And suppliers of

**Camloc Fasteners**
The quick opening action of quarter turn fasteners makes them ideal for applications where fast and frequent access is required. They are used in a very diverse range of areas such as inspection panels on aircraft and racing cars, covers on agricultural machinery and access panels in transportation and machine guarding.

**Quick Release Pins**
Hand operated, non-threaded and designed to operate in shear applications quick release pins are fast and easy to release by a pull or push action. Ideal for use in structural joints subjected to shear loads where quick assembly/dis-assembly is required. Applications include retaining stores on helicopters, bodywork on cars, demountable shelters and equipment on high-performance yachts.

**Keensert Inserts**
Keensert Inserts give high strength joints in low strength materials. Positively locked in position by the external flax the stainless steel solid bushing configuration of the Keensert Insert guarantees the quality of the internal thread before installation. Typical applications include transmission housings, military vehicles, and suspension units.

**AEROCATCH**
Aerocatch® shear pin latch is a replacement for the traditional slide pin used to retain bonnets and boot lids on racing saloons and rally cars. Its aesthetically pleasing and very low profile not only gives an aerodynamic advantage but also is road legal with no sharp projections. Aerocatch® 2 is a shear pin latch for use where it is not possible to use a strike pin and Aerocatch® 3 is a shear and tension latch typically used to retain panels on sports cars.

**APPLICATIONS ARE ENDLESS**
Although initially designed for the motorsport industry, Aerocatch® is now finding applications in off road machinery, trailers and marine use, where its robust composite and stainless steel construction makes it ideal for arduous conditions.

**HYDRAFLOW**
HYDRAFLOW the right connection for perfect fluid control

**HYDRAFLOW**
the next generation in connector technology

**Manufacturers of AeroCatch® the panel fastener for the 21st Century**

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The Hydraflow 14J21 Clamshell is a threadless flexible coupling with a unique safety feature for fluid transfer in motorsport applications and used with industry standard flanges.

- Lightweight
- Flexible
- Durable
- Safety Strap
- Single handed operation
- Industry standard flanges
- Integral bonding wires

Safety first
The unique safety strap not only provides visual proof that the unit is locked but also gives added security as it cannot be engaged until the clamshell is closed correctly. Easy to use for peace of mind.

Product development
The 14J21 clamshell has taken well proven technology from aerospace and defence applications and applied it to the motorsport industry. The safety strap adds to the security of the dual action latching mechanism to give a lightweight, safe and quick action system.

About Hydraflow
Hydraflow specialises in creating engineered solutions for moving low pressure fluid within high technology platforms. Whether you are working in the motorsport, aerospace, marine, defence or any other high technology industries, it’s likely that Hydraflow has the products and expertise to meet your challenges. Call Specialty Fasteners for details on how to solve your fluid needs using Hydraflow products.

![Clamshell illustration](image)

- **Safety device**: The safety strap gives a fast, easy visual indication that the coupling is closed correctly.
- **Locks automatically**: Clamshell closure locks automatically when the coupling has been completely closed. Operating instructions are available on our website: www.specialty-fasteners.co.uk and search 14J21.
- **Clamp hand operation**: No sharp edges to snag mechanics’ gloves.
- **No sharp edges to snag mechanics’ gloves.**
- **Snagging experience eliminated**
- **Self Bonding**: Electrical bonding to class “S” of MIL-B-5087B is automatically provided when the coupling is assembled.
- **Integral Bonding Wires**: The bonding wires are captivated within the clamshell halves eliminating the chance of snagging experienced with external bonding systems and also improving the aesthetics of the coupling.

**Clampshell dimensions/part numbers**

<table>
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<tr>
<th>TUBE SEAL</th>
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**Flange dimensions/part numbers**

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- **Flexible**
- **Axial adjustment 1/4” angular misalignment is ±4° for full couplings.**
- **Burst Pressure**: 382 PSIG
- **Operating Pressure**: 227 PSIG
- **Proof Pressure**: 155 PSIG
- **Burst Pressure**: 100 PSIG
- **Dalby Pressure**: 382 PSIG
- **Note**: All pressures are at room temperature

**Cable**

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the connector taken to the next stage

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- Lightweight
- Flexible
- Durable
- Safety Strap
- Single handed operation
- Industry standard flanges
- Integral bonding wires

Safety first

The unique safety strap not only provides visual proof that the unit is locked but also gives added security as it cannot be engaged until the clamshell is closed correctly. Easy to use for peace of mind.

Product development

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Safety device

The safety strap is provided to help correct installation and cannot be engaged unless the coupling has been completely closed. Operating instructions are available on our website: www.specialty-fasteners.co.uk and search 14J21.

Early Impacted

The safety strap gives a fast, easy visual indication that the coupling is closed correctly.

Safety Strap

The 14J21-21 clamshell has taken well proven technology from aerospace and defence systems and also improving the aesthetics of snagging experienced with external bonding systems. The bonding wires are captivated within the clamshell halves eliminating the chance of snagging experienced with external bonding systems. Please visit our website: www.specialty-fasteners.co.uk and search 14J21 to obtain full material specifications.

Meets tough requirements

Originally designed to meet stringent military and aerospace criteria which have been carried over to motorsport applications.

Gloved hand operation

Pawls must be lifted simultaneously to disengage accidentally since all three latch points must be lifted simultaneously to disengage the latch

Electrical bonding to class “C” of MIL-B-5087B is automatically provided when the coupling is assembled

Flange dimensions/part numbers

<table>
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<tr>
<th>FLANGE</th>
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Gloved hand operation

Gloved hand operation

Flex Arm adjustment 1/4” angular misalignment

Self Bonding

Electrical bonding to class “C” of MIL-B-5087B is automatically provided when the coupling is assembled

Integral Bonding Wire

The bonding wires are captivated within the clamshell halves eliminating the chance of snagging experienced with external bonding systems. Please visit our website: www.specialty-fasteners.co.uk and search 14J21 to obtain full material specifications.

Performance

The coupling meets the performance requirements of AS1553.

Temperature rating

-67°F to +262°F

Operating Pressure

502 PSIG 155 PSIG

Proof Pressure

700 FSIG 320 FSIG

Burst Pressure

1000 FSIG 382 FSIG

Note: All pressures are at room temperature

CADD

CADD STEP files available on request for coupling and flanges

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