

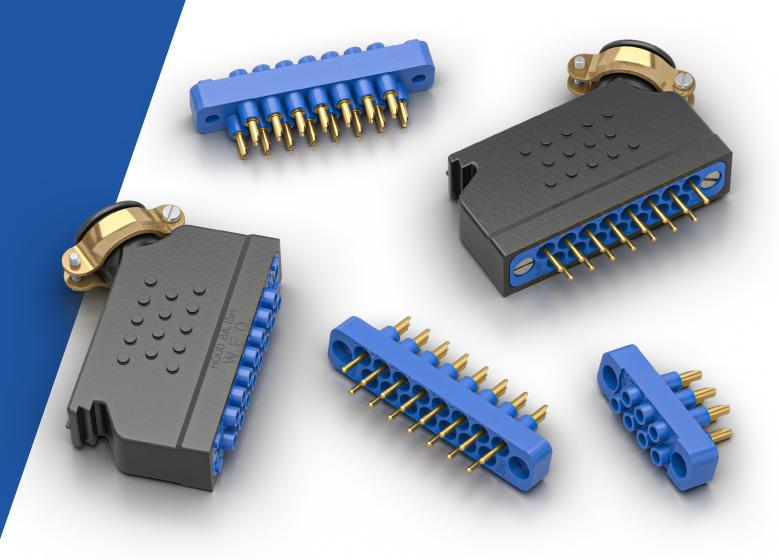
Manufacturers of High Quality Connectors and Accessories

# **BA CONNECTORS**

Lightweight and compact rack and panel style connectors, ideal for use in high voltage power and communication applications.







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#### **Lodge Group**

Established in 1976, Weald Electronics is part of the privately-owned Lodge Group which includes the connector distributor FC Lane Electronics and its Autosport Division, Lane Motorsport.



Weald Electronics is predominantly known for its comprehensive selection of circular bayonet and screw coupling power and filtered circular connectors, PCB Edge Card, two-part PCB and sub-miniature plastic-bodied circular connectors.

To complete your interconnection solution, Weald manufactures protective caps and backshells for MIL-DTL-38999 and 26482 applications as well as protective caps, nut plates and gaskets for use right across motorsport.

With design, manufacturing and test facilities at its Slinfold Lodge HQ, Weald Electronics is able to tailor a connector solution to exactly meet a customer's specific requirement on surprisingly short lead times. Standard products are normally available by next day.

Products from Weald Electronics Ltd are available from FC Lane Electronics Ltd.

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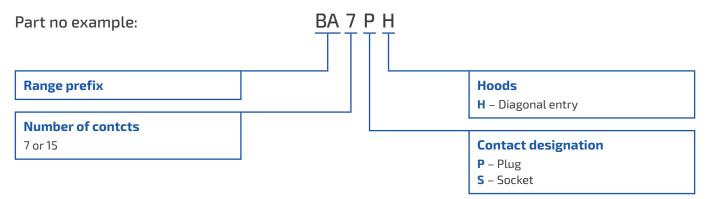
#### **General Information**

The extremely compact lightweight construction of these high voltage plug and socket connectors makes them ideal for use in power control and communications circuits. DAP mouldings provide high arc resistance, high dielectric and mechanical strength. The non-rotating contacts are gold plated to provide low contact resistance, to prevent corrosion and to facilitate soldering.

#### **Characteristics**

Current rating per contact	13 amps
Working voltage DC or AC peak	2500 volts at sea level
DC breakdown voltage between contacts (connector engaged)	7000 volts at sea level 1700 volts at 60 000 ft
DC breakdown voltage contacts to ground (connector engaged)	10000 volts at sea level 1700 volts at 60 000 ft
Solder cup hole diameter	1.85 mm
Contact material	Gold plated brass
Moulding material	Diallyl Phthalate (DAP)
Hood material	HDPE (high density polyethylene)
Fasteners	Steel (plated and passivated), Brass and Aluminium (anodised)

## **BA Range Ordering Information**

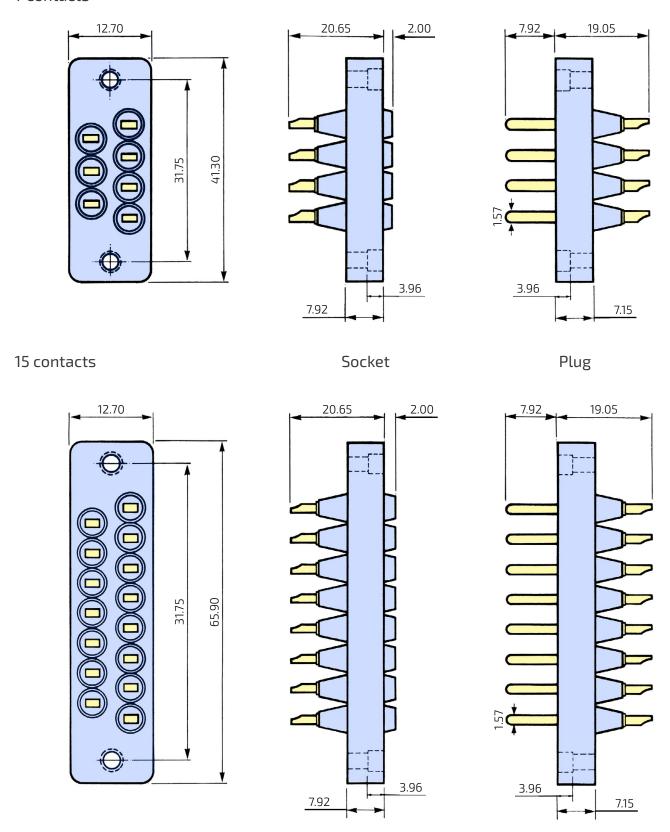


If hoods only required, omit **contact designation** step.



## **Insert and Contact Dimensions**

#### 7 contacts

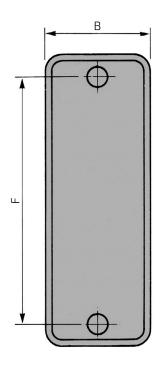


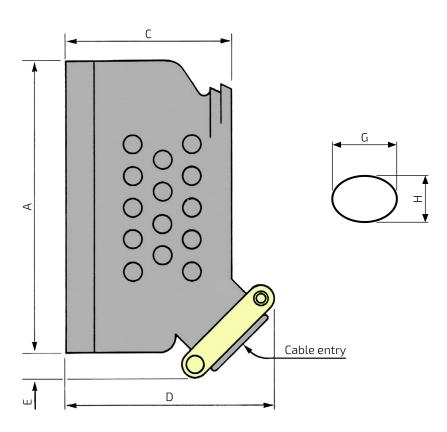
Note: All dimensions are in millimeters (mm). All outline dimensions are nominal.

## **Hood Dimensions**

Designed to protect the soldered wire connections on plugs and sockets. They render support and strain relief to the cable and facilitate disengagement of mated connectors.

Material: high density polythene.





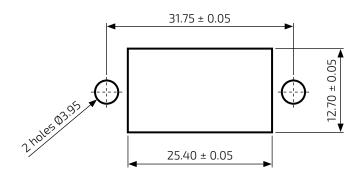
Fits connector		А	В	С	D	E	F	G	Н
7 way	in	1.765	0.640	1.250	2.000	0.250	1.250	0.375	0.281
	mm	44.83	16.27	31.75	50.80	6.35	31.75	9.35	7.14
15 way	in	2.734	0.640	1.500	2.125	0.375	2.250	0.562	0.406
	mm	69.45	16.27	38.10	53.90	9.53	57.15	14.27	10.31

Note: All outline dimensions are nominal.

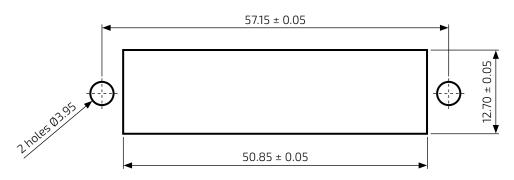


## **Panel Cut-Out Dimensions**

#### 7 contacts



#### 15 contacts





#### **Product Safety Information**

These notes are intended to be used in conjunction with the Product Catalogue and Product Specification. Products may be safely used in the applications for which they have been designed and within the specified rating and environments. If products are exposed to conditions outside the performance ratings or specified environments they may constitute a hazard. In particular it should be noted that:

#### 1. Material Content

Circular Connectors generally use metalwork parts made of brass, aluminium, phosphor-bronze or steel, which, dependant on the particular application, may be passivated and protected with cadmium or zinc plate – in conjunction with chromated or anodised surface finishes. The insulating materials can either be natural or synthetic rubber, together with plastic or glass-filled plastic moulded parts. Contact materials vary but are usually made of brass, phosphor-bronze, alumel or chromel.

#### 2. Electric Shock, Burns and Fire

Hazard can occur if the product is used outside the specified parameters or if the product is damaged, wrongly wired, poorly assembled, poorly integrated into larger equipments, or contaminated with conductive fluids. Live circuit terminations must be protected and live circuits never broken by disconnecting products.

Hot spots may be created when resistance is increased due to damage or incorrect integration particularly soldering, or loose terminations. Overheating can cause breakdown of insulation, electric shock, burns or, ultimately, fire. In the event of fire noxious and/or toxic fumes may be released and, in these circumstances, any fire involving the product should be dealt with by personnel properly equipped. Connectors with exposed terminations or contacts should not be used on the current supply side of a circuit with exposed contacts on an unmated product. Before making a circuit live, the product and wiring should be checked to ensure there is no electrically conducting debris present. Circuit resistance checks should also be conducted before making the circuit live. Always ensure that connectors are assembled and wired by properly trained personnel.

#### 3. Use, Transport and Storage of Products

Care must be exercised to avoid damage to any part of the products during transporting, storage or use. Abnormal transit or storage conditions and abuse during installation can give rise to damage. Products should not be used in a damaged condition.

Improper storage (particularly of damaged products) can give rise to additional hazards particularly corrosion. Attention is specifically drawn to the need for proper storage of products containing cadmium and you are advised to see the Guidance Note from the Health and safety Executive on Cadmium – Health and Safety Precautions.

#### 4. Disposal of Products

Product should not be burnt.

## **Safety Rules**

- Follow the guidelines given
- Always protect live circuits and never disconnect a live connector
- Never use a damaged connector
- Never burn discarded connectors

## **Lodge Group**

#### **FC Lane Electronics Ltd**

Franchised connector distributor

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### Weald Electronics Ltd

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#### **Lane Motorsport**

Division of FC Lane dedicated to motorsport industry

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