

# RFM SERIES

## Modular Floating Racks



## Main Characteristics

- Blind mate, floating fixing
- High mating / unmating cycles (up to 5000)
- NF F 61-032 approved (Railways)
- Good behaviour in vibrations
- Low insertion forces
- Power contacts (8, 15, 25, 50, 60, 200\* Amps)
- Modular : 5, 3, 2 and 1\* contacts modules with removable crimp and wire wrap contacts
- Metallic guiding pins

\* see Power RFM datasheet

**Density & Modularity ?  
RACK is the solution !**

## Description

- Plugs and receptacles with floating fixing
- Stackable modules
- Metallic modules guides
- Allows misalignment between rack and panel :  
+/- 1.25 mm around the fixing screw, it means  $\varnothing 2.5$  mm for each connector

DOC-RFM-ANG-C

## Applications

- Railway Racks
- Shelters
- Cabinets
- Power Racks
- Modular equipments
- Automatic assembly machines

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# Main Electrical Values :

	2 contacts module	3 contacts module	5 contacts module
Current (nom.)	25 A or 60 A	15 A	8 A
Insulation resistance under 500 Vrms	> 10 <sup>3</sup> MΩ	> 10 <sup>3</sup> MΩ	> 10 <sup>3</sup> MΩ
Contact Resistance	< 0.80 mΩ	< 1 mΩ	< 2,5 mΩ
DWV			
between contacts	3000 Vrms	2000 Vrms	1500 Vrms
between contact and ground	2800 Vrms	2000 Vrms	1600 Vrms
Pin contact diameter	3,50 mm	2,50 mm	1,50 mm
Temperature range	- 55 à + 125°C		

\* For module with 1 contact of 200 Amps, see Power RFM datasheet

## Main Environmental Characteristics :

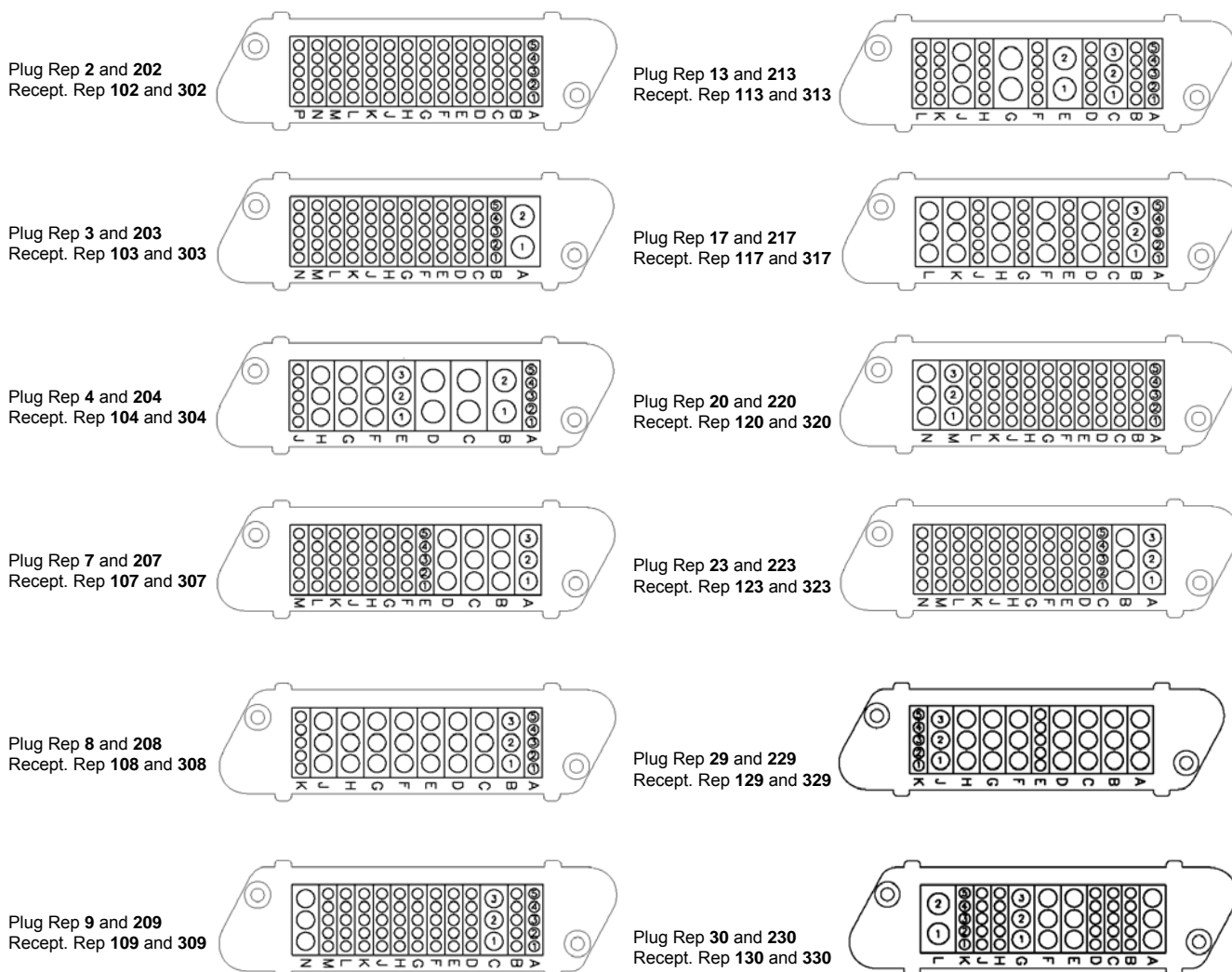
- Fire behaviour : I2 F2 following NF F 16-102
- Salt Spray : 96 following NFC 20711
- Chemical behaviour : Hcl 1N 5min; NaOH 1N 5min
- Temperature Range : -55°C/+125°C

## Standards Contacts Arrangements :

(For other arrangements, please consult us : [contact@amphenol-socapex.com](mailto:contact@amphenol-socapex.com))

View : Receptacle, connection side

**Nota :** For the arrangements 2XX and 3XX the inserts are longer at the rear, in order to avoid to put heat shrink boots around the contact crimping area.

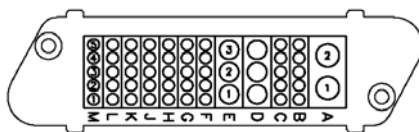


# Standards Contacts Arrangements :

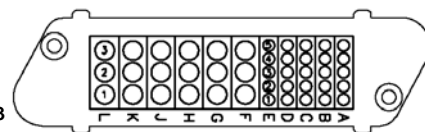
(For other contact arrangement, please consult us)

View : Receptacle, connection side

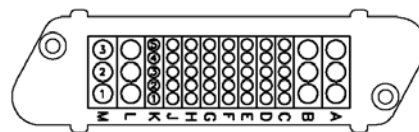
Plug Rep 34 and 234  
Recept. Rep 134 and 334



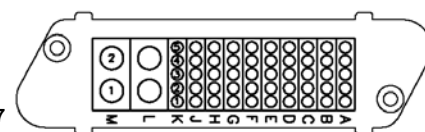
Plug Rep 43 and 243  
Recept. Rep 143 and 343



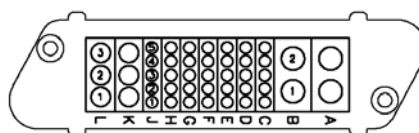
Plug Rep 35 and 235  
Recept. Rep 135 and 335



Plug Rep 47 and 247  
Recept. Rep 147 and 347



Plug Rep 37 and 237  
Recept. Rep 137 and 337

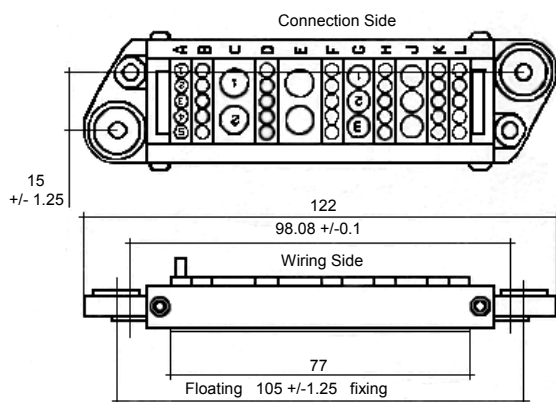


## Exemples of Part Number :

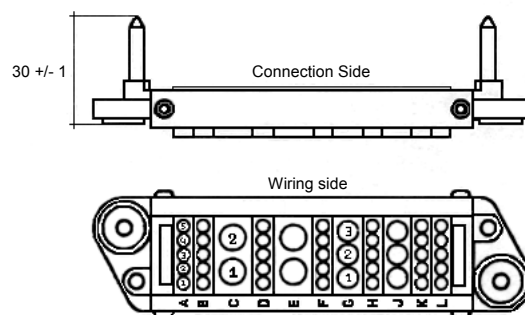
- Plug Rep 2 : **RFM F REP 2**
- Receptacle Rep 302 (with 5 modules longer at the rear) : **RFM E REP 302**

## Outside Dimensions :

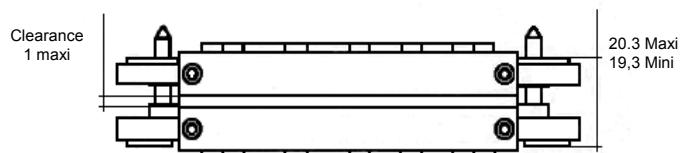
### Receptacle



### Plug



### Plug and Receptacle



# Contacts :

(Other types : please, consult us)

## Pins

P / N	Designation	Termination	Current	Adm. Section
30526	Pin Contact 1,5 mm diameter	Crimp	8A	. 0,34 to 1,5 mm <sup>2</sup> . S1 S2 . AWG 16-22
30517	Pin Contact 2,5 mm diameter	Crimp	15A	. 1,34 to 2 mm <sup>2</sup> . S4 . AWG 14-16
30518	Pin Contact 3,5 mm diameter	Crimp	20A	. 1,34 to 2 mm <sup>2</sup> . S4 . AWG 14-16
30532	Pin Contact 3,5 mm diameter	Crimp	20A	. 1,91 to 2,5 mm <sup>2</sup> . AWG 14-16
29589	Pin Contact 1,5 mm diam.	WW 1mm square	3A	. W . AWG 22-24
29592	Pin Contact 1,5 mm diam.	WW 0,6 mm square	1,5A	. K mini. . AWG 26-30
30531	Pin Contact 2,5 mm diam.	WW 1mm square	3A	. W . AWG 22-24
30533	Pin Contact 3,5 mm diam.	Crimp	60A	. 4 to 10 mm <sup>2</sup> . AWG 8-10

## Sockets

P / N	Designation	Termination	Current	Adm. Section
30521	Socket Contact 1,5 mm diameter	Crimp	8A	. 0,34 to 1,5 mm <sup>2</sup> . S1 S2 . AWG 16-22
30519	Socket Contact 2,5 mm Diameter	Crimp	15A	. 1,34 to 2 mm <sup>2</sup> . S4 . AWG 14-16
30520	Socket Contact 3,5mm diameter	Crimp	20A	. 1,34 to 2 mm <sup>2</sup> . S4 . AWG 14-16
30522	Socket Contact 1,5mm	WW 1mm square	3A	. W . AWG 22-24
30534	Socket Contact 3,5mm	Crimp	60A	. 4 to 10 mm <sup>2</sup> . AWG 8-10

## Tooling :

### . Crimping tools

Contacts 30521 30526	<b>OCETA FT. 8 Plier</b> Selector positions 3 to 6 (Gauge AWG 22 to 16) Locator OCETA SH 463 Color Code : <b>RED</b>
	<b>COJACK TGV 101 Plier</b> Selector positions 3 to 6 (Gauge AWG 22 to 16) Locator COJACK TGV 201 Color Code : <b>RED</b>
Contacts 30517 30519	<b>OCETA FT. 8 Plier</b> Selector positions 6 to 7 (Gauge AWG 16 to 14) Locator OCETA SH 463 Color Code : <b>BLUE</b>
	<b>COJACK TGV 101 Plier</b> Selector positions 6 to 7 (Gauge AWG 16 to 14) Locator COJACK TGV 201 Color Code : <b>BLUE</b>
Contacts 30520 30518 30532	<b>OCETA M 317 Plier</b> Selector positions 2 to 3 (Gauge AWG 16 to 14) Locator OCETA TP 805
	<b>COJACK TGV 515 Plier</b> Selector positions 2 to 3 (Gauge AWG 16 to 14) Locator COJACK TGV 503
Contacts 30533 30534	<b>OCETA M 317 Plier</b> Selector positions 5 to 8 (Gauge AWG 10 to 8) Locator OCETA TP 805
	<b>COJACK TGV 515 Plier</b> Selector positions 5 to 8 (Gauge AWG 10 to 8) Locator COJACK TGV 503

### . Insertion tools

#### Part Numbers for Pin and Socket contacts :

- 1.5 mm diameter : **RFM ODI X 1.5**
- 2.5 mm diameter : **RFM ODI X 2.5**
- 3.5 mm diameter : **RFM ODI X 3.5**

### . Extraction tools

#### Part Numbers for Pin and Socket contacts :

- 1.5 mm diameter : **RFM ODE 1.5**
- 2.5 mm diameter : **RFM ODE 2.5**
- 3.5 mm diameter : **RFM ODE 3.5**



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