

ALUMINIUM STAINLESS STEEL TITANIUM



INTRODUCING BLACK

MOTORCYCLE BOLT KITS & ACCESSORIES



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# ABOUT US

Pro-Bolt is the world's leading supplier of high quality fasteners and has earned a reputation for excellence in supply, high quality and support from its work in the extremely demanding world of British Superbikes, World Superbikes and MotoGP. Our performance in the paddock means that users from other industry sectors, who need lightweight, high quality and performance fasteners, fit Pro-Bolt. Customers fit and forget with Pro-Bolt.

Based in the UK's Motorsport Valley, Pro-Bolt benefits from easy access to industry innovators and expertise. This, coupled with the knowledge we gain during our bespoke developments for racing clients, keeps our product range at the cutting edge of what is possible.

We couple innovative design and technical expertise with great looks and well thought through product ranges. For motorcycle owners we have measured and specified complete bike kits in aluminium, stainless steel and titanium. In the commercial sector, we offer a range of DIN /ISO standard bolts in addition to our Pro-Bolt range. As the world's leading supplier of high performance and quality assured fasteners, Pro-Bolt's products are everywhere – on satellites in space, on helicopters and UAVs in the sky, at sea and in homes.

#### HOW PRO-BOLT'S CUSTOMERS HAVE HELPED US GROW

Our customers use our products in extreme conditions and constantly feed back to us their ideas for improvement, new requirements and application demands. By listening to this feedback we are able to keep our product ranges in line with our customers' needs.

#### PRO-BOLT'S QUALITY ASSURANCE

Our products are of superior quality because they are manufactured in the UK using fully certified and traceable raw materials, enhanced using multi-axis sliding head machines to ISO9001 standards and then anodised by our in-house experts. We carry high stock levels so that when you need to complete your project, or replace critical parts, we can meet your deadlines.



#### BESPOKE MANUFACTURE

If what you need is not a stock item we will make your parts quickly, using the same high quality materials and processes we use in our standard range, so that you can enjoy the same service and peace of mind, wherever your project takes you.

#### WORLDWIDE SUPPLY

Pro-Bolt supply more than 50 countries globally, offering multi-currency purchasing, local distribution and support, as well as UPS delivery, all designed to help you complete your projects on time, every time.

#### PERSONAL SERVICE COMMITMENT

We are a family owned business and your project matters to us, so we will keep our promises, be flexible when you need us to be and provide a service which delights you.

#### PRO-BOLT PRODUCT RANGE PERFORMANCE

**Stainless Steel:** We offer a unique material in unique head styles, polished to an unmatched mirror finish. Manufactured from 316 stainless steel, providing superior strength and corrosion resistance, Pro-Bolt offers tapered socket caps, flanged hex head, dome head bolts and countersunk bolts along with a range of nuts, washers and motorcycle special parts. Our stainless range is now available in black finish which is a tough durable DLC coating.

**Titanium:** Manufactured from aircraft grade titanium 6AL-4V (grade 5), the outstanding benefits of these products include 42% less weight than the equivalent stainless steel product, whilst the process of rolling the threads produces greater fatigue strength and reduces galling. Pro-Bolt offers tapered socket caps, flanged hex head, drilled race spec, dome head and countersunk bolts and our new range of #DualDrive bolts. In addition we have a wide range of nuts, washers and motorcycle special parts. Our titanium range is available in blue, gold, natural, purple haze and now also available in black finish which is a tough durable DLC coating.

**Aluminium:** Offering an outstanding weight reduction of 60% lighter than the equivalent steel bolts, this range is manufactured from 7075T6 aluminium, and is suitable for use in all non-safety critical areas. We offer a wide range of socket cap, drilled race spec, dome head and countersunk bolts in addition to nuts & washers and motorcycle accessories. Products are available in a choice of black, blue, gold, orange, purple, red and silver.

# **CUSTOMISING**

# MADE EASY

# Are your fasteners rusty, lost or just heavy? We have a solution for you...

We offer a variety of products in three different materials – aluminium, stainless steel and titanium, each offers a different level of strength suitable for different applications. We have pre-measured a huge range of bike models enabling us to offer bolt kits and accessories in the most suitable and relevant materials allowing you to safely and easily replace your original fasteners.

**Aluminium:** Excellent for non-stress areas, weight reduction and customising with 7 colours to choose from.

**Stainless steel**: Highly polished to a superb mirror finish, durable and highly resistant to corrosion.

**Titanium:** A combination of superb strength and a 42% weight reduction over steel, this offers an unbeatable combination – an essential for racers and those who insist on the best.

#### **MEASURED AND CHECKED**

This symbol denotes that this is an area of the bike we measure and model specific kits are available.



#### WHY CHOOSE PRO-BOLT

- Make your bike stand out from the crowd
- Replace lost or corroded fasteners
- More cost effective alternative to OEM parts
- Reduce weight by fitting aluminium and titanium fasteners
- Thousands of bike models pre-measured
- Kits available for individual areas of a bike and easy to fit
- Used and trusted by the best
- Quality materials and manufacture methods.

#### **SATISFACTION GUARANTEE**

We are very proud of our product range and quality. We take great pride in our reputation as the world's No.1 Superbike Fastener. Should you have any points or issues you would like to discuss, please do not hesitate to contact our customer care department.













# **MATERIALS**

# ALUMINIUM

ALL AVAILABLE IN A CHOICE OF 7 COLOURS:
BLACK • BLUE • GOLD • ORANGE • PURPLE • RED • SILVER



Lightweight, colour consistent and machined to a high quality smooth finish, our ever increasing aluminium range allows you to create a unique look and style.

You can customise your project little by little, or make large-scale changes. We offer model specific kits for motorcycles, cycle sets and rocker cover kits. All our fasteners are available in a choice of black, blue, gold, orange, purple, red and silver.

- Material specification: 70756T6 Aluminium
- Manufacturing process: Head: cold formed; Shank: thread rolled
- Anodising: Chemically brightened and colour anodised to between 8 and 12 microns thick
- Weight: 60% lighter than steel 40% lighter than titanium
- Corrosion: Saltwater, road film or mild acids do not affect anodised aluminium
- Application: Aluminium is suitable for use in all non-safety critical areas mudguards, screens, fairings, engine casings, huggers, fuel caps, number plates, lamp units, exhaust cans, heel plates, exhaust manifold brackets, fuel cap surrounds, air filters, car rocker covers, plus many more. Aluminium is not suitable for any stress area applications. If you are in any doubt as to the suitability of our products for your machine, or the size you need, please contact Pro-Bolt directly.

#### **ANODISED PRODUCTS**

The colour finish applied to our products is known as 'anodising'. This is an electrochemical conversion process that permanently changes the outer structure of the metal. When aluminium is exposed to air it naturally develops a thin aluminium oxide film that seals the aluminium from further oxidation. Its porous nature makes it possible to dye the aluminium a variety of colours.

#### **TORQUE & LUBRICATION**

When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

#### **MATERIAL PROPERTIES**

Dome Head/Fairing Bolt

Countersunk Bolt

Density:	2730 kg/m³ (170lb/ft³)
Young's Modulus:	72GPa (10.4 x 10 <sup>6</sup> psi)
Yield Strength:	505MPa (73.2 x 10 <sup>3</sup> psi)
Ultimate Tensile Strengt	h:570MPa (82.7 x 10³psi)
Compressive Strength:	505MPa (73.2 x 10 <sup>3</sup> psi)
Shear Modulus:	27GPa (3.92 x 106psi)
Shear Strength:	330MPa (47.9 x 103psi)
Ductility:	10% elongation at break
Poisson's Ratio:	0.33
Hardness:	150 Brinell
Strength-to-Weight Ration	o:185 kNm/kg
Stiffness-to-Weight Ratio	o:

Thread Diameter	Material Stress Ar		Max I (kN)	_oad	lotal Ele (mm)	ongation
6mm	20.1		11.58		0.56	
8mm	36.6		23.19		0.62	
10mm	58.0		39.17		1.05	
Maxim	num Torqu	ie Guide -	Alumin	ium in N	lm	
Thread Diameter	3mm	4mm	5mm	6mm	8mm	10mm
Flanged Hex Head Bolt	n/a	n/a	6.00	8.00	12.00	20.00
Socket Cap	1.5	3.50	6.00	6.00	10.00	n/a

5.00

5.00

8.00

16.00

n/a

For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling. If you are in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.

2.00

2.50

n/a

n/a





ATERIAI PROPERTIES

Maximum value allowed by ....

Strength-to-Weight Ratio: .....

Stiffness-to-Weight Ratio:....

Countersunk Bolt



# STAINLESS STEEL

Our stainless steel range of products is manufactured from 316 Stainless Steel, a premium quality product which offers superior strength and corrosion resistance.

Pro-Bolt stock high levels of tapered socket caps, flanged hex heads, race spec pre-drilled bolts, countersunk bolts and domed/mushroom fairing bolts. We offer a quality grade material in unique head styles. Our stainless range is available in a polished mirror finish or our new black finish which is the tough durable DLC coating.

Please note that not all stainless steel is suitable for stress areas. However, our 316 Stainless Steel is suitable for engine casings, fairings, screens, front axle pinch bolts, caliper pinch bolts, caliper mount bolts, footrest hanger bolts, clip-on handle bar bolts, brake/ clutch pinch perch bolts and top/bottom yoke clamp bolts.

Also available are 1/4 Turn D-Ring quick release fasteners, 1/4 turn allen key drive quick release fasteners, brake caliper pad pins, axle nuts, banjo bolts, bleed nipples and motorcycle disc rotor bolts.

- Material specification: 316 Stainless Steel.
- Manufacturing process: We manufacture in a single process on multi axis CNC machining centres, which includes thread rolling. Thread standards are to BS3692:1967 which is the British Standard for ISO Precision Metric Threads. Route radii vary between 0.8mm and 0.4mm. This is the maximum that we can use and improves shear strength. Thread lead varies between K1 and K2.
- Material: Stainless steels are iron alloys with a minimum of 16.5% Chromium with other elements (nickel, molybdenum, titanium, copper, carbon, Nitrogen) added to enhance properties such as formability and strength. It is the chromium-rich, oxide film that gives the corrosion resistance of stainless steel. This protective film is strong and chemically stable (i.e. passive) where there is sufficient oxygen on the surface. The protection is extremely thin and will usually self-repair if sufficient oxygen is available. Please note that under certain conditions the passive state can be broken down and corrosion can result.
- Heat resistance: 316 has good resistance to oxidation in continuous service to 870°C and intermittent service to 925°C. However, continuous use at 425-860°C is not recommended due to its resistance to carbide precipitation. Where high strength is required at temperatures above 500°C, Grade 316H is recommended.



Density:	8030 kg/m³ (501lb/ft³)
Young's Modulus:	193GPa (28 x 10 <sup>6</sup> psi)
■ Yield Strength:	260MPa (37.7 x 10 <sup>3</sup> psi)
Ultimate Tensile Strength:	570MPa (82.7 x 10 <sup>3</sup> psi)
Compressive Strength:	260MPa (37.7 x 10 <sup>3</sup> psi)
Shear Modulus:	78GPa (11.3 x 10 <sup>6</sup> psi)
Ductility:	40% elongation at break +
Minimum value allowed by	ASTM A240
Poisson's Ratio:	0.27
Hardness:	95 Rockwell B +

Thread Diameter		erial Te ss Area	ensile a (mm²		ax Load N)		otal Elon nm)	gation
6mm	20.1			16.	40	1.9	93	
8mm	36.6			29.	.15	2.8	85	
10mm	58.0			46.	.89	3.	70	
Maxim	um To	rque G	iuide -	Stainle	ess Stee	el in Nm	ı	
Thread Diameter	3mm	4mm	5mm	6mm	8mm	10mm	12mm	14mm
Flanged Hex Head Bolt	2.00	5.00	12.00	15.00	35.00	38.00	97.50	155.20
Tapered Socket Cap	1.73	4.00	10.00	14.00	25.00	38.00	n/a	n/a
Dome Head Bolt	n/a	3.50	5.00	11.00	16.00	26.00	n/a	n/a

#### **TORQUE & LUBRICATION:**

8.00

When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

15.00 20.00

For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling, the exception being bleed nipples and banjo bolts which should be fitted dry. For bolts in safety critical areas, we would recommend a medium strength threadlock. If you are in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.

Torque guide for fasteners in general usage
Torque for flanged hex head and tapered socket
cap bolts - use torque values specified by your
equipment manufacturer. Where possible use
the same torque as manufacturer's originals. For
fasteners in safety applications on a motorycle,
use your manufacturers torque guide when
fitting flanged hex head or tapered socket cap
fasteners. For fasteners in other applications
you can refer to the table above for lubricated





## TITANIUM

Made from aircraft grade Titanium 6AL-4V (grade 5), our titanium bolts have a tensile strength in excess of 120,000psi, suitable for replacing both grade 5 and grade 8 steel bolts. In addition, we roll the threads to produce greater fatigue strength and reduce galling.

New to our titanium range is our unique and innovative 'DualDrive' bolt, designed for race teams this ultimate bolt combines form and function and offers superb functionality, strength and durability. You can select the appropriate tool, depending on accessibility & torque required. Head design is compatible with both a socket and allen key, our forged DualDrive offers rolled threads for superior strength and are pre-drilled for lockwiring.

New across our entire titanium range is a stunning black finish which is a tough durable 'DLC' coating.

We offer tapered, socket cap, flanged hex head, drilled race spec, countersunk, and dome head bolts, nuts and washers – from 3mm to 12mm. We also offer axle nuts, swingarm nuts, yoke nuts, caliper pins, banjo bolts, disc bolts and many more specifically machined items. Our titanium range is available in natural, blue, black, gold and purple haze.

- Material specification: Ti-6Al-4V, an alloy introduced in 1954, is a good general purpose grade. Titanium alloy is available in all product forms. Its density is 0.160 pounds per cubic inch, it can be heat-treated to ultimate strengths in excess of 170,000psi and responds to heat treatment in sections up to 15mm. This alloy is stable at temperatures ranging from 423°F to over 1000°F.
- Manufacturing process: We manufacture in a single process on multi axis CNC machining centres, which includes thread rolling. Thread standards are to BS3692:1967 which is the British Standard for ISO Precision Metric Threads. Route radii vary between 0.8mm and 0.4mm. This is the maximum that we can use and improves shear strength. Thread lead varies between K1 and K2.
- Weight: 42% lighter than steel.
- Other items: Machined from bar.

#### **TORQUE & LUBRICATION**

When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling, the exception being bleed nipples and banjo bolts which should be fitted dry. For bolts in safety critical areas, we would recommend a medium strength threadlock. If you are





#### **MATERIAL PROPERTIES**

Density:	4420 kg/m³ (276lb/ft³)
Young's Modulus:	110GPa (16 x 10 <sup>6</sup> psi)
Yield Strength:	828 MPa (120 x 10 <sup>3</sup> psi)
Ultimate Tensile Strength:	1030MPa (149 x 10 <sup>3</sup> psi)
Compressive Strength:	960MPa (139 x 10 <sup>3</sup> psi)
Shear Modulus:	43GPa (6.24 x 10 <sup>6</sup> psi)
Ductility:	10% elongation at break
Poisson's Ratio:	0.34
Poisson's Ratio:	
	36 Rockwell C
Hardness:	36 Rockwell C
Hardness: Maximum value allowed by	36 Rockwell C ASTM A240 187kNm/kg

Thread Diameter		erial Te ss Area	ensile a (mm²		ax Load N)		tal Elon m)	gation
6mm	20.1			21.	.25	0.5	4	
8mm	36.6			36.	.78	0.4	8	
10mm	58.0			53.	.53	1.4	5	
Maxim	um To	rque G	iuide -	Stainle	ess Stee	el in Nm	1	
Thread Diameter	3mm	4mm	5mm	6mm	8mm	10mm	12mm	14mm
Flanged Hex Head Bolt	2.00	5.00	12.00	15.00	35.00	38.00	97.50	155.20
Tapered Socket Cap	1.73	4.00	10.00	14.00	25.00	38.00	n/a	n/a
Dome Head Bolt	n/a	3.50	5.00	11.00	16.00	26.00	n/a	n/a
Countersunk Bolt	n/a	3.50	5.00	8.00	15.00	20.00	n/a	n/a

in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.

#### Torque guide for fasteners in general usage

Torque for flanged hex head and tapered socket cap bolts - use torque values specified by your equipment manufacturer. Where possible use the same torque as manufacturer's originals. For fasteners in safety applications on a motorcycle, use your manufacturers torque guide when fitting flanged hex head or tapered socket cap fasteners. For fasteners in other applications you can refer to the table above for lubricated threads.









The design team at Pro-Bolt proudly announce their stunning version of a bolt that provides a perfect marriage of form and functionality – the Pro-Bolt DualDrive™.

The Ultimate Bolt for Ultimate Machines - Our brief was to create an ultimate bolt for ultimate machines – a bolt that delivered superb functionality, strength and durability. From a concept on our drawing board, the Pro-Bolt DualDrive™ was born and after hundreds of hours of testing, with some of the worlds' top teams, the ultimate Pro-Bolt is now available in titanium.

Choice and Flexibility - Designed with an allen key drive, stronger than a standard socket cap bolt, yet maintaining the flexibility to opt for a socket wrench, provide choice and flexibility valued by GP, WSBK & BSB race teams worldwide. The response from race teams to the Pro-Bolt DualDrive™ has been unanimous resulting in its selection as the bolt of choice for the 2016 season.

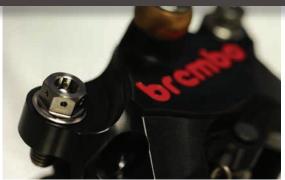
Strength by Design - The DualDrive  $^{\text{IM}}$  range is forged for superior strength after which the threads are rolled for greater fatigue strength and reduced galling.

You can select the appropriate tool, depending on accessibility & torque required.

Torque Information					
Thread Diameter in mm	5	6	8	10	
Max Torque in NM	9	15	45	50	









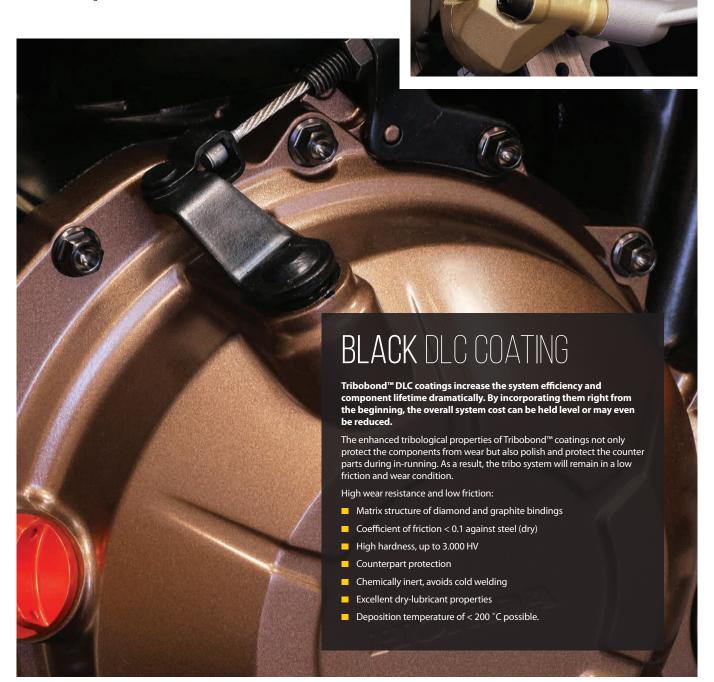






After much research and testing, Pro-Bolt has launched its new black finish applied to the surface of our stainless steel and titanium bolts. The technique not only offers a beautiful, long lasting black finish but also supreme hardness and corrosion resistance provided by nanocomposite coating.

Tribobond™ DLC coatings increase component lifetime dramatically. The enhanced tribological properties of Tribobond™ coatings not only protect the components from wear but also polish and protect the counter parts during in-running. As a result, the tribo system will remain in a low friction and wear condition. Features of the Tribobond™ coating are listed in table below.





#### **Button Inserts**

**ALUMINIUM** 

Push-in button inserts are ideal for covering both stress area and non stress area bolts, keeping out the dirt or for an effective colour contrast. Push-in buttons fit into the head of a standard allen key socket cap bolt and are held in place with a rubber 'O' ring. When ordering, please note sizes are taken from the thread diameter of the corresponding bolt – NOT the allen key drive.

Available individually in the following sizes:

Part Number	Description	Outside Diameter	To Suit Allen Key Size
LBUT5	5mm Button Insert	7.80mm	4
LBUT6	6mm Button insert	9.30mm	5
LBUT8	8mm Button Insert	12.50mm	6
LBUT10	10mm Button Insert	14.90mm	8



#### **Cup Washers**

**ALUMINIUM** 

The cup washer slides up the thread of the bolt and shrouds the head, leaving the head surface exposed. Good way to colour contrast – try these with a different coloured aluminium bolt for a truly unique look. Available in the following sizes:

Part Number	Description	Outside Diameter
LWACP5	5mm Cup Washer	10.60mm
LWACP6	6mm Cup Washer	12.00mm
LWACP8	8mm Cup Washer	15.90mm
LWACP10	10mm Cup Washer	18.70mm

#### **Hose Separators**

ALUMINIUM

Don't let your lines rub you up the wrong way! Separate them with these neat little additions. Supplied with a colour co-ordinated countersunk bolt and nyloc nut to clamp the hose.

Part Number	Description
HOSESEP10	Brake line hose separator kit - 7mm
HOSESEP20	Brake line hose separator kit - 9mm













P-Clips ALUMINIUM

Anodised aluminium, rubber lined P-clips for securing rear brake lines.

Part Number	Description	
PCLIP10	Rubber lined P-Clips - 5mm bolt hole	
PCLIP11 Rubber lined P-Clips - 6mm bolt hole		



#### **Bleed Nipple Covers**

**ALUMINIUM** 

Keep dust and grime away from your nipples! Slides straight onto the bleed nipple and held securely in place with the 'O' ring supplied. Fits the most popular 7mm bleed nipples.

Part Number	Description	
LBNCOVER7	Individual with 'O' Ring	
BNCOVER7-2	Pair of Covers with 'O' Rings	
BNCOVER7-3	Set of 3 Covers with 'O' Rings	



#### **Tyre Valve Covers**

ALUMINIUM

Form an airtight seal and keep out the dirt with our tyre valve covers - universal fit for bikes, cars and cycles.

Part Number	Description	
LDCAP10	Individually with 'O' Ring	
2DCAP10	Pair of Dust Caps with 'O' Rings	
4DCAP10	Set of 4 Dust Caps with 'O' Rings	





#### **Flared Washers**

**ALUMINIUM** 

'Chunky' cup washer, designed to accept either a standard M6 socket cap bolt, M8 socket cap or a countersunk bolt. Excellent for spreading the load on deeper recessed panels. (Note: Bolts sold separately.)

Part Number	Description	Outside diameter	Height
LWAPB625	M6 Cone Washer for use with LPB6/LCS6	25mm	9.5mm
LWAPB826	M8 Cone Washer for use with LPB8/LCS8	25mm	9.5mm





#### **Engine Casing Kits**

**ALUMINIUM** 

STAINLESS TITANIUM

Our engine casing kits include all the necessary bolts to replace all side engine casing bolts in your chosen colour. Also included are copper grease lubricant and the necessary allen keys. Kits are easy to use – remove one bolt at a time, and replace with the identical length bolt from your Pro-Bolt kit.

All engine casing kits are supplied using allen key bolts. Where fitment will allow, we also offer flanged hex head kits. Please note: Oil filler caps and cam cover bolts are sold separately.







#### **SUZUKI BANDIT/GSXR**

STAINLESS

An absolute must for any GSXR & Bandit. Replace dull and rusty cam cover bolts. Our bolts are supplied in a smooth polished finish. Available individually or as a full set of 12 (8 top & 4 side). The finishing touch to any engine!



Stainless Steel Part No.	Description
SSSITEM1	Single Top Cylinder Head Bolt
SSSITEM1-8	Set of 8 Cylinder Head Bolt
SSSITEM3	Single Side Cam Bolt
SSSITEM3-4	Set of 4 Side Cam Bolts
SSSITEM13FULL	Complete set of 8 Top & 4 Side





Oil Filler Caps ALUMINIUM

Machined to a smooth finish in your choice of colour – complete with 'O' ring. Each has a hole drilled in the top corner to allow the use of lock wire – complements our engine casing kits to achieve the finished look. 13 fitments available to cover a wide range of models.

Part Number	Description	Thread & Pitch
OFCB10	BMW/F650 etc	M24mm x 3.00mm
OFCB20	BMW/R1200GS etc	M34mm x 1.50mm
OFCB30	BMW/S1000R	M24mm x 2.00mm
OFCD10	Ducati & some Aprilia	M22mm x 1.50mm
OFCH10	Honda Standard - some Triumph	M20mm x 2.50mm
OFCK10	Kawasaki Standard	M30mm x 1.50mm
OFCS10	Suzuki & some Aprilia	M20mm x 1.50mm
OFCY10	Yamaha Standard	M27mm x 3.00mm
LOFCY30	Yamaha R1 (2004+)	M27mm x 3.00mm







### Sump Bolts ALUMINIUM TITANIUM

Our sump bolts are pre-drilled on all flats for ease of lockwiring. They are also fitted with a magnetic stud to assist with removing particles from the engine oil, which could be potentially damaging. See our model specific price list for detailed fitment information.



Part Number	Thread & Pitch
TISUMP1215MAG	M12 x 1.50mm x 15mm
TISUMP1412MAG	M14 x 1.50mm x 12mm
TISUMP1412FMAG	M14 x 1.25mm x 12mm
TISUMP16150MAG	M16 x 1.50mm x 12mm







#### **Fairing Bolt Kits ALUMINIUM** STAINLESS TITANIUM

Our fairing kits include all the necessary bolts and anti-scratch washers to replace bolts on the top and side fairing, seat unit, belly pan, mudguard & hugger. Allen keys, Pro-Lube and stickers are also included in the kits. Replacement backing clips are not included as standard – our bolt kits will screw into the original backing clips. Where this is not possible, we do provide replacement nuts or clips for behind the fairing. Don't forget to order your matching screen kit!

When fitting a bolt kit, replace one bolt at a time with an identical length bolt (lubricated where required). Follow our torque guides for the relevant material. Bolt kits in contact with the screen or fairing contain plastic washers which

should be used under the head of all bolts to prevent scratching paintwork/plastic. In our fairing kits you will also find a number of collars, where your original bolts have shoulders - these are used to replicate the collar allowing the bolt to locate into the fairing effectively.



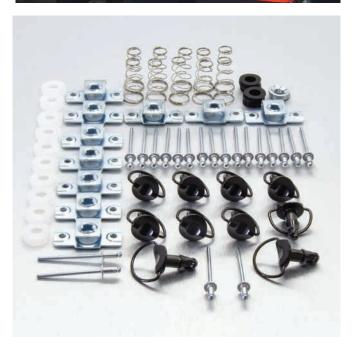


#### 1/4 Turn Quick Release Fairing Kits

Our quick release fairing kits will provide D-Ring 1/4 turn replacements where quick release are present as standard. All other bolts on the side fairing, mudguard, belly pan and seat unit will be replaced with standard threaded bolts. This will provide a colour consistent finish throughout the fairing. slide-on & rivet-on backing plates are also available separately.











#### **Screen Bolt Kits**

ALUMINIUM STAINLESS TITANIUM

Screen bolt kits include the specified amount of 5mm screen bolts, nylon washers and rubber nuts with brass insert. 4mm fine pitch screen kits are also available for Ducati, MV Agusta, Cagiva and Aprilia Factory RSVR. Finish the look with our model specific fairing bolt kits.



Description	Aluminium Part Number	Stainless Steel Part Number	Titanium Part Number
4 Bolt Standard Kit	SK4	SK4SS	TISK4
5 Bolt Standard Kit	SK5	SK5SS	TISK5
6 Bolt Standard Kit	SK6	SK6SS	TISK6
7 Bolt Standard Kit	SK7	SK7SS	TISK7
8 Bolt Standard Kit	SK8	SK8SS	TISK8
9 Bolt Standard Kit	SK9	SK9SS	TISK9
10 Bolt Standard Kit	SK10	SK10SS	TISK10
7 Bolt 4mm Diameter Fine Pitch Special Kit	SKDUC7	SKDUC7SS	TISKDUC7
9 Bolt 4mm Diameter Fine Pitch Special Kit	SKDUC9	SKDUC9SS	TISKDUC9
14 Bolt 4mm Diameter	SKDUC14	SKDUC14SS	TISKDUC14





#### **Fuel Cap Bolt Kits**

ALUMINIUM STAINLESS

These are the bolts that fit into the fuel cap surround – they are available for all bikes including the specially engineered Honda bolts. Kits are very easy to fit – remove one bolt at a time and replace with the identical length Pro-Bolt.







#### **Bar Ends**

ALUMINIUM

Replace lost or damaged steel bar ends and put some colour where you can see it! Supplied complete with necessary fittings.



Description	Aluminium Part Number
Pair of Aprilia Bar Ends - RSV Mille etc	BARENDAP10
Pair of Bar Ends for Hollow Bars	BARENDUN10
Pair of BMW bar Ends - F650/F800GS	BARENDBM10
Pair of BMW Bar Ends - S1000RR	BARENDBM20
Pair of Honda Bar Ends - CBR600 / CBR900 etc	BARENDHO10
Pair of Honda Bar Ends - SP1/SP2	BARENDHO20
Pair of Honda Bar Ends - Hornet '07	BARENDHO30
Pair of Kawasaki Bar Ends - ZX6 / ZX9	BARENDKA10
Pair of Kawasaki Bar Ends - ZX7 / ZX12	BARENDKA20
Pair of Kawasaki Bar Ends - GPZ / Z1000 / ZZR	BARENDKA30
Pair of Kawasaki Bar Ends - ZX10R (2006)	BARENDKA40
Pair of Suzuki Bar Ends - GSXR600 K1/K2	BARENDSU10
Pair of Suzuki Bar Ends - SV650/GSXR750/SRAD/GSXR1100 - etc	BARENDSU20
Pair of Suzuki Bar Ends - SV650 / SV1000 / TL1000 etc	BARENDSU30
Pair of Suzuki Bar Ends - GSXR600 etc	BARENDSU50
Pair of Suzuki Bar Ends - GSXR1000 K6/Other	BARENDSU60
Pair of Yamaha Bar Ends - R1 etc	BARENDYA10
Pair of Yamaha Bar Ends - R6 etc	BARENDYA20





#### **Top Yoke Nuts**

ALUMINIUM TITANIUM

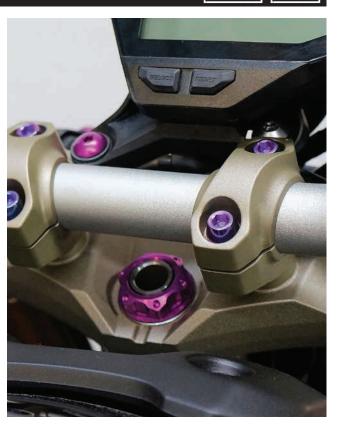
Replace damaged or rusty centre stem nuts with something rather more colourful. See our price list for fitment details.







Thread and Pitch	Socket Size	Aluminium Domed	Aluminium Open	Titanium
M24 x 1.00	30mm	-	LTYOKEO10	TIYOKE010
M25 x 1.00	36mm	LTYOKE20	LTYOKEO20	TIYOKE20
M24 x 1.50	32mm	LTYOKE30	LTYOKEO30	TIYOKE030
M28 x 1.00	32mm	LTYOKE40	LTYOKEO40	TIYOKE040
M22 x 1.00	30mm	-	LTYOKEO50	-
M22 x 1.25	-	LTYOKE100	-	-
M33 x 1.00	41mm	-	LTYOKEO60	-
M25 x 1.00	32mm	-	LTYOKEO70	-



#### **Pre-Load Adjusters**

**ATAMINIAM** 

They look fantastic and are also functional, allowing easy adjustment of fork spring compression, to adapt to pillion passengers, different road types and riding style. Supplied with steel grub screws to hold them in place and an allen key to fit. Sizes available to fit most models.

*Please Note:* These may not be compatible if a steering damper is fitted.

#### **HEXAGON FITMENT**

Description	Aluminium Part Number
Pre-Load 14mm	PLOAD14
Pre-Load 14mm - Thinner Fork Tops	PLOAD14-T
Pre-Load 17mm	PLOAD17
Pre-Load 19mm	PLOAD19
Pre-Load 22mm	PLOAD22

#### **FLAT/ROUNDED FITMENT**

Description	Aluminium Part Number
Pre-Load 18/14mm	PLOAD1814
Pre-Load 20/17mm	PLOAD2017









#### **Reservoir Caps**

**ATAMINIAM** 

Superb smooth finish in a colour of your choice – literally in your face! Get rid of ugly plastic stock originals. We offer a wide range of reservoir caps to fit front brake, clutch and rear brake cylinders on a wide range of models. Supplied complete with countersunk bolts where necessary. Measurements are the outside diameter.



Description	Aluminium Part Number
Threaded Round Cap - 61mm o/d	RESR10
2 Screws Round Cap - 56mm o/d - with 50mm bolts	RESR20
2 Screws Round Cap - 56mm o/d - with 15mm bolts	RESR20-CS415
2 Screws Round Cap - 56mm o/d - with 45mm bolts	RESR20-CS445
Threaded Round Cap - 38mm o/d	RESR30
Threaded Round Cap - 42mm o/d	RESR50
2 Screws 2 x 45 Round Cap - 53mm o/d Brembo	RESR60
Threaded Round Cap - 39mm o/d Brembo	RESR70
Threaded Round Cap - 48mm o/d	RESR90
Oblong 43 x 75mm	RESO10
Oblong 37 x 55mm - with 15mm Bolts	RESO20
Oblong 37 x 55mm - with 20mm Bolts	RESO20-20
Oblong 37 x 55mm - with 45mm Bolts	RESO20-45
Oblong 43 x 85mm	RESO30
Oblong 47 x 69mm	RESO40
Oblong 57 x 33mm	RESO50





#### **Reservoir Clips**

**ALUMINIUM** 

To complement our top selling reservoir cap, this clip works with our reservoir cap part number 'RESR10'. This will replace your original mild steel clip – choose a complementing or contrasting colour to your reservoir cap. Supplied with matching bolt.









#### **Cable Adjusters**

**ATAMINIAM** 

Exact replicas of the originals – easy to replace and colour where you can see it! Suitable for use on many models of Honda, Kawasaki, Suzuki and Yamaha.



Description	Aluminium Part Number
2 piece M8 thread	LCA10
1 piece M10 thread	LCA20



#### **Paddock Stand Bobbins**

**ALUMINIUM** 

Essential for all bikers! Screws straight into the swingarm, showing no ugly steel bolts. Available in M6, M8 & M10 .



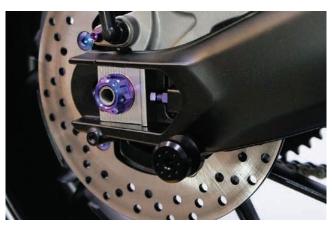
Description	Aluminium Part Number
Pair of M6 Paddock Stand Bobbins	BOB6
Pair of M8 Paddock Stand Bobbins	BOB8
Pair of M10 Paddock Stand Bobbins	BOB10













#### **Chain Adjuster Blocks**

**ALUMINIUM** 

Smarten up your rear end! Replace rusty stock originals with these shiny new blocks – supplied in pairs.



Description	Aluminium Part Number
Honda CBR900RR (00-03) Pair of Blocks	CABPRH10
Honda CB1300 Pair of Blocks	CABPRH30
Kawasaki KLX250/Versys 650 Pair of Blocks	CABPRLEFTK20
Kawasaki ZX10R (2004-2005) Pair of Blocks	CABPRK20
Kawasaki ZX10R '06+ Pair of Blocks	CABPRK40
Kawasaki ZX10R '08 Pair of Blocks	CABPRK50
Suzuki GSXR600/750/1000/TL1000/GSXR1300 Pair of Blocks	CABPRS10
Suzuki 1200 Bandit Pair of Blocks	CABPRS20
Yamaha R6 (03+) / R1 Pair of Blocks	CABPRY20
Yamaha XJR1300SP Pair of Blocks	CABPRY60



#### **Chain Adjuster Bolts and Nuts**

STAINLESS

TITANIUM

For use with the chain adjuster blocks above. Smartens up the swingarm and very easy to fit. Available individually or in sets.

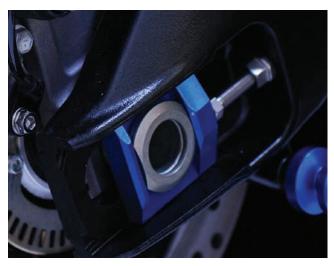


TITANIUM Description	Titanium Part Number	Length
Individual M8 x 45mm Chain Adjuster Bolt	TIAXLEADJ845	45mm
Individual M8 x 50mm Chain Adjuster Bolt	TIAXLEADJ850	50mm
Individual M8 x 55mm Chain Adjuster Bolt	TIAXLEADJ855	55mm
Chain Adjuster Bolt & Nut Set - Pair of M8 x 45mm Bolts & Nuts	TIAXLE845SET	45mm
Chain Adjuster Bolt & Nut Set - Pair of M8 x 50mm Bolts & Nuts	TIAXLE850SET	50mm
Chain Adjuster Bolt & Nut Set - Pair of M8 x 55mm Bolts & Nuts	TIAXLE855SET	55mm
<b>STAINLESS</b> Description	Stainless Steel Part Number	Length

<b>STAINLESS</b> Description	Stainless Steel Part Number	Length
Individual M8 x 45mm Chain Adjuster Bolt	LSSAXLEADJ845	45mm
Individual M8 x 55mm Chain Adjuster Bolt	LSSAXLEADJ855	55mm
Chain Adjuster Bolt & Nut Set - Pair of M8 x 45mm Bolts & Nuts	SSAXLEADJ845SET	45mm
Chain Adjuster Bolt & Nut Set - Pair of M8 x 55mm Bolts & Nuts	SSAXLEADJ855SET	55mm









Put some colour in your nuts! Manufactured using aerospace grade alloy with rolled threads for extra strength.

**Torque:** Please refer to the Pro-Bolt fitting and torque instructions provided for our aluminium sprocket nuts - we specify a torque setting of 33lbsft/44Nm which is significantly lower than manufacturer's steel originals. Our stainless steel and titanium sprocket nuts should be torqued to your manufacturer's recommended setting.

ALUMINIUM Description	Aluminium Part Number	Drilled Aluminium Part Number
Set of 6 10mm x 1.25mm pitch - (most models)	SPN10	SPN10D
Set of 6 12mm x 1.25mm pitch - (some Honda and large CC Suzuki)	SPN12	-

(Some Horida and large CC Suzuki)			
STAINLESS TITANIUM	Stainless Steel Part Number	Titanium Part Number	Drilled Titanium Part Number
M8 x 1.25mm Sprocket Nut - Individual	LSSSPN8	TISPN8	TISPN8D
M8 x 1.25mm Sprocket Nut - Set of 5	SS5SPN8	TI5SPN8	TI5SPN8D
M8 x 1.25mm Sprocket Nut - Set of 6	SS6SPN8	TI6SPN8	TI6SPN8D
M10 x 1.00mm Sprocket Nut - Individual (used on Ducati 1098)	LSSSPN10F	TISPN10F	-
M10 x 1.00mm Sprocket Nut - Set of 6 (used on Ducati 1098)	SS6SPN10F	TI6SPN10F	-
M10 x 1.25mm Sprocket Nut - Individual	LSSSPN10	TISPN10	-
M10 x 1.50mm Sprocket Nut - Individual	LSSSPN10C	TISPN10C	-
M10 x 1.25mm Sprocket Nut - Set of 5	SS5SPN10	TI5SPN10	-
M10 x 1.25mm Sprocket Nut - Set of 6	SS6SPN10	TI6SPN10	-
M10 x 1.50mm Sprocket Nut - Set of 6 (used on some models of Aprilia)	SS6PN10C	TI6SPN10C	-
M12 x 1.25mm Sprocket Nut - Individual	LSSSPN12	TISPN12	-
M12 x 1.25mm Sprocket Nut - Set of 5	SS5SPN12	TI5SPN12	-
M12 x 1.50mm Sprocket Nut - Individual	LSSSPN12C	TISPN12C	-
M12 x 1.50mm Sprocket Nut - Set of 5	SS5SPN12C	TI5SPN12C	-

#### **Sprocket Nuts Bi-Hex**

Italian inspired design. Titanium 12 point bi-hex sprocket nuts. Available individually or in sets of 5 and 6.



TITANIUM

Description	Titanium Part Number
Set of 5 - 10mm x 1.25 pitch Nut	TI5SPN10BH
Set of 6 - 10mm x 1.25 pitch Nut	TI6SPN10BH
Set of 5 - 10mm x 1.00 pitch Nut	TI5SPN10FBH
Set of 6 - 10mm x 1.00 pitch Nut	TI6SPN10FBH













# MODEL SPECIFIC PARTS

#### **Disc Rotor Bolt Silhouettes**



STAINLESS TITANIUM

#### **BMW**

Material	Part Number
Titanium	TIDISCBMW
Stainless Steel	LSSDISCBMW
M8	
	25

#### **BMW**

Material		Part Number
Titanium		TIDISCBMW001
Stainless Steel		LSSDISCBMW001
	M8	
	IVIO	
•		28

#### **BMW**

Material	Part Number
Titanium	TIDISCBMW002
Stainless Steel	LSSDISCBMW002
M6	17

#### APRILIA/DUCATI ALLEN KEY

Material		Part Number
Titanium		TIDISCDUC10
Stainless Steel		N/A
	М8	20

#### **DUCATI**

Material	Part Number
Titanium	TIDISCDUC20
Stainless Steel	N/A
М	8 15

#### **DUCATI**

Material	Part Number
Titanium	TIDISCDUC30
Stainless Steel	LSSDISCDUC30
M8	20

#### **DUCATI**

Material	Part Number
Titanium	TIDISCDUC40
Stainless Steel	LSSDISCDUC40
	M8 20

#### **DUCATI**

Material	Part Number
Titanium	TIDISCDUC50
Stainless Steel	LSSDISCDUC50
	M8

#### **HONDA FRONT**

HONDALINON	
Material	Part Number
Titanium	TIDISCHONFR
Stainless Steel	LSSDISCHONFR
	M6

#### **HONDA REAR**

Material	Part Number
Titanium	TIDISCHONRE
Stainless Steel	LSSDISCHONRE
	M8

#### KAWASAKI

Material		Part Number	
Titanium		TIDISCKAW	
Stainless Steel		LSSDISCKAW	
	M8		
		3	0

#### **SUZUKI**

Material	Part Number
Titanium	TIDISCSUZ
Stainless Steel	LSSDISCSUZ
N	18
	30

#### **SUZUKI**

Material	Part Number
Titanium	TIDISCGSXR
Stainless Steel	LSSDISCGSXR
	M8
	33

#### **SUZUKI**

Material	Part Number
Titanium	TIDISCSUZ10
Stainless Steel	LSSDISCSUZ10
•	M6 20

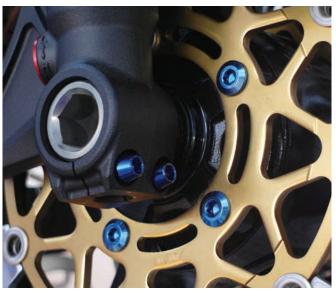
#### **SUZUKI**

Material	Part Number
Titanium	TIDISCSUZ20
Stainless Steel	LSSDISCSUZ20
	M8
	22



Many of these bolts are also suitable replacements for footrest hanger bolts and subframe bolts.







#### TRIUMPH

Material	Part Number
Titanium	TIDISCTRIFR
Stainless Steel	LSSDISCTRIFR
	М8
	30

#### TRIUMPH

Material	Part Number
Titanium	TIDISCTRIRE
Stainless Steel	LSSDISCTRIRE
	M8

#### YAMAHA

LAMALIA	
Material	Part Number
Titanium	TIDISCYAM
Stainless Steel	LSSDISCYAM
М	8
	25

#### YAMAHA

Material	Part Number
Titanium	TIDISCR1R6
Stainless Steel	LSSDISCR1R6
•	M8

#### YAMAHA

Material	Part Number
Titanium	TIDISCYAM20
Stainless Steel	LSSDISCYAM20
þ	M8

## TITANIUM



ALL AVAILABLE IN A CHOICE OF5 COLOURS: BLACK • BLUE • GOLD • SILVER • PURPLE HAZE





AVAILABLE IN BLACK OR WITH A HIGH POLISH STAINLESS FINISH



# MODEL SPECIFIC PARTS

#### **Axle Nuts and Swingarm Nuts**

STAINLESS

MUINATIT

Replace rusty originals with these light, bright and sexy alternatives. In most cases, our axle nuts are manufactured with a captive washer. For fitment intended on a particular model of bike, please refer to our model specific price list or website page. The following table is provided as a list of thread diameters, thread pitches, socket sizes and heights.



Description	Thread	Pitch	Height	Flange Diameter	Socket Size	Titanium Part Number	Stainless Part Number
Axle Nut Flanged AF22	16mm	1.50mm	16mm	32mm	22mm	TINUT16150001	LSSNUT16150001
Axle Nut Flanged AF27	18mm	1.50mm	14mm	31mm	27mm	TINUT18150001	LSSNUT18150001
Axle Nut Flanged AF24	18mm	1.50mm	18mm	32mm	24mm	TINUT18150002	LSSNUT18150002
Axle Nut Flanged Castellated AF27	18mm	1.50mm	17.8mm	31mm	27mm	TINUT18150003	LSSNUT18150003
Axle Nut Flanged AF26	20mm	1.50mm	11.2mm	30mm	26mm	TINUT20150001	-
Axle Nut Flanged AF27	20mm	1.50mm	15.2mm	35mm	27mm	TINUT20150002	-
Axle Nut Flanged AF27	20mm	1.50mm	15.8mm	32mm	27mm	TINUT20150003	-
Axle Nut Flanged AF32	22mm	1.50mm	15mm	27mm	32mm	TINUT22150001	LSSNUT22150001
Axle Nut Flanged Castellated AF32	24mm	1.50mm	24mm	38mm	32mm	TINUT24150001	LSSNUT24150001
Axle Nut Flanged AF32	24mm	1.50mm	18mm	39mm	32mm	TINUT24150002	LSSNUT24150002
Axle Nut Flanged AF28 M25 (748/916/996)	25mm	1.25mm	33.3mm	33mm	28mm	TINUT25125001	-
Axle Nut Flanged AF30	25mm	1.25mm	10mm	37mm	30mm	TINUT25125002	LSSNUT25125002
Axle Nut Flanged AF30	25mm	1.50mm	10mm	35mm	30mm	TINUT25150001	_
Axle Nut Flanged Plastic Nyloc AF32	25mm	1.50mm	13mm	37.7mm	32mm	TINUT25150002	-
Axle Nut Flanged AF36	25mm	1.50mm	18mm	43mm	36mm	TINUT25150003	LSSNUT25150003
Axle Nut Flanged AF36	30mm	1.50mm	12mm	44mm	36mm	TINUT30150001	-
Yamaha Swingarm Captive Nut (R1 '07-'08 Right Side)	32mm	1.00mm	11mm	45mm	34mm	TINUT32100001	-
Axle Nut Flanged AF41 (Ducati 748/916/996/848/796)	33mm	1.25mm	14.5mm	49mm	41mm	TINUT33125002	-
Axle Nut Flanged Castellated AF46 (748/916/996)	38mm	1.50mm	28mm	63mm	46mm	TINUT38150001	-
Axle Nut Flanged Bi-hex AF61 (MV Agusta) /1098/S	48mm	1.50mm	35mm	75mm	55mm	TINUT48150003	-







#### Axle Bolts

STAINLESS

TITANIUM

Axle bolts bear the brunt of the elements, road grit, dirt and grime, therefore they corrode quickly.
Replace them with stainless steel or titanium versions.



The following multi-fit specials fit many Honda models:

Description	Stainless Steel Part Number	Titanium Part Number
Front Wheel Axle Bolt – M14 x 1.50mm – 22mm Socket Size	LSSSPH001	TISPHO01
Front Wheel Axle Bolt – M18 x 1.50mm – 22mm Socket Size	-	TISPHO03





#### **Bleed Nipples**

**Banjo Bolts** 

STAINLESS

TITANIUM

For those who value real attention to detail! M7, M8 and M10 and special M8 for Ducati.



Description	Stainless Steel Part Number	Titanium Part Number
M7 x 1.00mm	LSSBN7	TIBN7
M7 x 1.00mm (Shallow)	LSSBN7KAW	-
M8 x 1.25mm	LSSBN8	TIBN8
M8 Special Ducati x 1.25mm	-	TIBN8-DUCATI
M10 x 1.00mm	LSSBN10	TIBN10

Manufacturer*	Front	Rear	Clutch
Honda	M8 x 1.25mm	M8 x 1.25mm	M8 x 1.25mm
Kawasaki	M7 x 1.00mm	M7 x 1.00mm	M8 x 1.25mm
Suzuki	M7 x 1.00mm	M7 x 1.00mm	M8 x 1.25mm
Yamaha	M8 x 1.25mm	M8 x 1.25mm	M8 x 1.25mm
Ducati	M8 x 1.25mm	M8 x 1.25mm	M8 x 1.25mm
Triumph - Late	M8 x 1.25mm	M8 x 1.25mm	M8 x 1.25mm
BMW Pre 1996	M10 x 1.00mm	M10 x 1.00mm	-
BMW 1996+	M10 x 1.00mm	-	-
BMW K Models	M10 x 1.00mm	M10 x 1.00mm	_

<sup>\*</sup> Please refer to Fitment Guide for model-specific sizing. However, this table shows a standard manufacturer's guide.



TITANIU

Available in hex head, double and single sizes. We also now offer a pre-drilled 'Race Spec' version, designed for racers, for ease of lockwiring. Banjo bolts are supplied with copper washers.



Note: Banjo bolts should be fitted 'dry' without any lubricant.

Description	Stainless Steel Part Number	Titanium Part Number
Single Banjo M10 x 1.25mm Race Spec	LSSBANJOS10R	TIBANJOS10R
Single Banjo M10 x 1.00mm Race Spec	LSSBANJOS10FR	TIBANJOS10FR
Single Banjo M10 x 1.00mm Race Spec with Bleed Nipple	-	TIBANJOS10FBN
Double Banjo M10 x 1.25mm	LSSBANJOD10	TIBANJOD10
Double Banjo M10 x 1.25mm Race Spec	LSSBANJOD10R	TIBANJOD10R
Double Banjo M10 x 1.00mm Race Spec	LSSBANJOD10FR	TIBANJOD10FR



Pad pin grub screw. Manufactured with a 5mm allen key drive. Common fitment for Nissin and Tockico calipers. Protects pin/calipers by keeping out the dirt – M10 x 1.25mm fitment.

Titanium Part Number	Stainless Steel Part Number
TIPINGRUB	LSSPINGRUB











# MODEL SPECIFIC PARTS

#### **Caliper Pad Retaining Pin Silhouettes**



Internal fitment of pad pins are replicas of originals. Our most popular pins are supplied with an external hex head, which has been drilled to allow for lockwire.





#### NISSIN

Part Number
TIPINBP001
LSSPINBP001
•
_

#### NISSIN

Material	Part Number
Titanium	TIPINBP002R
Stainless Steel	LSSPINBP002R
: .	

#### NISSIN

Material	Part Number
Titanium	TIPINBP003R
Stainless Steel	LSSPINBP003R
•	
:	

#### TOKICO

Material	Part Number
Titanium	TIPINBP004R
Stainless Steel	LSSPINBP004R

#### NISSIN

Material	Part Number
Titanium	TIPINBP005R
Stainless Steel	LSSPINBP005R
•	
•	

#### **TOKICO**

Part Number
TIPINBP007
N/A

# MODEL SPECIFIC PARTS





Material		Part Number
Titanium		TIPINBP008
Stainless St	eel	N/A
	•	•

#### NISSIN

Material	Part Number
Titanium	TIPINBP009
Stainless Steel	N/A
	_

#### **TOKICO**

Material	Part Number
Titanium	TIPINBP011R
Stainless Steel	LSSPINBP011R

#### **SUZUKI OWN MAKE**

Material	Part Number
Titanium	TIPINBP014
Stainless Steel	N/A
	•
_	



#### токісо

Material	Part Number
Titanium	TIPINBP010
Stainless Steel	N/A

#### **BREMBO**

IBP012

#### **SUZUKI OWN MAKE**

Material	Part Number
Titanium	TIPINBP015
Stainless Steel	N/A



# MODEL SPECIFIC KITS

Pro-Bolt has built up a huge database of bolts kits, meaning we have pre-measured thousands of models of Aprilia, BMW, Cagiva, Ducati, KTM, Gas Gas, Honda, Husqvarna, Kawasaki, KTM, MV Agusta, Suzuki, Triumph, & Yamaha. Using the data gathered, we can offer model specific kits for most areas of the bike. To find the specific kits available for your bike, please refer to our website or price list/fitment guide. Kits offered will be in a similar head style to that of the OEM bolt and identical in thread, pitch and length. Where fitment allows, you may find a choice of head style and of course colour:

Head styles: Tapered socket cap, parallel socket cap, flanged hex head, race spec and our new DualDrive fastener.

Unique to Pro-Bolt is our new DualDrive fastener combining form and function. You can select the appropriate tool, depending on accessibility & torque required, and the head design is compatible with both socket and allen

keys. DualDrive are forged bolts with rolled threads for superior strength and durability with fantastic weight saving properties. The range is also pre-drilled for lockwiring. The flexibility and resilience of the design makes this bolt the choice for GP, WSBK & BSB race teams worldwide.

Titanium range is available in: Natural factory finish, blue, gold, purple haze and our new black DLC coating.

Stainless steel range is available in: Highly polished and our new black DLC coating

■ Black DLC coating: The beautiful, long lasting black finish results from an application of Diamond Like Coating (DLC). This gives supreme hardness and corrosion resistance provided by a nano composite coating. This coating increases the component lifetime dramatically and helps to prevent galling. By incorporating them right from the beginning, the overall system cost can be held level or may even be reduced.

#### **Race Spec Radial Caliper Mount Bolt Kits**

STAINLESS TITANIUM

For standard or upgraded radial calipers - we've now made it easier to order! All our radial caliper kits are metric 10mm x 1.25mm fine pitch with pre-drilled heads for ease of lock-wiring. Kits are available to order by length of required bolt - measurements are taken from below the head.

Stainless Steel Part Number	Titanium Part Number	Set of 4 Bolts - Length of Bolt measured from under the head
SSFBRADIALRS55	TIFBRADIALRS55	Set of 4 Race Spec M10 x 55mm x 1.25mm
SSFBRADIALRS60	TIFBRADIALRS60	Set of 4 Race Spec M10 x 60mm x 1.25mm
SSFBRADIALRS65	TIFBRADIALRS65	Set of 4 Race Spec M10 x 65mm x 1.25mm
SSFBRADIALRS70	TIFBRADIALRS70	Set of 4 Race Spec M10 x 70mm x 1.25mm
SSFBRADIALRS75	TIFBRADIALRS75	Set of 4 Race Spec M10 x 75mm x 1.25mm
SSFBRADIALRS80	TIFBRADIALRS80	Set of 4 Race Spec M10 x 80mm x 1.25mm





#### **Front & Rear Caliper Mount Kits**

Supplied in kit form with copper grease, these replace the bolts that mount the caliper to the fork legs. We use either flanged hex head or tapered socket cap bolts as appropriate, when replacing the originals.



TITANIUM





#### Front & Rear Caliper Pinch Bolt Kit

STAINLESS TITANIUM

These are the bolts that go through the caliper itself, pinching the caliper together. We also offer the special 'low head profile' Brembo caliper pinch bolts in both titanium and stainless steel.









#### Fork/Axle Bottom Pinch Bolts

STAINLESS TITANIUM

Supplied in kit form with copper grease – these replace the bolts at the bottom of the forks.











ALL AVAILABLE IN **STAINLESS TITANIUM** 

#### **Brake & Clutch Perch Pinch Bolt Kits**

Supplied in a variety of head styles to match OEM originals and where fitment allows we offer a Race Spec version. These bolts are used to pinch together the brake and clutch perches on the handlebars.



#### **Handlebar Bolt Kits**

Supplied in a variety of head styles to match OEM originals and where fitment allows we offer a Race Spec version. These bolts clamp the handlebar to the yoke or forks depending on styling or handlebar fitting (retro/clip-on).





#### **Top & Bottom Triple Clamp Bolt Kits**

Supplied in a variety of head styles to match OEM originals and where fitment allows we offer a Race Spec version. These are the fork to yoke and fork clamp pinch bolts.







#### **Rider & Pillion Footrest Hanger Bolt Kits**

Supplied in a variety of head styles to match OEM originals, these are the bolts that mount the footrest hanger - we offer sets for both rider and pillion footrests.







STAINLESS

TITANIUM

Being in a low area on the bike the original fasteners corrode very quickly, these kits are quick and easy to fit.





#### **Scratch & Spark Set**

TITANIUM

For those who like to get down, you'll get some serious sparks from these! Titanium bolts, with your colour choice of alloy collar. We offer 6mm & 8mm Bolts in 20mm lengths. Other lengths can be supplied on request.



Part Number	Description
TISPARK6	Pair of 6mm Allen Key Drive Bolts with colour anodised collar
TISPARK8	Pair of 8mm Allen Key Drive Bolts with colour anodised collar





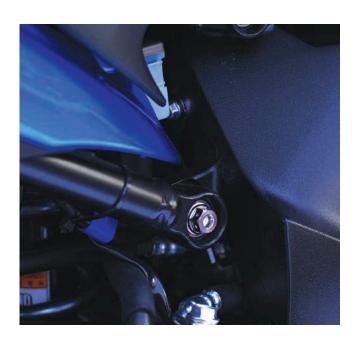


#### **Subframe Bolt Kits**

STAINLESS TITANIUM

Supplied in a variety of head styles to replicate OEM originals, including nuts, bolts and washers where necessary.







# SPECIAL RACE PARTS

Benefit from our work in the paddocks by customising your bike using bespoke fasteners developed specifically for the Moto GP, Moto2, World Superbike & British Superbike race teams. Alternatively enhance your performance by fitting lighter fasteners to reduce un-sprung weight.

Developed whilst working with World and British Superbike teams, these kits contain lightweight, high performance replacement fasteners for the most common customisations made by race teams we work with. They are currently available for the Honda CBR1000RR, BMW S1000R / HP4 and Kawasaki ZX10R.

Ducati		
Part Number	Description	Fits Models
ALUMINIUM		
ALSPDUC41R	Reservoir Mount Race Spec Bolt M5 x 11mm	Panigale 1199
LDUCNUT40	Front Spindle Collar	1098/1198 Panigale/1098/1099
STAINLESS		
LSSSPDUC01	Front Caliper Pinch Bolt M8 x 40mm - low head profile	748/916/996/998
TITANIUM		
TINUT33125002	Sprocket Side Nut	

748/916/996/998

748/916/996/998

1098

Panigale















TINUT38150001

TISPDUC01

TISPDUC01-8

TISPDUC40

TISPDUC41R

Rear Axle Nut

Front Caliper Pinch Bolt

Front Caliper Pinch Bolts - Set of 8

Rear Hub Pinch Bolt - M12 x 40mm

Engine Nut (cable cover Race Spec version)

# SPECIAL RACE PARTS TIM SM

#### Honda

Part Number	Description
STAINLESS	
LSSSPHO24	Rear Caliper Through Pin – fits various models
TITANIUM	
TISPHO111	Cam Chain Tensioner 12mm - Honda CBR1000RR '08+
TISPHO114	Centre Oil Press Plug - Honda CBR1000RR'08+
TISPHO122	Oil Filer Bush M20 x 36mm - Honda CBR1000RR '08+
TISPHO123	Valve Cover Bolt - Honda CBR1000RR'08+
TISPHO124	Oil Sensor Mount Bush - Honda CBR1000RR'08+
TISPHO24	Rear Caliper Through Pin - fits various models
TISPHO38	Rear Sprocket Stud - Honda CBR600RR/CBR1000RR
TISPHO45	Front Sprocket Bolt - Various Honda Off Road Models

#### TITANIUM SPECIAL RACE PARTS KIT - HONDA

Pro-Bolt Race Parts Kit for Honda CBR1000RR 2008 onwards containing bespoke parts as used by World Superbike Team Pata Honda / Ten Kate Racing. This presentation box kit includes:

- 1 x Titanium Cam Chain Tensioner Bolt 1 x Titanium Centre Oil Press Plug
- 1 x Titanium Oil Filter Mount Bush 4 x Titanium Valve Cover Bolts
- 10 x Titanium Cylinder Head Nuts 1 x Aluminium Generator Cover Blind Plug
- 1 x Titanium M14 Oil Filter Bush 6 x Titanium Rear Sprocket Studs
- 1 x Titanium M20 x 36mm Sump Bolt with Magnetic Stud

Part Number: TIKITSPECIALHO214





#### **BMW**

Part Number	Description
STAINLESS	
LSSSPBMW003	Frame Adjusting Nut - M800 Series, 80S, 800ST
LSSSPBMW005	Wheel Bolt for Cast Wheels - M10 x 1.25mm x 40mm
TITANIUM	
TISPBMW001	Linkage Bolt M12 x 120mm (30mm Thread) - S1000RR
TISPBMW002	Shock Linkage Flanged Nut - M12 - S1000RR
TISPBMW003	Bottom Linkage To Shock Bolt M12 x 140mm - S1000RR
TISPBMW004	Linkage Bolt Dome Head M10 x 1.50mm x 55mm - S1000RR
TISPBMW005	Linkage Bolt M10 x 1.25mm x 65mm - S1000RR
TISPBMW006	Linkage Bolt M12 x 1.25mm x 60mm - S1000RR
TISPBMW007	Swingarm Nut Left Side M18 x 1.50 - 6H - S1000RR
TISPBMW008	Front Sprocket Nut M24 x 1.50 -6H - S1000RR

#### TITANIUM SPECIAL RACE PARTS KIT - BMW

Pro-Bolt Race Parts Kit for BMW S1000RR / HP4, containing bespoke race parts as used by British Superbike Team Buildbase BMW. This presentation box kit includes:

- 1 x Titanium Bottom Linkage to Shock Bolt M12 x 140mm Socket Head
- $\, \cdot \, 1 \, x \,$  Titanium Linkage Bolt Dome Head M10 x 1.50mm x 55mm
- 1 x Titanium Linkage Bolt M12 x 60mm Large Cap Head
- •1 x Titanium Linkage Bolt M12x120mm (30mm Thread)
- 1 x Titanium Shock Linkage Flanged Nut M12
- 1 x Titanium Linkage Bolt M10 X 65mm Cap Head
- 1 x Titanium Flat Washer M10 (20mm Outside Diameter)
- 1 x Titanium Nylon Nut M10 x 1.50mm
- 1 x Titanium BMW S1000R Swingarm Nut Left Side M18x1.50mm 6H
- •1 x Titanium BMW S1000RR Front Sprocket M24x1.50mm 6H
- 4 x Titanium Hex Head M10 x (1.50mm) x 50mm
- 4 x Titanium Hex Head M10 x (1.25mm) x 40mm
- 4 x Titanium Sprocket Nut M10 x 1.25mm

Part Number: TIKITSPECIALBMW05





# SPECIAL RACE PARTS

#### Kawasaki

Part Number	Description
TITANIUM	

#### ZX10R 2011 SPECIAL PARTS:

TISPKAW001	Rear Swingarm Nut
TISPKAW002	Top Shock Nut (High Profile)
TISPKAW003	Engine Tensioner Threaded (Male) M18 x 1.50mm
TISPKAW004	Engine Tensioner Castellated Female
TISPKAW005	Engine Tensioner Hex Head Bolt M10 x 65mm (32mm Thread)
TISPKAW25	Upper Engine Mount Bolt - 280mm
TISPKAW30	Front Gear Sprocket Nut M20 x 150mm
TISPKAW35	Lower Engine Mount Bolt - 260mm

#### TITANIUM SPECIAL RACE PARTS UPGRADE KIT

Pro-Bolt Race Parts Kit for Kawasaki ZX10R 2008 onwards containing bespoke race parts as used by British Superbike Team Gearlink Kawasaki, this presentation box kit includes:

- + 1 x Titanium Rear Swing Arm Nut Low Profile M20 x 1.50mm AF 24mm
- 1 x Titanium Top Shock Nut High Profile M16 x 1.50mm AF 30m
- 1 x Titanium Engine Tensioner Threaded Male M18 x 1.50mm
- 1 x Titanium Engine Tensioner Castellated Female
- 1 x Titanium Engine Tensioner Hex Head Bolt M10 X 65mm 32mm Thread
- 1 x Titanium Front Gear Sprocket Nut ZX10R 20mm x (1.5mm) AF
- 1 x Titanium Kawasaki ZX10R Upper Engine Mount 280mm
- 1 x Titanium Kawasaki ZX10R Lower Engine Mount 260mm
- ullet 2 x Titanium Flanged Metal Lock Nut M10 x 1.25mm

Part Number: TIKITSPECIALKA01







#### Yamaha

Part Number	Description
TITANIUM	
TISPYAM14	R6 2003-2007/R12004-2008 Rear Caliper Slide Bolt
TISPYAM19	R1 2002-2003 Rear Caliper Slide Bolt









# **ANCILLARY ITEMS**





Part Number	Description
<b>TANNINIUM</b>	
LCOLLAR5-7-3U	5mm Threaded Collar - 7.5mm o/d - 3mm in Length
LCOLLAR5-7-5U	5mm Threaded Collar - 7.5mm o/d - 5mm in Length
LCOLLAR5-7-10U	5mm Threaded Collar - 7.5mm o/d - 10mm in Length
LCOLLAR6-8-3U	6mm Threaded Collar - 8mm o/d - 3mm in Length
LCOLLAR6-8-5U	6mm Threaded Collar - 8mm o/d - 5mm in Length
LCOLLAR6-8-10U	6mm Threaded Collar - 8mm o/d - 10mm in Length
LCOLLAR6-10-3U	6mm Threaded Collar -10mm o/d - 3mm in Length
LCOLLAR6-10-6U	6mm Threaded Collar -10.5mm o/d - 6mm in Length
LCOLLAR8-10-5U	8mm Threaded Collar -10mm o/d - 5mm in Length



Part Number	Description
LWASOR	Steel 'Grippa' Washers for M6 Ouick Release Studs

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Part Number	Description
LWCOP10	M10 x 13.5mm o/d
LWCOP14-19	M14 x 19mm o/d

#### **Plastic Anti Scratch Washers**

	Part Number	Description
	LWAN4	M4 Fairing Plastic Washer
	LWAN5	M5 Fairing Plastic Washer
	LWAN6	M6 Fairing Plastic Washer
	LWAN8	M8 Fairing Plastic Washer
	LWACR6	M6 Countersunk Washer
	LWACR8	M8 Countersunk Washer
	LWASITEM	Washer for Suzuki Cam Cover Bolt

#### **Quick Release Spring/Cup Washers**

Part Number	Description
LWARQR	Flat Plastic Washer for Quick Release Stud
LWASQR	Steel 'Grippa' Washer for Quick Release Fastener
QRSPRINGA5	Spring & Cup Washer for Quick Release

#### Plastic Tubing/Spacing Collars

Part Number	Description	
TUB5	M5 Spacer/Tubing	
TUB6	M6 Spacer/Tubing	









# ANCILLARY ITEMS

Backing Plates & Receptacles				
Part Number	Description			
CLIP1	M6 Chimney Nut / Slip On			
CLIP2	M5 Chimney Nut / Slip On - 14mm width			
CLIP3	Receptacle for Quick Release- Slide On			
CLIP4	M8 Chimney Nut / Slip On			
CLIP5	M5 Chimney Nut / Slip On - 12mm width			
CLIP6	Receptacle for Quick Release- Rivet On			
CLIP7	M5 Chimney Nut / Weld On			
CLIP8	M6 Chimney Nut / Weld On			
CLIP9	Race Fairing S Clip			
CLIP20	Race Fairing S Clip - Pack of 20			
LRIVET3.2-6	Blind rivet 3.2mm diameter x 6mm length			
LWARQR	Plastic Washer for Quick Release Stud			
LWASQR	Steel Grippa Washer for M6 Quick Release Stud			

Allen Keys	
Part Number	Description
AK1.5	1.5mm Allen Key
AK2	2mm Allen Key
AK2.5	2.5mm Allen key
AK3	3mm Allen Key
AK4	4mm Allen Key
AK5	5mm Allen Key
AK6	6mm Allen Key

### Lockwire

For use with both our Race Spec and DualDrive range of fasteners, we offer 302 grade stainless steel lockwire supplied by the roll or the meter.

Part Number	Description
LOCKWIRE 51	0.51mm Diameter x 1 Meter Length
LOCKWIRE.51ROLL	0.51mm Diameter x 1 Roll 0.45 kilos
LOCKWIRE.61	0.61mm Diameter - 1 Meter Length
LOCKWIRE.61ROLL	0.61mm Diameter - 1 Roll 0.45 kilos

Rubber Well Nuts			
Part Number	Description		
LRNUT4F	M4 (0.5mm - Fine Pitch) Ducati Rubber Nut		
LRN5	M5 Rubber Nut - 13mm Length		
LRN6	M6 Rubber Nut - 15mm Length		
LRN6-25	M6 Rubber Nut - 25mm Length		
LRN8	M8 Rubber Nut - 28mm Length		

### **Copper Grease**

Prevent galling when fitting titanium fasteners using copper grease supplied in a 5ml sachet.



















### **Nylon Pry and Push Rivets**

Part Number	Description
PBPRYRIV7	Nylon Black Pry Rivet M7
PBPRYRIV8	Nylon Black Pry Rivet M8
PBPUSHRIV6	Nylon Black Push Rivet M6
PBPUSHRIV7	Nylon Black Push Rivet M7
PBPUSHRIV8	Nylon Black Push Rivet M8
PBSCREWRIV6	Nylon Black Screw Rivet M6

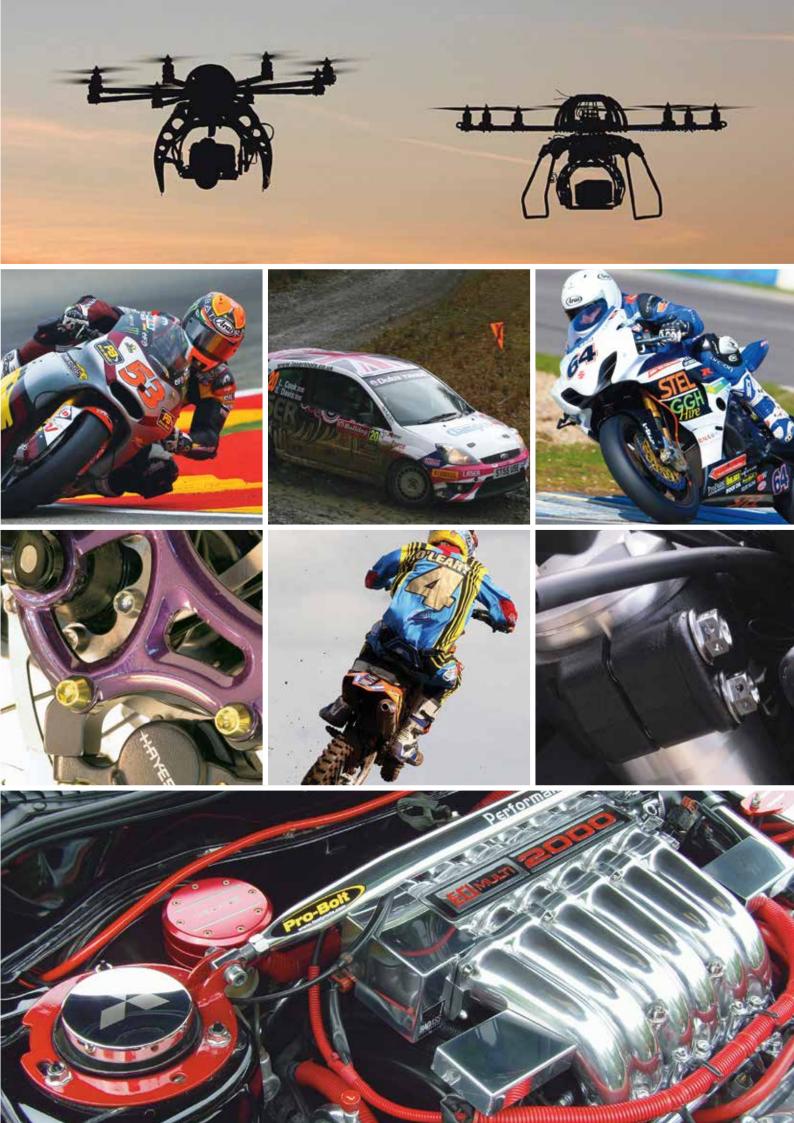




ALUMINIUM TITANIUM STAINLESS STEEL



passionate about bolts







### **ABOUT US**

Pro-Bolt is the world's leading supplier of fasteners and has earned a reputation for excellence in supply, high quality and support from its work in the extremely demanding world of British Superbikes, World Superbikes and MotoGP. Our performance in the paddock means that users from other industry sectors, who need lightweight, high quality and performance fasteners, fit Pro-Bolt. Customers fit and forget with Pro-Bolt.

Based in the UK's Motorsport valley, Pro-Bolt benefits from easy access to industry innovators and expertise. This, coupled with the knowledge we gain during our bespoke developments for racing clients, keeps our product range at the leading edge of what is possible.

We couple innovative design and technical expertise with great looks and well though through product ranges. For motorcycle owners we have measured and specified complete bike kits in Aluminium, Stainless Steel and Titanium. In the commercial sector, we offer a range of DIN /ISO standard bolts in addition to our Pro-Bolt Range. As the world's leading supplier of high quality, high performance and quality assured bolts and fasteners, Pro-Bolt's products are everywhere – on satellites in space, on helicopters & UAVs in the sky, at sea and in homes.

#### HOW PRO-BOLT'S CUSTOMERS HAVE HELPED US GROW

Our customers use our products in extreme conditions and constantly feed back to us their ideas for improvement, new requirements and application demands. By listening to this feedback we are able to keep our product ranges in line with our customers' needs.

#### PRO-BOLT'S QUALITY ASSURANCE

Our products are of superior quality because they are manufactured in the UK using fully certified and traceable raw materials, enhanced using multi-axis sliding head machines to ISO9001 standards and then anodised by our in-house experts. We carry high stock levels so that when you need to complete your project, or replace critical parts, we can meet your deadlines.

#### **BESPOKE MANUFACTURE**

If what you need is not a stock item we will make your parts quickly, using the same high quality materials and processes we use in our standard range, so that you can enjoy the same service and peace of mind, where ever your project takes you.

### WORLDWIDE SUPPLY

Pro-Bolt supply more than 50 countries globally, offering multi-currency purchasing, local distribution and support, as well as UPS delivery, all designed to help you complete your projects on time, every time.

#### PERSONAL SERVICE COMMITMENT

We are a family owned business and your project matters to us, so we will keep our promises, be flexible when you need us to be and provide a service which delights you.

### PRO-BOLT PRODUCT RANGE PERFORMANCE

Stainless Steel: We offer a unique material in unique head styles, polished to an unmatched mirror finish. Manufactured from 316 stainless steel, providing superior strength and corrosion resistance, Pro-Bolt is the first company to provide tapered socket caps, flanged hex head, dome head bolts and countersunk bolts in stainless steel.

**Titanium**: Manufactured from aircraft grade titanium 6AL-4V (grade 5), the outstanding benefits of these products include 42% less weight than the equivalent stainless steel product, whilst the process of rolling the threads produces greater fatigue strength and reduces galling.

**Aluminium**: Offering an outstanding weight reduction of 60% lighter than the equivalent steel bolts, this range is manufactured from 7075T6 aluminium, and is suitable for use in all non-safety critical areas. Products are available in a choice of black, blue, gold, orange, purple, red and silver.

### **ALUMINIUM**





Lightweight, colour consistent, and machined to a high quality smooth finish, our ever increasing aluminium range allows you to create a unique look and style.

You can customise your project little by little, or make large-scale changes. We offer model specific kits for Motorcycles, Cycle Sets and Rocker Cover Kits. All our fasteners are available in a choice of Black, Blue, Gold, Orange, Purple, Red and Silver.

- Material Specification: 70756T6 Aluminium.
- Manufacturing process: Head: cold formed; Shank: thread rolled.
- Anodising: Chemically brightened and colour anodised to between 8 and 12 microns thick.
- Weight: 60% lighter than steel 40% lighter than Titanium.
- Corrosion: Saltwater, road film or mild acids do not affect anodised aluminium
- Application: Aluminium is suitable for use in all non-safety critical areas mudguards, screens, fairings, engine casings, huggers, fuel caps, number plates, lamp units, exhaust cans, heel plates, exhaust manifold brackets, fuel cap surround, air filter, car rocker covers, plus many more. Aluminium is not suitable for any stress area applications. If you are in any doubt as to the suitability of our products for your machine, or the size you need, please contact Pro-Bolt directly.

MATERIAL PROPERTIES	
Density:	
Shear Strength: Ductility: Poisson's Ratio: Hardness: Strength-to-Weight Ratio: Stiffness-to-Weight Ratio:	

Thread Diameter	Material Tensile Stress Area (mm²)	Max Load (kN)	Total Elongation (mm)
6mm	20.1	11.58	0.56
8mm	36.6	23.19	0.62
10mm	58.0	39.17	1.05

#### **TORQUE & LUBRICATION**

When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling, the exception being bleed nipples and banjo bolts which should be fitted dry. For bolts in safety critical areas, we would recommend a medium strength threadlock. If you are in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.





### **MATERIALS**

### STAINLESS STEEL

Our stainless steel range of products is manufactured from 316 Stainless Steel, a premium quality product which offers superior strength and corrosion resistance.

Pro-Bolt were first to provide Tapered Socket Caps, Flanged Hex Heads and Domed/Mushroom Fairing Bolts. We are offering a quality grade material in unique head styles – and to a polished mirror finish. Absolutely no polishing is required.

Please note that not all Stainless Steel is suitable for stress areas. However, our 316 Stainless Steel is suitable for Engine Casings, Fairings, Screens, Front Axle Pinch Bolts, Caliper Pinch Bolts, Caliper Mount Bolts, Footrest Hanger Bolts, Clip-On Handle Bar Bolts, Brake/Clutch Pinch Perch Bolts, Top/Bottom Yoke Clamp Bolts. Also available are 1/4 Turn D-Ring Quick Release Fasteners, 1/4 Turn Allen Key Drive Quick Release Fasteners, Brake Caliper Pad Pins, Axle Nuts, Banjo Bolts, Bleed Nipples and Motorcycle Disc Rotor Bolts.

- Material specification: 316 Stainless Steel.
- Manufacturing process: We manufacture in a single process on multi axis CNC machining centres, which includes thread rolling. Thread standards are to BS3692:1967 which is the British Standard for ISO Precision Metric Threads. Route radii vary between 0.8mm and 0.4mm. This is the maximum that we can use and improves shear strength. Thread lead varies between K1 and K2.
- Material: Stainless Steels are iron alloys with a minimum of 10.5% Chromium with other elements (Nickel, Molybdenum, Titanium, Copper, Carbon, Nitrogen) added to enhance properties such as formability and strength. It is the chromium-rich, oxide film that gives the corrosion resistance of Stainless Steel. This protective film is strong and chemically stable (i.e. passive) where there is sufficient oxygen on the surface. This protection is extremely thin and will usually self-repair

AVAILABLE WITH A HIGH POLISH STAINLESS FINISH



if sufficient oxygen is available. Please note: Under certain conditions the passive state can be broken down and corrosion can result.

■ Heat Resistance: 316 has good resistance to oxidation in continuous service to 870°C and intermittent service to 925°C. However, continuous use at 425-860°C is not recommended due to its resistance to carbide precipitation. Where high strength is required at temperatures above 500°C, Grade 316H is recommended.

### **MATERIAL PROPERTIES**

	/ 0/ / 0
Density:	
Young's Modulus:	193GPa (28 x 10 <sup>6</sup> psi)
Yield Strength:	260MPa (37.7 x 10³psi)
Ultimate Tensile Strength:	570MPa (82.7 x 10³psi)
Compressive Strength:	260MPa (37.7 x 10³psi)
Shear Modulus:	78GPa (11.3 x 10 <sup>6</sup> psi)
Ductility:	40% elongation at break +
Minimum value allowed by	ASTM A240
Poisson's Ratio:	0.27
Hardness:	95 Rockwell B +
Maximum value allowed by	ASTM A240
Strength-to-Weight Ratio:	32.4kNm/kg
Stiffness-to-Weight Ratio:	24 M Nm/kg

Material Tensile Stress Area (mm²)	Max Load (kN)	Total Elongation (mm)
20.1	16.40	1.93
36.6	29.15	2.85
58.0	46.89	3.70
	Stress Area (mm²) 20.1 36.6	Stress Area (mm²)     (kN)       20.1     16.40       36.6     29.15



### **TORQUE & LUBRICATION:**

When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling, the exception being bleed nipples and banjo bolts which should be fitted dry. For bolts in safety critical areas, we would recommend a medium strength threadlock. If you are in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.

### TITANIUM

Made from aircraft grade Titanium 6AL-4V (grade 5), our titanium bolts have a tensile strength in excess of 120,000psi, suitable for replacing both Grade 5 and Grade 8 steel bolts. In addition, we roll the threads to produce greater fatigue strength and reduce galling.

We carry the UK's widest range of products for the automotive industry, among others. We offer Flanged Hex Head, Tapered Socket Cap, Countersunk, and Dome Head Bolts, Nuts and Washers – from 3mm to 12mm. We also offer Axle Nuts, Swingarm Nuts, Yoke Nuts, Caliper Pins, Banjo Bolts, Disc Bolts and many more specifically machined items. All our Titanium nuts, bolts, washers and specially machined items are available in natural, blue, gold and purple haze, with the exception of our Race-Spec range which has a factory finish.

### **MATERIAL PROPERTIES**

Density:	
Young's Modulus:	110GPa (16 x 10 <sup>6</sup> psi)
Yield Strength:	828 MPa (120 x 10 <sup>3</sup> psi)
Ultimate Tensile Strength:	1030MPa (149 x 10 <sup>3</sup> psi)
Compressive Strength:	960MPa (139 x 10 <sup>3</sup> psi)
Shear Modulus:	
Ductility:	
Poisson's Ratio:	0.34
Hardness:	36 Rockwell C
Maximum value allowed by	ASTM A240
Strength-to-Weight Ratio	
Stiffness-to-Weight Ratio	24.9MNm/kg

Thread Diameter	Material Tensile Stress Area (mm²)	Max Load (kN)	Total Elongation (mm)
6mm	20.1	21.25	0.54
8mm	36.6	36.78	0.48
10mm	58.0	53.53	1.45









- ALL AVAILABLE IN A CHOICE OF 4 COLOURS: BLUE GOLD NATURAL PURPLE HAZE
- Material specification: Ti-6Al-4V, an alloy introduced in 1954, is a good general purpose grade. Titanium alloy is available in all product forms. Its density is 0.160 pounds per cubic inch. It can be heat-treated to ultimate strengths in excess of 170,000psi and responds to heat treatment in sections up to 15mm. This alloy is stable at temperatures ranging from 423°F to over 1000°F.
- Manufacturing process: We manufacture in a single process on multi axis CNC machining centres, which includes thread rolling. Thread standards are to BS3692:1967 which is the British Standard for ISO Precision Metric Threads. Route radii vary between 0.8mm and 0.4mm. This is the maximum that we can use and improves shear strength. Thread lead varies between K1 and K2.
- **Weight:** 42% lighter than steel.
- Other Items: Machined from bar.

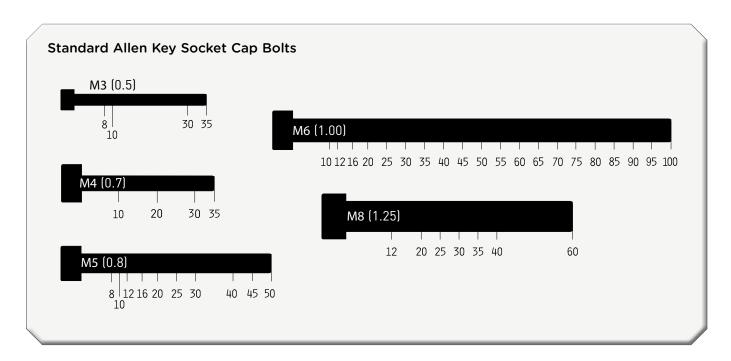
#### **TORQUE & LUBRICATION**

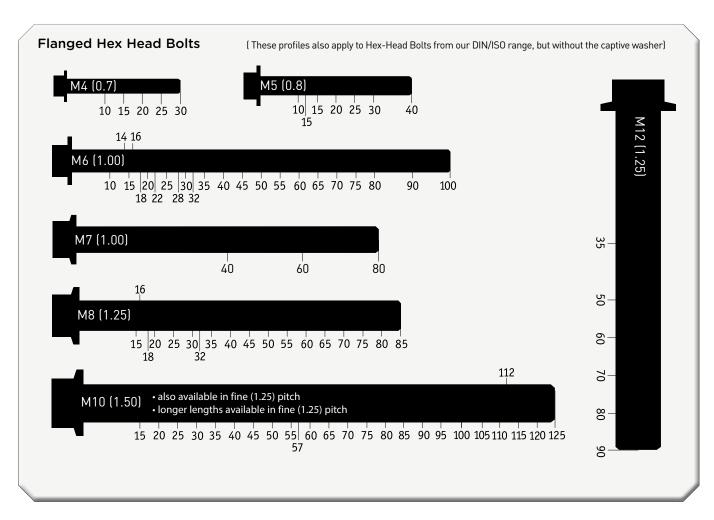
When individual bolts are purchased, torque guides vary depending on the material, manufacturing method, thread diameter, pitch and head style.

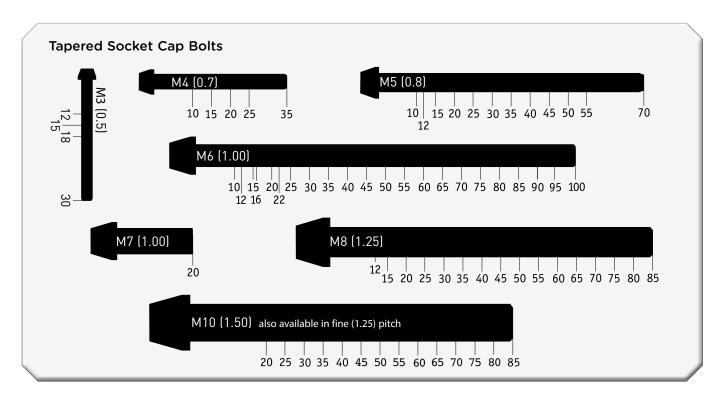
For fasteners in general use, we recommend an anti-seize or a copper based lubricant be applied to the threads in order to prevent galling, the exception being bleed nipples and banjo bolts which should be fitted dry. For bolts in safety critical areas, we would recommend a medium strength threadlock. If you are in any doubt as to the suitability or torque settings of our products for your specific application, please do not hesitate to contact us prior to fitment.

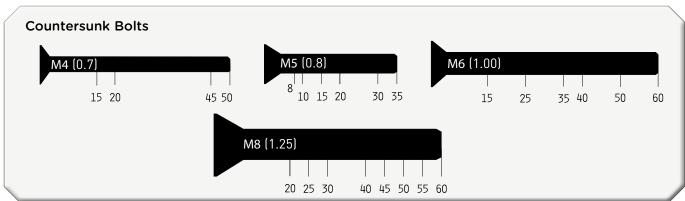


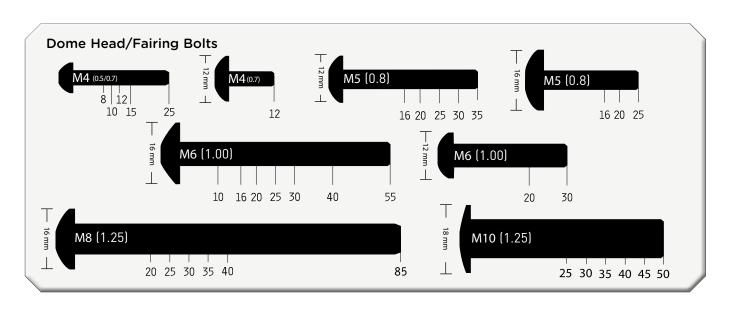
**Note:** Not all sizes are available in ALL materials, please refer to relevant material section.



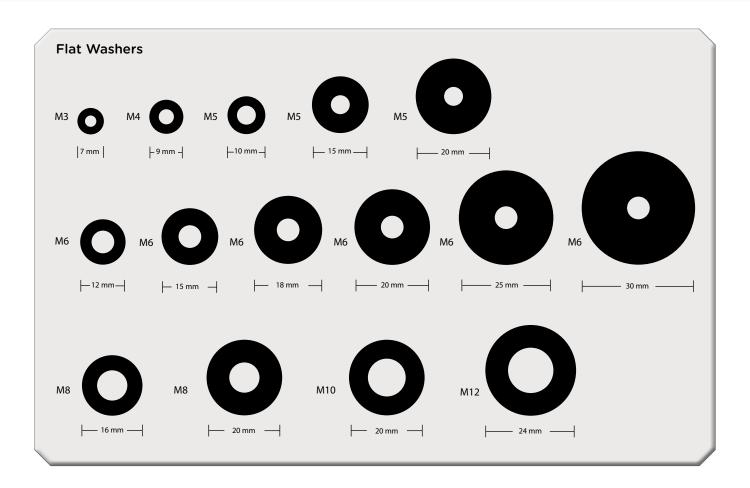


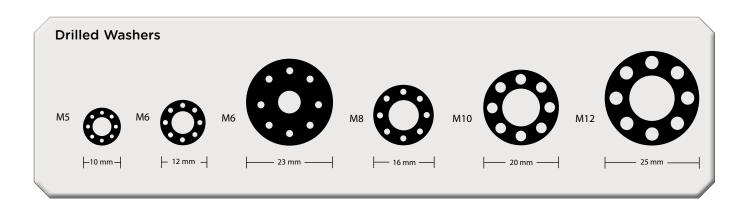


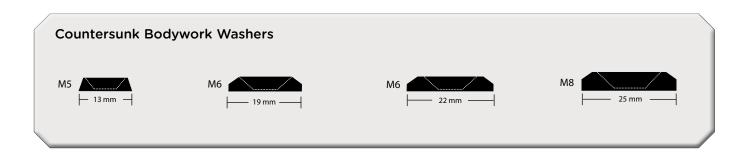


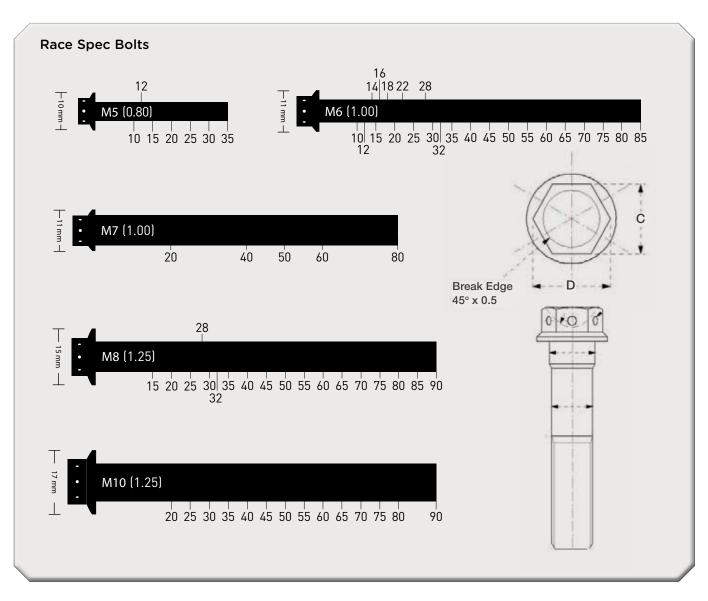


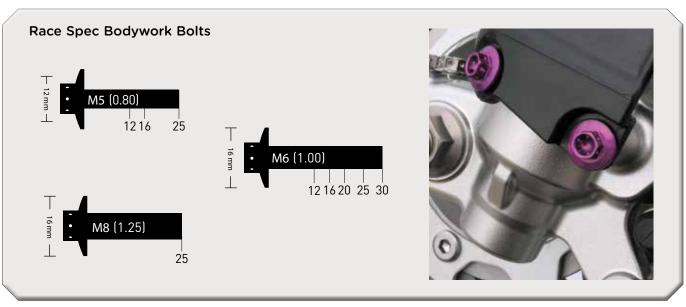














# THE ISO/DIN RANGE

DIN 126 Plain Washer				
Titanium Part No.	Stainless Part No.	Inside Diameter	WasherThickness	Outside Diameter
TIWADIN4	SSWADIN4	4.3	0.8	9
TIWADIN5	SSWADIN5	5.3	1.0	10
TIWADIN6	SSWADIN6	6.4	1.6	12
TIWADIN8	SSWADIN8	8.4	1.6	16
TIWADIN10	SSWADIN10	10.5	2.0	24
TIWADIN12	SSWADIN12	13	2.5	26

DIN 934	DIN 934 Hexagon Nut										
Titanium Part No.	Stainless Part No.	Nut Diameter	Nut Height	Socket Width	Pitch						
TIFNDIN3	SSFNDIN3	3	3	5.5	0.5						
TIFNDIN4	SSFNDIN4	4	4	7	0.7						
TIFNDIN5	SSFNDIN5	5	5	8	0.8						
TIFNDIN6	SSFNDIN6	6	6	10	1						
TIFNDIN8	SSFNDIN8	8	8	13	1.25						
TIFNDIN10F	SSFNDIN10F	10	10	17	1.25						
TIFNDIN10	SSFNDIN10	10	10	17	1.5						
TIFNDIN12FF	SSFNDIN12FF	12	12	19	1.25						
TIFNDIN12F	SSFNDIN12F	12	12	19	1.5						
TIFNDIN12	SSFNDIN12	12	12	19	1.75						

DIN 6923 Flanged Hexagon Nut										
Titanium Part No.	Stainless Part No.	Nut Diameter	Nut Height	Socket Width	Flange Diameter	Pitch				
TIFNFLDIN5	SSFNFLDIN5	5	5	8	11.8	8.0				
TIFNFLDIN6	SSFNFLDIN6	6	6	10	14.2	1				
TIFNFLDIN8	SSFNFLDIN8	8	8	12	17.9	1.25				
TIFNFLDIN10F	SSFNFLDIN10F	10	10	15	21.8	1.25				
TIFNFLDIN10	SSFNFLDIN10	10	10	15	21.8	1.5				
TIFNFLDIN12FF	SSFNFLDIN12FF	12	12	18	26	1.25				
TIFNFLDIN12F	SSFNFLDIN12FF	12	12	18	26	1.5				
TIFNFLDIN12	SSFNFLDIN12	12	12	18	26	1.75				

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(part th	readed)	90 De	g					
Titanium Part No.	Stainless Part No.	Shaft Diameter	Bolt Length	Thread Length	Head Width	Head Height	Socket Width	Pitch
TICSDIN308	SSCSDIN308	3	8	6.14	6.72	1.86	2	0.5
TICSDIN310	SSCSDIN310	3	10	8.14	6.72	1.86	2	0.5
TICSDIN312	SSCSDIN312	3	12	10.14	6.72	1.86	2	0.5
TICSDIN315	SSCSDIN315	3	15	13.14	6.72	1.86	2	0.5
TICSDIN320	SSCSDIN320	3	20	18	6.72	1.86	2	0.5
TICSDIN325	SSCSDIN325	3	25	18	6.72	1.86	2	0.5
TICSDIN408	SSCSDIN408	4	8	5.52	8.96	2.48	2.5	0.7
TICSDIN410	SSCSDIN410	4	10	7.52	8.96	2.48	2.5	0.7
TICSDIN412	SSCSDIN412	4	12	9.52	8.96	2.48	2.5	0.7
TICSDIN415	SSCSDIN415	4	15	12.52	8.96	2.48	2.5	0.7
TICSDIN420	SSCSDIN420	4	20	17.52	8.96	2.48	2.5	0.7
TICSDIN425	SSCSDIN425	4	25	20	8.96	2.48	2.5	0.7
TICSDIN510	SSCSDIN510	5	10	6.8	11.2	3.2	3	8.0
TICSDIN512	SSCSDIN512	5	12	8.8	11.2	3.2	3	0.8
TICSDIN515	SSCSDIN515	5	15	11.8	11.2	3.2	3	0.8
TICSDIN520	SSCSDIN520	5	20	16.8	11.2	3.2	3	0.8
TICSDIN525	SSCSDIN525	5	25	21.8	11.2	3.2	3	0.8
TICSDIN530	SSCSDIN530	5	30	22	11.2	3.2	3	0.8
TICSDIN535	SSCSDIN535	5	35	22	11.2	3.2	3	0.8
TICSDIN540	SSCSDIN540	5	40	22	11.2	3.2	3	0.8
TICSDIN610	SSCSDIN610	6	10	6.28	13.44	3.72	4	1
TICSDIN612	SSCSDIN612	6	12	8.28	13.44	3.72	4	1
TICSDIN615	SSCSDIN615	6	15	11.28	13.44	3.72	4	1
TICSDIN620	SSCSDIN620	6	20	16.28	13.44	3.72	4	1
TICSDIN625	SSCSDIN625	6	25	21.28	13.44	3.72	4	1
TICSDIN630	SSCSDIN630	6	30	24	13.44	3.72	4	1
TICSDIN635	SSCSDIN635	6	35	24	13.44	3.72	4	1
TICSDIN640	SSCSDIN640	6	40	24	13.44	3.72	4	1
TICSDIN645	SSCSDIN645	6	45	24	13.44	3.72	4	1
TICSDIN650	SSCSDIN650	6	50	24	13.44	3.72	4	1
TICSDIN655	SSCSDIN655	6	55	24	13.44	3.72	4	1
TICSDIN660	SSCSDIN660	6	60	24	13.44	3.72	4	1
TICSDIN665	SSCSDIN665	6	65	24	13.44	3.72	4	1
TICSDIN670	SSCSDIN670	6	70	24	13.44	3.72	4	1
TICSDIN675	SSCSDIN675	6	75	24	13.44	3.72	4	1

Titanium Part No.	Stainless Part No.	Shaft Diameter	Bolt Length	Thread Length	Head Width	Head Height	Socket Width	Pitch
TICSDIN680	SSCSDIN680	6	80	24	13.44	3.72	4	1
TICSDIN685	SSCSDIN685	6	85	24	13.44	3.72	4	1
TICSDIN690	SSCSDIN690	6	90	24	13.44	3.72	4	1
TICSDIN815	SSCSDIN815	8	15	10.04	17.92	4.96	5	1.25
TICSDIN820	SSCSDIN820	8	20	15.04	17.92	4.96	5	1.25
TICSDIN825	SSCSDIN825	8	25	20.04	17.92	4.96	5	1.25
TICSDIN830	SSCSDIN830	8	30	25.04	17.92	4.96	5	1.25
TICSDIN835	SSCSDIN835	8	35	28	17.92	4.96	5	1.25
TICSDIN840	SSCSDIN840	8	40	28	17.92	4.96	5	1.25
TICSDIN845	SSCSDIN845	8	45	28	17.92	4.96	5	1.25
TICSDIN850	SSCSDIN850	8	50	28	17.92	4.96	5	1.25
TICSDIN855	SSCSDIN855	8	55	28	17.92	4.96	5	1.25
TICSDIN860	SSCSDIN860	8	60	28	17.92	4.96	5	1.25
TICSDIN865	SSCSDIN865	8	65	28	17.92	4.96	5	1.25
TICSDIN870	SSCSDIN870	8	70	28	17.92	4.96	5	1.25
TICSDIN875	SSCSDIN875	8	75	28	17.92	4.96	5	1.25
TICSDIN880	SSCSDIN880	8	80	28	17.92	4.96	5	1.25
TICSDIN885	SSCSDIN885	8	85	28	17.92	4.96	5	1.25
TICSDIN890	SSCSDIN890	8	90	28	17.92	4.96	5	1.25
TICSDIN1020F	SSCSDIN1020F	10	20	13.8	22.4	6.2	6	1.25
TICSDIN1025F	SSCSDIN1025F	10	25	18.8	22.4	6.2	6	1.25
TICSDIN1030F	SSCSDIN1030F	10	30	23.8	22.4	6.2	6	1.25
TICSDIN1035F	SSCSDIN1035F	10	35	28.8	22.4	6.2	6	1.25
TICSDIN1040F	SSCSDIN1040F	10	40	32	22.4	6.2	6	1.25
TICSDIN1045F	SSCSDIN1045F	10	45	32	22.4	6.2	6	1.25
TICSDIN1050F	SSCSDIN1050F	10	50	32	22.4	6.2	6	1.25
TICSDIN1055F	SSCSDIN1055F	10	55	32	22.4	6.2	6	1.25
TICSDIN1060F	SSCSDIN1060F	10	60	32	22.4	6.2	6	1.25
TICSDIN1065F	SSCSDIN1065F	10	65	32	22.4	6.2	6	1.25
TICSDIN1070F	SSCSDIN1070F	10	70	32	22.4	6.2	6	1.25
TICSDIN1075F	SSCSDIN1075F	10	75	32	22.4	6.2	6	1.25
TICSDIN1080F	SSCSDIN1080F	10	80	32	22.4	6.2	6	1.25
TICSDIN1085F	SSCSDIN1085F	10	85	32	22.4	6.2	6	1.25
TICSDIN1090F	SSCSDIN1090F	10	90	32	22.4	6.2	6	1.25
TICSDIN1020	SSCSDIN1020	10	20	13.8	22.4	6.2	6	1.5
TICSDIN1025	SSCSDIN1025	10	25	18.8	22.4	6.2	6	1.5
TICSDIN1030	SSCSDIN1030	10	30	23.8	22.4	6.2	6	1.5
TICSDIN1035	SSCSDIN1035	10	35	28.8	22.4	6.2	6	1.5
TICSDIN1040	SSCSDIN1040	10	40	32	22.4	6.2	6	1.5
TICSDIN1045	SSCSDIN1045	10	45	32	22.4	6.2	6	1.5
TICSDIN1050	SSCSDIN1050	10	50	32	22.4	6.2	6	1.5
TICSDIN1055	SSCSDIN1055	10	55	32	22.4	6.2	6	1.5
TICSDIN1060	SSCSDIN1060	10	60	32	22.4	6.2	6	1.5
TICSDIN1065	SSCSDIN1065	10	65	32	22.4	6.2	6	1.5
TICSDIN1070	SSCSDIN1070	10	70	32	22.4	6.2	6	1.5
TICSDIN1075	SSCSDIN1075	10	75	32	22.4	6.2	6	1.5
TICSDIN1080	SSCSDIN1080	10	80	32	22.4	6.2	6	1.5
TICSDIN1085	SSCSDIN1085	10	85	32	22.4	6.2	6	1.5
TICSDIN1090	SSCSDIN1090	10	90	32	22.4	6.2	6	1.5

ISO7380 - Socket Button Hex Head											
(fully threaded)											
Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Width	Head Height	Socket Width	Pitch			
TIFBDIN308	SSFBDIN308	3	8	8	5.7	1.65	2	0.5			
TIFBDIN310	SSFBDIN310	3	10	10	5.7	1.65	2	0.5			
TIFBDIN312	SSFBDIN312	3	12	12	5.7	1.65	2	0.5			
TIFBDIN316	SSFBDIN316	3	16	16	5.7	1.65	2	0.5			
TIFBDIN408	SSFBDIN408	4	8	8	7.6	2.2	2.5	0.7			
TIFBDIN410	SSFBDIN410	4	10	10	7.6	2.2	2.5	0.7			
TIFBDIN412	SSFBDIN412	4	12	12	7.6	2.2	2.5	0.7			
TIFBDIN416	SSFBDIN416	4	16	16	7.6	2.2	2.5	0.7			
TIFBDIN420	SSFBDIN420	4	20	20	7.6	2.2	2.5	0.7			
TIFBDIN510	SSFBDIN510	5	10	10	9.5	2.75	3	0.8			
TIFBDIN512	SSFBDIN512	5	12	12	9.5	2.75	3	0.8			
TIFBDIN515	SSFBDIN515	5	15	15	9.5	2.75	3	0.8			
TIFBDIN520	SSFBDIN520	5	20	20	9.5	2.75	3	0.8			
TIFBDIN525	SSFBDIN525	5	25	25	9.5	2.75	3	0.8			
TIFBDIN530	SSFBDIN530	5	30	30	9.5	2.75	3	0.8			
TIFBDIN535	SSFBDIN535	5	35	35	9.5	2.75	3	0.8			
TIFBDIN540	SSFBDIN540	5	40	40	9.5	2.75	3	0.8			
TIFBDIN610	SSFBDIN610	6	10	10	10.5	3.3	4	1			
TIFBDIN612	SSFBDIN612	6	12	12	10.5	3.3	4	1			
TIFBDIN615	SSFBDIN615	6	15	15	10.5	3.3	4	1			
TIFBDIN620	SSFBDIN620	6	20	20	10.5	3.3	4	1			
TIFBDIN625	SSFBDIN625	6	25	25	10.5	3.3	4	1			
TIFBDIN630	SSFBDIN630	6	30	30	10.5	3.3	4	1			
TIFBDIN635	SSFBDIN635	6	35	35	10.5	3.3	4	1			

## STAINLESS STEEL: TITANIUM

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Width	Head Height	Socket Width	Pitch
TIFBDIN640	SSFBDIN640	6	40	40	10.5	3.3	4	1
TIFBDIN645	SSFBDIN645	6	45	45	10.5	3.3	4	1
TIFBDIN650	SSFBDIN650	6	50	50	10.5	3.3	4	1
TIFBDIN655	SSFBDIN655	6	55	55	10.5	3.3	4	1
TIFBDIN660	SSFBDIN660	6	60	60	10.5	3.3	4	1
TIFBDIN665	SSFBDIN665	6	65	65	10.5	3.3	4	1
TIFBDIN670	SSFBDIN670	6	70	70	10.5	3.3	4	1
TIFBDIN675	SSFBDIN675	6	75	75	10.5	3.3	4	1
TIFBDIN680	SSFBDIN680	6	80	80	10.5	3.3	4	1
TIFBDIN685	SSFBDIN685	6	85	85	10.5	3.3	4	1
TIFBDIN690	SSFBDIN690	6	90	90	10.5	3.3	4	1
TIFBDIN815	SSFBDIN815	8	15	15	14	4.4	5	1.25
TIFBDIN820	SSFBDIN820	8	20	20	14	4.4	5	1.25
TIFBDIN825	SSFBDIN825	8	25	25	14	4.4	5	1.25
TIFBDIN830	SSFBDIN830	8	30	30	14	4.4	5	1.25
TIFBDIN835	SSFBDIN835	8	35	35	14	4.4	5	1.25
TIFBDIN840	SSFBDIN840	8	40	40	14	4.4	5	1.25
TIFBDIN845	SSFBDIN845	8	45	45	14	4.4	5	1.25
TIFBDIN850	SSFBDIN850	8	50	50	14	4.4	5	1.25
TIFBDIN855 TIFBDIN860	SSFBDIN855 SSFBDIN860	8	55 60	55 60	14 14	4.4 4.4	5 5	1.25 1.25
TIFBDIN865	SSFBDIN865	8	65	65	14	4.4	5	1.25
TIFBDIN870	SSFBDIN870	8	70	70	14	4.4	5	1.25
TIFBDIN875	SSFBDIN875	8	75	75	14	4.4	5	1.25
TIFBDIN880	SSFBDIN880	8	80	80	14	4.4	5	1.25
TIFBDIN885	SSFBDIN885	8	85	85	14	4.4	5	1.25
TIFBDIN890	SSFBDIN890	8	90	90	14	4.4	5	1.25
TIFBDIN1020F	SSFBDIN1020F	10	20	20	17.5	5.5	6	1.25
TIFBDIN1025F	SSFBDIN1020F	10	25	25	17.5	5.5	6	1.25
TIFBDIN1030F	SSFBDIN1030F	10	30	30	17.5	5.5	6	1.25
TIFBDIN1035F	SSFBDIN1035F	10	35	35	17.5	5.5	6	1.25
TIFBDIN1040F	SSFBDIN1040F	10	40	40	17.5	5.5	6	1.25
TIFBDIN1045F	SSFBDIN1045F	10	45	45	17.5	5.5	6	1.25
TIFBDIN1050F	SSFBDIN1050F	10	50	50	17.5	5.5	6	1.25
TIFBDIN1055F	SSFBDIN1055F	10	55	55	17.5	5.5	6	1.25
TIFBDIN1060F	SSFBDIN1060F	10	60	60	17.5	5.5	6	1.25
TIFBDIN1065F	SSFBDIN1065F	10	65	65	17.5	5.5	6	1.25
TIFBDIN1070F TIFBDIN1075F	SSFBDIN1070F SSFBDIN1075F	10 10	70 75	70 75	17.5 17.5	5.5 5.5	6 6	1.25 1.25
TIFBDIN1080F	SSFBDIN1080F	10	80	80	17.5	5.5	6	1.25
TIFBDIN1085F	SSFBDIN1085F	10	85	85	17.5	5.5	6	1.25
TIFBDIN1090F	SSFBDIN1090F	10	90	90	17.5	5.5	6	1.25
TIEDDINI1020	CCERDINI1020	10	20	20	17.5			1.5
TIFBDIN1020 TIFBDIN1025	SSFBDIN1020 SSFBDIN1025	10 10	20 25	20 25	17.5 17.5	5.5 5.5	6	1.5 1.5
TIFBDIN1025	SSFBDIN1030	10	30	30	17.5	5.5	6 6	1.5
TIFBDIN1035	SSFBDIN1035	10	35	35	17.5	5.5	6	1.5
TIFBDIN1040	SSFBDIN1040	10	40	40	17.5	5.5	6	1.5
TIFBDIN1045	SSFBDIN1045	10	45	45	17.5	5.5	6	1.5
TIFBDIN1050	SSFBDIN1050	10	50	50	17.5	5.5	6	1.5
TIFBDIN1055	SSFBDIN1055	10	55	55	17.5	5.5	6	1.5
TIFBDIN1060	SSFBDIN1060	10	60	60	17.5	5.5	6	1.5
TIFBDIN1065	SSFBDIN1065	10	65	65	17.5	5.5	6	1.5
TIFBDIN1070	SSFBDIN1070	10	70	70	17.5	5.5	6	1.5
TIFBDIN1075	SSFBDIN1075 SSFBDIN1080	10 10	75 80	75 80	17.5	5.5 5.5	6	1.5 1.5
TIFBDIN1080 TIFBDIN1085	SSFBDIN1080 SSFBDIN1085	10	85	85	17.5 17.5	5.5	6	1.5
TIFBDIN1083	SSFBDIN1090	10	90	90	17.5	5.5	6	1.5
	SSFBDIN1220FF	12	20	20	21	6.6	8	1.25
	SSFBDIN1225FF SSFBDIN1230FF	12 12	25 30	25 30	21 21	6.6	8	1.25 1.25
	SSFBDIN1230FF SSFBDIN1235FF	12	35	35	21	6.6 6.6	8	1.25
	SSFBDIN1240FF	12	40	40	21	6.6	8	1.25
	SSFBDIN1245FF	12	45	45	21	6.6	8	1.25
	SSFBDIN1250FF	12	50	50	21	6.6	8	1.25
TIFBDIN1255FF	SSFBDIN1255FF	12	55	55	21	6.6	8	1.25
	SSFBDIN1260FF	12	60	60	21	6.6	8	1.25
	SSFBDIN1265FF	12	65	65	21	6.6	8	1.25
	SSFBDIN1270FF	12	70	70	21	6.6	8	1.25
	SSFBDIN1275FF	12	75	75	21	6.6	8	1.25
	SSFBDIN1280FF SSFBDIN1285FF	12 12	80 85	80 85	21	6.6	8	1.25 1.25
	SSFBDIN1285FF SSFBDIN1290FF	12	90	90	21 21	6.6 6.6	8	1.25
	SSFBDIN1295FF	12	95	95	21	6.6	8	1.25
TIEDDIVIAGO	CCEDDIVIONA		2.5	22	2.			
TIFBDIN1220F	SSFBDIN1220F	12	20	20	21	6.6	8	1.5
TIFBDIN1225F TIFBDIN1230F	SSFBDIN1225F SSFBDIN1230F	12 12	25 30	25 30	21 21	6.6 6.6	8	1.5 1.5
TIFBDIN1235F	SSFBDIN1235F	12	35	35	21	6.6	8	1.5
TIFBDIN1240F	SSFBDIN1240F	12	40	40	21	6.6	8	1.5
TIFBDIN1245F	SSFBDIN1245F	12	45	45	21	6.6	8	1.5
TIFBDIN1250F	SSFBDIN1250F	12	50	50	21	6.6	8	1.5
TIFBDIN1255F	SSFBDIN1255F	12	55	55	21	6.6	8	1.5
TIFBDIN1260F	SSFBDIN1260F	12	60	60	21	6.6	8	1.5
TIFBDIN1265F	SSFBDIN1265F	12	65	65	21	6.6	8	1.5

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Width	Head Height	Socket Width	Pitch
TIFBDIN1270F	SSFBDIN1270F	12	70	70	21	6.6	8	1.5
TIFBDIN1275F	SSFBDIN1275F	12	75	75	21	6.6	8	1.5
TIFBDIN1280F	SSFBDIN1280F	12	80	80	21	6.6	8	1.5
TIFBDIN1285F	SSFBDIN1285F	12	85	85	21	6.6	8	1.5
TIFBDIN1290F	SSFBDIN1290F	12	90	90	21	6.6	8	1.5
TIFBDIN1295F	SSFBDIN1295F	12	95	95	21	6.6	8	1.5
TIFBDIN1220	SSFBDIN1220	12	20	20	21	6.6	8	1.75
TIFBDIN1225	SSFBDIN1225	12	25	25	21	6.6	8	1.75
TIFBDIN1230	SSFBDIN1230	12	30	30	21	6.6	8	1.75
TIFBDIN1235	SSFBDIN1235	12	35	35	21	6.6	8	1.75
TIFBDIN1240	SSFBDIN1240	12	40	40	21	6.6	8	1.75
TIFBDIN1245	SSFBDIN1245	12	45	45	21	6.6	8	1.75
TIFBDIN1250	SSFBDIN1250	12	50	50	21	6.6	8	1.75
TIFBDIN1255	SSFBDIN1255	12	55	55	21	6.6	8	1.75
TIFBDIN1260	SSFBDIN1260	12	60	60	21	6.6	8	1.75
TIFBDIN1265	SSFBDIN1265	12	65	65	21	6.6	8	1.75
TIFBDIN1270	SSFBDIN1270	12	70	70	21	6.6	8	1.75
TIFBDIN1275	SSFBDIN1275	12	75	75	21	6.6	8	1.75
TIFBDIN1280	SSFBDIN1280	12	80	80	21	6.6	8	1.75
TIFBDIN1285	SSFBDIN1285	12	85	85	21	6.6	8	1.75
TIFBDIN1290	SSFBDIN1290	12	90	90	21	6.6	8	1.75
TIFBDIN1295	SSFBDIN1295	12	95	95	21	6.6	8	1.75

<b>DIN 692</b> 1	DIN 6921 - Flanged Hex Heads										
(part thr	eaded)										
Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Flange Width	Head Height	Socket Width	Pitch			
TIHXFLDIN510	SSHXFLDIN510	5	10	10	11.8	5.4	8	0.8			
TIHXFLDIN512	SSHXFLDIN512	5	12	12	11.8	5.4	8	0.8			
TIHXFLDIN515	SSHXFLDIN515	5	15	15	11.8	5.4	8	0.8			
TIHXFLDIN520	SSHXFLDIN520	5	20	16	11.8	5.4	8	0.8			
TIHXFLDIN525	SSHXFLDIN525	5	25	16	11.8	5.4	8	0.8			
TIHXFLDIN530	SSHXFLDIN530	5	30	16	11.8	5.4	8	0.8			
TIHXFLDIN535	SSHXFLDIN535	5	35	16	11.8	5.4	8	0.8			
TIHXFLDIN540	SSHXFLDIN540	5	40	16	11.8	5.4	8	8.0			
TIHXFLDIN610	SSHXFLDIN610	6	10	10	14.2	6.6	10	1			
TIHXFLDIN612	SSHXFLDIN612	6	12	12	14.2	6.6	10	1			
TIHXFLDIN615	SSHXFLDIN615	6	15	15	14.2	6.6	10	1			
TIHXFLDIN620	SSHXFLDIN620	6	20	18	14.2	6.6	10	1			
TIHXFLDIN625	SSHXFLDIN625	6	25	18	14.2	6.6	10	1			
TIHXFLDIN630	SSHXFLDIN630	6	30	18	14.2	6.6	10	1			
TIHXFLDIN635	SSHXFLDIN635	6	35	18	14.2	6.6	10	1			
TIHXFLDIN640	SSHXFLDIN640	6	40	18	14.2	6.6	10	1			
TIHXFLDIN645	SSHXFLDIN645	6	45	18	14.2	6.6	10	1			
TIHXFLDIN650	SSHXFLDIN650	6	50	18	14.2	6.6	10	1			
TIHXFLDIN655	SSHXFLDIN655	6	55	18	14.2	6.6	10	1			
TIHXFLDIN660	SSHXFLDIN660	6	60	18	14.2	6.6	10	1			
TIHXFLDIN665	SSHXFLDIN665	6	65	18	14.2	6.6	10	1			
TIHXFLDIN670	SSHXFLDIN670	6	70	18	14.2	6.6	10	1			
TIHXFLDIN675	SSHXFLDIN675	6	75	18	14.2	6.6	10	1			
TIHXFLDIN680 TIHXFLDIN685	SSHXFLDIN680 SSHXFLDIN685	6	80 85	18 18	14.2 14.2	6.6 6.6	10 10	1			
TIHXFLDIN690	SSHXFLDIN690	6	90	18	14.2	6.6	10	1			
TIHAFLDING90	33HAFLDING90	0	90	10	14.2	0.0	10	- 1			
TIHXFLDIN815	SSHXFLDIN815	8	15	15	18	8.1	13	1.25			
TIHXFLDIN820	SSHXFLDIN820	8	20	20	18	8.1	13	1.25			
TIHXFLDIN825	SSHXFLDIN825	8	25	22	18	8.1	13	1.25			
TIHXFLDIN830	SSHXFLDIN830	8	30	22	18	8.1	13	1.25			
TIHXFLDIN835	SSHXFLDIN835	8	35	22	18	8.1	13	1.25			
TIHXFLDIN840	SSHXFLDIN840	8	40	22	18	8.1	13	1.25			
TIHXFLDIN845	SSHXFLDIN845	8	45	22	18	8.1	13	1.25			
TIHXFLDIN850	SSHXFLDIN850	8	50	22	18	8.1	13	1.25			
TIHXFLDIN855	SSHXFLDIN855	8	55	22	18	8.1	13	1.25			
TIHXFLDIN860	SSHXFLDIN860	8	60	22	18	8.1	13	1.25			
TIHXFLDIN865	SSHXFLDIN865	8	65	22	18	8.1	13	1.25			
TIHXFLDIN870	SSHXFLDIN870	8	70	22	18	8.1	13	1.25			
TIHXFLDIN875	SSHXFLDIN875	8	75	22	18	8.1	13	1.25			
TIHXFLDIN880	SSHXFLDIN880	8	80	22	18	8.1	13	1.25			
TIHXFLDIN885	SSHXFLDIN885	8	85	22	18	8.1	13	1.25			
TIHXFLDIN890	SSHXFLDIN890	8	90	22	18	8.1	13	1.25			
TIHXFLDIN1020F	SSHXFLDIN1020F	10	20	20	22.3	9.2	15	1.25			
TIHXFLDIN1025F	SSHXFLDIN1025F	10	25	25	22.3	9.2	15	1.25			
TIHXFLDIN1030F	SSHXFLDIN1030F	10	30	26	22.3	9.2	15	1.25			
TIHXFLDIN1035F	SSHXFLDIN1035F	10	35	26	22.3	9.2	15	1.25			
TIHXFLDIN1040F	SSHXFLDIN1040F	10	40	26	22.3	9.2	15	1.25			
TIHXFLDIN1045F	SSHXFLDIN1045F	10	45	26	22.3	9.2	15	1.25			
TIHXFLDIN1050F	SSHXFLDIN1050F	10	50	26	22.3	9.2	15	1.25			
TIHXFLDIN1055F	SSHXFLDIN1055F	10	55	26	22.3	9.2	15	1.25			
TIHXFLDIN1060F	SSHXFLDIN1060F	10	60	26	22.3	9.2	15	1.25			
TIHXFLDIN1065F	SSHXFLDIN1065F	10	65	26	22.3	9.2	15	1.25			
TIHXFLDIN1070F	SSHXFLDIN1070F	10	70	26	22.3	9.2	15	1.25			
TIHXFLDIN1075F	SSHXFLDIN1075F	10	75	26	22.3	9.2	15	1.25			



# THE ISO/DIN RANGE

### DIN 6921 - Flanged Hex Heads (part threaded) continued

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Flange Width	Head Height	Socket Width	Pitch
TIHXFLDIN1080F	SSHXFLDIN1080F	10	80	26	22.3	9.2	15	1.25
TIHXFLDIN1085F	SSHXFLDIN1085F	10	85	26	22.3	9.2	15	1.25
TIHXFLDIN1090F	SSHXFLDIN1090F	10	90	26	22.3	9.2	15	1.25
TIHXFLDIN1020	SSHXFLDIN1020	10	20	20	22.3	9.2	15	1.5
TIHXFLDIN1025	SSHXFLDIN1025	10	25	25	22.3	9.2	15	1.5
TIHXFLDIN1030	SSHXFLDIN1030	10	30	26	22.3	9.2	15	1.5
TIHXFLDIN1035	SSHXFLDIN1035	10	35	26	22.3	9.2	15	1.5
TIHXFLDIN1040	SSHXFLDIN1040	10	40	26	22.3	9.2	15	1.5
TIHXFLDIN1045	SSHXFLDIN1045	10	45	26	22.3	9.2	15	1.5
TIHXFLDIN1050 TIHXFLDIN1055	SSHXFLDIN1050 SSHXFLDIN1055	10 10	50 55	26 26	22.3 22.3	9.2 9.2	15 15	1.5 1.5
TIHXFLDIN1060	SSHXFLDIN1060	10	60	26	22.3	9.2	15	1.5
TIHXFLDIN1065	SSHXFLDIN1065	10	65	26	22.3	9.2	15	1.5
TIHXFLDIN1070	SSHXFLDIN1070	10	70	26	22.3	9.2	15	1.5
TIHXFLDIN1075	SSHXFLDIN1075	10	75	26	22.3	9.2	15	1.5
TIHXFLDIN1080	SSHXFLDIN1080	10	80	26	22.3	9.2	15	1.5
TIHXFLDIN1085	SSHXFLDIN1085	10	85	26	22.3	9.2	15	1.5
TIHXFLDIN1090	SSHXFLDIN1090	10	90	26	22.3	9.2	15	1.5
	SSHXFLDIN1220FF	12	20	20	26.6	11.5	16	1.25
	SSHXFLDIN1225FF	12	25	25	26.6	11.5	16	1.25
	SSHXFLDIN1230FF	12	30	30	26.6	11.5	16	1.25
	SSHXFLDIN1235FF	12	35	30	26.6	11.5	16	1.25
	SSHXFLDIN1240FF SSHXFLDIN1245FF	12	40	30	26.6	11.5	16	1.25
	SSHXFLDIN1245FF	12 12	45 50	30 30	26.6 26.6	11.5 11.5	16 16	1.25 1.25
	SSHXFLDIN1255FF	12	55	30	26.6	11.5	16	1.25
	SSHXFLDIN1260FF	12	60	30	26.6	11.5	16	1.25
	SSHXFLDIN1265FF	12	65	30	26.6	11.5	16	1.25
TIHXFLDIN1270FF	SSHXFLDIN1270FF	12	70	30	26.6	11.5	16	1.25
TIHXFLDIN1275FF	SSHXFLDIN1275FF	12	75	30	26.6	11.5	16	1.25
	SSHXFLDIN1280FF	12	80	30	26.6	11.5	16	1.25
	SSHXFLDIN1285FF	12	85	30	26.6	11.5	16	1.25
	SSHXFLDIN1290FF	12	90	30	26.6	11.5	16	1.25
TIHAFLUIN 1295FF	SSHXFLDIN1295FF	12	95	30	26.6	11.5	16	1.25
TIHXFLDIN1220F	SSHXFLDIN1220F	12	20	20	26.6	11.5	16	1.5
TIHXFLDIN1225F	SSHXFLDIN1225F	12	25	25	26.6	11.5	16	1.5
TIHXFLDIN1230F	SSHXFLDIN1230F	12	30	30	26.6	11.5	16	1.5
TIHXFLDIN1235F	SSHXFLDIN1235F	12	35	30	26.6	11.5	16	1.5
TIHXFLDIN1240F TIHXFLDIN1245F	SSHXFLDIN1240F SSHXFLDIN1245F	12 12	40 45	30 30	26.6 26.6	11.5 11.5	16 16	1.5 1.5
TIHXFLDIN1250F	SSHXFLDIN1250F	12	50	30	26.6	11.5	16	1.5
TIHXFLDIN1255F	SSHXFLDIN1255F	12	55	30	26.6	11.5	16	1.5
TIHXFLDIN1260F	SSHXFLDIN1260F	12	60	30	26.6	11.5	16	1.5
TIHXFLDIN1265F	SSHXFLDIN1265F	12	65	30	26.6	11.5	16	1.5
TIHXFLDIN1270F	SSHXFLDIN1270F	12	70	30	26.6	11.5	16	1.5
TIHXFLDIN1275F	SSHXFLDIN1275F	12	75	30	26.6	11.5	16	1.5
TIHXFLDIN1280F	SSHXFLDIN1280F	12	80	30	26.6	11.5	16	1.5
TIHXFLDIN1285F	SSHXFLDIN1285F	12 12	85	30 30	26.6	11.5	16	1.5
TIHXFLDIN1290F TIHXFLDIN1295F	SSHXFLDIN1290F SSHXFLDIN1295F	12	90 95	30	26.6 26.6	11.5 11.5	16 16	1.5 1.5
TIITAF EDIN 1293F	3311X1 LD11\12331	12	93	30	20.0	11.5	10	1.5
TIHXFLDIN1220	SSHXFLDIN1220	12	20	20	26.6	11.5	16	1.75
TIHXFLDIN1225	SSHXFLDIN1225	12	25	25	26.6	11.5	16	1.75
TIHXFLDIN1230 TIHXFLDIN1235	SSHXFLDIN1230 SSHXFLDIN1235	12 12	30 35	30 30	26.6	11.5 11.5	16 16	1.75 1.75
TIHXFLDIN1240	SSHXFLDIN1240	12	40	30	26.6 26.6	11.5	16	1.75
TIHXFLDIN1240	SSHXFLDIN1245	12	45	30	26.6	11.5	16	1.75
TIHXFLDIN1250	SSHXFLDIN1250	12	50	30	26.6	11.5	16	1.75
TIHXFLDIN1255	SSHXFLDIN1255	12	55	30	26.6	11.5	16	1.75
TIHXFLDIN1260	SSHXFLDIN1260	12	60	30	26.6	11.5	16	1.75
TIHXFLDIN1265	SSHXFLDIN1265	12	65	30	26.6	11.5	16	1.75
TIHXFLDIN1270	SSHXFLDIN1270	12	70	30	26.6	11.5	16	1.75
TIHXFLDIN1275	SSHXFLDIN1275	12	75	30	26.6	11.5	16	1.75
TIHXFLDIN1280	SSHXFLDIN1280	12	80	30	26.6	11.5	16	1.75
TIHXFLDIN1285	SSHXFLDIN1285	12	85	30	26.6	11.5	16	1.75
TIHXFLDIN1290 TIHXFLDIN1295	SSHXFLDIN1290 SSHXFLDIN1295	12 12	90 95	30 30	26.6 26.6	11.5 11.5	16 16	1.75 1.75
ללצו אווטם זאו וויו	JULIAL FOUNT 532	12	73	30	20.0	11.3	10	1./3

DIN 933 - Hex Head (part threaded)									
Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Height	Socket Width	Pitch		
TIHXDIN410	SSHXDIN410	4	10	10	2.8	7	0.7		
TIHXDIN412	SSHXDIN412	4	12	12	2.8	7	0.7		
TIHXDIN415	SSHXDIN415	4	15	14	2.8	7	0.7		
TIHXDIN420	SSHXDIN420	4	20	14	2.8	7	0.7		
TIHXDIN425	SSHXDIN425	4	25	14	2.8	7	0.7		
TIHXDIN430	SSHXDIN430	4	30	14	2.8	7	0.7		

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Height	Socket Width	Pitch
TIHXDIN510	SSHXDIN510	5	10	10	3.5	8	0.5
TIHXDIN512 TIHXDIN515	SSHXDIN512 SSHXDIN515	5 5	12 15	12 15	3.5 3.5	8	0.5 0.5
TIHXDIN520	SSHXDIN520	5	20	16	3.5	8	0.5
TIHXDIN525 TIHXDIN530	SSHXDIN525 SSHXDIN530	5 5	25 30	16 16	3.5 3.5	8	0.5 0.5
TIHXDIN535 TIHXDIN540	SSHXDIN535 SSHXDIN540	5 5	35 40	16 16	3.5 3.5	8	0.5 0.5
TIHXDIN610 TIHXDIN612	SSHXDIN610 SSHXDIN612	6 6	10 12	10 12	4 4	10 10	0.75 0.75
TIHXDIN615 TIHXDIN620	SSHXDIN615 SSHXDIN620	6 6	15 20	15 18	4	10 10	0.75 0.75
TIHXDIN625	SSHXDIN625	6	25	18	4	10	0.75
TIHXDIN630 TIHXDIN635	SSHXDIN630 SSHXDIN635	6	30 35	18 18	4	10 10	0.75 0.75
TIHXDIN640 TIHXDIN645	SSHXDIN640 SSHXDIN645	6 6	40 45	18 18	4	10 10	0.75 0.75
TIHXDIN650	SSHXDIN650	6	50	18	4	10	0.75
TIHXDIN655 TIHXDIN660	SSHXDIN655 SSHXDIN660	6 6	55 60	18 18	4	10 10	0.75 0.75
TIHXDIN665 TIHXDIN670	SSHXDIN665 SSHXDIN670	6	65 70	18 18	4	10 10	0.75 0.75
TIHXDIN675	SSHXDIN675	6	75	18	4	10	0.75
TIHXDIN680 TIHXDIN685	SSHXDIN680 SSHXDIN685	6 6	80 85	18 18	4	10 10	0.75 0.75
TIHXDIN690	SSHXDIN690	6	90	18	4	10	0.75
TIHXDIN815	SSHXDIN815	8	15	15	5.3	13	1
TIHXDIN820 TIHXDIN825	SSHXDIN820 SSHXDIN825	8 8	20 25	20 22	5.3 5.3	13 13	1
TIHXDIN830	SSHXDIN830 SSHXDIN835	8	30	22	5.3	13	1
TIHXDIN835 TIHXDIN840	SSHXDIN835 SSHXDIN840	8	35 40	22 22	5.3 5.3	13 13	1
TIHXDIN845 TIHXDIN850	SSHXDIN845 SSHXDIN850	8	45 50	22 22	5.3 5.3	13 13	1
TIHXDIN855	SSHXDIN855	8	55	22	5.3	13	1
TIHXDIN860 TIHXDIN865	SSHXDIN860 SSHXDIN865	8 8	60 65	22 22	5.3 5.3	13 13	1
TIHXDIN870 TIHXDIN875	SSHXDIN870 SSHXDIN875	8	70 75	22 22	5.3 5.3	13 13	1
TIHXDIN880	SSHXDIN880	8	80	22	5.3	13	1
TIHXDIN885 TIHXDIN890	SSHXDIN885 SSHXDIN890	8	85 90	22 22	5.3 5.3	13 13	1
TIHXDIN1020F	SSHXDIN1020F	10	20	20	6.4	17	1.25
TIHXDIN1025F	SSHXDIN1025F	10	25	25	6.4	17	1.25
TIHXDIN1030F TIHXDIN1035F	SSHXDIN1030F SSHXDIN1035F	10 10	30 35	26 26	6.4 6.4	17 17	1.25 1.25
TIHXDIN1040F	SSHXDIN1040F	10	40	26	6.4	17	1.25
TIHXDIN1045F TIHXDIN1050F	SSHXDIN1045F SSHXDIN1050F	10 10	45 50	26 26	6.4 6.4	17 17	1.25 1.25
TIHXDIN1055F TIHXDIN1060F	SSHXDIN1055F SSHXDIN1060F	10 10	55 60	26 26	6.4 6.4	17 17	1.25 1.25
TIHXDIN1065F	SSHXDIN1065F	10	65	26	6.4	17	1.25
TIHXDIN1070F TIHXDIN1075F	SSHXDIN1070F SSHXDIN1075F	10 10	70 75	26 26	6.4 6.4	17 17	1.25 1.25
TIHXDIN1080F TIHXDIN1085F	SSHXDIN1080 SSHXDIN1085F	10 10	80 85	26 26	6.4 6.4	17 17	1.25 1.25
TIHXDIN1090F	SSHXDIN1090F	10	90	26	6.4	17	1.25
TIHXDIN1020	SSHXDIN1020	10	20	20	6.4	17	1.5
TIHXDIN1025 TIHXDIN1030	SSHXDIN1025 SSHXDIN1030	10 10	25 30	25 26	6.4 6.4	17 17	1.5 1.5
TIHXDIN1035	SSHXDIN1035	10	35	26	6.4	17	1.5
TIHXDIN1040 TIHXDIN1045	SSHXDIN1040 SSHXDIN1045	10	40 45	26	6.4	17 17	1.5 1.5
TIHXDIN1050 TIHXDIN1055	SSHXDIN1050 SSHXDIN1055	10 10	50 55	26 26	6.4 6.4	17 17	1.5 1.5
TIHXDIN1060	SSHXDIN1060 SSHXDIN1065	10	60	26	6.4	17	1.5
TIHXDIN1065 TIHXDIN1070	SSHXDIN1070	10 10	65 70	26 26	6.4 6.4	17 17	1.5 1.5
TIHXDIN1075 TIHXDIN1080	SSHXDIN1075 SSHXDIN1080	10 10	75 80	26 26	6.4 6.4	17 17	1.5 1.5
TIHXDIN1085	SSHXDIN1085	10	85	26	6.4	17 17	1.5
TIHXDIN1090	SSHXDIN1090	10	90	26	6.4		1.5
TIHXDIN1220FF TIHXDIN1225FF	SSHXDIN1220FF SSHXDIN1225FF	12 12	20 25	20 25	7.5 7.5	19 19	1.25 1.25
TIHXDIN1230FF TIHXDIN1235FF	SSHXDIN1230FF SSHXDIN1235FF	12 12	30 35	30 35	7.5 7.5	19 19	1.25 1.25
TIHXDIN1240FF	SSHXDIN1240FF	12	40	36	7.5	19	1.25
TIHXDIN1245FF TIHXDIN1250FF	SSHXDIN1245FF SSHXDIN1250FF	12 12	45 50	36 36	7.5 7.5	19 19	1.25 1.25
TIHXDIN1255FF TIHXDIN1260FF	SSHXDIN1255FF SSHXDIN1260FF	12 12	55 60	36 36	7.5 7.5	19 19	1.25
TIHXDIN1265FF	SSHXDIN1265FF	12	65	36	7.5	19	1.25 1.25
TIHXDIN1270FF TIHXDIN1275FF	SSHXDIN1270FF SSHXDIN1275FF	12 12	70 75	36 36	7.5 7.5	19 19	1.25 1.25
TIHXDIN1280FF	SSHXDIN1280FF	12	80	36	7.5 7.5	19	1.25
TIHXDIN1285FF TIHXDIN1290FF	SSHXDIN1285FF SSHXDIN1290FF	12 12	85 90	36 36	7.5	19 19	1.25 1.25
TIHXDIN1295FF	SSHXDIN1295FF	12	95	36	7.5	19	1.25
TIHXDIN1220F TIHXDIN1225F	SSHXDIN1220F SSHXDIN1225F	12 12	20 25	20 25	7.5 7.5	19 19	1.5 1.5
TIHXDIN1230F	SSHXDIN1230	12	30	30	7.5	19	1.5
TIHXDIN1235F TIHXDIN1240F	SSHXDIN1235F SSHXDIN1240F	12 12	35 40	35 36	7.5 7.5	19 19	1.5 1.5
TIHXDIN1245F	SSHXDIN1245F	12	45	36	7.5	19	1.5

## **STAINLESS STEEL: TITANIUM**

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Height	Socket Width	Pitch
TIHXDIN1250F	SSHXDIN1250F	12	50	36	7.5	19	1.5
TIHXDIN1255F	SSHXDIN1255F	12	55	36	7.5	19	1.5
TIHXDIN1260F	SSHXDIN1260F	12	60	36	7.5	19	1.5
TIHXDIN1265F	SSHXDIN1265F	12	65	36	7.5	19	1.5
TIHXDIN1270F	SSHXDIN1270F	12	70	36	7.5	19	1.5
TIHXDIN1275F	SSHXDIN1275F	12	75	36	7.5	19	1.5
TIHXDIN1280F	SSHXDIN1280F	12	80	36	7.5	19	1.5
TIHXDIN1285F	SSHXDIN1285F	12	85	36	7.5	19	1.5
TIHXDIN1290F	SSHXDIN1290F	12	90	36	7.5	19	1.5
TIHXDIN1295F	SSHXDIN1295F	12	95	36	7.5	19	1.5
TIHXDIN1220	SSHXDIN1220	12	20	20	7.5	19	1.75
TIHXDIN1225	SSHXDIN1225	12	25	25	7.5	19	1.75
TIHXDIN1230	SSHXDIN1230	12	30	30	7.5	19	1.75
TIHXDIN1235	SSHXDIN1235	12	35	35	7.5	19	1.75
TIHXDIN1240	SSHXDIN1240	12	40	36	7.5	19	1.75
TIHXDIN1245	SSHXDIN1245	12	45	36	7.5	19	1.75
TIHXDIN1250	SSHXDIN1250	12	50	36	7.5	19	1.75
TIHXDIN1255	SSHXDIN1255	12	55	36	7.5	19	1.75
TIHXDIN1260	SSHXDIN1260	12	60	36	7.5	19	1.75
TIHXDIN1265	SSHXDIN1265	12	65	36	7.5	19	1.75
TIHXDIN1270	SSHXDIN1270	12	70	36	7.5	19	1.75
TIHXDIN1275	SSHXDIN1275	12	75	36	7.5	19	1.75
TIHXDIN1280	SSHXDIN1280	12	80	36	7.5	19	1.75
TIHXDIN1285	SSHXDIN1285	12	85	36	7.5	19	1.75
TIHXDIN1290	SSHXDIN1290	12	90	36	7.5	19	1.75
TIHXDIN1295	SSHXDIN1295	12	95	36	7.5	19	1.75

Titanium Part No.	Stainless Part No.	Shaft Diameter	Shaft Length	Thread Length	Head Diameter	Head Height	Socket Width	Pitch
TIPBDIN310	SSPBDIN310	3	10	10	5.5	3	2.5	0.5
TIPBDIN312	SSPBDIN312	3	12	12	5.5	3	2.5	0.5
TIPBDIN315	SSPBDIN315	3	15	15	5.5	3	2.5	0.5
TIPBDIN320	SSPBDIN320	3	20	18	5.5	3	2.5	0.5
TIPBDIN325	SSPBDIN325	3	25	18	5.5	3	2.5	0.5
TIPBDIN410	SSPBDIN410	4	10	10	7	4	3	0.7
TIPBDIN412	SSPBDIN412	4	12	12	7	4	3	0.7
TIPBDIN415	SSPBDIN415	4	15	15	7	4	3	0.7
TIPBDIN420	SSPBDIN420	4	20	20	7	4	3	0.7
TIPBDIN425	SSPBDIN425	4	25	20	7	4	3	0.7
TIDBDIN//30	CCDBDINASO	1	30	20	7	1	3	0.7

DIN 912 - Allen Drive (part threaded)

Part No.	Part No.	Diameter	Length	Length	Diameter	Height	wiatn	
TIPBDIN310	SSPBDIN310	3	10	10	5.5	3	2.5	0.5
TIPBDIN312	SSPBDIN312	3	12	12	5.5	3	2.5	0.5
TIPBDIN315	SSPBDIN315	3	15	15	5.5	3	2.5	0.5
TIPBDIN320	SSPBDIN320	3	20	18	5.5	3	2.5	0.5
TIPBDIN325	SSPBDIN325	3	25	18	5.5	3	2.5	0.5
TIPBDIN410	SSPBDIN410	4	10	10	7	4	3	0.7
TIPBDIN412	SSPBDIN412	4	12	12	7	4	3	0.7
TIPBDIN415	SSPBDIN415	4	15	15	7	4	3	0.7
TIPBDIN420	SSPBDIN420	4	20	20	7	4	3	0.7
TIPBDIN425	SSPBDIN425	4	25	20	7	4	3	0.7
TIPBDIN430	SSPBDIN430	4	30	20	7	4	3	0.7
TIPBDIN510	SSPBDIN510	5	10	10	8.5	5	4	0.8
TIPBDIN512	SSPBDIN512	5	12	12	8.5	5	4	0.8
TIPBDIN515	SSPBDIN515	5	15	15	8.5	5	4	0.8
TIPBDIN520	SSPBDIN520	5	20	20	8.5	5	4	0.8
TIPBDIN525	SSPBDIN525	5	25	22	8.5	5	4	0.8
TIPBDIN530	SSPBDIN530	5	30	22	8.5	5	4	0.8
TIPBDIN535	SSPBDIN535	5	35	22	8.5	5	4	0.8
TIPBDIN540	SSPBDIN540	5	40	22	8.5	5	4	0.8
TIPBDIN610	SSPBDIN610	6	10	10	10	6	5	1
TIPBDIN612	SSPBDIN612	6	12	12	10	6	5	1
TIPBDIN615	SSPBDIN615	6	15	15	10	6	5	1
TIPBDIN620	SSPBDIN620	6	20	20	10	6	5	1
TIPBDIN625	SSPBDIN625	6	25	24	10	6	5	1
TIPBDIN630	SSPBDIN630	6	30	24	10	6	5	1
TIPBDIN635	SSPBDIN635	6	35	24	10	6	5	1
TIPBDIN640	SSPBDIN640	6	40	24	10	6	5	1
TIPBDIN645	SSPBDIN645	6	45	24	10	6	5	1
TIPBDIN650	SSPBDIN650	6	50	24	10	6	5	1
TIPBDIN655	SSPBDIN655	6	55	24	10	6	5	1
TIPBDIN660	SSPBDIN660	6	60	24	10	6	5	1
TIPBDIN665	SSPBDIN665	6	65	24	10	6	5	1
TIPBDIN670	SSPBDIN670	6	70	24	10	6	5	1
TIPBDIN675	SSPBDIN675	6	75	24	10	6	5	1
TIPBDIN680	SSPBDIN680	6	80	24	10	6	5	1
TIPBDIN685	SSPBDIN685	6	85	24	10	6	5	1
TIPBDIN690	SSPBDIN690	6	90	24	10	6	5	1
TIPBDIN815	SSPBDIN815	8	15	15	13	8	6	1.25
TIPBDIN820	SSPBDIN820	8	20	20	13	8	6	1.25
TIPBDIN825	SSPBDIN825	8	25	25	13	8	6	1.25
TIPBDIN830	SSPBDIN830	8	30	28	13	8	6	1.25
TIPBDIN835	SSPBDIN835	8	35	28	13	8	6	1.25
TIPBDIN840	SSPBDIN840	8	40	28	13	8	6	1.25
TIPBDIN845	SSPBDIN845	8	45	28	13	8	6	1.25
TIPBDIN850	SSPBDIN850	8	50	28	13	8	6	1.25
TIPBDIN855	SSPBDIN855	8	55	28	13	8	6	1.25
TIPBDIN860	SSPBDIN860	8	60	28	13	8	6	1.25
TIPBDIN865	SSPBDIN865	8	65	28	13	8	6	1.25
TIPBDIN870	SSPBDIN870	8	70	28	13	8	6	1.25
TIPBDIN875	SSPBDIN875	8	75	28	13	8	6	1.25

Titanium	Stainless	Shaft	Shaft	Thread	Head	Head	Socket	Di. I
Part No.	Part No.	Diameter	Length	Length	Diameter	Height	Width	Pitch
TIPBDIN880	SSPBDIN880	8	80	28	13	8	6	1.25
TIPBDIN885 TIPBDIN890	SSPBDIN885 SSPBDIN890	8	85 90	28	13 13	8	6 6	1.25 1.25
TIF BDIIN090	33F BD111030	0	90	28	13	0	U	1.23
TIPBDIN1020F	SSPBDIN1020F	10	20	20	16	10	8	1.25
TIPBDIN1025F	SSPBDIN1025F	10	25	25	16	10	8	1.25
TIPBDIN1030F TIPBDIN1035F	SSPBDIN1030F SSPBDIN1035F	10 10	30 35	30 32	16 16	10 10	8	1.25
TIPBDIN1040F	SSPBDIN1040F	10	40	32	16	10	8	1.25
TIPBDIN1045F	SSPBDIN1045F	10	45	32	16	10	8	1.25
TIPBDIN1050F	SSPBDIN1050F	10	50	32	16	10	8	1.25
TIPBDIN1055F TIPBDIN1060F	SSPBDIN1055F SSPBDIN1060F	10 10	55 60	32 32	16 16	10 10	8	1.25 1.25
TIPBDIN1065F	SSPBDIN1065F	10	65	32	16	10	8	1.25
TIPBDIN1070F	SSPBDIN1070F	10	70	32	16	10	8	1.25
TIPBDIN1075F TIPBDIN1080F	SSPBDIN1075F SSPBDIN1080F	10 10	75 80	32 32	16 16	10 10	8	1.25 1.25
TIPBDIN1085F	SSPBDIN1085F	10	85	32	16	10	8	1.25
TIPBDIN1090F	SSPBDIN1090F	10	90	32	16	10	8	1.25
TIDDDIN1020	CCDDDIN1030	10	20	20	16	10	0	1.5
TIPBDIN1020 TIPBDIN1025	SSPBDIN1020 SSPBDIN1025	10 10	20 25	20 25	16 16	10 10	8	1.5 1.5
TIPBDIN1030	SSPBDIN1030	10	30	30	16	10	8	1.5
TIPBDIN1035	SSPBDIN1035	10	35	32	16	10	8	1.5
TIPBDIN1040 TIPBDIN1045	SSPBDIN1040 SSPBDIN1045	10 10	40 45	32 32	16 16	10 10	8	1.5 1.5
TIPBDIN1045	SSPBDIN1045 SSPBDIN1050	10	50	32	16	10	8	1.5
TIPBDIN1055	SSPBDIN1055	10	55	32	16	10	8	1.5
TIPBDIN1060	SSPBDIN1060	10	60	32	16 16	10	8	1.5
TIPBDIN1065 TIPBDIN1070	SSPBDIN1065 SSPBDIN1070	10 10	65 70	32 32	16 16	10 10	8	1.5 1.5
TIPBDIN1075	SSPBDIN1075	10	75	32	16	10	8	1.5
TIPBDIN1080	SSPBDIN1080	10	80	32	16	10	8	1.5
TIPBDIN1085 TIPBDIN1090	SSPBDIN1085 SSPBDIN1090	10 10	85 90	32	16 16	10 10	8	1.5
TIPBUIN 1090	33PDDIN 1090	10	90	32	10	10	0	1.5
TIPBDIN1220FF	SSPBDIN1220FF	12	20	20	18	12	10	1.25
TIPBDIN1225FF	SSPBDIN1225FF	12	25	25	18	12	10	1.25
	SSPBDIN1230FF SSPBDIN1235FF	12 12	30 35	30 35	18 18	12 12	10 10	1.25 1.25
	SSPBDIN1240FF	12	40	36	18	12	10	1.25
	SSPBDIN1245FF	12	45	36	18	12	10	1.25
	SSPBDIN1250FF	12	50	36	18	12	10	1.25
TIPBDIN1255FF	SSPBDIN1255FF SSPBDIN1260FF	12 12	55 60	36 36	18 18	12 12	10 10	1.25 1.25
TIPBDIN1265FF	SSPBDIN1265FF	12	65	36	18	12	10	1.25
TIPBDIN1270FF	SSPBDIN1270FF	12	70	36	18	12	10	1.25
TIPBDIN1275FF TIPBDIN1280FF	SSPBDIN1275FF SSPBDIN1280FF	12 12	75 80	36 36	18 18	12 12	10 10	1.25 1.25
	SSPBDIN1285FF	12	85	36	18	12	10	1.25
	SSPBDIN1290FF	12	90	36	18	12	10	1.25
TIPBDIN1295FF	SSPBDIN1295FF	12	95	36	18	12	10	1.25
TIPBDIN1220F	SSPBDIN1220F	12	20	20	18	12	10	1.5
TIPBDIN1225F	SSPBDIN1225F	12	25	25	18	12	10	1.5
TIPBDIN1230F	SSPBDIN1230F	12	30	30	18	12	10	1.5
TIPBDIN1235F TIPBDIN1240F	SSPBDIN1235F SSPBDIN1240F	12 12	35 40	35 36	18 18	12 12	10 10	1.5 1.5
TIPBDIN1240F	SSPBDIN1240F	12	45	36	18	12	10	1.5
TIPBDIN1250F	SSPBDIN1250F	12	50	36	18	12	10	1.5
TIPBDIN1255F TIPBDIN1260F	SSPBDIN1255F SSPBDIN1260F	12 12	55 60	36 36	18 18	12 12	10 10	1.5 1.5
TIPBDIN1265F	SSPBDIN1260F SSPBDIN1265F	12	65	36	18	12	10	1.5
TIPBDIN1270F	SSPBDIN1270F	12	70	36	18	12	10	1.5
TIPBDIN1275F	SSPBDIN1275F	12	75	36	18	12	10	1.5
TIPBDIN1280F TIPBDIN1285F	SSPBDIN1280F SSPBDIN1285F	12 12	80 85	36 36	18 18	12 12	10 10	1.5 1.5
TIPBDIN1290F	SSPBDIN1290F	12	90	36	18	12	10	1.5
TIPBDIN1295F	SSPBDIN1295F	12	95	36	18	12	10	1.5
TIDROIN1220	SSDRDINITOO	12	20	20	18	12	10	1 75
TIPBDIN1220 TIPBDIN1225	SSPBDIN1220 SSPBDIN1225	12 12	20 25	20 25	18	12 12	10	1.75 1.75
TIPBDIN1230	SSPBDIN1230	12	30	30	18	12	10	1.75
TIPBDIN1235	SSPBDIN1235	12	35	35	18	12	10	1.75
TIPBDIN1240 TIPBDIN1245	SSPBDIN1240 SSPBDIN1245	12 12	40 45	36 36	18 18	12 12	10 10	1.75 1.75
TIPBDIN1243	SSPBDIN1243	12	50	36	18	12	10	1.75
TIPBDIN1255	SSPBDIN1255	12	55	36	18	12	10	1.75
TIPBDIN1260	SSPBDIN1260	12	60	36	18	12	10	1.75
TIPBDIN1265 TIPBDIN1270	SSPBDIN1265 SSPBDIN1270	12 12	65 70	36 36	18 18	12 12	10 10	1.75 1.75
TIPBDIN1275	SSPBDIN1275	12	75	36	18	12	10	1.75
TIPBDIN1280	SSPBDIN1280	12	80	36	18	12	10	1.75
TIPBDIN1285 TIPBDIN1290	SSPBDIN1285 SSPBDIN1290	12 12	85 90	36 36	18 18	12 12	10 10	1.75 1.75
TIPBDIN1295	SSPBDIN1295	12	95	36	18	12	10	1.75



# **BOLTS**

## **ALUMINIUM**

### **Standard Allen Key Socket Cap Bolts**

M3 Thread Diameter (2.5mm Allen Key)				
Part Number	Thread & Pitch	Length		
LPB308	M3 x 0.5mm	8mm		
LPB310	M3 x 0.5mm	10mm		
LPB330	M3 x 0.5mm	30mm		
LPB335	M3 x 0.5mm	35mm		

M4 Thread Diameter (3mm Allen Key)				
Part Number	Thread & Pitch	Length		
LPB410	M4 x 0.7mm	10mm		
LPB420	M4 x 0.7mm	20mm		
LPB430	M4 x 0.7mm	30mm		
LPB435	M4 x 0.7mm	35mm		

M5 Thread Diameter (4mm Allen Key)					
Part Number	Thread & Pitch	Length			
LPB508	M5 x 0.8mm	8mm			
LPB510	M5 x 0.8mm	10mm			
LPB512	M5 x 0.8mm	12mm			
LPB516	M5 x 0.8mm	16mm			
LPB520	M5 x 0.8mm	20mm			
LPB525	M5 x 0.8mm	25mm			
LPB530	M5 x 0.8mm	30mm			
LPB540	M5 x 0.8mm	40mm			
LPB545	M5 x 0.8mm	45mm			

M6 Thread Dia	meter (5mm Allen k	(ey)
Part Number	Thread & Pitch	Length
LPB610	M6 x 1.00mm	10mm
LPB612	M6 x 1.00mm	12mm
LPB616	M6 x 1.00mm	16mm
LPB620	M6 x 1.00mm	20mm
LPB625	M6 x 1.00mm	25mm
LPB630	M6 x 1.00mm	30mm
LPB635	M6 x 1.00mm	35mm
LPB640	M6 x 1.00mm	40mm
LPB645	M6 x 1.00mm	45mm
LPB650	M6 x 1.00mm	50mm
LPB655	M6 x 1.00mm	55mm
LPB660	M6 x 1.00mm	60mm
LPB665	M6 x 1.00mm	65mm
LPB670	M6 x 1.00mm	70mm
LPB675	M6 x 1.00mm	75mm
LPB680	M6 x 1.00mm	80mm
LPB685	M6 x 1.00mm	85mm
LPB690	M6 x 1.00mm	90mm
LPB695	M6 x 1.00mm	95mm
LPB6100	M6 x 1.00mm	100mm

All length measurements, apart from countersunk bolts, are taken from below the head  $\,$ 

M8 Thread Diameter (6mm Allen Key)					
Part Number	Thread & Pitch	Length			
LPB812	M8 x 1.25mm	12mm			
LPB820	M8 x 1.25mm	20mm			
LPB825	M8 x 1.25mm	25mm			
LPB830	M8 x 1.25mm	30mm			
LPB835	M8 x 1.25mm	35mm			
LPB840	M8 x 1.25mm	40mm			
LPB860	M8 x 1.25mm	60mm			

Countersu	nk Bolts	(Length measured includes the head)		
Part Number	Thread & Pitch	Length	Allen Key Size	
LCS415	M4 x 0.7mm	15mm	2.5	
LCS420	M4 x 0.7mm	20mm	2.5	
LCS445	M4 x 0.7mm	45mm	2.5	
LCS450	M4 x 0.7mm	50mm	2.5	
LCS520	M5 x 0.8mm	20mm	3	
LCS530	M5 x 0.8mm	30mm	3	
LCS535	M5 x 0.8mm	35mm	3	
LCS615	M6 x 1.00mm	15mm	4	
LCS625	M6 x 1.00mm	25mm	4	
LCS635	M6 x 1.00mm	35mm	4	
LCS820	M8 x 1.25mm	20mm	6	
LCS840	M8 x 1.25mm	40mm	6	

Dome Hea	ad/Fairing Bolts		
Part Number	Thread & Pitch	Length	Allen Key Size
LFB412F	M4 x 0.5mm (8mm head)	12mm	2.5
LFB412	M4 x 0.7mm (8mm head)	12mm	2.5
LFB425	M4 x 0.7mm (8mm head)	25mm	2.5
LFB512	M5 x 0.8mm (12mm head)	12mm	3
LFB516	M5 x 0.8mm (12mm head)	16mm	3
LFB516XL	M5 x 0.8mm (16mm head)	16mm	3
LFB520	M5 x 0.8mm (12mm head)	20mm	3
LFB525	M5 x 0.8mm (12mm head)	25mm	3
LFB610	M6 x 1.00mm (16mm head)	10mm	4
LFB616	M6 x 1.00mm (16mm head)	16mm	4
LFB620	M6 x 1.00mm (16mm head)	20mm	4
LFB620XS	M6 x 1.00mm (12mm head)	20mm	4
LFB625	M6 x 1.00mm (16mm head)	25mm	4
LFB630	M6 x 1.00mm (16mm head)	30mm	4
LFB630XS	M6 x 1.00mm (12mm head)	30mm	4
LFB635	M6 x 1.00mm (16mm head)	35mm	4
LFB640	M6 x 1.00mm (16mm head)	40mm	4
LFB825	M8 x 1.25mm (16mm head)	25mm	4
LFB840	M8 x 1.25mm (16mm head)	40mm	4
LFB1025F	M10 x 1.25mm (17.5mm head)	25mm	6
LFB1045F	M10 x 1.25mm (17.5mm head)	45mm	6

Honda Special Fuel Cap Bolts				
Part Number	Thread & Pitch	Length		
LH465	M4 x 0.7mm (10mm head diameter)	6.5mm		
LH420	M4 x 0.7mm (10mm head diameter)	20mm		

## RACE SPEC BOLTS

### **ALUMINIUM**

### Race-Spec Hex Head Bolts

New Bolt Range in 7075 Aluminium, machined with Rolled Threads for superior strength. Widely used by racers, enthusiasts and those who like attention to detail. The heads are pre-drilled on the flats for ease of lockwiring and etched with the Pro-Bolt name. Outstanding 62% weight saving over equivalent sized steel bolts.

Part Number	Thread/ Pitch	Length	Thread Length	Flange Diameter	Socket Size
LHX510R	M5 x 0.8mm	10mm	10mm	10mm	7mm
LHX512R	M5 x 0.8mm	12mm	12mm	10mm	7mm
LHX516R	M5 x 0.8mm	16mm	16mm	10mm	7mm
LHX520R	M5 x 0.8mm	20mm	20mm	10mm	7mm
LHX525R	M5 x 0.8mm	25mm	25mm	10mm	7mm
LHX530R	M5 x 0.8mm	30mm	25mm	10mm	7mm
LHX535R	M5 x 0.8mm	35mm	25mm	10mm	7mm
LHX610R	M6 x 1.00mm	10mm	10mm	12mm	8mm
LHX612R	M6 x 1.00mm	12mm	12mm	12mm	8mm
LHX615R	M6 x 1.00mm	15mm	15mm	12mm	8mm
LHX620R	M6 x 1.00mm	20mm	20mm	12mm	8mm
LHX625R	M6 x 1.00mm	25mm	25mm	12mm	8mm
LHX630R	M6 x 1.00mm	30mm	30mm	12mm	8mm
LHX635R	M6 x 1.00mm	35mm	25mm	12mm	8mm
LHX640R	M6 x 1.00mm	40mm	25mm	12mm	8mm
LHX645R	M6 x 1.00mm	45mm	25mm	12mm	8mm
LHX650R	M6 x 1.00mm	50mm	25mm	12mm	8mm
LHX655R	M6 x 1.00mm	55mm	25mm	12mm	8mm
LHX660R	M6 x 1.00mm	60mm	25mm	12mm	8mm
LHX665R	M6 x 1.00mm	65mm	25mm	12mm	8mm
LHX670R	M6 x 1.00mm	70mm	25mm	12mm	8mm
LHX675R	M6 x 1.00mm	75mm	25mm	12mm	8mm
LHX680R	M6 x 1.00mm	80mm	25mm	12mm	8mm
LHX685R	M6 x 1.00mm	85mm	25mm	12mm	8mm
LHX810R	M8 x 1.25mm	20mm	20mm	15mm	10mm
LHX815R	M8 x 1.25mm	20mm	20mm	15mm	10mm
LHX820R	M8 x 1.25mm	20mm	20mm	15mm	10mm
LHX825R	M8 x 1.25mm	25mm	25mm	15mm	10mm
LHX830R	M8 x 1.25mm	30mm	30mm	15mm	10mm
LHX835R	M8 x 1.25mm	35mm	25mm	15mm	10mm
LHX840R	M8 x 1.25mm	40mm	25mm	15mm	10mm
LHX845R	M8 x 1.25mm	45mm	25mm	15mm	10mm
LHX1025FR	M10 x 1.25mm	25mm	25mm	17mm	12mm
LHX1030FR	M10 x 1.25mm	30mm	30mm	17mm	12mm
LHX1035FR	M10 x 1.25mm	35mm	30mm	17mm	12mm
LHX1040FR	M10 x 1.25mm	40mm	25mm	17mm	12mm
LHX1045FR	M10 x 1.25mm	45mm	25mm	17mm	12mm
LHX1050FR	M10 x 1.25mm	50mm	25mm	17mm	12mm
LHX1055FR	M10 x 1.25mm	45mm	25mm	17mm	12mm
LHX1060FR	M10 x 1.25mm	60mm	25mm	17mm	12mm
LHX1065FR	M10 x 1.25mm	65mm	25mm	17mm	12mm
LHX1070FR	M10 x 1.25mm	70mm	25mm	17mm	12mm

### **Race Spec Body Bolts**

New Bodywork Bolt Range in 7075 Aluminium machined with Rolled Threads for superior strength. Perfect for plastics/bodywork where the large diameter will prevent bolts 'pulling through' bodywork. The external hex drive on the head offers enhanced strength. The heads are pre-drilled on the flats for ease of lockwiring. Outstanding 62% weight saving over equivalent sized steel bolts.

			Thurs and	П	Caaliah
Part Number	Thread/ Pitch	Length	Thread Length	Flange Diameter	Socket Size
LBWHX512R	M5 x 0.8mm	12mm	12mm	16mm	7mm
LBWHX516R	M5 x 0.8mm	16mm	16mm	16mm	7mm
LBWHX525R	M5 x 0.8mm	25mm	25mm	16mm	7mm
LBWHX612R	M6 x 1.00mm	12mm	12mm	16mm	8mm
LBWHX616R	M6 x 1.00mm	16mm	16mm	16mm	8mm
LBWHX620R	M6 x 1.00mm	20mm	20mm	16mm	8mm
LBWHX625R	M6 x 1.00mm	25mm	25mm	16mm	8mm
LBWHX630R	M6 x 1.00mm	30mm	30mm	16mm	8mm
LBWHX825R	M8 x 1.25mm	25mm	25mm	16mm	10mm











# NUTS

## **ALUMINIUM**

Full Nuts		
Part Number	Thread & Pitch	Socket Size
LFN4	M4 x 0.7mm	7mm
LFN5	M5 x 0.8mm	8mm
LFN6	M6 x 1.00mm	10mm
LFN6LH (Left Hand Thread)	M6 x 1.00mm	10mm
LFN8	M8 x 1.25mm	13mm

Nyloc Nuts		
Part Number	Thread & Pitch	Socket Size
LNYN3	M3 x 0.7mm	5.5mm
LNYN4	M4 x 0.7mm	7mm
LNYN5	M5 x 0.8mm	8mm
LNYN6	M6 x 1.00mm	10mm
LNYN8	M8 x 1.25mm	13mm
LNYN10	M10 x 1.50mm	17mm
LNYN10F	M10x 1.25mm	13mm

<b>Dome Nuts</b>			
Part Number	Thread & Pitch	Socket Size	Height
LDOMENUT4	M4 x 0.7mm	7mm	8mm
LDOMENUT5	M5 x 0.8mm	8mm	10mm
LDOMENUT6	M6 x 1.00mm	10mm	12mm
LDOMENUT8	M8 x 1.25mm	13mm	15mm
LDOMENUT10F	M10 x 1.25mm	17mm	18mm
LDOMENUT10	M10 x 1.50mm	17mm	18mm

# WASHERS

Flat Washers			
Part Number	Inside Diameter	Outside Diameter	Thickness
LWA3	M3	7mm o/d	0.55mm
LWA4	M4	9mm o/d	0.80mm
LWA5	M5	10mm o/d	0.90mm
LWA6	M6	12mm o/d	1.40mm
LWA6-18	M6	18mm o/d	1.40mm
LWA8	M8	16mm o/d	1.50mm
LWA8-20	M8	20mm o/d	1.60mm
LWA10	M10	20mm o/d	1.77mm

Drilled Washers						
Part Number	Inside Diameter	Outside Diameter	Thickness			
LWAD5	M5	10mm	1.30mm			
LWAD6	M6	12mm	1.50mm			
LWAD6-23	M6	23mm	1.50mm			
LWAD8	M8	16mm	1.90mm			
LWAD10	M10	20mm	2.80mm			
LWAD12	M12	25mm	3.40mm			

Countersunk Bodywork Washers					
Part Number	Inside Diameter	Outside Diameter	Thickness		
LWAC5	M5	13mm o/d	3.20mm		
LWAC6-19	M6	19mm o/d	3.40mm		
LWAC6-22	M6	22mm o/d	3.40mm		
LWAC8	M8	25mm o/d	5.00mm		

Part Number Inside Diameter Outside Diameter LWAPB625 M6 25mm o/d	andard socket cap bolt
LWAPR625 M6 25mm o/d	Thickness
EWAI BOZS INO ZSIIIII O/U	7.00mm
LWAPB826 M8 26mm o/d	10.00mm













## STAINLESS STEEL

# BOLTS

## STAINLESS

Tapered	Socket Cap			
Part Number	Thread Diameter/Pitch	Allen Key Drive	Max Head Diameter	Lengths Available
LSSSC5**	M5 x 0.8mm	4mm	7.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm
LSSSC6**	M6 x 1.00mm	5mm	9.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm, 95mm
LSSSC8**	M8 x 1.25mm	6mm	12.4mm	15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm,
LSSSC10**	M10 x 1.50mm	8mm	15.8mm	20mm, 25mm
LSSSC10**F	M10 x 1.25mm	8mm	15.8mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm

Flanged	Hex Head			
Part Number	Thread Diameter/Pitch	Socket Size	Max Head Diameter	Lengths Available
LSSHX5**	M5 x 0.8mm	7mm	9.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 35mm
LSSHX6**	M6 x 1.00mm	8mm	11.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm
LSSHX8**	M8 x 1.25mm	12mm	15.8mm	15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm
LSSHX10** F	M10 x 1.25mm	13mm	17.8mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 52mm, 55mm, 57mm, 60mm, 65mm, 70mm, 75mm, 80mm, 128mm

Countersunk Bolts (Length measured includes the hea					
Part Number	Thread Diameter/Pitch	Allen Key Drive	Max Head Diameter	Lengths Available	
LSSCS5**	M5 x 0.8mm	3mm	10.0mm	13mm,15mm, 20mm, 25mm, 30mm	
LSSCS6**	M6 x 1.00mm	4mm	12.0mm	15mm, 25mm, 30mm, 35mm, 40mm, 60mm	
LSSCS8**	M8 x 1.25mm	5mm	15.7mm	30mm, 40mm	
LSSCS12	M12 x 1.50mm	8mm	24.0mm	65mm	

Race Spec Flanged Hex Head Bolts						
Part Number	Thread Diameter/Pitch	Socket Size	Max Head Diameter	Lengths Available		
LSSHX5**R	M5 x 0.8mm	7mm	10.0mm	10mm		
LSSHX6**R	M6 x 1.00mm	8mm	12.0mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm		
LSSHX8**R	M8 x 1.25mm	12mm	16.0mm	30mm, 55mm, 60mm, 65mm, 70mm, 75mm		
LSSHX10**R	M10 x 1.25mm	13mm	17.0mm	30mm, 60mm, 65mm, 70mm, 75mm		











# BOLTS

## STAINLESS

Parallel	Parallel Head Bolts						
Part Number	Thread Diameter/Pitch	Allen key size	Max Head Diameter	Lengths Available			
LSSPB5**	M5 x 0.8mm	4mm	8.0mm	8mm, 10mm, 12mm, 16mm, 20mm, 25mm, 30mm			
LSSPB6**	M6 x 1.00mm	5mm	10.0mm	10mm, 12mm, 16mm, 20mm			
LSSPB8**	M8 x 1.25mm	6mm	12.5mm	40mm, 45mm			
LSSPB10**	M10 x 1.25mm	8mm	25mm	60mm			

All length measurements are taken from below the head

Spike H	Spike Head Bolts						
Part Number	Thread Diameter/Pitch	Socket size	Max Head Diameter	Lengths Available			
LSSSK6**	M6 x 1.00mm	6mm	10.0mm	10mm, 12mm, 15mm, 20mm, 25mm, 27mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm			

Dome Head/Fairing Bolts						
Part Number	Thread Diameter/Pitch	Allen Key Drive	Max Head Diameter	Lengths Available		
LSSFB412F	M4 (0.50)	2.5mm	8mm	12mm		
LSSFB5**	M5 (0.8)	4mm	12mm	12mm, 16mm, 20mm, 25mm		
LSSFB516XL	M5 (0.8)	4mm	16mm	16mm		
LSSFB6**	M6 (1.00)	5mm	16mm	10mm, 16mm, 20mm, 25mm, 30mm, 35mm, 40mm		
LSSFB6**XS	M6 (1.00)	5mm	12mm	16mm, 20mm, 30mm		
LSSFB8**	M8 (1.25)	5mm	16mm	20mm, 25mm, 30mm, 35mm, 40mm		
LSSFB10**F	M10 (1.25)	6mm	18mm	25mm, 30mm, 35mm		









## STAINLESS STEEL

# NUTS & WASHERS STAINLESS

Thread/Pitch	Socket Size
M5 x 0.8mm	8mm
M6 x 1.00mm	10mm
M8 x 1.25mm	12mm
M10 x 1.50mm	14mm
M10 x 1.25mm	14mm
M10 x 1.00mm	14mm
M12 x 1.50mm	15mm
M12 x 1.25mm	15mm
	M5 x 0.8mm M6 x 1.00mm M8 x 1.25mm M10 x 1.50mm M10 x 1.25mm M10 x 1.00mm M12 x 1.50mm

<b>Dome Nuts</b>		
Part Number	Thread/Pitch	Socket Size
LSSDOMENUT6	M6 x 1.00mm	10mm
LSSDOMENUT8	M8 x 1.25mm	13mm
LSSDOMENUT10F	M10 x 1.25mm	17mm

Flat Washers			
Part Number	Inside Diameter	Outside Diameter	Thickness
LSSWA6	6mm	12mm o/d	1.6mm
LSSWA6-15	6mm	15mm o/d	1.6mm
LSSWA8	8mm	16mm o/d	1.6mm
LSSWA10	10mm	20mm o/d	1.6mm

Countersunk Washers					
Part Number	Size	Outside Diameter	Thickness		
LSSWAC5-15	M5	15mm	4mm		
LSSWAC6-19	M6	19mm	4.5mm		
LSSWAC6-22	M6	22mm	4.5mm		
LSSWAC8-25	M8	25mm	5.5mm		











## RACE SPEC BOLTS

Race Sp	ес Нех Не	ad Bolt	:S		
Part Number	Diameter & Thread	Length	Thread Length	Head Diameter	Socket Size
TIHX510R	M5 x 0.8mm	10mm	10mm	10mm	7mm
TIHX512R	M5 x 0.8mm	12mm	12mm	10mm	7mm
TIHX516R	M5 x 0.8mm	16mm	16mm	10mm	7mm
TIHX520R	M5 x 0.8mm	20mm	20mm	10mm	7mm
TIHX525R	M5 x 0.8mm	25mm	25mm	10mm	7mm
TIHX610R	M6 x 1.00mm	10mm	10mm	11mm	8mm
TIHX612R	M6 x 1.00mm	12mm	12mm	11mm	8mm
TIHX614R	M6 x 1.00mm	14mm	14mm	11mm	8mm
TIHX616R	M6 x 1.00mm	16mm	16mm	11mm	8mm
TIHX618R	M6 x 1.00mm	18mm	18mm	11mm	8mm
TIHX620R	M6 x 1.00mm	20mm	20mm	11mm	8mm
TIHX622R	M6 x 1.00mm	22mm	22mm	11mm	8mm
TIHX625R	M6 x 1.00mm	25mm	25mm	11mm	8mm
TIHX628R	M6 x 1.00mm	28mm	28mm	11mm	8mm
TIHX630R	M6 x 1.00mm	30mm	30mm	11mm	8mm
TIHX632R	M6 x 1.00mm	32mm	32mm	11mm	8mm
TIHX635R	M6 x 1.00mm	35mm	25mm	11mm	8mm
TIHX640R	M6 x 1.00mm	40mm	25mm	11mm	8mm
TIHX645R	M6 x 1.00mm	45mm	25mm	11mm	8mm
TIHX650R	M6 x 1.00mm	50mm	25mm	11mm	8mm
TIHX655R	M6 x 1.00mm	55mm	25mm	11mm	8mm
TIHX660R	M6 x 1.00mm	60mm	25mm	11mm	8mm
TIHX665R	M6 x 1.00mm	65mm	25mm	11mm	8mm
TIHX670R	M6 x 1.00mm	70mm	25mm	11mm	8mm
TIHX675R	M6 x 1.00mm	75mm	25mm	11mm	8mm
TIHX680R	M6 x 1.00mm	80mm	25mm	11mm	8mm
TIHX685R	M6 x 1.00mm	85mm	25mm	11mm	8mm
TIHX690R	M6 x 1.00mm	90mm	25mm	11mm	8mm
TIHX720R	M7 x 1.00mm	20mm	20mm	11mm	8mm
TIHX740R	M7 x 1.00mm	40mm	20mm	11mm	8mm
TIHX750R	M7 x 1.00mm	50mm	20mm	11mm	8mm
TIHX760R	M7 x 1.00mm	60mm	20mm	11mm	8mm
TIHX780R	M7 x 1.00mm	80mm	20mm	11mm	8mm
TIHX815R	M8 x 1.25mm	15mm	15mm	15mm	10mm
TIHX820R	M8 x 1.25mm	20mm	20mm	15mm	10mm
TIHX825R	M8 x 1.25mm	25mm	25mm	15mm	10mm
TIHX828R	M8 x 1.25mm	28mm	28mm	15mm	10mm
TIHX830R	M8 x 1.25mm	30mm	30mm	15mm	10mm



## TITANIUM

Our Race Spec bolts are designed for professionals, enthusiasts and those who like attention to detail. Weight is



saved by reducing the socket size/head diameter and machining out the head – on average they weigh 45% less than steel equivalents with no compromise in strength or durability – and they can give a two kilo weight saving on an average motorcycle.

Developed at the cutting edge of competition, these bolts are widely used by top international Race Teams.

Supplied 'off the machine with no polishing' – gives the factory look.



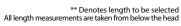
All length measurements are taken from below the head

All length measure	ements are taken from	below the hea	ad		
TIHX832R	M8 x 1.25mm	32mm	30mm	15mm	10mm
TIHX835R	M8 x 1.25mm	35mm	25mm	15mm	10mm
TIHX840R	M8 x 1.25mm	40mm	25mm	15mm	10mm
TIHX845R	M8 x 1.25mm	45mm	25mm	15mm	10mm
TIHX850R	M8 x 1.25mm	50mm	25mm	15mm	10mm
TIHX855R	M8 x 1.25mm	55mm	25mm	15mm	10mm
TIHX860R	M8 x 1.25mm	60mm	25mm	15mm	10mm
TIHX865R	M8 x 1.25mm	65mm	25mm	15mm	10mm
TIHX870R	M8 x 1.25mm	70mm	25mm	15mm	10mm
TIHX880R	M8 x 1.25mm	80mm	25mm	15mm	10mm
TIHX885R	M8 x 1.25mm	85mm	25mm	15mm	10mm
TIHX1020FR	M10 x 1.25mm	20mm	20mm	17mm	12mm
TIHX1025FR	M10 x 1.25mm	25mm	25mm	17mm	12mm
TIHX1030FR	M10 x 1.25mm	30mm	30mm	17mm	12mm
TIHX1035FR	M10 x 1.25mm	35mm	25mm	17mm	12mm
TIHX1040FR	M10 x 1.25mm	40mm	25mm	17mm	12mm
TIHX1045FR	M10 x 1.25mm	45mm	25mm	17mm	12mm
TIHX1050FR	M10 x 1.25mm	50mm	25mm	17mm	12mm
TIHX1055FR	M10 x 1.25mm	55mm	25mm	17mm	12mm
TIHX1057FR	M10 x 1.25mm	57mm	25mm	17mm	12mm
TIHX1060FR	M10 x 1.25mm	60mm	25mm	17mm	12mm
TIHX1065FR	M10 x 1.25mm	65mm	25mm	17mm	12mm
TIHX1070FR	M10 x 1.25mm	70mm	25mm	17mm	12mm
TIHX1075FR	M10 x 1.25mm	75mm	25mm	17mm	12mm
TIHX1080FR	M10 x 1.25mm	80mm	25mm	17mm	12mm

# BOLTS

## TITANIUM

Tapered	d Socket (	Сар		
Part Number	Thread & Pitch	Allen Key Drive	Max Head Diameter	Lengths Available
TISC3**	M3 x 0.50mm	2.5mm	5.4mm	12mm, 15mm, 18mm, 35mm
TISC4**	M4 x 0.70mm	3mm	6.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 35mm
TISC5**	M5 x 0.80mm	4mm	7.9mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 70mm
TISC6**	M6 x 1.00mm	5mm	9.9mm	10mm, 12mm, 15mm, 20mm, 22mm, 25mm, 28mm 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm, 95mm, 100mm
TISC720	M7 x 1.00mm	5mm	9.9mm	20mm
TISC8**	M8 x 1.25mm	6mm	12.5mm	15mm, 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm
TISC10**	M10 x 1.50mm	8mm	15.8mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 70mm, 75mm, 80mm
TISC10**F	M10 x 1.25mm	8mm	15.8mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm



Flange	d Hex Hea	d		
Part Number	Thread & Pitch	Socket Size	Flange Diameter	Lengths Available
TIHX3**	M3 x 0.50mm	5mm	6.9mm	6mm, 12mm
TIHX4**	M4 x 0.70mm	6mm	8mm	10mm, 15mm, 20mm, 25mm, 30mm
TIHX5**	M5 x 0.80mm	7mm	10mm	10mm, 12mm, 15mm, 20mm, 25mm, 30mm, 40mm, 45mm
TIHX6**	M6 x 1.00mm	8mm	12mm	10mm, 12mm, 14mm, 15mm, 16mm, 18mm, 20mm, 22mm, 25mm, 28mm, 30mm, 32mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm, 95mm, 100mm, 105mm
TIHX8**	M8 x 1.25mm	12mm	16mm	15mm, 20mm, 25mm, 28mm, 30mm, 32mm, 35mm, 40mm, 45mm, 47mm, 50mm, 55mm, 60mm, 65mm, 70mm, 80mm, 85mm
TIHX10**	M10 x 1.50mm	12/13mm	18mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55m, 60mm, 65mm
TIHX10**F	M10 x 1.25mm	12/13mm	18mm	25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 57mm, 60mm, 65mm, 70mm, 75mm, 80mm, 90mm, 110mm, 112mm, 115mm, 125mm
TIHX12**FF	M12 x 1.25mm	14mm	20mm	50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 90mm







## Countersunk Bolts Length measurements include the head

Part Number	Thread & Pitch	Allen Key Drive	Max Head Diameter	Lengths Available
TICS4**	M4 X 0.70mm	2.5mm	7.8mm	15mm, 20mm
TICS5**	M5 x 0.80mm	3mm	9.8mm	8mm, 10mm, 15mm, 20mm, 25mm, 30mm,
TICS6**	M6 x 1.00mm	4mm	11.8.mm	15mm, 20mm, 25mm, 30mm, 35mm
TICS8**	M8 x 1.25mm	5mm	15.6mm	20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, 55mm
TICS1020F	M10 x 1.25mm	6mm	19.9mm	20mm

## Dome Head/Fairing Bolts Length measurements are taken from below the head

Part Number	Thread & Pitch	Allen Key Drive	Max Head Diameter	Lengths Available
TIFB412F	M4 x 0.50mm	3mm	8mm	12mm
TIFB4**	M4 x 0.70mm	3mm	8mm	10mm, 12mm, 15mm
TIFB5**	M5 x 0.80mm	4mm	12mm	10mm, 16mm, 20mm, 25mm, 30mm
TIFB516XL	M5 x 0.80mm	4mm	16mm	16mm
TIFB6*	M6 x 1.00mm	5mm	16mm	10mm, 16mm, 20mm, 25mm, 30mm, 35mm, 40mm, 55mm
TIFB6**XS	M6 x 1.00mm	5mm	12mm	20mm, 30mm
TIFB8**	M8 x 1.25mm	5mm	16mm	20mm, 25mm, 30mm, 35mm 40mm, 85mm

## TITANIUM





# NUTS

# MUINATIT

Full Nu	ts	Α
Part No.	Thread & Pitch	Socket Size
TIFN4	M4 (0.70) Full Nut	7mm
TIFN5	M5 (0.80) Full Nut	8mm
TIFN6	M6 (1.00) Full Nut	10mm
TIFN8	M8 (1.25) Full Nut	13mm
TIFN10	M10 (1.50) Full Nut	17mm
TIFN10F	M10 (1.25) Full Nut	17mm
TIFN12	M12 (1.75) Full Nut	18mm
TIFN12F	M12 (1.50) Full Nut	18mm

Flanged	Nuts	В
Part No.	Thread & Pitch	Socket Size
TIFLN4	M4 (0.70) Flanged Nut	7mm
TIFLN5	M5 (0.80) Flanged Nut	8mm
TIFLN6	M6 (1.00) Flanged Nut	10mm
TIFLN8	M8 (1.25) Flanged Nut	13mm
TIFLN10	M10 (1.50) Flanged Nut	15mm
TIFLN10F	M10 (1.25) Flanged Nut	14mm
TIFLN10FF	M10 (1.00) Flanged Nut	14mm
TIFLN12	M12 (1.75) Flanged Nut	18mm
TIFLN12F	M12 (1.50) Flanged Nut	17mm
TIFLN12FF	M12 (1.25) Flanged Nut	17mm

Nyloc N	uts	С
Part No.	Thread & Pitch	Socket Size
TINYN3	M3 (0.50) Nyloc Nut	5.5mm
TINYN4	M4 (0.70) Nyloc Nut	7mm
TINYN5	M5 (0.80) Nyloc Nut	8mm
TINYN6	M6 (1.00) Nyloc Nut	10mm
TINYN8	M8 (1.25) Nyloc Nut	13mm
TINYN10	M10 (1.50) Nyloc Nut	16mm
TINYN10F	M10 (1.25) Nyloc Nut	16mm
TINYN12	M12 (1.75) Nyloc Nut	20mm
TINYN12F	M12 (1.50) Nyloc Nut	20mm
TINYN12FF	M12 (1.25) Nyloc Nut	20mm

Flanged	Nyloc Nuts	D
Part No.	Thread & Pitch	Socket Size
TINYNFL3	M3 (0.50) Flanged Nyloc Nut	5.5mm
TINYNFL4	M4 (0.70) Flanged Nyloc Nut	7mm
TINYNFL5	M5 (0.80) Flanged Nyloc Nut	8mm
TINYNFL6	M6 (1.00) Flanged Nyloc Nut	10mm
TINYNFL8	M8 (1.25) Flanged Nyloc Nut	13mm
TINYNFL8F	M8 (1.00) Flanged Nyloc Nut	13mm
TINYNFL10	M10 (1.50) Flanged Nyloc Nut	15mm
TINYNFL10F	M10 (1.25) Flanged Nyloc Nut	15mm
TINYNFL12	M12 (1.75) Flanged Nyloc Nut	18mm
TINYNFL12F	M12 (1.50) Flanged Nyloc Nut	18mm
TINYNFL12FF	M12 (1.25) Flanged Nyloc Nut	18mm















Bi-Hex Plast	E	
Part Number	Thread & Pitch	Socket Size
TINYNFLBH6	M6 (1.00) Flanged Bi-Hex Plastic Nyloc	11mm
TINYNFLBH8	M8 (1.25) Flanged Bi-Hex Plastic Nyloc	13mm
TINYNFLBH10	M10 (1.50) Flanged Bi-Hex Plastic Nyloc	15mm
TINYNFLBH10F	M10 (1.25) Flanged Bi-Hex Plastic Nyloc	15mm
TINYNFLBH10FF	M10 (1.00) Flanged Bi-Hex Plastic Nyloc	15mm

Metal Lock	F	
Part Number	Thread & Pitch	Socket Size
TILOCKNUT3	M3 (0.5) Flanged Metal Locknut	5.5mm
TILOCKNUT4	M4 (0.7) Flanged Metal Locknut	7mm
TILOCKNUT5	M5 (0.8) Flanged Metal Locknut	8mm
TILOCKNUT6	M6 (1.00) Flanged Metal Locknut	10mm
TILOCKNUT8	M8 (1.25) Flanged Metal Locknut	12mm
TILOCKNUT10	M10 (1.50) Flanged Metal Locknut	14mm
TILOCKNUT10F	M10 (1.25) Flanged Metal Locknut	14mm

Bi-Hex Meta	al Lock Nuts	G
Part Number	Thread & Pitch	Socket Size
TILOCKNUTBH6	M6 (1.00) Flanged Bi-Hex Metal Locknut	11mm
TILOCKNUTBH8	M8 (1.25) Flanged Bi-Hex Metal Locknut	13mm
TILOCKNUTBH10	M10 (1.50) Flanged Bi-Hex Metal Locknut	15mm
TILOCKNUTBH10F	M10 (1.25) Flanged Bi-Hex Metal Locknut	15mm



# WASHERS

# TITANIUM

Flat Wash	ers		
Part Number	Description	Outside Diameter	Thickness
TIWA3	M3 Flat Washer	7mm	0.6mm
TIWA4	M4 Flat Washer	9mm	0.7mm
TIWA5	M5 Flat Washer	10mm	1.0mm
TIWA6	M6 Flat Washer	12mm	1.5mm
TIWA8	M8 Flat Washer	16mm	1.6mm
TIWA10	M10 Flat Washer	20mm	1.7mm
TIWA12	M12 Flat Washer	24mm	2.6mm

Penny Washers			
Part Number	Description	Outside Diameter	Thickness
TIWA5-15	M5 Penny Washer	15mm	1.0mm
TIWA5-20	M5 Penny Washer	20mm	1.1mm
TIWA6-15	M6 Penny Washer	15mm	1.5mm
TIWA6-20	M6 Penny Washer	20mm	1.5mm
TIWA6-25	M6 Penny Washer	25mm	1.8mm
TIWA6-30	M6 Penny Washer	30mm	1.6mm

Countersunk Washers			
Part Number	Description	Outside Diameter	Thickness
TIWAC6-22	M6 Countersunk Washer	22mm	4.5mm

Drilled Washers			
Part Number	Description	Outside Diameter	Thickness
TIWAD5	M5 Drilled Washer	10mm	1.0mm
TIWAD6	M6 Drilled Washer	12mm	1.5mm
TIWAD8	M8 Drilled Washer	16mm	1.6mm
TIWAD10	M10 Drilled Washer	20mm	1.7mm
TIWAD12	M12 Drilled Washer	24mm	2.5mm











## WORKSHOP ASSORTMENTS

We offer a variety of tubs and workshop kits in aluminium. Ideal for spares in the workshop or for that special project – just choose your preferred quantity, colour and bolt combination.

### 25/50pc Workshop Kits

Supplied with Copper Grease Lubricant, Allen Keys and Stickers.

WSKIT25 Assortment of 5mm, 6mm & 8mm Allen Bolts, Fairing Bolts,

Nuts and Washers - 25 pieces

WSKIT50 As above but 50 pieces rather than 25

### 100pc Workshop Tubs

Supplied in handy tub with Allen Keys and Copper Grease.

#### ALLEN KEY SOCKET CAP BOLT TUB

PBTUBALLEN 100 pc Metric Socket Cap Allen Key Bolt Tub - M5 - M8

#### DOME HEAD/FAIRING BOLT TUB

PBTUBFAIR 100 pc Metric Dome Head Allen Key Bolt Tub - M5 - M8

#### MIXED BOLT TUB

PBTUBMIXED 100 pc Metric Assorted Dome Head & Socket Cap

Allen Key Bolt Tub - M5 - M8

### **NUT & WASHER TUB**

PBTUBNUTS 100 pc Metric Assorted Full Nuts, Nyloc Nuts & Washers - M5 - M8

#### DOME NUT TUB

PBTUBDOMENUT 100 pc Metric Assorted Dome Nuts

M4 - M5 - M6 - M8 - M10 - M10 Fine

### **DRILLED WASHER TUB**

PBTUBWAD 100 pc Drilled Washer Tub - M5 - M12

#### THREADED COLLAR TUB

PBTUBCOLLAR 100 pc Threaded Collar Tub - M5 & M6 various outside

diameters & lengths for use as spacers, shoulders and collars. Supplied only in natural finish. NB: Colour options not available.

### 200pc Workshop Box

Complete with Allen Keys, Copper Grease Lubricant, Anti-Scratch Washers and Pro-Bolt Stickers.

WSBOX200 (In our handy Workshop Box we supply) Allen Bolts, Dome

Head Bolts, Nuts, Washers, Countersunk Bolts, Countersunk Washers and Cup Washers in the most popular sizes.

### **500pc Workshop Cabinet**

Ideal for large scale projects. Excellent value for money, presented in a convenient cabinet.

BCAB500 Allen Bolts, Dome Head Bolts, Countersunk Bolts, Nuts and

Washers in 5mm, 6mm and 8mm sizes in their most popular lengths. Also comes with Allen Keys, Copper Grease Lubricant,

Anti-Scratch Washers and Pro-Bolt stickers.

## **ALUMINIUM**











## WORKSHOP ASSORTMENTS

STAINLESS

We offer a variety of tubs and workshop kits in Stainless Steel. Ideal for spares in the workshop or for special projects. Exact contents are available on request or online and can be amended if desired, with the agreement of Pro-Bolt.

### **50pc Workshop Kit**

Supplied with Copper Grease Lubricant, Allen Keys and Stickers.

SSWSBOX50 10 Nuts • 10 Washers • 10 Countersunk Bolts • 10 Flanged

Hex Head Bolts • 10 Tapered Socket Caps Bolts

### 100pc Workshop Tubs

Supplied in handy tub with Allen Keys and Copper Grease.

#### ALLEN KEY SOCKET CAP BOLT TUB

SSTUBALLEN 100 pc Metric Tapered Socket Cap Allen Key Bolt Tub - M5 - M8

#### DOME HEAD/FAIRING BOLT TUB

SSTUBFAIR 100 pc Metric Dome Head Allen Key Bolt Tub - M5 - M8

#### MIXED BOLT TUB

SSTUBMIXED 100 pc Metric Assorted Dome Head & Tapered Socket Cap

Allen Key Bolt Tub - M5 - M8

### 200pc Workshop Box

Complete with Allen Keys, Copper Grease Lubricant, Anti-Scratch Washers and Pro-Bolt Stickers.

SSWSBOX200 25 Assorted Washers - M5 - M10 • 25 Countersunk Bolts •

30 Assorted Nuts - M5 - M10 • 60 Flanged Hex Head Bolts -

M5 - M10 • 60 Tapered Socket Cap Bolts - M5 - M10





## WORKSHOP ASSORTMENTS



In our Titanium workshop boxes we provide a selection of our most popular parts. Exact contents are available on request or online and can be amended if desired, with the agreement of Pro-Bolt.

### **50pc Workshop Box**

Supplied with Copper Grease Lubricant, Allen Keys and Stickers.

TIWSBOX50 10 Nuts • 10 Washers • 10 Countersunk Bolts •

10 Flanged Hex Head Bolts • 10 Tapered Socket Caps Bolts

#### 100pc Workshop Box

Supplied with Copper Grease Lubricant, Allen Keys and Stickers.

TIWSBOX100 15 Assorted Washers • 10 Countersunk Bolts • 25 Assorted Nuts

• 25 Flanged Hex Head Bolts • 25 Tapered Socket Cap Bolts

### 200pc Workshop Box

Complete with Allen Keys, Copper Grease Lubricant, Anti-Scratch Washers and Pro-Bolt Stickers.

TIWSBOX200 25 Assorted Washers - M5 - M10 • 25 Countersunk Bolts •

30 Assorted Nuts - M5 - M10 • 60 Flanged Hex Head Bolts - M5 - M10 • 60 Tapered Socket Cap Bolts - M5 - M10

100pc Flanged Hex Head 'Race-spec' Workshop Box

Supplied with Copper Grease Lubricant and Stickers.

TIWSBOX100RS Race-Spec Flanged Hex Head Bolts - M5 - M10







### **QUICK RELEASE FASTENERS**

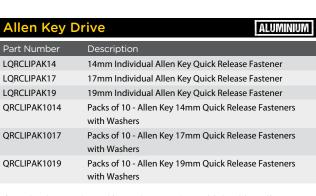
### **ALUMINIUM**

Makes removal of bodywork easy and fast. Supplied individually or in packs and in all materials. Available packs and lengths are listed below – choose from D-Ring, Scalloped Head or Allen Key Drive, all with a superb finish (17mm is the most popular, 14mm is the most common for thinner race fairings). Now supplied with springs to ensure a tight fit for race frings.

<b>D-Ring</b>	ALUMINIUM
Part Number	Description
LQRCLIP14	14mm Individual D-Ring Quick Release Fastener
LQRCLIP17	17mm Individual D-Ring Quick Release Fastener
LQRCLIP19	19mm Individual D-Ring Quick Release Fastener
QRCLIP1014	Packs of 10 - D-Ring 14mm Quick Release Fasteners & Washers
QRCLIP1017	Packs of 10 - D-Ring 17mm Quick Release Fasteners & Washers
QRCLIP1019	Packs of 10 - D-Ring 19mm Quick Release Fasteners & Washers

Can also be purchased in packs complete with backing clips:

QRPACKRIVET**	Pack of 10 D-Ring Fasteners with Rivet-on Backing Plates and Rivets & Washers
QRPACKSLIDE**	Pack of 10 D-Ring Fasteners with Slide-on Backing Plates & Washers



ALL AVAILABLE IN A CHOICE OF 7 COLOURS:

BLACK • BLUE • GOLD • ORANGE • PURPLE • RED • SILVER

Can also be purchased in packs complete with backing clips:

QRPACKAKRIVET**	Pack of 10 D-Ring Fasteners with Rivet-on Backing Plates,
	Rivets and Washers
QRPACKAKSLIDE**	Pack of 10 D-Ring Fasteners with Slide-on Backing Plates and Washers

\*\* Required length





### **QUICK RELEASE FASTENERS**

### STAINLESS STEEL

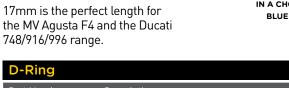
STAINLESS STEEL PRODUCTS HAVE A
HIGH POLISH STAINLESS FINISH

D-Ring	STAINLESS
Part Number	Description
LSSQRCLIP14	14mm Length D-ring Quick Release Fastener
LSSQRCLIP17	17mm Length D-ring Quick Release Fastener
LSSQRCLIP19	19mm Length D-ring Quick Release Fastener
SSQRCLIP1017	17mm D-ring Quick Release Fastener - Pack of 10
SSQRCLIP1417	17mm D-ring Quick Release Fastener - Pack of 14
SSQRCLIP1019	17mm D-ring Quick Release Fastener - Pack of 10
SSQRPACKRIVET1017	$17mm\ D\text{-ring Quick Release Fastener-Pack of }10\text{-Rivet on Backs \& Washers}$
SSQRPACKRIVET1417	17mm D-ring Quick Release Fastener - Pack of 14 - Rivet on Backs & Washers
SSQRPACKRIVET1019	19mm D-ring Quick Release Fastener - Pack of 10 - Rivet on Backs & Washers
SSQRPACKSLIDE1017	17mm D-ring Quick Release Fastener - Pack of 10 - Slide on Backs & Washers
SSQRPACKSLIDE1417	17mm D-ring Quick Release Fastener - Pack of 14 - Slide on Backs & Washers
SSQRPACKSLIDE1019	$19mm\ D\text{-ring Quick Release Fastener-Pack of }10\text{-}Slide\ on\ Backs\ \&\ Washers}$

Alley Key Driv	'e STAINLESS
Part Number	Description
LSSQRCLIPAK14	14mm Allen Key Drive Quick Release Fastener
LSSQRCLIPAK17	17mm Allen Key Drive Quick Release Fastener
LSSQRCLIPAK19	19mm Allen Key Drive Quick Release Fastener
SSQRPACKAKRIVET1017	17mm Allen Key Quick Release Fastener - Pk of 10 - Rivet on Backs & Washers
SSQRPACKAKRIVET1417	17mm Allen Key Quick Release Fastener - Pk of 14 - Rivet on Backs & Washers
SSQRPACKAKRIVET1019	19mm Allen Key Quick Release Fastener - Pk of 10 - Rivet on Backs & Washers
SSQRPACKAKSLIDE1017	17mm Allen Key Quick Release Fastener - Pk of 10 - Slide on Backs & Washers
SSQRPACKAKSLIDE1417	17mm Allen Key Quick Release Fastener - Pk of 14 - Slide on Backs & Washers
SSQRPACKAKSLIDE1019	19mm Allen Key Quick Release Fastener - Pk of 10 - Slide on Backs & Washers



TITANIUM PRODUCTS AVAILABLE
IN A CHOICE OF 4 COLOURS:
BLUE • GOLD • NATURAL •
PURPLE HAZE



D-Ring		TITANIUM
Part Number	Description	
TIQRCLIP17	17mm Titanium Quick Release Stud - D Ring	
TIQRCLIP19	19mm Titanium Quick Release Stud - D Ring	

## BLACK ZINC COATED STEEL

Black Zinc Coated Steel Quick Release Fasteners. Strong and durable cost effective option, available in 17mm only – the most popular length.

<b>D-Ring</b>	
Part Number	Description
LDZUS-PANEX20	Individual Black Zinc Coated Steel D-Ring Quick Release Fastener
QRSTEEL17SETBK	Pack of 10 Black Steel 17mm Fasteners, Rivet on Backs and Rivets & Washers
QRSTEELSETSLIDE	Pack of 10 Black Steel 17mm Fasteners, Slide on Backs and Rivets & Washers









## ALL YOU NEED TO KNOW ABOUT BOLTS

### **IDEAL BOLT MEASURING TOOLS**

For precision measuring we would recommend the use of Digital Vernier Callipers and a Thread Gauge to measure thread pitch. For standard bolts in the range of M5 – M12 we offer our own Pro-bolt Measuring Gauge – see ourwebsite for details.

# **IMPORTANT**

If you print out this pdf, make sure you print it at full size - do this by setting 'Page Scaling' to 'None' in the print option window

### MEASURING A FASTENER

### **Shank Diameter**

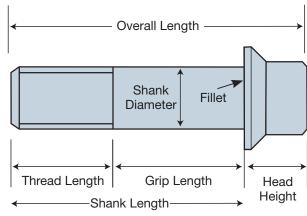
Also called Major diameter. The diameter of a bolt is the Shank diameter, expressed in millimetres for Metric bolts. Because this is approximately the same as the Major or Thread diameter the thread diameter measurement can be used for fully threaded bolts.

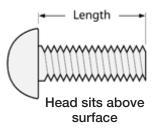
### Shank Length

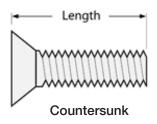
Fastener length is measured from where the material surface is assumed to be, to the end of the fastener. For fasteners where the head usually sits above the surface, the measurement is from directly under the head to the end of the fastener. For fasteners that are designed to be countersunk, the measurement is made from the point on the head where the surface of the material is, to the end of the fastener.

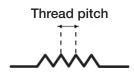
### Thread Pitch

Metric fasteners are specified with a thread pitch instead of a thread count. The thread pitch is the distance between threads expressed in millimeters (measured along the length of the fastener). For example a thread pitch of 1.5 means that the distance between one thread and the next is 1.5mm. In general smaller fasteners have finer thread so they have lower thread pitch.





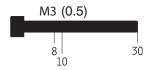


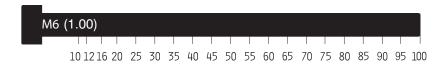


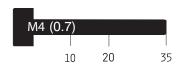


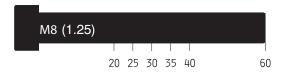
Note: Not all sizes are available in ALL materials, please refer to relevant material section.

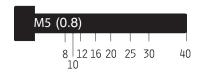
Standard Allen Key Socket Cap Bolts -



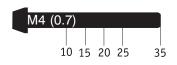


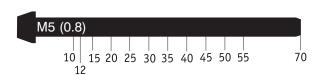


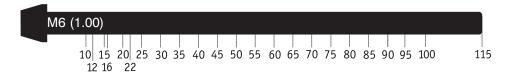




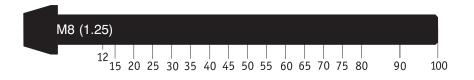
Tapered Socket Cap Bolts

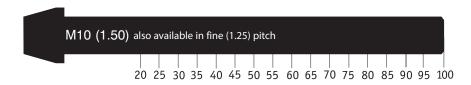




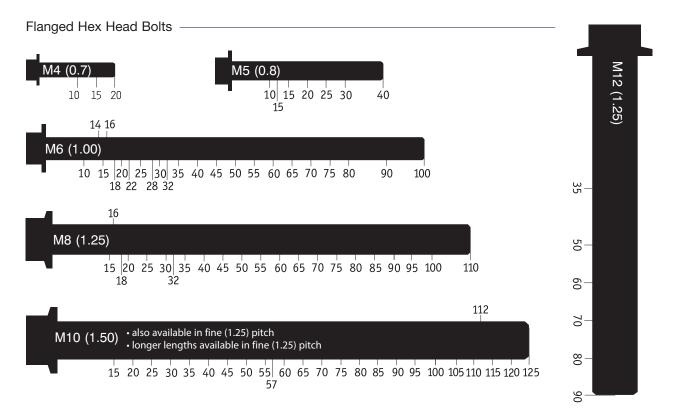




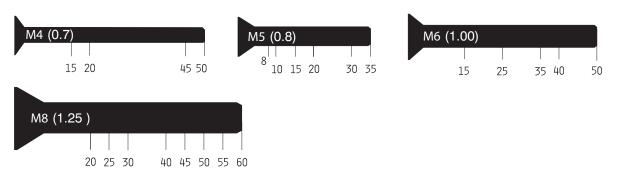




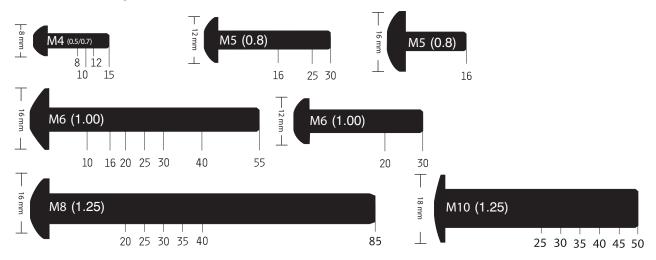








### Dome Head/Fairing Bolts





Note: Not all sizes are available in ALL materials, please refer to relevant material section.

Flat Washers -M5 \_\_\_\_ 15 mm \_\_\_\_ 7 mm - 9 mm -|−10 mm | \_\_\_\_ 20 mm \_\_\_\_ М6 М6 M6 \_\_\_\_ 18 mm \_\_\_ \_\_\_\_\_ 20 mm \_\_\_\_ \_\_\_\_\_ 30 mm \_\_\_\_\_ \_\_\_\_\_ 25 mm \_\_\_\_ \_\_\_12 mm \_\_\_ ─ 15 mm — M8 M10 \_\_\_\_ 16 mm \_\_\_\_ \_\_\_\_ 20 mm \_\_\_\_ — 30 mm — \_\_\_\_ 20 mm \_\_\_\_ M12 M14 M16 — 30 mm — — 24 mm —— — 28 mm — Drilled Washers -M10 M12 \_10 mm \_ \_\_\_\_\_ 23 mm \_\_\_\_ 16 mm — \_\_\_\_ 20 mm — Countersunk Bodywork Washers

M6 I

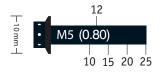
— 19 mm –

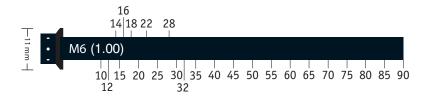
M8

25 mm —

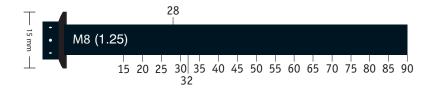


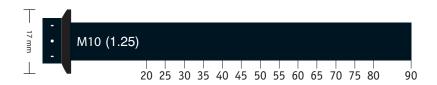
Race Spec Bolts















Race Spec Bodywork Bolts



