

SLR

Reinforced version of the SLX



MAIN CHARACTERISTICS

Strong points:

- High shock resistance (metallic shells).
- High vibration resistance (one thread lock, low slope).
- High salt spray and chemical agents resistance (specific corrosion resistant shells plating).
- IP 67, when mated due to receptacle and panel gaskets as well as one piece backshell with cable clamp and sealing gland backshell.
- Metallic protective caps for plug and receptacle with seal.
- Working temperature: -55°C/+125°C.
- 5 positioning keys for Plug / Receptacle.
- Coding by the user: 12 coding possibilities (from A to M) by insert rotation. (without any specific tool).
- Crimp removable gold plated machined contacts
- Closed entry female contacts.
- 3 arrangements: 55 size 16 contacts, 37 size 12 contacts, 37 size 16 contacts.

For other arrangement, please consult us.

DESCRIPTION

SLR series connectors are derived from the standard SLX and have the particularity to be well adapted to applications in harsh environments (Shocks, Vibrations, Humidity) like shelters, off shore or building sites activities

Coding by user allows a diminution of the number of references to manage.

General characteristics:

CHARACTERISTIC	VALUE	NORME
Watertightness	IP67 connected	NFEN 60 529
Physical shock	IK06 / 1.5 kg mass dropped from a 40 cm height	NFEN 50 102
Fall test	Fall Height: 1 meter	NFC 93 400 - Test 7b
Vibrations	10 to 60 Hz, amplitude 0.075 mm 60 to 100 Hz, speed 25.4 mm/sec 100 to 600 Hz, acceleration 5G no cut $\geq 1\mu s$	NFC 93 400 - Test 6b
Cable clamp tensile strength	40 kg in axis	NFC 93 400 - Test 17c
Acceptable cables diameter:	20 to 35 mm	
Humidity	21 days - 43°C to humidity 98%	NFC 93 400 - Test 11c
Working temperature	-55°C/+125°C	NFC 93 400 - Test 11d
Durability	≥ 100 mating cycles	NFC 93 400 - Test 9a
Proof voltage	≥ 3000 V	NFC 93 400 - Test 4a
Insert resistance	≥ 100 M Ω	NFC 93400 - Test 3a
Contact resistance	≤ 2 m Ω	NFC 93400 - Test 2a-2b

Note: Reference document NFF 61-030
UL 1977 approved

APPLICATIONS

- Shelters
- Power
- Check-Control
- Building sites
- Off shore

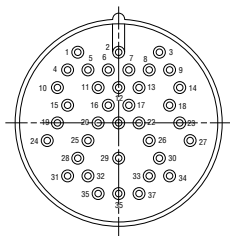
SLR



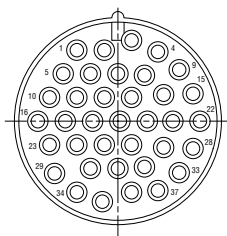
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Available arrangements:

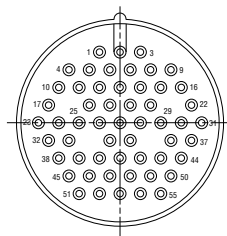
Pin connector front face view, A coding.



537S
37 size 16 contacts

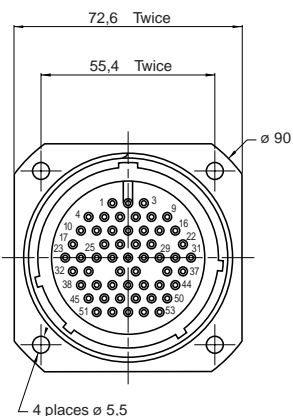
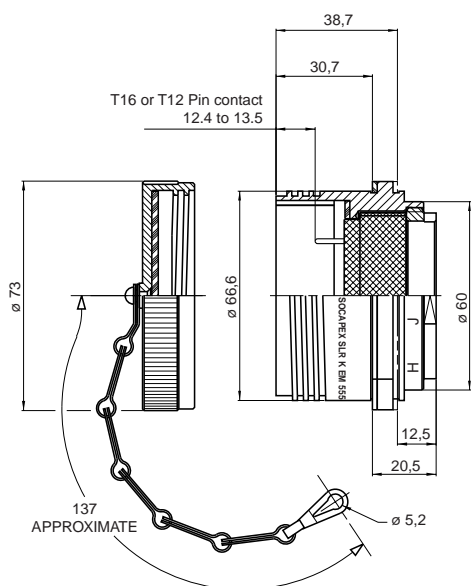


537D
37 size 12 contacts



555
55 size 16 contacts

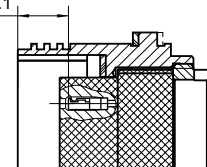
Dimensions of the connectors:



- **Receptacle:**
Possibility to mount the receptacle at the front or the rear of the panel by inverting the panel gasket.

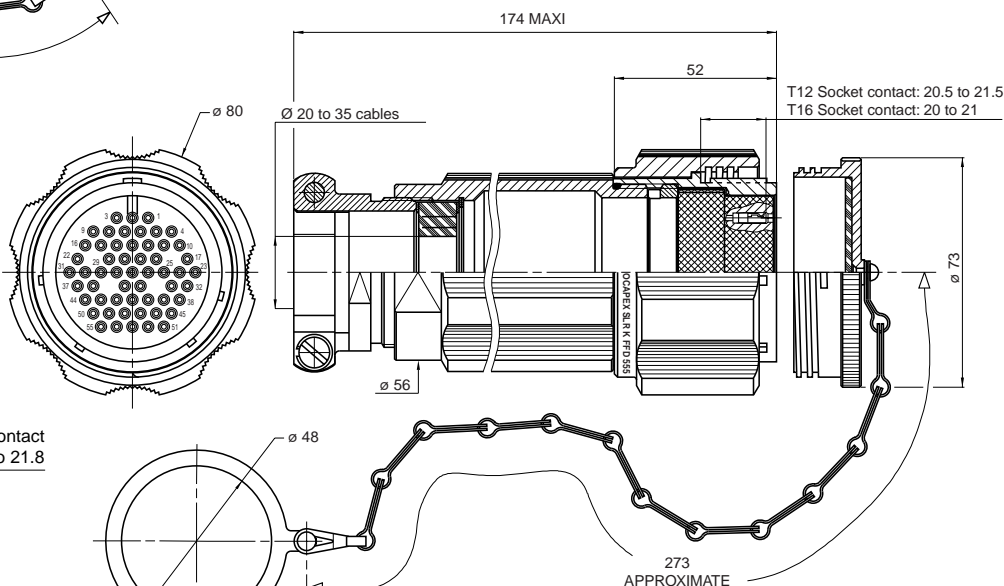
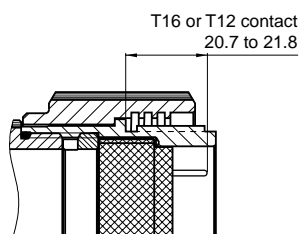
- **Positionning of socket contact**

T12 contact: 12.6 to 13.6
T16 contact: 13.1 to 14.1

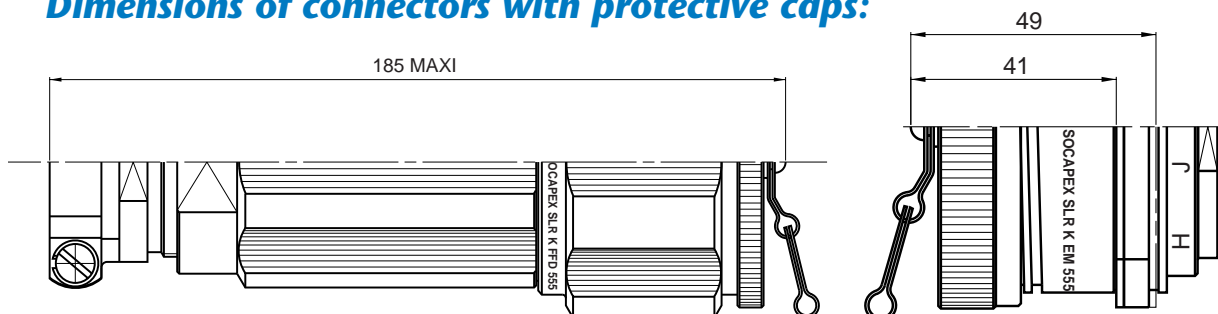


- **Plug:**

- **Positionning of pin contact**



Dimensions of connectors with protective caps:



Contacts:

2 contact types: size 16 and size 12

Contact size	16	12
Nominal current	13 A	25 A
Contact resistance	$\leq 2 \text{ m}\Omega$	$\leq 2 \text{ m}\Omega$
Contact retention in the insert	$\geq 40 \text{ N}$	$\geq 45 \text{ N}$
Part-number for one pin contact*	800660	21713
Part-number for one socket contact*	800664	21728

* Minimum order quantity: 100 contacts



Permissible wire:

Contact Size	Crimp Barrel		Pin Contact (mm)	Wire Gauge (AWG)	Section mm ²		Diameter over conductor (mm)		Maxi Diameter Over Sleeving (mm)
	Inside Diameter (mm)	Depth (mm)			mini	maxi	mini	maxi	
12	2.5	7.5	3	14→12	1.8	3.3	1.7	2.45	4.2
16	1.95	6.4	1.6	20→14	0.6*	1.91	1	1.9	2.8

* The use of a 800629 reducing sleeve is necessary for cable section less than 0.60 mm² for size 16 contacts

Acceptable cable diameter:

20 to 35 mm.

Cabling tools:

- Crimping pliers **809857** (M22520/1-01)
- Controlling gauge **809907** (M22520/3-1)
- Locator **21770** (TH 397 Daniels)

(Set the selector in position 4)



Screwdriver type

Contacts	Insertion Tool		Removal Tool
	Screwdriver type	Pliers type	
Size 12: Pin	141900 (metal)	809735	21746
Size 12: Socket	141900 (metal)	809735	21745
Size 16: Pin	48680 (plastic)	809734	809731
Size 16: Socket	48680 (plastic)	809734	809732



Pliers type

Cabling process:

• Crimping process

Place the locator in the pliers.

Choose the selector number on the locator according to the contact size to crimp.

Strip the wire end (7.5mm for size 12 contact / 6mm for size 16 contact)

Insert the wire in the contact crimp barrel of and check through the inspection hole of the contact that wire is wellplaced.

Place the contact with the wire into the pliers until the stop.

Completely close the tool and after, let it open itself.

Visually check if crimping is correct and by the inspection hole of the contact if the wire is well-placed in the crimp barrel.

• Contact insertion

Always put insert into shell before beginning the contact insertion.

Insert the wired contact in the groove of the tool, taking care that the extremity of the tool touches the shoulder of the contact.

Insert the contact in its cavity from wiring side and steadily push the tool along the axis of the cavity until the contact locks home.

Carefully withdraw the tool , applying a forward pressure on the wire.

Pull on the wire to check that the contact is correctly locked.

• Contact removal

Insert the tool from the mating side and push it along the contact axis until contact unlocks.

Pull the contact out from the rear of the connector.

IMPORTANT: If you do not use some cavities, always insert a contact to ensure the contact retention and the non-mating for the case when the coding is different between the plug and the receptacle.
For good contact retention, do not remove it more than three times.

How to order:

Connectors

SLR	F	F	DR	5	37D	LC
Blank: Connector without protective cap K: Connector and protective cap Kit						
F: Plug E: Receptacle						
F: Socket contact insert M: Pin contact insert						
DR: Straight Backshell (Plug only) Blank: Receptacle						
Shell size: 5 for 50						
Arrangement: 37S: 37 size 16 contacts 37D: 37 size 12 contacts 55: 55 size 16 contacts						
LC: Connector sold without contact. Contacts to be ordered separately (<i>see page 3</i>) Blank: Connector sold with contacts.						

Note: Inserts are not assembled into shells so that the user chooses among the 12 coding possibilities.

Protective caps

SLR B	F	5
F: Plug protective cap E: Receptacle protective cap		
Shell size: 50		

Do not hesitate to contact us for further information

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