



## Fire & Smoke Resistant Connector

The plastic rectangular solution offering an excellent fire & smoke resistance for indoor applications.

**Compliant to railway standards**



Tested according to NFF61030  
Tested according to NFF16101 & NFF16102  
(fire & smoke standards)

**Compact design  
& up to 36 contacts**



Ideal for tight space integration & high density  
contact applications

**Excellent durability**



500 mating / unmating

**Standardization oriented**

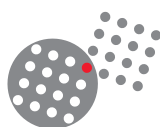


Compatible with standard AWG16 contacts

**A wide range available**



Plug & receptacle with or without hood  
Panel mount receptacle  
PCB receptacle



# SMS Flame Retardant



## Technical features

### Mechanical

- **Insulating material:** Polyamide 6.6 - UL94V0
- **Contamination class:** 1
- **Endurance:** 500 mating/unmating
- **Colour:** grey  
black - Boardmount versions
- **PCB contacts (for SMS GE33, 43, 53, 63):**  
Min. 0.4µ gold all over, over nickel

### Electrical

- **Current rating per contact:** 13 Amps
- **Insulation resistance:** 5000 MΩ
- **Rated voltage:** 2000 Vac
- **Operating voltage:** 500 V (according to UL1977)

### Environmental

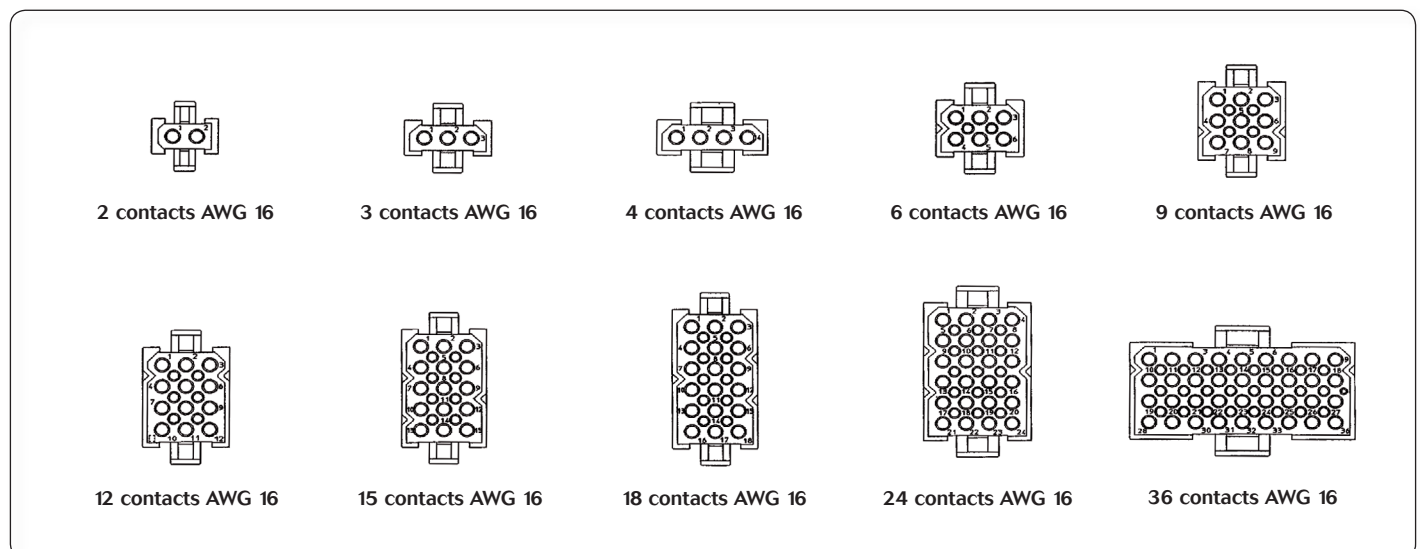
- **Operating temperature:** -40°C to +105 °C
- **Sealing (mated conditions):** IP40
- **Flammability rating:**
  - . I3F2 according to NFF16101/16102 standards
  - . I2F3 according to NFF16101/16102 standards



## Ordering information

| Connector family                                         | SMS<br>SMS                                                                                 | 4<br>36 | PDH3<br>RD3 |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|-------------|
| Number of contacts:<br>2, 3, 4, 6, 9, 12, 15, 18, 24, 36 |                                                                                            |         |             |
| Design variation                                         |                                                                                            |         |             |
| PDH3                                                     | <div> <div>Contacts to be ordered separately</div> <div>PCB contacts included</div> </div> |         |             |
| RDH3                                                     |                                                                                            |         |             |
| PD3                                                      |                                                                                            |         |             |
| RD3                                                      |                                                                                            |         |             |
| R3                                                       |                                                                                            |         |             |
| GE33                                                     | PCB contacts included                                                                      |         |             |
| GE43                                                     |                                                                                            |         |             |
| GE53                                                     |                                                                                            |         |             |
| GE63                                                     |                                                                                            |         |             |

## Contact layouts

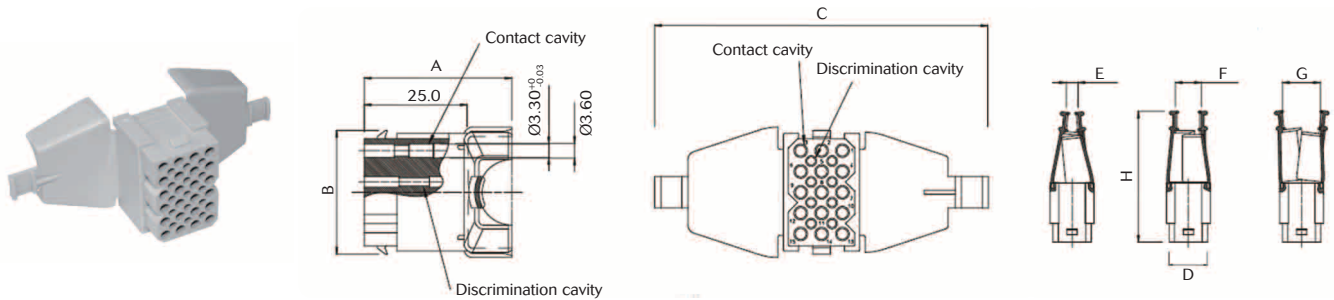


# SMS Flame Retardant



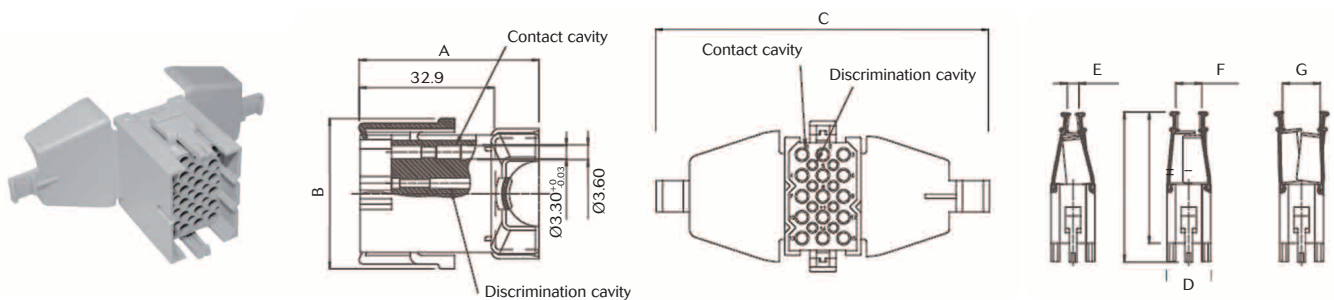
## Range presentation

### Cable receptacle with integrated strain relief hood (Delivered without contacts)



| Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C     | D    | E    | F    | G    | H    | Cable range |
|--------------|----------------------------|-----------------------------------|------|------|-------|------|------|------|------|------|-------------|
| SMS2RDH3     | 2                          | 0                                 | 31.6 | 9.9  | 64.8  | 11.1 | 0.5  | 7.4  | 8.4  | 49.2 | 0.5 - 8.4   |
| SMS3RDH3     | 3                          | 0                                 | 35.1 |      | 69.0  | 16.2 | 0.8  | 4.1  | 7.3  |      | 0.8 - 7.3   |
| SMS4RDH3     | 4                          | 0                                 | 38.2 |      | 74.4  | 21.2 | 1.5  | 5.4  | 10.0 |      | 1.5 - 10.0  |
| SMS6RDH3     | 6                          | 2                                 | 34.6 | 15.0 | 72.6  | 16.2 | 1.7  | 6.8  | 9.2  | 50.9 | 1.7 - 9.2   |
| SMS9RDH3     | 9                          | 4                                 | 35.8 | 20.0 | 75.3  |      | 3.9  | 9.3  | 12.3 | 52.2 | 3.9 - 14.3  |
| SMS12RDH3    | 12                         | 6                                 | 38.1 | 25.1 | 72.0  |      | 4.0  | 10.0 | 15.0 | 52.7 | 4.0 - 15.0  |
| SMS15RDH3    | 15                         | 8                                 | 35.9 | 30.2 | 81.3  |      | 5.0  | 11.0 | 16.2 | 55.2 | 5.0 - 16.2  |
| SMS18RDH3    | 18                         | 10                                | 36.1 | 35.3 |       |      | 5.8  | 12.5 | 20.3 |      | 5.8 - 20.3  |
| SMS24RDH3    | 24                         | 15                                | 39.7 |      |       | 90.4 | 21.2 | 7.1  | 12.4 | 20.4 | 57.2        |
| SMS36RDH3    | 36                         | 24                                | 54.6 | 25.1 | 128.0 | 46.6 | 8.8  | 13.0 | 24.5 | 63.3 | 8.8 - 24.5  |

### Cable plug with integrated strain relief hood (Delivered without contacts)



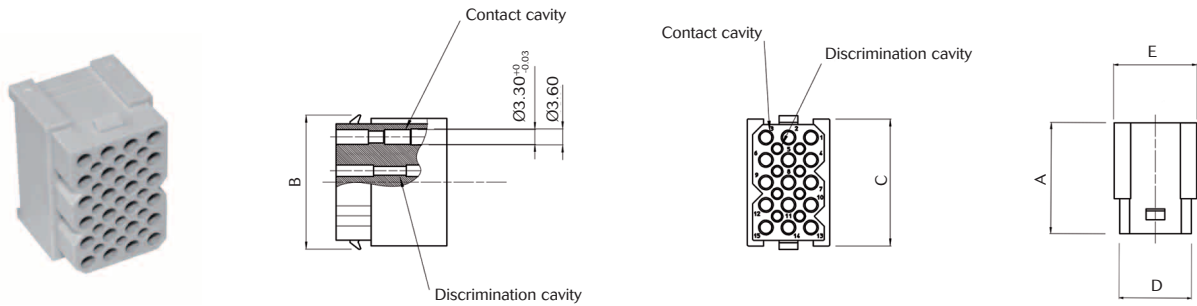
| Part numbers | Number of<br>contact cavities | Number of<br>discrimination cavities | A    | B    | C     | D    | E    | F    | G    | H    | I    | Cable<br>range |
|--------------|-------------------------------|--------------------------------------|------|------|-------|------|------|------|------|------|------|----------------|
| SMS2PDH3     | 2                             | 0                                    | 39.5 | 16.4 | 64.8  | 14.1 | 0.5  | 7.4  | 8.4  | 57.1 | 49.2 | 0.5 - 8.4      |
| SMS3PDH3     | 3                             | 0                                    | 43.0 |      | 69.0  | 18.6 | 0.8  | 4.1  | 7.3  |      |      | 0.8 - 7.3      |
| SMS4PDH3     | 4                             | 0                                    | 46.1 |      | 74.4  | 23.7 | 1.5  | 5.4  | 10.0 |      |      | 1.5 - 10.0     |
| SMS6PDH3     | 6                             | 2                                    | 42.5 | 21.5 | 72.6  | 18.6 | 1.7  | 6.8  | 9.2  | 58.8 | 50.9 | 1.7 - 9.2      |
| SMS9PDH3     | 9                             | 4                                    | 43.7 | 26.7 | 75.3  |      | 3.9  | 9.3  | 12.3 | 60.1 | 52.2 | 3.9 - 14.3     |
| SMS12PDH3    | 12                            | 6                                    | 46.0 | 31.7 | 72.0  |      | 4.0  | 10.0 | 15.0 | 60.6 | 52.7 | 4.0 - 15.0     |
| SMS15PDH3    | 15                            | 8                                    | 43.8 | 36.7 | 81.3  |      | 5.0  | 11.0 | 16.2 | 63.1 | 55.2 | 5.0 - 16.2     |
| SMS18PDH3    | 18                            | 10                                   | 44.0 | 41.8 |       |      | 5.8  | 12.5 | 20.3 |      |      | 5.8 - 20.3     |
| SMS24PDH3    | 24                            | 15                                   | 47.6 |      |       |      | 90.4 | 23.7 | 7.1  |      |      | 12.4           |
| SMS36PDH3    | 36                            | 24                                   | 62.5 | 31.7 | 128.0 | 49.1 | 8.8  | 13.0 | 24.5 | 71.2 | 63.3 | 8.8 - 24.5     |

Note : 1. It is recommended to use unirap cable tie (not delivered by Souriau)  
2. All dimensions are in mm

# SMS Flame Retardant

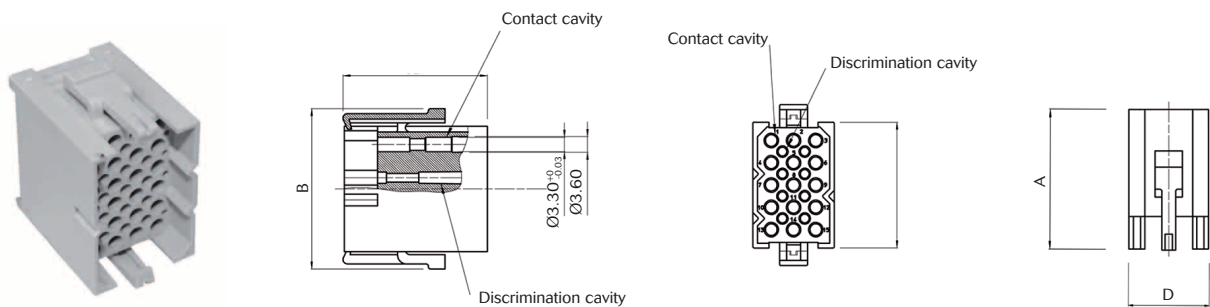


## Cable receptacle without strain relief hood (Delivered without contacts)



| Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    | E    |
|--------------|----------------------------|-----------------------------------|------|------|------|------|------|
| SMS2RD3      | 2                          | 0                                 | 25.0 | 9.9  | 8.4  | 11.1 | 14.1 |
| SMS3RD3      | 3                          | 0                                 |      | 9.9  | 8.4  | 16.2 | 18.6 |
| SMS4RD3      | 4                          | 0                                 |      | 9.9  | 8.4  | 21.2 | 23.7 |
| SMS6RD3      | 6                          | 2                                 |      | 15.0 | 13.4 | 16.2 | 18.6 |
| SMS9RD3      | 9                          | 4                                 |      | 20.0 | 18.5 | 16.2 | 18.6 |
| SMS12RD3     | 12                         | 6                                 |      | 25.1 | 23.6 | 16.2 | 18.6 |
| SMS15RD3     | 15                         | 8                                 |      | 30.2 | 28.7 | 16.2 | 18.6 |
| SMS18RD3     | 18                         | 10                                |      | 35.3 | 33.8 | 16.2 | 18.6 |
| SMS24RD3     | 24                         | 15                                |      | 35.3 | 33.8 | 21.2 | 23.7 |
| SMS36RD3     | 36                         | 24                                |      | 25.1 | 23.6 | 46.6 | 49.1 |

## Cable plug without strain relief hood (Delivered without contacts)

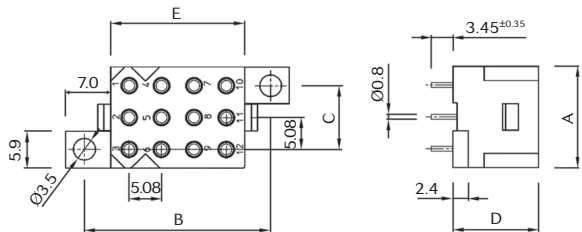


| Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    |
|--------------|----------------------------|-----------------------------------|------|------|------|------|
| SMS2PD3      | 2                          | 0                                 | 32.7 | 16.4 | 8.4  | 14.1 |
| SMS3PD3      | 3                          | 0                                 |      | 16.4 | 8.4  | 18.6 |
| SMS4PD3      | 4                          | 0                                 |      | 16.4 | 8.4  | 23.7 |
| SMS6PD3      | 6                          | 2                                 |      | 21.5 | 13.4 | 18.6 |
| SMS9PD3      | 9                          | 4                                 |      | 26.7 | 18.5 | 18.6 |
| SMS12PD3     | 12                         | 6                                 |      | 31.7 | 23.6 | 18.6 |
| SMS15PD3     | 15                         | 8                                 |      | 36.7 | 28.7 | 18.6 |
| SMS18PD3     | 18                         | 10                                |      | 41.8 | 33.8 | 18.6 |
| SMS24PD3     | 24                         | 15                                |      | 41.8 | 33.8 | 23.7 |
| SMS36PD3     | 36                         | 24                                |      | 31.7 | 23.6 | 49.1 |

Note : all dimensions are in mm

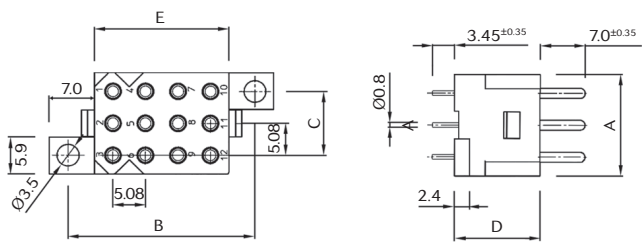
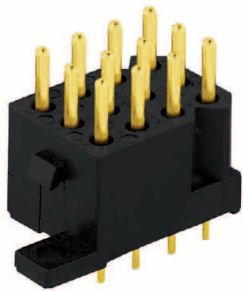


Straight boardmount receptacle delivered with female PCB contacts (SMS GE33)



| Contacts (included) | Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    | E    |
|---------------------|--------------|----------------------------|-----------------------------------|------|------|------|------|------|
| Female contacts     | SMS3GE33     | 3                          | 0                                 | 16.2 | 14   | 10.2 | 13.4 | 5.9  |
|                     | SMS6GE33     | 6                          | 0                                 |      | 19.2 |      |      | 10.9 |
|                     | SMS9GE33     | 9                          | 4                                 |      | 24.2 |      |      | 16   |
|                     | SMS12GE33    | 12                         | 0                                 |      | 29.2 |      |      | 21.1 |
|                     | SMS15GE33    | 15                         | 8                                 |      | 34.3 |      |      | 26.1 |
|                     | SMS18GE33    | 18                         | 10                                |      | 39.4 |      |      | 31.2 |
|                     | SMS24GE33    | 24                         | 0                                 | 21.2 | 39.4 | 15.2 |      | 31.2 |
|                     | SMS36GE33    | 36                         | 0                                 | 46.5 | 15.2 | 54.6 |      | 20.9 |

Straight boardmount receptacle delivered with male PCB contacts (SMS GE43)



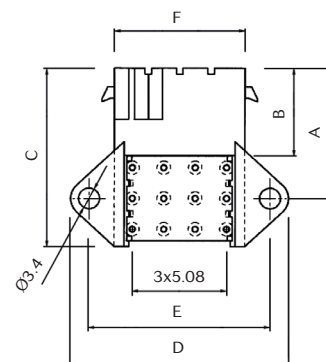
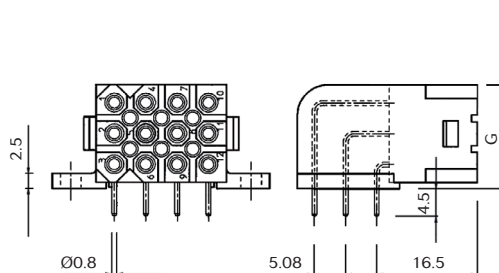
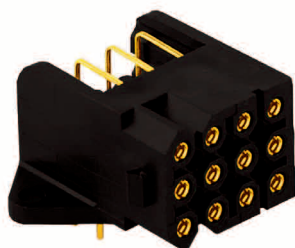
| Contacts (included) | Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    | E    |
|---------------------|--------------|----------------------------|-----------------------------------|------|------|------|------|------|
| Male contacts       | SMS3GE43     | 3                          | 0                                 | 16.2 | 14   | 10.2 | 13.4 | 5.9  |
|                     | SMS6GE43     | 6                          | 0                                 |      | 19.2 |      |      | 10.9 |
|                     | SMS9GE43     | 9                          | 4                                 |      | 24.2 |      |      | 16   |
|                     | SMS12GE43    | 12                         | 0                                 |      | 29.2 |      |      | 21.1 |
|                     | SMS15GE43    | 15                         | 8                                 |      | 34.3 |      |      | 26.1 |
|                     | SMS18GE43    | 18                         | 10                                |      | 39.4 |      |      | 31.2 |
|                     | SMS24GE43    | 24                         | 0                                 | 21.2 | 39.4 | 15.2 |      | 31.2 |
|                     | SMS36GE43    | 36                         | 0                                 | 46.5 | 15.2 | 54.6 |      | 20.9 |

Note : all dimensions are in mm

# SMS Flame Retardant

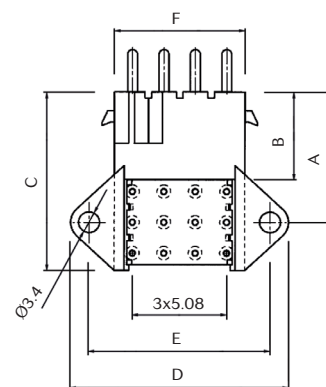
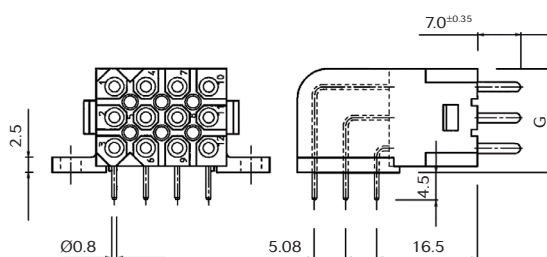
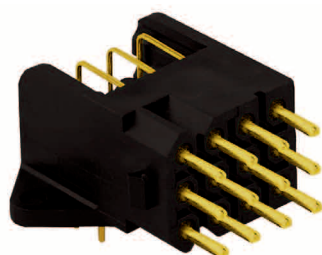


## Right angle boardmount receptacle delivered with female PCB contacts (SMS GE53)



| Contacts (included) | Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    | E    | F    | G    |
|---------------------|--------------|----------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Female contacts     | SMS3GE53     | 3                          | 0                                 | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8  |
|                     | SMS6GE53     | 6                          | 0                                 | 19   |      | 24.5 |      |      |      | 11.9 |
|                     | SMS12GE53    | 12                         | 0                                 | 21.6 |      | 29.5 | 35.2 | 29.2 | 21.2 | 17.2 |
|                     | SMS18GE53    | 18                         | 10                                |      |      |      | 45.4 | 39.4 | 31.2 |      |

## Right angle boardmount receptacle delivered with male PCB contacts (SMS GE63)



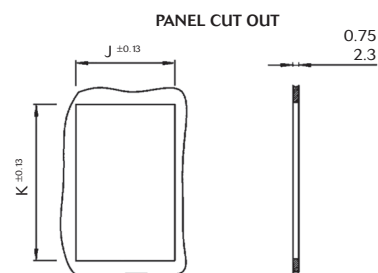
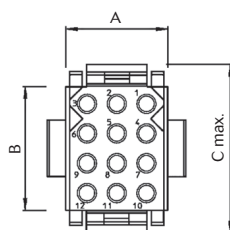
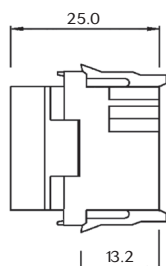
| Contacts (included) | Part numbers | Number of contact cavities | Number of discrimination cavities | A    | B    | C    | D    | E    | F    | G    |
|---------------------|--------------|----------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Male contacts       | SMS3GE63     | 3                          | 0                                 | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8  |
|                     | SMS6GE63     | 6                          | 0                                 | 19   |      | 24.5 |      |      |      | 11.9 |
|                     | SMS12GE63    | 12                         | 0                                 | 21.6 |      | 29.5 | 35.2 | 29.2 | 21.2 | 17.2 |
|                     | SMS18GE63    | 18                         | 10                                |      |      |      | 45.4 | 39.4 | 31.2 |      |

Note : all dimensions are in mm

# SMS Flame Retardant

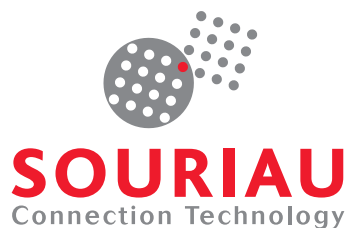


## Panel mount receptacle (Delivered without contacts)



| Part numbers | Number of contact cavities | A    | B    | C max. | J $\pm 0.13$ | K $\pm 0.13$ |
|--------------|----------------------------|------|------|--------|--------------|--------------|
| SMS2R3       | 2                          | 11.0 | 5.8  | 15.2   | 11.4         | 11.6         |
| SMS3R3       | 3                          | 16.2 |      |        | 16.5         |              |
| SMS4R3       | 4                          | 21.2 |      |        | 21.7         |              |
| SMS6R3       | 6                          | 16.2 | 10.9 | 20.3   | 16.5         | 16.7         |
| SMS9R3       | 9                          |      | 16.0 | 25.4   | 16.7         | 21.6         |
| SMS12R3      | 12                         |      | 21.1 | 30.5   |              | 26.7         |
| SMS15R3      | 15                         |      | 26.2 | 35.6   |              | 31.8         |
| SMS18R3      | 18                         |      | 31.2 | 40.6   | 21.7         | 36.9         |
| SMS24R3      | 24                         | 21.2 |      |        |              |              |
| SMS36R3      | 36                         | 46.6 | 21.1 | 30.5   | 47.1         | 26.7         |

Note : all dimensions are in mm



For further information, visit our website [www.railway-connectors.com](http://www.railway-connectors.com)  
or contact us at [contactindustry@souriau.com](mailto:contactindustry@souriau.com)