



## SMS IP: high voltage sealed plastic connector

A connector designed for indoor railway equipments,  
using the standard Ø 1.6 contact.

- |  |   |  |
|--|---|--|
| Safe                                     | ✓ | Finger proof<br>High operating voltage up to 500 V |
| Compliant to fire and<br>smoke standards | ✓ | CEN / TS 45-545<br>NF F 16-101/16-102              |
| Sealed                                   | ✓ | IP 67  |
| Easy to handle                           | ✓ | 1 stainless steel latch                            |
| Designed for railways                    | ✓ | NF F 61-030 derivated                              |



# 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.*



## Technical features (NF F 61-030 derivated)

### Mechanical

- Following NF F 61-030
- Durability: 500 mating/unmating
- Vibrations & shocks: EN 61-373 Cat.2
- Locking system: 1 metallic latch - Audible "Click"
- Keying system: 3 different positions

### Electrical

- Current rating per contact: 15 A maxi
- Operating voltage:  $\leq 500$  Vdc /  $\leq 380$  Vac  
NF F 61-030
- 500 Vdc/ac following EN 50-124-1
- Creepage distances (unmated):  $> 12$  mm
- Clearance distances (unmated):  $> 8$  mm
- Withstanding voltage: 3250 V
- Insulation resistance:  $\geq 5000$  M $\Omega$
- Contacts resistance:  $\leq 2.5$  m $\Omega$

### Material

- Plug & receptacle: black thermoplastic
- Grommet & interfacial seal: light grey silicone
- Latch: stainless steel

### Environmental

- Sealing: IP 65 & IP67 - Following CEI 60-529
- Fire resistance, toxicity & smoke opacity:  
R23 /HL3 following CEN/TS 45-545  
I3/F2 2 following NF F 16-101/16-102
- RoHS compliant
- Damp heat: 21 days / 40°C / 95% RH
- Operating temperature: -50°C to +100°C
- Fluids: NF F 61-030
- Corrosion: 500 hours salt spray

### Sealed version (SMS IP67)

- Sealing: IP 65 & IP 67 - Following CEI 60-529
- Delivered with pre-mounted grommets and interfacial seal
- Grommets are closed to seal empty cavities

## 2 versions available



### SMS IP67

Delivered with:

- Interfacial seal (pre-mounted)
- Grommets (pre-mounted)
- Coding pins

### SMS IP20

Delivered with:

- Coding pins

## Contacts (to be ordered separately)

- Standard crimp machined contact #16 compatible with EN 50-306-2 & EN 50-264-3-1 wires
- Cable section: 0.5 to 2.5 mm<sup>2</sup>  
( $\varnothing$  insulator: 1.5 to 3.8 mm)

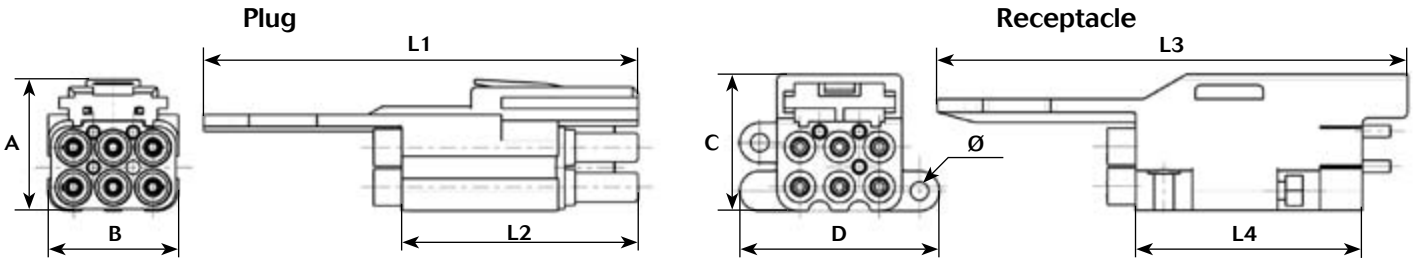
## Ordering information

	SMS	6	P	IP 67
<b>Contact layout:</b> 3 – 6 – 12				
<b>Contact type:</b> P: Plug for female contacts R: Receptacle for male contacts				
<b>Application:</b> IP 67 : Sealed version - delivered with grommets and interfacial seal IP 20 : Non sealed version				



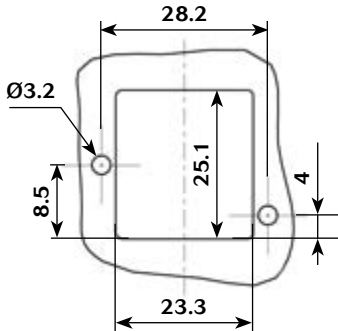


## Dimensions & weight

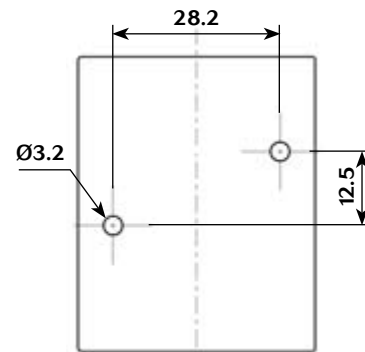


	Part number		Layout	A	B	L1	L2	C	D	L3	L4	Ø	Weight ±0.2 g.
	Plug	Receptacle											
IP67	SMS6PIP67		6	23	23	77	42	-	-	-	-	-	18.3 g
		SMS6RIP67	6	-	-	-	-	24	35	83	40	3.2	22.3 g
IP20	SMS6PIP20		6	23	23	77	42	-	-	-	-	-	16.3 g
		SMS6RIP20	6	-	-	-	-	24	35	83	40	3.2	20.3 g

## Panel cut 6 contacts



Fixation on an panel



Fixation on a board

## Several ways of fixation



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)

Note : all dimensions are in mm