws



304 SS

M3	304 SS
M3 X 6	
M3 X 8	
M3 X 10	
M3 X 12	
M3 X 16	
M3 X 20	
Use T10 Post 6 Lobe Driver Tip (see p.288)	

M4	304 SS
M4 X 8	
M4 X 10	
M4 X 12	
M4 X 16	
M4 X 20	
M4 X 25	
M4 X 30	
Use T20 Post 6 Lobe Driver Tip (see p.288)	

M5	304 SS
M5 X 10	
M5 X 12	
M5 X 16	
M5 X 20	
M5 X 25	
M5 X 30	
M5 X 40	
Use T25 Post 6 Lobe Driver Tip (see p.288)	

M6	304 SS
M6 X 10	
M6 X 12	
M6 X 16	
M6 X 20	
M6 X 25	
M6 X 30	
M6 X 40	
M6 X 50	
Use T30 Post 6 Lobe Driver Tip (see p.288)	

Csk Snake Eye Machine Screws



304 SS

M4	304 SS
M4 X 12	
M4 X 16	
M4 X 20	
M4 X 30	
M4 X 35	
8G Snake Eye Driver Tip (see p.288)	

M5	304 SS
M5 X 12	
M5 X 16	
M5 X 20	
M5 X 25	
M5 X 30	
M5 X 35	
10G Snake Eye Driver Tip (see p.288)	

M6	304 SS
M6 X 12	
M6 X 16	
M6 X 20	
M6 X 25	
M6 X 30	
M6 X 40	
14G Snake Eye Driver Tip (see p.288)	

More security fasteners available on request

Csk Post Socket Machine Screws



304 SS

M5

304 SS

M5 X 16

M5 X 30

M5 X 40

Use M3 Hex Post Skt Bit (see p.288)

M6

304 SS

M6 X 16

Use M4 Hex Post Skt Bit (see p.288)

M8

304 SS

M8 X 16

Use M5 Hex Post Skt Bit (see p.288)

Button Post 6 Lobe Machine Screws



304 SS

M3

304 SS

M3 X 8

M3 X 10

M3 X 12

M3 X 16

M3 X 20

Use T10 Post 6 Lobe Bit (see p.288)

M4

304 SS

M4 X 8

M4 X 10

M4 X 12

M4 X 16

M4 X 20

M4 X 25

M4 X 30

Use T20 Post 6 Lobe Bit (see p.288)

M5

304 SS

M5 X 10

M5 X 12

M5 X 16

M5 X 20

M5 X 25

M5 X 30

M5 X 40

M5 X 50

Use T25 Post 6 Lobe Bit (see p.288)

M6

304 SS

M6 X 10

M6 X 12

M6 X 16

M6 X 20

M6 X 25

M6 X 30

M6 X 40

M6 X 50

M6 X 60

Use T30 Post 6 Lobe Bit (see p.288)

M8

304 SS

M8 X 16

M8 X 20

M8 X 25

M8 X 30

M8 X 40

M8 X 50

Use T40 Post 6 Lobe Bit (see p.288)

M10

304 SS

M10 X 20

M10 X 25

M10 X 30

M10 X 40

M10 X 50

M10 X 60

Use T45 Post 6 Lobe Bit (see p.288)

More security fasteners available on request

Button Post Socket Machine Screws



304 SS

M4 304 SS

M4 X 12

M4 X 25

Use M2.5 Hex Post Skt Bit (see p.288)

M5 304 SS

M5 X 10

M5 X 12

M5 X 16

M5 X 20

M5 X 25

Use M3 Hex Post Skt Bit (see p.288)

M6 304 SS

M6 X 10

M6 X 16

M6 X 20

M6 X 25

M6 X 30

M6 X 40

Use M4 Hex Post Skt Bit (see p.288)

M8 304 SS

M8 X 20

M8 X 25

M8 X 30

Use M5 Hex Post Skt Bit (see p.288)

M10 304 SS

M10 X 40

M10 X 50

Use M6 Hex Post Skt Bit (see p.288)

Pan Snake Eye Machine Screws



304 SS

M4 304 SS

M4 X 10

M4 X 12

M4 X 16

M4 X 20

M4 X 25

Use 8G Snake Eye Bit (see p.288)

M5 304 SS

M5 X 12

M5 X 16

M5 X 20

M5 X 25

M5 X 30

Use 10G Snake Eye Bit (see p.288)

M6 304 SS

M6 X 12

M6 X 16

M6 X 20

M6 X 25

M6 X 30

M6 X 40

Use 14G Snake Eye Bit (see p.288)

Shear Nuts

304 SS



304 SS

M5

M6

M8

M10

M12

More security fasteners available on request

Csk Post 6 Lobe Self Tapping Screws



304 SS

6G	304 SS
6G X 3/8	
6G X 1/2	
6G X 5/8	
6G X 3/4	
6G X 1	
Use T15 Post 6 Lobe Bit (see p.288)	

10G	304 SS
10G X 3/4	
10G X 1	
10G X 1-1/4	
10G X 1-1/2	
10G X 2	
Use T25 Post 6 Lobe Bit (see p.288)	

12G	304 SS
12G X 3/4	
12G X 1	
12G X 1-1/4	
12G X 1-1/2	
12G X 2	
Use T30 Post 6 Lobe Bit (see p.288)	

8G	304 SS
8G X 1/2	
8G X 5/8	
8G X 3/4	
8G X 1	
8G X 1-1/4	
8G X 1-1/2	
Use T20 Post 6 Lobe Bit (see p.288)	

Csk Snake Eye Self Tapping Screws



304 SS

6G	304 SS
6G X 3/4	
6G X 1	
6G X 1-1/4	
6G X 1-1/2	
Use 6G Snake Eye Bit (see p.288)	

10G	304 SS
10G X 3/4	
10G X 1	
10G X 1-1/4	
10G X 1-1/2	
10G X 2	
Use 10G Snake Eye Bit (see p.288)	

12G	304 SS
12G X 3/4	
12G X 1	
12G X 1-1/4	
12G X 1-1/2	
12G X 2	
Use 12G Snake Eye Bit (see p.288)	

8G	304 SS
8G X 3/4	
8G X 1	
8G X 1-1/4	
8G X 1-1/2	
8G X 2	
Use 8G Snake Eye Bit (see p.288)	

More security fasteners available on request

Csk Post Socket Self Tapping Screws



304 SS

6G

304 SS

6G X 1

Use 6G Hex Post Skt Bit (see p.288)

8G

304 SS

8G X 3/4

8G X 1

8G X 1-1/2

Use 8G Hex Post Skt Bit (see p.288)

10G

304 SS

10G X 2

Use 10G Hex Post Skt Bit (see p.288)

Button Post 6 Lobe Self Tapping Screws



304 SS

6G

304 SS

6G X 1/2

6G X 3/4

6G X 1

Use T10 Post 6 Lobe Bit (see p.288)

8G

304 SS

8G X 1/2

8G X 5/8

8G X 3/4

8G X 1

8G X 1-1/4

8G X 1-1/2

Use T15 Post 6 Lobe Bit (see p.288)

10G

304 SS

10G X 3/4

10G X 1

10G X 1-1/4

10G X 1-1/2

Use T25 Post 6 Lobe Bit (see p.288)

12G

304 SS

12G X 3/4

12G X 1

12G X 1-1/4

12G X 1-1/2

12G X 2

Use T27 Post 6 Lobe Bit (see p.288)

More security fasteners available on request

Pan, Snake Eye Self Tapping Screws



304 SS

6G	304 SS
6G X 5/8	
6G X 3/4	
6G X 1	
6G X 1-1/4	
Use 6G Snake Eye Bit (see p.288)	

8G	304 SS
8G X 3/4	
8G X 1	
8G X 1-1/4	
8G X 1-1/2	
Use 8G Snake Eye Bit (see p.288)	

10G	304 SS
10G X 3/4	
10G X 1	
10G X 1-1/4	
10G X 1-1/2	
10G X 2	
Use 10G Snake Eye Bit (see p.288)	

12G	304 SS
12G X 1	
12G X 1-1/4	
12G X 1-1/2	
12G X 2	
Use 12G Snake Eye Bit (see p.288)	

Pan One Way Self Tapping Screws



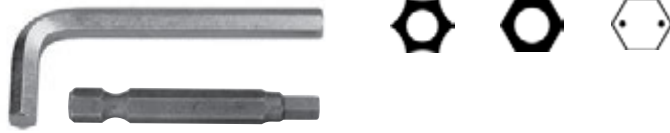
304 SS

8G	304 SS
8G X 3/4	
8G X 1	
8G X 1-1/4	
8G X 1-1/2	

10G	304 SS
10G X 3/4	
10G X 1	
10G X 1-1/4	
10G X 1-1/2	

More security fasteners available on request

Security Bits & Keys



Post 6 Lobe Bit & Key

T10	
T15	
T20	
T25	
T27	
T30	
T40	
T45	





















Hex Post Skt Bit & Key

M2	
M2.5	
M3	
M4	
M5	
M6	

Snake Eye Bit

6G	
8G	
10G	
12G	
14G	

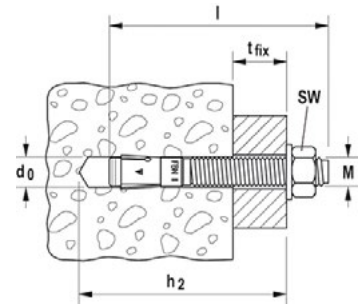
Masonry Anchors

fischer FBN II Anchor Bolts	 	125
fischer FBS II Concrete Screw	 	126-127
Sleeve Anchors		127
Flush Head Anchors		128
Wedge Anchors		128
Chemical Anchor Studs		128
fischer Internal Threaded Anchor	 	129
Drop-In Anchors		130
Setting Tool for Drop-In Anchors		130
Mushroom/Csk Head Spikes		130
fischer SXR Screw – Torx Drive/Csk	 	131
fischer SXR Screw – Torx Drive/HWF	 	132
Chemical Anchor Cartridges	 	133-134
Chemical Anchor Accessories	 	135

fischer FBN II Anchor Bolts



316 SS



Type	Art No.	ETA approval	d ₀ Drill hole diameter (mm)	l Anchor length (mm)	1 _{fix} Max. usable length hef, stand/hef,red (mm)	316 SS
FBN II 12/10 A4	507563	•	12	106	10/25	
FBN II 12/20 A4	507564	•	12	116	20/35	
FBN II 12/50 A4	507566	•	12	146	50/65	
FBN II 16/10 A4	507568	•	16	130	10/25	
FBN II 16/25 A4	507569	•	16	145	25/40	
FBN II 16/50 A4	507570	•	16	170	50/65	

- Other sizes available on request
- Seismic option, FAZ II Zinc/SS/HC, available on request.

Highest permissible loads for a single anchor¹⁾ in concrete C20/25⁴⁾

For the design the complete approval ETA - 07/0211 has to be considered.

Type	Non-cracked concrete							
	Min. Effective anchorage depth	Max. Effective anchorage depth	Min. member thickness	Installation torque	Permissible Tensile Load	Permissible Shear Load	Min. Spacing	Min. Edge Distance
	h _{ef,min} [mm]	h _{ef,max} [mm]	h _{min} [mm]	T _{inst} [Nm]	n ^{perm} ³⁾ [kN]	v ^{perm} ³⁾ [kN]	s ^{min} ²⁾ [mm]	c ^{min} ²⁾ [mm]
FBN II 10 A4	40		100	20.0	6,1	11,6	50	80
		50	100	20.0	8,5	11,6	70	55
FBN II 12 A4	50		100	35.0	8,5	15,7	70	100
		65	120	35.0	12,6	15,7	70	70
FBN II 16 A4	65		120	80.0	12,6	29,0	90	120
		80	160	80.0	17,2	29,1	120	80

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L=1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing

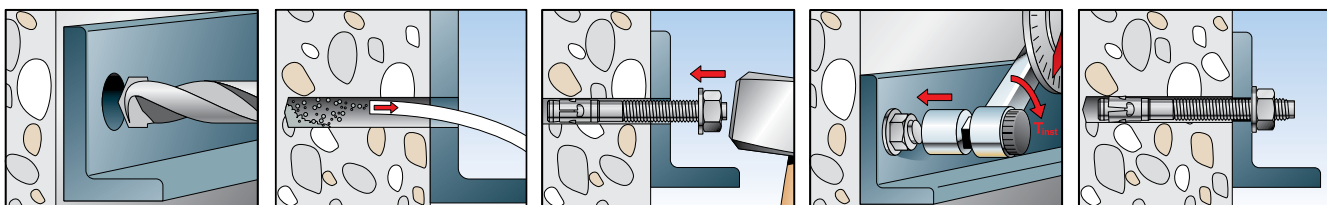
$s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. Accurate data see approval.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

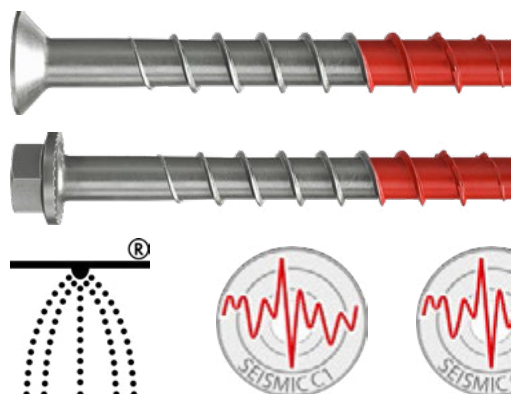
⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁵⁾ The anchorage depths smaller than 40mm are only allowed for multiple use for non-structural applications.

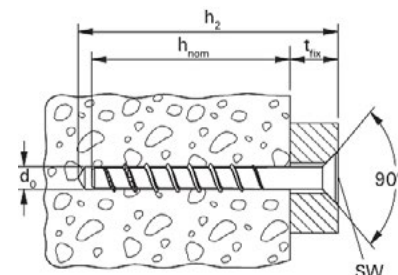
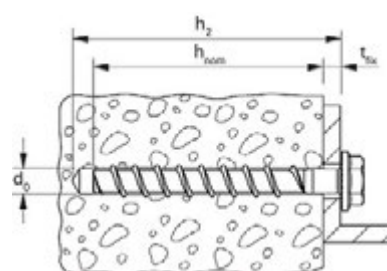


fischer FBS II Concrete Screw

316 SS



fischer 
innovative solutions



Type	Head Type	Art No.	ETA Approval	d ₀ Drill hole diameter (mm)	Min. drill hole depth for through fixings h ₂ (mm)	Screw d _s x l _s (mm)	316 SS
FBS II 8 x 60 10/- US A4	Hex	543565	•	8	70	10 x 60	*
FBS II 8 x 60 10/- SK A4	Csk	543579	•	8	70	10 x 60	*
FBS II 8 x 70 20/- US A4	Hex	543566	•	8	80	10 x 80	*
FBS II 8 X 80 30/- US A4	Hex	543567	•	8	90	10 x 80	*
FBS II 8 X 80 30/- SK A4	Csk	543580	•	8	90	10 x 80	*
FBS II 10 x 60 5/- US A4	Hex	543569	•	10	70	12 x 60	*
FBS II 10 x 65 10/- SK A4	Csk	543582	•	10	75	12 x 65	*
FBS II 10 x 70 15/- US A4	Hex	543570	•	10	80	12 x 70	*
FBS II 10 x 80 25/- US A4	Hex	543571	•	10	90	12 x 80	*
FBS II 10 x 80 25/- SK A4	Csk	543583	•	10	90	12 x 80	*
FBS II 10 X 100 45/- US A4	Hex	543573	•	10	110	12 x 100	*
FBS II 10 X 100 45/- SK A4	Csk	543585	•	10	110	12 x 100	*
FBS II 10 X 120 65/- US A4	Hex	543574	•	10	130	12 x 120	*
FBS II 10 X 120 65/- SK A4	Csk	543586	•	10	130	12 x 120	*
FBS II 12 x 70 10/- US A4	Hex	543575	•	12	80	14 x 70	*
FBS II 12 x 85 25/- US A4	Hex	543576	•	12	95	14 x 85	*
FBS II 12 x 110 50/- US A4	Hex	543577	•	12	120	14 x 110	*
FBS II 12 x 130 70/- US A4	Hex	543578	•	12	140	14 x 130	*

fischer FBS II Concrete Screws are 316 SS body with 410 SS tip

Type	Min Embedment Depth ^h _{nom, min} [mm]	Max Embedment Depth ^h _{nom, max} [mm]	Min. member thickness ^h _{min} [mm]	Installation Torque ^T _{inst, max} [Nm]	Cracked Concrete				Non-cracked Concrete			
					Permissible tensile load	Permissible Shear Load	Min Spacing	Min. Edge Distance	Permissible tensile load	Permissible Shear Load	Min Spacing	Min. Edge Distance
					^N _{perm³⁾} [kN]	^V _{perm³⁾} [kN]	^s _{min²⁾} [mm]	^c _{min²⁾} [mm]	^N _{perm³⁾} [kN]	^V _{perm³⁾} [kN]	^s _{min²⁾} [mm]	^c _{min²⁾} [mm]
FBS II 8 A4	50		100	≤ 600	2,9	4,2	35	35	5,9	5,9	35	35
		65	120		5,7	9,0	35	35	9,0	9,0	35	35
FBS II 10 A4	55		100	≤ 650	4,3	4,8	40	40	6,8	6,8	40	40
		85	140		9,6	16,6	40	40	13,5	16,6	40	40
FBS II 12 A4	60		110	≤ 650	5,5	11,0	50	50	7,7	15,2	50	50
		100	150		12,5	20,3	50	50	17,5	20,3	50	50

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L=1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. For accurate data see approval.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

APPLICATIONS

- Guard rails
- Consoles/Base plates
- Metal profiles
- Steel constructions
- Façades
- Protection barriers

BUILDING MATERIALS

Approved for:

- Concrete C20/25 to C50/60, cracked and non-cracked
- Seismic Rating C1 & C2. Seismic Rating C1 & C2 on certain sizes, please refer ETA – 17/0740 for full details

Also suitable for:

- Concrete C12/15
- Solid building materials
- Masonry with a dense structure

PERMISSION

- ETA-17/0740

*For embedment depth and anchor loading, please use this link: www.anzor.com.au/ultracut-loads

- Other sizes and zinc plated steel options available on request

Sleeve Anchors



316 SS

M6.5

316 SS

M6.5 X 40
M6.5 X 60
M6.5 X 75

M8

316 SS

M8 X 40
M8 X 65
M8 X 80
M8 X 90

M10

316 SS

M10 X 40
M10 X 45
M10 X 50
M10 X 55
M10 X 60
M10 X 75
M10 X 95
M10 X 100

M12

316 SS

M12 X 60
M12 X 75
M12 X 100

Flush Head Anchors



316 SS

M8

316 SS

M8 X 40
M8 X 45
M8 X 70

M10

316 SS

M10 X 40
M10 X 60
M10 X 75
M10 X 95

M12

316 SS

M12 X 75

Wedge Anchors



316 SS

M10

316 SS

M10 X 75

M12

316 SS

M12 X 80
M12 X 100
M12 X 120
M12 X 140
M12 X 180

M16

316 SS

M16 X 100
M16 X 125
M16 X 140
M16 X 175

M20

316 SS

M20 X 120
M20 X 160

Chemical Anchor Studs



316 SS

M10

316 SS

M10 X 100
M10 X 110
M10 X 115
M10 X 130
M10 X 140

M12

316 SS

M12 X 160

M16

316 SS

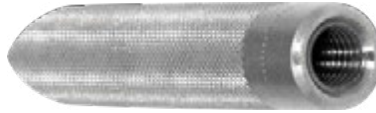
M16 X 190

M20

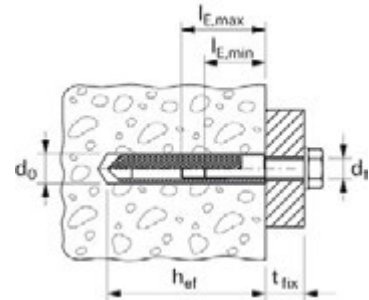
316 SS

M20 X 250
M20 x 260

fischer Internal Threaded Anchor



316 SS



Size	Art No.	ETA Approval	d ₀ Drill hole diameter (mm)	Thread A	Effect anchorage depth h _{ef} (mm)	Min. Bolt penetration l _{E min} (mm)	Max. bolt penetration l _{E max} (mm)	316 SS
M10 16 x 90	50566	•	18	M10	90	15	23	
M12 18 x 125	50567	•	20	M12	125	18	26	
M16 22 x 160	50568	•	24	M16	160	24	35	

Loads

Injection system FIS VL: Injection mortar FIS VL with Internal threaded anchor RG M I.

Permissible loads of a single fanchor in non-cracked normal concrete (concrete compression zone) of strength class C20/25 (~B25)¹⁾²⁾³⁾.

Type	Screw Material resp. screw surface	Min. member thickness	Effective Anchorage Depth	Maximum torque moment	Permissible tensile load	Permissible Shear Load	Required edge distance (with one edge) for		Required spacing for	Minimum spacings while reducing the load	
							Max. tension load	Max. shear load		Min. spacing	Min. Edge Distance
							h _{min}	h _{ef}	T _{max}	N _{perm 4)}	V _{perm 4)}
[mm]	[mm]	[Nm]	[kN]	[kN]	[mm]	[mm]	[mm]	[mm]	[mm]		
RG M10 I	A4-70	130	90	20	15,7	9,3	170	100	270	65	65
RG M12 I	A4-70	170	125	40	19,8	13,5	190	125	375	75	75
RG M16 I	A4-70	210	160	80	29,8	25,1	240	205	480	95	95

For the design the complete assessment ETA-10/0352 has to be considered.⁷⁾

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L=1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. For accurate data see ETA-10/0352.

²⁾ For higher concrete strength classes up to C50/60, higher permissible loads may be possible.

³⁾ Drill method hammer drilling. For further allowable application conditions see ETA-10/0352.

⁴⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see ETA-10/0352.

⁵⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

⁶⁾ Minimum possible spacing resp. edge distance while reducing the permissible load for the required minimum member thickness. The combination of minimum edge distance and minimum spacing is not possible. One of both values has to be increased acc. ETA-10/0352.

⁷⁾ The given loads refer to the European Technical Assessment ETA-10/0352, issue date 13/02/2017. Design of the loads according ETAG 001, Technical Report TR 029 (for static resp. quasi-static loads)

APPLICATIONS

- Removable and temporary fixings
- Anchorings with resin capsules RSB and RM II
- Anchorings with injection mortars FIS SB, FIS EM Plus, FIS V, FIS VL, and FIS GREEN in concrete

BUILDING MATERIALS

- Concrete, cracked and non-cracked

PERMISSION

- DoP No. 0756-CPD-0300

Drop-In Anchors



316 SS

	316 SS
M6 - (fits M6 Setting tool)	
M8 - (fits M8 Setting tool)	
M10 - (fits M10 Setting tool)	

316 SS

	316 SS
M12 - (fits M12 Setting tool)	
M16 - (fits M16 Setting tool)	
M20 - (fits M20 Setting tool)	

Setting Tool for Drop-In Anchor



M6	
M8	
M10	

M12	
M16	
M20	

Mushroom/Csk Head Spikes*



316 SS

M5	316 SS
M5 X 25	M
M5 X 32	M
M5 X 38	M
M5 X 50	M

M6.5	316 SS
M6.5 X 38	M/C
M6.5 X 50	M/C
M6.5 X 75	M/C
M6.5 X 100	C

*M - Mushroom Head. C - Csk Head.

fischer SXR Screw

(Torx Drive, Csk)

316 SS

fischer 
innovative solutions



Type	Art.-No	Min. anchorage depth ^{h_{nom}} (h _v) [mm]	Drill Hole Diameter ^{d₀}	Min Drill Hole depth for through fixings ^{h₂}	316 SS
SXR 10 x 80 CSK	046272	50	10	90	
SXR 10 x 100 CSK	046274	50	10	110	
SXR 10 x 120 CSK	046278	50	10	130	
SXR 10 x 140 CSK	046279	50	10	150	
SXR 10 x 160 CSK	046283	50	10	170	
SXR 10 x 180 CSK	046285	50	10	190	
SXR 10 x 200 CSK	046286	50	10	210	
SXR 10 x 230 CSK	046287	50	10	240	
SXR 10 x 260 CSK	046288	50	10	270	

T40 X 50 Torx Drive Tip also available - see p. 287

LOADS

• Frame fixing SXR⁴⁾

Highest permissible loads^{1) 6)} for a single anchor for multiple fixings of non-structural applications in normal concrete \geq C12/15 resp. $>$ B15. For the design the complete approval ETA-07/0121 has to be considered.

Type	Min. anchorage depth ^{h_{nom}} [mm]	Min. member thickness ^{h_{min}} [mm]	Cracked or Non-cracked concrete			
			Permissible tensile load ^{h_{perm3)}} [kN]	Permissible shear load ^{v_{perm3)}}	Min. spacing ^{s_{min 2)}} [mm]	Min. edge distance ^{c_{min2)}} [mm]
SXR 8	50	100	1.0	1.2 ⁵⁾	50	50
SXR 10	50	100	1.8	2.0 ⁵⁾	50	60

- 1) The required partial safety factors for material resistance as well as a partial safety factor for load variations $\gamma_L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq s_{cr,N}$ and an edge distance $c \geq c_{cr,N}$ according table 8 of the approval.
- 2) Minimum possible axial spacings (anchor group) resp. edge distance for concrete \geq C16/20 while reducing the permissible load. The combination of the given min. spacing and min. edge distance is not possible. One of them has to be increased according approval. Values for concrete C12/15 see approval.
- 3) For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.
- 4) Valid for zinc coated screws and for screws made of stainless steel. For exterior use of the zinc coated screws measures against incoming humidity according approval have to be taken.
- 5) The permissible shear load determined acc. ETAG 020, Annex C considers exclusively steel failure of the screw. For SXR 8 it amounts $V_{perm} = 4,2$ kN for galvanised screws and $V_{perm} = 3,4$ kN for screws made of stainless steel. For SXR 10 it amounts $V_{perm} = 6,0$ kN. Due to that the expected displacements will disable the proper function of the fixture a maximum shear load on the basis of table 7 of the approval is recommended.
- 6) Valid for temperatures in the substrate up to +50 °C (resp. short term up to 80 °C). For long term temperatures up to 30 °C higher permissible loads may be possible.

fischer SXR Screw

(Torx Drive, HWF)

316 SS



fischer 
innovative solutions



Type		Min. anchorage depth h_{nom} [mm]	Drill Hole Diameter d_0	Min Drill Hole depth for through fixings h_2	316 SS
SXR 10 x 60 HWF	046339	50	10	70	
SXR 10 x 80 HWF	046340	50	10	90	
SXR 10 x 100 HWF	046342	50	10	110	
SXR 10 x 120 HWF	046343	50	10	130	
SXR 10 x 140 HWF	046344	50	10	150	
SXR 10 x 160 HWF	046345	50	10	170	
SXR 10 x 180 HWF	046361	50	10	190	
SXR 10 x 200 HWF	046362	50	10	210	
SXR 10 x 230 HWF	046363	50	10	240	
SXR 10 x 260 HWF	046364	50	10	270	

T40 X 50 Torx Drive Tip also available - see p. 287

LOADS

• Frame fixing SXR⁴⁾

Highest permissible loads^{1) 6)} for a single anchor for multiple fixings of non-structural applications in normal concrete \geq C12/15 resp. $>$ B15. For the design the complete approval ETA-07/0121 has to be considered.

Type	Min. anchorage depth h_{nom} [mm]	Min. member thickness h_{min} [mm]	Cracked or Non-cracked concrete			
			Permissible tensile load $V_{perm}^{3)}$ [kN]	Permissible shear load $V_{perm}^{3)}$	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
SXR 8	50	100	1.0	1.2 ⁵⁾	50	50
SXR 10	50	100	1.8	2.0 ⁵⁾	50	60

- 1) The required partial safety factors for material resistance as well as a partial safety factor for load variations $\gamma_L = 1,4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq s_{c,N}$ and an edge distance $c \geq c_{c,N}$ according table 8 of the approval.
- 2) Minimum possible axial spacings (anchor group) resp. edge distance for concrete \geq C16/20 while reducing the permissible load. The combination of the given min. spacing and min. edge distance is not possible. One of them has to be increased according approval. Values for concrete C12/15 see approval.
- 3) For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.
- 4) Valid for zinc coated screws and for screws made of stainless steel. For exterior use of the zinc coated screws measures against incoming humidity according approval have to be taken.
- 5) The permissible shear load determined acc. ETAG 020, Annex C considers exclusively steel failure of the screw. For SXR 8 it amounts $V_{perm} = 4,2$ kN for galvanised screws and $V_{perm} = 3,4$ kN for screws made of stainless steel. For SXR 10 it amounts $V_{perm} = 6,0$ kN. Due to that the expected displacements will disable the proper function of the fixture a maximum shear load on the basis of table 7 of the approval is recommended.
- 6) Valid for temperatures in the substrate up to +50 °C (resp. short term up to 80 °C). For long term temperatures up to 30 °C higher permissible loads may be possible.

Vinylester Chemical Anchor

(410 mL) Art.-No. 521431



For standard applications in masonry and cracked concrete.

FEATURES

- High performance, styrene free, low odour.
- Leak proof cartridge for clean and safe handling.
- Curing time of 45 minutes at 20°C.
- Approved (ETA)* for seismic applications for FIS A/ RG M C1 (M10-M30) & C2 (M12-M20).

Use fischer AC XXL dispenser Gun

RECOMMENDED LOAD:

Nperm(kN) = **20.5⁺**

⁺When used with M12 5.8 stud with 20MPa uncracked concrete at 110mm embedment



Variable embedment depth **4xd to 20xd**

Approved (ETA)* in cracked concrete:
FIS A/RG M (M10 – M30)

Approved (ETA)* in non-cracked concrete
FIS A (M6 – M30),
RG M (M8 – M30),
RG MI (M8 – M20)

Installation temperature range:
0°C up to **+40°C**

Approved (ETA)* for **cracked** and **non-cracked concrete**

Approved (ETA)* for **solid** and **hollow masonry** as well as **aerated concrete**

Application temperature range:
-40°C **up to +120°C**

Usable in **dry** and **wet concrete**



*ETA - EUROPEAN TECHNICAL ASSESSMENT

Vinylester Chemical Anchor

(300 mL) Art.-No. 521376



For standard applications in masonry and concrete.

FEATURES

- High performance, styrene free, low odour.
- For use with a commonly available caulking gun.
- Leak proof cartridge for clean and safe handling.
- Curing time of 45 minutes at 20°C.
- Approved (ETA)^{*} for seismic applications FIS A/RG M C1 (M10-M30) & C2 (M12-M20).

Use any Standard Caulking Gun or fischer AM Gun

RECOMMENDED LOAD:

$N_{perm}(kN) = 20.5^+$

⁺When used with M12 5.8 stud with 20MPa uncracked concrete at 110mm embedment

Variable embedment depth **4xd to 20xd**

Approved (ETA)^{*} in cracked concrete: **FIS A/RG M** (M10 – M30)

Approved (ETA)^{*} in non-cracked concrete **FIS A** (M6 – M30), **RG M** (M8 – M30), **RG MI** (M8 – M20)

Installation temperature range: 0°C up to **+40°C**

Approved (ETA)^{*} for **cracked and non-cracked concrete**

Approved (ETA)^{*} for **solid and hollow masonry** as well as **aerated concrete**

Application temperature range: **-40°C up to +120°C**

Available in a larger cartridge (410 mL) on request

Usable in **dry and wet concrete**

Universal for all applications in masonry and cracked concrete

La résine universelle pour toutes les applications dans la maçonnerie et le béton fissuré

كافة لجميع الاستخدامات في البناء والخزانات المتصدعة

Materials / Matériaux / مواد

System / Système / نظام

490 g e 300 ml Art. No. 54872



***ETA - EUROPEAN TECHNICAL ASSESSMENT**

Chemical Anchor Accessories



fischer AM Cartridge Gun
- for 300, 360, 390mL
cartridges

(Code: DYCFICHAMCG)

fischer 
innovative solutions



fischer AC Cartridge Gun -
for 410mL cartridge

(Code: DYCFICHACCG)

fischer 
innovative solutions










fischer AM Blow Out Gun

(Code: DYCFICHBOG)

fischer 
innovative solutions



Nails & Staples

Flat Head Nails		137
Jolt Head Nails		137
Rose Head Nails		138
Pentagon Head Nails		138
Csk Decking Nails		139
Bracket & Product Nails		139
Panel Pin Nails		139

Flat Head Nails



(Stainless Nail)

304 SS **316 SS**

	304 SS All 304 SS checkered head. Annular grooved.	316 SS All 316 SS checkered head. Annular grooved.
2.80 x 30		
2.80 x 40		
3.30 x 45		
2.80 x 50		
3.15 x 60		
3.15 x 75		
4.00 x 90		
4.00 x 100		



Available per kg (loose) or 5kg pail

Jolt Head Nails



(Stainless Nail)

304 SS **316 SS**

	304 SS	316 SS
2.8 x 40		
2.8 x 50		
3.0 X 60		
3.15 X 60		
3.15 x 75		
3.55 x 90		
4.0 X 90		
4.0 x 100		



Available per kg (loose) or 5kg pail

Rose Head Nails



(Stainless Nail)

304 SS

316 SS

	304 SS	316 SS
2.8 X 50		
3.15 X 60		
3.15 X 75		
3.15 X 90		
3.25 X 65		
3.25 X 75		
3.3 X 85		
4.0 X 100		



Available per kg (loose) or 5kg pail

Pentagon Head Nails



(Stainless Nail)

316 SS

	316 SS
3.15 X 75	
3.15 X 80	



Available per kg (loose) or 5kg pail

Csk Decking Nails



304 SS **316 SS**

	304 SS	316 SS
3.15 X 60		
3.15 X 75		

NB: Heads are smooth.



Available per kg (loose) or 5kg pail

Bracket & Product Nails



304 SS **316 SS**

	304 SS	316 SS
3.15 X 30 Product Nail		
3.3 X 45 Bracket Nail		



Available per kg (loose) or 5kg pail












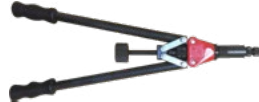


Panel Pin Nails



316 SS

	316 SS
1.2 X 12	
1.2 X 16	
1.2 X 20	
1.2 X 25	
1.6 X 20	
1.6 X 25	
1.6 X 30	
1.6 X 40	
2.0 X 50	

Rivets & Threaded Inserts

<p>Rivets – Truss & Csk</p>		<p>141</p>
<p>Rivets – White & Black</p>		<p>142</p>
<p>Rivets – Large Flange</p>		<p>142</p>
<p>Long Arm Riveter Tool</p>		<p>142</p>
<p>Rimless Threaded Insert – Stainless – Aluminium</p>		<p>143-145 143 145</p>
<p>Flanged Threaded Insert – Stainless – Aluminium</p>		<p>143-145 143 145</p>
<p>Rimless Sealed Threaded Insert – Stainless</p>		<p>144</p>
<p>Flanged Sealed Threaded Insert – Stainless</p>		<p>144</p>
<p>Flanged Sealed Threaded Insert – Knurled – Stainless</p>		<p>145</p>
<p>Rimless Hex Threaded Insert – Stainless</p>		<p>146</p>
<p>Flanged Hex Threaded Insert – Stainless</p>		<p>146</p>
<p>A03 Threaded Insert Tool</p>		<p>147</p>
<p>Nylon Threaded Insert with Aluminium Thread</p>		<p>147</p>
<p>Threaded Wood Insert</p>		<p>147</p>

Rivets – Truss & Csk



Truss Head (73)

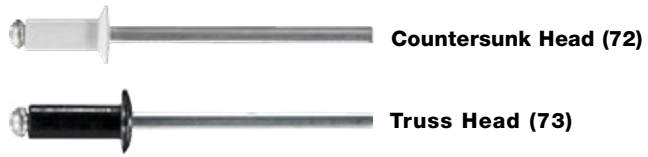


Countersunk Head (72)

Size ∨	Rivet Diam. (mm) ∨	Grip Range (mm) ∨	Shell Length (mm) ∨	Type >	72AS Csk	72MS Csk	72STST Csk	73AS Truss	73AA Truss	73TA Truss	73MS Truss	73STST Truss	73TST Truss
				Body >	Ali	Monel	304 SS	Ali	Ali	Ali Sealed	Monel	304 SS	304 SS Sealed
				Pin >	Steel	Steel	304 SS	Steel	Ali	Steel	Steel	304 SS	420 SS
4-1	3.2	Up to 1.6	5.4					•					
4-2	3.2	1.6-3.2	7.0		•			•	•	•	•	•	
4-3	3.2	3.2-4.8	8.6		•	•	•	•	•		•	•	
4-4	3.2	4.8-6.4	10.2		•	•	•	•	•	•	•	•	•
4-5	3.2	6.4-7.9	11.7		•			•		•	•	•	
4-6	3.2	7.9-9.5	13.3		•	•		•	•	•	•	•	
4-8	3.2	9.5-12.7	16.5		•			•			•	•	
4-10	3.2	12.7-15.9	19.7					•					
4-12	3.2	15.9-19.0	22.9					•					
5-2	4.0	1.6-3.2	7.6		•			•		•	•	•	
5-3	4.0	3.2-4.8	9.2		•			•			•	•	
5-4	4.0	4.8-6.4	10.8		•	•	•	•	•	•	•	•	
5-5	4.0	6.4-7.9	12.3		•			•			•	•	
5-6	4.0	7.9-9.5	13.8		•		•	•	•		•	•	
5-8	4.0	9.5-12.7	17.1		•			•			•	•	
5-10	4.0	12.7-15.9	20.3		•			•					
5-12	4.0	15.9-19	N/A					•					
6-2	4.8	1.6-3.2	8.3		•			•		•	•	•	
6-3	4.8	3.2-4.8	9.8		•			•			•	•	
6-4	4.8	4.8-6.4	11.4		•	•	•	•	•	•	•	•	
6-5	4.8	6.4-7.9	13		•	•		•			•	•	
6-6	4.8	7.9-9.5	14.6		•	•	•	•	•	•	•	•	•
6-8	4.8	9.5-12.7	17.8		•	•	•	•	•	•	•	•	
6-10	4.8	12.7-15.9	21.0		•	•		•	•	•	•	•	
6-12	4.8	15.9-19	24.1		•			•				•	
6-14	4.8	19-22.2	27.3					•					
6-16	4.8	22.2-25.4	30.5					•				•	
6-20	4.8	26-31	35					•					
6-22	4.8	31-36	40					•					
8-5	6.4	6.4-7.9	N/A								•		
8-6	6.4	6.3-9.5	15.9					•					
8-8	6.4	9.5-12.7	19.1					•			•		
8-10	6.4	12.7-15.9	22					•	•			•	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Rivets – White & Black



Size	Rivet Diam. (mm)	Grip Range (mm)	Shell Length (mm)		White 72AS Csk	White 73AS Truss	Black 72AS Csk	Black 73AS Truss
				Body	Ali	Ali	Ali	Ali
				Pin	Steel	Steel	Steel	Steel
4-2	3.2	1.6-3.2	7.0			•	•	•
4-3	3.2	3.2-4.8	8.6					
4-4	3.2	4.8-6.4	10.2				•	
4-6	3.2	7.9-9.5	13.3					
5-2	4.0	1.6-3.2	7.6				•	
5-3	4.0	3.2-4.8	9.2					•
5-4	4.0	4.8-6.4	10.8		•	•	•	
5-6	4.0	7.9-9.5	13.8					
6-4	4.8	4.8-6.4	11.4					

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Rivets – Large Flange



Size	73ASL Truss	
	Body	Aluminium
	Pin	Steel
4-4		•
4-6		•
4-8		•
5-6		•

Size	73ASL Truss	
	Body	Aluminium
	Pin	Steel
6-4		•
6-6		•
6-8		•
6-10		•

Size	73ASL Truss	
	Body	Aluminium
	Pin	Steel
6-12		•
6-14		•
6-16		•

NB: other sizes available on request

Long Arm Riveter Tool

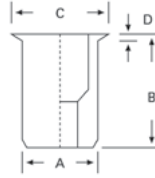
Code: TLRVHR730



• Rivets up to and including 8-series (1/4")

Stainless Rimless Threaded Insert

304 SS

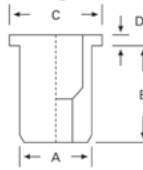


Size Int. Thread (Grip Range)	Hole ($\pm 0.1/-0$ mm)	A (Max. mm)	B ($+0.5/-0$ mm)	C ($+0.3/-0.3$ mm)	D ($+0.3/-0$ mm)	304 SS
M3 (0.5-2.0mm)	5.1	5.0	9.0	6.0	0.5	
M4 (0.5-3.0mm)	6.1	6.0	11.0	7.0	0.5	
M5 (0.5-3.0mm)	7.1	7.0	12.0	8.0	0.5	
M6 (0.8-3.0mm)	9.1	9.0	14.0	10.0	0.5	
M8 (1.0-3.0mm)	11.10	11.0	15.5	12.0	0.7	
M10 (1.0-2.5mm)	13.10	13.0	16.0	14.0	0.7	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Flanged Threaded Insert

304 SS

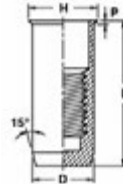


Size Int. Thread (Grip Range)	Hole ($\pm 0.1/-0$ mm)	A (Max. mm)	B ($+0.3/-0$ mm)	C ($+0/-0.5$ mm)	D ($+0.1/-0.1$ mm)	304 SS
M4 (0.3-2.5)	6.1	6.0	11.0	9.0	1.0	
M4 (2.5-4.0)	6.1	6.0	12.5	9.0	1.0	
M5 (0.3-3.0)	7.1	7.0	12.0	10.0	1.0	
M5 (3.0-4.5)	7.1	7.0	13.5	10.0	1.0	
M6 (0.5-3.0)	9.1	9.0	14.0	12.0	1.5	
M6 (3.0-5.0)	9.1	9.0	16.0	12.0	1.5	
M8 (0.5-3.0)	11.1	11.0	16.0	15.0	1.5	
M8 (3.0-5.5)	11.1	11.0	18.5	15.0	1.5	
M10 (1.0-3.5)	13.1	13.0	19.0	16.3	1.5	
M10 (3.5-6.0)	13.1	13.0	21.5	16.3	1.5	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Rimless Sealed Threaded Insert

304 SS

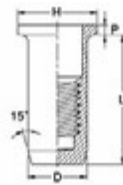


Size Int. Thread (Grip Range)	D ± 0.1	Hole ±0.1/-0	P +0.3/-0	L +5.0/-0	Hole +0.1/-0	304 SS
M4 (0.5-2.5)	5.90	7.00	0.50	16.00	6.0	
M5 (0.5-3.0)	6.90	8.00	0.50	18.00	7.0	
M6 (0.5-3.0)	8.90	10.00	0.50	21.00	9.0	
M8 (0.5-3.0)	10.90	12.00	0.50	23.50	11.0	
M10 (1.0-3.5)	12.90	14.20	0.80	26.50	13.0	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Flanged Sealed Threaded Insert

304 SS

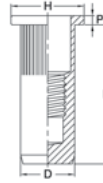


Size Int. Thread (Grip Range)	D ± 0.1	H ±0/-0.5	P ±0.1	L ±0.3	Hole +0.7/-0	304 SS
M4 (0.5-2.5)	5.90	9.00	1.00	16.00	6.0	
M5 (0.5-3.0)	6.90	10.00	1.00	18.00	7.0	
M5 (6.0-7.5)	6.90	10.00	1.00	22.50	7.0	
M6 (0.5-3.0)	8.90	12.00	1.50	21.00	9.0	
M6 (3.0-5.0)	8.90	12.00	1.50	23.00	9.0	
M8 (0.5-3.0)	10.90	15.00	1.50	23.50	11.0	
M8 (3.0-5.5)	10.90	15.00	1.50	26.00	11.0	
M10 (1.0-3.5)	12.90	17.00	2.00	26.00	13.0	
M10 (3.0-5.5)	12.90	17.00	2.00	29.00	13.0	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Flanged Sealed Threaded Insert-Knurled

304 SS

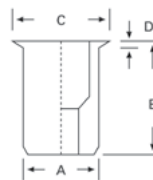


Size Int. Thread (Grip Range)	D ± 0.1	H ±0/-0.5	P ±0.1	L ±0.3	Hole +0.1/-0	304 SS
M6 (3.0-5.0)	8.9	12.00	1.5	23.00	9.0	
M8 (3.0-5.5)	10.90	15.00	1.5	26.00	11.0	
M10 (3.0-5.5)	12.90	17.00	2.00	29.00	13.0	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Aluminium Rimless Threaded Insert

ALI

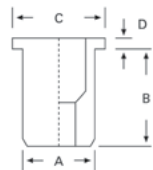


Size Int. Thread (Grip Range)	Hole (+0.1/-0mm)	A (+0/-0.1mm)	B (+0.3/-0.3mm)	C (+0.3/-0.3mm)	D (+0.1/-0.1mm)	ALI
M4 (2.5-3.5)	6.0	6.0	12.0	7.0	0.5	
M5 (2.5-3.5)	7.0	7.0	13.0	8.0	0.5	
M6 (2.5-4.0)	9.0	9.0	15.5	10.0	0.5	
M8 (2.5-4.0)	11.0	11.0	17.0	12.0	0.7	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Aluminium Flanged Threaded Insert

ALI

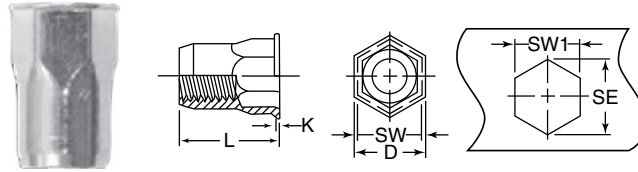


Size Int. Thread (Grip Range)	Hole (+0.1/-0mm)	A (+0/-0.1mm)	B (+0.3/-0.3mm)	C (+0.3/-0.3mm)	D (+0.1/-0.1mm)	ALI
M4 (0.8-2.5)	6.0	6.0	10.5	9.0	0.8	
M4 (2.5-3.5)	6.0	6.0	11.5	9.0	0.8	
M5 (0.8-2.5)	7.0	7.0	11.5	10.0	1.0	
M5 (2.5-3.5)	7.0	7.0	12.5	10.0	1.0	
M6 (1.0-2.5)	9.0	9.0	13.5	12.5	1.5	
M6 (2.5-4.0)	9.0	9.0	15.0	12.5	1.5	
M8 (2.5-4.0)	11.0	11.0	15.0	14.5	1.5	
M8 (3.5-6.0)	11.0	11.0	16.5	14.5	1.5	
M10 (2.5-4.0)	13.0	13.0	17.0	16.5	1.5	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Rimless Hex Threaded Insert

304 SS

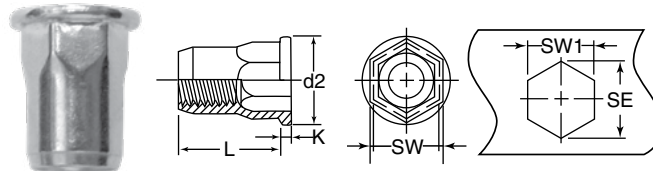


Size Int. Thread (Grip Range)	SW (+0/-0.15)	Hex Hole (SW1)	SE (Min.)	D (±0.3)	K (+0.3/-0)	L (+0.5/-0)	304 SS
M3 (0.5 ~ 2.0)	5.00	5.10	5.50	6.00	0.5	9.00	
M4 (0.5 ~ 2.5)	6.00	6.10	6.80	7.00	0.5	11.00	
M4 (2.5 ~ 4.0)	6.00	6.10	6.80	7.00	0.5	12.50	
M5 (0.5 ~ 3.0)	7.00	7.10	7.90	8.00	0.5	12.00	
M5 (3.0 ~ 4.5)	7.00	7.10	7.90	8.00	0.5	13.50	
M6 (0.5 ~ 3.0)	9.00	9.10	10.20	10.00	0.5	14.00	
M6 (3.0 ~ 5.0)	9.00	9.10	10.20	10.00	0.5	16.00	
M8 (0.5 ~ 3.0)	11.00	11.10	12.40	12.00	0.5	16.00	
M8 (3.0 ~ 5.0)	11.00	11.10	12.40	12.00	0.5	18.50	
M10 (1.0 ~ 3.5)	13.00	13.10	14.70	14.20	0.7	19.00	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Stainless Flanged Hex Threaded Insert

304 SS



Size Int. Thread (Grip Range)	SW (+0/-0.15)	Hex Hole (SW1)	SE (Min.)	d2 (+0.5/-0)	K (±0.1)	L (±0.3)	304 SS
M4 (0.5 ~ 2.5)	6.00	6.10	6.80	9.00	1.00	11.00	
M4 (2.5 ~ 4.0)	6.00	6.10	6.80	9.00	1.00	12.50	
M5 (0.5 ~ 3.0)	7.00	7.10	7.90	10.00	1.00	12.00	
M5 (3.0 ~ 4.5)	7.00	7.10	7.90	10.00	1.00	13.50	
M6 (0.5 ~ 3.0)	9.00	9.10	10.20	12.00	1.50	14.00	
M6 (3.0 ~ 5.0)	9.00	9.10	10.20	12.00	1.50	16.00	
M8 (0.5 ~ 3.0)	11.00	11.10	12.40	14.50	1.50	16.00	
M8 (3.0 ~ 5.0)	11.00	11.10	12.40	14.50	1.50	18.50	
M10 (1.0 ~ 3.5)	13.00	13.10	14.70	16.50	2.00	19.00	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

A03 Threaded Insert Tool



NB: pneumatics tool are available on request.

Nylon Threaded Insert with Aluminium Thread



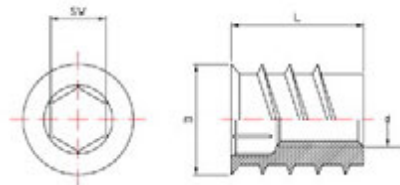
NYLON

Size	Grip Range (mm)	Hole	NYLON
M4	2.1-2.4	10.3	
M5	2.1-2.4	10.3	
M6	2.5-3.2	12.7	
M8	3.3-4.0	14.3	

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.


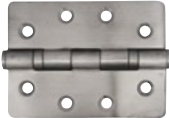







Threaded Wood Insert

304 SS



	304 SS	D (mm)	L (mm)	d (mm)	SW (mm)
M5 (internal thread)		10	12	M5	5
M6 (internal thread)		12	15	M6	6
M8 (internal thread)		16	18	M8	8

Hinges & Marine Hinges

<p>Butt Hinges</p>		<p>149</p>
<p>Radius Hinges</p>		<p>149</p>
<p>Flush Fit Hinges</p>		<p>149</p>
<p>Piano Hinge</p>		<p>150</p>
<p>Strap Hinges</p>		<p>150</p>
<p>Strap Hinges - Mirror Finish</p>		<p>150</p>
<p>Tee Hinges</p>		<p>151</p>
<p>Tee Hinges - Mirror Finish</p>		<p>151</p>
<p>Marine Hinges - Polished</p>		<p>152-156</p>

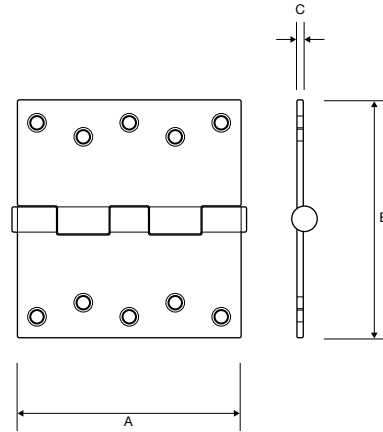
Butt Hinges

304 SS

316 SS

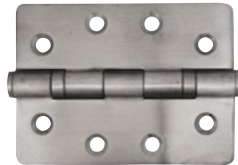


A X B X C	304 SS	316 SS
1½ X 1 X 0.75mm	4G screw	
2 X 1½ X 1.30mm (Nylon Bearings)	4G screw	
2½ X 1-¾ X 1.30mm (Nylon Bearings)	6G screw	
3 X 2 X 1.50mm (Nylon Bearings)	6G screw	
3 X 2½ X 2.00mm	10G screw	
4 X 3 X 2.00mm	10G screw	
4 X 2-¾ X 2.00mm (Nylon Bearings)	8G screw	
4 X 3 X 2.00mm (with 304 Bearings)		10G screw
4 X 3 X 2.50mm	10G screw	
4 X 4 X 2.00mm	10G screw	
4 X 4 X 2.00mm (Nylon Bearings)	8G screw	
4 X 4 X 2.50mm	10G screw	
5 X 5 X 3.00mm	10G screw	
4 X 4 X 2.00 mm (with 304 Bearings)		10G screw

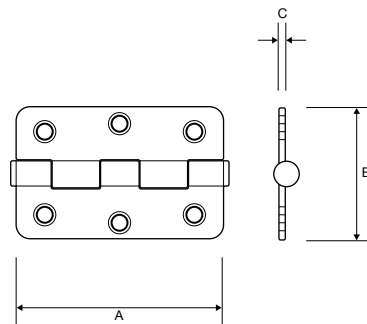


Radius Hinges

304 SS



A X B X C	304 SS
90 X 60 X 2.00mm (FIXED PIN)	10G screw
90 X 60 X 2.00mm (REMOVABLE PIN)	10G screw
4 X 3 X 2.50mm (FIXED PIN)	10G screw
4 X 3 X 2.50mm (REMOVABLE PIN)	10G screw

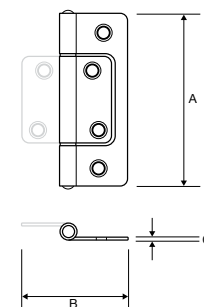


Flush Fit Hinges

430 SS

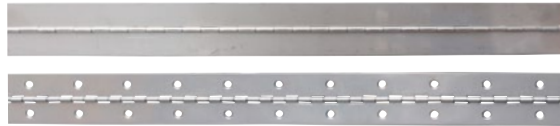


A X B X C	430 SS
2-1/2 X 1-1/2 X 0.90mm	4G screw
3 X 2 X 1.50mm	6G screw
4 X 2-1/2 X 1.50mm	4G screw

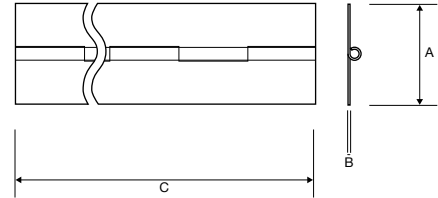


Piano Hinge

304 SS **316 SS**



A x B x C	304 SS DRILLED	304 SS PLAIN	316 SS PLAIN
1-1/8 X 20G X 1830mm	8G screw		
1-1/4 X 20G X 1830mm	8G screw		
1-1/2 X 20G X 1830mm	8/10G screw		
2 X 20G X 1830mm	8/10G screw		
2 X 16G X 1830mm			
2-1/2 X 16G X 1830mm			
2-1/2 X 14G X 1830mm			
3 X 16G X 1830mm			
3 X 14G X 1830mm			
3 X 10G X 1830mm			
4 X 10G X 1830mm			



Strap Hinges

304 SS



	304 SS
4" (when closed)	8G screw
5" (when closed)	8G screw
6" (when closed)	10G screw
8" (when closed)	10G screw
10" (when closed)	10G screw

Self Tapping Screw	Approx. Size (mm)
4g	2.9
6g	3.5
8g	4.2
10g	4.8
12g	5.5
14g	6.3
18g	8.0

Strap Hinges – Mirror Finish*

316 SS MIRROR



	316 SS MIRROR
27mm X 160mm X 4mm	10G screw

*for improved corrosion resistance

Imperial to Metric Conversion (approx.)

1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
6mm	10mm	13mm	16mm	19mm	25mm	32mm	38mm	51mm	63mm	76mm	101mm

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Tee Hinges

304 SS



	304 SS
4" (when closed)	*
5" (when closed)	*
6" (when closed)	*
8" (when closed)	*
10" (when closed)	*

* If you require hole diameters, please enquire.

Tee Hinges - Mirror Finish*

**316 SS
MIRROR**



	316 SS MIRROR
98mm X 197mm X 5mm	

* for improved corrosion resistance

Marine Hinges – Polished

304 SS














Marine Hinge	Travel Angle	Size (mm)	
		140 x 40 x 2	304
		75 x 40 x 2	304
		75 x 40 x 2	304
		100 x 30 x 2	304
		75 x 40 x 2	304
		60 x 40 x 2	304
		65 x 40 x 2	304

N.B. Travel Angle – shaded area denotes the degree of movement

Marine Hinges – Polished (cont.)

304 SS




Marine Hinge	Travel Angle	Size (mm)	
		125 x 40 x 2	304
		40 x 30 x 2	304
		40 x 30 x 2	304
		48x 30 x 2	304
		75 x 40 x 2	304
		140 x 40 x 2	304

N.B. Travel Angle – shaded area denotes the degree of movement

Marine Hinges – Polished (cont.)

304 SS




Marine Hinge	Travel Angle	Size (mm)	
		70 x 40 x 2	304
		75 x 40 x 2	304
		75 x 40 x 2	304
		55 x 40 x 2	304
		65 x 40 x 2	304

N.B. Travel Angle – shaded area denotes the degree of movement

Marine Hinges – Polished (cont.)

316 SS



Marine Hinge	Travel Angle	Size (mm)	
		75 x 40 x 4	316 Polished
		130 x 25 x 4	316 Polished
		105 x 25 x 4	316 Polished
		155x 25 x 4	316 Polished
		75 x 38 x 4 90 x 38 x 4 105 x 38 x 4	316 Polished
		57 x 38 x 4 71 x 38 x 4	316 Polished
		38 x 38 x 4	316 Polished

N.B. Travel Angle – shaded area denotes the degree of movement

Marine Hinges – Polished (cont.)

316 SS



Marine Hinge	Travel Angle	Size (mm)	
		50 x 38 x 4	316 Polished
		27 x 160 x 4	316 Polished
		98 x 197 x 5	316 Polished
		64 x 64 x 4	316 Polished
		64 x 81 x 4	316 Polished

N.B. Travel Angle – shaded area denotes the degree of movement

Hose Clips, Cable Ties, Strapping

Perforated Hose Clips		159
Non-Perforated Hose Clips		159
Heavy Duty Hose Clamps		160
1 Ear Hose Clamp		160
Cable Ties		161
Strapping & Buckles		161

Perforated Hose Clips



304 SS

Suit Hose Dia. (mm)	304 SS
(7-16)	
(11-19)	
(13-22)	
(14-27)	
(18-32)	
(21-38)	
(21-44)	
(27-51)	

Suit Hose Dia. (mm)	304 SS
(33-57)	
(40-63)	
(46-70)	
(52-76)	
(59-82)	
(65-89)	
(72-95)	
(78-101)	

Suit Hose Dia. (mm)	304 SS
(84-108)	
(91-114)	
(105-127)	
(118-140)	
(130-153)	
(143-165)	
(155-178)	

Non-Perforated Hose Clips



304 SS **316 SS**

Suit Hose Dia. (mm)	304 SS	316 SS
(8-12)		
(10-16)		
(12-20)		
(16-25)		
(20-32)		
(25-40)		
(32-50)		

Suit Hose Dia. (mm)	304 SS	316 SS
(40-60)		
(50-70)		
(60-80)		
(70-90)		
(80-100)		
(100-120)		
(110-130)		
(120-140)		
(150-170)		
(160-180)		
(180-200)		
(200-220)		

Heavy Duty Hose Clamps



304 SS*

Grip Range (mm)	304 SS*
(17-21)	
(19-23)	
(22-27)	
(24-29)	
(28-32)	
(31-36)	
(35-40)	
(39-45)	

Grip Range (mm)	304 SS*
(43-49)	
(47-53)	
(51-57)	
(55-61)	
(59-65)	
(63-69)	
(67-75)	
(72-81)	

Grip Range (mm)	304 SS*
(78-88)	
(84-94)	
(90-100)	
(96-106)	
(102-114)	
(111-123)	
(120-132)	
(129-142)	

- NB: larger sizes are available on request.
- *Heavy Duty Clamps are all 304 except the 304 Bolt and Nut have a Brass & Nickel Top Coating.

1 Ear Hose Clamp



304 SS

Size Grip Range (mm)	304 SS
7.0 - 8.7	
8.3 - 10.0	
9.6 - 11.3	
10.8 - 13.3	
11.3 - 13.3	
11.7 - 14.2	
12.0 - 14.5	

Size Grip Range (mm)	304 SS
12.8 - 15.3	
15.0 - 17.5	
16.5 - 18.5	
19.6 - 22.6	



For 1 Ear Hose Clamp
Tool see p. 291

Cable Ties

304 SS

316 SS



Cable Tie tool available
- see p.291

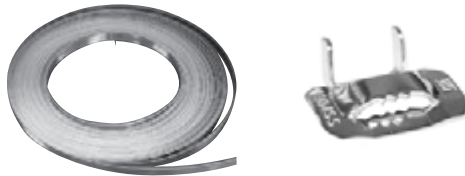
Code: TLCTTCH2065

Size	To Suit Max OD	304 SS	316 SS
4.6 X 127MM	25MM OD		
4.6 X 201MM	50MM OD		
7.9 X 521MM	150MM OD		

Strapping & Buckles

304 SS

316 SS



Strapping	304 SS	316 SS
10MM X 30M		
13MM X 30M		
20MM X 30M		

Buckles for Strapping	304 SS	316 SS
10MM		
13MM		
20MM		

NB: only sold in 30m rolls.



















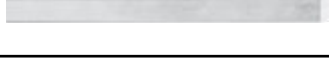



Strapping tool available
- See p. 291



Comes in a handy carry case.

Circlips, Pins, Recoils, Grease Nipples, Shaft Collars

Internal Circlips		163-164
External Circlips		165-166
E-Type Circlips		167
R Clips		167
Retaining Clips		168
Split Pins		168
Dowel Pins		169
Quick Release Pins		169
Lynch Pins		169
Antiluce – With & without shank		169
Cotter Rings		170
Split Rings		170
Shaft Collars		170
Tension Pins (Roll Pins)		171
Skew Proof Wave Spring Pins		172
Recoils – Metric – Imperial		173-174
Recoil Thread Repair Kits – Metric – UNC		173-174
Grease Nipples		174
Key Steel – Metric – Imperial		175
Key Steel – Rectangular – Metric		175

Internal Circlips

304 SS



Size (mm) (Bore Size d_1)	Groove Size (mm) d_2	OD Circlip (mm) d_3	Thickness (mm) t	Groove Width (mm) m	304 SS
10	10.4	10.7	1.0	1.15	
11	11.4	11.8	1.0	1.15	
12	12.5	13.0	1.0	1.15	
13	13.6	14.1	1.0	1.15	
14	14.6	15.1	1.0	1.15	
15*	15.7	16.2	1.0	1.15	
16	16.8	17.3	1.0	1.15	
17	17.8	18.3	1.0	1.15	
18	19.0	19.5	1.0	1.15	
19	20.0	20.5	1.0	1.15	
20	21.0	21.5	1.0	1.15	
21*	22.0	22.5	1.0	1.15	
22	23.0	23.5	1.0	1.15	
24	25.2	25.9	1.2	1.35	
25	26.2	26.9	1.2	1.35	
26	27.2	27.9	1.2	1.35	
28	29.4	30.1	1.2	1.35	
30	31.4	32.1	1.2	1.35	
32	33.7	34.4	1.2	1.35	
34	35.7	36.5	1.6	1.75	
35	37.0	37.8	1.6	1.75	
36	38.0	38.8	1.6	1.75	
37	39.0	39.8	1.6	1.75	
38	40.0	40.8	1.6	1.75	
40	42.5	43.5	1.8	1.95	
42	44.5	45.5	1.8	1.95	
45	47.5	48.5	1.8	1.95	
47	49.5	50.5	1.8	1.95	
48*	50.5	51.5	1.8	1.95	
50	53.0	54.2	2.0	2.20	
52	55.0	56.2	2.0	2.20	
55	58.0	59.2	2.0	2.20	
56	59.0	60.2	2.0	2.20	
58	61.0	62.2	2.0	2.20	
60	63.0	64.2	2.0	2.20	
62	65.0	66.2	2.0	2.20	
63	66.0	67.2	2.0	2.20	

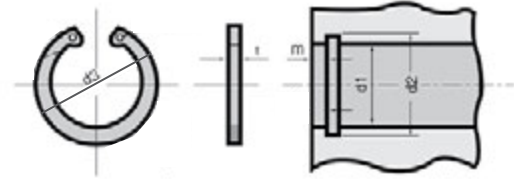
* Not available ex-stock but at a lead time – please enquire.

Continued on next page...

NB: other non-standard and larger diameters available on request.

Internal Circlips (cont.)

304 SS



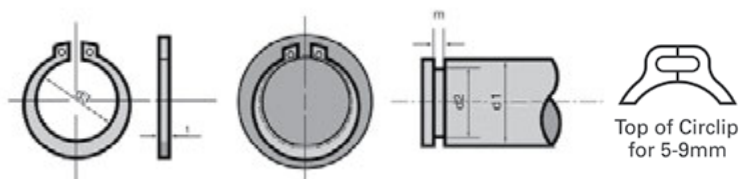
Size (mm) (Bore Size d_1)	Groove Size (mm) d_2	OD Circlip (mm) d_3	Thickness (mm) t	Groove Width (mm) m	304 SS
65	68.0	69.2	2.5	2.7	
68	71.0	72.5	2.5	2.7	
70	73.0	74.5	2.5	2.7	
72*	75.0	76.5	2.5	2.7	
75	78.0	79.5	2.5	2.7	
78*	81.0	82.5	2.5	2.7	
80	83.5	85.5	2.5	2.7	
82	85.5	87.5	2.5	2.7	
85	88.5	90.5	3.0	3.2	
88*	91.5	93.5	3.0	3.2	
90	93.5	95.5	3.0	3.2	
92*	95.5	97.5	3.0	3.2	
95*	98.5	100.5	3.0	3.2	
98*	101.5	103.5	3.0	3.2	
100	103.5	105.5	3.0	3.2	
102*	106.0	108.0	4.0	4.2	
105*	109.0	112.0	4.0	4.2	
108*	112.0	115.0	4.0	4.2	
110	114.0	117.0	4.0	4.2	
112*	116.0	119.0	4.0	4.2	
115*	119.0	122.0	4.0	4.2	
120	124.0	127.0	4.0	4.2	
125*	129.0	132.0	4.0	4.2	
130*	134.0	137.0	4.0	4.2	
135*	139.0	142.0	4.0	4.2	
140*	144.0	147.0	4.0	4.2	
145*	149.0	152.0	4.0	4.2	
150	155.0	158.0	4.0	4.2	
155*	160.0	164.0	4.0	4.2	
160*	165.0	169.0	4.0	4.2	
165*	170.0	174.5	4.0	4.2	
170*	175.0	179.5	4.0	4.2	
175*	180.0	184.5	4.0	4.2	
180*	185.0	189.5	4.0	4.2	
185*	190.0	194.5	4.0	4.2	
190*	195.0	199.5	4.0	4.2	
195*	200.0	204.5	4.0	4.2	
200*	205.0	209.5	4.0	4.2	

* Not available ex-stock but at a lead time – please enquire.

NB: other non-standard and larger diameters available on request.

External Circlips

304 SS



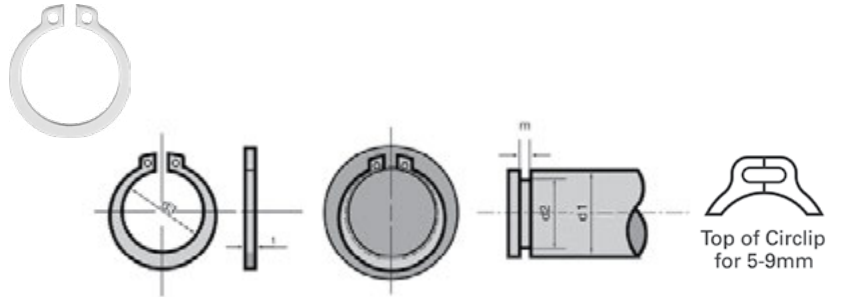
Size (mm) (Shaft Size d_1)	Groove Size (mm) d_2	Internal Diam. (mm) d_3	Thickness (mm) t	Groove Width (mm) m	304 SS
5	4.7	4.5	0.4	0.45	
6	5.7	5.5	0.4	0.45	
7	6.5	6.3	0.65	0.7	
8	7.4	7.1	0.65	0.7	
9	8.4	8.1	0.65	0.7	
10	9.6	9.3	1.0	1.15	
11	10.5	10.2	1.0	1.15	
12	11.5	11.1	1.0	1.15	
13	12.4	12.0	1.0	1.15	
14	13.4	12.9	1.0	1.15	
15	14.3	13.8	1.0	1.15	
16	15.2	14.7	1.0	1.15	
17	16.2	15.7	1.0	1.15	
18	17.0	16.5	1.2	1.35	
19	18.0	17.5	1.2	1.35	
20	19.0	18.5	1.2	1.35	
22	21.0	20.5	1.2	1.35	
24	22.9	22.2	1.2	1.35	
25	23.9	23.2	1.2	1.35	
26	24.9	24.2	1.2	1.35	
28	26.9	25.9	1.6	1.75	
30	28.6	27.9	1.6	1.75	
32	30.3	29.6	1.6	1.75	
34	32.3	31.5	1.6	1.75	
35	33.0	32.2	1.6	1.75	
36	34.0	33.2	1.8	1.95	
38	36.0	35.2	1.8	1.95	
40	38.0	37.0	1.8	1.95	
42	39.5	38.5	1.8	1.95	
45	42.5	41.5	1.8	1.95	
48	45.5	44.5	1.8	1.95	
50	47.0	45.8	2.0	2.20	
52	49.0	47.8	2.0	2.20	
55	52.0	50.8	2.0	2.20	
58	55.0	53.8	2.0	2.20	
60	57.0	55.8	2.0	2.20	

Continued on next page...

NB: other non-standard and larger diameters available on request.

External Circlips (cont.)

304 SS

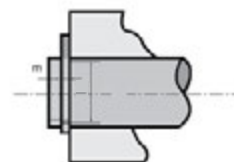
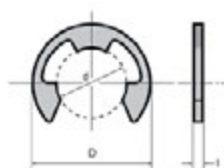


Size (mm) (Shaft Size d_1)	Groove Size (mm) d_2	Internal Diam. (mm) d_3	Thickness (mm) t	Groove Width (mm) m	304 SS
65	62.0	60.8	2.5	2.7	
68	65.0	63.5	2.5	2.7	
70	67.0	65.5	2.5	2.7	
72	69.0	67.5	2.5	2.7	
75	72.0	70.5	2.5	2.7	
78	75.0	73.5	2.5	2.7	
80	76.5	74.5	2.5	2.7	
82	78.5	76.5	2.5	2.7	
85	81.5	79.5	3.0	3.2	
88	84.5	82.5	3.0	3.2	
90	86.5	84.5	3.0	3.2	
95	91.5	89.5	3.0	3.2	
100	96.5	94.5	3.0	3.2	
105	101	98.0	4.0	4.2	
110	106	103	4.0	4.2	
115	111	108	4.0	4.2	
120	116	113	4.0	4.2	
125	121	118	4.0	4.2	
130	126	123	4.0	4.2	
135	131	128	4.0	4.2	
140	136	133	4.0	4.2	
145	141	138	4.0	4.2	
150	145	142	4.0	4.2	
155	150	146	4.0	4.2	
160	155	151	4.0	4.2	
165	160	155.5	4.0	4.2	
170	165	160.5	4.0	4.2	
175	170	165.5	4.0	4.2	
180	175	170.5	4.0	4.2	
185	180	175.5	4.0	4.2	
190	185	180.5	4.0	4.2	
195	190	185.5	4.0	4.2	
200	195	190.5	4.0	4.2	

NB: other non-standard and larger diameters available on request.

E-Type Circlips

304 SS



Size (mm) (Groove Size d_1)	Shaft Size (mm)	Outside Diam (mm) D	Thickness (mm) t	Groove Width (mm) m	304 SS
2.0	2.5 ~ 3.2	5	0.4	0.5	
2.5	3.2 ~ 4.0	6	0.4	0.5	
3.0	4.0 ~ 5.0	7	0.6	0.7	
4.0	5 ~ 7	9	0.6	0.7	
5.0	6 ~ 8	11	0.6	0.7	
6.0	7 ~ 9	12	0.8	0.9	
7.0	8 ~ 11	14	0.8	0.9	
8.0	9 ~ 12	16	0.8	0.9	
9.0	10 ~ 14	18	0.8	0.9	
10.0	11 ~ 15	20	1.0	1.15	
12.0	13 ~ 18	23	1.0	1.15	
15.0	16 ~ 24	29	1.5	1.65	
19.0	20 ~ 31	37	1.5	1.65	
24.0	25 ~ 38	44	2.0	2.20	

R Clips

304 SS

316 SS



Size Shaft Diam* X Pin Diam	Length (mm)	304 SS	316 SS
M4 X 1.0MM	16.30		
M5 X 1.0MM	17.90		
M6 X 1.2MM	21.20		
M8 X 1.6MM	27.70		
M10 X 1.8MM	32.60		
M12 X 1.8MM	35.80		
M16 X 2.0MM	43.80		
M16 X 2.5MM	50.00		
M20 X 3.0MM	70.00		
M25 X 4.0MM	80.00		

*Represents size of shaft R Clip is fitting to.

Retaining Clips

304 SS



Code	Size	304 SS
613/7	Small	
502/7	Medium	
1167/7	Large	

- Retaining Clips serve as a locking device for selected Toggle Latches (those with holes/shafts through the centre of the latch).
- For Toggle Latches - see p. 201

Split Pins

304 SS

316 SS



M1.6	304 SS	316 SS
M1.6 X 10 (1/16 X 3/8)		
M1.6 X 12 (1/16 X 1/2)		
M1.6 X 16 (1/16 X 5/8)		
M1.6 X 20 (1/16 X 3/4)		
M1.6 X 25 (1/16 X 1)		
M1.6 X 32 (1/16 X 1-1/4)		
M1.6 X 40 (1/16 X 1-1/2)		

M2.0	304 SS	316 SS
M2.0 X 12 (5/64 X 1/2)		
M2.0 X 16 (5/64 X 5/8)		
M2.0 X 20 (5/64 X 3/4)		
M2.0 X 25 (5/64 X 1)		
M2.0 X 32 (5/64 X 1-1/4)		
M2.0 X 40 (5/64 X 1-1/2)		
M2.0 X 50 (5/64 X 2)		

M2.5	304 SS	316 SS
M2.5 X 12 (3/32 X 1/2)		
M2.5 X 20 (3/32 X 3/4)		
M2.5 X 25 (3/32 X 1)		
M2.5 X 32 (3/32 X 1-1/4)		
M2.5 X 40 (3/32 X 1-1/2)		
M2.5 X 50 (3/32 X 2)		

M3.2	304 SS	316 SS
M3.2 X 20 (1/8 X 3/4)		
M3.2 X 25 (1/8 X 1)		
M3.2 X 32 (1/8 X 1-1/4)		
M3.2 X 40 (1/8 X 1-1/2)		
M3.2 X 50 (1/8 X 2)		
M3.2 X 63 (1/8 X 2-1/2)		

M4	304 SS	316 SS
M4 X 16 (5/32 X 5/8)		
M4 X 20 (5/32 X 3/4)		
M4 X 25 (5/32 X 1)		
M4 X 32 (5/32 X 1-1/4)		
M4 X 40 (5/32 X 1-1/2)		
M4 X 50 (5/32 X 2)		
M4 X 63 (5/32 X 2-1/2)		
M4 X 80 (5/32 X 3)		

M5	304 SS	316 SS
M5 X 25 (3/16 X 1)		
M5 X 32 (3/16 X 1-1/4)		
M5 X 40 (3/16 X 1-1/2)		
M5 X 50 (3/16 X 2)		
M5 X 63 (3/16 X 2-1/2)		
M5 X 80 (3/16 X 3)		
M5 X 100 (3/16 X 4)		

M6.3	304 SS	316 SS
M6.3 X 25 (1/4 X 1)		
M6.3 X 32 (1/4 X 1-1/4)		
M6.3 X 40 (1/4 X 1-1/2)		
M6.3 X 50 (1/4 X 2)		
M6.3 X 63 (1/4 X 2-1/2)		
M6.3 X 80 (1/4 X 3)		
M6.3 X 100 (1/4 X 4)		

M8	304 SS	316 SS
M8 X 63 (5/16 X 2-1/2)		
M8 X 100 (5/16 X 4)		

M10	304 SS	316 SS
M10 X 100 (3/8 X 4)		

Dowel Pins



316 SS

M2

316 SS

M2 X 12

M2 X 24

M2.5

316 SS

M2.5 X 4

M2.5 X 5

M2.5 X 6

M2.5 X 8

M2.5 X 10

M2.5 X 12

M3

316 SS

M3 X 4

M3 X 5

M3 X 6

M3 X 8

M3 X 10

M3 X 12

M3 X 14

M3 X 16

M3 X 20

M4

316 SS

M4 X 5

M4 X 10

M4 X 14

M4 X 20

M6

316 SS

M6 X 5

M6 X 20

M8

316 SS

M8 X 40

Quick Release Pins



304 SS

316 SS

3/16

304 SS

316 SS

3/16 X 1/2

1/4

304 SS

316 SS

1/4 X 7/8

1/4 X 1

1/4 X 1-5/16

1/4 X 2-1/4

*

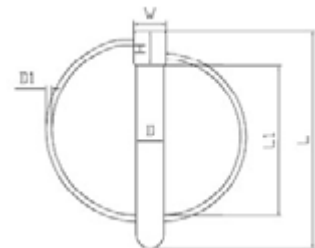
*Pin is hollow.

Lynch Pins

316 SS



Size	L	L1	D	D1	H	W	316 SS
4.2 X 48	48	31.5	4.2	2.5	7.3	5.0	
6.0 X 57	56	34.8	6.0	3.2	7.7	7.5	
7.5 X 57	56	33.0	7.5	3.2	9.1	8.5	



Antiluce – with & without shank

304 SS



With Shank

304 SS*

M8 X 21 THREAD

M8 X 40 THREAD

Without Shank

304 SS*

M8 NO SHANK

*All 304 SS except Roll Pin which is 420 SS.

*All 304 SS except Roll Pin which is 420 SS.

Cotter Rings

316 SS



Size (OD)	316 SS
11MM	
13MM	
18MM	
23MM	

Split Rings

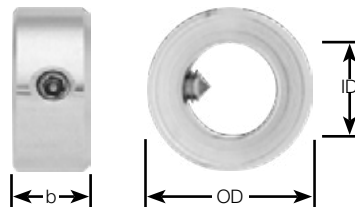
304 SS



Size (OD)	304 SS
10MM	
16MM	
22MM	

Shaft Collars (DIN 705)

303 SS



Size					303 SS
ID (mm)	X	OD (mm)	X	Width b (mm)	
8	X	16	X	8	
10	X	20	X	10	
12	X	22	X	12	
16	X	28	X	12	

Size					303 SS
ID (mm)	X	OD (mm)	X	Width b (mm)	
20	X	32	X	14	
25	X	40	X	16	
30	X	45	X	16	

Size					303 SS
ID (mm)	X	OD (mm)	X	Width b (mm)	
32	X	50	X	16	
40	X	63	X	18	
50	X	80	X	18	

Tension Pins (Roll Pins) – Imperial



420 SS

1/16*	420 SS	5/32*	420 SS	5/16*	420 SS
1/16 X 3/8		5/32 X 1/2		5/16 X 1	
1/16 X 1/2		5/32 X 5/8		5/16 X 1-1/4	
1/16 X 5/8		5/32 X 3/4		5/16 X 1-1/2	
1/16 X 3/4		5/32 X 1		5/16 X 2	
		5/32 X 1-1/4		5/16 X 2-1/2	
		5/32 X 1-1/2		5/16 X 3	
3/32*	420 SS	3/16*	420 SS	3/8*	420 SS
3/32 X 1/4		3/16 X 1/2		3/8 X 1-1/2	
3/32 X 5/16		3/16 X 5/8		3/8 X 2	
3/32 X 3/8		3/16 X 3/4		3/8 X 2-1/2	
3/32 X 1/2		3/16 X 1		3/8 X 3	
3/32 X 5/8		3/16 X 1-1/4		3/8 X 4	
3/32 X 3/4		3/16 X 1-1/2			
3/32 X 1		3/16 X 2		1/2*	420 SS
		3/16 X 2-1/2		1/2 X 1-1/2	
				1/2 X 2	
1/8*	420 SS	1/4*	420 SS		
1/8 X 1/4		1/4 X 5/8			
1/8 X 5/16		1/4 X 3/4			
1/8 X 3/8		1/4 X 1			
1/8 X 1/2		1/4 X 1-1/4			
1/8 X 5/8		1/4 X 1-1/2			
1/8 X 3/4		1/4 X 2			
1/8 X 1		1/4 X 2-1/2			
1/8 X 1-1/4					
1/8 X 1-1/2					

*Size of bore diameter that the pin fits.

To suit bore diameter (size)	1/16	3/32	1/8	5/32	3/16	1/4	5/16	3/8	1/2
Diam. Max (inch)	0.069	0.103	0.135	0.167	0.199	0.264	0.328	0.392	0.5140
Diam. Min (inch)	0.066	0.099	0.131	0.162	0.194	0.258	0.321	0.385	0.4970
Wall Thick. (inch)	0.012	0.022	0.028	0.032	0.040	0.048	0.062	0.077	0.096
Double Shear Load (min lb)	425	1000	2100	3000	4400	7700	11500	17600	N/A

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Skew Proof Wave Spring Pins



420 SS

M1.5*	420 SS
M1.5 X 6	
M1.5 X 16	

M2*	420 SS
M2.0 X 6	
M2.0 X 8	
M2.0 X 10	
M2.0 X 12	
M2.0 X 16	
M2.0 X 20	

M2.5*	420 SS
M2.5 X 6	
M2.5 X 10	
M2.5 X 12	
M2.5 X 20	
M2.5 X 25	

M3*	420 SS
M3 X 6	
M3 X 8	
M3 X 10	
M3 X 12	
M3 X 16	
M3 X 18	
M3 X 20	
M3 X 22	
M3 X 25	
M3 X 32	

M3.5*	420 SS
M3.5 X 25	

M4*	420 SS
M4 X 16	
M4 X 20	
M4 X 25	
M4 X 30	
M4 X 32	
M4 X 40	

M5*	420 SS
M5 X 12	
M5 X 16	
M5 X 20	
M5 X 22	
M5 X 25	
M5 X 30	
M5 X 40	
M5 X 50	

M6*	420 SS
M6 X 16	
M6 X 20	
M6 X 25	
M6 X 30	
M6 X 36	
M6 X 40	
M6 X 50	
M6 X 60	

M8*	420 SS
M8 X 25	
M8 X 30	
M8 X 40	
M8 X 50	

*Size of bore diameter that the pin fits.

To suit bore diameter (size)	M1.5	M2.0	M2.5	M3.0	M3.5	M4.0	M5.0	M6.0	M8.0
Diam. Max (mm)	1.70	2.25	2.75	3.25	3.90	4.40	5.40	6.40	8.53
Diam. Min (mm)	1.60	2.15	2.65	3.15	3.70	4.20	5.20	6.20	8.47
Wall Thickness (mm)	0.30	0.40	0.50	0.60	0.70	0.80	1.00	1.20	1.60
Double Shear Strength (kN)	1.5	2.7	4.3	6.2	8.4	11.0	17.2	24.8	N/A

IF MEASUREMENTS ARE CRITICAL, PLEASE ASK FOR THEM TO BE CHECKED.

Recoils – Metric



304 SS

M3	304 SS
M3 X 1.0D	
M3 X 2.0D	
M4	304 SS
M4 X 1.0D	
M4 X 1.5D	
M4 X 2.0D	
M5	304 SS
M5 X 1.0D	
M5 X 1.5D	
M5 X 2.0D	
M5 X 3.0D	
M6	304 SS
M6 X 1.5D	
M6 X 2.0D	
M6 X 3.0D	

M8	304 SS
M8 X 1.0D	
M8 X 1.5D	
M8 X 2.0D	
M8 X 3.0D	
M10	304 SS
M10 X 1.5D	
M10 X 2.0D	
M10 X 3.0D	
M12	304 SS
M12 X 1.5D	
M12 X 2.0D	
M12 X 3.0D	
M14	304 SS
M14 X 3.0D	

M16	304 SS
M16 X 1.5D	
M16 X 2.0D	
M16 X 3.0D	
M20	304 SS
M20 X 1.5D	
M20 X 2.0D	
M20 X 3.0D	

- E.g. 1.5D = 1.5 X diameter (M3 X 2.0D = M3 diameter with a 6mm length when installed).
- NB: recoils expand on installation.
- 316 available on request.

Recoil Thread Repair Kits – Metric



304 SS

Size	Inserts per Kit	304 SS
M4	10	
M5	10	
M6	10	
M8	10	
M10 (1.25P)	10	

Size	Inserts per Kit	304 SS
M10 (1.5P)	10	
M12	5	
M14	5	
M14 (1.25P)*	5	

*Spark Plug

Size	Inserts per Kit	304 SS
M14 (1.5P)	5	
M16	5	
M20 (2.0P)	5	
M20 X 2.0D	5	

Recoils – Imperial



304 SS		304 SS		304 SS	
1/4	304 SS	3/8	304 SS	1/2	304 SS
1/4 X 1.0D		3/8 X 1.5D		1/2 X 1.5D	
1/4 X 1.5D		7/16	304 SS	5/8	304 SS
5/16	304 SS	7/16 X 1.5D		5/8 X 1.5D	
5/16 X 1.5D					

- E.g. 1.5D = 1.5 X diameter (1/4 X 1.0D = 1/4 diam. with a 6.350mm length when installed).
- NB: recoils expand on installation.

Recoil Thread Repair Kits – UNC



304 SS		304 SS	
1/4	304 SS	7/16	304 SS
5/16		1/2	
3/8		5/8	

Grease Nipples



304 SS			
	Straight	67°	90°
1/8 BSP			
1/4 BSP			
1/4 UNF			
M6 - 0.75P			
M6 - 1.00P			
M8 - 1.00P			
M8 - 1.25P			
M10 - 1.00P			

Key Steel – Imperial



304 SS

	304 SS		304 SS		304 SS
3/16" X 3/16" X 12"		7/16" X 7/16" X 12"		3/4" X 3/4" X 12"	
1/4" X 1/4" X 12"		1/2" X 1/2" X 12"		7/8" X 7/8" X 12"	
5/16" X 5/16" X 12"		9/16" X 9/16" X 12"		1" X 1" X 12"	
3/8" X 3/8" X 12"		5/8" X 5/8" X 12"			

Key Steel – Metric



304 SS

	304 SS		304 SS		304 SS
3 X 3 X 300MM		6 X 6 X 300MM		12 X 12 X 300MM	
4 X 4 X 300MM		8 X 8 X 300MM		14 X 14 X 300MM	
5 X 5 X 300MM		10 X 10 X 300MM		16 X 16 X 300MM	




















Key Steel – Rectangular – Metric (DIN 6880)*



316 SS










	316 SS		316 SS		316 SS
8 X 7 X 100MM		14 X 9 X 100MM		18 X 11 X 100MM	
8 X 7 X 300MM		14 X 9 X 300MM		18 X 11 X 300MM	
8 X 7 X 1M		14 X 9 X 1M		18 X 11 X 1M	
10 X 8 X 100MM		16 X 10 X 100MM		20 X 12 X 100MM	
10 X 8 X 300MM		16 X 10 X 300MM		20 X 12 X 300MM	
10 X 8 X 1M		16 X 10 X 1M		20 X 12 X 1M	
12 X 8 X 100MM					
12 X 8 X 300MM					
12 X 8 X 1M					

Pipe & Tube Fittings, BSP Valves

RJT Male Part		178
RJT Slotted Nut		178
RJT Hex Nut		178
RJT Sanitary Welder Liner		178
RJT Pressed Blank Liner		178
RJT Step Sanitary Seal – Nitrile – EPDM		178
Tri-Clamp		178
Tri-Clamp – Short Ferrule		178
Tri-Clamp – Medium Ferrule		178
Tri-Clamp – Long Ferrule		178
Tri-Clamp – Expanding Ferrule		178
Tri-Clamp – Blank Liner		178
Tri-Clamp – Seal		178
45° Bend (UNI)		179
90° Bend (UNI)		179
Concentric Reducers		180
Eccentric Reducers		180
Equal Tees		181
Pulled Tees		181








continued on next page...

Pipe & Tube Fittings, BSP Valves cont.

<p>BSP Fittings</p> <ul style="list-style-type: none"> - Barrell Nipples - Hex Nipples - Weld Nipples - Reducing Weld Nipples to Tube - Crosses - Back Nuts - Round Caps - Hex Caps - 45° Elbows - 90° Elbows - Street Elbows - Equal Tees - Reducing Bushes - Reducing Hex Nipples - Reducing Sockets - Pressure Plugs - Square Plugs - Hex Plugs - Sockets - Unions 		<p>182-186</p> <p>182 182 182 182 182 182 183 183 183 183 183 183 185 185 185 186 186 186 186 186</p>
<p>Negative Bush Adaptor</p> <ul style="list-style-type: none"> - NPT X BSP - BSP X BSP 		<p>183-184</p>
<p>BSP x Tri-Clamp Adaptor</p>		<p>184</p>
<p>BSP Nipping Tube</p>		<p>186</p>
<p>BSP Hose Tails</p> <ul style="list-style-type: none"> - Male Hose Tails - Female Hose Tails 		<p>187</p>
<p>BSP Ball Valves</p> <ul style="list-style-type: none"> - Mini - 1 Piece - 2 Piece - 3 Piece 		<p>188</p>
<p>E Series Butterfly Valve</p> <ul style="list-style-type: none"> - Butterfly Valve - PTFE Seal 		<p>189</p>
<p>NPT Fittings</p> <ul style="list-style-type: none"> - Weld Nipples - Half Sockets - Pressure Plugs - Hex Nipples - Full Sockets - Barrel Nipples - Hex Plugs 		<p>190</p>
<p>Camlock Fittings</p> <ul style="list-style-type: none"> - Type A, B, C, D, E, F, DC & DP - Spare Parts Set - Nitrile Rubber Gasket - A-Butt Welds & D-Butt Welds 		<p>191</p>

RJT








304 SS 316 SS Nitrile EPDM

	Male Part	Slotted Nut	Hex Nut	Sanitary Welder Liner	Pressed Blank Liner	Step Sanitary Seal - Nitrile	Step Sanitary Seal - EPDM
							
	316 SS	304 SS	304 SS	316 SS	316 SS	Nitrile	EPDM
1							
1-1/2							
2							
2-1/2							
3							
4							
5							
6							

BSM & SMS Fittings also available

Tri-Clamp

304 SS 316 SS EPDM

	Tri-Clamp	Short Ferrule (Total Length = 12.7mm)	Medium Ferrule (Total Length = 21.5mm)	Long Ferrule (Total Length = 28.8mm)	Expanding Ferrule	Blank Liner	Seal
							
	304 SS	316 SS	316 SS	316 SS	316 SS	316 SS	EPDM
1							
1-1/2							
2							
2-1/2							
3							
4							
5	*	*	*	*		*	
6							
8							

* Slim version

45° Bend (UNI)



304 SS **316 SS**

	304 SS	316 SS
3/4 X 16G		
1 X 16G		
1-1/4 X 16G		

	304 SS	316 SS
1-1/2 X 16G		
2 X 16G		
2-1/2 X 16G		

	304 SS	316 SS
3 X 16G		
4 X 16G		
6 X 14G		

Made to AS1528.3.

90° Bend (UNI)



304 SS **316 SS**

	304 SS	316 SS
1/2 X 16G		
5/8 X 16G		
3/4 X 16G		
1 X 16G		

	304 SS	316 SS
1-1/4 X 16G		
1-1/2 X 16G		
2 X 16G		

	304 SS	316 SS
2-1/2 X 16G		
3 X 16G		
4 X 16G		
6 X 16G		

Made to AS1528.3.

180° Bend



304 SS **316 SS**

	304 SS	316 SS
1 X 16G		
1-1/4 X 16G		
1-1/2 X 16G		
2 X 16G		

	304 SS	316 SS
2-1/2 X 16G		
3 X 16G		
4 X 16G		

Concentric Reducers



316 SS

	316 SS
3/4 X 1/2	
1 X 1/2	
1 X 3/4	
1-1/4 X 5/8	
1-1/4 X 3/4	
1-1/4 X 1	
1-1/2 X 3/4	
1-1/2 X 1	
1-1/2 X 1-1/4	

	316 SS
2 X 1	
2 X 1-1/4	
2 X 1-1/2	
2-1/2 X 1	
2-1/2 X 1-1/4	
2-1/2 X 1-1/2	
2-1/2 X 2	
3 X 1-1/2	
3 X 2	

	316 SS
3 X 2-1/2	
4 X 1-1/2	
4 X 2	
4 X 2-1/2	
4 X 3	
5 X 4	
6 X 2	
6 X 3	
6 X 4	

Eccentric Reducers



316 SS

	316 SS
1-1/2 X 3/4	
1-1/2 X 1	
2 X 1	
2 X 1-1/2	
2-1/2 X 1-1/2	

	316 SS
2-1/2 X 2	
3 X 1-1/2	
3 X 1	
3 X 2	
3 X 2-1/2	

	316 SS
4 X 2-1/2*	
4 X 3*	
5 X 4*	
6 X 4*	

*available on request

Equal Tees



304 SS **316 SS**

	304 SS	316 SS
1/2 X 16G		
3/4 X 16G		
1 X 16G		
1-1/4 X 16G		

	304 SS	316 SS
1-1/2 X 16G		
2 X 16G		
2-1/2 X 16G		

	304 SS	316 SS
3 X 16G		
4 X 16G		
6 X 16G		

Pulled Tees



316 SS

	316 SS
3/4 X 16G	
1 X 16G	
1-1/4 X 16G	

	316 SS
1-1/2 X 16G	
2 X 16G	
2-1/2 X 16G	

	316 SS
3 X 16G	
4 X 16G	







Not all BSP Fittings are made equal. Anzor's are of high quality. Here is why:

- They are 'Lost Wax Investment Cast' not 'Sand Cast' – this means that they have a smooth finish, which not only looks good, but is more corrosion resistant. With sand casting, the fittings are more likely to have air-pockets, and therefore more likely to fail.
- Pressure rating is 150 PSI.
- Sockets are 'OD machined' for a smooth finish.
- Made from 316 Stainless Steel

Please note: NB = Nominal Bore Ø in MM

BSP Fittings

316 SS







	Barrell Nipples	Hex Nipples	Weld Nipples	Reducing Weld Nipple to Tube	Crosses	Back Nuts
						
	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS
1/8 BSP (NB6)						
1/4 BSP (NB8)						
3/8 BSP (NB10)						
1/2 BSP (NB15)						
3/4 BSP (NB20)						
1 BSP (NB25)						
1-1/4 BSP (NB32)						
1-1/2 BSP (NB40)						
2 BSP (NB50)						
2-1/2 BSP (NB65)						
3 BSP (NB80)						
4 BSP (NB100)						

See p.190 for NPT Fittings

Please note: NB = Nominal Bore Ø in MM

BSP Fittings

316 SS

	Round Caps	Hex Caps	45° Elbows	90° Elbows	Street Elbows	Equal Tees
						
	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS
1/8 BSP (NB6)						
1/4 BSP (NB8)						
3/8 BSP (NB10)						
1/2 BSP (NB15)						
3/4 BSP (NB20)						
1 BSP (NB25)						
1-1/4 (NB32)						
1-1/2 (NB40)						
2 BSP (NB50)						
2-1/2 BSP (NB65)						
3 BSP (NB80)						
4 BSP (NB100)						

NPT x BSP Negative Bush Adaptor

316 SS



	316 SS		316 SS
1/4 NPT X 1/8 BSP		1/2 NPT (NB15) X 1/4 BSP (NB8)	
1/4 NPT (NB8) X 1/4 BSP (NB8)		1/2 NPT (NB 15) X 3/8 BSP (NB10)	
3/8 NPT (NB10) X 1/4 BSP (NB8)		1/2 NPT (NB15) X 1/2 BSP(NB15)	
3/8 NPT (NB10) X 3/8 BSP (NB10)			

*See p.190 for all other NPT Fittings.

BSP x BSP Negative Bush Adaptor

316 SS



	316 SS
3/4 BSP X 1/2 BSP	
1 BSP X 1/2 BSP	
1 BSP X 3/4 BSP	

	316 SS
1-1/4 BSP X 1 BSP	
1-1/2 BSP X 1-1/4 BSP	
2 BSP X 1-1/2 BSP	

*See p.190 for all other NPT Fittings.

BSP x Tri-Clamp Adaptor

316 SS



	316 SS
1-1/4 BSP X 1-1/4 TRI-CLAMP	
1-1/2 BSP X 1-1/2 TRI-CLAMP	
2 BSP X 2 TRI-CLAMP	

*See p.190 for all other NPT Fittings.

BSP Fittings

316 SS

	Reducing Bushes 	Reducing Hex Nipples 	Reducing Sockets 
	316 SS	316 SS	316 SS
1/4 BSP x 1/8 (NB 8/6)			
3/8 BSP x 1/8 (NB 10/6)			
3/8 BSP x 1/4 (NB 10/8)			
1/2 BSP x 1/8 (NB 15/6)			
1/2 BSP x 1/4 (NB 15/8)			
1/2 BSP x 3/8 (NB 15/10)			
3/4 BSP x 1/8 (NB 20/6)			
3/4 BSP x 1/4 (NB 20/8)			
3/4 BSP x 3/8 (NB 20/10)			
3/4 BSP x 1/2 (NB 20/15)			
1 BSP x 1/4 (NB 25/8)			
1 BSP x 3/8 (NB 25/10)			
1 BSP x 1/2 (NB 25/15)			
1 BSP x 3/4 (NB 25/20)			
1-1/4 BSP x 1/2 (NB 32/15)			
1-1/4 BSP x 3/4 (NB 32/20)			
1-1/4 BSP x 1 (NB 32/25)			
1-1/2 BSP x 1/2 (NB 40/15)			
1-1/2 BSP x 3/4 (NB 40/20)			
1-1/2 BSP x 1 (NB 40/25)			
1-1/2 BSP x 1-1/4 (NB 40/32)			
2 BSP x 1 (NB 50/25)			
2 BSP x 1-1/4 (NB 50/32)			
2 BSP x 1-1/2 (NB 50/40)			
2-1/2 BSP x 2 (NB 65/50)			
3 BSP x 2 (NB 80/50)			
3 BSP x 2-1/2 (NB 80/65)			
4 BSP x 3 (NB 100/80)			







All BSP available to order as NPT

Please note: NB = Nominal Bore Ø in MM

BSP Fittings

304 SS

316 SS

	Pressure Plugs	Square Plugs	Hex Plugs	Sockets	Unions	Unions w/ PTFE Seal
						
	304 SS	316 SS	316 SS	316 SS	316 SS	316 SS
1/8 BSP (NB6)						
1/4 BSP (NB8)						
3/8 BSP (NB10)						
1/2 BSP (NB15)						
3/4 BSP (NB20)						
1 BSP (NB25)						
1-1/4 BSP (NB32)						
1-1/2 BSP (NB40)						
2 BSP (NB50)						
2-1/2 BSP (NB65)						
3 BSP (NB80)						
4 BSP (NB100)						

*See p.190 for NPT Fittings.

BSP Nippling Tube



316 SS

100mm	316 SS	300mm	316 SS	600mm	316 SS
3/8 BSP x 100mm		3/8 BSP x 300mm		3/8 BSP x 600mm	
1/2 BSP x 100mm		1/2 BSP x 300mm		1/2 BSP x 600mm	
3/4 BSP x 100mm		3/4 BSP x 300mm		3/4 BSP x 600mm	
1 BSP x 100mm		1 BSP x 300mm		1 BSP x 600mm	
1-1/4 x 100mm		1-1/4 BSP x 300mm		1-1/4 BSP x 600mm	
1-1/2 BSP x 100mm		1-1/2 BSP x 300mm		1-1/2 BSP x 600mm	
2 BSP x 100mm		2 BSP x 300mm		2 BSP x 600mm	

All BSP available to order as NPT

Please note: NB = Nominal Bore Ø in MM

BSP Hose Tails

316 SS

B (bore/internal diameter)



Size (Thread X Hose size)	Bore ø (B)	316 SS
1/4		
1/4 BSP (NB8) X 6.3MM	3.5mm	
1/4 BSP (NB8) X 8MM	5mm	
1/4 BSP (NB8) X 9MM	3.5mm	
1/4 BSP (NB8) X 9MM	5.5mm	
1/4 BSP (NB8) X 9.5MM	5.5mm	
1/4 BSP (NB8) X 10MM	6.5mm	
1/4 BSP (NB8) X 13MM	9mm	
3/8		
3/8 BSP (NB10) X 11MM	8mm	
3/8 BSP (NB10) X 13MM	10mm	
1/2		
1/2 BSP (NB15) X 12.7MM	9mm	
1/2 BSP (NB15) X 16MM	12.5mm	
1/2 BSP (NB15) X 20MM	16.2mm	
3/4		
3/4 BSP (NB20) X 19MM	15mm	
3/4 BSP (NB20) X 20MM	16mm	
3/4 BSP (NB20) X 25MM	21.2mm	
1/8		
1/8 BSP (NB6) X 6MM	3.5mm	

Size (Thread X Hose size)	Bore ø (B)	316 SS
1		
1 BSP (NB25) X 20MM	15.5mm	
1 BSP (NB25) X 25.4MM	21mm	
1-1/4		
1-1/4 BSP (NB32) X 31.8MM	27.2mm	
1-1/2		
1-1/2 BSP (NB40) X 38.1MM	33.1mm	
2		
2 BSP (NB50) X 50.8MM	45.5mm	
2-1/2		
2-1/2 BSP (NB65) X 63.5MM	58mm	
3		
3 BSP (NB80) X 76.1MM	69.5mm	
4		
4 BSP (NB100) X 102MM	94mm	

All BSP available to order as NPT

Female BSP Hose Tails

316 SS



	Bore ø (B)	316 SS
1/2 BSP X 12.7MM	9mm	
3/4 BSP X 19.1MM	15mm	
1 BSP X 25.4MM	21mm	
1-1/4 BSP X 31.8MM	27.2mm	

Please note: NB = Nominal Bore ø in MM

Mini BSP Ball Valves

316 SS



	F/F	M/F
1/4 BSP		
3/8 BSP		
1/2 BSP		

1 Piece BSP Ball Valves

316 SS



	316 SS		316 SS
1/4 BSP (NB5)		1 BSP (NB15)	
3/8 BSP (NB6.7)		1-1/4 BSP (NB20)	
1/2 BSP (NB9.2)		1-1/2 BSP (NB25)	
3/4 BSP (NB12.5)			

The internal surfaces of the Ball Valves are 316 SS. Some external parts are 304 SS.

2 Piece BSP Ball Valves

316 SS



	316 SS		316 SS
1/4 BSP (NB11.6)		1 BSP (NB25)	
3/8 BSP (NB12.7)		1-1/4 BSP (NB32)	
1/2 BSP (NB15)		1-1/2 BSP (NB38)	
3/4 BSP (NB20)		2 BSP (NB50)	

The internal surfaces of the Ball Valves are 316 SS. Some external parts are 304 SS.

3 Piece BSP Ball Valves

316 SS



	316 SS	Replacement Seals		316 SS	Replacement Seals
1/4 BSP (NB11.6)		•	1-1/2 BSP (NB38)		•
3/8 BSP (NB12.7)		•	2 BSP (NB50)		•
1/2 BSP (NB15)		•	2-1/2 BSP (NB65)		•
3/4 BSP (NB20)		•	3 BSP (NB80)		•
1 BSP (NB25)		•	4 BSP (NB100)		•
1-1/4 BSP (NB32)		•			

Sealed sets also available

Please note: NB = Nominal Bore Ø in MM

The internal surfaces of the Ball Valves are 316 SS (apart from the PTFE seals). Some external parts are 304 SS.

E Series Butterfly Valves



316 SS

	316 SS	Replacement Seals
1		•
1-1/4		•
1-1/2		•
2		•
2-1/2		•
3		•

NPT Fittings

316 SS

Weld Nipples	Half Sockets	Hex Nipples	Full Sockets	Hex Plugs
				

	316 SS	316 SS	316 SS	316 SS	316 SS
1/8-27 NPT X 30MM (NB6)					
1/4-18 NPT X 30MM (NB8)					
3/8-18 NPT X 30MM (NB10)					
1/2-14 NPT X 35MM (NB15)					
3/4-14 NPT X 40MM (NB20)					
1-11.5 NPT X 40MM (NB25)					
1-1/4-11.5 NPT X 50MM (NB32)					
1-1/2-11.5 NPT X 50MM (NB40)					
2-11.5 NPT X 50MM (NB50)					

NPT Barrel Nipples



316 SS

	316 SS
1/8-27 NPT X 40MM	
1/4-18 NPT X 40MM	
3/8-18 NPT X 40MM	
1/2-14 NPT X 60MM	
3/4-14 NPT X 60MM	

	316 SS
1-11.5 NPT X 60MM	
1-1/4-11.5 NPT X 80MM	
1-1/2-11.5 NPT X 80MM	
2-11.5 NPT X 100MM	

NPT Pressure Plugs








304 SS

	304 SS
1/8-27 NPT (NB6)	
1/4-18 NPT (NB8)	






Please note: NB = Nominal Bore \varnothing in MM



Camlock Fittings

316 SS

	Type A 	Type B 	Type C 	Type D 	Type E 
	316 SS	316 SS	316 SS	316 SS	316 SS
1/2					
3/4					
1					
1-1/4					
1-1/2					
2					
2-1/2					
3					
4					















NB: Spare Arms and Pins, and Spare Seals available.

	Type F 	Type DC 	Type DP 	Spare Parts Set 1 pin, 1 arm, 1 ring, 1 r-clip 	Nitrile Rubber Gasket 
	316 SS	316 SS	316 SS	316 SS	Nitrile
1/2					
3/4					
1					
1-1/4					
1-1/2					
2					
2-1/2					
3					
4					

	Type A Butt-Weld 	Type D Butt-Weld 
	316 SS	316 SS
3		
4		

User Guide to Camlock Fittings
Type A - Male Adaptor to FBSP
Type B - Female Coupling to MBSP
Type C - Female Coupling to Hose Tail
Type D - Female Coupling to FBSP
Type E - Male Adaptor to Hose Tail
Type F - Male Adaptor to MBSP
Type DC - Dust Cover
Type DP - Dust Plug
Type A-BW - Male Adaptor Butt-Weld
Type D-BW - Female Coupling Butt-Weld

Pipe & Tube Clamps, U Bolts, Saddles

Pipe Clamps		193
Pipe Clamps with M10 Boss		193
Tube Clamps		193
Tube Clamps with M10 Boss		194
Saddle Clamps		194
Saddle Clamps with M10 Boss		194
Pipe Munson Rings with Boss		194
Tube Munson Rings with Boss		195
Munson Ring Backing Plate with Boss		195
Stainless Steel Down Pipe Wall Clamps		196
Tube U-Bolts – Metric Thread		197
Pipe U-Bolts – Metric Thread – UNC Thread		197-198 197 198
Tube Saddles – Metric		199
Half Tube Saddles – Metric		199

Pipe Clamps

304 SS



Size	Fits O/D
½ NB PIPE	21mm O/D
¾ NB PIPE	27mm O/D
1 NB PIPE	33mm O/D
1¼ NB PIPE	43mm O/D
1½ NB PIPE	48mm O/D

Size	Fits O/D
2 NB PIPE	60mm O/D
2½ NB PIPE	73mm O/D
3 NB PIPE	89mm O/D
4 NB PIPE	115mm O/D
6 NB PIPE	160mm O/D

Pipe Clamps with M10 Boss

304 SS



Size	Fits O/D
⅜ NB PIPE	17mm O/D
½ NB PIPE	21mm O/D
¾ NB PIPE	27mm O/D
1 NB PIPE	33mm O/D
1¼ NB PIPE	43mm O/D
1½ NB PIPE	48mm O/D

Size	Fits O/D
2 NB PIPE	60mm O/D
2½ NB PIPE	73mm O/D
3 NB PIPE	89mm O/D
4 NB PIPE	115mm O/D
6 NB PIPE*	160mm O/D

*6 NB PIPE comes as a Saddle Clamp. See pg.194

Tube Clamps

304 SS



Size	Fits O/D
1 TUBE	25mm O/D
1¼ TUBE	32mm O/D
1½ TUBE	38mm O/D
2 TUBE	51mm O/D

Size	Fits O/D
2½ TUBE	63mm O/D
3 TUBE	76mm O/D
4 TUBE	101mm O/D
6 TUBE	152mm O/D

Tube Clamps with M10 Boss

304 SS



Size	Fits O/D
1 TUBE	25mm O/D
1¼ TUBE	32mm O/D
1½ TUBE	38mm O/D
2 TUBE	51mm O/D

Size	Fits O/D
2½ TUBE	63mm O/D
3 TUBE	76mm O/D
4 TUBE	101mm O/D
6 TUBE*	152mm O/D

*6 TUBE comes as a Saddle Clamp.

Saddle Clamps

304 SS



Size	Fits O/D
¾ TUBE	10mm O/D
½ TUBE	12.7mm O/D

Size	Fits O/D
½ PIPE	21mm O/D
¾ TUBE	20mm O/D

Saddle Clamps with M10 Boss

304 SS



Size	Fits O/D
¾ NB PIPE	19mm O/D
½ TUBE	12.7mm O/D
½ NB PIPE	21mm O/D
⅝ TUBE	16mm O/D

Size	Fits O/D
¾ TUBE	20mm O/D
6 TUBE	152mm O/D
6 NB PIPE	160mm O/D

Pipe Munson Rings with Boss

304 SS



Size	Fits O/D	Boss
½ NB PIPE	21mm O/D	M10
¾ NB PIPE	27mm O/D	M10
1 NB PIPE	34mm O/D	M10
1¼ NB PIPE	43mm O/D	M10
1½ NB PIPE	48mm O/D	M10
2 NB PIPE	60mm O/D	M10

Size	Fits O/D	Boss
2½ NB PIPE	73mm O/D	M10
3 NB PIPE	90mm O/D	M10
4 NB PIPE	115mm O/D	M12
6 NB PIPE	168mm O/D	M12

Some sizes available in 316

Tube Munson Rings with Boss



304 SS

Size	Fits Pipe O/D	Boss
½ TUBE	12.7mm	M10
¾ TUBE	20mm	M10
1 TUBE	25.4mm	M10
1¼ TUBE	32mm	M10
1½ TUBE	38mm	M10
2 TUBE	51mm	M10

Size	Fits Pipe O/D	Boss
2½ TUBE	63mm O/D	M10
3 TUBE	76mm O/D	M10
80mm	80mm Downpipe	M10
4 TUBE	101mm O/D	M10
6 TUBE	152mm O/D	M12

Some sizes available in 316

Munson Ring Backing Plate with Boss



For connectors, see Threaded Studs, p.35

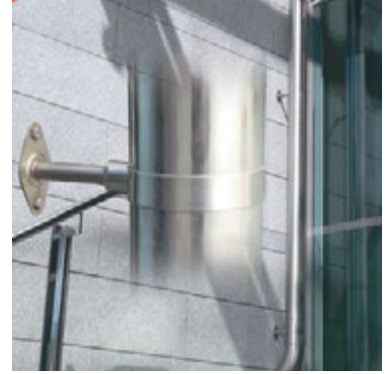
304 SS

	304 SS
M6	M6 Boss
M8	M8 Boss
M10	M10 Boss
M12	M12 Boss

Some sizes available in 316

Stainless Steel Down Pipe Wall Clamps

304 SS **316 SS**



BENEFITS

- Easy installation - only hand tools required
- Very flush, sleek finish for all applications
- Available in 304 (ex-stock) or 316 (to order) stainless steel.

Option 1: PLAIN SHANK – for a clean, modern look

Offset Brackets



- 55x90mm diamond shape
- Long - 200mm offset (Code: TFCBMB200)
- Short - 120mm offset (Code: TFCBMB120)
- Lengths can be trimmed on site with a hacksaw.

Bracket Strap & Nuts



Bracket Strap

Sizes: 1" - 6" (holds tube 25mm - 152mm OD). 3"NB Pipe (89OD)
Strap size 0.7x16mm.
Code: TFCB...

Option 2: THREADED SHANK – for flexible shank length

Wall Mounts



M10 Small Diamond Wall Mount 55x30mm (Code: TFWMS10B)
M10 Large Diamond Wall Mount 80x45mm (Code: TFWMDL10B)
M10 Large Rectangle Wall Mount 90x25mm (Code: TFWML10B)

Threaded stud



* See pg 35 for Studs under 1m.

Threaded Inserts



Inserts - M10 or M12
Code: TFBL...



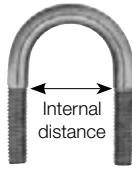
Bracket Strap & Nuts

Bracket Strap

Sizes: 1" - 6" (holds tube 25mm - 152mm OD).
3"NB Pipe (89OD)
Strap size 0.7x16mm. (Code: TFCB..)



Tube U-Bolts - Metric Thread



316 SS

Tube Size X Thread	Internal Distance (mm)	Thread Length (mm)	Overall Internal Length (mm)	316 SS
1 Tube X M6	29	25	48	
1½ Tube X M8	40	25	56	
2 Tube X M8	51.5	40	69	
2½ Tube X M10	65	40	84	
3 Tube X M10	79	45	108	
4 Tube X M10	106	45	139	

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Select the size of a Tube U Bolt based on the outside diameter of the Tube

Pipe U-Bolts - Metric Thread



316 SS



For U Bolts with Keepers see p. 254

Pipe Size X Thread	Internal Distance (mm)	Thread Length (mm)	Overall Internal Length (mm)	316 SS
½ NB Pipe X M6	25	22	44	
¾ NB Pipe X M6	28	20	46	
1 NB Pipe X M8	36	30	57	
1¼ NB Pipe X M8	45	30	66	
1½ NB Pipe X M8	53	40	80	
2 NB Pipe X M10	65	40	84	
2½ NB Pipe X M10	79	45	108	
3 NB Pipe X M10	94	45	118	
4 NB Pipe X M10	116	45	148	

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Select the size of a Pipe U Bolt based on the outside diameter of the Nominal Bore Pipe.

Pipe U-Bolts - UNC Thread

304 SS **316 SS**



For U Bolts with Keepers
see p.254

Pipe Size X Thread	Internal Distance (mm)	Thread Length (mm)	Overall Internal Length (mm)	304 SS	316 SS
¼ NB Pipe X ¼ UNC	15	19	32		
⅜ NB Pipe X ¼ UNC	21	24	31		
½ NB Pipe X ¼ UNC	24	25	38		
¾ NB Pipe X ¼ UNC	31	25	44		
1 NB Pipe X 5/16 UNC	36	31	56		
1¼ NB Pipe X 5/16 UNC	43	34	60		
1½ NB Pipe X 5/16 UNC	50	31	70		
2 NB Pipe X 3/8 UNC	66	50	90		
2½ NB Pipe X 3/8 UNC	79	40	108		
3 NB Pipe X 3/8 UNC	95	50	118		
3½ NB Pipe X 3/8 UNC	105	49	132		
4 NB Pipe X 3/8 UNC	118	50	143		
5 NB Pipe X 3/8 UNC	146	40	178		
6 NB Pipe X 3/8 UNC	170	60	205		

MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Select the size of a Pipe U Bolt based on the outside diameter of the Nominal Bore Pipe.

Tube Saddles - Metric



304 SS

	304 SS
6mm	
8mm	
10mm	
12mm	
16mm	

	304 SS
20mm	
25mm	
32mm	
35mm	

	304 SS
40mm	
45mm	
50mm	
60mm	

*Size represents the O/D of the tube.

Half Tube Saddles - Metric

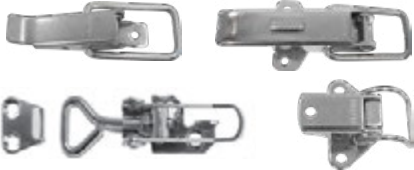









304 SS

	304 SS
12mm	
16mm	
20mm	

	304 SS
25mm	
32mm	
40mm	

Latches, Padbolts, Antiluce, Ratchets

<p>Toggle Latches – Wide range available</p>		<p>201</p>
<p>Toggle Catches</p>		<p>202</p>
<p>Padbolts</p>		<p>202</p>
<p>Padbolts – Spring Loaded</p>		<p>203</p>
<p>Barrel Bolts</p>		<p>203</p>
<p>Gate Catch & Latch</p>		<p>203</p>
<p>Ratchet Tie Downs</p>		<p>204</p>
<p>Handles</p>		<p>204</p>

Toggle Latches

304 SS



Toggle Latches	Overall Size of Toggle	Matching Catch	Fits a Retaining Clip for locking – see page 168.
	36mm x 22mm	01-531 02-531 03-531	No
	45mm x 38mm	01-613 02-613 03-613	Yes
	71mm x 35mm	02-633 05-623 06-623	Yes
	72mm x 22mm	02-633 03-633 07-613 03-613	Yes
	93mm x 35mm	01-502- Heavy Duty 02-502- Heavy Duty 03-502- Heavy Duty	Yes
	130mm x 51mm	01-502- with Safety Catch 02-502- with Safety Catch 03-502- with Safety Catch	Yes
	130mm x 51mm	01-502- with Safety Catch 02-502- with Safety Catch 03-502- with Safety Catch	Yes
	90mm x 28mm	Catch Inclusive Adjustable & Lockable	Has hole for padlock
	120mm 40mm	Catch Inclusive Adjustable & Lockable	Has hole for padlock
	180mm x 60mm	Catch Inclusive Adjustable & Lockable	Has hole for padlock

Toggle Catches

304 SS



Toggle Catches	Overall Size of Toggle
	20.6 x 6.3
	38.1 x 10.5
	60.3 x 22.2
	23.0 x 9.5
	31.0 x 15.9
	31.8 x 15.9
	55.6 x 23.8
	51 x 16

de	Toggle Catches	Overall Size of Toggle
03-531		23.9 x 9.5
03-613		30.8 x 15.9
03-633		29.4 x 15.9
03-502		56.6 x 23.8
05-623		34.9 x 31.8
06-623		34.9 x 26.5
07-613		29.4 x 15.9

Padbolts

304 SS



100mm, 150mm SS



200mm, 300mm, 400mm SS

	304 SS
100mm	
150mm	
200mm	
300mm	
400mm	

Padbolts – Spring Loaded

304 SS



304 SS

140 mm

166 mm

221 mm

Barrel Bolts

304 SS

316 SS

3215	60MM – 304 with Nickel Plated Brass Pin		304 SS
RBB0605	70MM – 304 Spring Loaded		304 SS
1454	3 1/2 – 316 Polished		316 SS

Gate Catch & Latch

304 SS



304 SS

Base of latch: 37 x 47mm

Base of catch: 10 x 40mm



NB: sold as one unit.

Ratchet Tie Downs

304 SS



Size ⁺	Breaking Load*	
25 X 110mm	800KG	
25 X 130mm	1500KG	
38 X 170mm	1800KG	
50 X 190mm	3000KG	

Size ⁺	Breaking Load*	
25mm X 5M (Hook – SS)	680KG	
25mm Double J Hook (304 SS)	400KG	

⁺Width of strapping X ratchet length.

***Apply a Working Load Limit (a percentage of the Breaking Load) that provides a large safety margin.**

Wire Handle












304 SS

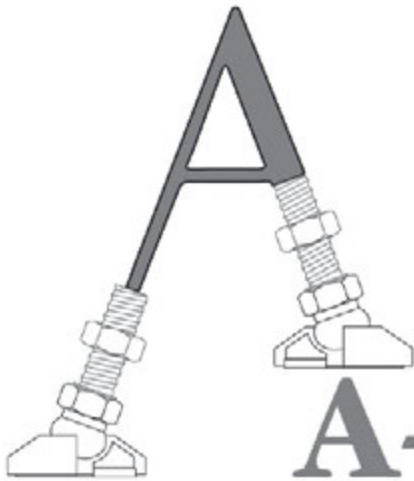


94-758 + 321C **304 SS**

- Base Plate is 100 x 55mm.
- NB: also see Lift Rings on p.259
- NB: also see Cabinet Handles & T Handles on p.260

A-JUSTA-FOOT – Pedestal Foot

<p>Ball Jointed 21 Series (20° adj.) – 304 Stud/Nut</p>		<p>208</p>
<p>Fixed 41 Series – 304 Stud/Nut</p>		<p>208</p>
<p>Bolt Down 31 Series (20° adj.) – 304 Stud/Nut</p>		<p>209</p>
<p>Square Plug – No Hole</p>		<p>209</p>
<p>Square Threaded Tube End 11 Series</p>		<p>210</p>
<p>Round Threaded Tube End 81 Series</p>		<p>211</p>
<p>HDA Heavy Duty Boltdown Series – 304 SS 221 Series (10° adj.) 231 Series (10° adj.)</p>		<p>211</p>
<p>HD Heavy Duty Boltdown Series – 304 SS 121 Series (55° adj.) 131 Series (55° adj.)</p>		<p>212</p>
<p>Heavy Duty Slimline (55° adj.)</p>		<p>213</p>
<p>Heavy Duty Riveted (30° adj.)</p>		<p>213</p>
<p>CF Series (Fixed)</p>		<p>213</p>



A-justa-foot™

The A-JUSTA-FOOT is a multi-adjustable pedestal foot, ideal for industrial, commercial, workshop or food industry applications.

The special insert in the base helps to absorb vibration and means your machinery will stay exactly where you put it.

A-JUSTA-FOOT is available in a large variety of sizes.

Special requirements can often be produced.

To complement the A-JUSTA-FOOT range, inserts for round or square tube are available to fit light wall tube.

The inserts are designed especially so they can be turned down to fit heavier wall RHS.

Specifications on following pages.

MATERIALS:

Base: Glass reinforced Nylon – Black

Ball: Glass reinforced Nylon – Black

Pad: Synthetic Rubber Shore 73

Stud: Stainless Steel

Nut: Stainless Steel

Maximum adjustable angle: – 20°

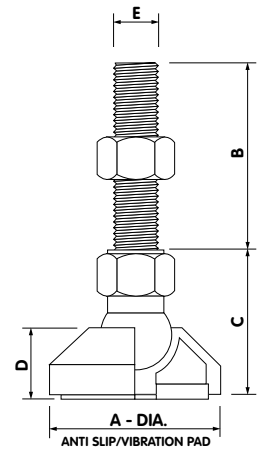
Tube ends & plugs: Glass reinforced Nylon with Threaded Metal insert.



Ball Jointed 21 Series (20° adj.) – 304 Stud/Nut



Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Safe Working Load
40xM6	40	40	33	20	M6	100kg
40xM8	40	40	33	20	M8	100kg
40xM8	40	80	33	20	M8	350kg
40xM10	40	60	33	20	M10	500kg
60xM12	60	65	51	25	M12	800kg
60xM16	60	65	51	25	M16	1000kg
60xM16	60	165	51	25	M16	1000kg
60xM20	60	100	51	25	M20	1000kg
60xM20	60	165	51	25	M20	1000kg
90xM12	90	65	51	25	M12	800kg
90xM16	90	65	51	25	M16	1000kg
90xM16	90	165	51	25	M16	1000kg
90xM20	90	100	51	25	M20	1000kg
90xM20	90	165	51	25	M20	1000kg
125xM12	125	65	56	30	M12	900kg
125xM16	125	65	56	30	M16	1100kg
125xM16	125	165	56	30	M16	1100kg
125xM20	125	100	56	30	M20	1200kg
125xM20	125	165	56	30	M20	1200kg

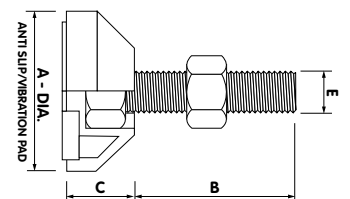


- Selected sizes in stock, others available on request.
- A-JUSTA-FOOT is available in other stud lengths (B) as required.

Fixed 41 Series – 304 Stud/Nut



Size	A (mm)	B (mm)	C (mm)	E (mm)	Safe Working Load
40xM8	40	35	20	M8	350kg
40xM10	40	35	20	M10	500kg
40xM10	40	65	20	M10	500kg
60xM12	60	60	25	M12	800kg



- Selected sizes in stock, others available on request.
- A-JUSTA-FOOT is available in other stud lengths (B) as required.

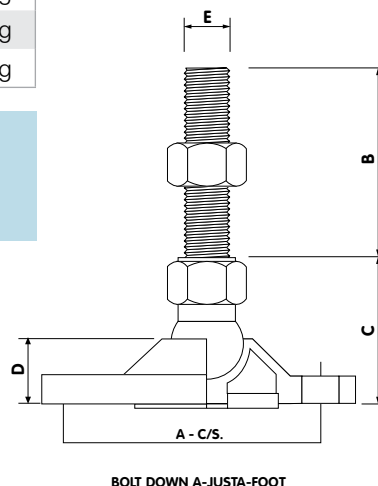
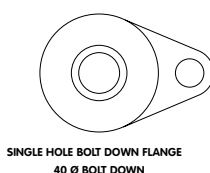
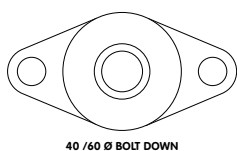
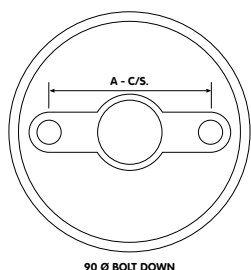
Bolt Down 31 Series (20° adj.) – 304 Stud/Nut



Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Safe Working Load
40xM8	60	80	33	20	M8	350kg
40xM10	60	60	33	20	M10	500kg
60xM12	80	65	51	23	M12	800kg
60xM16	80	65	51	23	M16	1000kg
60xM16	80	165	51	23	M16	1000kg
60xM20	80	100	51	23	M20	1000kg
60xM20	80	165	51	23	M20	1000kg
90xM12	60	65	51	25	M12	800kg
90xM16	60	65	51	25	M16	1000kg
90xM16	60	165	51	25	M16	1000kg
90xM20	60	100	51	25	M20	1000kg
90xM20	60	165	51	25	M20	1000kg
90xM20	60	100	51	25	M20	1000kg
90xM20	60	165	51	25	M20	1000kg



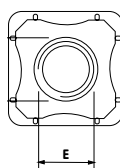
- Available to order on request.
- A-JUSTA-FOOT is available in other stud lengths (B) as required.
- * Denotes also available with single hole flange.



Square Plug (No hole)



Size	A	C	D	E	F	G
P25	25	39	44	16.5	23.5	22-23
P32	32	39	45	16.5	30	28-29
P38	38	41	47	18	36	35-36
P51	51	39	45	18	48	47-48



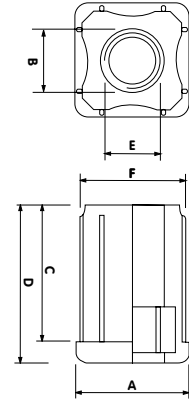
- Selected sizes in stock, others available on request.
- NB: Glass Reinforced Nylon.

Square Threaded Tube End 11 Series

NB: Glass Reinforced Nylon with 304 SS Threaded Insert



Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G* (mm)	Safe Working Load
19xM8	19	M8	22.5	24.8	9	16	15-16	50kg
25xM8	25	M8	39	44	10	23.5	22-23	250kg
25xM10	25	M10	39	44	11	23.5	22-23	250kg
25xM12	25	M12	39	44	13	23.5	22-23	250kg
25xM16	25	M16	39	44	16.5	23.5	22-23	250kg
30xM8	30	M8	39	45	10	26.8	26-27	350kg
30xM10	30	M10	39	45	11	26.8	26-27	350kg
30xM12	30	M12	39	45	13	26.8	26-27	350kg
30xM16	30	M16	39	45	16.5	26.8	26-27	350kg
32xM8	32	M8	39	45	10	30	28-29	350kg
32xM10	32	M10	39	45	11	30	28-29	350kg
32xM12	32	M12	39	45	13	30	28-29	350kg
32xM16	32	M16	39	45	16.5	30	28-29	350kg
35xM8	35	M8	39	45	11	32.2	31-32	350kg
35xM10	35	M10	39	45	11	32.2	31-32	400kg
35xM12	35	M12	39	45	13	32.2	31-32	400kg
35xM16	35	M16	39	45	16.5	32.2	31-32	400kg
38xM8	38	M8	41	45	10	36	35-36	500kg
38xM10	38	M10	41	47	17.7	36	35-36	500kg
38xM12	38	M12	41	47	13	36	35-36	500kg
38xM16	38	M16	41	47	18	36	35-36	500kg
40xM10	40	M10	39	45	11	36.8	36-37	500kg
40xM12	40	M12	39	45	13	36.8	36-37	500kg
40xM16	40	M16	39	45	16.5	36.8	36-37	500kg
51xM10	51	M10	39	45	11	48.4	7-48	750kg
51xM12	51	M12	39	45	13	48	47-48	750kg
51xM16	51	M16	39	45	18	48	47-48	750kg
51xM20	51	M20	39	45	18	48	47-48	750kg

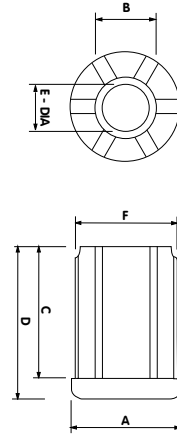


- Glass Reinforced Nylon with 304 SS Threaded insert.
- Selected sizes in stock, others available on request.
- *(G) is recommended ID tube sizes.

Round Threaded Tube End 81 Series



Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G* (mm)	Safe Working Load
25xM8	25	M8	38	46.5	11	23	22	100kg
25xM10	25	M10	38	46.5	12	23	22	100kg
25xM12	25	M12	38	46.5	14	23	22	100kg
32xM8	32	M8	39	45	11	29.5	28-29	200kg
32xM10	32	M10	39	45	12	29.5	28-29	250kg
32xM12	32	M12	39	45	14	29.5	28-29	250kg
32xM16	32	M16	39	45	18	29.5	28-29	250kg
38xM10	38	M10	38	45	12	35.5	35-36	300kg
38xM12	38	M12	38	45	14	35.5	35-36	300kg
38xM16	38	M16	38	45	18	35.5	35-36	300kg
40xM8	40	M8	39	45	11	36.8	36-37	350kg
40xM10	40	M10	39	45	12	36.8	36-37	500kg
40xM12	40	M12	39	45	14	36.8	36-37	500kg
40xM16	40	M16	39	45	18	36.8	36-37	500kg
51xM12	51	M12	38	45	14	48	47-48	450kg
51xM16	51	M16	38	45	18	48	47-48	450kg
62xM16	62	M16	38	45	18	60.5	60-61	450kg



- Selected sizes in stock, others available on request.
- *(G) is recommended ID tube sizes.

HDA Heavy Duty Series – 304 SS 221 Series (10° adj.) 231 Bolt-down Series (10° adj.)

AVAILABLE TO ORDER ON REQUEST.

The HDA 221 & 231 Range

- All 304 SS
- Have 10% angle adjustment and the usual height adjustment.
- Foot is available in 90mm base, 90 Bolt-down, 125 base, or 125 bolt-down base with antislip pad
- Stud sizes M16, M20, M24 available in 2 lengths.
- HDA 231 Bolt down series has 11mm holes with a 60mm centre for a 90 base, and 90mm centre for 121 base.

Available on Request – please ask about sizes



HDA221 Standard Series
Code: FAHDA



HDA231 Bolt-down version
also available.
Code: FBHDA

Materials:

Base: 304 stainless steel
Pad: Synthetic rubber shore 73

Stud: 304 stainless steel
Locknuts: 304 stainless steel

HD Heavy Duty Boltdown Series – 304 SS

121 Series (55° adj.)

131 Series (55° adj.)



The HD A-JUSTA-FOOT is a HEAVY DUTY ALL METAL multi adjustable pedestal foot ideal for chemical, industrial and food industry applications. They are extra heavy duty, making them ideal for very heavy machinery.

The whole unit, foot, ball and stud are ALL METAL 304 stainless steel. The stainless steel feet are ideally suited to the food and chemical industry where washing down is necessary.

The HD A-JUSTA-FOOT range is supplied with antislip pad and locknut.

A range of square and round inserts is available to complement the feet. These inserts are designed to be welded into the tube giving the optimum hygienic seal. As the feet and inserts are machined, special requirements in size, length and design are able to be produced.

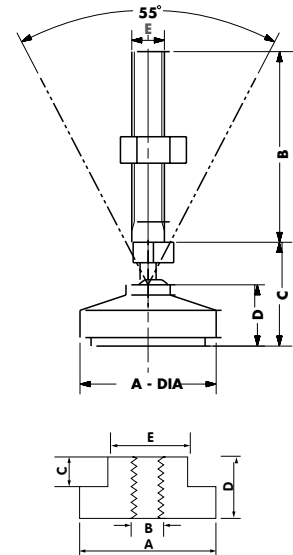


HD121 – 304SS
(with SS Threaded Tube End)



HD131 – 304SS
bolt-down with holes – available
with 90mm and 125mm base

Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Safe Working Load
40xM8	40	90	30	18	M8	500kg
40xM10	40	60	30	18	M10	700kg
60xM12	60	90	44	25	M12	1200kg
60xM12x190	60	190	44	25	M12	1200kg
60xM16	60	90	44	25	M16	2000kg
60xM16x190	60	190	44	25	M16	2000kg
60xM20	60	90	44	25	M20	3500kg
60xM20x190	60	190	44	25	M20	3500kg
60xM24	60	90	44	25	M24	4500kg
60xM24 x190	60	190	44	25	M24	4500kg
90xM12	90	90	44	25	M12	1200kg
90xM12x190	90	190	44	25	M12	1200kg
90xM16	90	90	44	25	M16	2000kg
90xM16x190	90	190	44	25	M16	2000kg
90xM20	90	90	44	25	M20	3500kg
90xM20x190	90	190	44	25	M20	3500kg
90xM24	90	90	44	25	M24	4500kg
90xM24x190	90	190	44	25	M24	4500kg
125xM12	125	90	44	25	M12	1200kg
125xM16	125	90	44	25	M16	2000kg
125xM16x190	125	190	44	25	M16	2000kg
125xM20	125	90	44	25	M20	3500kg
125xM20x190	125	190	44	25	M20	3500kg
125xM24	125	90	44	25	M24	4500kg
125xM24x190	125	190	44	25	M24	4500kg



Tube insert all metal,
square and round

SQUARE AND ROUND THREADED TUBE END

Designed to be welded in — in 304 stainless steel.

Square Threaded Tube End

HD111 available in sizes sq 38mm, 51mm and 62mm in thread sizes to fit the Heavy Duty A-JUSTA-FOOT range.

Round Threaded Tube End

HD181 available in sizes sq 38mm, 51mm and 62mm in thread sizes to fit the Heavy Duty A-JUSTA-FOOT range



HEAVY DUTY STAINLESS STEEL 131 BOLT DOWN

- Base 90 and 125 are available with Bolt-down holes — Series HD131.
- Bolt-down holes in 90 have 60mm centres.
- Bolt-down holes in 125 have 90mm centres.
- All bolt-down holes are 11mm diameter.

Heavy Duty Slimline (55° adj.)

304 SS

The HDS A-JUSTA-FOOT is a **HEAVY DUTY ALL METAL** multi adjustable pedestal foot, ideal for the chemical, industrial and food industry applications.

FEATURES

- The complete unit including foot, ball and stud are 304 stainless steel making it perfect for wash down areas.
- The HDS A-JUSTA-FOOT range comes with a antislip pad and locknut.



Available on Request – please ask about sizes

Heavy Duty Riveted (30° adj.)

304 SS

The HDR A-JUSTA-FOOT is a **HEAVY DUTY ALL METAL** multi adjustable pedestal foot.

FEATURES

- Riveted from below the foot to allow upward pressure and is ideal for the chemical, industrial and food industry applications.
- The complete unit including foot, ball and stud are 304 stainless steel making it perfect for wash down areas.
- The HDR A-JUSTA-FOOT range comes with a antislip pad and locknut.



Available on Request – please ask about sizes

CF Series (Fixed)

304 SS

The CF Range is for domestic, commercial and light industrial applications.

FEATURES

- There are two styles.
- The CFR Range has a TPR rubber foot giving anti slip and anti vibration qualities and has locknut.
- The CFP range is made of Nylon 6 plastic and has locknut.



CFP Foot

Materials:

Base: Nylon 6

Stud and locknut:
304 stainless steel

CFR Foot



























Materials:

Base: Synthetic Rubber
shore 73

Stud and locknut:
304 stainless steel










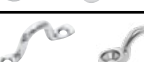
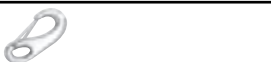
















Available on Request – please ask about sizes

Marine Hardware, Wire Rigging Fittings






















D Shackles		217-220
Twist Shackles		220
Bow Shackles		221
Double Bar D Shackles – With Captive Pin		221
Halyard Shackle – With Captive Pin		221
Shackle Keys		222
Canopy Fittings – Hand Polished	 Other types available	223
Hammer Lock Pin for Jaw Turnbuckles		226
Eye/Eye Turnbuckles		224
Hook/Eye Turnbuckles		227
Jaw/Jaw Pipe Turnbuckles		225
Mini Jaw/Jaw Pipe Turnbuckles		226
Hook/Eye Pipe Turnbuckles		227
Pipe Turnbuckles – Small forged eyes		228
Jaw/Swage Pipe Turnbuckles		228
Toggle/Swage Pipe Turnbuckles		229
Fork Terminals		229
Swivel Toggle Terminals		230
Eye Terminal		230
Swage Studs		231
Swage Stud Lagscrews		231
Wire Rope Thimbles		232
Crimps for Wire Rope – Copper & Nickel Plated Copper		232
Wire Rope Grips		233
Wire Cross Over Clamp		233
Eye Nuts		234

continued on next page

Marine Hardware, Wire Rigging Fittings cont.

Eye Bolts		234-236
Wire Stand Offs		237
Eye Screws		237-238
Cup & Screw Hooks		238
Cast Ring Screw		239
Round Eye Pads		239-240
Rectangular Eye Pads		240
Diamond Eye Pads		241
Folding Eye Pads		242
Oval Eye Pads		243
Eye Straps		243-244
Cast Spring Snaps		244
Spring Hooks		244-245
Double Locking Spring Hooks		245
Spring Snaps		246
Swivel Snap Shackles		247
Fixed Snap Shackles		247
Swivel Snap Shackles – With Clevis Pin		247
Rope Sheet Snap Shackles (J-Lock)		248
Pelican Hooks		248
Eye Snaps – Rigid/Swivel		248-249
Swivel Eye Bolts		249
Jaw/Jaw Swivels		249-250
Jaw/Eye Swivels		250
Eye/Eye Swivels		250
Rings – Dee, Triangle, Round		251-252
Dee Rings with Thimble		251
Bar D Thimble		252

Marine Hardware, Wire Rigging Fittings cont.

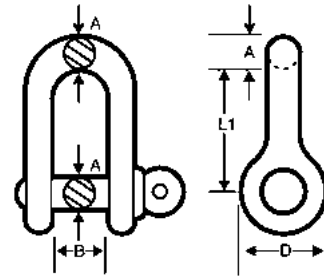
Clew Rings with Bar		253
Slides		253
Shouldered U Bolts – With 2 Keepers and Nuts		253
U Bolts – With Keepers and Nut		254
S Hooks		254
Eye Grab Hooks		255
Eye Slip Hooks – With Safety Latch		255
Clevis Slip Hook		255
Cabin Hook – Polished		256
Cover Latch – Polished		256
Cabin & Deck Hardware		257-258
Lift Rings & Handles		259
Cabinet Latch – Round, Drop T		260
Cleats – Hollow Base, Rope, Pull Up, Low Flat		261-263
Skene Type Fairleads – Hand Polished		261
Pulley Blocks – Type G, Type K, Type Q		263-264
Mame Blocks – Single Wheels – Double Wheels		264
Double Heavy Block		265
Taruma Blocks		265
Seine Blocks – With Safety Latch		265
Rod Holders – Polished		266

D Shackles

316 SS



Size (A)	B & D (mm)	L1 (mm)	Breaking Load (kg)*
M4	8	16	550
M5	10	20	1000
M6	12	24	1700
M7	14	28	2000
M8	16	32	2800
M10	20	40	4500
M12	24	48	6000
M16	32	64	10,000
M19	38	76	15,000
M25	50	100	23,000



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

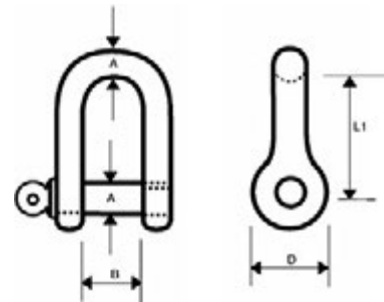
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

D Shackles with Captive Pin



316 SS

Size (A)	B & D (mm)	L1 (mm)	Breaking Load (kg)*
M4	8	16	800
M5	10	20	1000
M6	12	24	1400
M8	16	32	2800
M10	20	40	4000
M12	24	48	6200



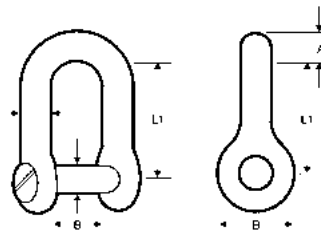
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

D Shackles with Slot Drive Pin



316 SS

Size (A)	B (mm)	L1 (mm)	Breaking Load (kg)*
M4	8	16	550
M5	10	20	1000
M6	12	24	1700
M8	16	32	2800
M10	20	40	4500
M12	24	48	6000



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

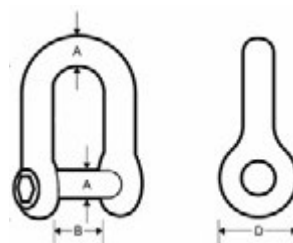
- N.B. larger sizes are available on request.

D Shackles with Socket Drive Pin



316 SS

Size (A)	B & D (mm)	Breaking Load (kg)*
M6	12	1700
M8	16	2800
M10	20	4500
M12	24	6000



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- N.B. larger sizes are available on request.

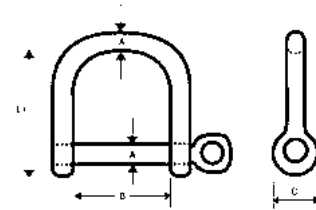
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Wide D Shackles

316 SS



Size (A)	B (mm)	D (mm)	L1 (mm)	Breaking Load (kg)*
M5	25	10	22	750
M6	24	12	36	1350
M8	28	16	35	2500
M10	40	20	72	3350



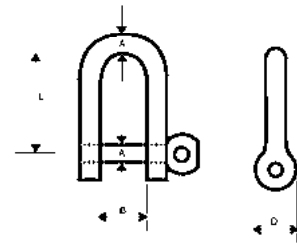
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Semi Round D Shackles

304 SS



Size (A)	B (mm)	D (mm)	L (mm)	Breaking Load (kg)*
M5	11	12	30.7	1000
M6	14	14	37.0	1600
M8	18	18	49.0	2800



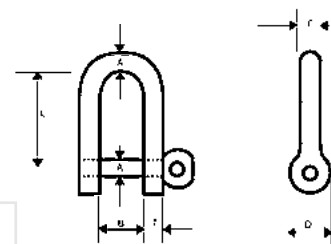
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Sheet D Shackles

304 SS



Size (A)	B (mm)	D (mm)	F (mm)	L (mm)	T (mm)	Breaking Load (kg)*
M4	10	9	5.5	19.6	1.8	600
M5	12	12	7.8	23.5	2.0	950
M6	15	14	8.5	27.5	3.0	1600
M8	23	18	10.5	48	4.0	2600



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

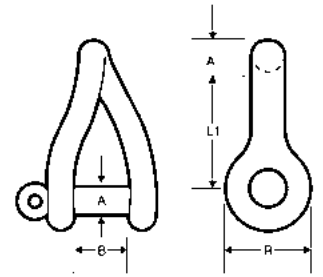
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Twist Shackles

316 SS



Size (A)	B & R (mm)	L1 (mm)	Breaking Load (kg)*
M4	8	24	665
M5	10	30	1100
M6	12	36	1600
M8	16	44	2800
M10	20	51	4600
M12	24	66	6000



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

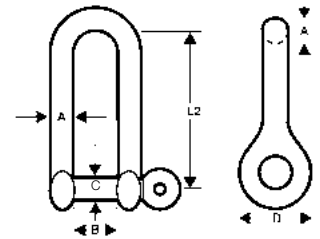
Long D Shackles

(with Captive Pin)

316 SS



Size (A)	B (mm)	C (mm)	D (mm)	L2 (mm)	Breaking Load (kg)*
M4	8	4.4	8	32	500
M5	10	4.4	10	40	1000
M6	12	5.3	12	48	1700
M8	16	7.1	16	64	2500
M10	20	10	20	80	3500
M12	24	12	24	96	5400



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

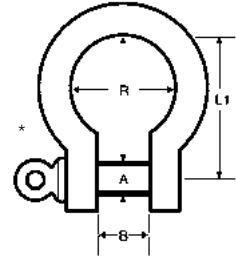
Bow Shackles

316 SS



Size (A)	B (mm)	R (mm)	L1 (mm)	Breaking Load (kg)*
M3	8	11	16.5	400
M4	8	14	20	550
M5	10	17	25.5	1000
M6	12	21	30	1700
M8	16	28	41	2800
M10	20	34	51	4500
M12	24	42	61	6000
M16	32	56	82	10,000

Please note the pin collar on this product is not available in sizes M4-M8.



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

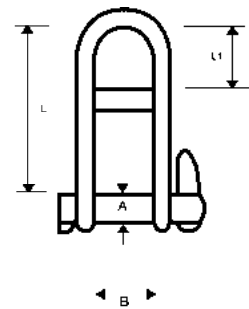
Double Bar D Shackles with Captive Pin

316 SS



Size (A)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M5	13	40.5	12	1000
M6	16	46.0	15	1600
M8	22	64.0	20	2250

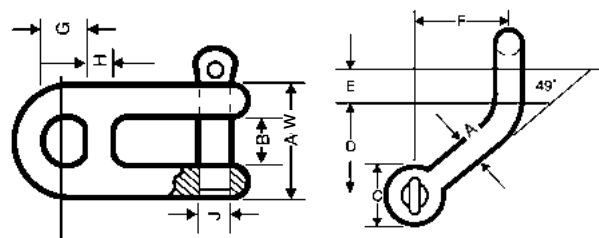
Please note the top bar is 304 SS.



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Halyard Shackle with Captive Pin

316 SS



Size (A)	W (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	Breaking Load (kg)*
M6	24	12	16	27	7.5	25.5	11.25	4.5	7.1	1,900
M8	32	16	20	36	10.0	34.0	15.00	6.0	8.9	3,700

* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

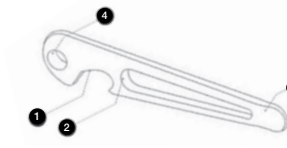
Shackle Key

316 SS



Size

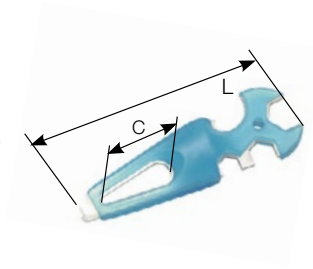
18mm Width x 87mm Overall length



- Functions
- 1 Bottle Opener
 - 2 Spanner
 - 3 Flat Screwdriver
 - 4 Hole for Lanyard

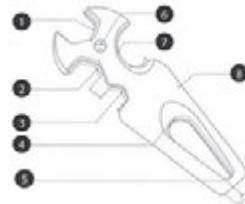
Shackle Key with Plastic Cover (Blue)

316 SS



Size

100mm Overall length (L) – 31mm (C)



- Functions
- 1 13mm Spanner
 - 2 10mm Spanner
 - 3 8mm Spanner
 - 4 3-8mm Spanner
 - 5 Flat Screwdriver
 - 6 Hole for Lanyard
 - 7 Bottle Opener
 - 8 Protective Cover

Canopy Fittings – Hand Polished

316 SS



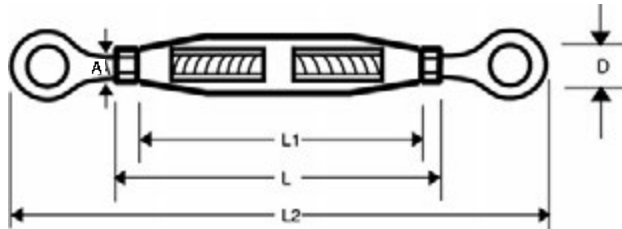
Description	Canopy Fitting	Size
Top Cap		For 3/4" O.D. Tube & 1/4" Bolt For 7/8" O.D. Tube & 1/4" Bolt For 1" O.D. Tube & 1/4" Bolt
Top Slide With Bolt		For 3/4" O.D. Tube & 1/4" Bolt included For 7/8" O.D. Tube & 1/4" Bolt included For 1" O.D. Tube & 1/4" Bolt included
Hinged Canopy Top Slide		For 7/8" O.D. Tube, M6 304 bolt & pin included For 1" O.D. Tube, M6 304 bolt & pin included For 1 1/4" O.D. Tube, M6 304 bolt & pin included
Plain Base Canopy Hinge		Base Size: 7/8" x 2 Pin Size: 1/4" Predrilled for two 10g csk screws
Angle Base Canopy Hinge		Base Size: 7/8" x 2 Pin Size: 1/4" Predrilled for two 10g csk screws
Angle Canopy Hinge with removable pin		Base Size: 7/8" x 2 Pin Size: 1/4" Predrilled for two 10g csk screws
Side Mount Canopy Hinge		Base Size: 7/8" x 2 Pin Size: 1/4" Predrilled for two 10g csk screws

Information used exclusively under permission of Sinox Marine Co. Ltd.

Eye/Eye Turnbuckles



316 SS



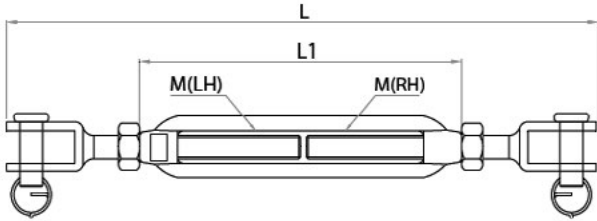
Size (A)	L (mm)	L1 (mm)	L2 (mm)	D (mm)	Breaking Load (kg)*
M4	67	60	102	8	475
M5	78	70	124	10	680
M6	100	90	154	12	1500
M8	132	120	210	14	2300
M10	166	150	257	17	3100
M12	221	200	325	20	4400
M16	276	250	390	22	8100

* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Jaw/Jaw Turnbuckles

316 SS

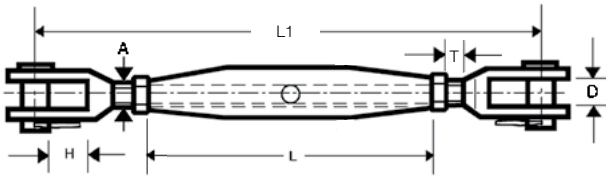


Size (M)	L (mm)	L1 (mm)	Breaking Load (kg)*
M6	137	70	1,400
M8	179	120	2,200
M10	220	150	3,450
M12	296	200	5,000

* Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Jaw/Jaw Pipe Turnbuckles

316 SS



Size (A)	L (mm)	L1 (mm)	D (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
M5	80	115	6.5	9	24	750
M6	90	142	7.5	9	33	1400
M8	105	160	11.0	11	35	2200
M10	125	200	12.0	13	44	3450
M12	150	245	14.0	21	52	5000
M16	190	304	17.0	26	64	8000
M20	210	350	20.0	28.5	64	10,500

* Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Hammer Lock Pin for Jaw Turnbuckles



316 SS

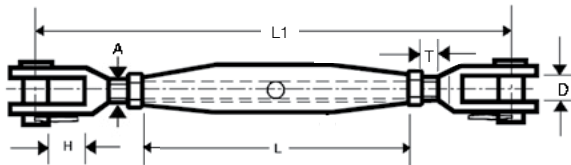
Size	Use
5MM	All M5 Jaw Turnbuckles / M4 Mini
6MM	All M6 Jaw Turnbuckles
8MM	All M8 Jaw Turnbuckles
9MM	All M10 Jaw Turnbuckles
12MM	All M12 Jaw Turnbuckles

Tamperproof pin for turnbuckle and prevent removal of pin.

Mini Jaw/Jaw Pipe Turnbuckles



316 SS

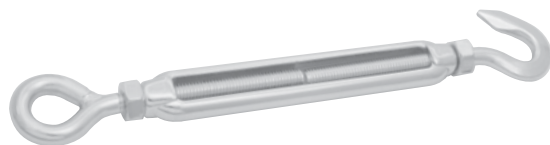


Size (A)	L (mm)	L1 (mm)	D (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
M4	40	84	6.5	10	10	500
M5	50	95	6.5	10	12	750
M6	60	110	8.1	10	16	1400

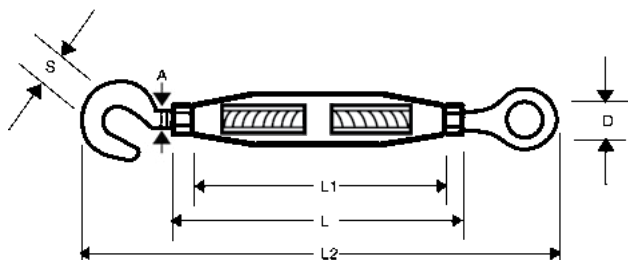
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Hook/Eye Turnbuckles



316 SS



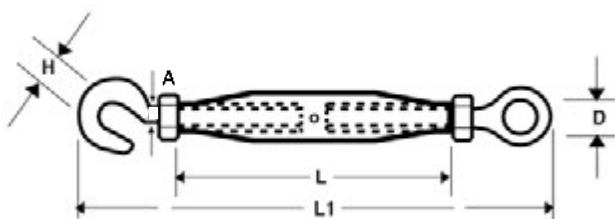
Size (A)	L (mm)	L1 (mm)	L2 (mm)	D (mm)	S (mm)	Breaking Load (kg)*
M4	67	60	103	8	7	100
M5	78	70	124	10	8	130
M6	100	90	162	12	10	350
M8	133	120	210	14	12	650
M10	166	150	256	17	15	800
M12	222	200	330	20	18	1400
M16	278	252	400	21	19	2400

*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Hook/Eye Pipe Turnbuckles



316 SS

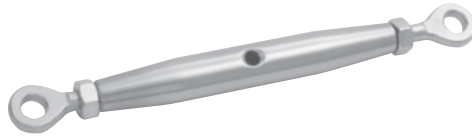


Size (A)	L (mm)	L1 (mm)	D (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
M5	80	137	10	7.5	24	130
M6	90	164	11	8.5	34	350
M8	105	196	13	10.0	36	650
M10	125	235	19	15.5	44	800
M12	150	288	19	15.5	54	1400

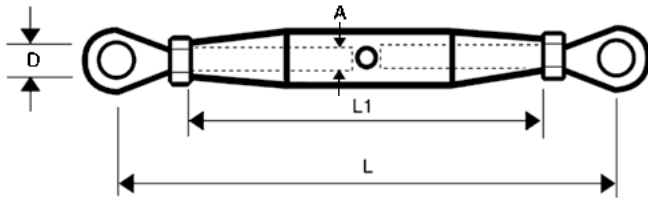
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Pipe Turnbuckles (small forged eyes)



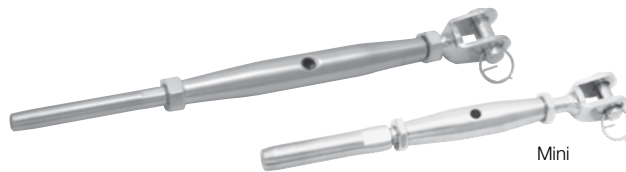
316 SS



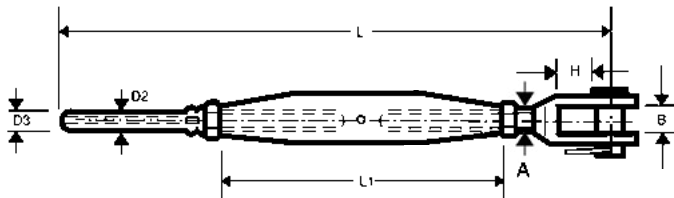
Size (A)	D (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M5	5.5	125	80	750
M6	6.4	135	90	1000
M8	8.4	165	105	2200
M10	13.1	185	125	3000
M12	13.4	225	150	5000
M16	14.5	275	190	8000

*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Jaw/Swage Pipe Turnbuckles



316 SS



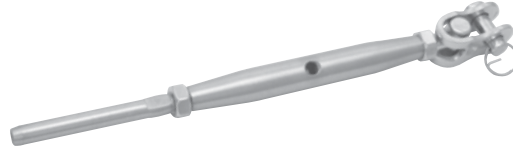
Size (A)	Wire Size (mm)	L (mm)	L1 (mm)	OD D2 (mm)	ID D3 (mm)	B (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
M5 MINI	3.0	107	50	5.0	3.4	6.5	10	12	750
M5	2.5	150	80	5.5	2.7	6.5	10	24	600
M5	3.2	142	80	6.3	3.2	6.5	10	32	600
M6	3.2	170	90	6.3	3.2	7.5	10	32	1000
M8	4.0	205	105	7.5	4.3	11.0	11	34	1400
M10	5.0	240	125	9.1	5.3	12.0	14	38	2200
M12	6.0	295	150	12.5	6.3	13.7	21	50	4000
M16	8.0	370	190	16.1	9.0	17.4	26	64	6500

• Hex Swage Tool - see p. 290

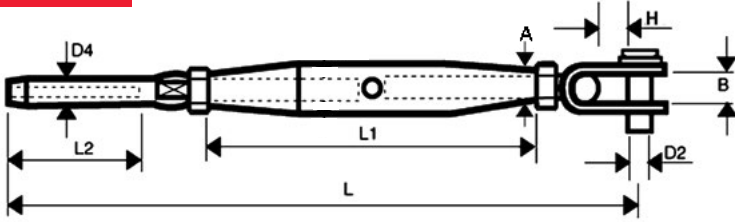
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Toggle/Swage Pipe Turnbuckles



316 SS



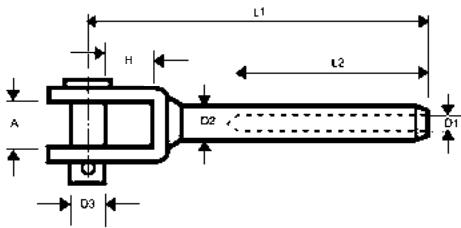
Size (A)	Wire Size (mm)	D4 (mm)	D2 (mm)	B (mm)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
M5	2.5	5.5	5.0	6.0	155	80	31	10	26	600
M6	3.2	6.3	6.0	7.0	172	90	37	10	32	1000
M8	4.0	7.5	8.0	10.0	210	105	48	11	34	1400
M10	5.0	9.1	9.0	12.0	246	125	53	14	38	2200
M12	6.0	12.5	11.9	15.3	296	150	72	21	50	4000
M16	8.0	16.1	15.5	18.0	386	190	100	23	64	6500
M20	10.0	17.8	18.5	21.8	422	210	97	26	56	8500

• Hex Swage Tool - see p. 290
 *Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Fork Terminals



316 SS



Size (for wire)	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	A (mm)	H (mm)	T Max. Unwound Thread (mm) at each end	Breaking Load (kg)*
2.5mm	2.70	5.53	5.0	62	55	7.0	8.9	700	700
3.2mm	3.30	6.35	6.0	68	38	8.0	9.3	1250	1250
4.0mm	4.30	7.54	8.0	77	45	11.0	11.0	1800	1800
5.0mm	5.30	9.12	9.0	87	51	12.0	13.0	2650	2650
6.0mm	6.30	12.54	12.0	109	64	14.5	21.0	4000	4000
8.0mm	8.40	16.13	14.28	148	80	15.0	22.0	6500	6500

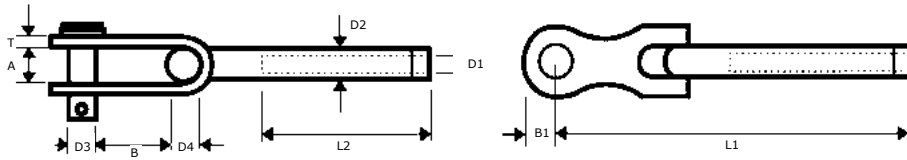
• Hex Swage Tool - see p. 290
 *Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co. Ltd.

Swivel Toggle Terminals



316 SS



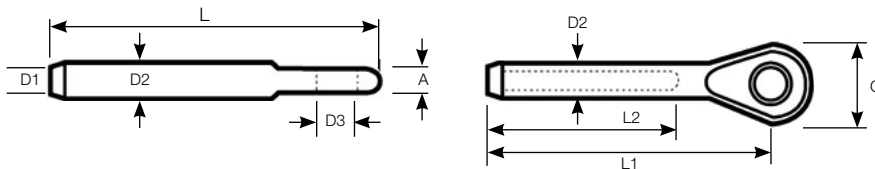
Size (for wire)	D1 ±0.2	D2 ±0.1	D3 ±0.1	D4	L1 ±1	L2 ±1	A ±0.5	B ±0.5	T	B1	Breaking Load (kg)*
3.2mm	3.30	6.35	6	7	80	38	7	9	2.5	7	1200
4.0mm	4.30	7.54	8	10	100	45	10	12	3	9	2000
5.0mm	5.30	9.12	9	12	114	51	12	15	4	11	3000
6.0mm	6.35	12.54	12	13	140	64	13	19	4	13	4500
8.0mm	8.40	16.13	16	17	164	76	17	25	7	8	7500
10.0mm	10.0	17.85	19	20	204	89	20	31	8	22	8500

• Hex Swage Tool - see p. 290
 *Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Eye Terminal



316 SS

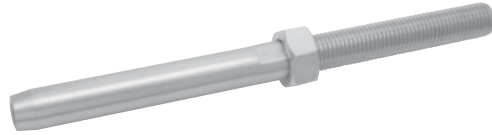


Size (for wire)	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	A (mm)	G ±1mm	L ±1mm	Breaking Load (kg)*
2.0mm	2.2	5.53	5.5	49	32	3	12.0	56	850
2.5mm	2.7	5.53	5.5	49	32	3	12.8	56	850
3.2mm	3.2	6.35	6.5	54	38	4	13.5	62	1000
4.0mm	4.2	7.54	8.5	68	45	5	17.0	77	1350
5.0mm	5.3	9.12	10.5	76	51	6	20.5	87	2500
6.0mm	6.3	12.54	13.0	94	64	8	24.5	107	4500
8.0mm	8.4	16.13	14.5	118	83	10	30.5	133	6700
10.0mm	10.5	17.85	16.3	142	89	11	36.5	159	7800
12.0mm	12.5	21.44	19.3	160	105	15	39.5	180	9000

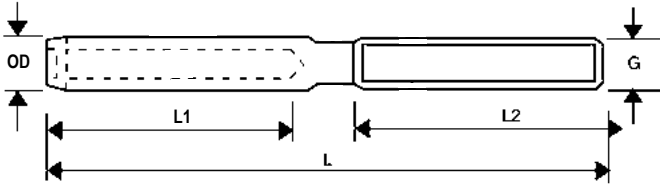
• Hex Swage Tool - see p. 290
 *Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co. Ltd.

S7801 Swage Studs



316 SS



Size Wire X Thread (G)	OD (mm)	L (mm)	L1 (mm)	L2 (mm)
2.0mm X M5	4.50	86	32	40
2.5mm X M5	5.50	86	35	40
3.2mm X M5	6.30	80	32	40
3.2mm X M6	6.30	97	38	48
4.0mm X M6	7.50	110	45	48
4.0mm X M8	7.50	115	45	54
5.0mm X M10	9.10	128	52	61
6.0mm X M12	12.5	162	63	79

• Hex Swage Tool - see p. 290

Swage Stud Lagscrews



316 SS

Size (for wire)	Length	Thread Length
3.2MM	90MM	42MM
3.2MM (Left Hand Thread)	90MM	42MM

• Hex Swage Tool - see p. 290
For more balustrading related products see p. 275-278

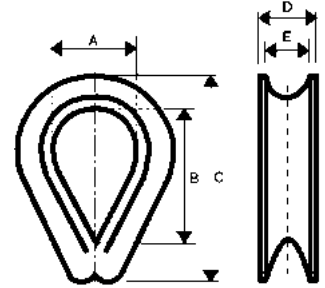
• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
• Information used exclusively under permission of Sinox Marine Co. Ltd.

Wire Rope Thimbles

316 SS



Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
M2/M2.5	10.0	12	25	5.0	3
M3.2	12.5	14	28.5	6.0	4
M4	13.0	16	33	7.0	5
M5	15.5	21	36.5	8.0	6
M6	17.0	26	40	9.5	7
M8	22.5	35	51	12.0	9
M10	26.0	42	58.5	14.0	11
M12	31.0	48	68	17.5	14
M16	37.5	63	83	21.0	17
M20	45.0	73	104	26.0	22
M25	54.0	92	125	34.0	26



Crimps for Wire Rope

(Copper & Nickel Plated Copper)

COPPER **NICKEL PLATED COPPER**



Copper



Nickel Plated

	COPPER (FOR WIRE)	NICKEL PLATED COPPER (FOR WIRE)	COPPER (FOR ROPE)
M1.5			
M2			
M2.5			
M3.2			
M4			

	COPPER (FOR WIRE)	NICKEL PLATED COPPER (FOR WIRE)	COPPER (FOR ROPE)
M5			
M6			
M8			
M10			

Crimping tools available to purchase. See page 290

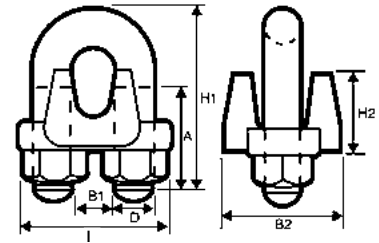
• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co. Ltd.

Wire Rope Grips



316 SS

Size (A)	A (mm)	B1 (mm)	B2 (mm)	D (mm)	H1 (mm)	H2 (mm)	I (mm)
2mm	10	4	14	3	17.5	11	14
3mm	12	5	16	3	21	12	17
4mm	13	6	18	4	23	14	19
5mm	15	7	20	5	29	16	24
6mm	15	8	22	6	32	18	28
8mm	20	10	28	8	40	21	34
10mm	28	11	35	10	50	24	45
12mm	35	14	39	12	62	28	51
16mm	46	18	46	14	78	33	58
19mm	NA	20	53	14	83	40	62



Wire Cross Over Clamp



← Internal Thread



316 SS

M3 with M10 Internal Thread

M4 with M12 Internal Thread

• See also Wire Stand Offs p. 237

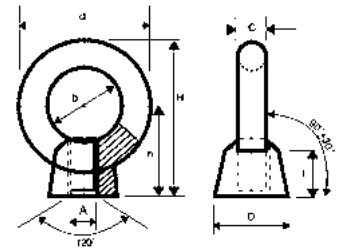
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Eye Nuts

316 SS



Size (A)	d (mm)	b (mm)	c (mm)	D (mm)	t (mm)	H (mm)	h (mm)	Breaking Load (kg)*
M6	26	16	5	13	4	31	13	1100
M8	33	20	6.2	16	5	39.3	17	1300
M10	41	25	8	20	7	48	21	2600
M12	50	30	10	25	9	61	26	3500
M16	60	35	12.5	30	11	72	30	8000
M20	72	40	16	35	13	86	35	10500



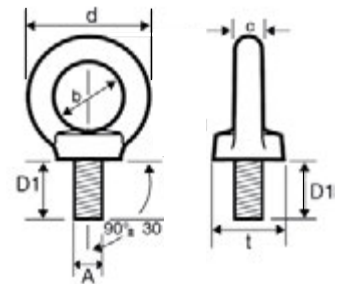
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Cast Eye Bolts

316 SS



Size A X D1 (mm)	d (mm)	b (mm)	c (mm)	t (mm)	Breaking Load (kg)*
M6 X 13	26	16	5	13	1100
M8 X 14	32	20	6	16	1800
M10 X 18	40	24.5	8	20	2600
M12 X 22.5	50	30	10	25	3500
M16 X 26.5	60	35	13	30	8000



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Eye Bolts



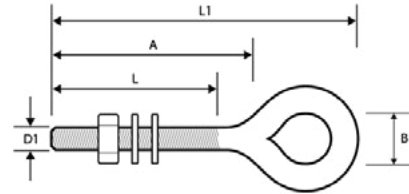
304 SS

M6 Size D1 x A(mm)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M6 x 40	13	33	60	1000
M6 x 60	13	53	85	1000
M6 x 80	13	73	105	1000
M6 x 100	13	93	125	1000

M8 Size D1 x A(mm)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M8 x 60	17	53	90	1800
M8 x 80	17	70	110	1800
M8 x 100	17	91	130	1800
M8 x 130	17	121	160	1800

M10 Size D1 x A(mm)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M10 x 80	21	69	120	2400
M10 x 100	21	88	140	2400
M10 x 120	21	106	160	2400
M10 x 150	21	123	190	2400

M12 Size D1 x A(mm)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
M12 x 100	25	87	150	3500
M12 x 120	25	106	170	3500
M12 x 150	25	139	200	3500
M12 x 200	25	160	247	3500



*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

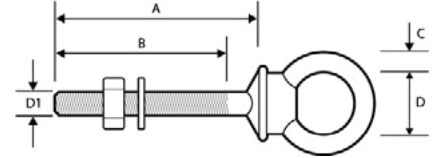
• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co. Ltd. (excluding crimps).

Cast Eye Bolts

316 SS



M6 Size D1 x A(mm)	B (mm)	C (mm)	D (mm)	Breaking Load (kg)*
M6 x 60	54	5	16	1100
M6 x 80	70	5	16	1100
M8 Size D1 x A(mm)	B (mm)	C (mm)	D (mm)	Breaking Load (kg)*
M8 x 80	70	6.2	20	1300
M8 x 100	90	6.2	20	1300
M10 Size D1 x A(mm)	B (mm)	C (mm)	D (mm)	Breaking Load (kg)*
M10 x 100	88	8	25	2600
M12 Size D1 x A(mm)	B (mm)	C (mm)	D (mm)	Breaking Load (kg)*
M12 x 100	100	10	30	3500
M12 x 120	105	10	30	3500



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Eye Bolt

316 SS



	Overall Length (mm)	Diam of Hole (mm)	Thread Length (mm)
M6 X 25	32	6.2	16
M6 x 40	48	6.2	23.2
M8 x 50	68	8.2	28
M10 x 50	70	10.2	29

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd. (excluding crimps).

Wire Stand Offs

316 SS

	316 SS
M10 x 20	Eye Screw
M10 x 20	Eye Bolt
M10 x 100	Eye Screw
M10 x 100	Eye Bolt



Wire Cross Over Clamp on p. 233



Eye Bolt

Eye Screw

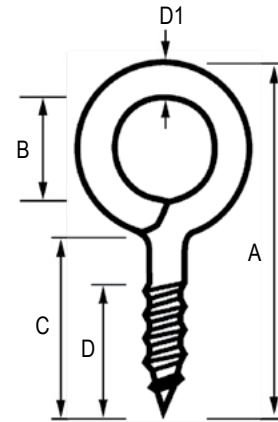


Eye Screws

304 SS



Type	Size D1 x A (mm)	B (mm)	C (mm)	D (mm)
14220	1.85 X 20.5	5	10	8
14225	2.45 X 25	7	12	10
14230	3.00 X 29	9	13	10
14234	3.30 X 34	10	18	15
14374	3.90 X 42	13	20	16
14254	4.60 X 54	15	27	18
14372	5.30 X 55	16	28	21
14371	6.20 X 67	19	32	29
14370	7.80 X 72	21	35	30
14351	4.50 X 76	18	58	29
14352	6.20 X 98	13	72	45
14354	6.20 X 128	13	100	45
14356	7.80 X 101	16	70	45
14357	7.80 X 125	16	95	45
14358	7.80 X 150	16	120	45
14360	8.50 X 112	19	75	45
14361	8.50 X 150	19	115	45

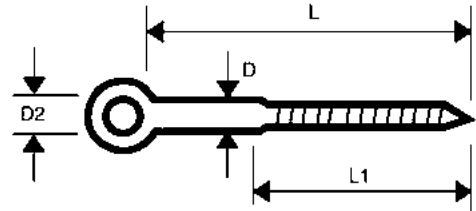


Cast Eye Screw

316 SS



Size D x L (mm)	L1 (mm)	D2 (mm)
4 X 45	30	4.2
5 X 55	40	5.2
6 X 55	36	6.2
8 X 60	40	8.2
10 X 80	55	10.3
12 X 100	65	12.3

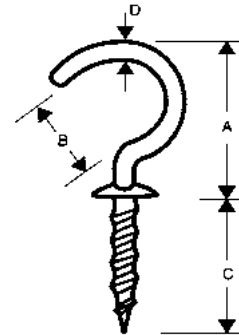


Cup Hooks

304 SS



Type	Size D x A (mm)	B (mm)	C (mm)
14416	2.2 X 16	5	10
14420	2.4 X 20	7	12
14425	2.8 X 25	10	14
14428	3.2 X 28	10	15
14432	3.5 X 32	13	17
14438	4.2 X 45	20	20

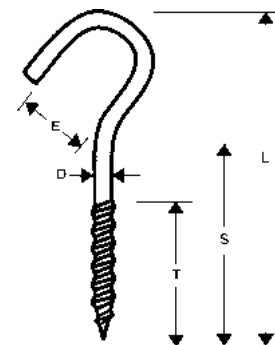


Screw Hooks

304 SS



Type	Size D x L (mm)	S (mm)	T (mm)	E (mm)
14575	1.90 X 34	20	12	7.50
14574	2.60 X 42	25	15	8.20
14573	3.40 X 52	30	18	11.50
14572	3.90 X 65	37	23	15.00
14571	4.70 X 85	48	21	19.50
14570	5.40 X 97	58	38	21.00
14569	6.00 X 105	63	42	25.00
14568	6.60 X 112	65	38	25.00
14600	7.90 X 114	70	45	26.00

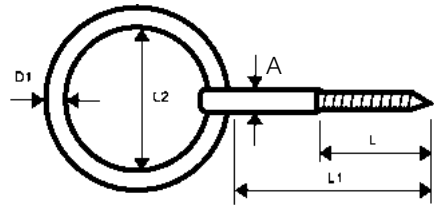


Cast Ring Screw

316 SS



Size A x L1 (mm)	L (mm)	D1 (mm)	L2 (mm)	Breaking Load (kg) ⁺
6mm X 60	32	6	30	900
8mm X 80	40	8	50	1500
10mm X 80	55	10	60	2500
12mm X 100	65	12	75	3500



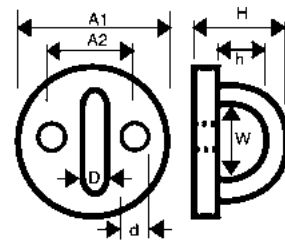
⁺For this product see the Breaking/Deformation/Standard Safety Factor Notice next to Dee Rings (S3250) on page 251.

Round Eye Pads

304 SS



Size (D)	A1 (mm)	A2 (mm)	H (mm)	h (mm)	W (mm)	d (mm)	Breaking Load (kg) [*]
5mm	33	19.5	20	12	13	4.5	700
6mm	40	23.0	26	17	17	4.5	1000
8mm	50	29.5	32	21	20	5.5	1600



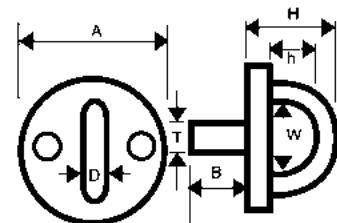
^{*}Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Round Eye Pads with Stud

304 SS



Size (D)	A (mm)	H (mm)	h (mm)	W (mm)	b (mm)	T (mm)	Breaking Load (kg) [*]
5mm	33	20	12	13	20	M6	400
6mm	40	26	17	17	23	M8	500
8mm	50	32	20	20	25	M10	1000



^{*}Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

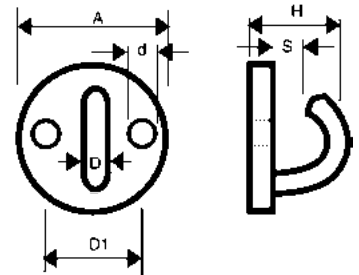
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd. (excluding crimps).

Round Eye Pads with Hook

304 SS



Size (D)	A (mm)	D1 (mm)	H (mm)	S (mm)	d (mm)	Breaking Load (kg)*
6mm	40	23	26	12	4.2	220



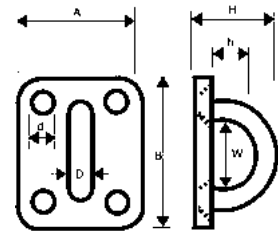
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Rectangular Eye Pads

304 SS



Size (D)	A (mm)	B (mm)	H (mm)	h (mm)	W (mm)	d (mm)	Breaking Load (kg)*
5mm	30	34	19	12	14	4.1	700
6mm	34	40	26	17	18	4.1	1000
8mm	39	50	33	22	20	5.3	1600



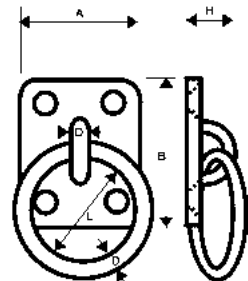
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Rectangular Eye Pads with Ring

304 SS



Size (D)	L (mm)	A (mm)	B (mm)	H (mm)	d (mm)	Breaking Load (kg)*
5mm	30	30	34	20	4.2	700
6mm	35	34	40	24	4.2	1000
8mm	45	39	50	33	5.2	1600



* For this product see the Breaking/Deformation/Standard Safety Factor Notice next to Dee Rings (S3250) on page 251.

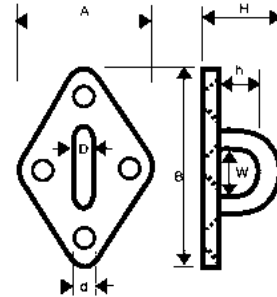
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Diamond Eye Pads



304 SS

Size (D)	A (mm)	B (mm)	H (mm)	h (mm)	W (mm)	d (mm)	Breaking Load (kg)*
5mm	37	59	22	12	15	4.1	700
6mm	40	64	26	15	19	4.1	1000
8mm	50	80	33	20	23	5.2	1600



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

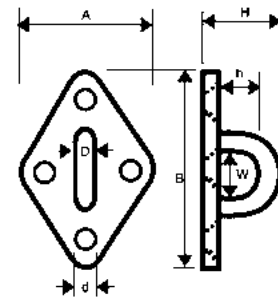
Cast Diamond Eye Pads

(Heavy Duty)

304 SS



Size (D)	A (mm)	B (mm)	H (mm)	h (mm)	W (mm)	d (mm)	Breaking Load (kg)*
8mm	50	80	27.5	22	16	8	3500
10mm	59	100	35	20	24	8	6000



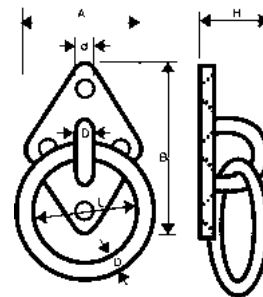
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Diamond Eye Pads with Ring

304 SS



Size (D)	L (mm)	A (mm)	B (mm)	H (mm)	d (mm)	Breaking Load (kg) ⁺
5mm	30	37	59	22	4.1	700
6mm	35	40	64	26	4.1	1000
8mm	45	50	80	33	5.1	1600



⁺For this product see the Breaking/Deformation/Standard Safety Factor Notice next to Dee Rings (S3250) on page 251.

Folding Eye Pads

316 SS



Small



Large

Size	Breaking Load (kg)*
SMALL - 40H X 28W	1200
LARGE - 50H X 56W	3000

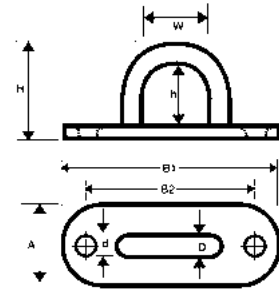
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Oval Eye Pads

304 SS



Size (D)	A (mm)	B1 (mm)	B2 (mm)	H (mm)	h (mm)	W (mm)	d (mm)	Breaking Load (kg)*
5mm	16	54	38	20	12	14	5	700
6mm	19	65	46	25	17	16	5.6	1000
8mm	25	81	56	32	21	20	5.6	1600



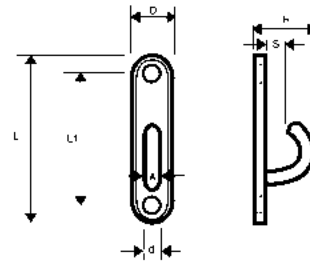
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Oval Eye Pad with Hook

304 SS



Size (D)	D (mm)	L (mm)	L1 (mm)	H (mm)	S (mm)	d (mm)	Breaking Load (kg)*
6mm	20	65	46	25	12	5.6	220



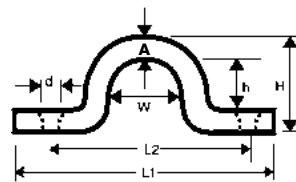
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Eye Straps

304 SS



Size (A)	L1 (mm)	L2 (mm)	H (mm)	h (mm)	W (mm)	d (mm)
4mm	42	32	14	11	10	3.6
5mm	50	40	16	13	11	4.2
6mm	60	44	22	16	14	5
8mm	64	47	24	17	11	6
10mm	67	57	26	26	15	5



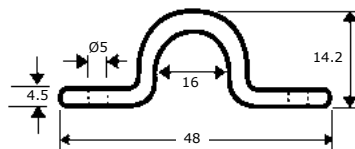
Heavy Wire Eye Straps

316 SS



M5

Base: 48L X 12.7W



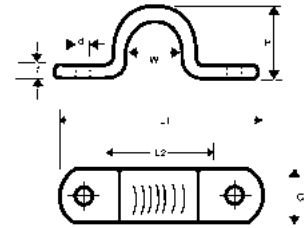
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Sheet Eye Straps

316 SS



Size (W)	L1 (mm)	L2 (mm)	C (mm)	H (mm)	T (mm)	d (mm)
10mm	42	30	11	8	1.2	4.2
13mm	45	33	11	11	1.2	4.2
16mm	48	36	11	14	1.2	4.2

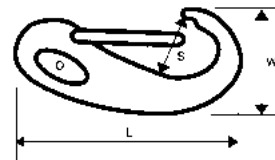


Cast Spring Snaps

316 SS



Size (L)	W (mm)	D (mm)	S (mm)	Breaking Load (kg)*
50mm	25	8	10	220
70mm	31	12	11	500
100mm	50	16	15	900



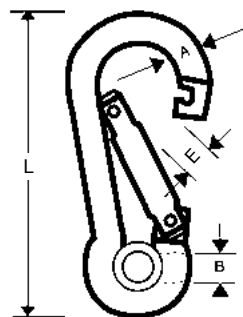
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Spring Hooks with Eyelet

316 SS



Size (A)	L (mm)	E (mm)	B (mm)	Breaking Load (kg)*
4mm	40	5.6	6.5	145
5mm	50	8	7.0	181
6mm	60	9	9.0	254
7mm	70	9	8.0	362
8mm	80	9	12.0	453
10mm	100	12	16.0	725
11mm	120	16	18.0	907
13mm	160	27	20.0	1207



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

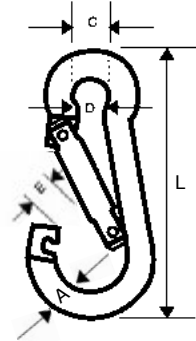
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Spring Hooks

316 SS



Size (A)	L (mm)	C (mm)	D (mm)	E (mm)	Breaking Load (kg)*
5mm	50	8	6	8	181
6mm	60	10	8	9	254
7mm	70	9.5	8	9	362
8mm	80	13	8	9	453
10mm	100	17	10	12	725
12mm	140	22	16	23	1088



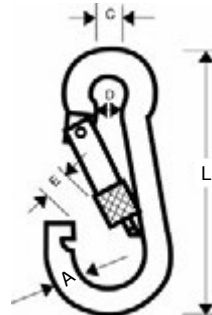
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Spring Hooks with Nut

316 SS



Size (A)	L (mm)	C (mm)	D (mm)	E (mm)	Breaking Load (kg)*
6mm	60	8	7	7	254
8mm	80	12	9	9	453
10mm	100	16	13	12	725
12mm	140	21	13	20	1088



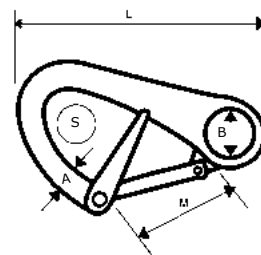
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Double Locking Spring Hooks

316 SS



Size (A)	S (mm)	B (mm)	M (mm)	L (mm)	Breaking Load (kg)*
10mm	22	20	19	109	1550



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

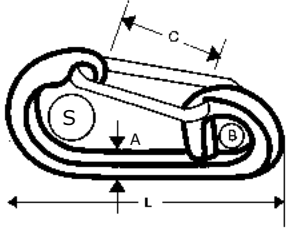
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Spring Snaps with Eyelet



316 SS

Size (A)	B (mm)	S (mm)	L (mm)	C (mm)	Breaking Load (kg)*
6mm	10	10	60	10	830
8mm	12	13	80	13	1600
10mm	15	15	100	15	2500
12mm	19	21	120	21	3300



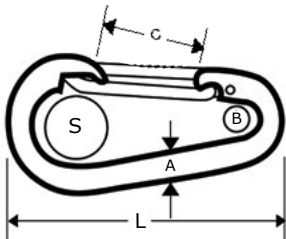
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Spring Snaps without Eyelet



316 SS

Size (A)	B (mm)	S (mm)	L (mm)	C (mm)	Breaking Load (kg)*
6mm	7	10	60	10	830
8mm	11	13	80	13	1600
10mm	13	15	100	15	2500
12mm	16	21	120	21	3300



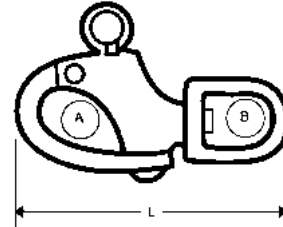
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Swivel Snap Shackles



316 SS

Code	Size (A)	B (mm)	L (mm)	Breaking Load (kg)*
S2482-1	12mm	12	67	1100
S2482-2	16mm	16	87	2000
S2482-3	22mm	22	126	3500



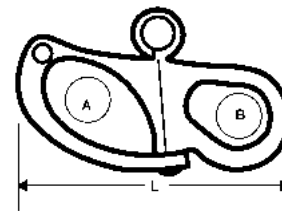
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Fixed Snap Shackles



316 SS

Code	Size (A)	B (mm)	L (mm)	Breaking Load (kg)*
S2483-0	9mm	6.5	34	400
S2483-1	12mm	16	52	1100
S2483-2	19mm	21	66	2000
S2483-3	25mm	21	96	3500



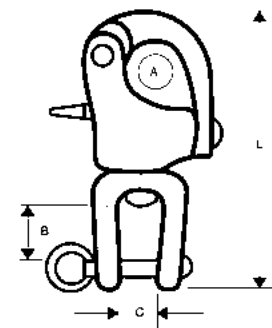
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Swivel Snap Shackles with Clevis Pin



316 SS

Code	Size (A)	B (mm)	C (mm)	L (mm)	Breaking Load (kg)*
S2478-1	12mm	12	13	70	1100
S2478-2	16mm	13	13	87	2000
S2478-3	22mm	16	22	128	3500



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

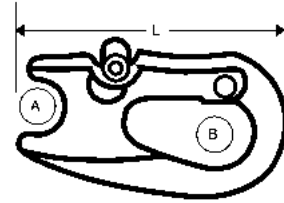
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Rope Sheet Snap Shackles (J-Lock)



316 SS

Type	Size (L)	A (mm)	B (mm)	Breaking Load (kg)*
S2464	52mm	12	10	830
S2466	66mm	15	14	1850
S2468	96mm	25	18	3500



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

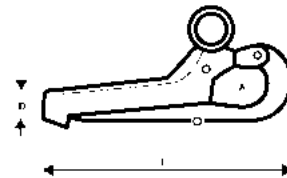
Pelican Hooks

Fasten to a swage stud



316 SS

Size (D)	L (mm)	A (mm)	Breaking Load (kg)*
M6	75	12.7	1200
M8	100	15.8	1500



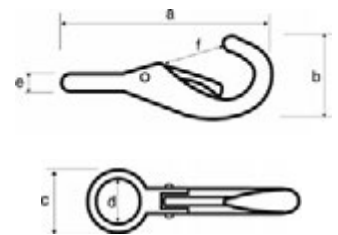
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Rigid Eye Snaps



316 SS

Size	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	Breaking Load (kg)*
0	53.5	23	18	10	4	10	160
1	73	31	24	16	4	15	200
2	81.5	39	28	19	5	17	300
3	98	48	33	19	7	24	450

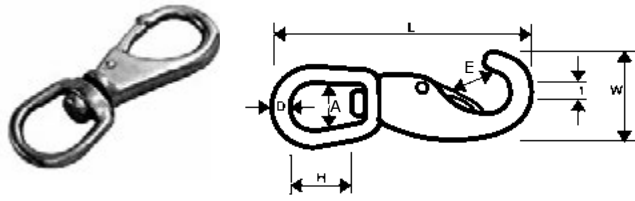


*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Swivel Eye Snaps

316 SS

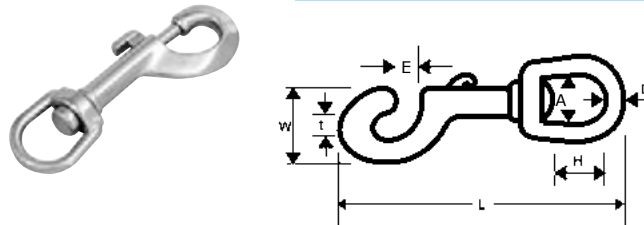


Size (A)	D (mm)	L (mm)	W (mm)	E (mm)	H (mm)	t (mm)	Breaking Load (kg)*
1/2	4	69	22	8	12	5	200
5/8	5	85	30	11	18	6	170
3/4	6	99	35	12	19	7	250
7/8	7	117.5	42	13	20	9	340

* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Swivel Eye Bolts

316 SS



Size (A)	D (mm)	L (mm)	W (mm)	E (mm)	H (mm)	t (mm)	Breaking Load (kg)*
1/2	4	75	21	7.0	11	5	250
5/8	4	85	24	8	14	7.5	650
3/4	5	91	24	8	18	8	650
1-1/4	6	120	34	13.7	28	10	550

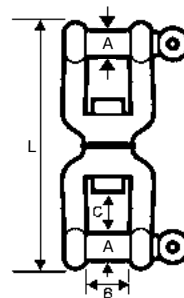
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Jaw/Jaw Swivels

316 SS



Size (A)	L (mm)	B (mm)	C (mm)	Breaking Load (kg)*
6mm	66	12	11	1200
8mm	94	16	16	1900
10mm	118	20	22	3500
13mm	152	26	28	5000
16mm	188	32	37	8500

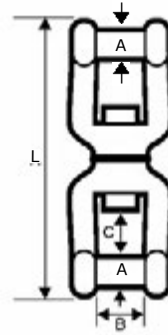


* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Jaw/Jaw Swivel Socket Drive

316 SS

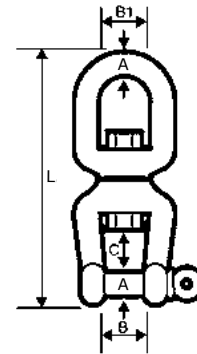


Size (A)	L (mm)	B (mm)	C (mm)	Breaking Load (kg)*
8mm	94	17	16	1900

*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Jaw/Eye Swivels

316 SS

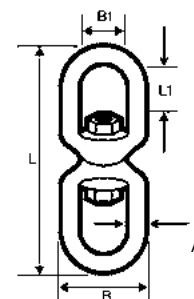


Size (A)	L (mm)	B (mm)	B1 (mm)	C (mm)	Breaking Load (kg)*
6mm	66	12	15	11	1200
8mm	94	16	20	16	1900
10mm	118	20	24	22	3500
13mm	152	26	32	28	5000
16mm	188	32	39	37	8500

*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Eye/Eye Swivels

316 SS



Size (A)	L (mm)	L1 (mm)	B (mm)	B1 (mm)	Breaking Load (kg)*
5mm	59	13	23	13	650
6mm	66	15	26	14.7	1200
8mm	94	22	35	20.5	1900
10mm	118	27	44	24	3500
13mm	152	35	57	31	5000
16mm	188	45	71	38	8500
19mm	223	52	79	42	10000

*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

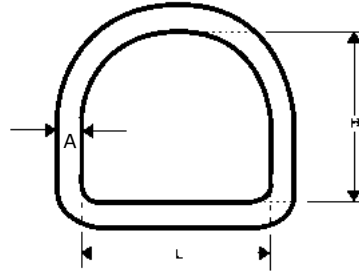
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Dee Rings

304 SS



Size A X L (mm)	H (mm)	Breaking Load (kg) ⁺
4 X 25	22	800
5 X 25	22	1000
5 X 30	25	1000
5 X 35	30	1000
6 X 30	25	1800
6 X 40	34	1800
6 X 50	43	1800
8 X 50	43	2800



⁺Breaking/Deformation/Standard Safety Factor Notice:

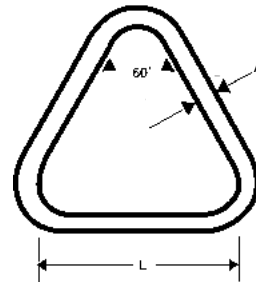
Breaking load is described as the load point where welding fails. Deformation load is however lower and is dependent on the diameter of rod and circumference of ring. A general rule is to assume deformation load at around 1/5 (20%) of breaking load. The Standard Safety Factor should be reasonably lower than the deformation load. Standard Safety Factor is to be determined at the sole discretion of the customer.

Triangle Rings

304 SS



Size A X L (mm)	Breaking Load (kg) ⁺
M5 X 40	1300
M6 X 40	2000
M6 X 50	2000
M8 X 50	2800



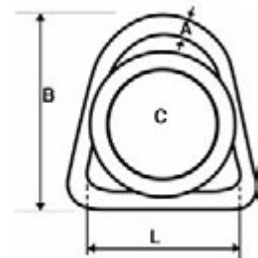
⁺For this product see the Breaking/Deformation/Standard Safety Factor Notice above next to Dee Rings (S3250).

Dee Rings with Thimble

304 SS



Size (A)	L (mm)	B (mm)	C (mm)	Breaking Load (kg) ⁺
6mm	30	43	23.5	1800
8mm	50	58	35.0	2800



⁺For this product see the Breaking/Deformation/Standard Safety Factor Notice above next to Dee Rings (S3250).

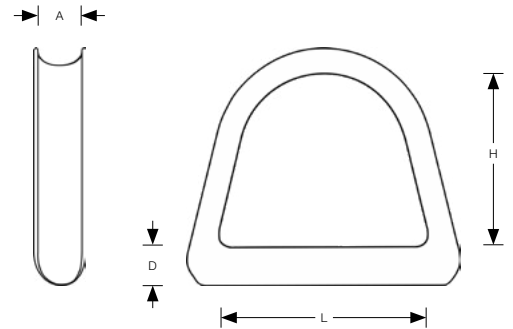
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Bar D Thimble

316 SS



Size A x D (mm)	L (mm)	H (mm)
6 x 7.6 mm	34	27
8 x 9.6 mm	51	42



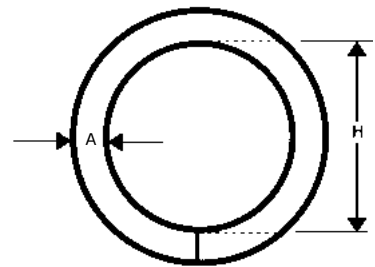
Round Rings

304 SS



Size A X H (mm)	Breaking Load (kg) [†]
3 X 10	650
3 X 15	650
3 X 20	650
3 X 25	650
4 X 20	1000
4 X 25	1000
4 X 30	1000
5 X 20	2000
5 X 25	2000
5 X 30	2000
5 X 35	2000
5 X 40	2000
5 X 50	2000
5 X 65	2000

Size A X H (mm)	Breaking Load (kg) [†]
6 X 25	2700
6 X 30	2700
6 X 35	2700
6 X 40	2700
6 X 50	2700
6 X 60	2700
6 X 80	2700
8 X 40	5000
8 X 50	5000
8 X 60	5000
8 x 75	5000
8 X 80	5000
8 X 100	5000
10 X 50	8500



[†]For this product see the Breaking/ Deformation/Standard Safety Factor Notice next to Dee Rings (S3250) on page 251

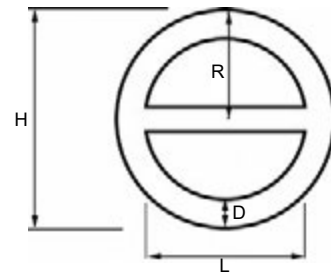
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Clew Ring with Bar

316 SS



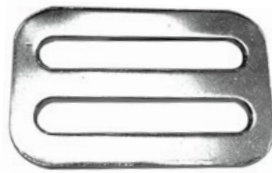
Size (D)	L (mm)	H (mm)	R (mm)	Breaking Load (kg) ⁺
8mm	50	67	22	5000
10mm	70	91	27	8500
12mm	80	104	34	10000



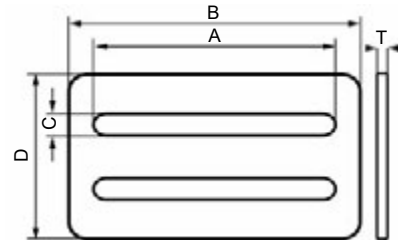
⁺For this product see the Breaking/Deformation/Standard Safety Factor Notice next to Dee Rings (S3250) on page 251

Slides

304 SS



Size (A)	B (mm)	C (mm)	D (mm)	T (mm)	Breaking Load (kg) [*]
40mm	50	6.3	32	2.0	900
50mm	63.8	6.35	32	3.0	900



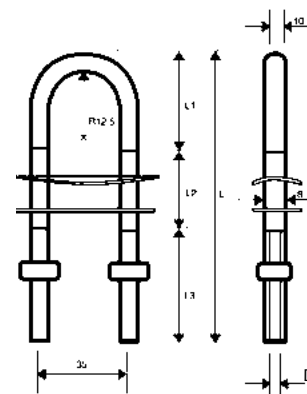
^{*}Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Shouldered U Bolts with 2 Keepers and Nuts

304 SS



Type	Size D x L (mm)	L1 (mm)	L2 (mm)	L3 (mm)
S547	M8 X 115	39	29	47
S548	M8 X 140	39	53	47
S549	M8 X 165	39	79	47



NB: for more U-Bolts, see Pipe & Tube U Bolts on p.197-198

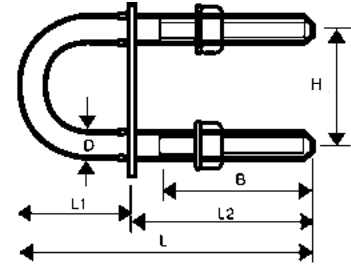
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

U Bolts with Keepers and Nut



304 SS

Size D x L (mm)	H (mm)	B (mm)	L1 (mm)	L2 (mm)
M5 x 80	35	40	35	45
M6 x 90	35	40	35	45
M8 x 80	35	40	35	45
M8 x 100	35	50	40	60
M10 x 90	50	40	40	50
M10 x 130	50	55	55	75
M12 x 150	60	65	65	85



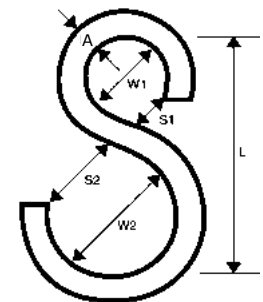
NB: for more U-Bolts, see Pipe & Tube U Bolts on p.197-198

S Hooks

304 SS



Size (A)	L (mm)	W1 (mm)	W2 (mm)	S1 (mm)	S2 (mm)	Breaking Load (kg)*
4mm	36	12.0	19.0	6.0	12.0	50
5mm	43	14.0	21.0	6.0	12.0	120
6mm	50	15.0	25.0	7.0	15.0	140
8mm	67	20.0	33.0	9.0	20.0	250



• See also Wire Stand Offs p. 237

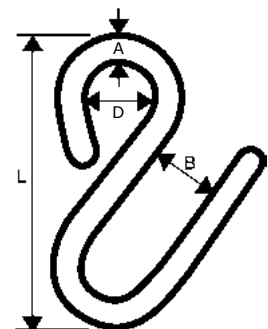
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

S Hooks - One End Closed



304 SS

Size (A)	D (mm)	B (mm)	L (mm)	Breaking Load (kg)*
4mm	8	7.5	40	60
5mm	9	8.5	50	150
6mm	12	11.0	60	200
8mm	16	15.0	75	400
10mm	18	17.0	85	800



*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

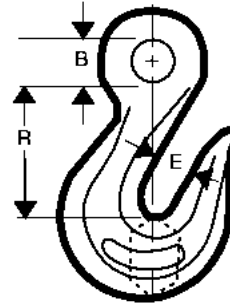
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Eye Grab Hooks

316 SS



Size (of chain)	B (mm)	E (mm)	R (mm)	Breaking Load (kg)*
6mm	13	8.7	50	2900
8mm	14.5	11.1	57	3700
10mm	17	12.7	65	5800
12mm	22.5	16.6	86	7000



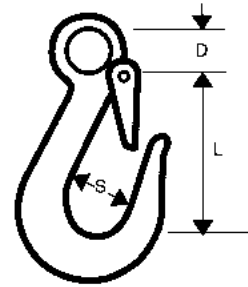
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Eye Slip Hooks with Safety Latch

316 SS



Size (of chain)	D (mm)	S (mm)	L (mm)	Breaking Load (kg)*
6mm	13	14	50	1500
8mm	16	17	57	2900
10mm	18	19	65	3200



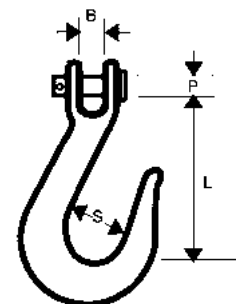
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Clevis Slip Hook

316 SS



Size (of chain)	B (mm)	S (mm)	P (mm)	L (mm)	Breaking Load (kg)*
6mm	11	22	9	65	2000
8mm	13	24	11	68	3100
10mm	16	29	12	82	4000

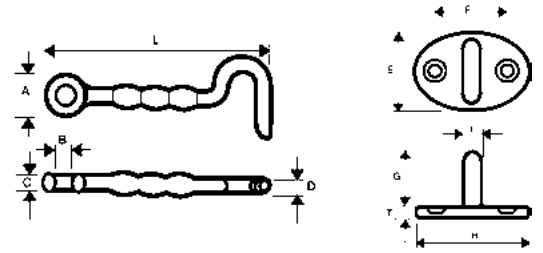


*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Cabin Hook - Polished

316 SS



Size L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	T (mm)
3"	18	8	8	7	26	24	19	38	5	3
4"	18	8	8	7	26	24	19	38	5	3

Cover Latch - Polished

316 SS



Length 76mm	
-------------	--

NB: For Toggle Latches - see p. 201

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Cabin & Deck Hardware

304 SS

316 SS

Type	L (mm)	W (mm)	Thickness (mm)	
<p>316 SS</p> <p>Swivel Hasp Polished</p>	76	26	3	
<p>304 SS</p> <p>Hasp Staple</p>	90 or 115	35	1.5	
<p>316 SS</p> <p>Barrel Bolt</p>	56	36	3	

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Cabin & Deck Hardware (cont.)

304 SS

316 SS



Type	L (mm)	W (mm)	W1 (mm)	d (mm)	D (mm)	H (mm)	A (mm)	
<p>304 SS</p> <p>Coat Hook</p>	40	13	12	3	17	27	5	
<p>316 SS</p> <p>Awning Hook</p>	21	27	16	3.7	7.6	19	7	
<p>316 SS</p> <p>Fender Hook</p>	18	30	18	4.6	11	22	5	
<p>316 SS</p> <p>Spring Fender Hook</p>	37 40	34 34	22 22	4.6 4.3	10 12	24 34	5 10	
<p>304 SS</p> <p>Door Holder</p>	33	21	-	-	-	-	-	

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Lift Rings & Handles

304 SS

316 SS



Type	Size (mm)	L (mm)	W (mm)	T (mm)	
<p>304 SS</p> <p>Spring Lift Ring Electro-polished</p>	<p>45 x 38</p> <p>65 x 55</p>	<p>45</p> <p>65</p>	<p>38</p> <p>55</p>	<p>8</p> <p>10</p>	<p>T = Thickness</p>
<p>304 SS</p> <p>Spring Lift Handle Electro-polished</p>	<p>75 x 58</p>	<p>58</p>	<p>75</p>	<p>9</p>	<p>T = Thickness</p>
<p>316 SS</p> <p>Cast Lift Ring</p>	<p>48 x 39</p>	<p>48</p>	<p>39</p>	<p>12</p>	<p>T = Thickness</p>
<p>316 SS</p> <p>Cast Lift Handle</p>	<p>77 x 58</p>	<p>58</p>	<p>77</p>	<p>10</p>	<p>T = Thickness</p>



See also Marine Hinges on p.152-156

• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

Round Cabinet Latch 316 Body; 304 Components



304 SS

316 SS

Type	
Round Cabinet Latch	
Round Cabinet Latch – Lockable	

Drop T Cabinet Latch Locking & Non-Locking

304 SS

Type	
Drop T Cabinet Latch – Lockable	<ul style="list-style-type: none"> • Zinc alloy chrome plated handle • Zinc alloy lock cylinder • Nickel plated steel Keys • 304 SS Body
Drop T Cabinet Latch	<ul style="list-style-type: none"> • Zinc alloy chrome plated handle • Zinc alloy lock cylinder • Nickel plated steel Keys • 304 SS Body

• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.

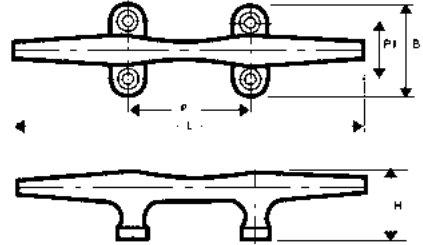
Hollow Base Cleats

316 SS



Hand polished with four holes

Size (L) (inch)	L (mm)	B (mm)	P (mm)	P1 (mm)	Hole (mm)	H (mm)
4	100	35	38.0	23.0	4.5	24
5	125	42	48.0	25.0	5.5	28
6	150	45	56.0	27.5	6.5	32
8	200	54	70.7	34.0	6.5	40
10	255	68	91.5	47.2	8.0	49
12	300	71	94.5	47.2	8.0	57



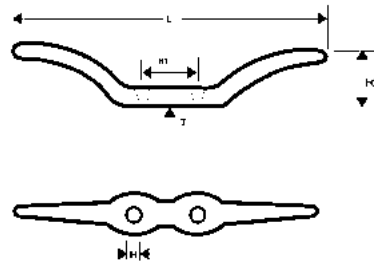
Rope Cleats

316 SS



Hand polished

Size (L) (inch)	L (mm)	H (mm)	H1 (mm)	H2 (mm)	T (mm)
2-1/2	68	4.5	10.5	12	4
4-1/2	114	5.8	20.5	20	6
6	150	6.7	24.4	26	8

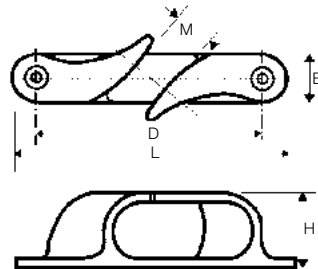


Skene Type Fairleads Hand Polished

316 SS



Size (L) (inch)	L (mm)	B (mm)	D (mm)	M (mm)	H (mm)
4-1/2	114	23	95.0	15.0	25.0
6	150	34	117.2	19.0	30.0

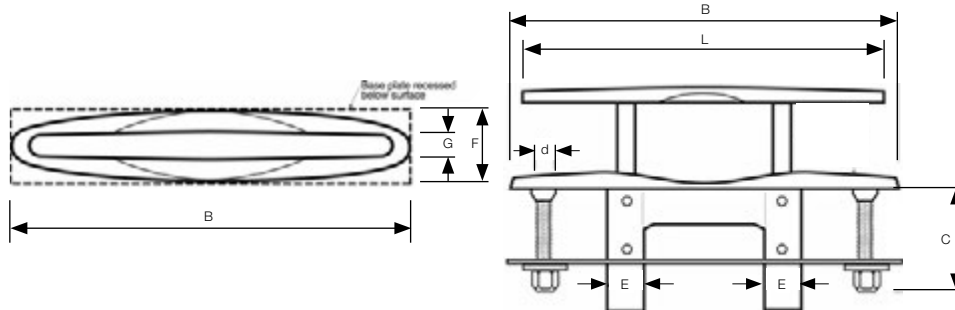


NB: sold as a pair – left & right.

• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co. Ltd.

Pull Up Cleats

316 SS

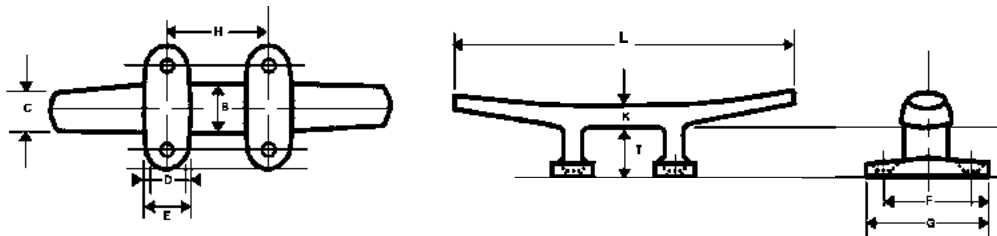


Hand polished with four holes

Size (L) (inch)	L (mm)	B (mm)	C (mm)	d (mm)	E (mm)	F (mm)	G (mm)	Thread
4-1/2	121	122	53	12.0	19	30	13	5/16-18UNC
6	160	159	61	14.5	20	38	13	3/8-16UNC
8	214	214	82	19.0	25	51	17	3/8-16UNC

Low Flat Cleats – Hand Polished

316 SS



Size (L) (inch)	L (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	K (mm)	T (mm)	H (mm)
4	100	14	9	11	14	25	36	7	14	30
5	125	15	11	14	16	30	46	7	18	40
6	150	20	12	16	18	35	53	8	20	45
8	200	23	15	16	18	50	68	9	24	55
10	250	25	16	21	24	60	83.5	10	30	70
12	300	28	18	23	26	65	75	12	34	75

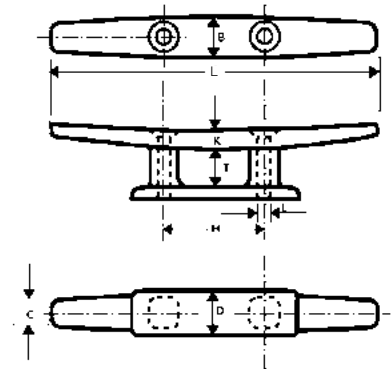
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Low Flat Cleats 2 Holes – Hand Polished



316 SS

Size (L) (inch)	L (mm)	B (mm)	C (mm)	D (mm)	K (mm)	T (mm)	L (mm)
4	100	14	8	11	7	14	6
5	125	15	9	14	7	18	6
6	150	20	12	16	8	20	6
8	200	23	15	16	9	24	8
10	250	25	16	21	10	30	8

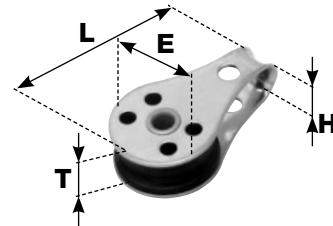


Pulley Block (type G)



304 SS

Size	E (mm)	H (mm)	L (mm)	T (mm)	Breaking Load (kg)*
25mm	25	10	44	6.5	350



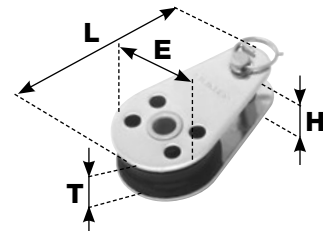
*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Pulley Block (type K)



304 SS

Size	E (mm)	H (mm)	L (mm)	T (mm)	Breaking Load (kg)*
25mm	25	10	45	6.5	350



*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

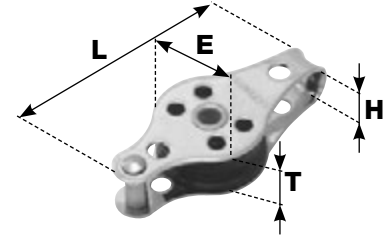
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Pulley Block (type Q)



304 SS

Size	E (mm)	H (mm)	L (mm)	T (mm)	Breaking Load (kg)*
25mm	25	10	58	6.5	450



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

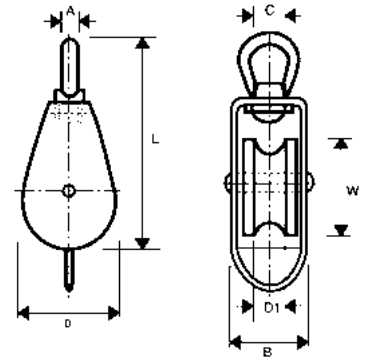
Mame Blocks Single Wheel



304 SS

Single wheel with welded ring

Size (W)	D (mm)	B (mm)	C (mm)	A (mm)	D1 (mm)	L (mm)	Breaking Load (kg)*
25mm	30	24	14	6	11.5	104	1500
32mm	36	24	14	6	12.5	117	1800
50mm	54	28	20	8	14.5	149	3500



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

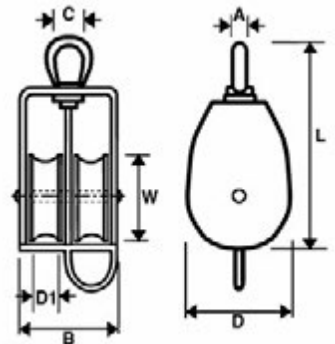
Mame Blocks Double Wheels



304 SS

Double wheels with welded ring.

Size (W)	D (mm)	B (mm)	C (mm)	A (mm)	D1 (mm)	L (mm)	Breaking Load (kg)*
25mm	30	44	14	6	11.5	100	1500
32mm	36	44	14	6	12.5	113	1500
50mm	54	52	20	8	14.5	148	2500



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

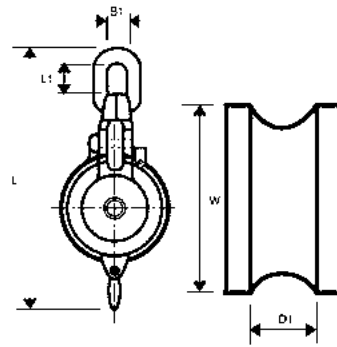
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Taruma Blocks

316 SS



Size (W) (mm)	D1 (mm)	B1 (mm)	L1 (mm)	L (mm)	Breaking Load (kg)*
75	16	20	40	252	4000
100	16	24	48	313	6000
125	18	27	54	361	8000



* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

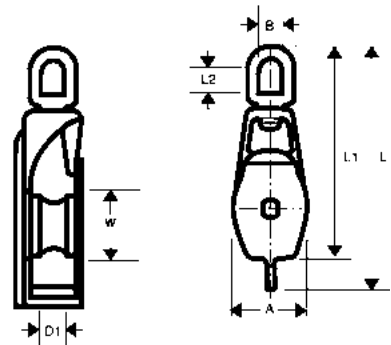
Seine Blocks with Safety Latch

304 SS



Single wheel with welded ring

Size (W)	D1 (mm)	A (mm)	B (mm)	L2 (mm)	L1 (mm)	L (mm)	Breaking Load (kg)*
50	14	52	22	30	151	171	1400
75	16	78	25	39	211	231	3500
100	19	104	31	45	274	294	5000



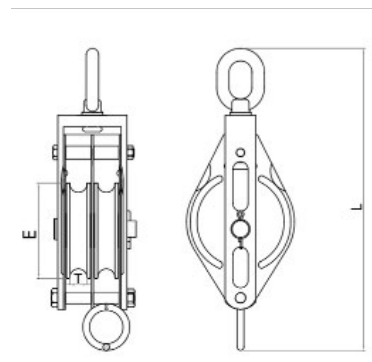
* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Double Heavy Block

304 SS



Size (W)	T (mm)	L (mm)	E (mm)	Breaking Load (kg)*
75MM	16	260	83	3500
100MM	19	325	113	5500
125MM	20	358	140	8500







* Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Rod Holders (polished)

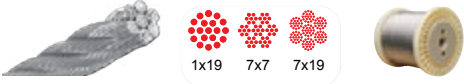





304 SS



Description	Accessories
Removable Rod Holder	
Flush Mounted Rod Holder	
Adjustable Rod Holder	
Rail Mount Rod Holder	

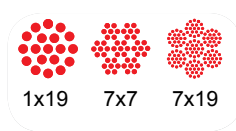
- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co. Ltd.

Wire Rope, Chain, and Chain Fittings




<p>Wire Rope 316</p>		<p>269</p>
<p>Chain</p>		<p>271</p>
<p>Quick Link</p>		<p>271</p>
<p>Connecting Link</p>		<p>271</p>
<p>C Ring</p>		<p>272</p>
<p>Wire Rope Thimbles</p>		<p>272</p>

Wire Rope 316

316 SS



BENEFITS	High quality wire rope. Wide range of sizes. Economical pricing.
MATERIAL	316 Stainless Steel
SIZE	1mm - 10mm
TYPES	1x19 (rigid); 7x7 (semi-flexible); 7x19 (flexible).
APPLICATION	Balustrades, shade sails, and architectural rigging. Material Test Certs available on request with order.
NOTES	Wire breaking loads are correct as of print date June 2019.



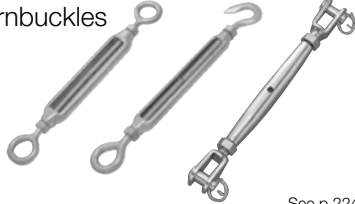









	Size	Breaking Load (kg)*	Characteristics
 1x19	2.0 mm	336	<ul style="list-style-type: none"> Rigid, non-flexible, low stretch - ideal in straight lines. Higher comparative breaking strain. Fewer crevices, traps less dirt, therefore less likely to 'tea-stain'. Commonly used with swage fittings. Easiest to clean.
	2.4 mm	525	
	3.2 mm	836	
	4.0 mm	1,346	
	5.0 mm	2,100	
	6.0 mm	3,028	
	8.0 mm	5,382	
 7x7	1.0 mm	57	<ul style="list-style-type: none"> Semi-flexible. Low-medium stretch. Medium breaking strain. Can be terminated with crimps, or can also be swaged.
	1.5 mm	101	
	2.0 mm	229	
	2.4 mm	358	
 7x19	2.0 mm	212	<ul style="list-style-type: none"> Very flexible. Medium stretch. Medium-low breaking strain. Can be terminated with crimps, or can also be swaged. More crevices so higher risk of tea-staining. *Breaking Load for Anzor Code: MFW02.50719 + Available with nylon coating.
	2.4 mm	332*	
	3.2 mm ⁺	836	
	4.0 mm ⁺	850	
	5.0 mm	1,449	
	6.0 mm	2,086	
	8.0 mm	3,402	
	10.0 mm	5,795	

***Standard Safety Factor of wire rope, and fittings** – to determine the standard safety factor of a wire rope or cable, or fittings, the nominal strength or Breaking Load (BL) must be reduced by a safety factor. The BL of a wire rope should be considered the straight line pull which will actually break the wire. The nominal strength or BL of a wire rope should never be used as its working load.

The safety factor is the ratio of strength of the rope or strand, or fitting to the Working Load Limit required. It is impossible to establish a uniform safety factor as it will depend upon the type of work performed, government regulations, loads applied, speed of operation, length of wire rope used, etc. As a guideline, designers/installers commonly use a the standard safety factor of 25% of Breaking Load, i.e. a 4:1 safety factor.

It is the customer's responsibility to ensure that an appropriate safety factor has been applied to the BL to calculate the Working Load Limit of the wire rope or fitting being specified or ordered. We suggest that you engage a consulting engineer to assist you.

Wire Rigging

<p>Spring Hooks</p>  <p>See p.245</p>	<p>Wire Thimbles</p>  <p>See p.232</p>	<p>Turnbuckles</p>  <p>See p.224</p>
<p>Shackles</p>  <p>See p.217</p>	<p>Crimps</p>  <p>Copper Nickel Plated</p> <p>Crimps for wire rope. See p.232</p>	<p>Wire Rope Grips</p>  <p>See p.233</p>
<p>Terminating with Wire Rope Grips</p>  <p>(Example only. More or less Wire Rope Grips may be required depending on load and other factors)</p>	<p>Terminating with a Swage – Can Hex Swage (shown) or Roll Swage</p> 	<p>Terminating with a Crimp</p> 
<p>Crimping Pliers</p>  <p>See p.290</p>	<p>Hex Swage Tool</p>  <p>See p.290</p>	<p>Wire Cutters</p>  <p>See p.291</p>

Wire Stand Offs

316 SS	
M10 x 20	316 SS
M10 x 20	Eye Screw
M10 x 100	Eye Bolt
M10 x 100	Eye Screw
M10 x 100	Eye Bolt



Wire Cross Over Clamp on p. 233



Eye Bolt

Eye Screw



Chain

316 SS



Size		Breaking Load (kg)*
Link Thickness (mm)	Internal Link Size (mm)	
2.0	12	192
2.0	22	180
3.0	16	346
4.0	16	693
5.0	18	1200
6.0	18	1731
6.0	25	1557

Size		Breaking Load (kg)*
Link Thickness (mm)	Internal Link Size (mm)	
8.0	24	3075
10.0	28	4806

*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

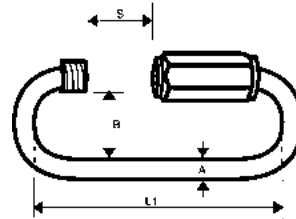
- This chain is not certified for lifting purposes.
- Stainless steel Lifting Chain available on request.

Quick Link

316 SS



Size (A)	L1 (mm)	B (mm)	S (mm)	Breaking Load (kg)*
4.0mm	32	11	5.5	1400
5.0mm	39	12.5	6.5	2250
6.0mm	45	14	7.5	3200
8.0mm	58	17	10	5100
10.0mm	69	20	12.0	8500
12.0mm	81	23	15	11000



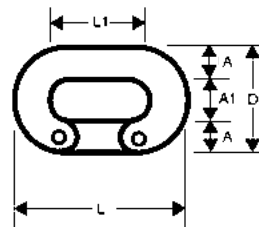
*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Connecting Link

316 SS



Size (A)	A1 (mm)	D (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
5mm	8.5	16.0	28.0	17.0	550
6mm	10.5	25.0	35.0	20.8	800
8mm	12	29.0	42.0	24.0	1450
10mm	15	35.0	53.0	28.3	1900
12mm	18.5	42.0	61.0	36.8	3200



*Standard Safety Factor guide ≈ 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

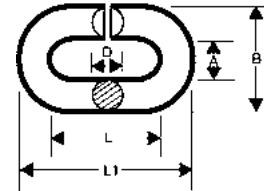
• MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
 • Information used exclusively under permission of Sinox Marine Co., Ltd (excluding chain).

C Ring

316 SS



Size (D)	A (mm)	B (mm)	L (mm)	L1 (mm)	Breaking Load (kg)*
6mm	9	24	24	36	300
8mm	12	30	32	48	550
10mm	15	37	40	60	850
13mm	19.5	48	52	79	1400



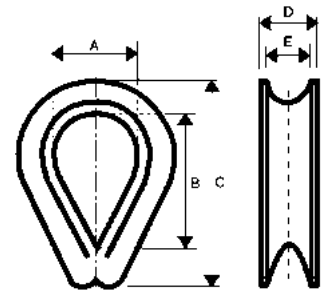
*Standard Safety Factor guide \approx 25% of Breaking Load. It is the user's responsibility to determine the Standard Safety Factor. See page 269.

Wire Rope Thimbles

316 SS


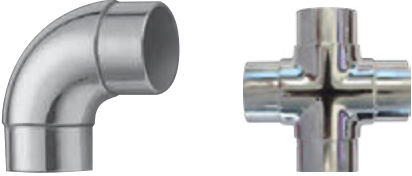



Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
M2/M2.5	10.0	12	25	5.0	3
M3.2	12.5	14	28.5	6.0	4
M4	13.0	16	33	7.0	5
M5	15.5	21	36.5	8.0	6
M6	17.0	26	40	9.5	7
M8	22.5	35	51	12.0	9
M10	26.0	42	59.5	14.0	11
M12	31.0	48	68	17.5	14
M16	37.5	63	83	21.0	17
M20	45.0	73	104	26.0	22
M25	54.0	92	125	34.0	26



- MEASUREMENTS MAY VARY SLIGHTLY. IF THEY ARE CRITICAL, PLEASE CHECK THEM.
- Information used exclusively under permission of Sinox Marine Co., Ltd.

Architectural Hardware & Fittings

Wire Balustrading Systems		275-278
Handrail Tube Connectors		279
Handrail Support Fittings		280

Wire Balustrading Systems

<p>Balustrading Eyelet – for Metal*</p> 	 Low profile and unobtrusive eyelet  2.5mm 7/7 316 Stainless Steel Wire  Turnbuckle
<p>Balustrading Eyelet – for Timber*</p> 	 Low profile and unobtrusive timber eyelet  2.5mm 7/7 316 Stainless Steel Wire  urnbuckle

Eyelet for Metal Frame Balustrades



316 SS

Eyelet for Metal (AHE)

Eyelet for Metal – suit M5 Jaw Turnbuckle (AHEJ) for ends

Eyelet for Timber Frame Balustrades



316 SS

Eyelet for Timber (AHEW)

Eyelet for Timber – suit M5 Jaw Turnbuckle (AHEWJ) for ends

The Balustrading Eyelet



DESCRIPTION

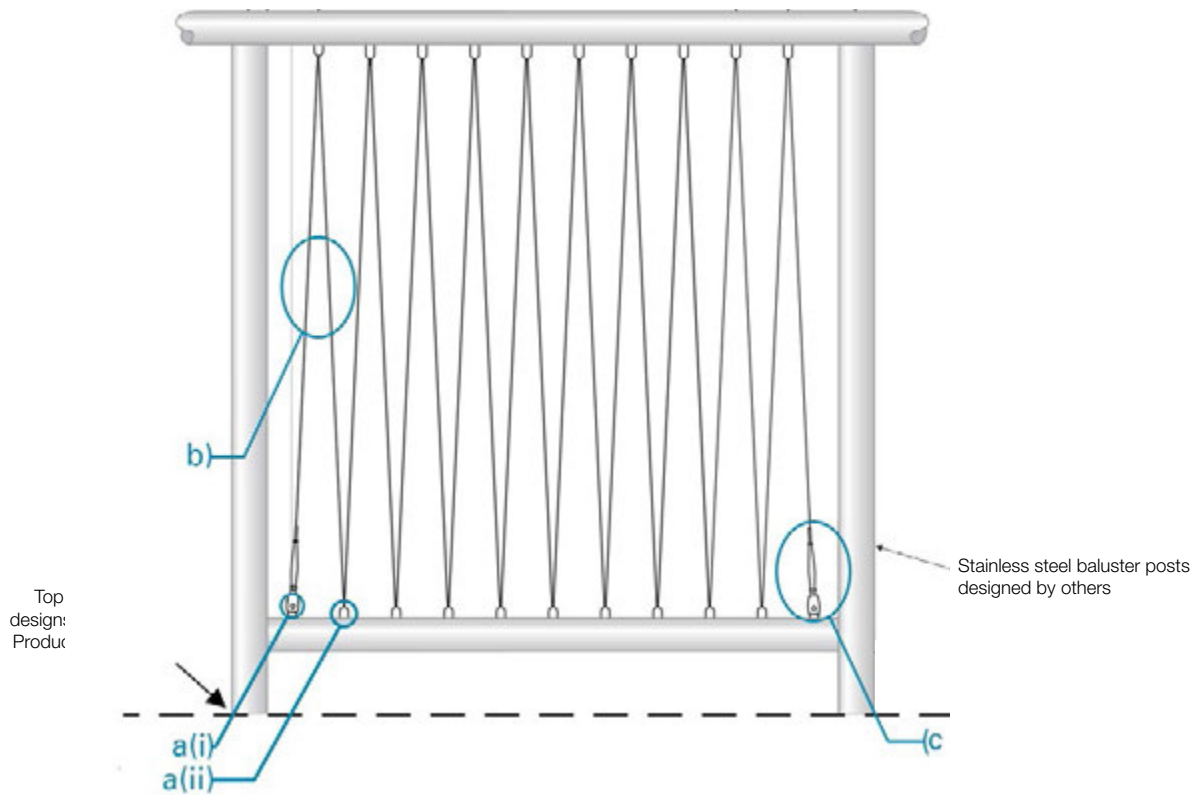
The balustrading eyelet is clean, easy to install and low-profile.

THE EYELET'S ADVANTAGES

- Unobtrusive and low profile, minimising obstruction to views.
- From interior staircases to outdoor decking, the eyelet suits both **stainless** and **timber** balustrades and handrails.
- Screwed, not welded, which eliminates the risk of the weld spots rusting.
- Made from **316 Stainless Steel**, which is then passivated for added corrosion resistance.
- The hole in the eyelet is chamfered, greatly reducing the chance of chaffing and/or the wire spragging when it is pulled through the holes.
- M6 gun tap used for installation



Eyelet – Vertical Wire Infill System within a metal frame



It is the customer's responsibility to design and install the balustrade or structure that these products are used within a way that complies with relevant regulations, standards and laws including the building code and legal requirements from building authorities and local authorities, councils and the government.

Components for the Wire Infill

a) Anchoring the wire to the tube with the Anzor Eyelet

The eyelets are screwed into the tube so that they don't need to be welded, leaving a clean finish.

There are two types:

- (i) Eyelet used to fit M5 Jaw Turnbuckle for terminating wire
- (ii) Standard M6 Eyelet

(use a M6 x 1mm pitch spiral point or gun tap to drill the holes for the eyelets.)



b) Wire

When the wire is swaged or crimped (NB: Producer Statement does not apply to crimped wire), use **2.5mm 7x7 316 stainless steel wire rope**.



c) Turnbuckles

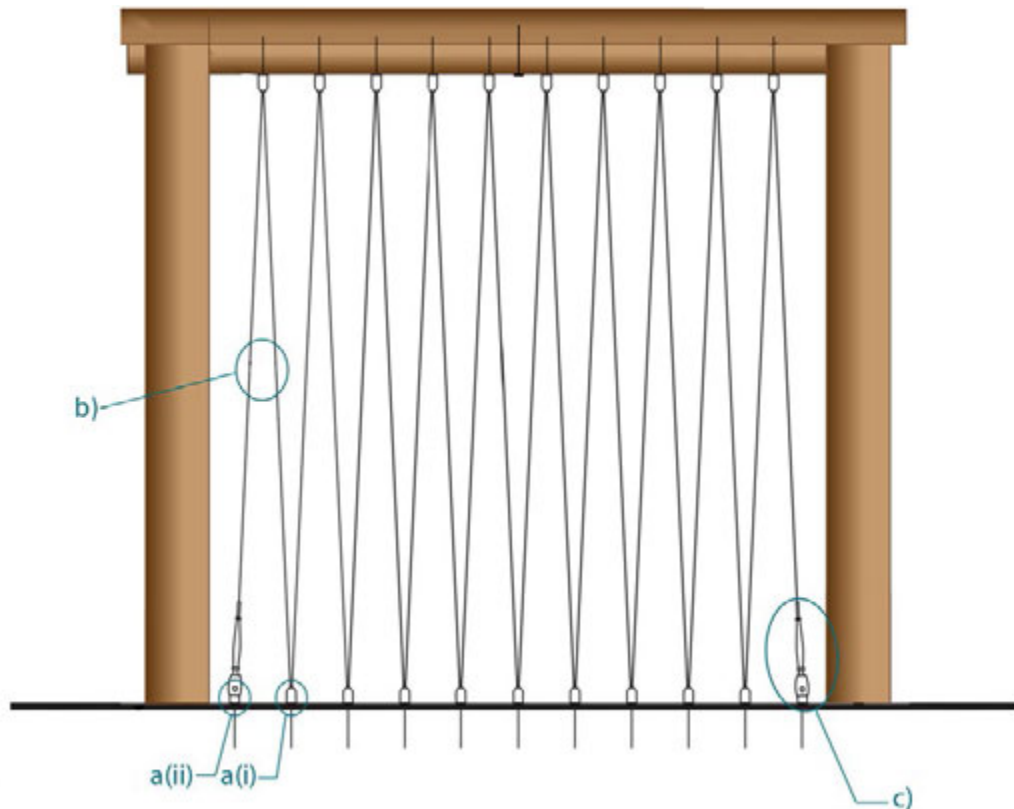
When the wire is **swaged**, use an M5 Jaw/Swage Pipe Turnbuckle standard.



When the wire is **crimped** (NB: Producer Statement does not apply to crimped wire) use an M5 Jaw/Jaw Pipe Turnbuckle

Use one at each end of the bay for improved tensioning - this ensures that the wires are taut. Wire to be tensioned to the specifications noted on the Producer Statement.

Eyelet – Vertical Wire Infill System within a timber frame



It is the customer's responsibility to design and install the balustrade or structure that these products are used within a way that complies with relevant regulations, standards and laws including the building code and legal requirements from building authorities and local authorities, councils and the government.

Components for the Wire Infill

a) Anchoring the wire to the tube with the Anzor Eyelet

The eyelets are screwed into the timber frame.

There are two types:

- (i) Timber Eyelet 14g (product code: AHEW).
- (ii) Eyelet used to fit M5 Jaw Turnbuckle for terminating wire (product code: AHEWJ).



b) Wire

When the wire is swaged or crimped (NB: Producer Statement does not apply to crimped wire), use **2.5mm 7x7 316 stainless steel wire rope**.



c) Jaw/Swage Turnbuckles

When the wire is **swaged**, use an M5 Jaw/Swage Pipe Turnbuckle standard.



When the wire is **crimped** (NB: Producer Statement does not apply to crimped wire) use an M5 Jaw/Jaw Pipe Turnbuckle



Use one at each end of the bay for improved tensioning - this ensures that the wires are taut. Wire to be tensioned to the specifications noted on the Producer Statement.

Handrail Tube Connectors

316 SS

FINISH: Polished

We Have an extensive range of 316 stainless steel tube fittings to suit your internal and external handrail needs.
















<p>90 DEGREE BEND 2" TUBE</p>  <p>Finish - Polished Product code: AHRB90051</p>	<p>90 DEGREE ELBOW 2" TUBE</p>  <p>Finish - Polished Product code: AHRE051</p>	<p>135 DEGREE BEND 2" TUBE</p>  <p>Finish - Polished Product code: AHRB135</p>
<p>3-WAY TEE 2" TUBE</p>  <p>Finish - Polished Product code: AHRT3W051</p>	<p>TEE 2" TUBE</p>  <p>Finish - Polished Product code: AHRT051</p>	<p>CROSS - Polished 2" TUBE</p>  <p>Finish - Polished Product code: AHRC051</p>
<p>TUBE JOINER - Polished 1-1/2" & 2" TUBE</p>  <p>1-1/2" TUBE: AHRTJ038 2" TUBE: AHRTJ051</p>	<p>TUBE BASE PLATE - Polished 1-1/2" & 2" TUBE</p>  <p>1-1/2" TUBE: AHRTBP038 2" TUBE: AHRTBP051</p>	<p>OVAL BASE PLATE - Polished 1-1/2" & 2" TUBE</p>  <p>1-1/2" TUBE: AHRTBP038O 2" TUBE: AHRTBP051O</p>
<p>CROSS MOUNTING 2" TUBE</p>  <p>Finish - Polished Product code: AHRCR051</p>	<p>DOME CAP</p>  <p>1-1/2" TUBE Mirror Finish Code: AHRC038M Satin Finish Code: AHRC038S</p> <p>2" TUBE Mirror Finish Code: AHRC051M Satin Finish Code: AHRC051S</p>	<p>FLAT CAP</p>  <p>1-1/2" TUBE Mirror Finish Code: AHRCF038M Satin Finish Code: AHRCF038S</p> <p>2" TUBE Mirror Finish Code: AHRCF051M Satin Finish Code: AHRCF051S</p>

Handrail Support Fittings

Our selection of handrail supports comes in 316 stainless steel, for securing handrails to stainless steel tube, wood and glass.

<p>HANDRAIL WALL SUPPORT SQUARE TUBE OR TIMBER 54mm dia. base</p> <p style="text-align: right;">316 SS</p>  <p>Finish - Satin and Mirror Product code: Satin: AHRSF5 Mirror: AHRSF</p>	<p>HANDRAIL WALL SUPPORT 1-1/2" & 2" TUBE 54mm dia. base</p> <p style="text-align: right;">316 SS</p>  <p>Finish - Satin and Mirror Product code: Satin: AHRSO..S Mirror: AHRSO</p>	<p>HANDRAIL WALL SUPPORT UNIVERSAL 90° - 54mm & 70mm dia. base</p> <p style="text-align: right;">316 SS</p>  <p>Finish - Satin and Mirror Product code: Satin: AHRSU6S Mirror: AHRSU6M</p>
<p>HANDRAIL WALL SUPPORT 2" TUBE WOODSCREW THREAD</p> <p style="text-align: right;">316 SS</p>  <p>Finish - Satin and Mirror Product code: Satin: AHRSW051S Mirror: AHRSW051M</p>		

Drill Bits, Driver Tips, Tools

Jobber Drill Bits		283
Double End Panel Drill Bit		283
Masonry Drill Bit Range		284
SDS Plus Zentro 4-Cutter		284
Alpha Drill Sets		285
3 & 5 Flute Countersinking Bits		286
Quick Cut Decking Csk Drill Bits		286
Driver Tips		287
Nutsetter for HWF Screws		287
Allen Keys		288
Security Bits		288
1/2 Impact Sockets		289
Crimping Pliers		290
Hex Swage Tool		290
Wire Cutters		291

Jobber Drill Bits



METRIC

1.00mm	■
1.50mm	■
1.60mm	■
1.90mm	■
2.00mm ⁺	■
2.20mm	■
2.40mm	■
2.50mm ⁺	■
2.60mm	■
2.80mm	■
2.90mm	■
3.00mm ⁺	■
3.10mm	■
3.20mm	■
3.30mm	■
3.40mm	■
3.50mm ⁺	■
3.60mm	■
3.70mm	■
3.80mm	■
3.90mm	■
4.00mm ⁺	■
4.10mm	■
4.20mm	■
4.30mm	■
4.50mm ⁺	■
4.70mm	■
4.80mm	■
4.90mm	■
5.00mm ⁺	■
5.10mm	■
5.20mm	■

METRIC

5.50mm ⁺	■
5.80mm	■
6.00mm ⁺	■
6.20mm	■
6.40mm	■
6.50mm ⁺	■
6.80mm	■
6.90mm	■
7.00mm ⁺	■
7.50mm	■
8.00mm ⁺	■
8.10mm	■
8.30mm	■
8.50mm	■
8.60mm	■
8.70mm	■
9.00mm	■
9.50 mm	■
9.60mm	■
10.00mm ⁺	■
10.20mm	■
10.30mm	■
10.50mm	■
10.60mm	■
11.00mm	■
11.50mm	■
12.00mm ⁺	■
12.50mm	■
13.00mm ⁺	■
13.00mm*	■
14.00mm*	■
15.00mm*	■

METRIC

16.00mm*	■
17.00mm*	■
18.00mm*	■
19.00mm*	■
20.00mm*	■
21.00mm*	■
22.00mm*	■

IMPERIAL

1/16	■
5/64	■
3/32	■
7/64	■
1/8	■
9/64	■
5/32	■
11/64	■
3/16	■
13/64	■
7/32	■
15/64	■
1/4	■
17/64	■
9/32	■
5/16	■
21/64	■
11/32	■
3/8	■
13/32	■
1/2	■

*Reduced shank
*Available in Long Series

Double End Panel Drill Bits



1/8 (NO. 30)	■
5/32 (NO. 20)	■
3/16 (NO. 11)	■

A range of reduced shank jobber drill bits also available

Masonry Drill Bits



Suitable for rotary and impact drilling

Size	Flute Length	
M5 X 85	45mm	■
M5 X 150	90mm	■
M6 X 100	55mm	■
M6 X 150	90mm	■
M6.5 X 100	55mm	■
M6.5 X 150	90mm	■

Size	Flute Length	
M7 X 100	55mm	■
M8 X 120	70mm	■
M10 X 120	70mm	■
M10 X 150	90mm	■
M12 X 150	90mm	■

NB: Length shown is the overall length.
Other sizes available on request.

SDS Plus Zentro 4-Cutter

Code: TLDBMSPZ...



Dynamic drilling ability with secondary cutters protecting the drill bit in the event of reinforcement collision.

Size	Flute Length	
5 x 110	50mm	■
5 x 160	100mm	■
5.5 x 110	50mm	■
5.5 x 160	100mm	■
6 x 110	50mm	■
6 x 160	100mm	■
6 x 210	150mm	■
6.5 x 110	50mm	■

Size	Flute Length	
6.5 x 160	100mm	■
6.5 x 210	150mm	■
8 x 160	100mm	■
8 x 210	150mm	■
10 x 160	100mm	■
10 x 210	150mm	■
12 x 160	100mm	■
12 x 210	150mm	■

Size	Flute Length	
14 x 260	200mm	■
16 x 260	200mm	■
16 x 450	400mm	■
18 x 250	200mm	■
20 x 250	200mm	■
22 x 450	400mm	■
24 x 250	200mm	■

NB:

- Length shown is the overall length
- Other sizes available on request
- SDS Max available on Request

Alpha Drill Sets

<p>1.0-13.0mm TUFFBOX</p> <p>Genuine Alpha Gold-Series (SM25PB)</p> 	<ul style="list-style-type: none">• 25 piece metric drill set• 135 degree split point - for fast drilling and minimising wandering.• Titanium-nitride coated - provides lubricity which reduces heat while extending the drill life.• Straight Shank• Plastic case
<p>1.0-10.0mm Genuine Alpha Gold-Series (SM19)</p> 	<ul style="list-style-type: none">• 19 piece metric drill set• 135 degree split point - for fast drilling and minimising wandering.• Titanium-nitride coated - provides lubricity which reduces heat while extending the drill life.• Straight Shank• Metal Case
<p>1.0-13.0mm Genuine Alpha Gold-Series (SM25)</p> 	<ul style="list-style-type: none">• 25 piece metric drill set• 135 degree split point - for fast drilling and minimising wandering.• Titanium-nitride coated - provides lubricity which reduces heat while extending the drill life.• Straight Shank• Metal Case

3 & 5 Flute Countersinking Bits

-90° Angle

Code: TLTI PCSK (90° Angle)



3 Flute

Head dia. - 8.3mm	■
Head dia. - 10.4mm	■
Head dia. - 12.4mm	■
Head dia. - 14.4mm	■
Head dia. - 16.5mm	■
Head dia. - 20.5mm	■
Head dia. - 25mm	■
Head dia. - 30mm	■

5 Flute

Head dia. - 8mm	■
Head dia. - 12mm	■
Head dia. - 16mm	■
Head dia. - 20mm	■

3 Flute is a multipurpose countersinking bit. It will countersink into most materials including: wood, plastic, and most metals.

5 Flute is better suited for stainless steel.

These bits are made from a HSS/Cobalt mix (harder than HSS).

Quick Cut Decking Csk Drill Bit

Code: TLTI PCSK (Quickbit)



8G	■
10G	■

12G	■
14G*	■

*Only for Bugle Head screws.

Driver Tips

Code: TLTIP



		SQ	PHIL
NO. 0 – (Fits 4g Sq Drive)	50mm		
		SQ	PHIL
NO. 1 – (Fits 6g Sq Drive) – (Fits 4g Phil Drive) – (Fits M2–2.5 Phil Drive)	25mm		
	50mm		
	75mm		
	100mm		
	150mm		
		SQ	PHIL
NO. 2 – (Fits 8g & 10g Sq Drive) – (Fits 6g, 8g & 10g Phil Drive) – (Fits M3–M5 Phil Drive)	25mm		
	50mm		
	75mm		
	100mm		
	150mm		
		SQ	PHIL
NO. 3 – (Fits 12g & 14g Sq & Phil Drive) – (Fits M6–M10 Phil Drive)	25mm		
	50mm		
	75mm		
	100mm		
	150mm		

Nutsetter - for HWF Screws

Code: TLTIPN



HWF

5/16 X 65mm Nutsetter (for 12G HWF)

3/8 X 65mm Nutsetter (for 14G HWF)

Star Drive Tip

Code: TLTIPT4050



Star

T40 X 50mm (for M10 SXR Fischer Screw)

Hex Socket Driver Tips

Code: TLTIPSKT



	CSK & Button MT	Cap MT	Bugle Screws	Csk Skt Coacscrews
3mm x 50mm	M5	M4		
4mm x 50mm	M6	M5	12G	
5mm x 50mm	M8	M6	14G	M8
6mm x 50mm	M10	M8		M10

* MT = Machine Thread

Metric Allen Keys – Chrome Plated

Code: TLAKM (Chrome Plated)



	Fits Screw Size	CHROME PLATED
M1.5	M2	
M2	M2.5	
M2.5	M3	
M3	M4	

	Fits Screw Size	CHROME PLATED
M4	M5	
M5	M6	
M6	M8	

Imperial Allen Keys – Chrome Plated

Code: TLAKI..



	CHROME PLATED
3/32	
1/8	
5/32	

	CHROME PLATED
3/16	
1/4	
5/16	

Security Bits & Keys

Code: SECBIT.. & SECKEY..



Post 6 Lobe Bit & Key

T10	
T15	
T20	
T25	
T27	
T30	
T40	
T45	

Hex Post Skt Bit & Key

M2	
M2.5	
M3	
M4	
M5	
M6	

Snake Eye Bit

6G	
8G	
10G	
12G	
14G	

1/2 Impact Sockets

Code: TLTIS...



	Male Hex Socket	Male Star Drive
T30 x 78mm		
T40 x 78mm		
T50 x 78mm		

T30 x 78mm	M6 TX Washer Head Timber Screw
T40 x 78mm	M8 TX Washer Head Timber Screw
	M8 x 80 CSK Concrete Bolt - Carbide
	M10 CSK Torx Fischer Screw
	M10 HWF Torx SXR Screw
T50 x 78mm	M10 x 90 Fischer CSK Concrete Bolt

HSS Taps MC

Code: TLT..



Size	Starter	Intermediate	Bottoming	Tap Sets*
3 X 0.5				
4 X 0.7				
5 X 0.8				
6 X 1				
8 X 1.25				
10 X 1.5				
12 X 1.75				

* Tap Sets include a bottoming, intermediate & tapering tap.

M6 Gun Tap for Anzor Balustrading Eyelet

Code: TLTAPGM6..



This type of tap pushes material ahead of the tap, thus giving more material to tap into. These taps can be used with a drill. See Balustrading Eyelet (as shown above) on page p.276-278.

A03 Threaded Insert Tool

Code: TLNSA03



See Threaded Inserts on page 143

Long Arm Riveter

Code: TLRVHR730 – for sizes 3/32 – 1/4



See Rivets on page 141-142.

Crimping Pliers

Code: TLCP...

No. 1 (1.5-2.5mm wire)	■
No. 3 (1.5-3mm wire)	■
No.4 (3-4mm wire)	■
No.5 (4-5mm wire)	■
No.6 (6mm wire)	■



See Crimps on page 232

Hex Swage Tool

Code: TLHST...

No.3 (2.5-3mm wire)	■
No.4 (4mm wire)	■



See Swage Fittings on page 228-231

For illustrative purposes only.
More than two presses may be required.

Wire Cutters

Code: TLWC...

No.6 (up to 3mm wire)



No.9 (up to 6mm wire)



See wire on p. 269

Cable Tie Tool (CH2065)

Code: TLCTTCH2065



See Cable Ties on p. 161

1 Ear Clamp Tool (CH207)

Code: TLECCH207



See 1 Ear Hose Clamps on p. 160

These are for installing 1 Ear Clamps.
Also great for pulling out nails and staples!

Stainless Steel Strapping Tool - CH-260

Code: TLBCH260 TLBCH075



See Strapping on p.161

Stainless Steel Strapping Tool - CH-075

Code: TLBCH075



See Strapping on p.161



website



google maps



Whatsapp



Facebook



Twitter



Linkedin



youtube

Tel: 25761115/8 - 25749470
Al Sabteya 1: 25778191
Al Sabteya2: 25797430
Al Sabteya 3: 25750027
Alyob: 42147786

Fax: 25765055 - 25754322
E-mail: ahmedkhalaf@alfahdsteel.net
Add.: 6 Sidi saeed square, Al sabteya,
Boulak, Ramses, Cairo, Egypt
Website: www.alfahdsteel.net