



# CSRC

## CPE Special Rectangular Connector



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|                |    |
|----------------|----|
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|----------------|----|

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|                          |    |
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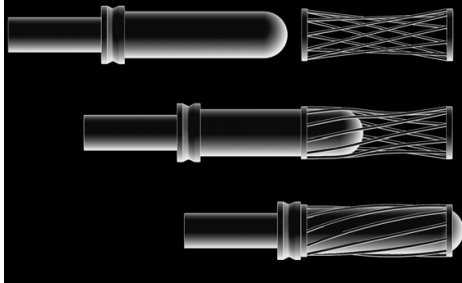
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|----------------|----|
| • 30 ways..... | 18 |
|----------------|----|

### **SPECIAL TYPE**

|                |    |
|----------------|----|
| • 18 ways..... | 19 |
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## DO YOU KNOW HYPERBOLOID CONTACT ?



The distinguishing feature of the HYPERBOLOID socket is the hyper-boloid-shaped sleeve formed by straight wires strung at an angle to the longitudinal axis.

Viewed from the side, you see a curve defined by a series of apparent short straight line segments which are tangent lines to points along a hyperbolic curve. This geometry provides for a design which has a decreasing circumscribed circle when viewed from the entry.

It begins larger than the pin acceptance diameter and is less than this same diameter at the center.

When the pin is inserted into this sleeve, the wires stretch, well within elastic limits, to accommodate it.

The unique geometry, the precision processing, and careful attention to quality, result in a highly desirable contact.

## WHY USE HYPERBOLOID CONTACT ?

- VLIF (Very Low Insertion Force):

Common sizes #22 and less average under one ounce per contact.

- Extraordinary Resistance to Shock & Vibration:

Tests exceeding 300 g's without discontinuity.

- Duty Cycle Exceeding 100,000 Mate/Demate:

The burnishing action of the wires on the pin surface is non-destructive.

Unlike the "plow" and scrape action of common designs, HYPERBOLOID's gentle mating action enhances life.

- Low, Low Contact Resistance:

The multiplicity of line contact, as opposed to point contact in other designs, provides an excellent interface exhibiting low contact resistance (often less than 1/2 of MIL spec. allowance).

This characteristics also provides for a cooler running contact under load.

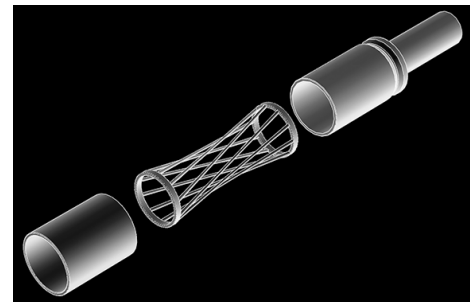
- Improved Current Carrying Capacity:

The low contact resistance gives a lower °C rise from ambient under load.

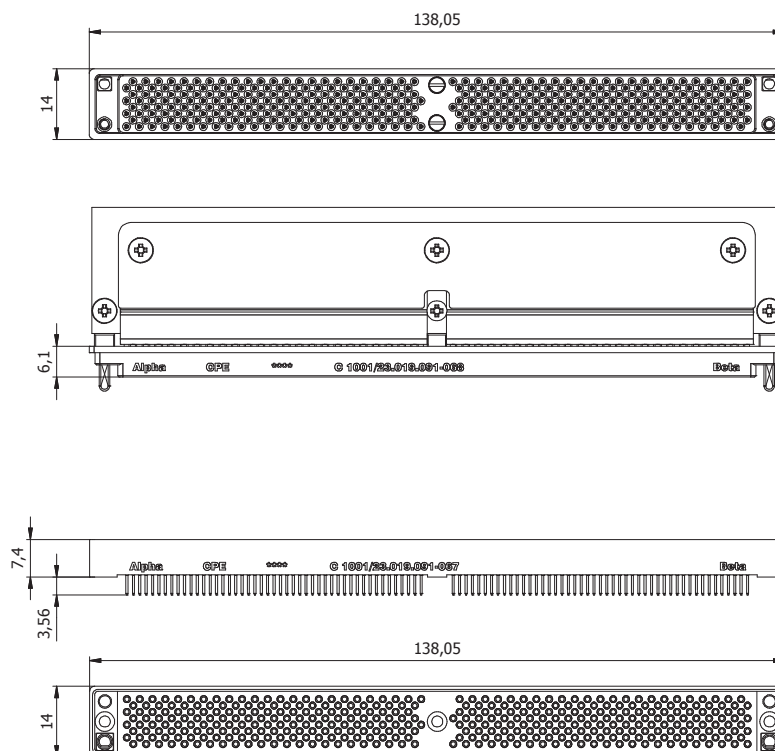
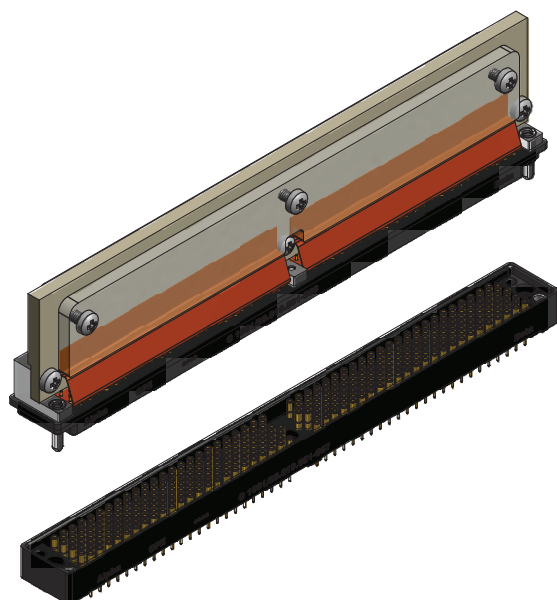
This feature often allows the user to operate the same size contact under higher load.

- Highest Reliability:

In use for over 40 years under the most demanding conditions HYPERBOLOID has proven itself to be the leading design for integrity and reliability. On space platforms, ships and boats at sea, land vehicles, fighter and transport aircraft, missiles, torpedoes, medical and transplant electronics, industrial and environmental controls, rail, construction, ATE and test equipment, PGA sockets, test interface stations, and other applications, HYPERBOLOID has lived up to its promise of the highest reliability connector available.



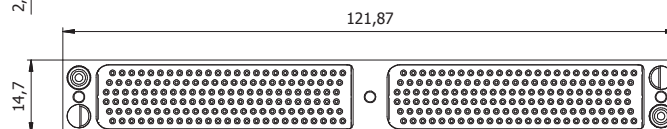
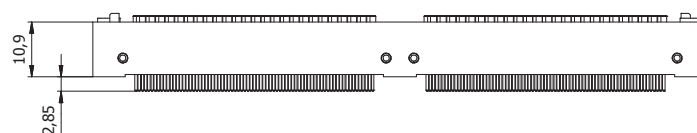
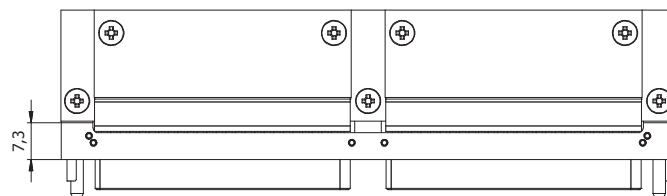
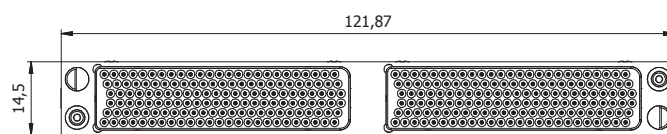
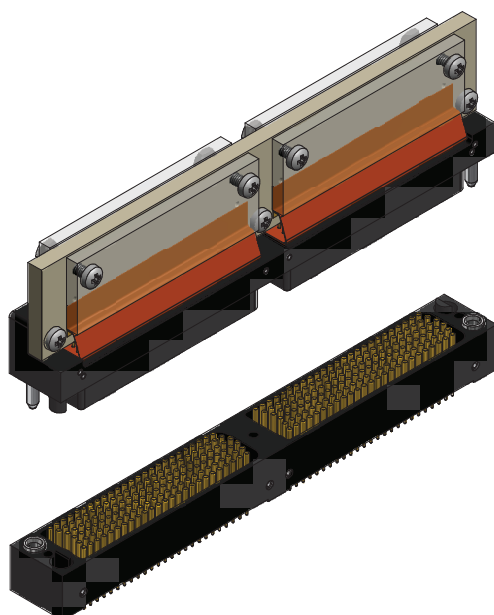
## ELECTRICAL PRINTED WIRING BOARD MALE PIN CONNECTOR WITH SURFACE MOUNT TECHNOLOGY FOR DOUBLE-SIDED AND FEMALE SOCKET CONNECTOR DIP SOLDER TERMINATIONS



| Ways<br>Type | Symmetrical Flex<br>Plug                                   | Asymmetrical Flex<br>Plug | Dip Solder<br>Receptacle                                          |
|--------------|------------------------------------------------------------|---------------------------|-------------------------------------------------------------------|
| 372          | 23.019.091-068 (Board 2mm)<br>23.019.091-090 (Board 3,4mm) | 23.019.091-071            | 23.019.091-067 (Termin. 3,56mm)<br>23.019.191-094 (Termin. 5,1mm) |
| 325          | 23.019.091-091 (Board 3,4mm)                               | -                         | 23.019.191-095 (Termin. 3,56mm)                                   |
| 278          | 23.019.091-092 (Board 3,4mm)                               | -                         | 23.019.191-096 (Termin. 3,56mm)                                   |

Technical drawings or different configurations upon request.

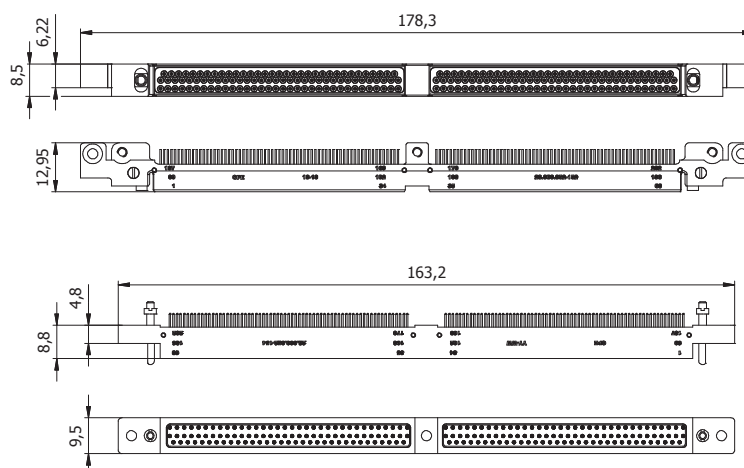
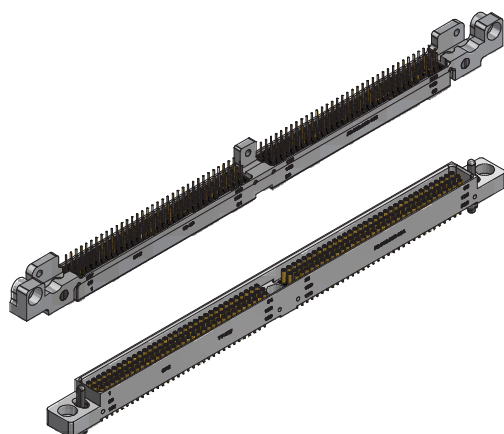
**ELECTRICAL PRINTED WIRING BOARD 300 WAYS MALE PIN CONNECTOR WITH SURFACE MOUNT TECHNOLOGY  
FOR DOUBLE-SIDED AND 300 WAYS FEMALE SOCKET CONNECTOR DIP SOLDER TERMINATIONS**



| Ways<br>Type | Symmetrical Flex<br>Plug | Dip Solder<br>Receptacle |
|--------------|--------------------------|--------------------------|
| 300          | 28.004.000-104           | 28.007.000-105           |

Technical drawings or different configurations upon request.

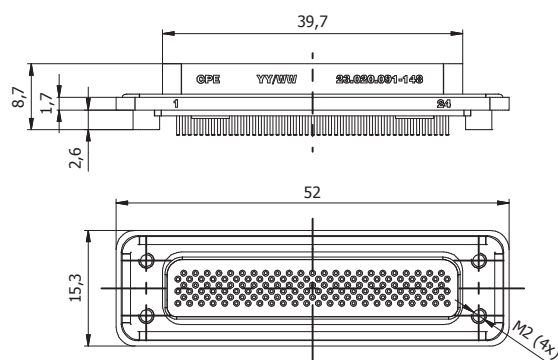
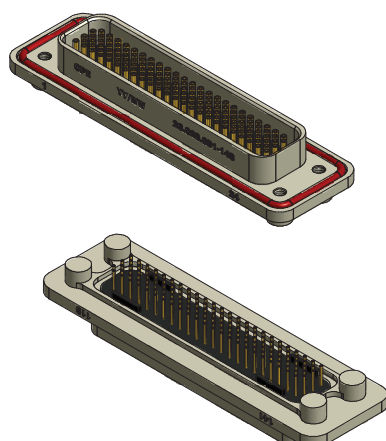
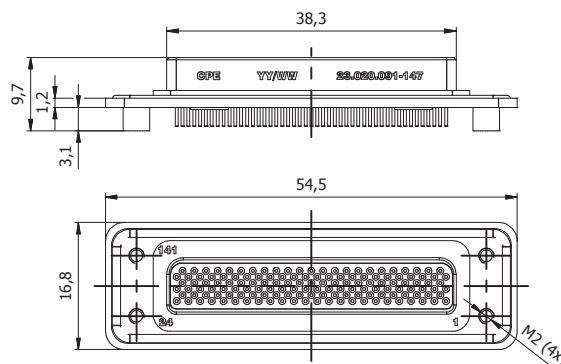
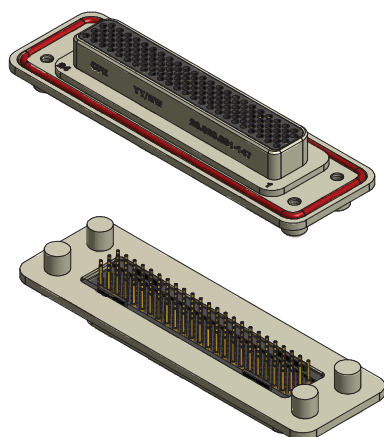
**ELECTRICAL PRINTED WIRING BOARD 202 WAYS MALE PIN CONNECTOR WITH SURFACE MOUNT TECHNOLOGY  
FOR DOUBLE-SIDED AND 202 WAYS FEMALE SOCKET CONNECTOR DIP SOLDER TERMINATIONS**



| Ways<br>Type | Standard Plug<br>(contact dia. 0,5mm) | Standard Receptacle<br>(contact dia. 0,5mm) | Optional Plug<br>(contact dia. 0,4mm) | Optional Receptacle<br>(contact dia. 0,4mm) |
|--------------|---------------------------------------|---------------------------------------------|---------------------------------------|---------------------------------------------|
| 202          | 28.002.052-152                        | 28.000.052-154                              | 28.002.052-153                        | 28.000.052-155                              |

Technical drawings or different configurations upon request.

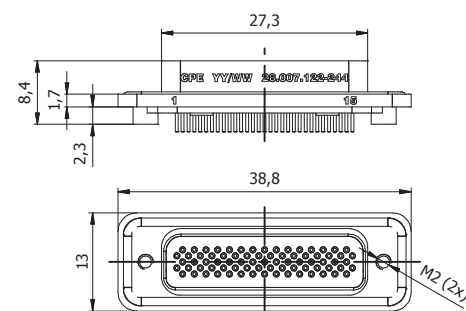
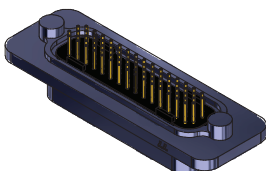
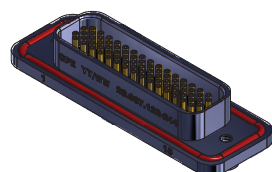
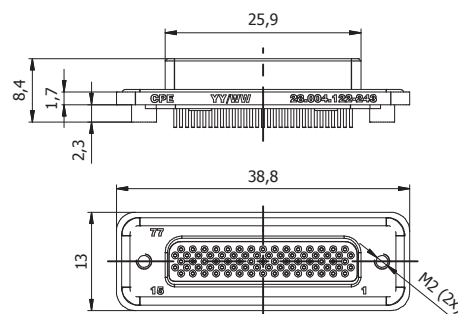
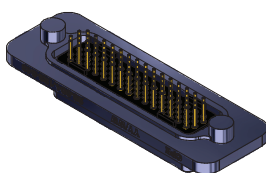
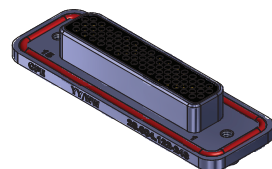
## ELECTRICAL PRINTED CIRCUIT BOARD MULTIROW MALE / FEMALE 141 WAYS CONNECTORS



| Ways<br>Type | Plug<br>(contact dia. 0,4mm) | Receptacle Hyperboloid<br>(contact accept. 0,4mm) |
|--------------|------------------------------|---------------------------------------------------|
| 141          | 23.020.091-147               | 23.020.091-148                                    |

Technical drawings or different configurations upon request.

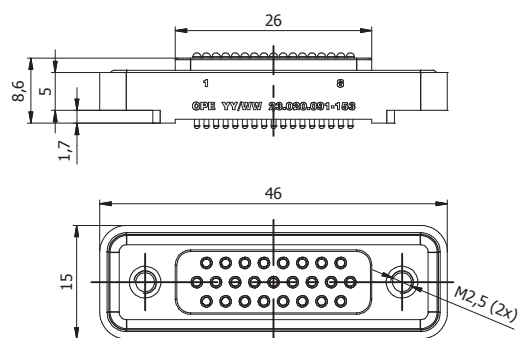
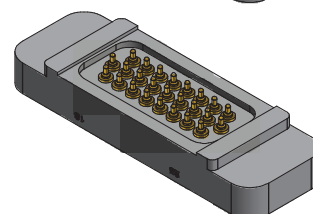
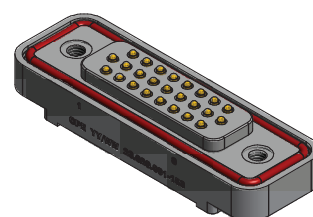
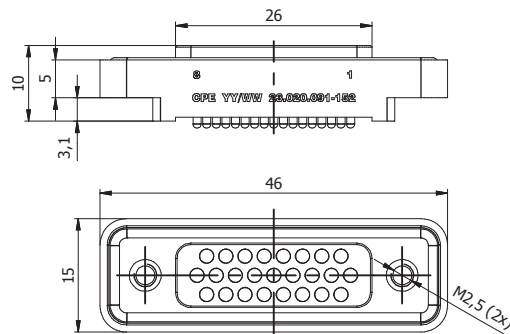
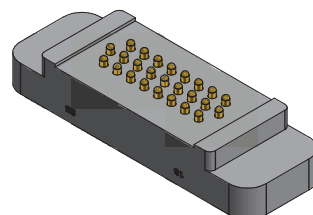
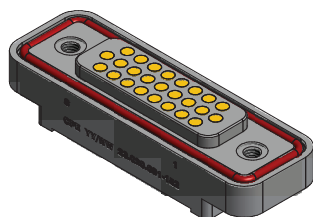
## ELECTRICAL PRINTED CIRCUIT BOARD MULTIROW MALE / FEMALE 77 WAYS CONNECTORS



| Ways<br>Type | Plug<br>(contact dia. 0,4mm) | Receptacle Hyperboloid<br>(contact accept. 0,4mm) |
|--------------|------------------------------|---------------------------------------------------|
| 77           | 28.004.122-243               | 28.007.122-244                                    |

Technical drawings or different configurations upon request.

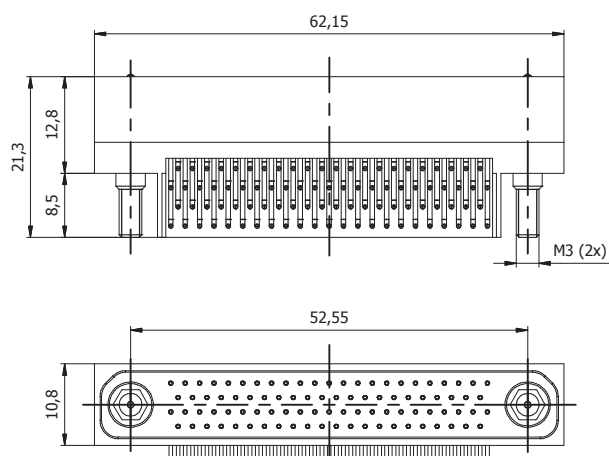
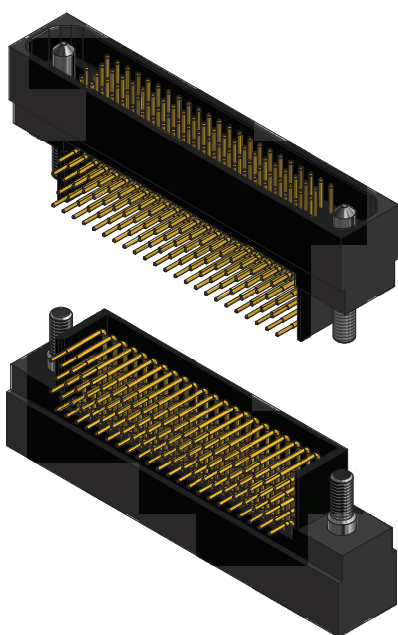
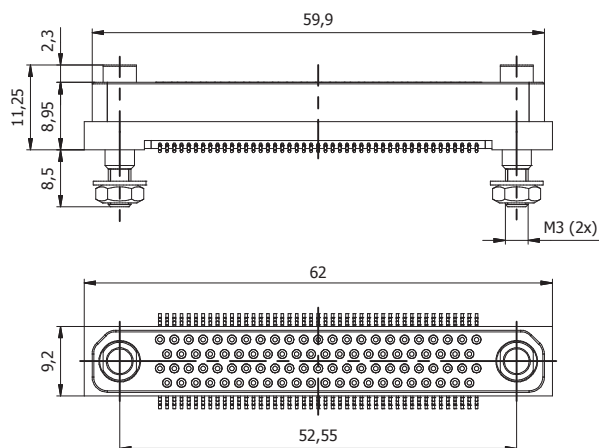
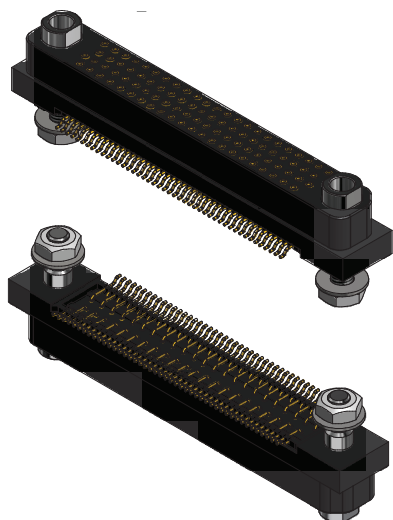
## ELECTRICAL PRINTED CIRCUIT BOARD MULTIROW MALE / FEMALE 25 WAYS CONNECTORS



| Ways<br>Type | Receptacle | Plug           |
|--------------|------------|----------------|
|              | 25         | 23.020.091-152 |
|              |            | 23.020.091-153 |

Technical drawings or different configurations upon request.

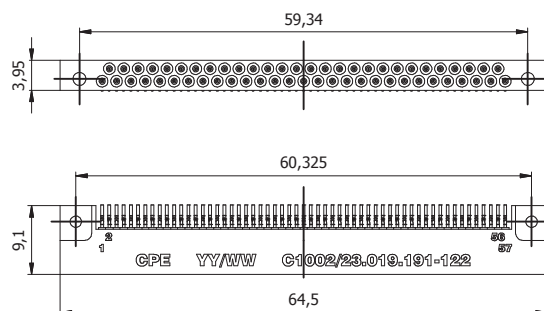
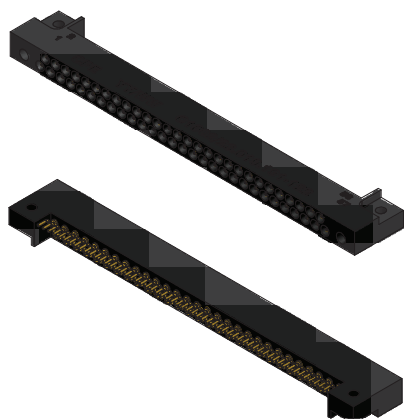
## VERY HIGH DENSITY PRINTED CIRCUIT BOARD MALE / FEMALE 90 WAYS CONNECTORS



| Ways<br>Type | Receptacle     | Plug           |
|--------------|----------------|----------------|
|              | 28.002.072-163 | 28.002.072-169 |

Technical drawings or different configurations upon request.

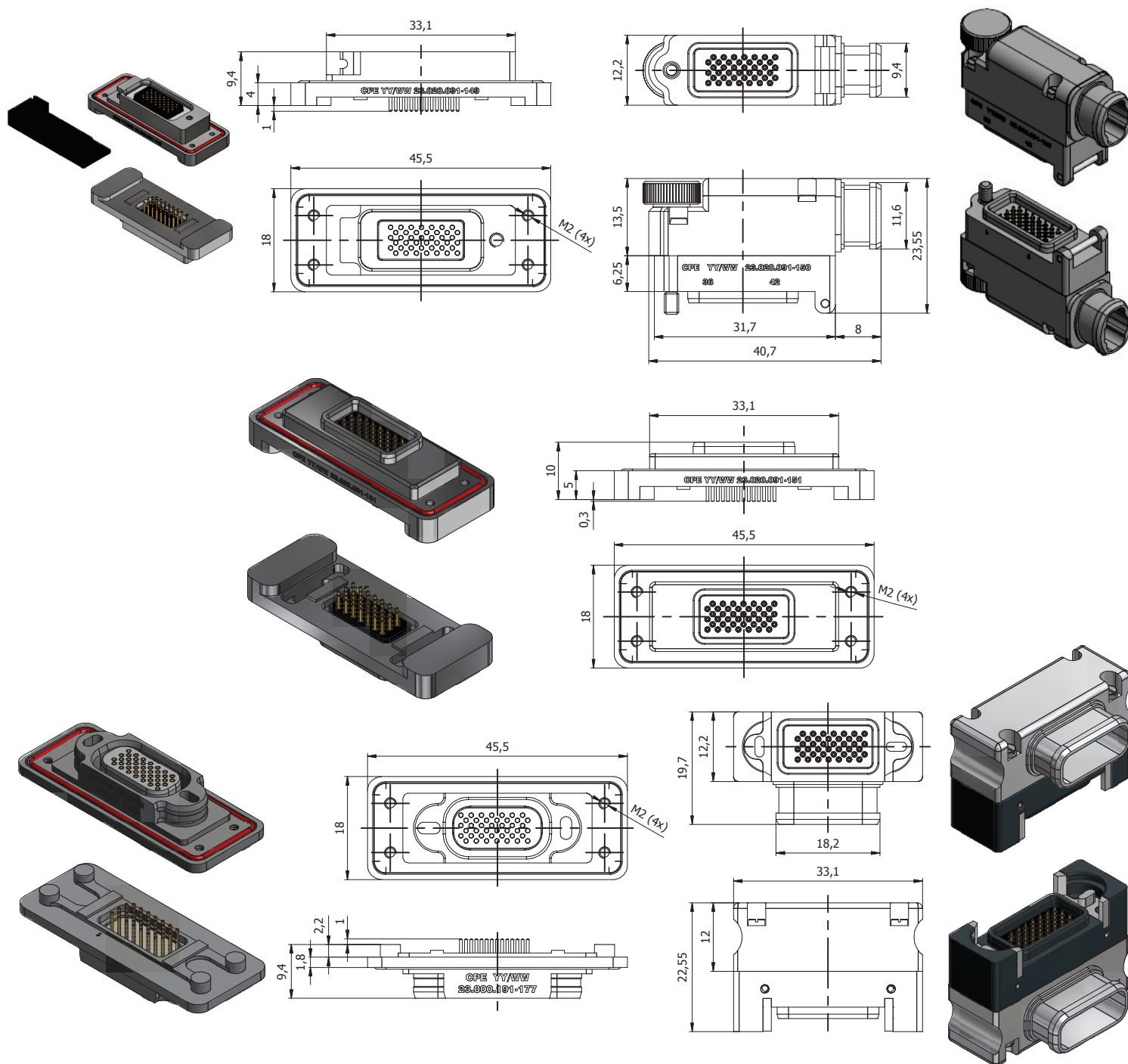
## MALE CONNECTOR WITH 57 PIN CONTACTS AND STANDARD SMT TERMINATIONS



| Ways<br>Type | Plug           |
|--------------|----------------|
| 57           | 23.019.191-122 |

Technical drawings or different configurations upon request.

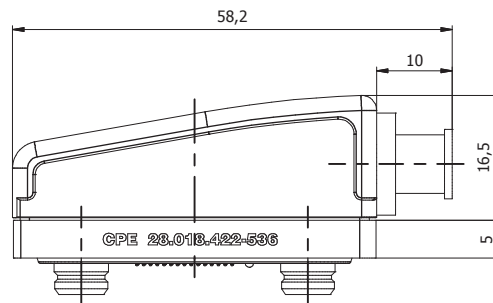
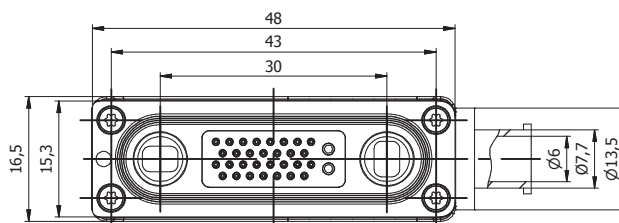
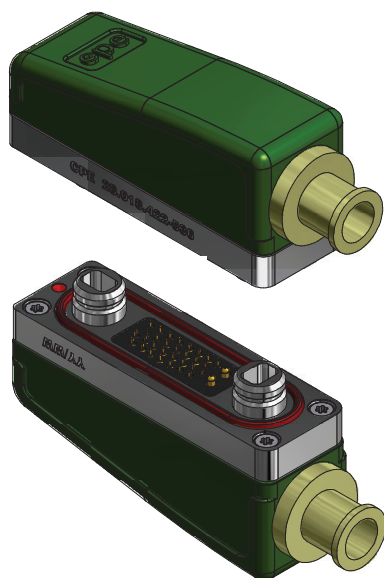
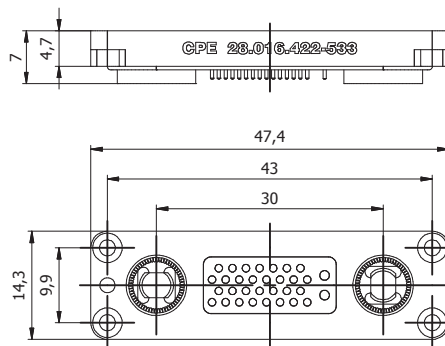
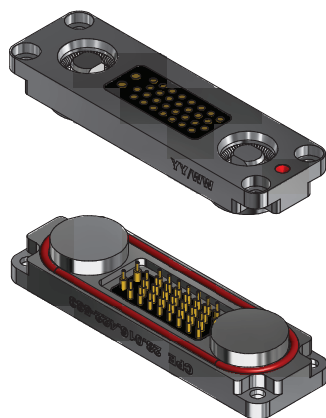
## ELECTRICAL MULTIROW MALE / FEMALE 42 WAYS CONNECTORS



| Ways<br>Type | Receptacle<br>(Target Contacts) | Plug<br>(with Hood)               | Plug<br>(Probe Contacts) | Receptacle<br>("Rapid Latching") | Plug with Hood<br>("Rapid Latching") |
|--------------|---------------------------------|-----------------------------------|--------------------------|----------------------------------|--------------------------------------|
| 42 Ways      | 23.020.091-149                  | 23.020.091-150                    | 23.020.091-151           | 23.000.191-177                   | 23.000.191-178                       |
| Accessories  | 1622-F8<br>(Protective Cap)     | 17.000.500-407<br>(Metallic Hood) | -                        | -                                | 17.000.500-467<br>(Metallic Hood)    |

Technical drawings or different configurations upon request.

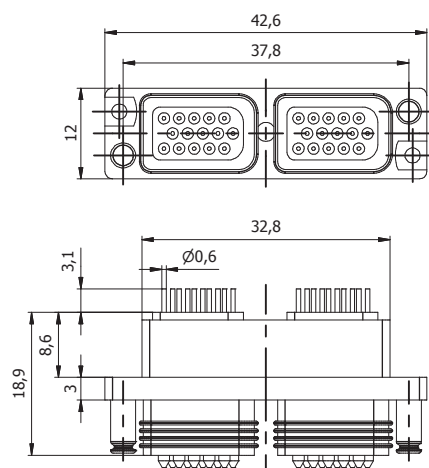
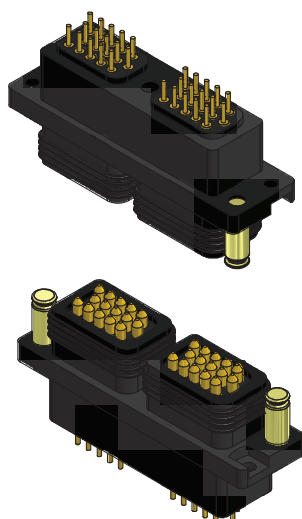
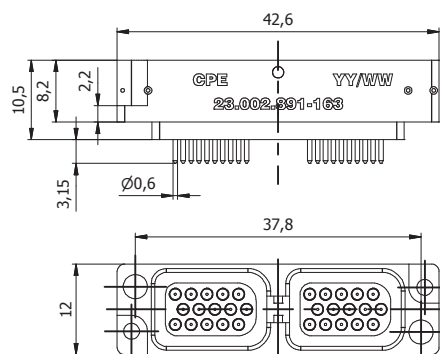
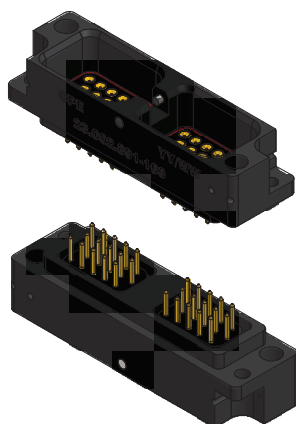
## ELECTRICAL MULTIROW MALE / FEMALE 30+2 WAYS CONNECTORS



| Ways<br>Type | Receptacle     | Plug (with Hood) |
|--------------|----------------|------------------|
| 30+2         | 28.016.422-533 | 28.018.422-536   |

Technical drawings or different configurations upon request.

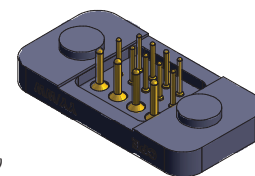
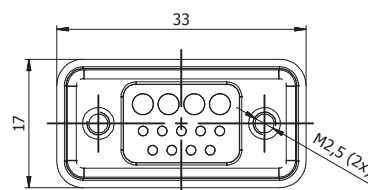
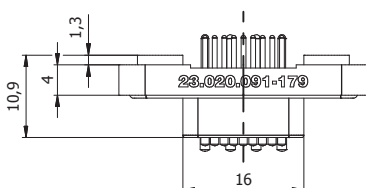
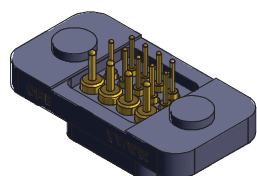
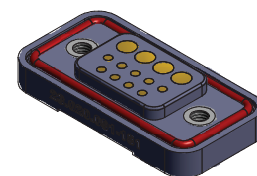
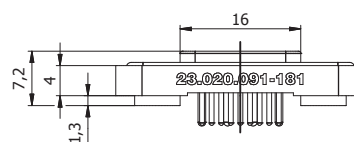
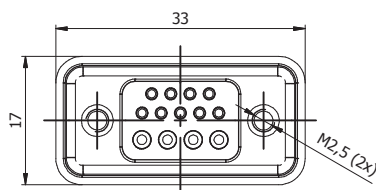
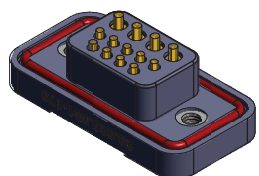
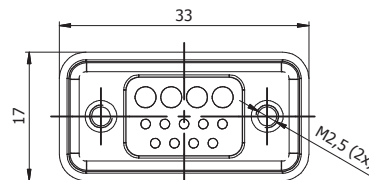
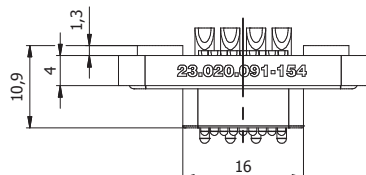
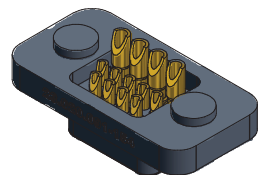
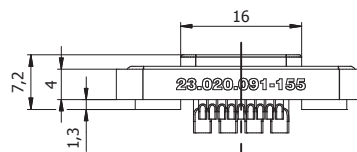
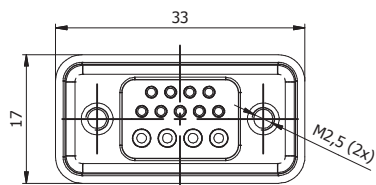
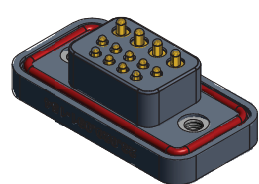
## ELECTRICAL MULTIROW MALE / FEMALE 30 WAYS CONNECTORS



| Ways | Type | Receptacle     | Plug           |
|------|------|----------------|----------------|
|      | 30   | 23.002.891-163 | 23.000.191-164 |

Technical drawings or different configurations upon request.

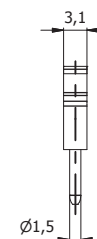
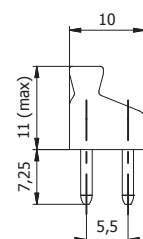
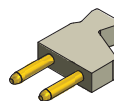
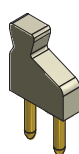
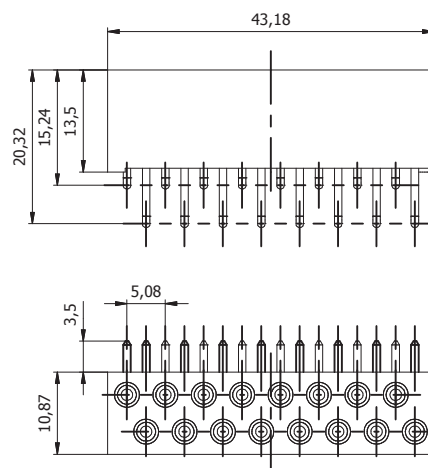
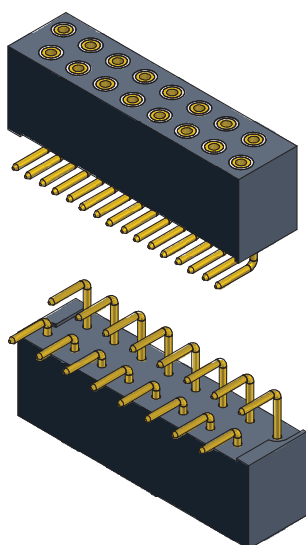
## ELECTRICAL MULTIROW MALE / FEMALE 9+4 WAYS CONNECTORS



| Ways<br>Type | Plug Probe Contacts<br>(Solder Cup Term.) | Receptacle Target Contacts<br>(Solder Cup Term.) | Plug Probe Contacts<br>(Dip Solder Term.) | Receptacle Target Contacts<br>(Dip Solder Term.) |
|--------------|-------------------------------------------|--------------------------------------------------|-------------------------------------------|--------------------------------------------------|
| 9+4          | 23.020.091-154                            | 23.020.091-155                                   | 23.020.091-179                            | 23.020.091-181                                   |

Technical drawings or different configurations upon request.

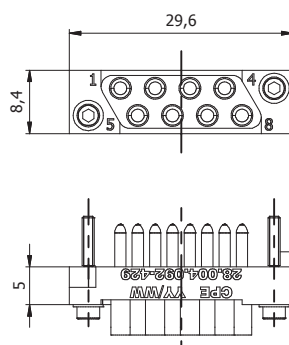
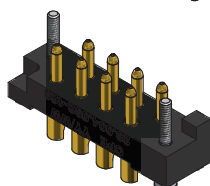
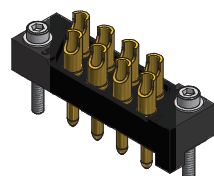
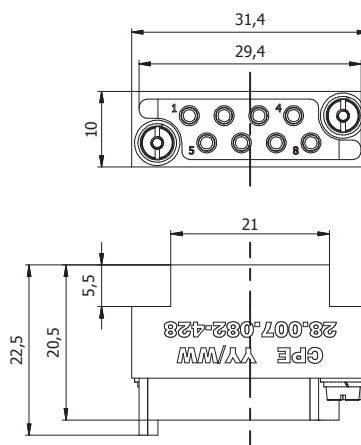
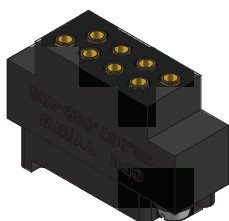
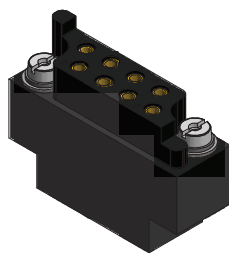
## RECTANGULAR CONNECTOR - JACK CONTACT RIGHT ANGLE DIP SOLDER TERMINATIONS



| Ways<br>Type | Receptacle     | Missing<br>Terminal | Accessories<br>(u-link jumper) |
|--------------|----------------|---------------------|--------------------------------|
| 8            | 28.008.070-193 | 3-4-7-11-8-12-15-16 | 17.250.500-319                 |
| 12           | 28.008.070-194 | 4-8-9-13            | 17.250.500-319                 |
| 12           | 28.008.070-195 | 7-8-9-10            | 17.250.500-319                 |
| 16           | 28.008.070-192 | -                   | 17.250.500-319                 |

Technical drawings or different configurations upon request.

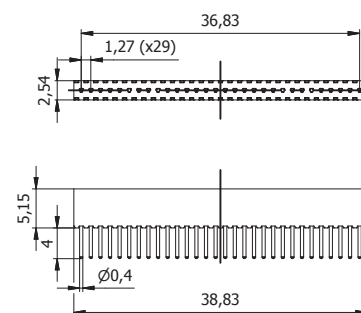
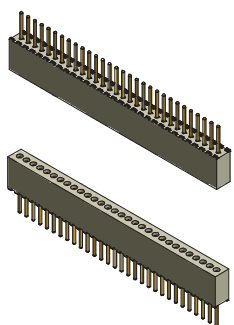
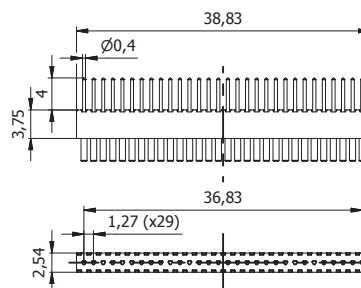
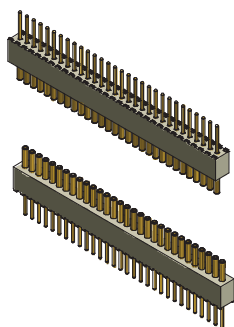
## ELECTRICAL MULTIROW MALE / FEMALE 8 WAYS CONNECTORS



| Ways | Type | Receptacle     | Plug           |
|------|------|----------------|----------------|
|      | 8    | 28.007.082-428 | 28.004.092-429 |

Technical drawings or different configurations upon request.

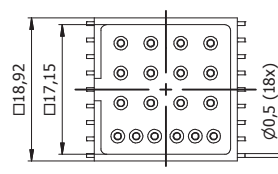
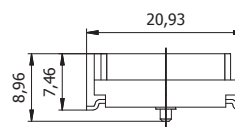
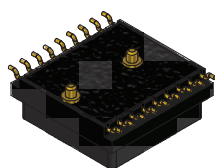
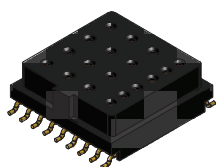
## ELECTRICAL SINGLE ROW PRINTED CIRCUIT BOARD MALE / FEMALE 30 WAYS CONNECTORS



| Ways<br>Type | Receptacle     | Plug           |
|--------------|----------------|----------------|
| 30           | 23.020.895-146 | 23.020.895-145 |

Technical drawings or different configurations upon request.

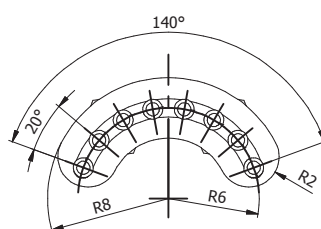
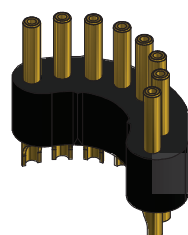
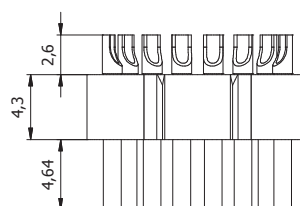
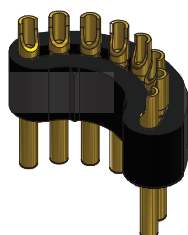
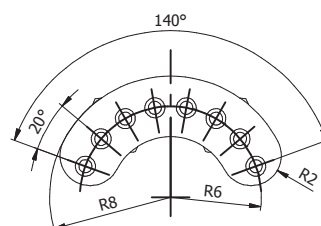
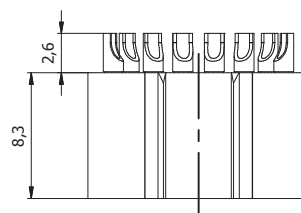
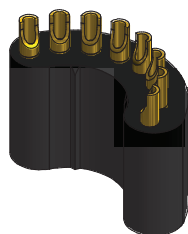
## AVIONIC BUTTON WITH 18 FEMALE CONTACTS AND STANDARD SMT TERMINATIONS



| Ways<br>Type | Receptacle     |
|--------------|----------------|
| 18           | 28.009.000-175 |

Technical drawings or different configurations upon request.

## CONNECTORS WITH 8 WAYS SOLDER CUP TERMINATION AWG 22-26



| Ways<br>Type | Receptacle     | Plug           |
|--------------|----------------|----------------|
| 8            | 23.019.093-203 | 23.019.193-202 |

Technical drawings or different configurations upon request.

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For Your Notes

For Your Notes

For Your Notes



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