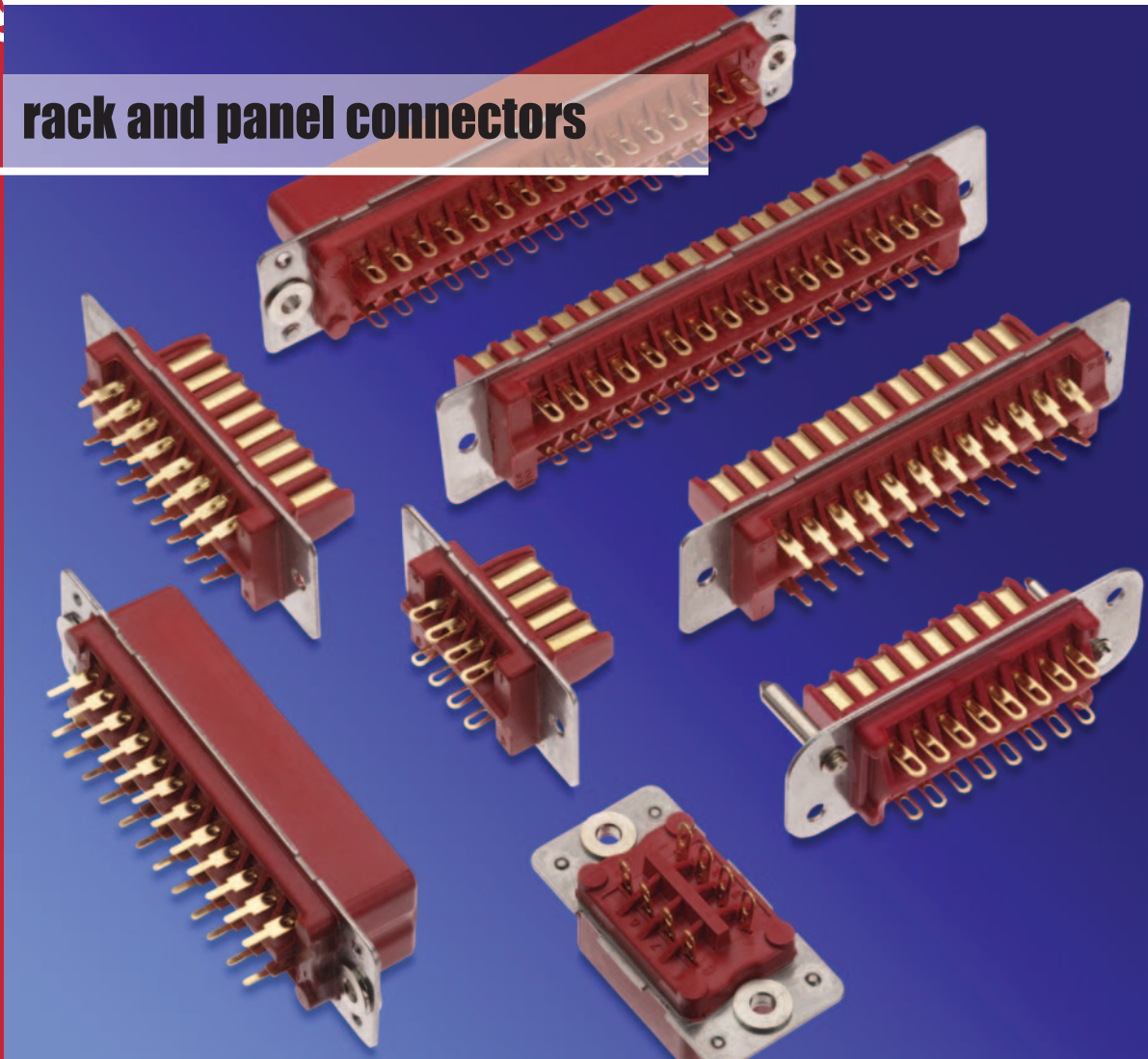


# connectors

## Red range

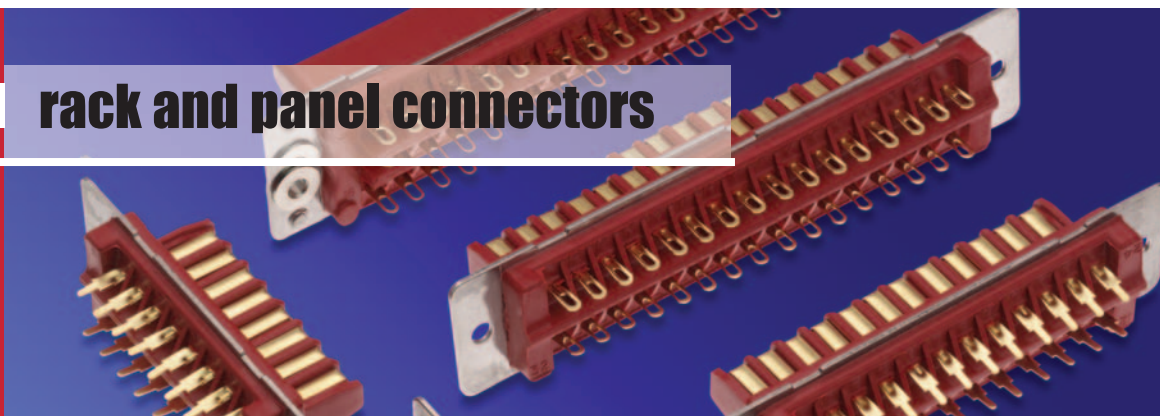
**Industrial** rack and panel connectors



**TW** **McMurdo**  
**Connector**

# Industrial rack and panel connectors

This comprehensive range of rugged rack and panel connectors is available in four sizes with options for both pcb or cable mounting. These connectors are used throughout industry in blind mating applications.



## FEATURES

Rugged construction

180° polarised

Dowel polarised for blind mating

Floating bushes to assist alignment

Excellent current carrying characteristics

Pcb or cable mounted

Available in four sizes

Cover with universal top or side entry cable clamp

## Technical Data

### MATERIALS

Insulator

Nylon PF or Diallyl-phthalate (DAP)

Contact

Copper alloy plated hard acid gold

Mounting plates

Stainless steel

Latching screws & bushes

Mild steel bright nickel plate

Dowels

Brass nickel plate

Covers

Aluminium alloy

### MECHANICAL

Mechanical operations

Nylon PF

DAP

Insertion and withdrawal force (per contact pair)

500

500

2.3N max  
/0.8 min

2.3N max  
/0.8 min

### ELECTRICAL

Current

All contacts (simultaneously)

Nylon PF

DAP

at 80°C Tamb.  
5A max

at 100°C Tamb.  
5A max

Working voltage

800V d.c.  
or a.c.peak

800V d.c.  
or a.c.peak

Proof voltage

3.5k V d.c.  
or a.c.peak

3.5k V d.c.  
or a.c.peak

Contact resistance - (initially)  
- (after conditioning)

5mΩ max  
10mΩ max

5mΩ max  
10mΩ max

Insulation resistance – (initially)  
- (after conditioning)

10<sup>9</sup>MΩ min  
10<sup>8</sup>MΩ min

10<sup>9</sup>MΩ min  
10<sup>8</sup>MΩ min

### ENVIRONMENTAL

Climatic category

40/100/21

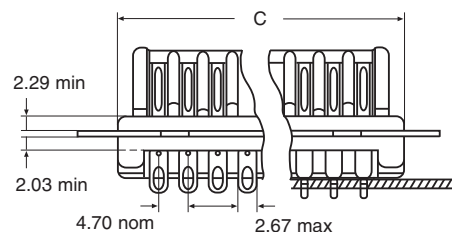
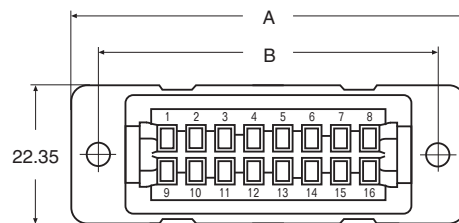
55/125/56

## Barrier Polarised

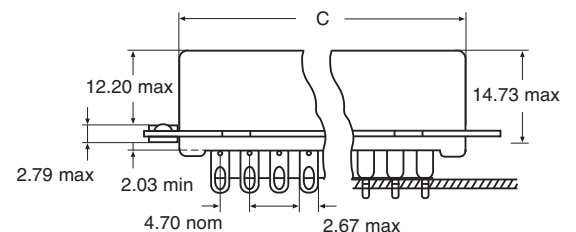
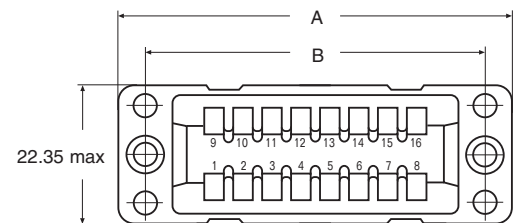
### Plug and socket dimensions

| No. of Ways | A max  | B crs | C max |
|-------------|--------|-------|-------|
| 8           | 43.94  | 34.92 | 26.42 |
| 16          | 62.99  | 53.97 | 45.47 |
| 24          | 82.04  | 73.02 | 64.52 |
| 32          | 101.09 | 92.07 | 83.57 |

### Plug



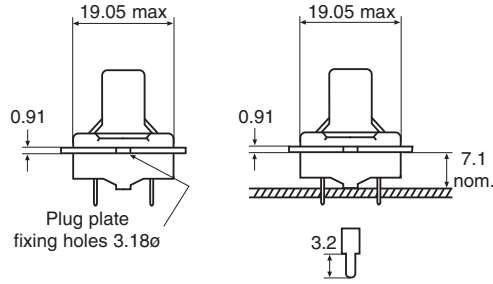
### Socket



# Barrier Polarised

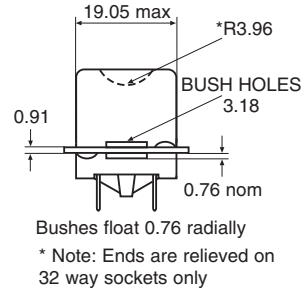
## Plug

### Solder termination PC termination

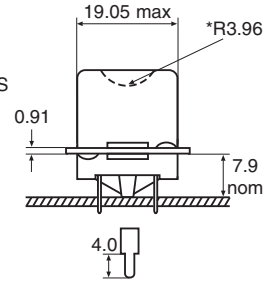


## Socket

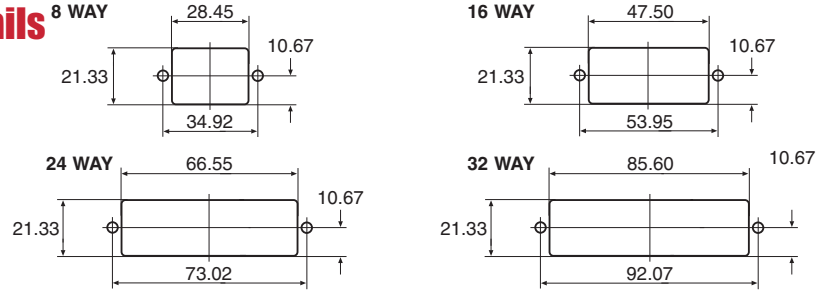
### Solder termination



### PC termination

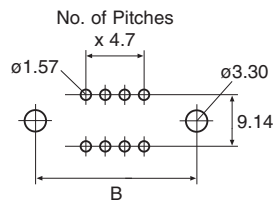


## Mounting details

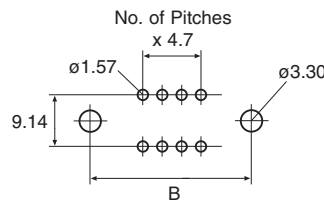


## P.C.B. layout

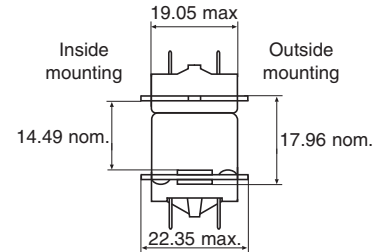
### View from rear of plug



### View from rear of sockets

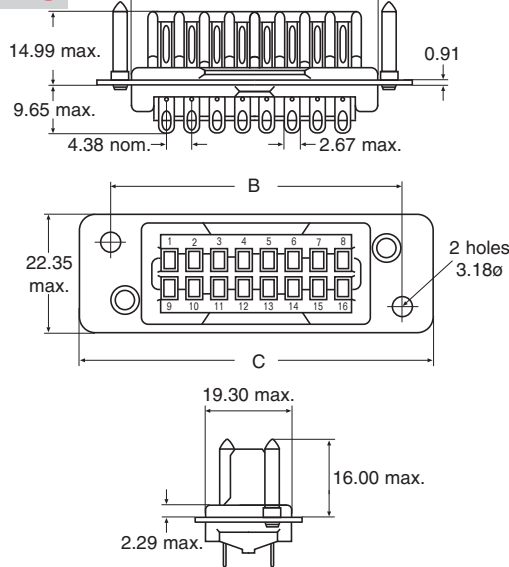


## Barrier polarised plug and socket mated

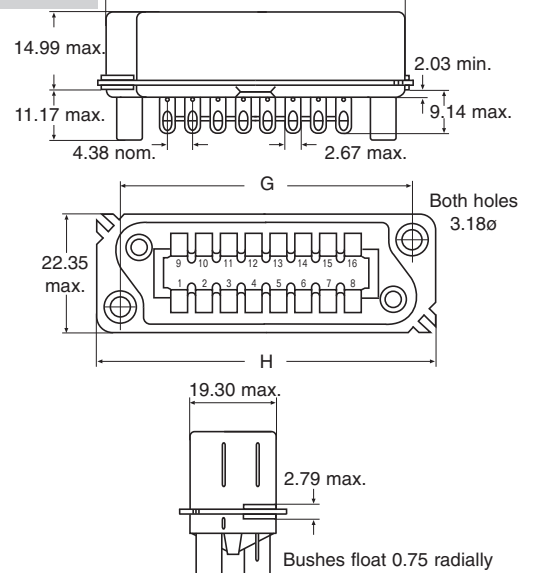


# Dowel Polarised

## Plug



## Socket

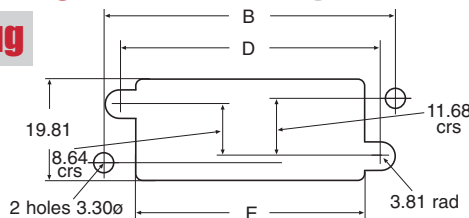


## Dimensions

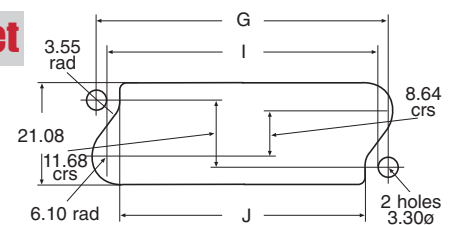
| No. of Ways | A max | B crs | C max | D crs | E nom | F max | G crs | H max | I crs | J nom |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 16 way      | 39.65 | 51.41 | 62.15 | 46.79 | 40.64 | 57.90 | 51.61 | 61.98 | 46.81 | 44.70 |
| 24 way      | 57.02 | 68.68 | 79.45 | 64.06 | 57.91 | 74.17 | 68.48 | 79.32 | 63.58 | 61.72 |
| 32 way      | 74.50 | 85.95 | 96.77 | 81.33 | 75.54 | 91.95 | 85.95 | 96.65 | 81.33 | 79.48 |

## Mounting details from wiring side

## Plug



## Socket



Red range

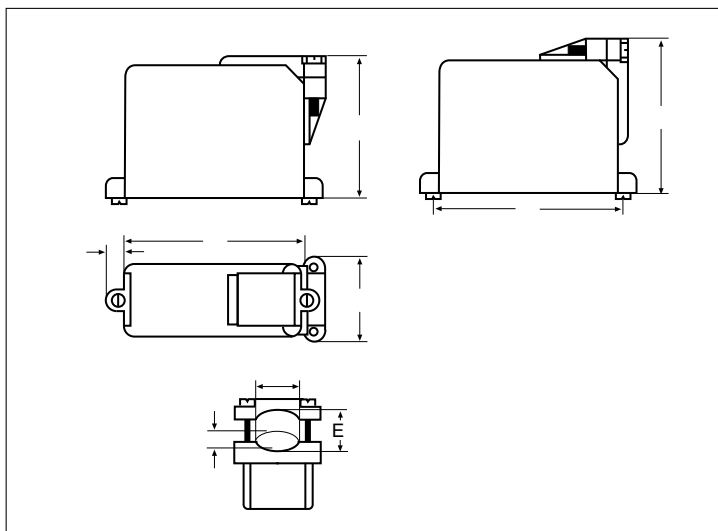
# ORDERING information

| DESCRIPTION                         |        |             | ORDER CODE        |                   |
|-------------------------------------|--------|-------------|-------------------|-------------------|
| Style                               | Gender | No. of Ways | Moulding Material |                   |
|                                     |        |             | Nylon PF          | Diallyl-Phthalate |
| <b>Barrier Polarised</b>            | Plug   | 8           | RP8               | DRP108            |
|                                     |        | 16          | RP16              | DRP116            |
|                                     |        | 24          | RP24              | DRP124            |
|                                     |        | 32          | RP32              | DRP132            |
|                                     | Socket | 8           | RS8*              | DRS108*           |
|                                     |        | 16          | RS16*             | DRS116*           |
|                                     |        | 24          | RS24*             | DRS124*           |
|                                     |        | 32          | RS32*             | DRS132*           |
| <b>Barrier Polarised P.C.B Tail</b> | Plug   | 8           | RP8-T             | DRP108-T          |
|                                     |        | 16          | RP16-T            | DRP116-T          |
|                                     |        | 24          | RP24-T            | DRP124-T          |
|                                     |        | 32          | RP32-T            | DRP132-T          |
|                                     | Socket | 8           | RS8P-T            | DRS108P-T         |
|                                     |        | 16          | RS16P-T           | DRS116P-T         |
|                                     |        | 24          | RS24P-T           | DRS124P-T         |
|                                     |        | 32          | RS32P-T           | DRS132P-T         |
| <b>Dowel Polarised</b>              | Plug   | 16          | RPD16             | DRPD116           |
|                                     |        | 24          | -                 | DRPD124           |
|                                     |        | 32          | -                 | DRPD132           |
|                                     | Socket | 16          | RSD16             | DRSD116           |
|                                     |        | 24          | -                 | DRSD124           |
|                                     |        | 32          | -                 | DRSD132           |

\*Sockets are normally supplied with floating bushes to assist alignment when mounted on racks and chassis. For sockets without floating bushes – add **P** to end of order code e.g. Order code RS24P.

## ACCESSORIES

### ACCESSORY ORDERING INFORMATION



| Contact Arrangement | A max | B crs | C max | D max | E max |
|---------------------|-------|-------|-------|-------|-------|
| 8                   | 32.51 | 34.92 | 36.83 | 40.89 | 9.40  |
| 16                  | 51.56 | 53.97 | 43.18 | 47.24 | 12.70 |
| 24                  | 70.61 | 73.02 | 43.18 | 47.24 | 15.74 |
| 32                  | 89.66 | 92.07 | 43.18 | 47.24 | 15.74 |

| Description  | Order Code | Description  | Order Code |
|--------------|------------|--------------|------------|
| 8 way cover  | RC108      | 24 way cover | RC124      |
| 16 way cover | RC116      | 32 way cover | RC132      |
| Latch clip   | RL-H       | Latch plate  | RL-L       |

#### COVER with LATCHING CLIPS

Latching clips are supplied separately, 2 off each per assembly. When the latching clips are fitted to sockets it is advisable to use sockets without the floating bushes – add **P** to end of order code. For full details of all our accessories please contact our sales department.

### A comprehensive range

In addition to rack and panel connectors we supply a comprehensive range of connectors for a variety of applications including general industrial, I.T. and military.

Due to our policy of continuous product development, ITW McMurdo Connectors retain the right to change the specification at any time without prior notice. Designed and printed in the UK.

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**Connector**