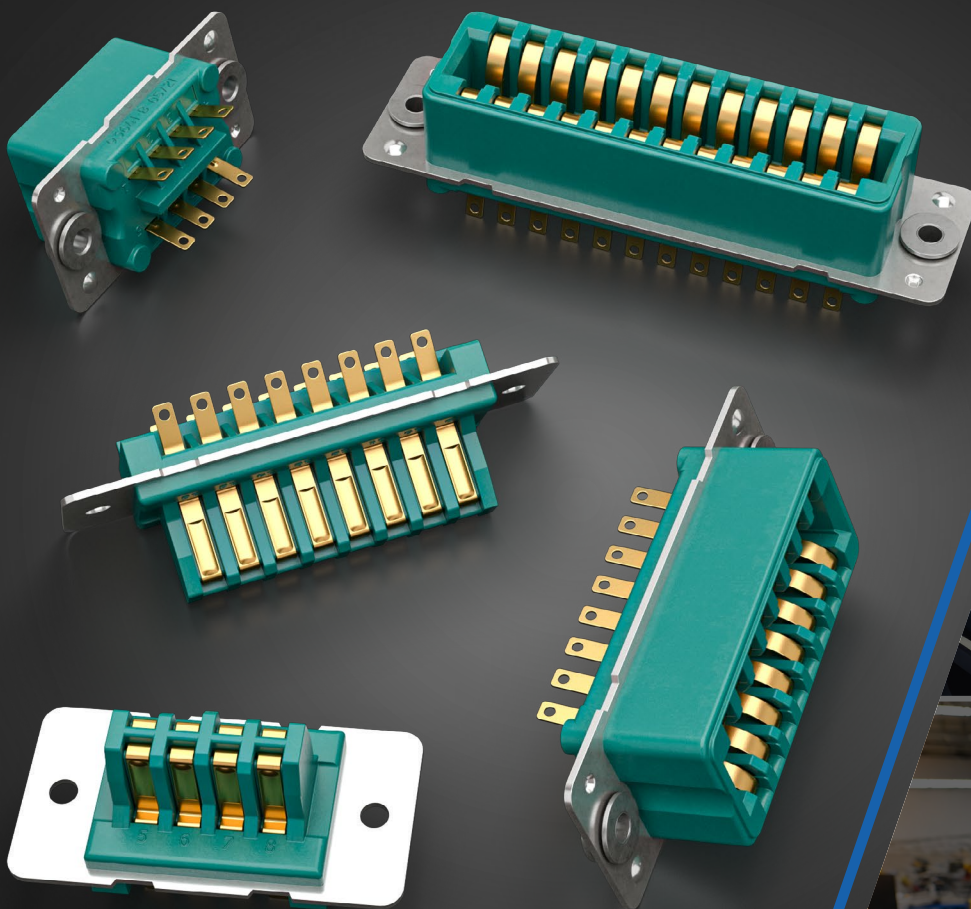
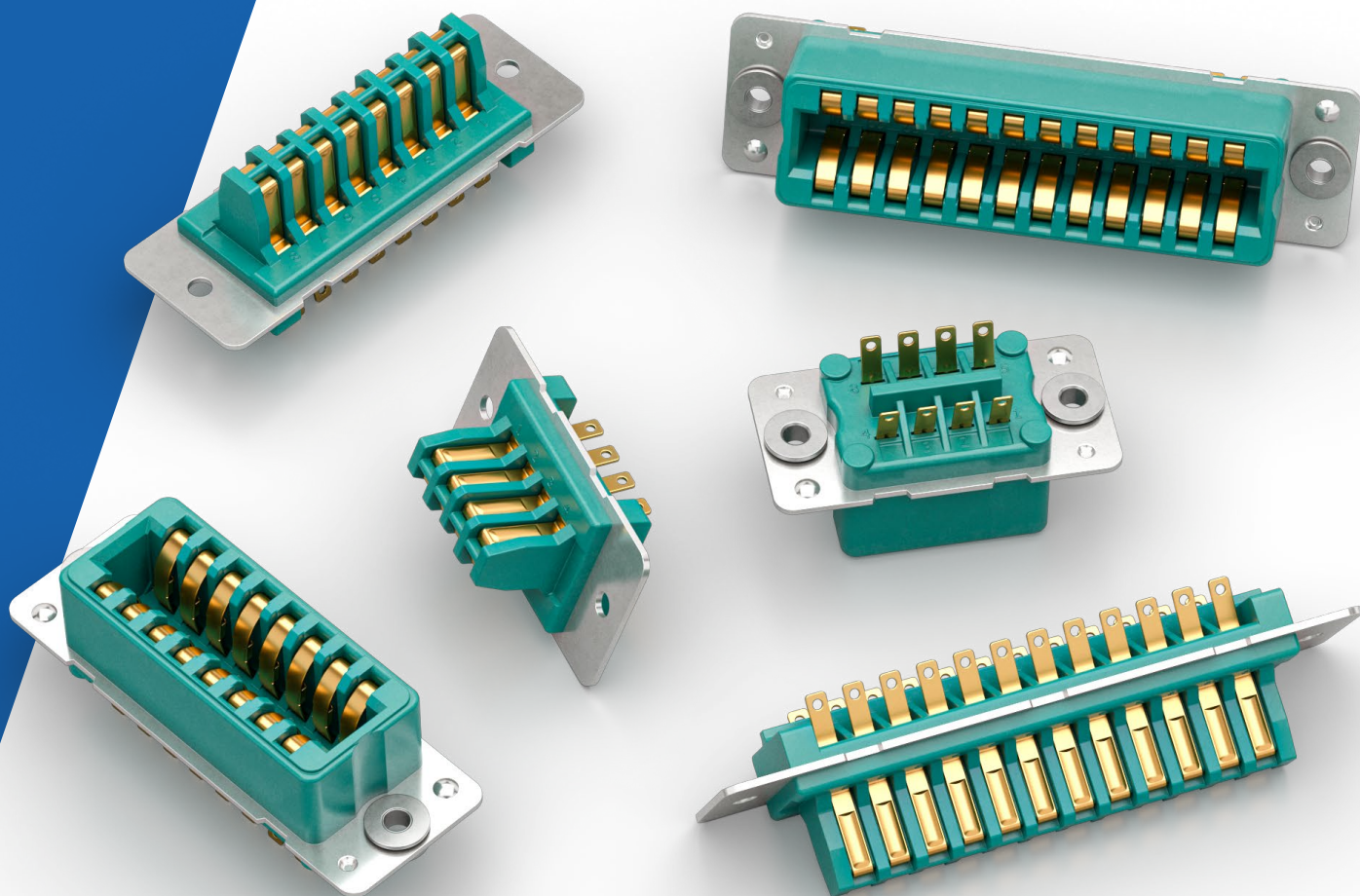


LMR CONNECTORS

Heavy duty rectangular rack and panel connector system, particularly suited for use in rugged conditions.





Contents

Introduction	3
General information	4
Characteristics	5
Dimensions	6
Ordering information	7
Mounting Details	7
Product safety information	8

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.



Lodge Group Headquarters

Weald Electronics is predominantly known for its comprehensive selection of circular bayonet and screw coupling power and signal 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.

t: +44 (0) 1403 790 661

e: sales@fclane.com

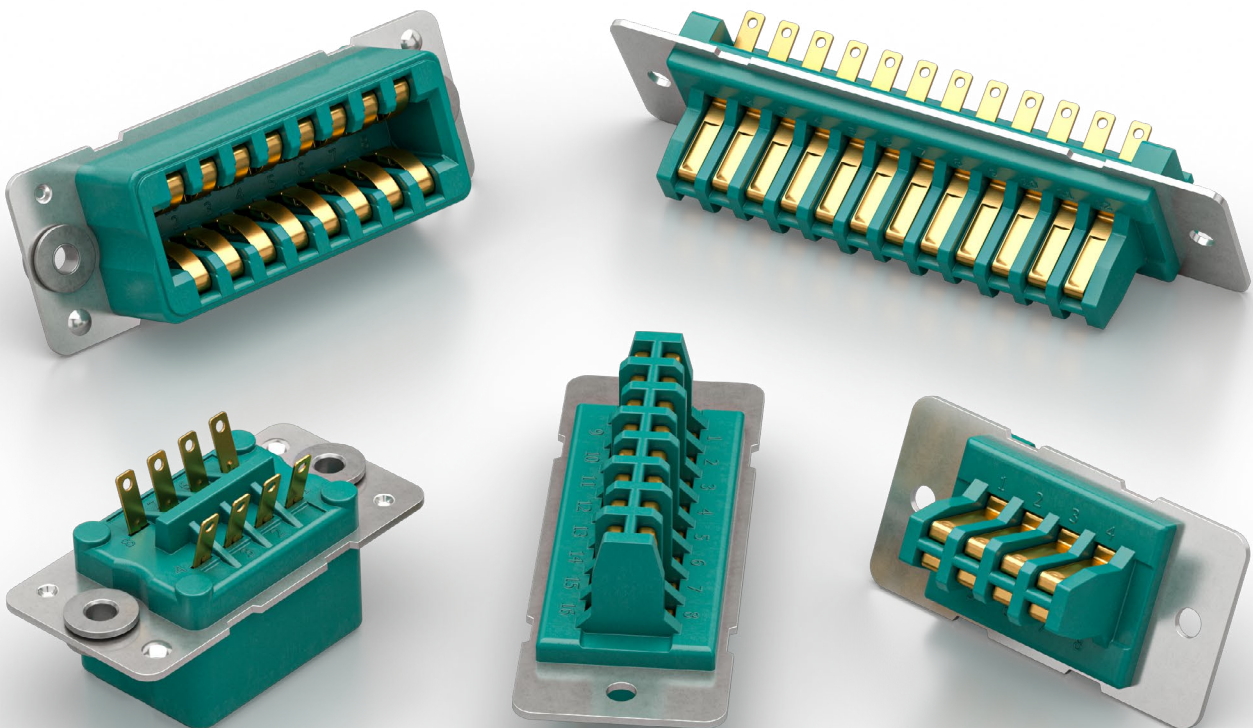
w: fclane.com

General information

This heavy duty rectangular rack and panel connector system is particularly suited for use in rugged conditions. Designed as a line to line or panel connector, they feature a low insertion force which means the plug and socket will self-align. As a result the LMR connectors are ideally suited for inaccessible applications.

Features and benefits:

- Rugged construction
- 180° polarised
- Floating bushes to assist alignment
- Excellent current carrying characteristics
- Available in four sizes with 8, 16, 24 and 32 contacts
- 5 A current rating
- Working voltage 800 V DC or AC peak
- UL-94 V-0 rated flame-retardant



Characteristics

Materials

Insulators	Diallyl-Phthalate (DAP), UL-94 V-0 rated flame-retardant
Contact	Copper alloy plated hard acid gold
Mounting plates	Stainless Steel
Latching screws and bushes	Mild steel bright nickel plate

Electrical

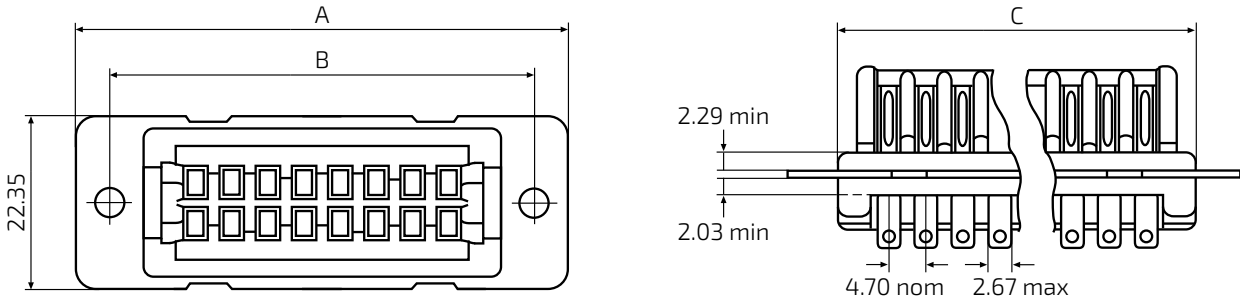
Maximum current rating	5 A all contacts simultaneously at 100°C
Working voltage DC or AC peak	800 V
Proof voltage DC or AC peak	3.5 kV
Contact resistance initially	5 mΩ max
Contact resistance after conditioning	10 mΩ max
Insultation resistance initially	10 ⁵ MΩ min
Insultation resistance after conditioning	10 ⁴ MΩ min

Mechanical

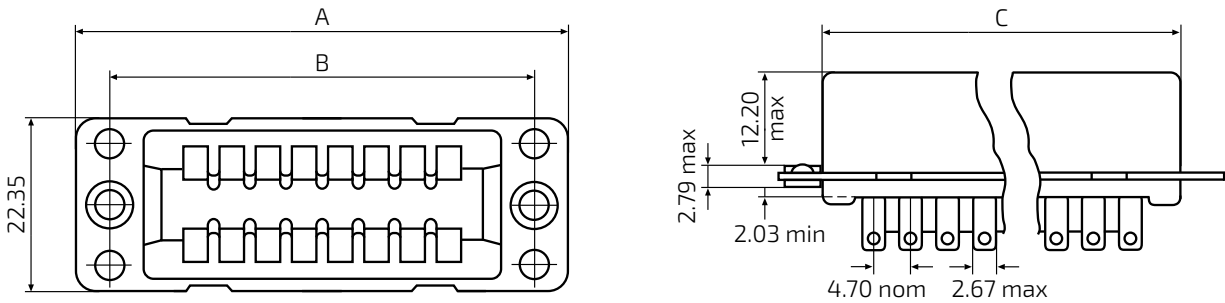
Mechanical Operations	500
Insertion and withdrawal force per contact pair	2.25 N max / 0.75 N min
Climatic category	55/125/56

Dimensions

Plug

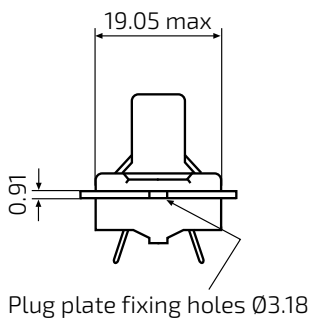


Socket

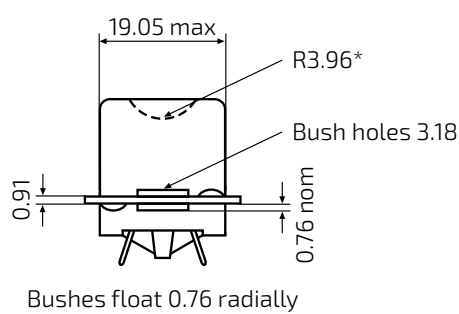


Number of ways	A max	B nom	C max
8	43.94	34.92	26.42
16	62.99	53.95	45.47
24	82.04	73.02	64.52
32	101.09	92.07	83.57

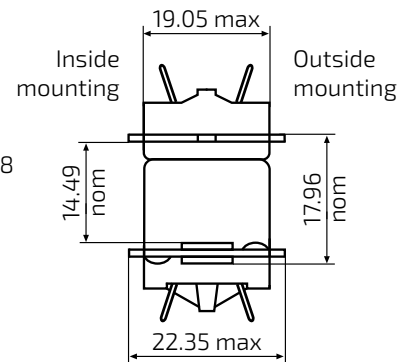
Plug solder termination



Socket solder termination



Plug and socket mated



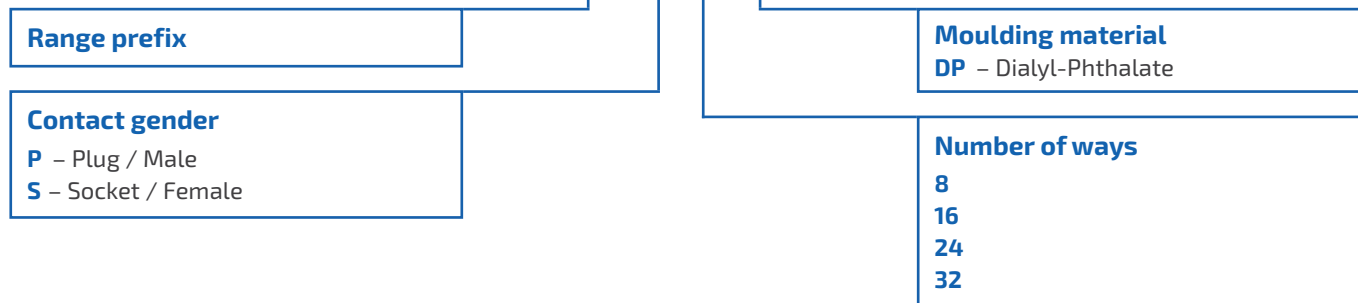
Note: All dimensions are in millimeters (mm).

* - Ends are relieved on 32 way sockets only.

Ordering Information

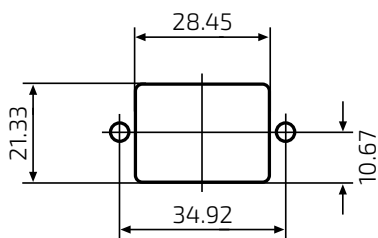
Part no example:

LMR P 8 DP

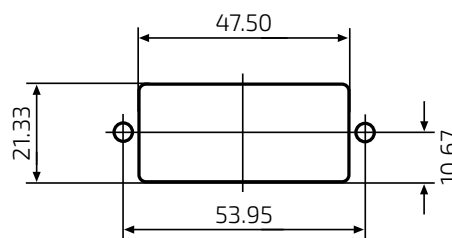


Mounting Details

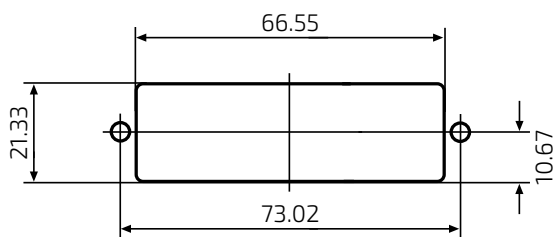
8 way



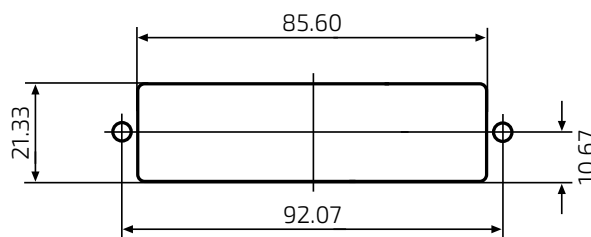
16 way



24 way



32 way



Note: All dimensions are in millimeters (mm).

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

+44 (0) 1403 790 661
fclane.com



Weald Electronics Ltd

Manufacturers of high quality connectors and accessories

+44 (0) 1403 790 715
wealdelectronics.com



Lane Motorsport

Division of FC Lane dedicated to motorsport industry

+44 (0) 1403 790 661
lanemotorsport.com



This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

Please see site for usage terms,
and more aircraft documents.

