

# KC 2000 Range

HIGH PERFORMANCE  
CIRCULAR EMC BACKSHELLS



# KC 2000 Range

## THE COMPLETE ANSWER TO ELECTROMAGNETIC SHIELDING AND ENVIRONMENTAL SEALING FOR CIRCULAR CONNECTORS

All the screening techniques that KEC has developed over many years of experience in this field are incorporated in the KC 2000 range. These supply solutions for a wide variety of EMC and environmental specifications including TEMPEST levels. Various techniques are used to provide cost effective shielding for both small batch and high volume production runs. Ideal for all defence, aerospace, commercial and industrial applications, the KC 2000 range is a great asset to manufacturers of all types of equipment in helping them meet UK and EC screening directives with which they are required to comply.

### KC 2000 - THE COMPLETE EMC INTERCONNECT SOLUTION

- Wide range of EMC solutions up to TEMPEST levels of performance
- Simple to assemble, requires no special tooling
- Easy to rework
- Individual and overall screening capability
- Straight and angled versions in a range of materials and plating finishes
- Integral and additional strain relief options
- Special bespoke designs can be supplied

The KC 2000 range is compatible and interchangeable with existing KEC backshells and shares with earlier designs the key feature that, unlike many competitive systems, the cable

braid is disturbed minimally during assembly ensuring that cable screening performance is unaffected.

### LATEST TECHNOLOGY

The KC 2000 range uses state-of-the art technology to provide the correct EMC solution no matter what the target specification and provides excellent value for money.

### WIDE RANGE OF CAPABILITY AND COMPATIBILITY

The range comprises eight individual products each designed to suit different EMC, mechanical and environmental requirements. The rationalisation of the product range has allowed us to use common parts within the different models. This means an increase in production flexibility and a reduction in piece part stock holding for assembling distributors resulting in a high degree of economy for our customers.

The IRIS spring technology in the KC 2100 and KC 2300 provides the highest levels of overall screen performance as the cable screen is not disturbed in any way. With the correct connectors and cables in a system, protection levels in excess of 100db over a wide frequency range can be achieved. Other series in the range utilise alternative methods of screen termination that rely on feeding the overall braid over a braid trap barrel or spigot of some form that with careful size matching

excellent levels of screening can be achieved.

### INDIVIDUAL AND OVERALL SCREENING

The method of individual screen termination by interwoven braid is consistent throughout the range. The highest levels of performance and protection can be achieved without any of the drawbacks associated with solder sleeves, daisy chains or pigtailed. Due to the simple mechanical method of assembly production and rework times are minimised.

### PERFORMANCE AND ECONOMY

The KC 2000 range is a rationalisation, consolidation and enhancement of techniques that have been developed by KEC over many years. The eight models are used in those applications that require the highest levels of protection such as the military, aerospace and specialised industrial markets and yet are available at prices that will provide cost effective EMC solutions to more commercial markets such as professional electronics and telecommunications.





THE **KC 2000 RANGE** COMPRISES EIGHT INDIVIDUAL PRODUCTS EACH DESIGNED TO SUIT DIFFERENT EMC AND ENVIRONMENTAL REQUIREMENTS

Excellent EMC performance including TEMPEST  
Proven IRIS spring technology for overall screening  
Individual screening with tube and braid kit  
Environmental sealing with integral 'O' ring seals



Excellent levels of EMC performance  
Overall screening by braid trap system  
Individual screening by interwoven braid and slotted body  
Lightweight and compact  
Sealing by heat shrink boot

Excellent EMC performance including TEMPEST  
Proven IRIS spring technology for overall screening  
Individual screening with tube and braid kit  
Lightweight and compact  
Sealing by heat shrink boot



High EMC performance  
Overall screening by braid trap system  
Lightweight and compact  
Sealing by heat shrink boot

High levels of EMC performance  
Overall screening by band strap system  
Hand or pneumatic tool termination  
Lightweight and compact  
Sealing by heat shrink boot



High levels of EMC performance  
Overall screening by band strap system  
Individual screening by interwoven braid and slotted body  
Lightweight and compact  
Sealing by heat shrink boot

High levels of EMC performance  
Overall screening by reworkable band clamp  
Lightweight and compact  
Sealing by heat shrink boot



High levels of EMC performance  
Overall screening by reworkable band clamp  
Individual screening by interwoven braid and slotted body  
Lightweight and compact  
Sealing by heat shrink boot

The KC 2000 range uses state-of-the-art technology to provide the correct EMC solution no matter what the target specification and provides excellent value for money.

SERIES	METHOD OF OVERALL SCREENING	INDIVIDUAL SCREEN OPTION	METHOD OF SEALING	ADDITIONAL STRAIN RELIEF * see note
KC 2100	IRIS spring	Yes, Tube & braid	'O' Ring	Clamp bars
KC 2200	Braid trap	Yes, Slotted body & braid	Heat shrink	Clamp bars, Tie bar
KC 2300	IRIS spring	Yes, Tube & braid	Heat shrink	Clamp bars
KC 2400	Braid trap	No	Heat shrink	Clamp bars, Tie bar
KC 2500	Band strap	No	Heat shrink	None
KC 2600	Band strap	Yes, Slotted body & braid	Heat shrink	None
KC 2700	Band clamp	No	Heat shrink	None
KC 2800	Band clamp	Yes, Slotted body & braid	Heat shrink	None

\* Note: All KC 2000 backshells provide a significant level of integral strain relief.

Since 1979 KEC has been at the forefront of EMC interconnect technology. Developing patented methods for both individual and overall screen termination we design and manufacture high quality, high performance, EMC Interconnect Components including Backshells for both circular and rectangular connectors, and Bulkhead or Panel Fittings to screen and seal cables passing through, or terminating at, instrument panels, box entries and bulkheads.

KEC products are complemented with a full range of DType, M12 and Profibus Connectors and Backshells, Metal Braids, Sleeving and Shielding, Conduit and Connector Mounting Plates making KEC the 'One Stop Shop' for all your EMC interconnect requirements.

KEC also offers a complete EMC Interconnect Component, Cable Harness Assembly and Box Kitting service. We can plan, design, build and supply complete systems or work with customer requirements to produce cable assemblies and kitted boxes and project manage total EMC interconnect solutions.

KEC is an ISO 9001 and ISO 14001 registered company and holds EN 9100 design and manufacturing approval.



**KEC Limited**  
 Orpheus House, Calleva Park,  
 Aldermaston, Reading,  
 Berkshire, RG7 8TA  
 Tel: +44 (0)118 981 1571  
 Fax: +44 (0)118 981 1570  
 E-mail: sales@kec.co.uk  
 www.kec.co.uk

Distributed by:

