STEELE CONNECT

The Ingenious Connection

PCU SERIES

ELECTRICAL CONNECTORS

DESIGN AND MANUFACTURE HIGH POWER INTERCONNECT SYSTEMS PCU SERIES FOR SEVERE ENVIRONMENT

PCU SERIES

EASY MATING & UNMATING SYSTEM

CONFIGURATION ADAPTED TO YOUR NEEDS

VISUAL POLARIZATION BY COLOR CODING

OPERATING TEMPERATURE -55°C to 155 °C

COMPETENCY

Steele Connect can provide **integrated solution adapted to your applications,** mastery of special processes and subcontracting through French industrial manufacturing according to ISO 9001 & EN 9100 standards.

ENGAGEMENTS

Ensure daily contact to **match all relevant solutions to your needs for innovative connectors.**

According to MIL-DTL-38999 type connectors with compact design, offering extended safety power range and signal contacts for data transfer communication

SERVICES

Customer satisfaction oriented. We propose the study & development of interconnect systems for all sectors.

For a better adaptation, we manufacture according to specifications, from prototyping to small, medium and mass production. We insure product qualification & maintenance during product life cycle.

INCREASED PERFORMANCES THROUGH INNOVATION

AN INNOVATIVE SOLUTION

- Current rating of Ultrawatts® contacts are 20% higher than existing contacts technologies of the same size (see De-rating curve)
- Increased power density allows for use of one shell size smaller in most applications
- Saves up to 20 % space, saving valuable weight
- Small interface footprint with weight & space saving for all applications
- Key coding with corresponding color bands prevent mis-mating
- Quick Push locking & ¼ turn Pull Exit system
- Ideal for harsh environments

PERFORMANCE AND SAFETY OVERVIEW

- Current Rating: up to 1000 A
- MIL-DTL-38999 standard panel cutting interface
- Contacts with low insertion and extraction force
- Reinforced security: 1000V AC / 1500V DC
- IP2X Finger proof protection
- IP67 Waterproof
- Mating cycles: > 500

PRODUCT CONFIGURATION AVAIBILITY

- 4 shell sizes: 300 / 400 / 600 and 700
- Multiple insert configurations
- 7 contact sizes
- Shells in aluminum, stainless steel, and plastic material

PERFORMANCE	MODULARITY	SAFETY
FROM 50 A to 1000 A	300, 400, 600 & 700	IP2X
EXTENDED PRODUCT RANGE	4 SHELL SIZES MODEL	FINGER PROOF PROTECTION

TECHNICAL SPECIFICATIONS

ELECTRICAL PERFORMANCES*

SINGLE POLE CONFIGURATION						
Connector Size	Contact Size	Maximum Continuous Current Rating (EIA-364-70)	Copper Contact Resistance (EIA-364-06)	Cable cross section (mm^2) - (AWG)	Max operating Voltage (VAC / VDC @ Sea Level)	DWV (VAC RMS)
PCU Hybrid	A	10 A	≤ 3 mΩ	0,5 mm^2 to 2,5 mm^2 AWG 20 to 13	500 / 600	1500
PCU Hybrid	B	120 A	0,10 mΩ/mm	10 mm^2 - AWG 7	500 / 600	1500
PCU Hybrid	C	160 A	0,05 mΩ/mm	16 mm^2 - AWG 5	500 / 600	1500
PCU Hybrid	D	265 A	0,03 mΩ/mm	35 mm^2 - AWG 2	500 / 600	1500
PCU 300	E	300 A	0,03 mΩ/mm	50 mm^2 - AWG 2/0	500 / 600	1500
PCU 400	F	400 A	0,03 mΩ/mm	70 mm^2 - AWG 2/0	800 / 1000	2600
PCU 600	G	600 A	0,02 mΩ/mm	120 mm^2 - AWG 250	1000 / 1500	4500
PCU 700	H	1000 A	0,02 mΩ/mm	240 mm^2 - AWG 500	1000 / 1500	4500

MI 360° screen for straight or right-angle EMC back shell in accordance with EIA-364-83
Shell to back shell resistance: < 5.00mΩ
Shell to shell resistance: < 2.50mΩ

MECHANICAL & ENVIRONMENTAL PERFORMANCES*

Connector Size	Contact Size	Standard mating Cycles	Contact Insertion Force (N)*	Contact Extraction Force (N)*
PCU Hybrid	A	≥ 500	5	5
PCU Hybrid	B	500	10	10
PCU Hybrid	C	500	15	15
PCU Hybrid	D	500	20	20
PCU 300	E	500	50	60
PCU 400	F	500	50	60
PCU 600	G	500	70	70
PCU 700	H	500	120	120

*Based upon single power contact configuration

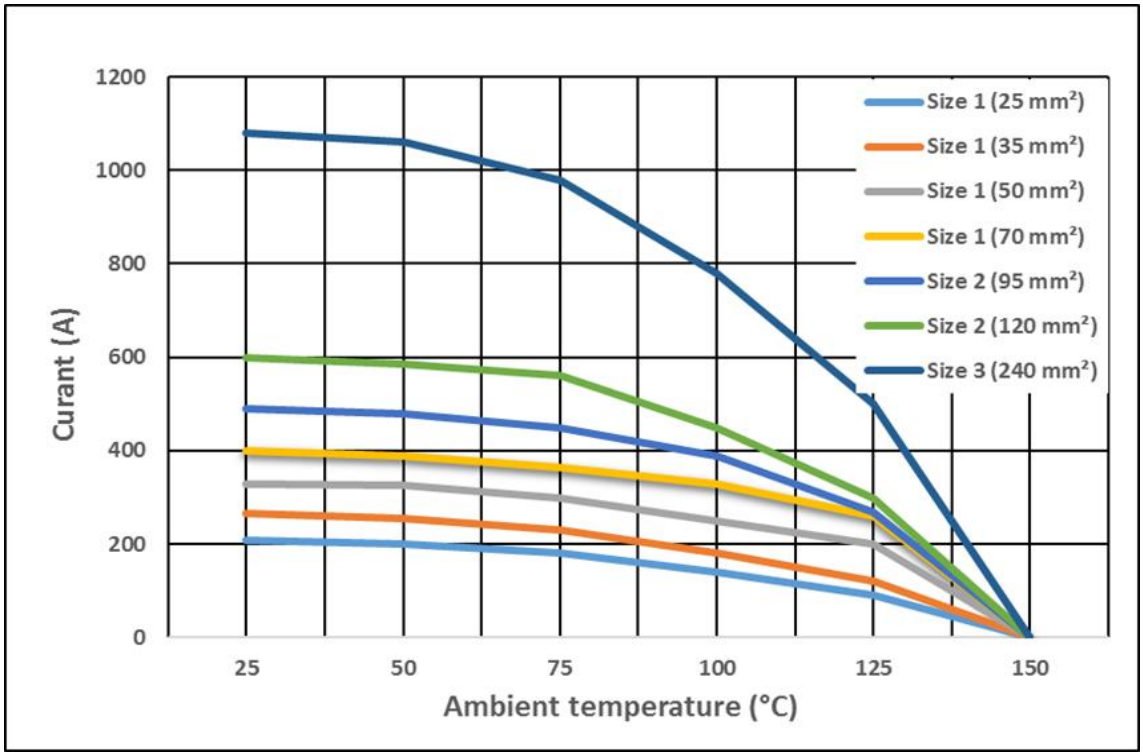
- Endurance, mating & unmating cycles according with EIA-364-09
- Shock Test condition according with EIA-364-27
- Vibration according with EIA-364-28 Test condition letter E (0,2 g2/Hz), duration 1.5 hours
- Salt spray according with ISO 9227

Aluminum shell / hard anodized	500 hours
Aluminum shell / zinc nickel	500 hours
Stainless steel	>750 hours

- Fire and smoke according to EN 45545-2 for railway application (option)
- Sealing (mated / unmated): IP67, 1hr at 2 meters immersion and waterproof against high pressure steam jet Cleaning
- Temperature range -55°C to +155°C (optional 260°C)
- Fluid resistance: AS Per MIL-DTL 38999

STEELE CONNECT PCU SERIES

De-rating curve Steele PCU connector (EN 60512-5-2)



De-rating curve is according to EN 60512-5-2 tested with cables 1.5-meter length.
Please contact us, should you require a derating curve for an alternate cable length.

CONTACT SIZES

Contact	Signal cable cross section (mm²) - AWG
Size A	Between 0.5 mm² to 2.5 mm² - AWG 20 to 13

Contact		Power cable cross section (mm²) - AWG													
	AWG	12	10	8	7	5	4	2	0	2/0	3/0	250	300	350	500
	mm²	4	6	8	10	16	25	35	50	70	95	120	150	185	240
Size B		O	O	O	X										
Size C				O	O	X									
Size D						O	O	X							
Size E								O	X						
Size F									O	X					
Size G										O	O	X			
Size H												O	O	O	X

X: Standard
O: Optional with cable adaptor

USUAL CABLE AND CONNECTOR CONFIGURATION

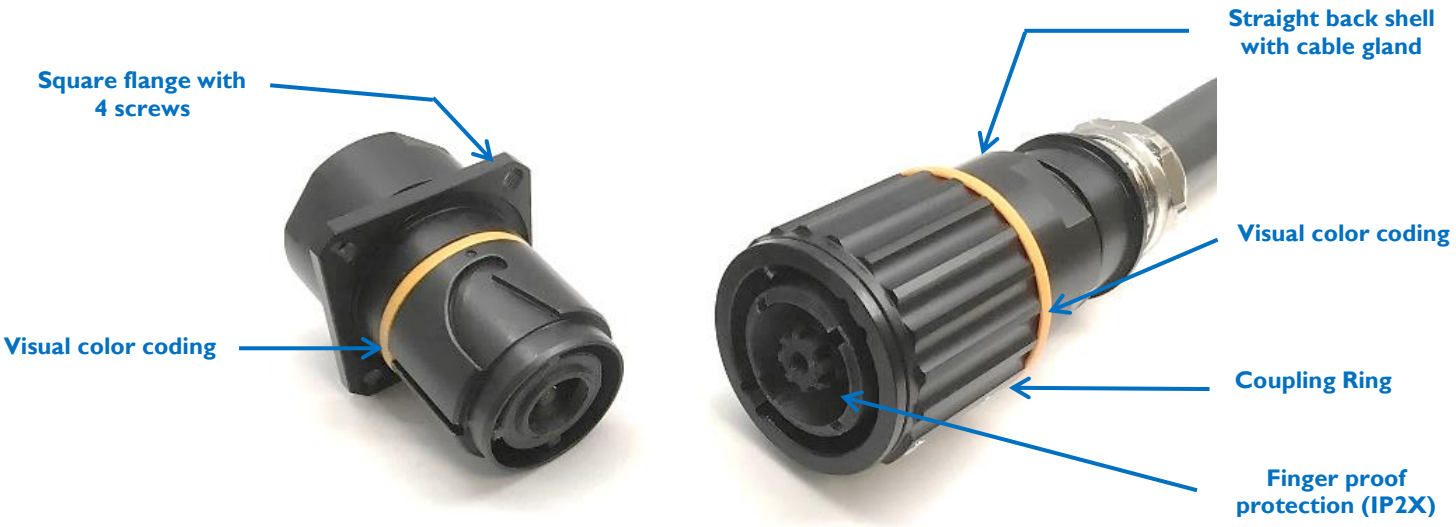
Cable*			Connector Size* (Single pole configuration)			
			300	400	600	700
10 mm² (cross section) AWG 7	Conductor Ø (mm)	4,59	X			
	Maximum Current (A) @ 30°C	120A				
16 mm² (cross section) AWG 5	Conductor Ø (mm)	6,15	X			
	Maximum Current (A) @ 30°C	160 A				
25 mm² (cross section) AWG 4	Conductor Ø (mm)	7,25	X			
	Maximum Current (A) @ 30°C	210 A				
35 mm² (cross section) AWG 2	Conductor Ø (mm)	8,68	X	X		
	Maximum Current (A) @ 30°C	265A				
50 mm² (cross section) AWG 0	Conductor Ø (mm)	10,15	X	X		
	Maximum Current (A) @ 30°C	330A				
70 mm² (cross section) AWG 2/0	Conductor Ø (mm)	12,32	Optional **	X	X	
	Maximum Current (A) @ 30°C	420A				
95 mm² (cross section) AWG 3/0	Conductor Ø (mm)	13,5		Optional **	X	
	Maximum Current (A) @ 30°C	500A				
120 mm² (cross section) AWG 250	Conductor Ø (mm)	15,84			X	X
	Maximum Current (A) @ 30°C	600A				
150 mm² (cross section) AWG 300	Conductor Ø (mm)	18			Optional **	X
	Maximum Current (A) @ 30°C	670A				
185 mm² (cross section) AWG 350	Conductor Ø (mm)	20,6			Optional **	X
	Maximum Current (A) @ 30°C	770A				
240 mm² (cross section) AWG 500	Conductor Ø (mm)	22			Optional **	X
	Maximum Current (A) @ 30°C	1000A				

* For other cables sizes or other configurations, please contact us or our local representative.

** The maximum performance of the connector & cable depends on the cable brands must be validated via testing operation on demand.

CONNECTOR DESCRIPTION

RECEPTACLE **PLUG**



CONNECTOR TYPE

SINGLE POLE CONFIGURATION

PANEL MOUNTED CUTTING INTERFACE

According to MIL-DTL-38999 Panel mounted interface

PCU 300 Connector

Standard Panel mounted interface

SIZE 15 Back Panel (Steele PCU)

Size 15 Jam-Nut (MIL-38999)

Size 15 Front Panel (Steele PCU)

STEELE PCU 300

Optional* configuration of PCU 300 according to the MIL 38999 Panel mounted interface:

- Jam Nut or back and front shells :
  Size 15
  Size 17

Optional configuration of PCU series

SIZE 15 Max

(Back panel)

Size 15 Min

(Back Panel)

Size 15 Jam Nut

Size 15 Min

(Front panel)

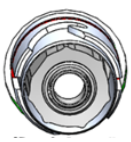
STEELE PCU 300

PCU 400 Connector

Size 17 Max

Back Panel

Size 17 Min



Back Panel

Size 17 Jam-Nut

Size 17 Min

(Front Panel)

STEELE PCU 400

Optional* configuration of PCU 400 according to the MIL 38999 Panel mounted interface:

- Jam-Nut receptacle shell - Size 17 or Size 21
- 4 Screws receptacle shell for Back or Front mounted - Size 21

PCU 600 Connector

Size 21 Max

(Back Panel)

Size 21 Min

(Back Panel)

Size 21 Jam-Nut

Size 23

Front Panel

STEELE PCU 600

Optional* configuration of PCU 600 according to the MIL 38999 Panel mounted interface:

- Jam-Nut receptacle shell - Size 23 or Size 25
- 4 Screws receptacle shell for Back or Front mounted - Size 23 or Size 25

PCU 700 Connector

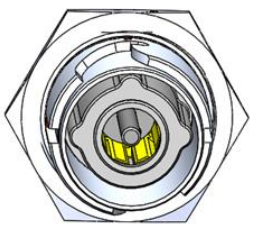
Size 25 Max

(Back Panel)

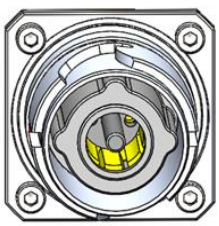
Size 25 Min

(Back Panel)

Size 25 Jam-Nut



Size 25

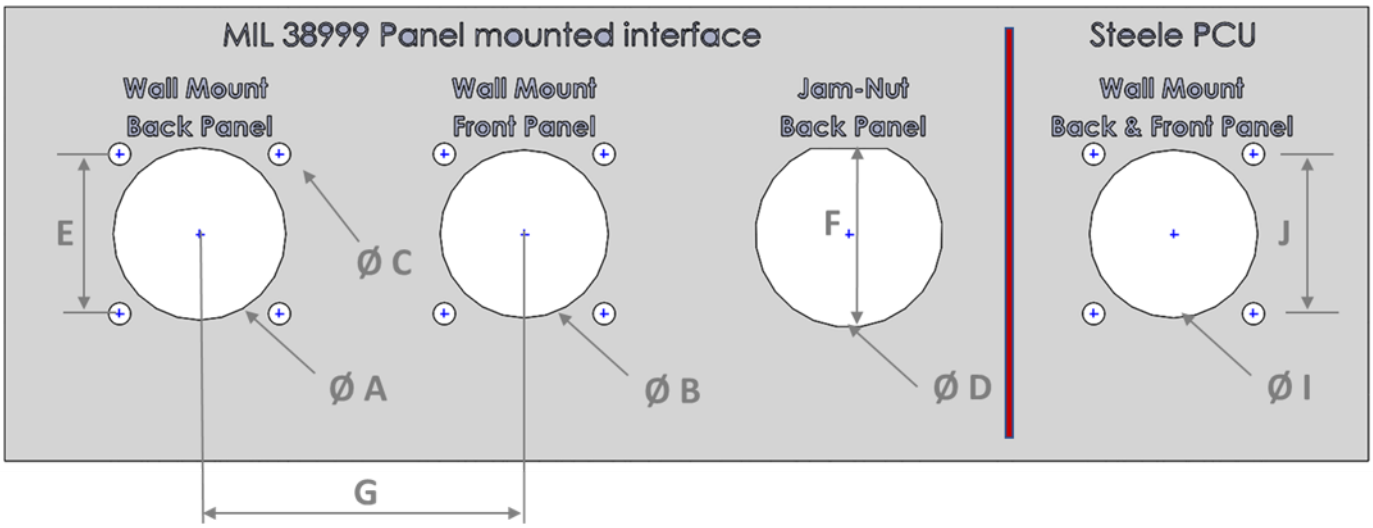


Front Panel

STEELE PCU 700

Note*
Specific receptacle shell. For additional information, please contact us or our local representative

PANEL CUTTING INTERFACE TABLE



MIL 38999 Panel interface (mm)								Steele PCU Specific interface Back & Front Panel (mm)	
Connector type	Ø A "Back Panel"	Ø B "Front Panel"	Ø C	Ø D	E	F	G	I	J
Size 15	25.91	26.59	3.40	28.83	24.61	27.56	48	28.83	26.80
Size 17	29.46	30.96	3.40	32.00	26.97	30.73	50	/	/
Size 21	34.25	34.25	3.40	38.35	31.75	37.08	58	/	/
Size 23	38.43	38.43	4.50	41.53	34.93	40.26	58	42,60	40
Size 25	41.43	41.43	4.50	44.70	38.10	43.43	62	47,10	44

Connector type	Standard configuration, panel interface (mm)				Optional* (according with Mil 38999)		
	Back Panel	Front Panel	Jam-Nut Back Panel	G	Back Panel	Front Panel	Jam-Nut Back Panel
PCU 300	Size 15 (Steele PCU)	Size 15 (Steele PCU)	Size 15 (Mil 38999)	48	Size 17 (Ø A & B)	Size 15 & 17 (Ø A & B)	Size 17
PCU 400	Size 17 (Mil 38999 / Ø A & B)	Size 17 (Mil 38999 / Ø A & B)	Size 15 (Mil 38999)	50	Size 21 (Ø A & B)	Size 21 (Ø A & B)	Size 17 & 21
PCU 600	Size 21 (Mil 38999 / Ø A & B)	Size 23 (PCU Specific)	Size 21 (Mil 38999)	58	Size 23 & 25 (Ø A & B)	/	Size 23 & 25
PCU 700	Size 25 (Mil 38999 / Ø A & B)	Size 25 (Steele PCU)	Size 25 (Mil 38999)	62	/	/	/

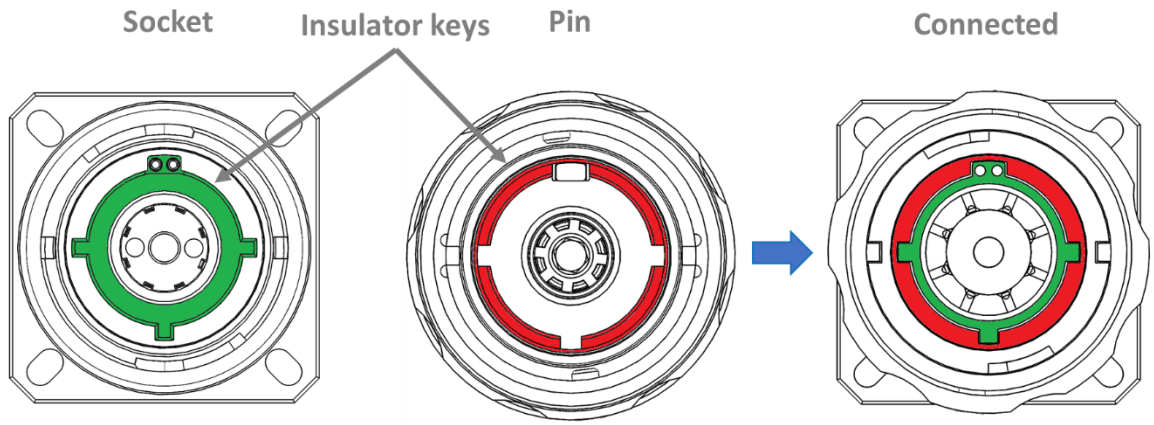
Note*
Specific receptacle shell. For additional information, please contact us or our local representative.

CONNECTOR POLARIZATION CONCEPT

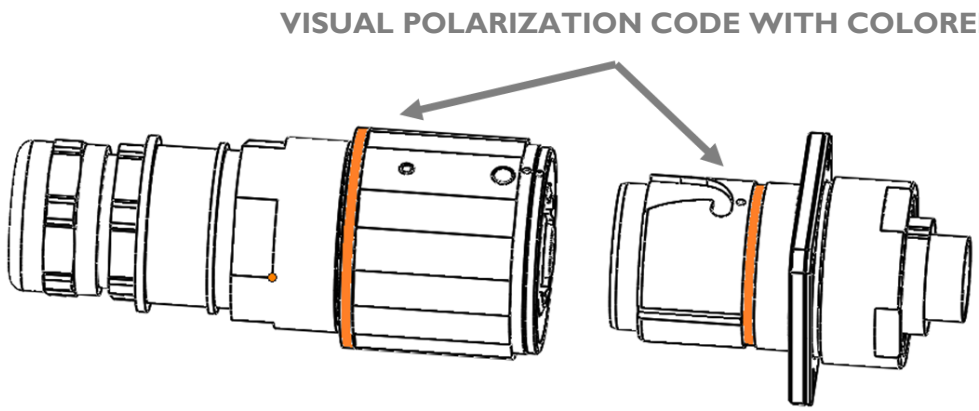
The connector polarization is realized during the cabling operation process. With same parts, it is possible to setup 5 key positions. A visual coding can be added to help the end user to easily connect the right receptacle to the associated plug.

Color	Coding
No Coding	X
Red	R
Yellow	Y
Green	G
Blue	B
Orange	O

Connector mechanical coding key



Connector visual coding



STEELE-PCU-X00-XXXXX-XXX-XXXX-X

Coding Color

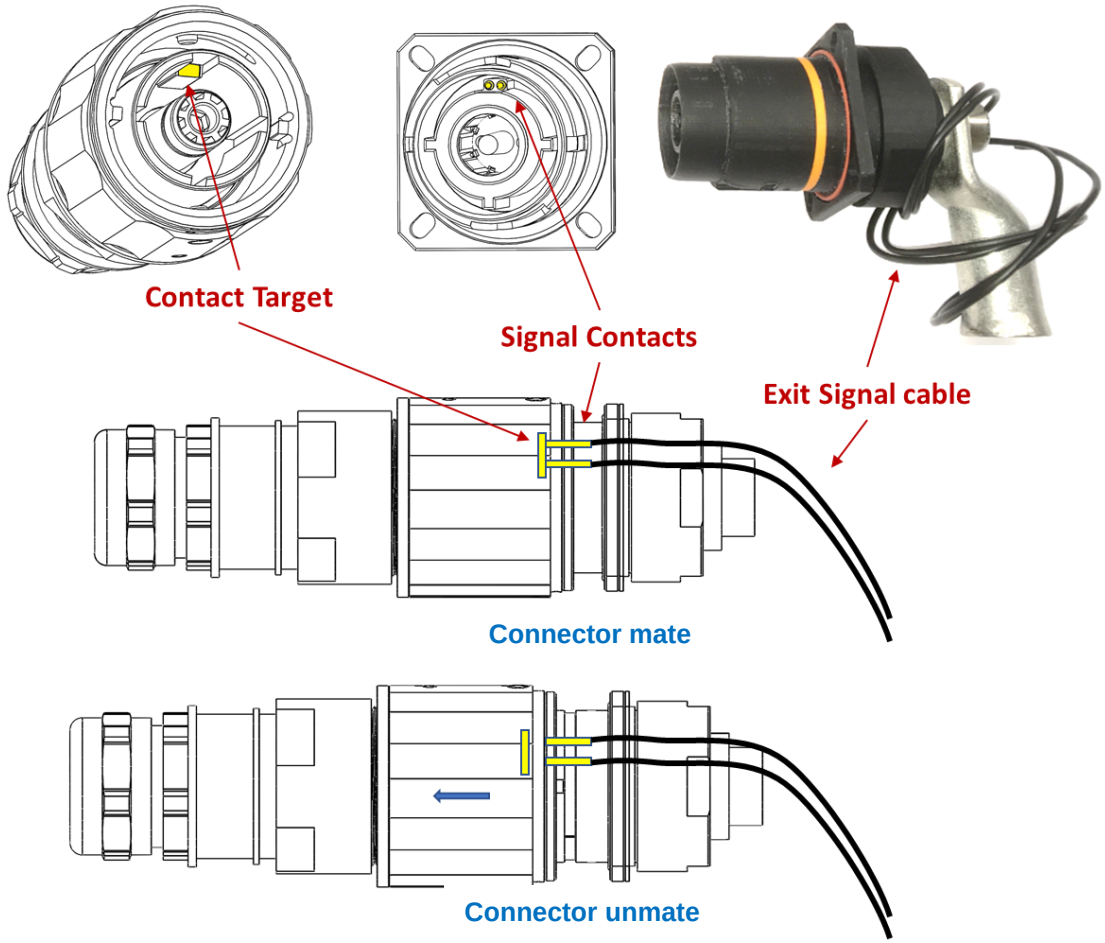
PILOT CONTACT (OPTION)

For special (high voltage) applications, a small power line monitoring system can be integrated into the connector. If someone inadvertently tries to disconnect the connector, the power line is cut off before the connector is disengaged.

The system is delivered with:

- Two signal contacts inside the socket insulator. The contacts will already be cabled with 1 m of cable.
- One contact "target" inside the pin insulator to close the electrical monitoring loop when the connector is locked.

STEELE-PCU-XXX-XXXX-XXX-XXXX-X

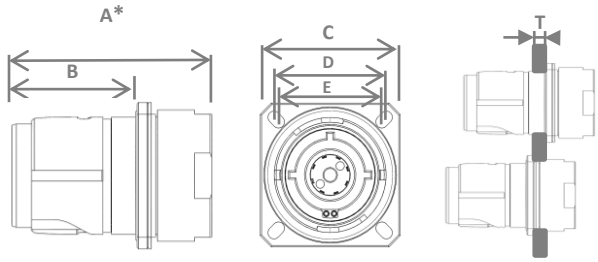


Insulator type	Pilot contact
Standard (150°C)	A
High temperature (230°C)	B

RECEPTACLES RANGE

RECEPTACLE

Wall mount square flange
4-screw shell equipped with crimp contact or lug.



STEELE-PCU-XXX-XX1XX-XXX-XXXX-X

Connector type	Standard Dimensions (mm)							Optional**	
	A*	B	C	D	E	T	Compatible with	Compatible with MIL 38999	T
PCU 300	46	32	36	27.60	26.70	7	Steele PCU Size 15	Size 15 & 17	4
PCU 400	58	33	33.32	27.22	24.62	6	Mil 38999 Size 17	Size 21	6
PCU 600	76	46	42.90	34.93	31.75	7	Mil 38999 Size 21	Size 23 & 25	7
PCU 700	77	53	50.00	39.00	37.20	7	MIL 38999 Size 25	/	7

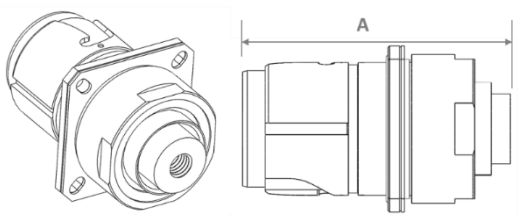
** Without the contact length*
*** For the other sizes of back shell or the other configurations, please contact us or our local representative*

RECEPTACLE

4 screw wall mount square flange
equipped with crimp, screw or flat tail contact

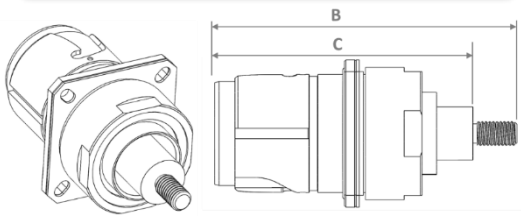
Connector type	Dimensions (mm)*						
	A	B	C	D	E	Ø F	G
PCU 300	63	75	64	88	11	7.10	63
PCU 400	72	90	76	98	11	11.20	75
PCU 600	82	105	86	116	12	13.10	85
PCU 700	82	105	86	116	12	13.10	85

STEELE-PCU-XXX-1X1X0-XXX-XXXX-X



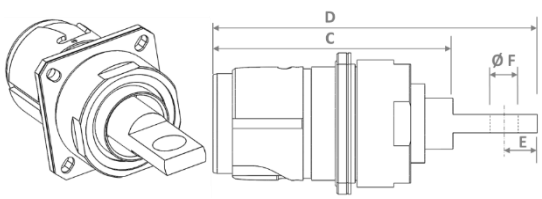
Wall mount 4 screw receptacle with screw contact (internal thread)

STEELE-PCU-XXX-4X1X0-XXX-XXXX-X



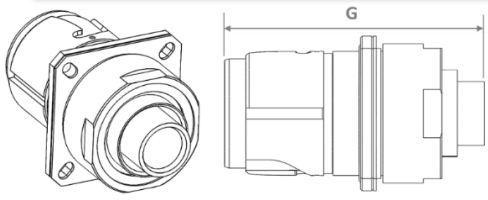
Wall mount 4 screw receptacle with screw contact (external thread)

STEELE-PCU-XXX-5X1X0-XXX-XXXX-X



Wall mount 4 screw receptacle with flat tail termination contact

STEELE-PCU-XXX-0X1X0-XXX-XXXX-X



Wall mount 4 screw receptacle with crimp contact

RECEPTACLES RANGE

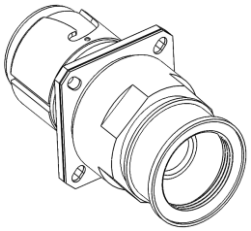
RECEPTACLE

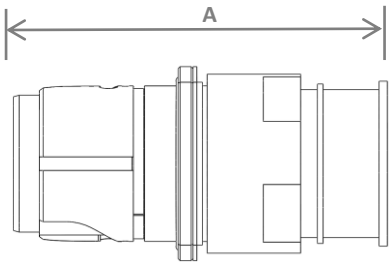
Wall Mount 4 screw shell, crimp contact with a straight termination for cable gland or shrink boots

STEELE-PCU-XXX-0X1X1-XXX-XXXX-X

STEELE-PCU-XXX-0X1X2-XXX-XXXX-

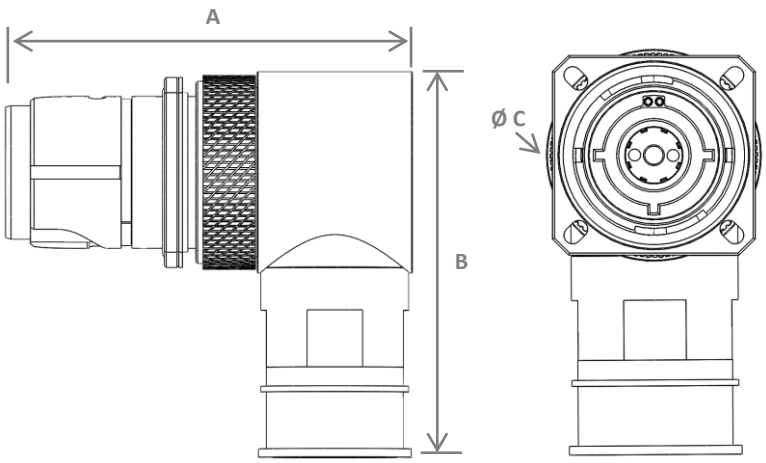
Connector type	Dimensions (mm)
	A
PCU 300	58
PCU 400	74
PCU 600	104
PCU 700	101





RECEPTACLE

Wall Mount 4-screw shell with a right-angle crimp termination for cable gland or shrink boots



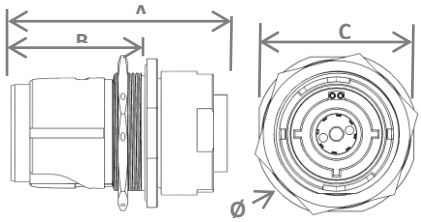
Connector type	Dimensions (mm)		
	A	B	Ø C
PCU 300	88	63	37
PCU 400	93	63	37
PCU 600	115	97	46
PCU 700	115	102	53

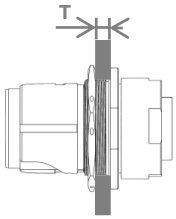
STEELE-PCU-XXX-0XAXI-XXX-XXXX-X

STEELE-PCU-XXX-0XAX2-XXX-XXXX-X

RECEPTACLE

Wall mount Jam Nut with crimp or screw contact





Backwall mounting of the Receptacle

STEELE-PCU-XXX-XX9XX-XXX-XXXX-X

Connector type	Standard Dimensions (mm)					Optional**	T
	A*	B	C	Ø D	Compatible with the MIL 38999	Compatible with the MIL 38999	(maxi wall thickness)
PCU 300	44	32	36	46	Size 15	/	4 mm
PCU 400	58	37	36	46	Size 15	Size 17 & 21	6 mm
PCU 600	73	51	48	51	Size 21	Size 23 & 25	7 mm
PCU 700	79	50	54	57	Size 25	/	

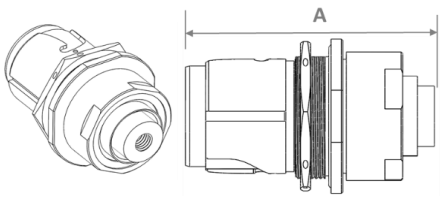
* Without the contact length
** For the other sizes of back shell or other configurations, please contact us or our local representative

Connector type	Dimensions (mm)						
	A	B	C	D	E	Ø F	G
PCU 300	63	75	66	90	11	7.10	65
PCU 400	72	90	78	101	11	11.20	77
PCU 600	85	105	89	120	12	10	88
PCU 700	85	105	89	120	12	10	88

RECEPTACLE

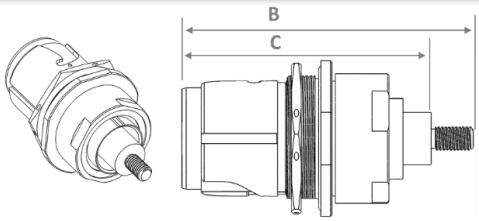
Wall Mount Jam Nut crimp or screw contact

STEELE-PCU-XXX-1X9X0-XXX-XXXX-X



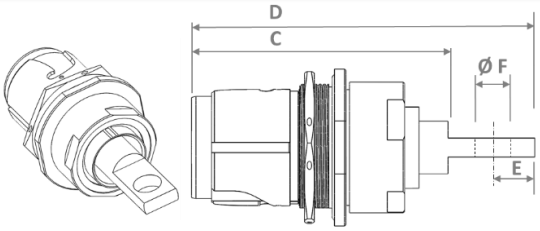
Wall mount Jam Nut receptacle with screw contact (internal thread)

STEELE-PCU-XXX-4X9X0-XXX-XXXX-X



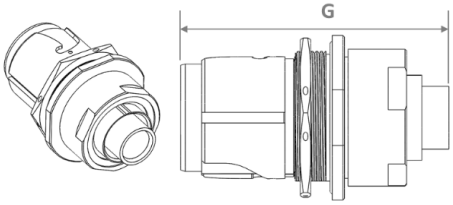
Wall mount Jam Nut receptacle with screw contact (external thread)

STEELE-PCU-XXX-5X9X0-XXX-XXXX-X



Wall mount Jam Nut receptacle with flat tail termination contact

STEELE-PCU-XXX-0X9X0-XXX-XXXX-X



Wall mount Jam Nut receptacle with crimp contact

STEELE-PCU-XXX-0X9X2-XXX-XXXX-X

RECEPTACLE

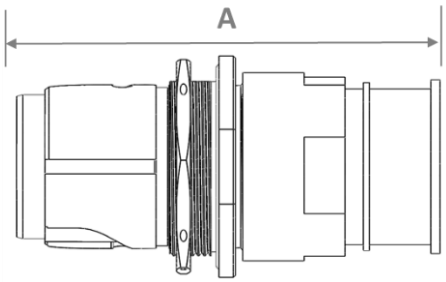
Straight wall mount Jam Nut shell crimp contact with a straight termination for cable gland or shrink boots

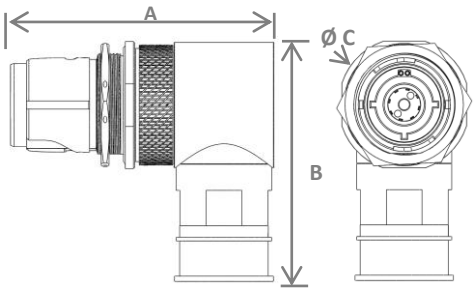
STEELE-PCU-XXX-0X9X1-XXX-XXXX-X

Jam nut shell with shrink boot

Jam nut shell with cable gland

Connector type	Dimensions (mm)
	A
PCU 300	58
PCU 400	72
PCU 600	103
PCU 700	106





RECEPTACLE

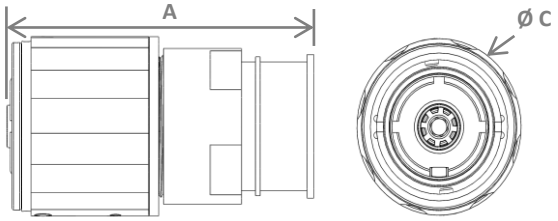
Straight wall mount Jam Nut shell, crimp contact with a straight termination for cable gland or shrink boots

Connector type	Dimensions (mm)		
	A	B	Ø C
PCU 300	88	63	37
PCU 400	93	63	37
PCU 600	115	97	46
PCU 700	115	102	53

Shrink boot configuration
STEELE-PCU-XXX-0XCX1-XXX-XXXX-X

Shrink boot configuration
STEELE-PCU-XXX-0XCX2-XXX-XXXX-X

PLUGS



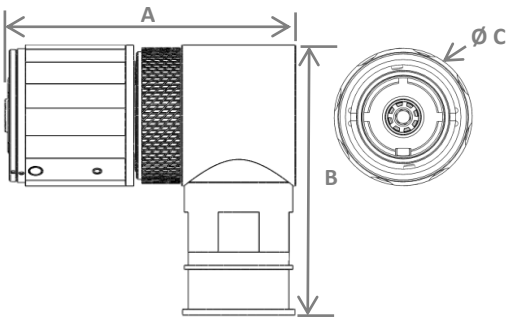
PLUG

Straight for cable gland or shrink boots

Connector type	Dimensions (mm)	
	A	Ø C
PCU 300	48	35
PCU 400	72	38
PCU 600	98	47
PCU 700	97	53

Cable gland configuration
STEELE-PCU-XXX-0X5X2-XXX-XXXX-X

Shrink boot configuration
STEELE-PCU-XXX-0X5X1-XXX-XXXX-X



PLUG

Right angle for cable gland or shrink boots

Connector type	Dimensions (mm)		
	A	B	Ø C
PCU 300	78	63	35
PCU 400	95	64	38
PCU 600	110	98	47
PCU 700	110	98	53

Shrink boot configuration
STEELE-PCU-XXX-0X6X2-XXX-XXXX-X

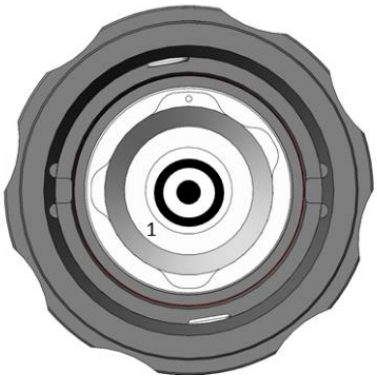
Shrink boot configuration
STEELE-PCU-XXX-0X6X1-XXX-XXXX-X

CONNECTOR CONFIGURATION

Single Pole Version

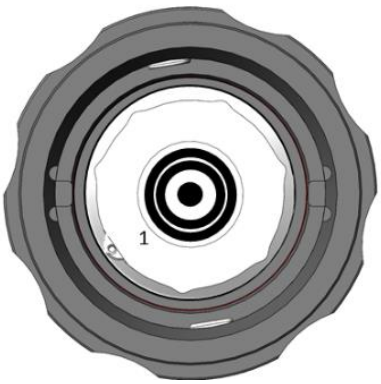
PCU 300

Contact **Size E**



PCU 400

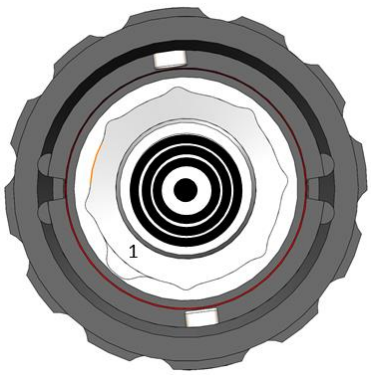
Contact **Size F**



PCU 600

ca 

Contact **Size G**



PCU 700

Contact **Size G**

Contact **Size H**

CONNECTOR CONFIGURATION

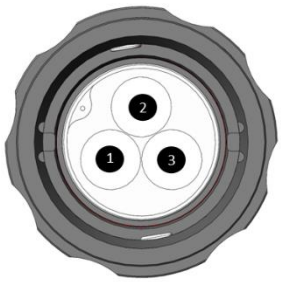
Hybrid Insert Layouts

PCU 300

Contact **Size A**

Contact **Size B**

14 contacts



3 contacts

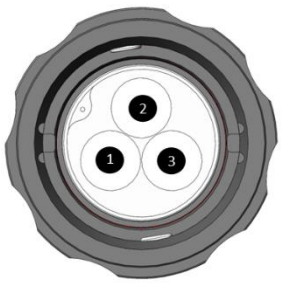
7 contacts

PCU 400

Contact **Size A**

Contact **Size B**

14 contacts



4 contacts

7 contacts

PCU 600

Contact **Size A**

Contact **Size C**

Contact **Size D**

12 contacts

3 contacts

2 contacts

PCU 700

Contact **Size A**

Contact **Size B**

Contact **Size C**

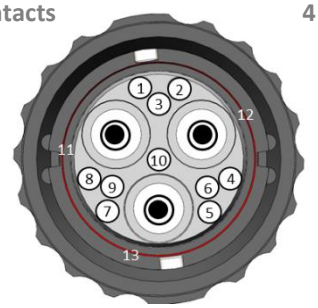
Contact **Size D**

Contact **Size E**

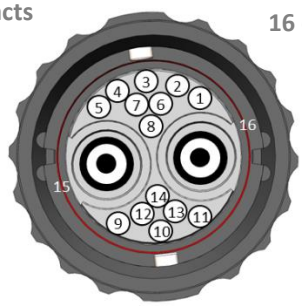
12 contacts

4 contacts

16 contacts



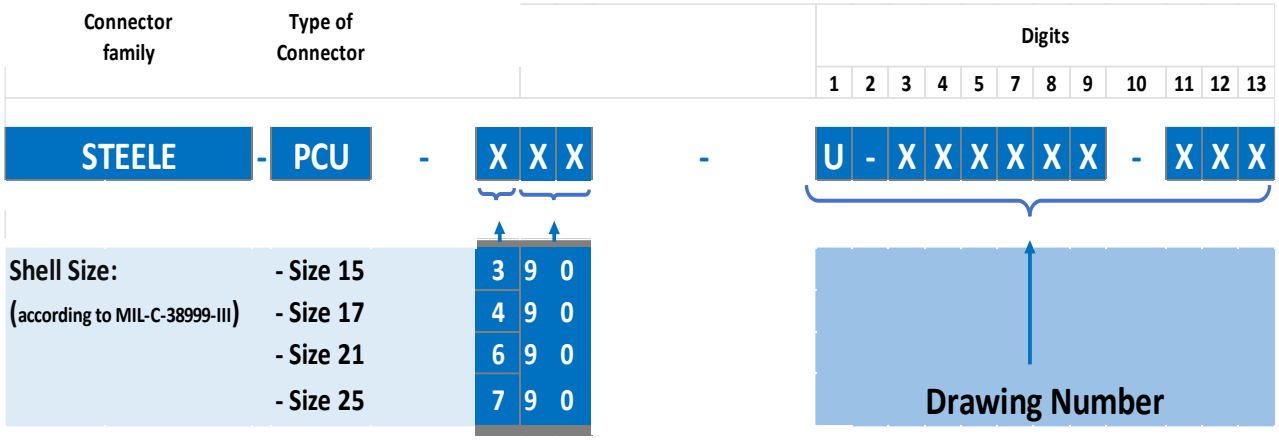
12 contacts



16 contacts

CONNECTOR CONFIGURATION

Special Version according customer specification



BESPOKE SOLUTION

- Mixed power and signal, special configuration on demand.
- Special back shell.
- Special systems for locking and disconnection.

Examples:

- Quick connect and disconnect connector with an emergency disconnection system (automatic disconnection when the pull force is higher than 400N).
  - Hybrid EMC connector with power (300A by contact) and signal contacts
  - 16 contacts in total
  - Finger proof
  - IP67 connected and disconnected shells

- Back shell adaptor to use various cable sizes with cable lugs for different configurations of applications.
  - Single pole EMC connector (cable between 50mm² to 250 mm²)
  - Straight configuration
  - Finger proof
  - IP67 connected and disconnected

- Charging connector for electrical plane
  - Hybrid EMC connector with 3 independent cable glans (2 powers and 1 signal)
  - 16 contacts in total.
  - Straight configuration
  - Finger proof
  - IP67 connected and disconnected

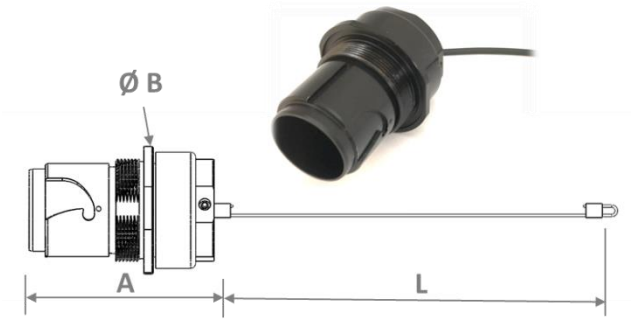
Our design office is at your service to customize connectors devices according to your application request. Don't hesitate to contact us.

ACCESSORIES

Metal cap for Plugs

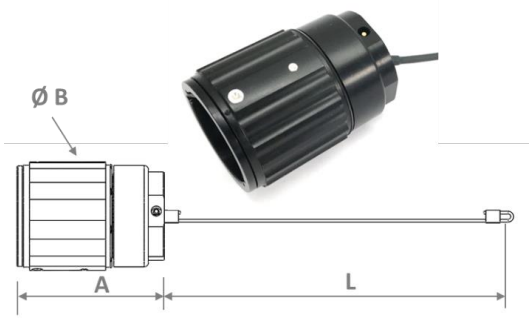
STEELE-PCU-XXX-X0PX0-XXX-XXXX-X

- Cable length (L)
- Type of the ring for fixing the cap
- Type of plating



Connector type	Dimensions (mm)		
	A	Ø B	L
PCU 300	50	40	Length 200 to 450 mm +/- 6 mm
PCU 400	65	40	
PCU 600	79	51	
PCU 700	79	57	

Metal cap for Receptacles



Connector type	Dimensions (mm)		
	A	Ø B	L
PCU 300	45	35	Length 200 to 450 mm +/- 6 mm
PCU 400	59	38	
PCU 600	73	47	
PCU 700	73	53	

STEELE-PCU-XXX-X0RX0-XXX-XXXX-X

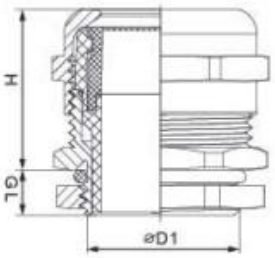
- Cable length (L)
- Type of the ring for fixing the cap
- Type of plating

ACCESSORIES

➡ Metric metal cable gland

Metric Type Metal Cable Glands

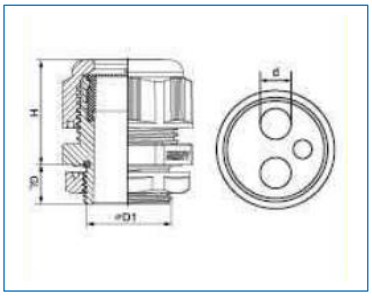
Material :	Nickel-Plated brass
Fixture material :	PA(NYLON), UL 94 V-2
Seal:	NBR (optional material EPDM, Silicone Rubber, TPV)
O-Ring:	EPDM (optional material, Silicone Rubber, TPV, FPM)
Working temperature:	-40°C to 100°C



Standard version on configuration table (page 28)	Thread ØD1	Hole diameter Ø mm	H mm	GL mm	mm	Steele Connect No.
Standard	M12 x 1.5	3-6.5	19	6.5	14	SCM1207BR
On demand	M12 x 1.5	2-5	19	6.5	14	SCM1205BR
Standard	M16 x 1.5	4-8	21	6	17/19	SCM1608BR
On demand	M16 x 1.5	2-6	21	6	17/19	SCM1606BR
On demand	M16 x 1.5	5-10	22	6	20	SCM1610BR
Standard	M20x 1.5	6-12	23	6	22	SCM2012BR
On demand	M20 x 1.5	5-9	23	6	22	SCM2009BR
On demand	M20 x 1.5	10-14	24	6	24	SCM2014BR
Standard	M25 x 1.5	13-18	25	7	30	SCM2518BR
On demand	M25 x 1.5	9-16	25	7	30	SCM2516BR
Standard	M32 x 1.5	18-15	31	8	40	SCM3225BR
On demand	M32 x 1.5	13-20	31	8	40	SCM3220BR
Standard	M40 x 1.5	22-32	37	8	50	SCM4032BR
On demand	M40 x 1.5	20-26	37	8	50	SCM4026BR
Standard	M50 x 1.5	32-38	37	9	57	SCM5038BR
On demand	M50 x 1.5	25-31	37	9	57	SCM5031BR
On demand	M63 x 1.5	37-44	38	10	64/68	SCM6344BR
Standard	M63 x 1.5	29-35	38	10	64/68	SCM6335BR
Standard	M18 x 1.5	5-10	22	6	20	SCM1810BR
On demand	M18 x 1.5	3-7	22	6	20	SCM1807BR
Standard	M22 x 1.5	10-14	24	6	24	SCM2214BR
On demand	M22 x 1.5	7-12	24	6	24	SCM2212BR
Standard	M27 x 1.5	13-18	25	7	30	SCM2718BR
On demand	M27 x 1.5	9-16	25	7	30	SCM2716BR

Multiple-entry Metal Cable Glands Metric Length Type

➡ Multi entry metal cable gland



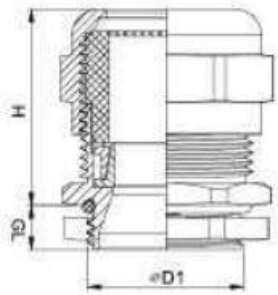
Material :	Nickel-Plated brass
Fixture material :	PA(NYLON), UL 94 V-2
Seal:	NBR (optional material EPDM, Silicone Rubber, TPV)
O-Ring:	EPDM (optional material, Silicone Rubber, TPV, FPM)
Working temperature:	-40°C to 100°C
Number of holes	Could be customized

Other material upon request
All O rings are pre-assembled as standard.

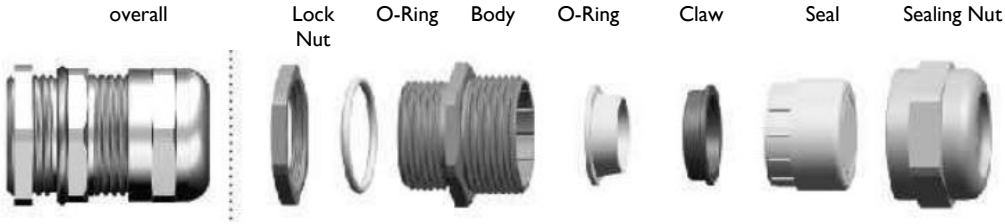
No. Of Holes	Thread ØD1	No. Of holes X cl mm	H mm	GL Mm	mm	Steele Connect No.
1	M20S x 1.5	1 x 5	23	10	22	SCM20SBRL-H1-5
1	M20S x 1.5	1 x 8	23	10	22	ScM20SBRL-H1-8
1	M20B x 1.5	1 x 7.5	24	10	24	SCM20BBRL-H1-7.5
1	M20B x 1.5	1 x 9	24	10	24	SCM20BBRL-H1-9
1	M25 x 1.5	1 x 6	25	12	30	SCM25BRL-H1-6
1	M25 x 1.5	1 x 7.5	25	12	30	SCM25BRL-H1-7.5
1	M25 x 1.5	1 x 10	25	12	30	SCM25BRL-H1-10
1	M40 x 1.5	1 x 33	37	15	50	SCM40BRL-H2-33
2	M12 x 1.5	2 x 2.5	19	10	14	SCM12BRL-H2-2.5
2	M12 x 1.5	2 x 2.8	19	10	14	SCM12BRL-H2-2.8
2	M16S x 1.5	2 x 3	21	10	17/19	SCM16SBRL-H2-3
2	M16B x 1.5	2 x 4	22	10	20	SCM16BBRL-H2-4
2	M20S x 1.5	2 x 5	23	10	22	SCM20SBRL-H2-5
2	M20B x 1.5	2 x 6	24	10	24	SCM20BBRL-H2-6
2	M20B x 1.5	2 x 6.7	24	10	24	SCM20BBRL-H2-6.7
2	M25 x 1.5	2 x 2.8	25	12	30	SCM25BRL-H2-8
2	M25 x 1.5	2 x 4.4	25	12	30	SCM25BRL-H1-4.4
2	M25 x 1.5	2 x 5.7	25	12	30	SCM25BRL-H1-5.7
2	M25 x 1.5	5 + 8	25	12	30	SCM25BRL-H1-5(5+8)
2	M25 x 1.5	2 x 6	25	12	30	SCM25BRL-H1-6
2	M25 x 1.5	2 x 6.3	25	12	30	SCM25BRL-H1-6.3
2	M25 x 1.5	2 x 8	25	12	30	SCM25BRL-H1-8
2	M32 x 1.5	2 x 4.5	31	12	40	SCM32BRL-H1-4.5
3	M12 x 1.5	3 x 1.5	19	10	14	SCM12BRL-H3-1.5
3	M16S x 1.5	3 x 3	21	10	17/19	SCM12BRL-H-3
3	M20S x 1.5	3 x 4	23	10	22	SCM20SBRL-H3-4
3	M25 x 1.5	3 x 4.5	25	12	30	SCM25BRL-H3-4.5
3	M25 x 1.5	3 x 6	25	12	30	SCM25BRL-H3-6
3	M25 x 1.5	3 x 7	25	12	30	SCM25BRL-H3-7
3	M32 x 1.5	1x6.7+2x10.2	31	12	40	SCM32BRL-H3-(6.7+10.2)
3	M32 x 1.5	1x7.6+2x11.7	31	12	40	SCM32BRL-H3-(7.6+11.7)
3	M63 x 1.5	3 x 6.5	49	15	64/68	SCM63SBRL-H3-6.5
4	M16S x 1.5	4 x 2	21	10	17/19	SCM16SBRL-H4-2
4	M25 x 1.5	4 x 5	25	12	30	SCM25BRL-H4-5
4	M25 x 1.5	4 x 6	25	12	30	SCM25BRL-H4-6
4	M32 x 1.5	4 x 7	31	12	40	SCM32BRL-H4-7
4	M32 x 1.5	2x5+2x8	31	12	40	SCM32BRL-H4-(2x5+2x8)
4	M32 x 1.5	4 x 8	31	12	40	SCM32BRL-H4-8
4	M40 x 1.5	4 x 10	37	15	50	SCM40BRL-H4-10
5	M25 x 1.5	5 X 4	25	12	30	SCM25BRL-H5-4
6	M20S x 1.5	6 x 2.5	23	10	22	SCM20BRL-H6-2.5
6	M20S x 1.5	5 X 3.2	23	10	22	SCM20SBRL-H6-3.2
6	M32 x 1.5	6 x 6	31	12	40	SCM32BRL-H6-5
8	M32 x 1.5	8 x 5	31	12	40	SCM32BRL-H8-6
8	M40 x 1.5	8 x 6	37	15	50	SCM40BRL-H8-5
9	M50 x 1.5	9 x 8	37	15	57	SCM50BRL-H9-8
25	M50 x 1.5	25 x 5	37	15	57	SCM50BRL-H25-5

PG Type EMC Metal Cable Glands-Ring Type

➡ Shielded metric metal cable gland

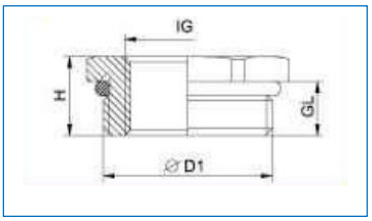


Material :	Nickel-Plated brass
Seal:	NBR (EPDM upon request)
O-Ring:	EPDM (Silicone upon request)
Working temperature:	-40°C to 100°C



Thread ØD1	Hole diameter Ø mm	H mm	GL mm	mm	Steele Connect No.
M12 x 1.5	3-6.5	23	10	17	SCM1207BRL-EMC-R
M12 x 1.5	2-5	23	10	17	SCM1205BRL-EMC-R
M16 x 1.5	4-8	25	10	20	SCM1608BRL-EMC-R
M16 x 1.5	2-6	25	10	20	SCM1606BRL-EMC-R
M16 x 1.5	5-10	25	10	20	SCM1610BRL-EMC-R
M16x 1.5	3-7	25	10	20	SCM1607BRL-EMC-R
M20 x 1.5	6-12	28	10	24	SCM2012BRL-EMC-R
M20 x 1.5	5-9	28	10	24	SCM2009BRL-EMC-R
M20 x 1.5	10-14	28	10	24	SCM2014BRL-EMC-R
M25 x 1.5	13-18	30	12	30	SCM2518BRL-EMC-R
M25 x 1.5	9-16	30	12	30	SCM2516BRL-EMC-R
M32 x 1.5	18-21	36	12	34	SCM3221BRL-EMC-R
M32 x 1.5	13-20	36	12	34	SCM3220BRL-EMC-R
M40 x 1.5	20-28	39	15	50	SCM4028BRL-EMC-R
M40 x 1.5	18-26	39	15	50	SCM4026BRL-EMC-R
M50 x 1.5	30-35.5	41	15	57	SCM5035BRL-EMC-R
M50 x 1.5	25-31	41	15	57	SCM5031BRL-EMC-R

➡ Metal reducer – On demand

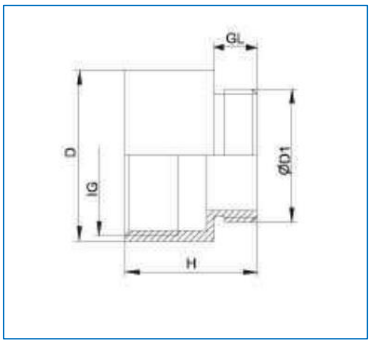


Material :	Nickel-Plated brass
O-Ring:	Silicone rubber
Working temperature:	-30°C to 80°C
Marking:	Ex eb II C Gb/ Ex tD A21 IP68

Thread ØD1	IG mm	GL mm	H mm	mm	Steele Connect No.
MTR-M16 x 1.5	M12 x 1.5	5	8	17	SCEx-M1612BRR
MTR-M20 x 1.5	M12 x 1.5	6	9	22	SCEx-M2012BRR
MTR-M20 x 1.5	M16 x 1.5	6	9	22	SCEx-M2016BRR
MTR-M25 x 1.5	M16 x 1.5	7	10	27	SCEx-M2516BRR
MTR-M25 x 1.5	M20 x 1.5	7	10	27	SCEx-M2520BRR
MTR-M32 x 1.5	M16x 1.5	8	11	34	SCEx-M3216BRR
MTR-M32 x 1.5	M20 x 1.5	8	11	34	ScEx-M3220BRR
MTR-M32 x 1.5	M25 x 1.5	8	11	34	SCEx-M3225BRR
MTR-M40 x 1.5	M20 x 1.5	8	12	43	SCEx-M4020BRR
MTR-M40 x 1.5	M25 x 1.5	8	12	43	SCEx-M4025BRR
MTR-M40 x 1.5	M32 x 1.5	8	12	43	SCEx-M4032BRR
MTR-M50 x 1.5	M25 x 1.5	9	13	55	SCEx-M5025BRR
MTR-M50 x 1.5	M32 x 1.5	9	13	55	SCEx-M5032BRR
MTR-M50 x 1.5	M40 x 1.5	9	13	55	ScEx-M5040BRR
MTR-63 x 1.5	M32 x 1.5	10	14	65	SCEx-M6332BRR
MTR-63 x 1.5	M40 x 1.5	10	14	65	SCEx-M6340BRR
MTR-63 x 1.5	M50 x 1.5	10	14	65	SCEx-M5350BRR

Metal Enlarger

➡ Metal enlarger – On demand



Material : Nickel-Plated brass
O-Ring: Silicone rubber
Working temperature: -30°C to 80°C
Marking: Ex eb II C Gb/ Ex tD A21 IP68

Thread ØD1	IG mm	GL mm	H mm	mm	Steele Connect No.
MTE-M12 x 1.5	M16 x 1.5	5	15	18	SCEx-M1216BRE
MTE-M16 x 1.5	M20 x 1.5	6	17.5	22	SCEx-M1620BRE
MTE-M20 x 1.5	M25 x 1.5	6.5	19	27	SCEx-M2025BRE
MTE-M25 x 1.5	M32 x 1.5	6.5	21	34	SCEx-M2532BRE
MTE-M32 x 1.5	M40 x 1.5	7	23	42	SCEx-M3240BRE
MTE-M40 x 1.5	M50x 1.5	9	31	53	SCEx-M4050BRE
MTE-M50 x 1.5	M63 x 1.5	9	31	66	SCEx-M5053BRE

CRIMPING TOOLS

Manual mechanic tool
Reference U-TO00058
Cable between 16 mm2 to 70 mm2 diameter

Electrical hydraulic tool
Reference U-TO00064
Cable between 95 mm² to 240mm² diameter.

Cable*			Crimp Tool	Die	Die Interface
10 mm² (Cross section) AWG 7	Conductor Ø (mm)	4,59	U-TO00058	U-TO00069	/
	Maximum Current (A) @ 30°C	120A			
16 mm² (Cross section) AWG 5	Conductor Ø (mm)	6,15	U-TO00058	U-TO00063	/
	Maximum Current (A) @ 30°C	160A			
25 mm² (Cross section) AWG 4	Conductor Ø (mm)	7,25	U-TO00058	U-TO00059	/
	Maximum Current (A) @ 30°C	210A			
35 mm² (Cross section) AWG 2	Conductor Ø (mm)	8,68	U-TO00058	U-TO00060	/
	Maximum Current (A) @ 30°C	265A			
50 mm² (Cross section) AWG 0	Conductor Ø (mm)	10,15	U-TO00058	U-TO00061	/
	Maximum Current (A) @ 30°C	330A			
70 mm² (Cross section) AWG 2/0	Conductor Ø (mm)	12,32	U-TO00058	U-TO00062	/
	Maximum Current (A) @ 30°C	420A			
95 mm² (Cross section) AWG 3/0	Conductor Ø (mm	13,5	U-TOO0064	U-TO00065	U-TO00068
	Maximum Current (A) @ 30°C	500A			
120 mm² (Cross section) AWG 250	Conductor Ø (mm	15,84	U-TOO0064	U-TO00066	U-TO00068
	Maximum Current (A) @ 30°C	600A			
150 mm² (Cross section) AWG 300	Conductor Ø (mm	18	U-TOO0064	U-TO00067	U-TO00068
	Maximum Current (A) @ 30°C	670A			
185 mm² (Cross section) AWG 350	Conductor Ø (mm	20,6	U-TOO0064	U-TO00070	U-TO00068
	Maximum Current (A) @ 30°C	770A			
240 mm² (Cross section) AWG 500	Conductor Ø (mm	22	U-TOO0064	U-TO00071	U-TO00068
	Maximum Current (A) @ 30°C	1000A			

CONNECTOR CODIFICATION

SINGLE POLE STANDARD CONFIGURATION

Connector family	Type of Connector				Digits														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STEELE	- PCU	-	X	X	X	-	X	X	X	X	X	-	X	X	X	-	X	X	X	X	-	X

Shell Size: (according to MIL-C-38999-III)	- Size 15	3	0	0																
	- Size 17	4	0	0																
	- Size 21	6	0	0																
	- Size 25	7	0	0																
Contact Termination:	- Crimp				0															
	- Screw (internal thread)				1															
	- Press Fit				2															
	- Welding Friction				3															
	- Screw (extrenal thread)				4															
	- Flat Tail				5															
Contact type:	- Without contact					0														
	- Socket					S														
	- Pin					P														
Type of shell:	- Receptacle, Straight						0													
	- Receptacle, Wall Mount 4-Screw, Straight						1													
	- Receptacle, 4-Screw Straight						2													
	- Plug, Straight						5													
	- Plug, Right Angle						6													
	- Receptacle, Jam Nut, Straight						7													
	- Receptacle, Jam Nut, Right Angle						8													
	- Receptacle, Wall Mount & Jam Nut, Straight						9													
	- Receptacle, Wall Mount 4-Screw, Right Angle						A													
	- Receptacle 4-Screw Right Angle						B													
	- Receptacle, Wall Mount & Jam Nut, Right Angle						C													
	- Receptacle Jam Nut & 4 screw Wall Mount						D													
	- Receptacle Jam Nut & 4 screw Wall Mount Right Angle						E													
	- Cap for Plug						P													
	- Cap for Receptacle						R													
Screen Conductivity: (EMC)	- Non Shielded:							0												
	- Shielded							1												
Cable Interface:	- Null								0											
	- Shrink boot								1											
	- Cable Gland (metric thread) non shielded								2											
	- Cable Gland (metric thread) shielded								3											
Cable cross-section:	- 10 mm²	#AWG 7			# diam Env 3,665 mm						0	1	0							
	- 16 mm²	#AWG 5			# diam Env 4,621 mm						0	1	6							
	- 25 mm²	#AWG 4			# diam Env 5,189 mm						0	2	5							
	- 35 mm²	#AWG 2			# diam Env 6,54 mm						0	3	5							
	- 50 mm²	#AWG 0			# diam Env 8,25 mm						0	5	0							
	- 70 mm²	#AWG 2/0			# diam Env 9,27 mm						0	7	0							
	- 95 mm²:	#AWG 3/0			# diam Env 10,40 mm						0	9	5							
	- 120 mm²	#AWG 250			# diam Env 14,6 mm						1	2	0							
	- 150 mm²	#AWG 300			# diam Env 16,0 mm						1	5	0							
	- 185 mm²	#AWG 350			# diam Env 17,3 mm						1	8	5							
	- 240 mm²	#AWG 500			# diam Env 20,7 mm						2	4	0							
Contact Raw Material :	- Copper														0					
	- Aluminum														1					
Ring for cap fixing:	-Ring, Receptacle, Jam Nut														A					
	-Ring, Plug														B					
Contact Protection:	- Silver															A				
	- Gold															B				
Shell plating:	- Anodic Oxidation																G			
	- Black Zink Nickel																B			
	- Stainless steel																S			
	- Olive Drab Cadmium																C			
Insulator :	- Standard																	1		
	- Standard with pilot contacts																	A		
	- High temperature																	2		
	- High temperature with pilot contacts																	B		
	- According to EN45545 (Fire and smoke toxicity requirements)																	3		
Color coding ring:	- No Coding																			X
	- Red																			R
	- Yellow																			Y
	- Green																			G
	- Blue																			B
	- Orange																			O

CONNECTOR CODIFICATION

HYBRID (POWER & SIGNAL) STANDARD CONFIGURATION

Connector family	Type of Connector																
							Digits										
							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STEELE	- PCU	-	X	X	X	-	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-	X
Shell	- Size 15		3	9	0																	
	- Size 17		4	9	0																	
	- Size 21		6	9	0																	
	- Size 25		7	9	0																	
Contact Termination:	- Crimp						0															
	- Screw (internal thread)						1															
	- Press Fit						2															
	- Welding Friction						3															
	- Screw (extrenal thread)						4															
	- Flat Tail						5															
	- Specific (Mixted)							1														
Type of shell:	- Receptacle, Straight								0													
	- Receptacle, Wall Mount 4-Screw, Straight								1													
	- Receptacle, 4-Screw Straight								2													
	- Plug, Straight								5													
	- Plug, Right Angle								6													
	- Receptacle, Jam Nut, Straight								7													
	- Receptacle, Jam Nut, Right Angle								8													
	- Receptacle, Wall Mount & Jam Nut, Straight								9													
	- Receptacle, Wall Mount 4-Screw, Right Angle								A													
	- Receptacle 4-Screw Right Angle								B													
	- Receptacle, Wall Mount & Jam Nut, Right Angle								C													
	- Receptacle Jam Nut & 4 screw Wall Mount								D													
	- Receptacle Jam Nut & 4 screw Wall Mount Right Angle								E													
	- Cap for Plug								P													
	- Cap for Receptacle								R													
Screen	- Non Shielded:									0												
	- Shielded									1												
Cable Interface:	- Null										0											
	- Shrink boot										1											
	- Cable Gland (metric thread) non shielded										2											
	- Cable Gland (metric thread) shielded										3											
Nb. of	1,2,3,4,5,6,7,8 and 9																					
Power	- 4 mm²	#AWG 12	# diam Env 4 mm											A								
	- 6 mm²	#AWG 10	# diam Env 6 mm											B								
	- 8 mm²	#AWG 8	# diam Env 10 mm											C								
	- 10 mm²	#AWG 7	# diam Env 3,665 mm											D								
	- 16 mm²	#AWG 5	# diam Env 4,621 mm											E								
	- 25 mm²	#AWG 4	# diam Env 5,189 mm											F								
	- 35 mm²	#AWG 2	# diam Env 6,54 mm											G								
	- 50 mm²	#AWG 0	# diam Env 8,25 mm											H								
	- 70 mm²	#AWG 2/0	# diam Env 9,27 mm											I								
	- 95 mm²:	#AWG 3/0	# diam Env 10,40 mm											J								
	- 120 mm²	#AWG 250	# diam Env 14,6 mm											K								
	- 150 mm²	#AWG 300	# diam Env 16,0 mm											L								
	- 185 mm²	#AWG 350	# diam Env 17,3 mm											M								
	- 240 mm²	#AWG 500	# diam Env 20,7 mm											N								
Power Contact Type:	- Pin														P							
	- Socket														S							
Nb. of signal contact:	1,2,3,4,5,6,7,8,9																					
	10															A						
	11															B						
	12															C						
	13															D						
	14															E						
Signal Contact Type:	- Pin																P					
	- Socket																S					
Shell plating:	- Anodic Oxidation																		G			
	- Black Zink Nickel																		B			
	- Stainless steel																		S			
	- Olive Drab Cadmium																		C			
	- Standard																			1		
	- Standard with pilot contacts																			A		
	- High temperature																			2		
	- High temperature with pilot contacts																			B		
	- According to EN45545 (Fire and smoke toxicity requirements)																			3		
Color coding ring:	- No Coding																					X
	- Red																					R
	- Yellow																					Y
	- Green																					G
	- Blue																					B
	- Orange																					O

NOTES

NOTES

APPLICATIONS

DEFENSE & SECURITY

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NUCLEAR

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MEDICAL

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