



## 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

**Compact design  
& up to 36 contacts**



Ideal for tight space integration & high density contact applications

**Excellent durability**



500 mating / unmating

**Standardization oriented**

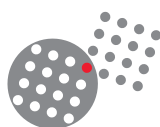


Compatible with standard AWG16 contacts

**A wide range available**



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



# SOURIAU on the railway market



*The SOURIAU solution offers a wide range of connector layouts providing a simplified process from purchasing to harnessing: 1 type of contact to order, to manage, to stock, to crimp for a wide range of connectors. SOURIAU's standardisation policy is the best compromise between technology and cost.*



*SOURIAU connectors ensure the continuity of the network with railway qualified connectors integrating new technologies: copper contacts, Quadrax and fibre optics to transfer high speed Ethernet and other data protocols.*



*SOURIAU, along with its customers is committed to the research of energy efficiency and sustainability. The use of lightweight materials, fiber optics and high contact density contribute to the weight reduction of train equipments and help railway operators to save energy.*

# Railway SMS / Flame Retardant



## Technical features

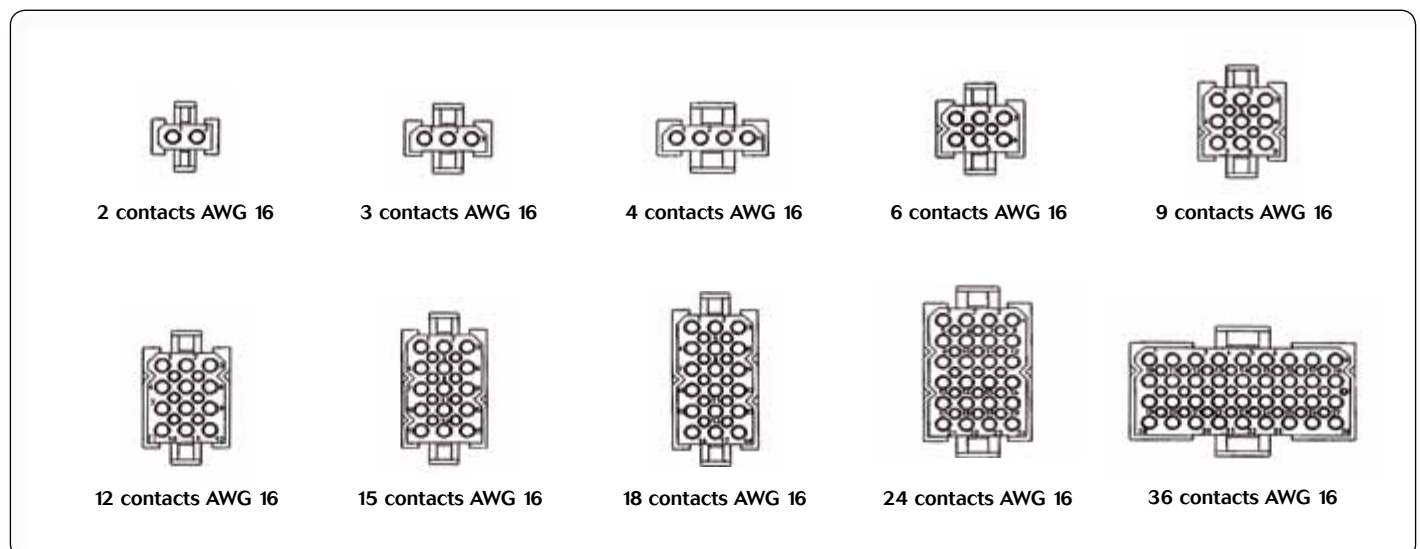
- Insulating material: Polyamid
- Endurance: 500 mating/unmating
- Colour: grey  
black - Boardmount versions
- PCB contacts (for SMS GE33, 43, 53, 63):  
Min. 0.4µ gold all over, over nickel
- Keying system: by using discrimination cavities  
(not available for all layouts, please check in the following tables)
- Current rating per contact: 13 Amps
- Insulation resistance: 5000 MΩ
- Withstanding voltage: 2550 Vac
- Operating voltage: 220 V (according to EN 50-124)
- Operating temperature: -40°C to +105 °C
- Sealing (mated conditions): IP40
- Flammability rating:
  - . I3F2 according to NFF16101/16102 standards
  - . PCB version: I2F3 according to NFF16101/16102 standards



## Ordering information

Connector family	SMS SMS	4 36	PDH3 RD3
<b>Number of contacts:</b> 2, 3, 4, 6, 9, 12, 15, 18, 24, 36			
<b>Design variation</b>			
PDH3 Flame Retardant plug with integrated strain relief hood RDH3 Flame Retardant receptacle with integrated strain relief hood PD3 Flame Retardant plug without strain relief hood RD3 Flame Retardant receptacle without strain relief hood R3 Flame Retardant panel mount receptacle GE33 Straight boardmount with female PCB contacts GE43 Straight boardmount with male PCB contacts GE53 Right angle boardmount with female PCB contacts GE63 Right angle boardmount with male PCB contacts			
Contacts to be ordered separately			
PCB contacts included			

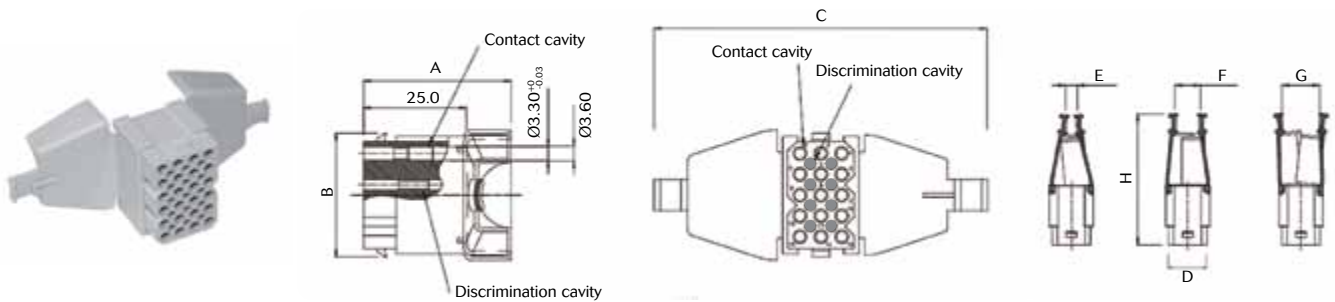
## Contact layouts





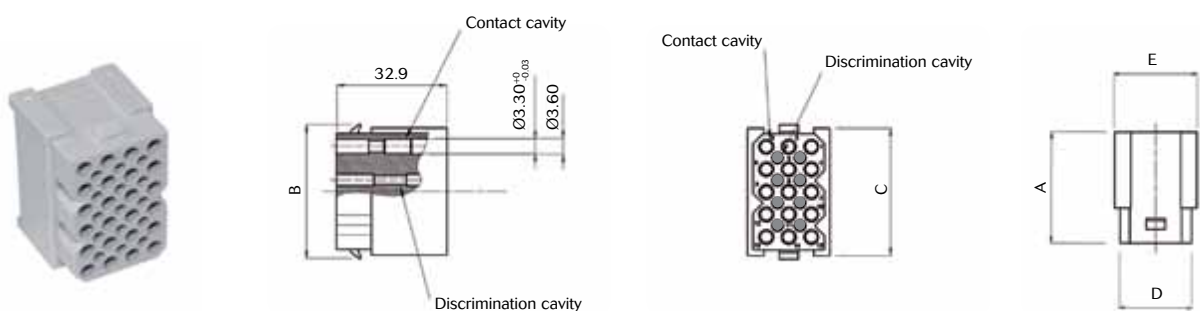
## Receptacle

### 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	7.1 - 20.4
SMS36RDH3	36	24	54.6	25.1	128.0	46.6	8.8	13.0	24.5	63.3	8.8 - 24.5

### Receptacle without strain relief hood (Delivered without contacts)

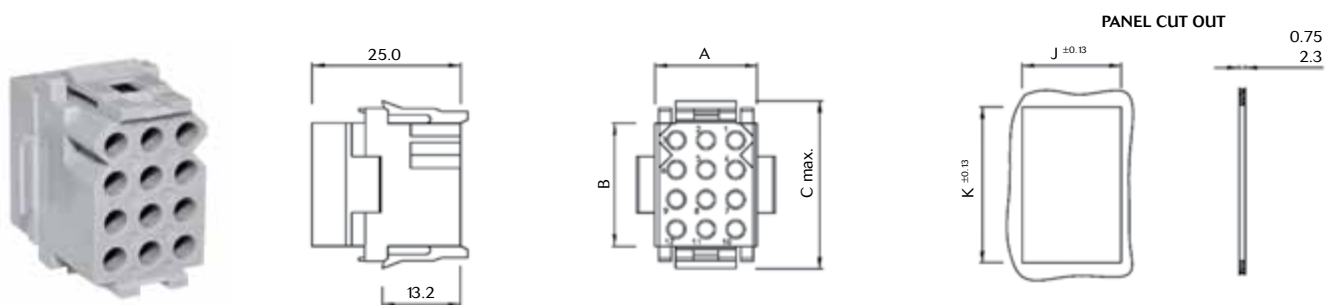


Part numbers	Number of contact cavities	Number of discrimination cavities	A	B	C	D	E
SMS2RD3	2	0	25.0	9.9	8.4	11.1	14.1
SMS3RD3	3	0		9.9	8.4	16.2	18.6
SMS4RD3	4	0		9.9	8.4	21.2	23.7
SMS6RD3	6	2		15.0	13.4	16.2	18.6
SMS9RD3	9	4		20.0	18.5	16.2	18.6
SMS12RD3	12	6		25.1	23.6	16.2	18.6
SMS15RD3	15	8		30.2	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



## Receptacle

### Panel mount receptacle (Delivered without contacts)



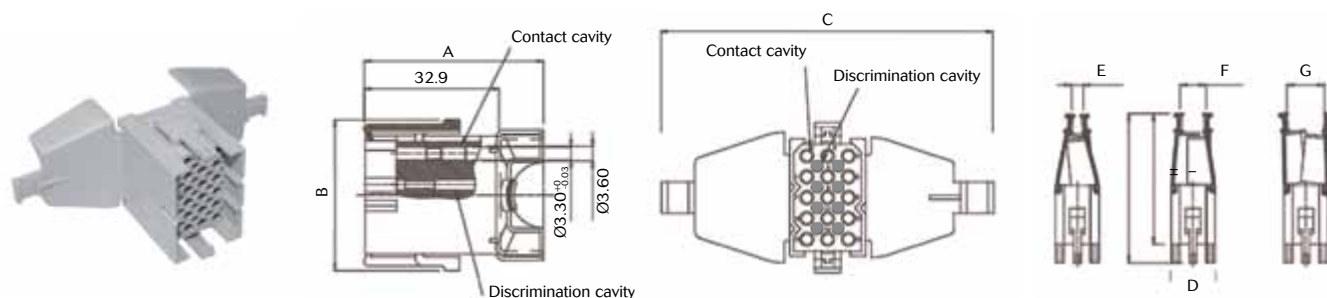
Part numbers	Number of contact cavities	Number of discrimination cavities	A	B	C max.	J <sup>±0.13</sup>	K <sup>±0.13</sup>
SMS2R3	2	0	11.0	5.8	15.2	11.4	11.6
SMS3R3	3	0	16.2			16.5	
SMS4R3	4	0	21.2			21.7	
SMS6R3	6	0	16.2	10.9	20.3	16.5	16.7
SMS9R3	9	0		16.0	25.4		21.6
SMS12R3	12	0		21.1	30.5	16.7	26.7
SMS15R3	15	0		26.2	35.6		31.8
SMS18R3	18	0		31.2	40.6		36.9
SMS24R3	24	0	21.2		21.7		
SMS36R3	36	0	46.6	21.1	30.5	47.1	26.7





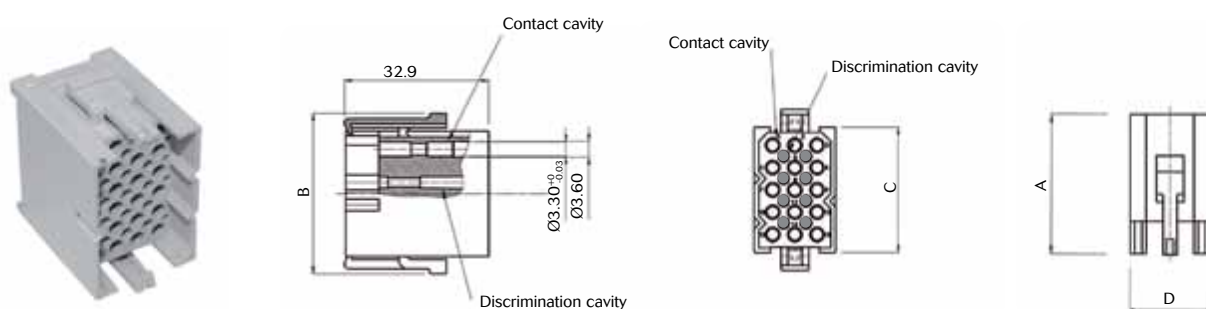
## Plug

### Plug 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	I	Cable 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	20.4	65.1	57.2
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

### 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

It is recommended to use unirap cable tie (not delivered by Souriau)

Note : all dimensions are in mm

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

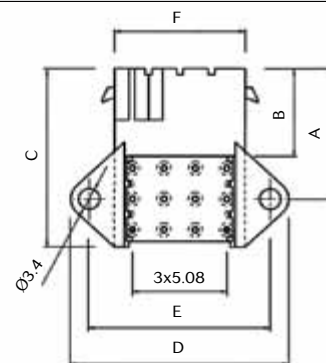
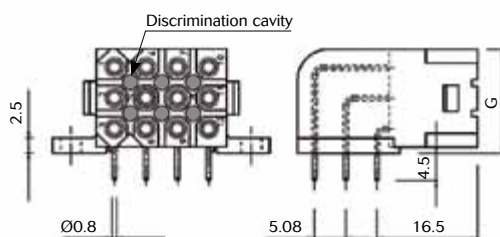
Contacts (included)	Part numbers	Number of contact cavities	Number of discrimination cavities	A	B	C	D	E
Female contacts	SMS3GE33	3	0	16.2	14	10.2	13.4	5.9
	SMS6GE33	6	0		19.2			10.9
	SMS9GE33	9	4		24.2			16
	SMS12GE33	12	0		29.2			21.1
	SMS15GE33	15	8		34.3			26.1
	SMS18GE33	18	10		39.4			31.2
	SMS24GE33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

*Note : all dimensions are in mm*



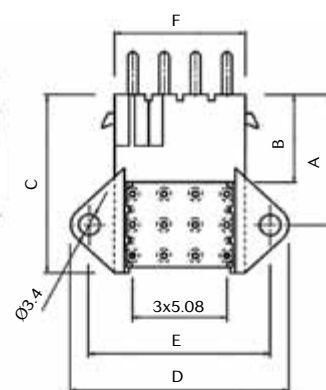
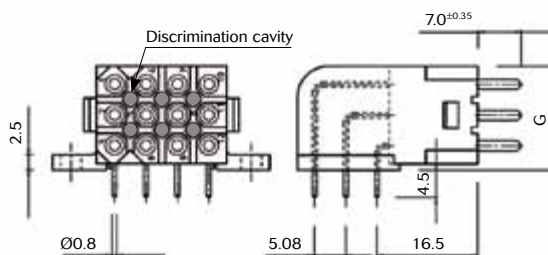
## PCB receptacle

### 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	6	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	6	21.6		29.5	35.2	29.2	21.2	17.2
	SMS18GE63	18	10				45.4	39.4	31.2	

For further information, click here [www.railway-connectors.com](http://www.railway-connectors.com)  
Or contact us click here [contactindustry@souriau.com](mailto:contactindustry@souriau.com)

Note : all dimensions are in mm



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