Amphenol SOCAPEX

RFM Series

Rack and Panel Blind Mating Modular Connector EN45545-2 & NF F 61-032 Qualified









NOTES

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ABOUT AMPHENOL SOCAPEX



Proven excellence in interconnect solutions

Since 1947, Amphenol Socapex has prescribed, designed and manufactured reliable and innovative interconnection solutions for harsh environments, specializing in standard and customized electrical and fiber optic connectors, contacts, accessories and cabling solutions.

Located in the **Mont Blanc** region of France and Pune in India, Amphenol Socapex has a presence in over 100 countries around the world.

Amphenol Socapex is part of the international **Amphenol Corporation**.



800+ employees



Net Sales 2018: **72,5 M€** 68% Export - 32% France



Two facilities: Thyez (France), Pune (India)

1947

- Socapex creation in Suresnes, France
- 1st radio connector

1956-57



- Manufacturing unit in Cluses (74) France
- Thomson-CSF becomes primary
- shareholder

Early 1960's



- 1st "licence Bendix" manufactured
- connectors

INNOVATION

- SI Series launch

1973



- New factory 13 000 m² in Thyez (74) France with 250 people

1975



- Production of 38999 connectors

2014-2017







New Cable Assembly workshop

- New Contact Manufacturing workshop

Today and tomorrow | New technologies

High-speed signals

Miniaturization

Rugged Ethernet

Fiber optics

ROHS solutions

Advanced Materials (composite)

INTERNATIONAL EXPERTISE



Our expertise has no boundaries

Integrated Production in France & India

- 24 000 m² manufacturing capacity on 2 sites
- Design centers in France and India
- State-of-the-art manufacturing technology



Our markets



Communication Systems - Radios - C4ISR / Ground vehicles - Vetronics / Marine / Missiles



Commercial & military / Avionics / Engines / Landing gear / Actuators



Today and tomorrow | Sustainable development



Respect for nature and the environment

Recycling Goodwill

Optimization of natural resources

Waste Management

PRODUCING FASTER, SMALLER, STRONGER CONNECTORS...



Technologies & innovation



Engineering Laboratory for product testing and qualification, product expertise and metrology

- Mechanical and electrical skills
- RF and fiber optics expertise



Strong expertise in high-speed signals

- 3D EM simulation software & EM models
- Time Domain and frequency domain (VNA 20GHz, TDR and eye diagram)



Focus on materials expertise and manufacturing techniques to produce faster, smaller and stronger products

- 3D CAD mechanical software, simulation & analysis
- Disruptive metal alloys, additive manufacturing



Sustainable environment approach, with pro-active management of regulations (REACH / RoHS / Conflict minerals...)

- New materials development, plating, and suitable processes
- Recycling and rational resources consumption

Our workshops

Our workshops located in France & India provide consistent quality adapted to your volume requirements.

Molding: Solid expertise in thermoplastic elastomer and thermoset molding

Machining: Manufacturing of cylindrical shells from 10 to 90 mm in diameter and rectangular shells

Screw Machining: Cylindrical production parts up to 10 mm in diameter

Plating: Plating with cadmium, nickel, electroless nickel, silver, black zinc nickel, gold

Assembly: Sub-assembly, harnessing, cabling, bonding and marking for small & large volumes

Our certifications











Product certifications: MIL-DTL38999, EN3645, EN3155, VG

Our memberships







AEROSPACEcluster RHONE ALPES



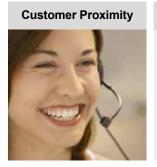
Member of CMG (Connecting Manufacturing Group) Consortium

DELIVERING GREAT CUSTOMER EXPERIENCE



▶ We have a strong reputation for helping customers solve their toughest challenges. This approach of serving your needs is ingrained in our company – from our sales team to our product development engineers.

A partner you can trust











Buy our solutions

You can access our solutions through our global network of sales offices or through our distributors.

Field Sales Team:

12 in France

4 15 in Europe

100+ in North America and rest of the world.

5 Business Development Managers supporting local sales force Europe, North America and the rest of the world

Technical Support & Multilingual Customer Service : 15 people

Worldwide Distribution Network:

Including qualified distributors (QPL approved) for assembling : MIL-DTL-38999, PT/451/VG95328 & Fiber Optics connectors



MARKETS AND APPLICATIONS



Industrial

Automation Transportation Nuclear power station Robotics





C4ISE

Threat detection system Soldier wearable equipment Rugges computer & digital radio Satellite reception unit





Military vehicles

Ground radios shelters
Ground vehicles
Battlefield
Communication systems





Military Avionics & Airframe

Power unit Aircraft Radar Display unit Flight control system





Missiles & UAVS

Air missiles and UAVS Ground control station & launchers

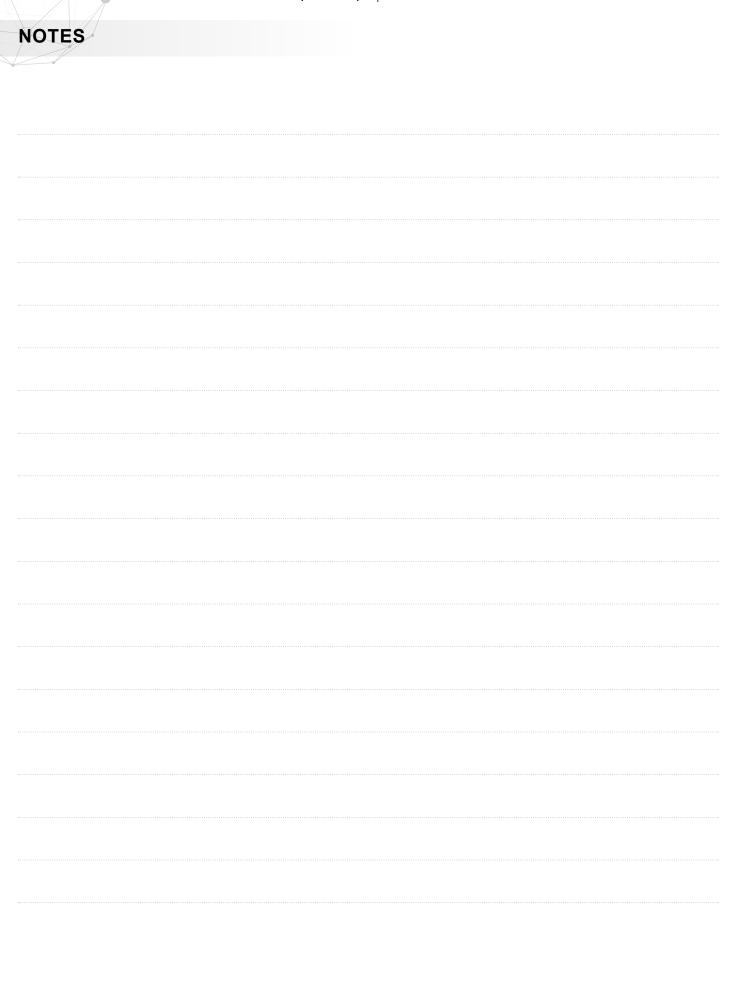


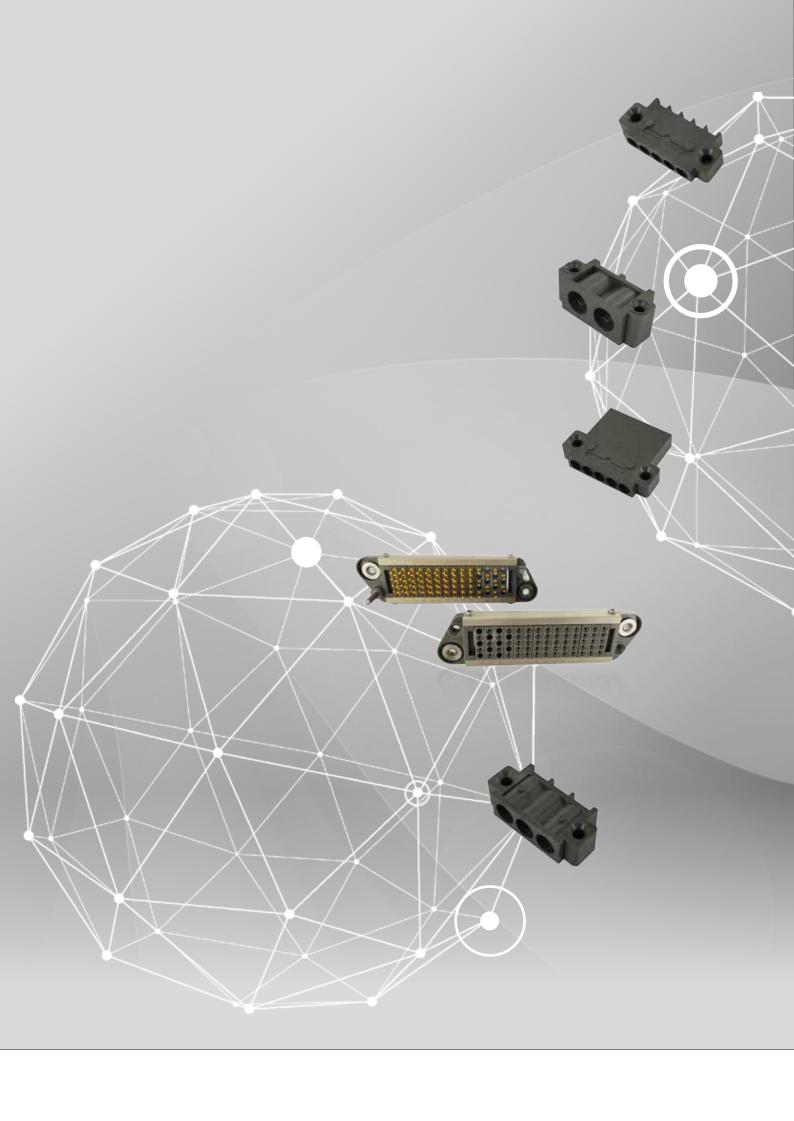


Navy

Navigation guidance







RFM STANDARD



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THE RFM STANDARD SERVES VARIOUS MARKETS, INCLUDING:



Industrial

Railway Racks
Shelters
Cabinets
Power Racks
Modular equipment
Automatic assembly machines

GENERAL CHARACTERISTICS - RFM STANDARD

Blind mate modular floating rack connector

Benefits

- Plug and receptacle with floating fixing.
- RoHS Compliant ✓.
- Low insertion forces.
- Male & female contacts can be mounted on both sides.
- Meets NF F 61-032 requirements: vibrations, salt spray, temperature.



NF F 61-032 Qualified product

GENERAL CHARACTERISTICS					
Qualification	NF F 61-032				
Mating cycles	500				
Misalignment allowance around each fixing screw	±1,25 mm				
Contact type	Crimp contacts				
MATERIALS					
Housing & modules (2 options)	GREY LEXAN BLACK LEXAN (recommended)				
Lateral rails	Nickel over aluminium				
MAIN ENVIRONMENT	ALS CARACTERISTICS				
Temperature range	-55°C to +125°C				
Fire behavior GREY LEXAN BLACK LEXAN (recommended)	EN 45545-2 HL1 (R22) & 12-F2 NF F16-102 EN 45545-2 HL3 (R22) & 13-F1 NF F16-102				
Salt spray	96 hours (following NFC 20711)				
Chemical behavior	HCI 1N 5min; NaOH 1N 5min				

1.Guiding system

Guiding pin & chamfered holes



2. Floating system

Around the fixing screw



GENERAL CHARACTERISTICS - RFM STANDARD

2. Contacts module



5. Contacts short module



3. Contacts module



5. Contacts long module

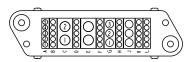
(Plug 2XX & Receptacle 3XX)

Avoid to put heat shrink boots around the contact crimping area.

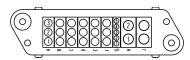


MODULE	5 contacts	3 contacts	2 contacts			
MAIN ELECTRICAL VALUES						
Contact diameter	Ø1.5 mm	Ø2.5 mm	Ø3.5 mm			
Current (nom.)	8 A	15 A	60 A			
Insulation resistance under 500 Vrms	>10³ MΩ					
Contact resistance	<2,5 mΩ	<1 mΩ	<0,80 mΩ			
DWV: - Between contacts - Between contacts & ground	1500 Vrms 1600 Vrms	2000 Vrms 2000 Vrms	3000 Vrms 2800 Vrms			
Max. Contact mating forces	2 N	4 N	6 N			

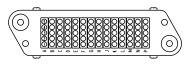
View: receptacle, cable connection side.



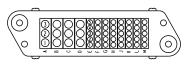
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	1	201	35	6	4
Receptacle	101	301	ან	0	4



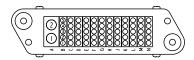
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	6	206	E	18	4
Receptacle	106	306	. J	10	4



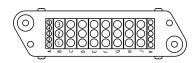
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	2	202	70		
Receptacle	102	302	70	-	-



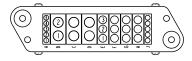
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	7	207	40	12	
Receptacle	107	307	40	12	-



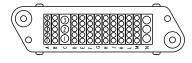
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	3	203	60		0
Receptacle	103	303	60	-	2



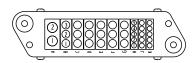
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	8	208	10	24	
Receptacle	108	308	10	24	-



	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	4	204	10	12	6
Receptacle	104	304	10	12	ь

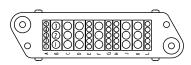


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	9	209	55	e	
Receptacle	109	309	55	0	-



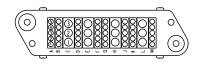
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	5	205	15	18	2
Receptacle	105	305	15	10	2

^{* 5} contacts modules (Ø1.5 mm contacts) only are longer

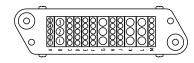


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	10	210	25	18	
Receptacle	110	310	∠5	18	-

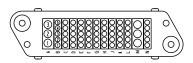
View: receptacle, cable connection side.



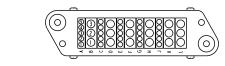
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	11	211	40	12	
Receptacle	111	311	40	12	-



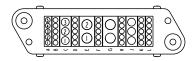
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	16	216	40	12	
Receptacle	116	316	40	12	-



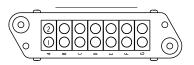
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	12	212	55	6	
Receptacle	112	312	. 55	0	-



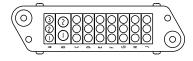
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	17	217	25	18	
Receptacle	117	317	- 25	10	-



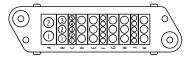
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	13	213	35	6	4
Receptacle	113	313	ან	0	4



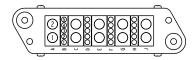
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	18	-			14
Receptacle	118	-	-	-	14



	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	14	-		24	2
Receptacle	114	-	-	24	2

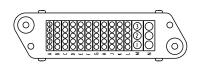


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	19	219	15	18	2
Receptacle	119	319	15	10	2



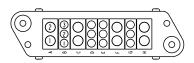
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	15	215	20		10
Receptacle	115	315	20	-	10

^{* 5} contacts modules (Ø1.5 mm contacts) only are longer

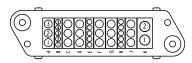


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	20	220	55	e	
Receptacle	120	320	ან	υ	-

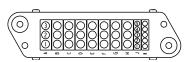
View: receptacle, cable connection side.



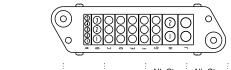
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	21	-		40	8
Receptacle	121	-	-	12	



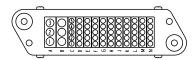
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	26	226	15	10	
Receptacle	126	326	15	18	



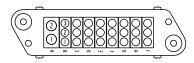
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	22	222		24	
Receptacle	122	322	10	24	-



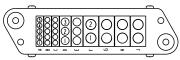
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	27	227	E	18	4
Receptacle	127	327	5	10	4



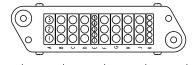
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	23	223	55	6	
Receptacle	123	323	. 55	U	-



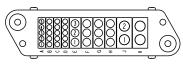
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	28	-		24	2
Receptacle	128	-	-	24	



	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	
Plug	24	224	15	e	0	
Receptacle	124	324	15	O	. 0	

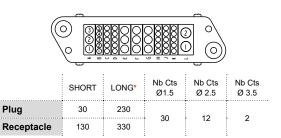


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	29	229	10	24	
Receptacle	129	329	10	24	-
Receptacle	129	329	:		



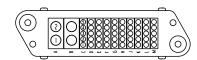
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	25	225	20	12	1
Receptacle	125	325	20	12	4

^{* 5} contacts modules (Ø1.5 mm contacts) only are longer

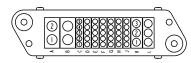


View: receptacle, cable connection side.

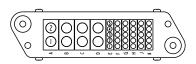
All standardized arrangement from NF F 61-032 are showed. If other arrangements needed, see page 38. Rep31 is not available.



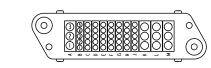
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	32	232		-	4
Receptacle	132	332	55		



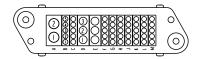
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	37	237	35	6	4
Receptacle	137	337	35	U	4



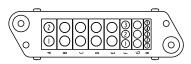
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	33	233	30		0
Receptacle	133	333	30	-	0



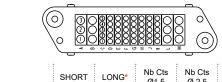
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	38	228	40	12	
Receptacle	138	338	40	12	-



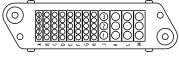
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	34	234	45	6	2
Receptacle	134	334	45	U	. 2



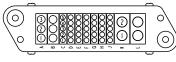
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	39	239	E	6	10
Receptacle	139	339	5	. 0	10



	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	35	235	40	12	
Receptacle	135	335	40	12	-

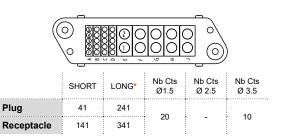


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	40	240	45	12	
Receptacle	140	340	45	12	-

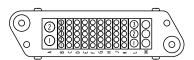


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	
Plug	36	236	36	e	4	
Receptacle	136	336	30	0	4	

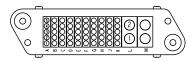
^{* 5} contacts modules (Ø1.5 mm contacts) only are longer



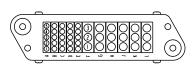
View: receptacle, cable connection side.



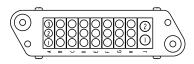
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	42	242	0	6	2
Receptacle	142	342	9	0	2



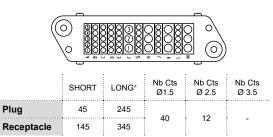
	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	47	247	F0		4
Receptacle	147	347	50	-	4

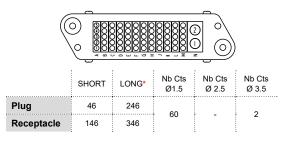


	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	43	243	25	18	
Receptacle	143	343	20	10	-



	SHORT	LONG*	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5
Plug	44	-		24	2
Receptacle	144	-	-	24	2





^{* 5} contacts modules (Ø1.5 mm contacts) only are longer

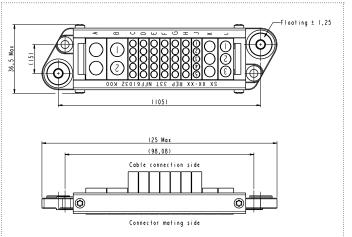
CONNECTOR INTEGRATION - RFM STANDARD

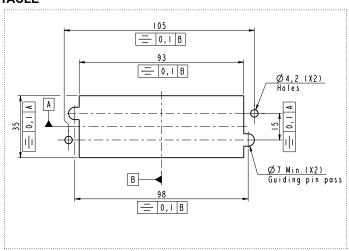
Example arrangement 337 & 237.

External dimension

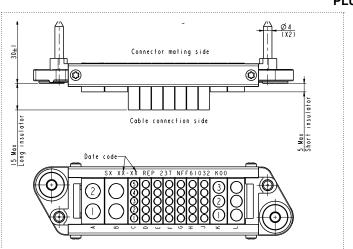
RECEPTACLE

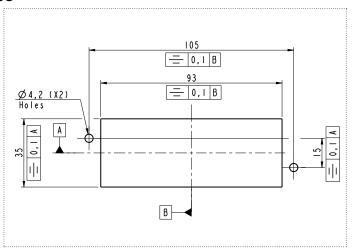
Panel cutout



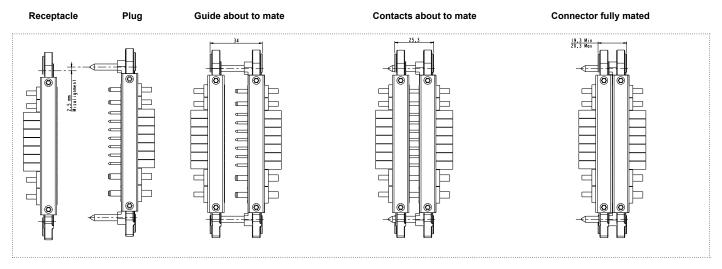


PLUG





MATING SEQUENCE



All dimensions are in mm

REP

HOW TO ORDER - RFM STANDARD

Nota:

Modules cannot be delivered separately. Connectors delivered without contacts, see page 21.

1. 2. 3. 4. 5.

Series Connector type Representation Layout Housing mate

Series	Connector type	Representation	Layout	Housing material
RFM	E	REP	302	

1. Series ı	name	
RFM		
2. Connec	tor type	
E	Receptacle	
F	Plug	
	·	
3. Represe	entation	

5. Housing material				
BLANK	GREY LEXAN			
K00	BLACK LEXAN			

PLU	G (F)	RECEPTA	ACLE (E)	5CTS	3CTS	2CTS
HORT 1	LONG*	SHORT 3	LONG*	module (Ø 1.5 mm)	module (Ø2.5 mm)	module (Ø3.5 mm
2	202	102	302	14		
3	203	103	303	12		
4	204	104	304	2		1
5	205	105	305	3	6	1
6	206	106	306	1	6	2
7	207	107	307	8	4	
8	208	108	308	2	8	
9	209	109	309	11	2	
10	210	110	310	5	6	
11	211	111	311	8	4	
12	212	112	312	11	2	
13	213	113	313	7	2	2
14	214	114	314		8	1
15	215	115	315	4	•	5
16	216	116	316	8	4	
17	217	117	317	5	6	•
18	218	118	318	·		7
19	219	119	319	3	6	1
20	220	120	320	11	2	
21	221	121	321		4	4
22	222	122	322	2	8	
23	223	123	323	11	2	•
24	224	124	324	3	2	4
25	225	125	325	4	4	2
26	226	126	326	3	6	1
27	227	127	327	1	6	2
28	228	128	328	:	8	1
29	229	129	329	2	8	• · · · · · · · · · · · · · · · · · · ·
30	230	130	330	6	4	1

	4. Layout – Choose from column 1 to 4							
PLUG (F)		RECEPTACLE (E)		5CTS	3CTS	2CTS		
	SHORT 1	LONG*	SHORT 3	LONG*	module (Ø 1.5 mm)	module (Ø2.5 mm)	module (Ø3.5 mm)	
	32	232	132	332	10		2	
	33	233	133	333	6		4	
	34	234	134	334	9	2	1	
	35	235	135	335	8	4		
	36	236	136	336	7	2	2	
	37	237	137	337	7	2	2	•
	38	238	138	338	8	4		
	39	239	139	339	1	2	5	•
	40	240	140	340	8	4	.	
	41	241	141	341	4		5	
	42	242	142	342	9	2	1	
	43	243	143	343	5	6		
	44	244	144	344		8	1	
	45	245	145	345	8	4		
	46	246	146	346	12	;	1	
	47	247	147	347	10	}	2	

^{*5} contacts modules (Ø1.5 mm contacts) only are longer

CONTACTS - RFM STANDARD

All connectors are delivered without contacts. Contacts must be ordered separately.

Pin contacts



Designation	P/N	Current	Admissible Section	Termination
Pin Contact Ø 1,5 mm	30526	8A	0,34 to 1,5 mm² S1 S2 AWG 16-22	
Pin Contact Ø 2,5 mm	30517	15A	1,34 to 2 mm² S4 AWG 14-16	
	30518	20A	1,34 to 2 mm² S4 AWG 14-16	Crimp
Pin Contact Ø 3,5 mm	30532	20A	1,91 to 2,5 mm² AWG 14-16	
	30533	60A	4 to 10 mm² AWG 8-10	

Socket contacts

Designation	P/N	Current	Admissible Section	Termination
Pin Contact Ø 1,5 mm*	30521	8A	0,34 to 1,5 mm² S1 S2 AWG 16-22	
Pin Contact Ø 2,5 mm	30519	15A	1,34 to 2 mm² S4 AWG 14-16	Crimp
Pin Contact	30520	20A	1,34 to 2 mm² S4 AWG 14-16	
Ø 3,5 mm	30534	60A	4 to 10 mm² AWG 8-10	

^{*} Socket Contacts Ø 1,5 mm are equipped with Hyperboloid technology which provide the best performances in harsher environments.

TOOLS - RFM STANDARD

Crimping tool

	Plier	Selector position	Gauge AWG	Locator	Color code
ContactsØ1,5 mm	OCETA FT. 8			OCETA SH 463	
30521 30526	COJACK TGV 101	3 to 6	22 to 16	COJACK TGV 201	RED
ContactsØ2,5 mm	OCETA FT. 8		16 to 14	OCETASH 463	
30517 30519	COJACK TGV 101	6 to 7		COJACK TGV 201	BLUE
ContactsØ3,5 mm 30520	OCETA M 317	2 to 3	16 to 14	OCETA TP 805	-
30518 30532	COJACK TGV 515			COJACK TGV 503	-
ContactsØ3,5 mm 30533 30534	OCETA M 317		10 to 8	OCETA TP 805	-
	COJACK TGV 515	5 to 8		COJACK TGV 503	-



Insertion / extraction tools

Nota:

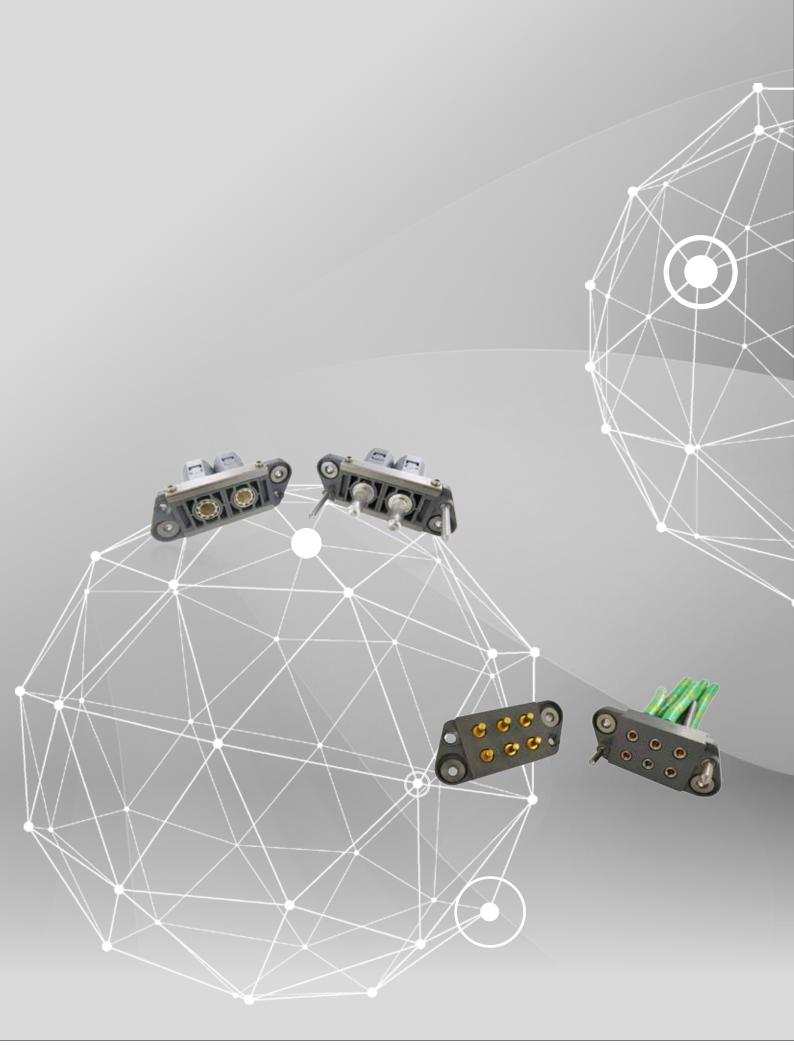
In accordance with the NF F 61 032 standard, extraction tools have to be inserted on the front side of the connector for contact extraction on the rear side of the connector.

		Contact Ø 1.5	Contact Ø 2.5	Contact Ø 3.5
Insertion	Pin & Socket	DAK32*	DAK126-12A*	DAK87-8*
	Pin	DAK602*	DAK126-12A*	
Extraction	Socket	DAK382*		DAK397*

^{*} DMC tools for sale in distribution.



NO	TE	S	/
7	7		



RFM POWER



Table of contents

RFM Power	25
General characteristics	26
Monolithic 6 x 60 A	27
200 A Module	29
200 A Module Contacts	30

THE RFM SERIES SERVES VARIOUS MARKETS, INCLUDING:



Industrial

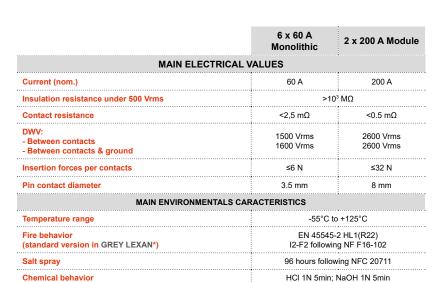
Railway Racks (cars batteries)
Battery Racks
Base stations

GENERAL CHARACTERISTICS - RFM

Blind mate modular floating rack with high voltage contacts

Benefits

- Blind mate, floating fixing.
- Low insertion forces.
- High mating / unmating cycles.
- Power contacts Male & Female contacts can be mounted on both sides.
- Socket contacts 200 Amps are equipped with RADSOK® Technology (see features page 30).
- Modular 2 modules of one crimp contact and monolithic 6 cavities for removable crimp contacts .
- Meets NF F61-032 requirements: vibrations, salt spray, temperature.





^{*} For BLACK LEXAN, please consult us

MONOLITHIC 6 X 60 A - RFM POWER



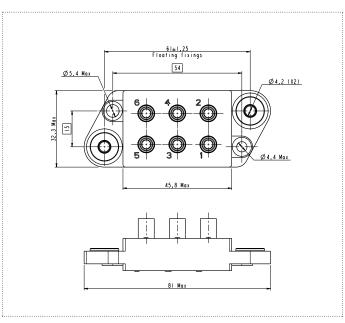
Nota:

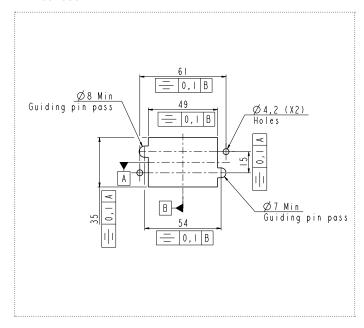
Plug or receptacle can be equipped with pins or sockets, the contacts must be ordered separately.

External dimension

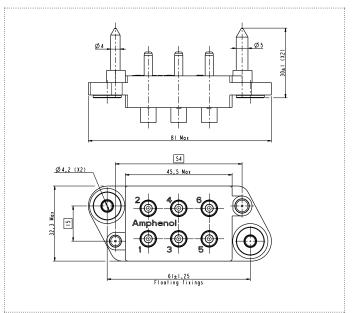
Panel cutout

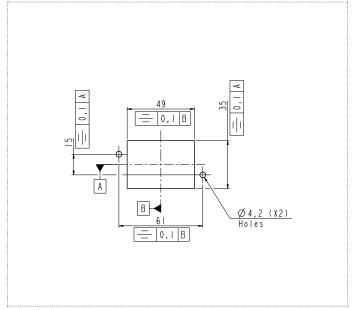
RECEPTACLE P/N 507688



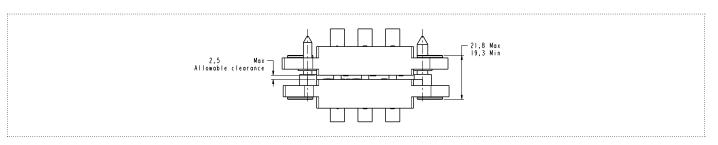


PLUG P/N 507687





MATED CONNECTORS



All dimensions are in mm

MONOLITHIC 6 X 60 A - RFM POWER

Contacts



Designation	P/N	Current	Admissible Section	Termination
Pin Contact	30501		13 mm² AWG 6	Crimp
Ø 3,5 mm	30533	OUA	4 à 10 mm² AWG 8-10	Giiffp



Designation	P/N	Current	Admissible Section	Termination
Socket Contact	30502	COA	13 mm² AWG 6	Crime
	30534	60A	4 à 10 mm² AWG 8-10	Crimp

Tooling

- Crimping:

- Omnping.	Plier	Selector position	Gauge awg	Locator
30501	OCETA M 317	6	6	OCETA TP 805
	COJACK TGV 515			COJACK TGV 503
ContactsØ3,5 mm 30533 30534	OCETA M 317			OCETA TP 805
	COJACK TGV 515	5 to 8	10 to 8	COJACK TGV 503

Contact Ø 3.5 mm							
Insertion	Pin & Socket	DAK590*					
Extraction	Pin	DAK126-12A*					
	Socket	DAK397*					





200 A MODULE - RFM POWER

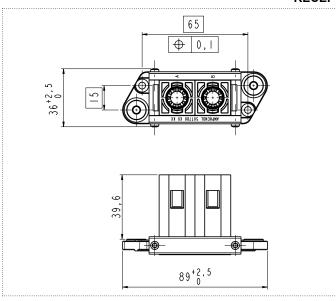
Nota:

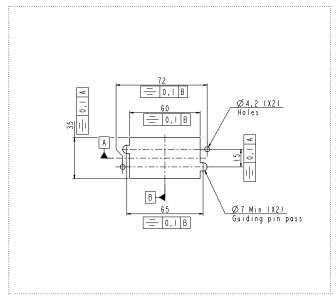
This 200 A module can be used into standard RFM modular connectors.

Plug to be equipped with pin & receptacle with sockets. Contacts must be ordered separately.

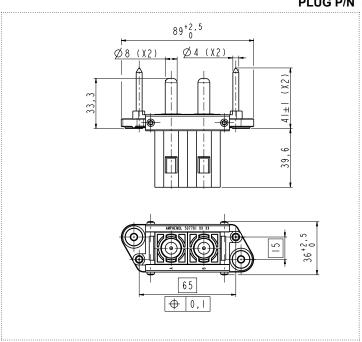
External dimension

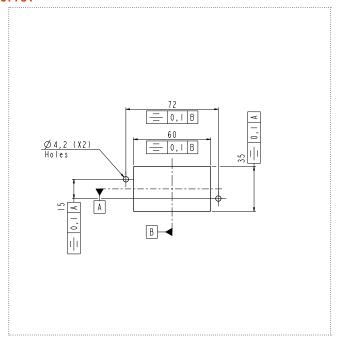
RECEPTACLE P/N 507780



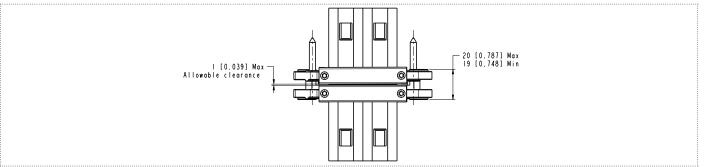


PLUG P/N 507781





MATED CONNECTORS



All dimensions are in mm

200 A MODULE CONTACTS - RFM POWER

Contacts radsok®

P/N	Designation	Current	Admissible Section	Termination
30279	Pin contact Ø 8mm		50 mm²	Crimp
30280	Socket contact	200A	AWG 0	Crimp



RADSOK® contacts features:

- Low contact engagement/separation forces.
 - Hyperbolic lamella socket contact.
- Low contact resistance.
 - Large interface area between socket & pin.
- High mating cycle durability.
 - Demonstrated survival of 20,000 mating cycles.



Tooling



- Crimping Hydraulic tool (pins and sockets contacts)

P/N: 809947

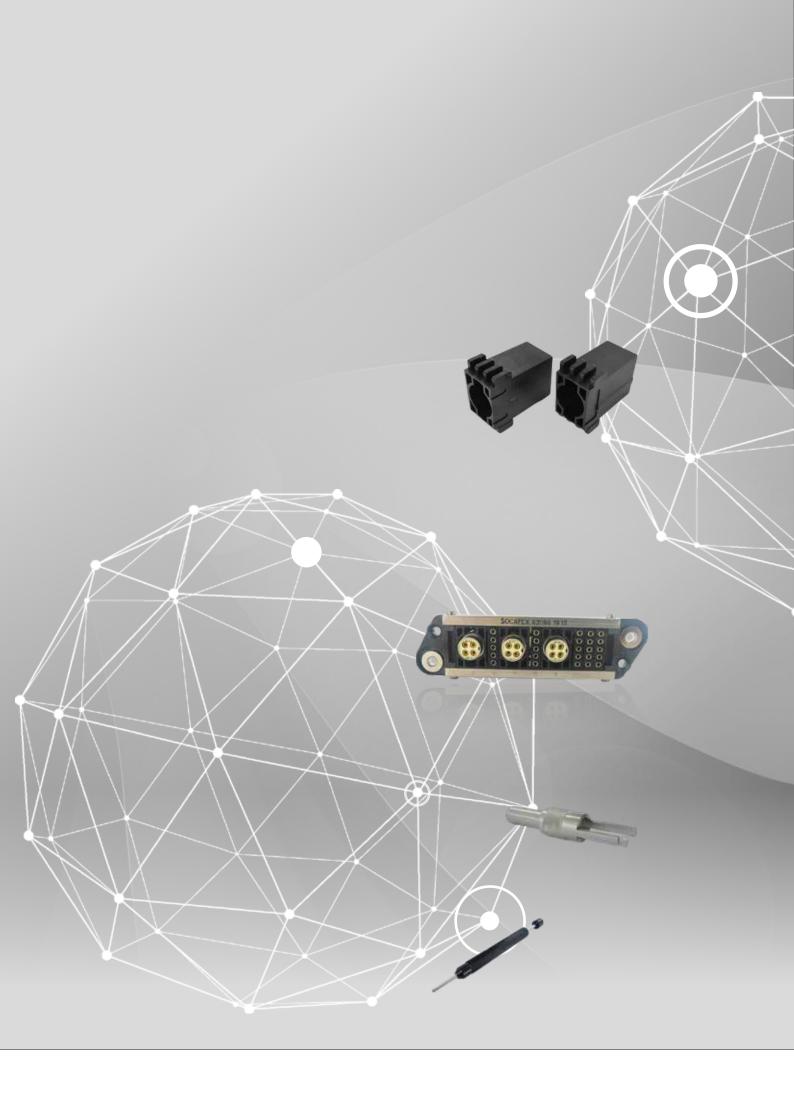
- Crimping Dies (pins and sockets contacts)

P/N: 809948



- Removal tool P/N: 809982





RFM QUADRAX



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RFM Quadrax	34
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THE RFM QUADRAX SERVES VARIOUS MARKETS, INCLUDING:



Industrial
Railway Racks
Shelters
Modular equipment
Automatic assembly machines

GENERAL CHARACTERISTICS - RFM QUADRAX

Blind mate modular floating rack connector

with Quadrax contacts for high speed applications.

8 8 8

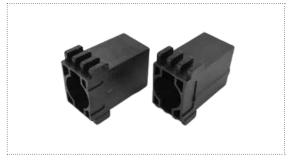
Benefits

- Plugs and receptacles with floating fittings.
- Male & female signals contacts can be mounted on both sides.
- Low insertion forces.
- Customs available on demand.
- Meets NF F 61-032 requirements: vibrations, salt spray, temperature.

MATERIALS					
Housing and modules	BLACK LEXAN				
Lateral Rails	Nickel over aluminium				
MAIN ENVIRONMENTALS CARACTERISTICS					
Temperature range	-55°C to +125°C				
Fire behavior (standard version in BLACK LEXAN*)	EN45545-2 HL3 (R22) I3-F1 NF F 16102				
Salt spray	96 hours following NFC 20711				
Chemical behavior	HCI 1N 5min; NaOH 1N 5min				

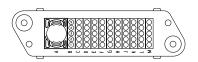
^{*} For grey lexan, please consult us.

	Quadrax module			
MAIN ELECTRICAL VALUES				
Pin diameter	Ø1.6 mm (inner contact)			
Current (nom.)	13 A			
Insulation resistance under 500 Vrms	≥ 2000 MΩ			
Contact resistance	≤ 2.5 mΩ			
DWV	AC 1500 Vrms			
Attenuation	<0.4dB@100MHz			
Crosstalk	>43dB@100MHz			

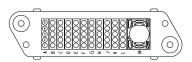


ARRANGEMENTS - RFM QUADRAX

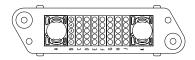
View: receptacle, connection side



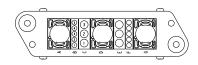
	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508600	EE			4
Receptacle	508601	55	-	-	1



	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508602	55	_		4
Receptacle	508603	33	-	-	1



	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508604	40			2
Receptacle	508605	40	-	-	2



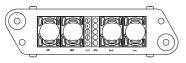
	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508606	10	6		2
Receptacle	508607	10	U	-	3

Signal contacts can be equiped on plug or receptacle. Quadrax contacts:

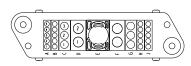
- Male on plug only
- Female on receptacle only

5 contacts modules (\emptyset 1,5 mm contacts) are only available in long version.

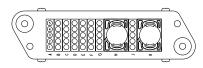
If other configuration needed, please consult us.



	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508608	10			4
Receptacle	508609	10	-	-	4



	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508610	20	6	4	4
Receptacle	508611	∠0	б	4	ļ



	P/N	Nb Cts Ø1.5	Nb Cts Ø 2.5	Nb Cts Ø 3.5	Nb Quadrax Cts
Plug	508612	40			2
Receptacle	508613	40	-	-	2

EXTERNAL DIMENSIONS - RFM QUADRAX

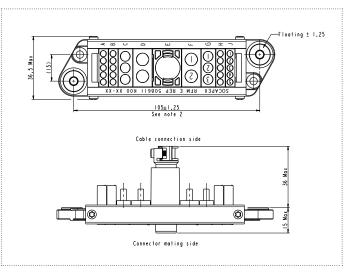
Nota:

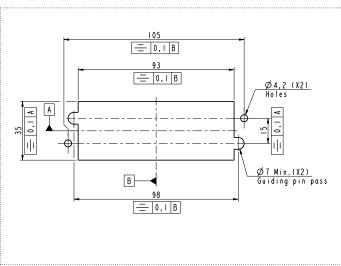
Example arrangement 508611 - 508610

External dimension

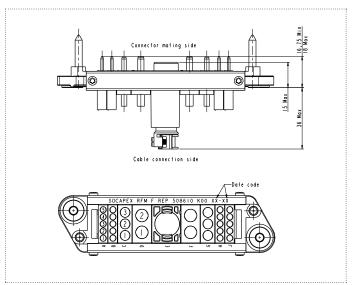
Panel cutout

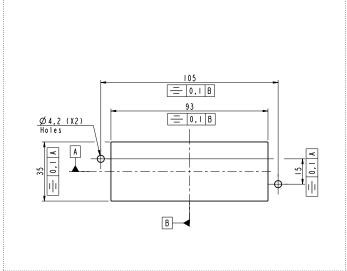
RECEPTACLE



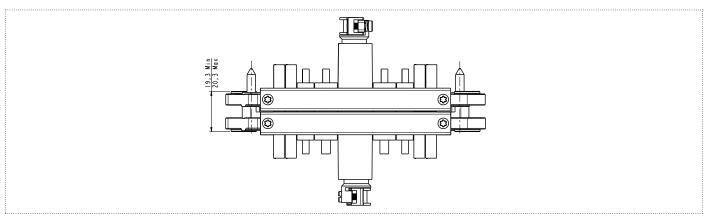


PLUG





MATED CONNECTORS



All dimensions are in mm

CONTACTS - RFM QUADRAX

Quadrax contact

Body		Inner contact			
P/N	Designation	Admissible section 0.13-0.3mm²	Admissible section 0.3-0.6mm²	Admissible section 0.6-1.5mm²	
612089	Male body (with inner pin contacts)	612083	612085	612087	
612090	Female body (with inner socket contacts)	612084	612086	612088	

Insertion / extraction tools



Extraction tool – Quadrax contact RFM ODE Q



Extraction tool – Inner contacts RFM ODE Q4

Crimping tools



Crimping tool M22520/1-01



Positioner * DMC UH2-5

For Quadrax contact crimping method, see datasheet DOC-001022-ANG.

* For sale in distribution

BUILD YOUR OWN - RFM CUSTOM POSSIBILITES

Choose the better options to fit your needs.

- Meets NF F 61-032 requirements: vibrations, salt spray, temperature
- 2 housing materials

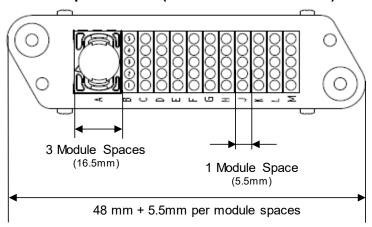


- Several configurations possibilities: up to 14 module spaces

Build the RFM following your needs.

Add the appropriate modules you need, using up to the 14 module spaces available.

Receptacle view (cable connection side)



	Modules				
	5 contacts	3 contacts	2 contacts	Quadrax	200 A
Contact diameter	Ø1.5 mm	Ø2.5 mm	Ø3.5 mm	Ø1.6 mm (inner contact)	Ø8 mm
Current (nom.)	8 A	15 A	60 A	13 A	200 A
Module space	1	1.5	2	3	4
Contact mating forces	2 N	4 N	6 N	35 N	32 N
GREY LEXAN	~	~	~	X	~
BLACK LEXAN	~	~	~	~	~

For others contact types, LEXAN material or styles please consult Amphenol SOCAPEX.

ABOUT AMPHENOL

Founded in 1932, **Amphenol** is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures, and markets electrical, electronic, and fiber optic connectors, interconnect systems, and coaxial and specialty cables.

Amphenol has a diversified presence as a leader in high growth areas of the interconnect industry and provides solutions for customers in the automotive, broadband, industrial, information technology and data communications, military and aerospace, mobile devices, and mobile networks markets.

More info on www.amphenol.com



Amphenol Military & Aerospace Operations (AMAO) has the largest and broadest selection of interconnect products in the military and aerospace markets.

More info on www.amphenolmao.com

North America



Europe			
FRANCE	Amphenol AIR LB	2 rue Clément Ader, ZAC de Wé - 08110 Carignan	+33 3 24 22 78 49
FRANCE	Amphenol SEFEE	Z.I. des Cazes – BP243 - 12402 Saint-Affrique Cedex	+33 5 65 98 11 00
GERMANY	Amphenol AIR LB GMBH	Am Kleinbahnhof 4 - 66740 Saarlouis	+49 6831 981 00
ITALY	Amphenol EUROPEAN SALES OPERATIONS	Via Barbaiana n.5 - 20020 Lainate - Milano	+39 293 254 214
UNITED KINGDOM	Amphenol INVOTEC	Unit 1-3, Hedging Lane Industrial Estate, Dosthill - Tamworth, B77 5HH	+44 1827 263 000
UNITED KINGDOM	Amphenol IONIX SYSTEMS	Prospect House, Taylor Business Park, Risley, Warrington, WA3 6HP	+44 1 942 685 200
UNITED KINGDOM	Amphenol LTD	Thanet Way, Whitstable - KENT, CT53JF	+44 1227 773 200
UNITED KINGDOM	Amphenol MARTEC	St Augustines Business Park, Swalecliffe Whitstable - Kent CT5 2QJ	+44 1227 793 733

HOTELI AMICHICA				
CANADA	Amphenol CANADA	605 Milner avenue - Toronto, Ontario	+1 416 291 0647	
USA	Amphenol AEROSPACE OPERATIONS	40-60 Delaware street - Sidney, NY 13838	+1 800 678 0141	
USA	Amphenol BORISH TECHNOLOGIES	4511 East Paris AVE - Grand Rapids, MI 49512	+1 616 554 9820	
USA	Amphenol FSI	1300 Central Expwy N, Suite 100 - Allen, TX 75013	+1 214 547 2400	
USA	Amphenol GRIFFITH ENTERPRISES	6000 East Coury Drive - Cottonwood, AZ 86326	+1 928 634 3685	
USA	Amphenol NEXUS TECHNOLOGIES	50 Sunnyside Avenue - Stamford, CT 06902	+1 203 327 7300	
USA	Amphenol PCD	72 Cherry Hill Drive - Beverly, MA. 01915	+1 978 624 3400	
USA	Amphenol PRINTED CIRCUIT	Board Technology, 91 Northeastern Boulevard - Nashua, NH 03062	+1 603 324 4500	
USA	Amphenol SV MICROWAVE	2400 Centrepark West Drive - West Palm Beach, FL	+1 561 840 1800	
USA	Amphenol TIMES MICROWAVE	358 Hall Avenue - Wallingford, CT 06492	+1 800 867 2629	

Asia			
CHINA	Amphenol PCD CO.	Building 21, 1st Liao Keng Industrial Zone, Shi Yan Street - Bao An District - Shenzhen 518108	+86 755 8173 8000/8286
INDIA	Amphenol INTERCONNECT INDIA	105 Bhosari Industrial Area - Pune 411 026	+91 20 27120363
JAPAN	Amphenol JAPAN	471-1, Deba, Ritto-City - Shiga 520 3041	+81 77 553 8501
KOREA	Amphenol DAESHIN	558 SongNae-Dong SoSa-Gu, Bucheon-city, Kyunggi-Do - 420-130	+81 32 610 3830/3845
SINGAPORE	Amphenol EAST ASIA	26/F, Railway Plaza, 39 Chatham Road South, Tsim Sha Tsui, Kowloon, Hong Kong	+65 6294 2128

Other Are	as		
AFRICA	Amphenol AFRICA	30 Impala Rd - Sandton 2146	+27 82 410 5179
ARGENTINA	Amphenol ARGENTINA	Av. Callao 930 2do piso Oficina B "Plaza" C1023 - AAP Buenos Aires	+54 11 4815 6886
AUSTRALIA	Amphenol AUSTRALIA PTY	2 Fiveways Blvd., Keysborough - Melbourne - Victoria 3173	+61 3 8796 8888
BRAZIL	Amphenol DO BRAZIL	Rua Diogo Moreira, 132, 20 andar, rooms 2001-2-3	+55 11 3815 1003
ISRAEL	Amphenol BAR-TEC	3 Hagavish Street, K fir-Barkan Bldg. East Industrial Zone - Kfar-Sava, 44102	+972 9 764 4100
MEXICO	Amphenol OPTIMIZE	Carretera Internacional Km 6.5, Col. Parque Industrial, Nogales, Sonora, C.P. 84094	+52 631 311 160
NEW ZEALAND	Amphenol PHITEK	Level 4, 2 Kingdon Street, Newmarket, Auckland 1023	+64 9 524 2984
TURKEY	Amphenol TURKEY	Sun Plaza 15 Kat: 15 Maslak Hah. Bilim Sok. No.5 - Sisli/Istanbul, 34398	+90 212 367 92 19



