

# Protex Fasteners - General Product Guide

## Ultimate Tensile Strength



The ultimate tensile strength (UTS) for our items is shown in the relevant product tables throughout the website. The figures for the UTS have been determined by tensile tests in a normal working load direction on standard products and do not include any safety factors. A maximum load rate of 30mm per minute was applied throughout the tests. The UTS figures are shown in Kilograms and for a safe working load we suggest that approximately half of the ultimate strength figure is used.



## Rigid Claw Fastener



Rigid claw fasteners are manufactured from rigid steel strip or rigid wire forms. Where rigid claw fasteners are fitted we suggest that a rubber type seal is used within the application to provide some resilience between the fastener and catch plate.

If this is not possible we suggest that a spring claw fastener should be used.



## Spring Claw Fastener



Spring claw fasteners are manufactured using spring steel curved wire or coil springs and can be used to provide resilience. The degree of spring deflection up to a maximum working load varies between different fasteners and is shown in the relevant product tables throughout the website. Extension spring claws pulled beyond their maximum working load will take a permanent set. Compression spring claws pulled beyond their maximum working load will become coil

bound (i.e. rigid) and will no longer act as a spring.



## Adjustable Fasteners



Adjustable fasteners incorporate either a screwed spindle or threaded eyebolt and trunnion which produce a minimum of 10mm adjustment. This gives the strength advantages of a rigid fastener while allowing the required tension to be set after fitting.



## Catch Plates



The catch plates which are compatible with the fastener are shown on each page under the heading “**Related Items**”. These may include flat, wide, narrow, 90 degree crank, joggled and no holes self finish suitable for welding.



## Material and Finish



Our products are usually offered in mild steel (MS) zinc plated or stainless steel (SS). The standard zinc plated finish for each fastener is either silver passivate (ZN) or yellow colour passivate (ZN/YP) and is shown in the product tables.

Certain fasteners and catch plates are available in mild steel finish (SF) with no holes (NH) for welding. Some of the 40-series have self finish bases (SFB) for welding with the remaining parts of the fastener zinc plated.

Zinc plate does provide some corrosion resistance for mild steel but when fitting fasteners outside, stainless steel will offer greater corrosion resistance.


We generally manufacture our products from type 304 stainless steel. However some fasteners and catch plates are available in type 316 as standard and some as an option. These are shown in the product tables as **SS316** where available.

Some products are also available in mild steel with a black Electrophoretic paint (BL) as standard.



## Safety Catch




To prevent accidental release, certain fasteners are offered with a top mounted or patented side action safety catch. Please look for the  symbol on the webpage.



## Sealing Facility



Many fasteners are available with sealing holes, shown as the symbol  in the product tables, which allows for a sealing pin or wire to be used. We can supply two different types of sealing pin.

