

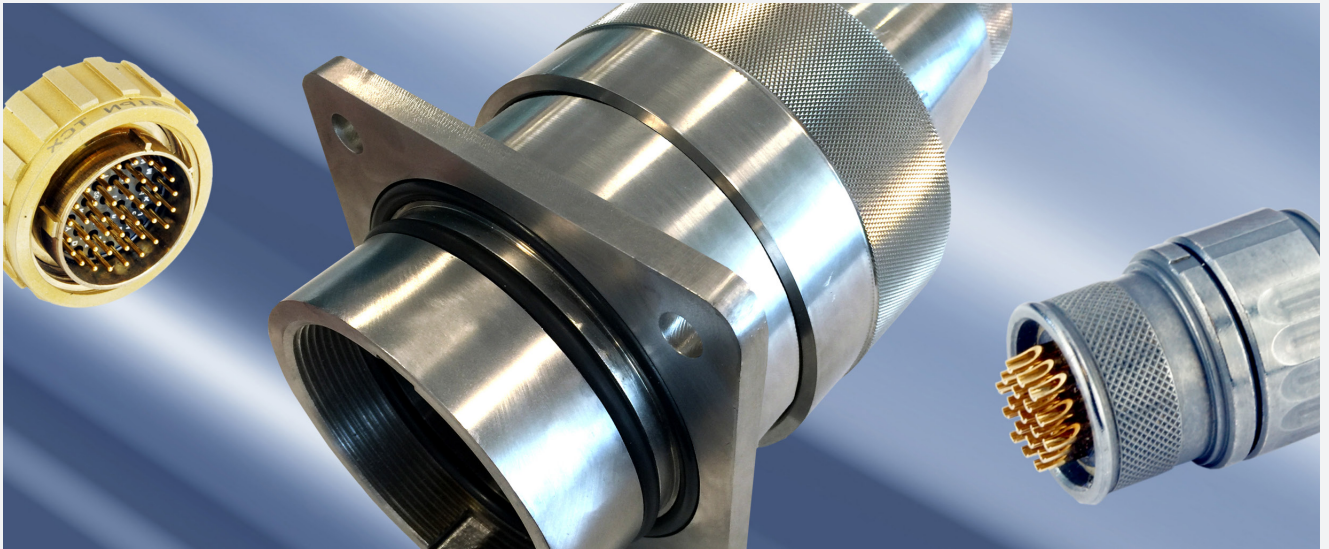


# Interconnect and cabling solutions

European leader in advanced technology solutions



consult. design. integrate.



## Acal BFi – offering high-performance interconnect solutions for demanding applications

With over 50 years' experience of interconnect products and technologies, Acal BFi are perfectly placed to discuss the most appropriate connector and cabling requirements for your application.

From the initial product design through to technical support, supply of connectors, sub assemblies, kits and cable assemblies, we will work with you ensuring your product design objectives are met with the most suitable solution.

### Cutting-edge connector solutions

**Defence and aerospace** – Approved assembly partner to Amphenol Ltd for over 50 years, we specify, configure, assemble and release circular connectors to meet MIL-DTL-38999, MS, PAN and JN approvals.

**Ruggedised and harsh environment** – Industrial- and military-approved or proprietary circular-connector solutions for assured reliability in extreme environments.

**Environmentally sealed** – Plastic, marine bronze and stainless steel salt-spray corrosion-resistant connectors and cable assemblies; offering sealing from IP6x through to full hermetic.

**Bespoke fibre** – In-house specification and manufacture of fibre and hybrid fibre / copper singlemode or multimode cable assemblies.

**High-speed data** – Solutions for data transmission ranging from filtered and unfiltered modular data connectors to military-specification twinax and quadax terminals.

**High power** – Connector solutions achieving current ratings of 1,000A+, utilising the latest hyperbolic contact technology.

**Application specific** – Industry-specific connector solutions for oil and gas, automotive, energy and industrial markets.

# Your partner for high-performance interconnect solutions

With a wealth of interconnect experience through long-standing manufacturer relationships (including over 50 years' experience as an Amphenol assembly partner with an output of over 5 million connectors), we are experts in the specification and supply of interconnect solutions, ranging from board-to-board connectors to complex cable assemblies.

As a trusted partner we will provide the best solution for your application, from discussing the initial design concept requirements, specifying of connectors with supply of data and samples, customisation, kits and full assemblies, through to full logistical services and ongoing technical support.



## Benefits of working with us

**Custom cable assembly** – Our custom cable assembly solutions provide application-ready, tested solutions that are standards compliant. We have in-house capability to produce custom cables with options such as over-moulding, shielding and the use of innovative Ecowire™ technology. Your custom assemblies can be delivered through our state-of-the-art logistics models, optimising your inventory and cash flow.

**Hybrid copper / fibre assemblies** – Our expertise in copper and fibre assemblies makes us the right choice for hybrid cables.

**Product-development services** – We can provide samples and demo kits, design consultancy and facilities for pre-EMC compliance testing, to accelerate and smooth your product-development process.

**Maintenance and repair services** – We also offer complete maintenance and repair services, so you know your system is in safe hands.



## Ruggedised / harsh environment fibre / copper assemblies

With more than 50 years' experience in the specification, assembly, supply and support of interconnect products, as well as detailed knowledge of the specific demands of the mil/aero and industrial sectors, we can be your trusted partner for all interconnect solutions.



### Circular military and industrial

As an authorised assembly partner to Amphenol Ltd, we provide MIL-DTL-26482, 5015, 608, MIL-DTL-38999, PAN and JN released connectors. We assemble these at our purpose-built facility in the UK, giving rapid supply of thousands of shell and planform configurations, including shell materials and plating, orientation and keying, custom pin loading, accessory kits, and full cable assemblies.

### Environmentally protected

For protection against fluid ingress and corrosion, we supply a range of connector solutions with ratings up to IP69/K.

For more demanding requirements, we offer specialist hermetic products for use in vacuum or high-pressure scenarios in instrumentation and subsea applications.



### High-power solutions

With power-carrying solutions of 1,000A+ utilising the latest hyperbolic contact technologies, we can provide interconnect options ranging from robust and proven military circular derivatives to bespoke hybrid / electric vehicle driveline assemblies.

### Ruggedised cable assemblies

Our experience and expertise in the assembly of military and industrial connector products gives us a unique advantage in the specification and production of rugged and harsh-environment cable assemblies.

Using our in-house connector assembly facility we can produce copper and fibre assemblies to your exact specification. We also offer a full technical support service.



## Ruggedised / harsh environment hybrid fibre / copper assemblies

From miniature and high-density products to data connectors ranging from serial I/O and Ethernet to high-speed fibre, we can offer the most appropriate interconnect solution for your needs.



### BK4 Backshell Series

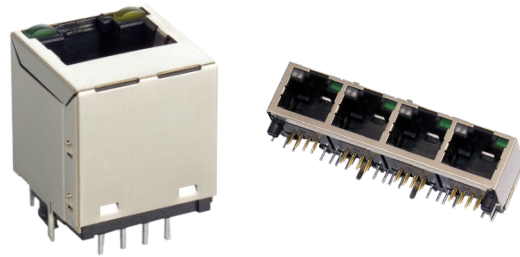
Acal BFi now offer backshell kits from Amphenol including the BK4 series of heatshrink adaptors. Available in multiple cable entry sizes and exit orientations to suit product families including 62GB/26482, MIL-DTL-38999 and Pattern 608 with materials and platings from olive drab cadmium & zinc cobalt, electroless nickel, marine bronze and black zinc nickel.

Complete kits available to include memory spring/ band and heatshrink boot.

### Modular network products

We offer all configurations of modular Ethernet connectors, with options for PoE, shielding, filtering / magnetics, and multiple LED combinations, in either singleport, multiport or stacked types.

Where specific design requirements are necessary, we can produce a custom connector configuration for you.

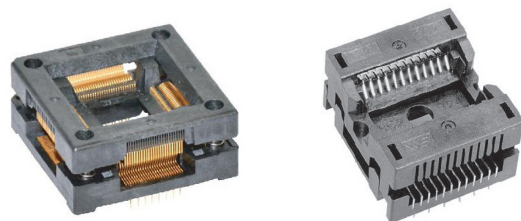


### Miniature and high density

Where space constraints exist, we can help overcome the design challenge by supplying miniature and micro-miniature connectors and sub-assemblies. With solutions from miniature wire-to-wire cable looms, fine pitch PCB interconnects to specialist, high-density I/O connectors, we can advise on the most suitable solution.










### Test and burn-in sockets and carriers

With a range of package options including BGA, LGA and QFP down to 0.4mm pitch, we are able to supply a wide range of test and burn-in sockets to support any programming or semiconductor development application.



# Amphenol Connector assembly programme

Acal BFi UK are an authorised assembling distributor for Amphenol circular connectors, ranging from 62GB's to 97/AMS's (The widest range of Amphenol connectors in the UK). The partnership has developed solutions for over 50 years, and covers the most comprehensive scope of approvals in the UK, including:- BS9000, PANAVIA, JN & MIL-DTL-38999 CAT 'C' Approval.

	ProprietaryPart	MIL-CSpec.	UK MODPattern	BSSpec.	Pan AviaSpec.	JNSpec.
	62GB	MIL-DTL-26482 (Series 1)	Pattern 105	-	-	-
	162GB	MIL-DTL-26482 (Series 1)	Pattern 603	-	-	-
	602GB	MIL-DTL-26482 (Series 2)	Pattern 602	-	PAN6432-1 PAN6432-4	-
	608	-	Pattern 608	-	-	-
	LJT (38999)	MIL-DTL-38999 (Series 1)	Pattern 616	Previously BS9520 G0001	-	-
	SJT (38999)	MIL-DTL-38999 (Series 1)	Pattern 615	-	PAN6433-2	JN1003
	D38999 / TV	MIL-DTL-38999 (Series 3)	-	Previously BS9520 G0003	-	JN1034
	97 / AMS	MIL-C-5015	-	-	-	-
	711	MIL-STD-1553B	-	-	PAN6484	-

## Connector Accessories & Custom Kits

In addition to final assembly of a wide range of circular connectors Acal BFi also supply connector accessories including heatshrink adaptor back shells and protective caps & cords. Custom part number kits can be provided for a range of product kits to meet customer requirements including connectors & backshells / protective caps through to full cable assemblies. Our BK4 band lock adaptor range for screen cable termination is an equivalent to TE/Polamco 91H1 and BTA1 series:

Range	Exit Angle	Family	Shell Size / Std Cable Entry*	Termination Kit	Plating	Accessory
BK4	S - (Straight) A - (90°) B - (45°)	RL - (38999 III)	08 049 (6.35mm)	X (Backshell Only)	ZN (Black Zinc Nickel)	B1 (180° Heat-shrink Boot)
		RN - (62GB, 608)	10 069 (9.52mm)	S (Spring)	Y (Olive Drab Zinc Cobalt)	
			12 089 (12.7mm)	B (Band)	N (Electroless Nickel)	
			14 109 (15.88mm)		K (Nickel Aluminium Bronze)	
			16 129 (19.05mm)		W (Olive Drab Cadmium)	
			18 149 (22.23mm)			
			20 159 (23.83mm)			
			22 179 (27.5mm)			
			24 209 (31.75mm)			
					*other cable entry sizes available on request	