



# SL 61

Industrial Circular Connectors

**NEW**  
Cadmium-free versions  
(nickel plating)

- Closed entry female contacts
- Inserts moulded in Alkyde
- Trapezoidal thread screw-locking
- Two parts backshell ensuring simple wiring and maintenance
- Adaptable capacity cable clamp
- Gold plated turned contacts
- Reinforced locking ring
- Solder contacts
- Please contact us for other contact terminations
  - for crimping
  - for soldering with earth protection
- Size 40 one piece backshell  
(please consult us)
- Working temperature:
  - 40°C / + 85°C
- Current capability:
  - 7.5, 10, 25 and 50 Amps
- Operating voltage:
  - to 600 Volts
- Cadmium-free versions (Ni)
- UL recognition n° E160967(01) for 419AR layout

- Large selection of insert arrangements
- Robust and reliable
- Stock items



## DESCRIPTION

Principally aimed at I/O applications, the SL61 connectors are available in 4 types of housing (10, 20, 30 and 40) and 26 arrangements from 2 to 61 mixed solder contacts. They are available in the following configurations:

- Plugs
- Receptacles
- Line mount receptacles
- Receptacles with locking ring

Connectors are made of aluminium alloy which provides them excellent reliability and robustness.

When application requires greater performances, the sealing can be improved by the use of a sprayproofing sleeve.

*Robustness  
and reliability*

## APPLICATIONS

- Automation
- Instrumentation
- Robotics
- Power distribution
- Transport
- Entertainment (brand-lights)



## Contact arrangements

①	13 U	14 V	17 P	22 B	23 C	23 AL	25 D	25 S	27 E	29 AE	212 AF
② (Vrms)	280	225	150	500	440	540	380	380	380	280	280
③ (Vrms)	1400	1400	1050	2100	1400	1750	1400	1400	1400	1400	1050
①	222 P	32 F	33 G	34 H	315 K	319 L	37 Y	39 J	337 P		
② (Vrms)	150	525	600	500	355	400	480	450	175		
③ (Vrms)	1050	1750	1750	1750	1750	1750	1750	1750	1050		
①	443 AP	461 P	48 M	419 AR	426 P	439 R					
② (Vrms)	300	110	420	400	380	280					
③ (Vrms)	1750	1050	2500	1750	1750	1750					

- ① Contact arrangement  
② Working voltage  
③ Test voltage at sea level

Nominal current	Contact resistance	Maximum permissible wire dia.
• 7,5 A	≤ 5 m Ω	0.75 mm <sup>2</sup>
○ 10 A	≤ 2 m Ω	1.75 mm <sup>2</sup>
● 25 A	≤ 2 m Ω	5.1 mm <sup>2</sup>
⊕ 50 A	≤ 2 m Ω	13 mm <sup>2</sup>

REMARK: the second and the third digit of the contact arrangements (if the third exists) indicate the number of contacts in the arrangement.  
Ex. : 426P = 26 contacts.

## Straight or right-angle backshell

Connector size	Backshell reference					
	black (non conductive)	straight nickel (conductive)	green cadmium (conductive)	black (non conductive)	right-angle nickel (conductive)	green cadmium (conductive)
10	47377N	47377NI	21458N	47381N	47381NI	21462N
20	47378N	47378NI	21459N	47382N	47382NI	21463N
30	47379N	47379NI	21460N	47383N	47383NI	21464N
40	47380N	47380NI	21461N	47384N	47384NI	21465N

- Straight or right-angle backshells are delivered with different clamping pads.
- Green backshells (conductive finish) are delivered with metallised clamping pads.

## Accessories

### Plug and receptacle protection caps:

SLB	F	M	3B
F: Plug E: Receptacle			
M: Pin connector F: Socket connector			
Plug and receptacle: none Line mount receptacle: R			
Size 1B: 10    3B: 30 2B: 20    4B: 40			



### Receptacle with locking ring protection caps:

BF	F	3B
M: Pin connector F: Socket connector		
Size 1B: 10    3B: 30 2B: 20    4B: 40		



### Sealing sleeve:

Connector	Size	Ref.
Straight	10	43458
Right-angle	10	43473
Straight	20	43456
or	30	44666
Right-angle	40	43457



for plug or line mount receptacle

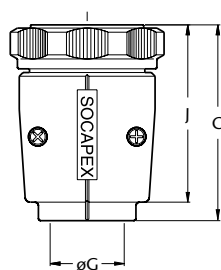
### Adaptator for flexible conduit and PG:

	Connector size	PG thread
SL RF 209N	20	9
SL RF 211N	20	11
SL RF 313N	30	13
SL RF 316N	30	16
SL RF 416N	40	16
SL RF 421N	40	21
SL RF 429N	40	29

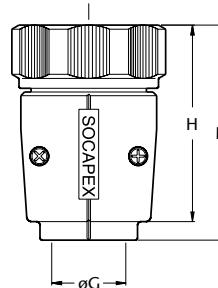


## Straight plug

Straight female plug

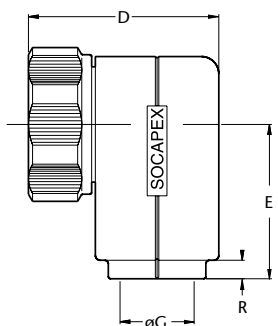


Straight male plug

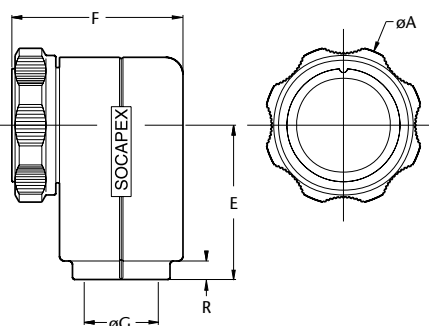


## Right angle plug

Right-angle male plug



Right-angle female plug

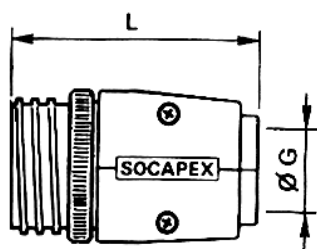


size	Ø A - 0,2 (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)			H (mm)	J (mm)	K (mm)	L (mm)	M (mm)	N (mm)	R (mm)	S (mm)	T (mm)	W (mm)	Y (mm)
10	27.5	61.9	52.9	47.9	45.5	38.9	5-7	7-9		57.4	48.4	21	53.5	57.9	24	4.5	16.5	3.2	19	25
20	36.5	66.5	59.8	55.5	51.5	48.8	6-8	9-11	12-14	62	55.3	28.1	61	59.8	32	4.5	25.5	3.5	24	31
30	51.5	88.5	80.8	68.5	55.5	60.8	10-12	13-16	17-20	82	74.3	42.2	82	80.8	45	6.5	35.5	3.5	34	46
40	64.5	86.5	78.8	76.5	62.5	68.8	14-18	19-23	24-30	79	71.3	52.2	80	79.6	54	7.5	47	3.5	41	56

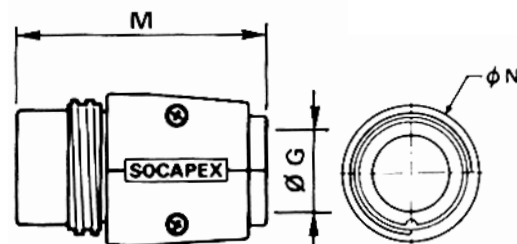
G: flanges equipped with different clamping pads delivered with the backshells.

## In-line receptacle

In-line male receptacle

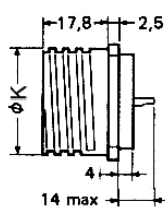


In-line female receptacle

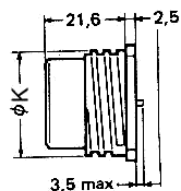


## Receptacle

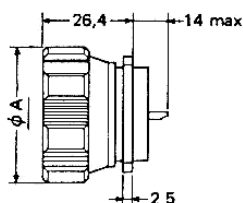
Male receptacle



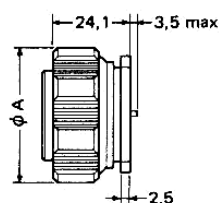
Female receptacle



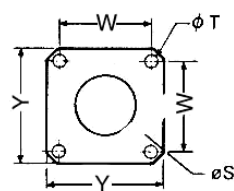
Male receptacle with locking ring



Female receptacle with locking ring



Square flange of receptacle



**Plug and line mount receptacle** (Bright cadmium or nickel plated)

SL series	SL	B	F	R	426 P	-
Plug or line mount receptacle						
Type of contact: Male M Female F						
Plug: none Line mount receptacle: R						
Contact arrangement (see page 2)						
Add "NI" for cadmium-free versions (nickel)						

**Plug and backshell set**

SL series	SL	F	M	D	426 P	-
F: plug or line mount receptacle						
Type of contact: Male M Female F						
D: plug + straight backshell DR: line mount receptacle + backshell C: plug + right angle backshell						
Contact arrangement (see page 2)						
Add "NI" for cadmium-free versions (nickel)						

**Receptacle and receptacle with locking ring**  
(Bright cadmium or nickel plated)

SL series	SL	E	M	-	426 P	-	-
Receptacle or receptacle with locking ring: E							
Type of contact: Male M Female F							
Receptacle: none Receptacle with locking ring: E							
Contact arrangement (see page 2)							
Add "MA" for tin plated retention ring (grounding)							
Add "NI" for cadmium-free versions (nickel)							

Comment: Pannel gasket deliver with the receptacle

Do not hesitate to contact us for further information

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