



SMS IP: high voltage sealed plastic connector

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

- | | | |
|--|---|--|
| Safe | ✓ | Finger proof
High operating voltage up to 500 V |
| Compliant to fire and smoke standards | ✓ | CEN / TS 45-545
NF F 16-101/16-102 |
| Sealed | ✓ | IP66 & IP67 |
| Easy to handle | ✓ | 1 stainless steel latch |
| Designed for railways | ✓ | NF F 61-030 derivated |



SOURIAU on the railway market



Standard

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.



High Speed

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.



Environment & Safety

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: ≤ 500 Vdc / ≤ 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: ≥ 5000 M Ω
- Contacts resistance: ≤ 2.5 m Ω

Material

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

Environmental

- 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 IP66 & IP67)

- Sealing: IP66 & IP67 - Following CEI 60-529
- Delivered with pre-mounted grommets and interfacial seal
- Grommets are closed to seal empty cavities

Ordering information

			SMS	3	P	IP67
Contact layout: 3 – 6 – 12						
Contact type: P: Plug for female contacts R: Receptacle for male contacts						
Application: IP66 & IP67 : Sealed version IP20 : Non sealed version - delivered without grommet						

Contacts (to be ordered separately)

- Standard crimp machined contact #16 compatible with EN 50-306-2 & EN 50-264-3-1 wires

Contact size	Type	Wire size		Part number		Max wire \varnothing mm	Max insulator \varnothing mm
		AWG	mm ²	Male	Female		
#16 \varnothing 1.6 mm	Machined	20-16	0.5-1.5	RM16M23K	RC16M23K	1.8	3.8
		16-14	1.5-2.5	RM14M50K	RC14M50K	2.05	3.8

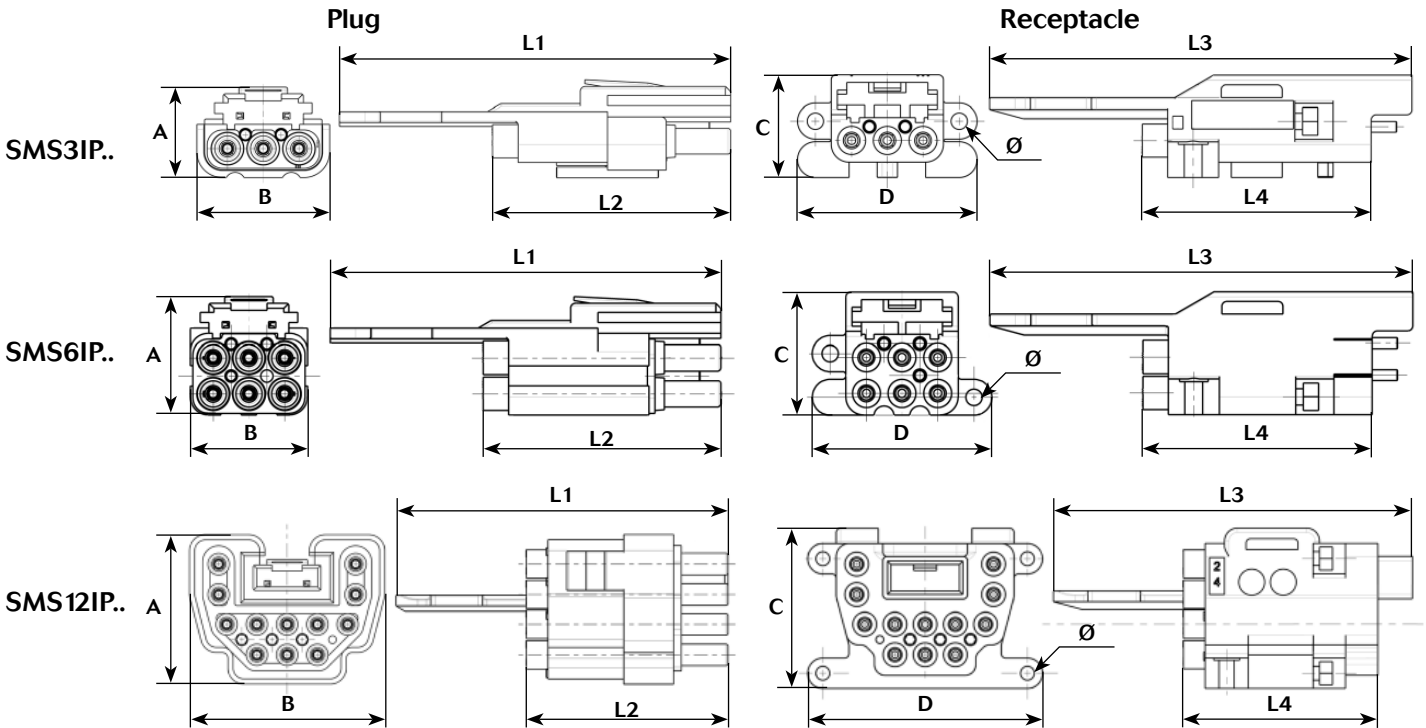
For other contact type consult us

Several ways of fixation





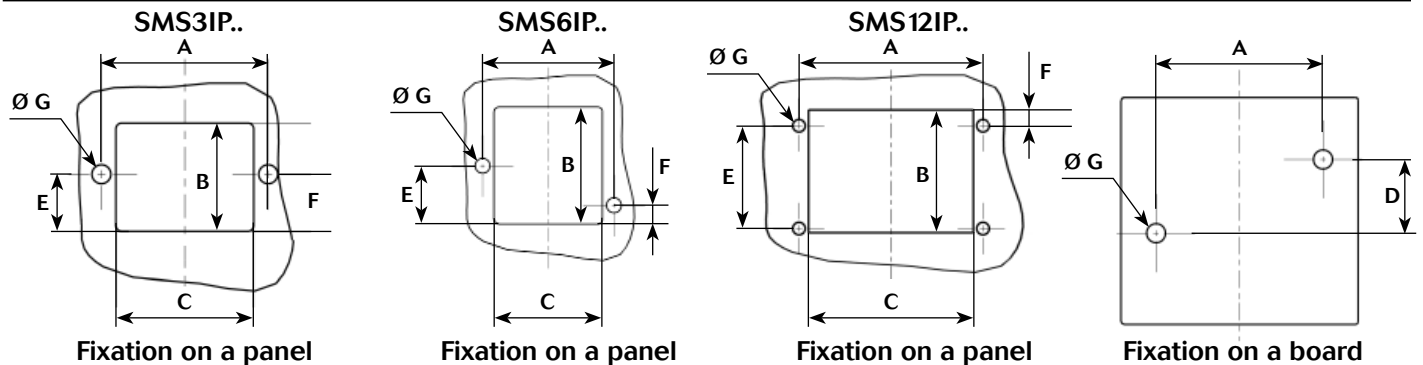
Dimensions & weight



Part number		Layout	A	B	L1	L2	C	D	L3	L4	Ø	Weight ±0.2 g.	
Plug	Receptacle											IP20	IP66 & IP67
SMS3PIP..		3	18	26	77	42	-	-	-	-	-	13.3 g	16.1 g
	SMS3RIP..	3	-	-	-	-	20	35	83	40	3.2	16.4 g	17.4 g
SMS6PIP..		6	23	23	77	42	-	-	-	-	-	16.3 g	18.3 g
	SMS6RIP..	6	-	-	-	-	24	35	83	40	3.2	20.3 g	22.3 g
SMS12PIP..		12	35	46	77	42	-	-	-	-	-	40 g	45 g
	SMS12RIP..	12	-	-	-	-	30	54	83	40	3.2	48 g	53 g

Panel cut

	A	B	C	D	E	F	Ø G
SMS3IP..	28.2	18.3	23.3	12.5	9.6	9.6	3.2
SMS6IP..	28.2	25.1	23.3	12.5	8.5	4	3.2
SMS12IP..	47.4	31.4	42.5	12.5	26.3	4	3.2



For further information, visit our website www.railway-connectors.com
or contact us at contactindustry@souriau.com

Note : all dimensions are in mm