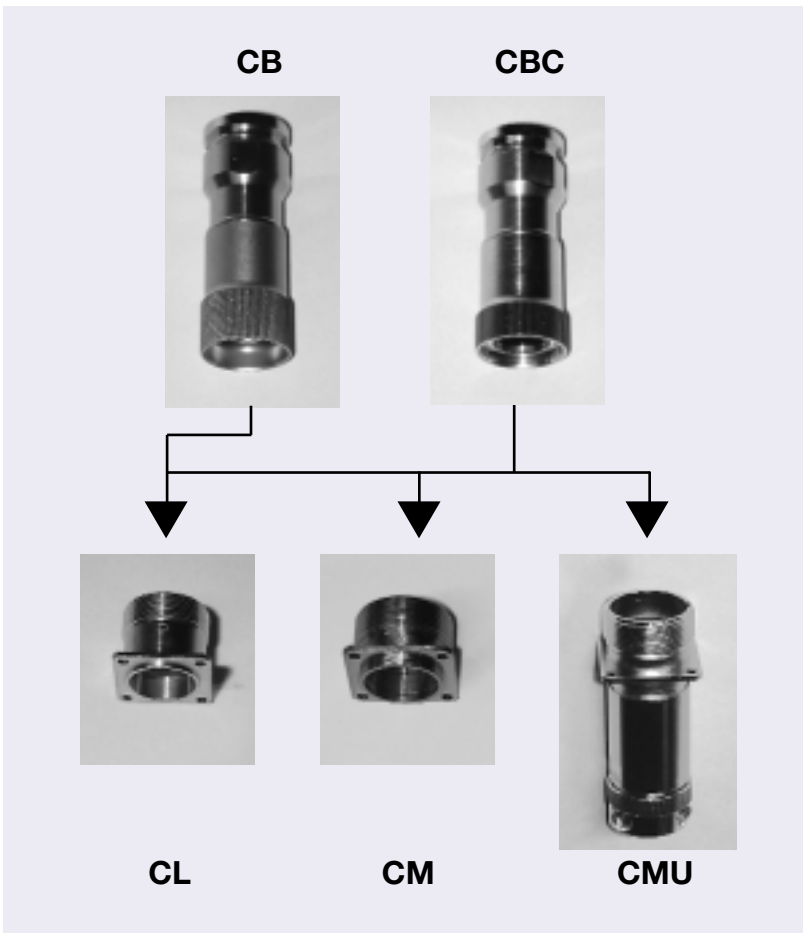




EMC Metallic Circular Connectors

- Metal shell
- Contacts density: 3x2mm, 5x1.5mm, 6x1.5mm, 8x1.2mm, 10x1mm, 12x1mm
- Threaded coupling sleeve with self locking mechanism
- Variable cable clamp 6 to 13.5mm.
- Shielded: EMC 70dB at 100MHz.
- Monobloc housing to avoid any wrong assembling and sealing problems
- Large cabling chamber
- Solder and crimp termination available
- Five coding points to avoid contacts broken when mating
- Corrosion: 500h salt spray (5%NaCl - NF C 20-711)
- IP 67 when mated

Receptacle and Plug Compatibility



Ordering Information - CB Series

C B C 0 3 2 1 2 2 0 - - K

C SERIES

MODEL

B Plug

M Short receptacle and cable mount receptacle

L Long receptacle

TYPE

- Standard (2)

C⁽¹⁾ Plug short coupling sleeve (mate with CM - CL receptacle)

E Five polarized keys for M & L receptacle

U Cable mount receptacle for M model

LAYOUT

Single polarized key

0 3 2 3 contacts Ø 2 mm*

5 1 5 5 contacts Ø 1.50 mm*

0 4 2 3 contacts Ø 2 mm*

6 1 5 6 contacts Ø 1.50 mm**

5 polarized keys

8 1 2 8 contacts Ø 1.20 mm*

1 0 1 10 contacts Ø 1.02 mm*

1 2 1 12 contacts Ø 1.02 mm*

PART - POLARITY

0 3 Plug without contact 0 4 Receptacle without contact

1 0 Female plug** 2 0 Female Receptacle** **except M model**

1 1 Male plug** - **except CBC** ⁽¹⁾ 2 1 Male Receptacle**

1 2 Female plug* 2 2 Female Receptacle* **except M model**

1 3 Male plug* - **except CBC** ⁽¹⁾ 2 3 Male Receptacle*

CONTACT TERMINATIONS

0 0 Without contact

2 0 Crimp termination

2 1 Crimp termination only for Ø2mm contact, 0.34 to 1.34 mm²

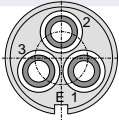
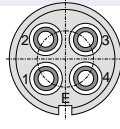
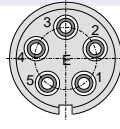
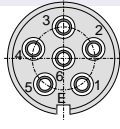
CODING TABULATION

Single polarized key											5 polarized keys
α	0°	30°	45°	60°	75°	90°	105°	120°	135°	150°	
Code		A	F	B	G	C	H	D	J	E	K (plug only)

* Clip contact retaining system
 ** Cloc contact retaining system
 (1) CBC plug is always female
 (2) Standard plug mate only with CL receptacle

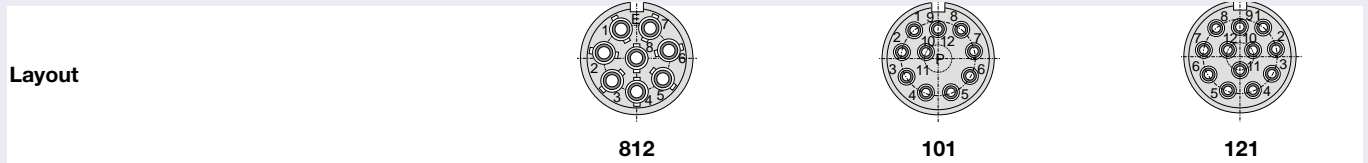
General Specifications

Single polarized key

Layout				
	032	042	515	615
TECHNICAL				
Contact numbers & Ø	3 Ø 2 mm	4 Ø 2 mm	5 Ø 1.50 mm	6 Ø 1.50 mm
Part number male insert	CMY0322320	CMY0422320	CLY5152320	CMY6152120
Cable size	1.34 to 2 mm ²	0.34 to 1.34 mm ²	0.34 to 1.91 mm ²	0.22 to 1.91 mm ²
Part number female insert	CMY0321220		CLY5151220	CMY6151020
Cable size	1.34 to 2 mm ²		0.34 to 1.91 mm ²	0.22 to 1.91 mm ²
Part number male insert	CMY0322321			
Cable size	0.34 to 1.34 mm ²			
Part number female insert	CMY0321221			
Cable size	0.34 to 1.34 mm ²			
Insulation material	Thermoplastic	Thermoplastic	Thermoset	Thermoplastic
Contact material	Brass	Brass	Brass	Brass
Contact plating	Au/Ni	Au/Ni	Au/Ni	Au/Ni
Part number male crimp contacts	0200621-20ROG 1.34 to 2 mm ² 0200631-21ROG 0.34 to 1.34 mm ²	0201071-20ROG 0.34 to 1.34 mm ²	0150851-20ROG 0.34 to 1.91 mm ²	0150871-20-OG 0.22 to 1.91 mm ²
Part number female crimp contacts	0200342-20RN1 1.34 to 2 mm ² 0200352-21RN1 0.34 to 1.34 mm ²		0150842-20RG0 0.34 to 1.91 mm ²	0150682-20-G1 0.22 to 1.91 mm ²
Vibration withstanding	25 to 250 Hz - 5 g following NF F 61-030			
Connector life cycles	> 500 mating cycles			
Contact retention forces	> 90 N with clip	> 90 N with clip	> 70 N with clip	> 70 N with cloc
ELECTRICAL				
Current rating (all contacts wired)	15 A	15 A	8 A	8 A
Testing voltage	2 750 / 2 000 V	2 750 / 2 000 V	2 800 / 2 500 V	2 200 / 2 000 V
Contact resistance	< 2 mΩ	< 2 mΩ	< 3 mΩ	< 3 mΩ
Insulation resistance	> 5.10 ³ MΩ			
EMC (CB connector)	> 70 db to 100 Mhz			
ENVIRONMENTAL				
Category	CEI 68-1 (NF C 20-700) -55°C to +125°C/56 days			
Protection level	IP 67 (NF EN 60529)			
Corrosion resistance	500 h. salt spray 5% Na Cl (NF C 20-711)			

General Specifications

Five polarized keys



TECHNICAL

Contact numbers & Ø	8 Ø 1.20 mm	10 Ø 1.02 mm	12 Ø 1.02 mm
Part number male insert	CMY8122320	CMY1012320	CMY1212320
Cable size	0.22 to 1.91 mm ²	1.34 to 2 mm ²	0.22 to 0.93 mm ²
Part number female insert	CMY8121220	CMY1011220	CMY1211220
Cable size	0.22 to 1.91 mm ²	1.34 to 2 mm ²	0.22 to 0.93 mm ²
Insulation material	Thermoset	Thermoset	Thermoset
Contact material	Brass	Brass	Brass
Contact plating	Au/Ni	Au/Ni	Au/Ni
Part number male crimp contacts	0120151-20ROG 0.22 to 1.91mm ²	0100721-20ROG 0.22 to 0.93mm ²	0100721-20ROG 0.22 to 0.93mm ²
Part number female crimp contacts	0120182-20RG1 0.22 to 1.91mm ²	0100612-20RGO 0.22 to 0.93mm ²	0100612-20RGO 0.22 to 0.93mm ²
Vibration withstanding	25 to 250 Hz - 5 g following NF F 61-030		
Connector life cycles	> 500 mating cycles		
Contact retention forces	> 70 N with clip	> 70 N with clip	> 70 N with clip

ELECTRICAL

Contact numbers & Ø	8 Ø 1.20 mm	10 Ø 1.02 mm	12 Ø 1.02 mm
Current rating (all contacts wired)	5 A	5 A	5 A
Testing voltage	2 400 / 2 200 V	2 800 / 2 000 V	1 000 / 1 000 V
Contact resistance	< 5 mΩ	< 6 mΩ	< 6 mΩ
Insulation resistance	> 5.10 ³ MΩ	> 5.10 ³ MΩ	> 5.10 ³ MΩ
EMC (CB connector)	> 70 db to 100 Mhz	> 70 db to 100 Mhz	> 70 db to 100 Mhz

ENVIRONMENTAL

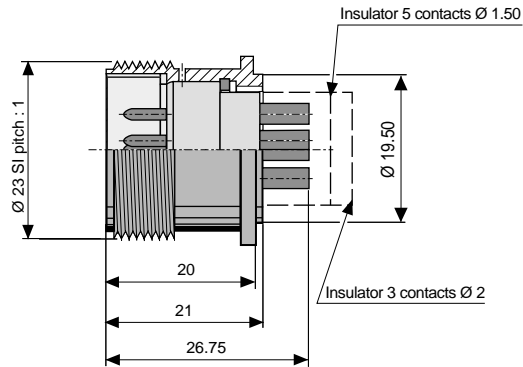
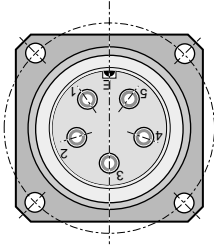
Category	CEI 68-1 (NF C 20-700) -55°C to +125°C/56 days
Protection level	IP 67 (NF EN 60529)
Corrosion resistance	500 h. salt spray 5% Na Cl (NF C 20-711)

Single polarized connectors

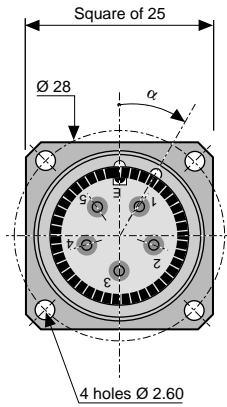
Receptacle dimensions

CL-

Wiring side

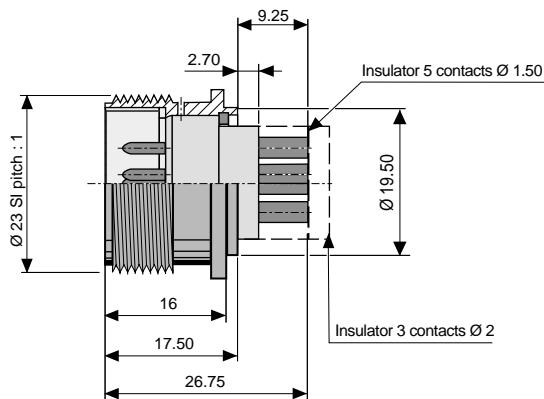
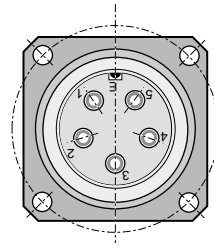


Mating side

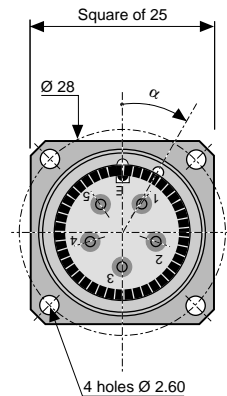


CM-

Wiring side

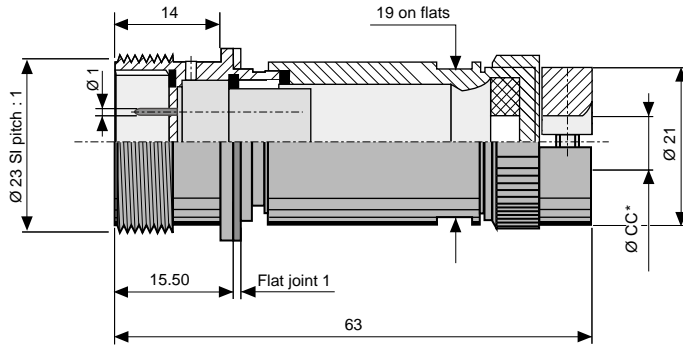


Mating side

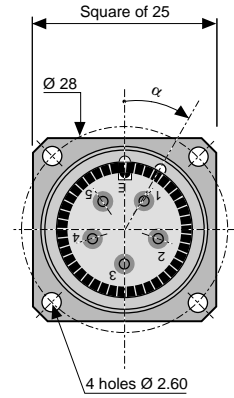


Dimensions are in mm

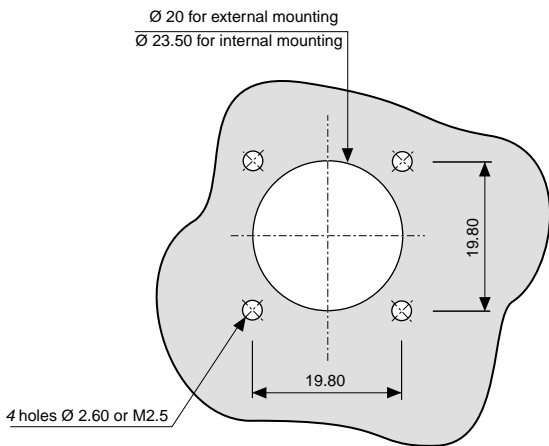
Single polarized connectors CMU Cable mount receptacle dimensions



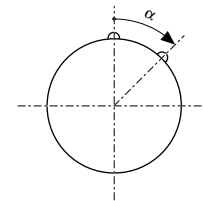
Mating side



Panel cut out



Receptacle coding tabulation



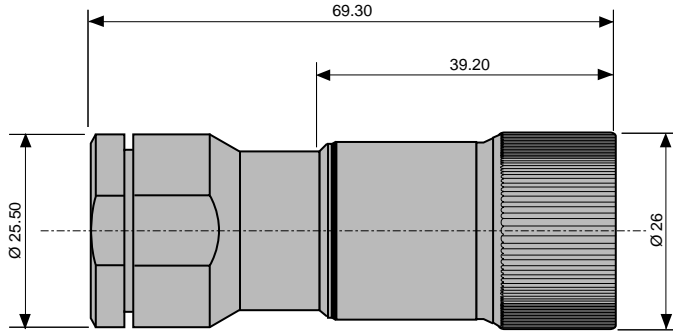
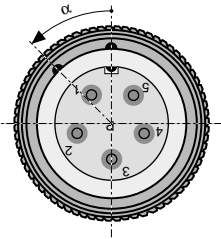
α	Code
0°	
30°	A
45°	F
60°	B
75°	G
90°	C
105°	H
120°	D
135°	J
150°	E

Single polarized connectors

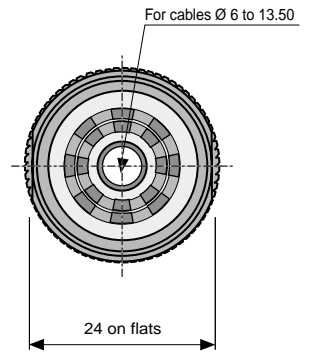
Plug dimensions

CB-

Mating side

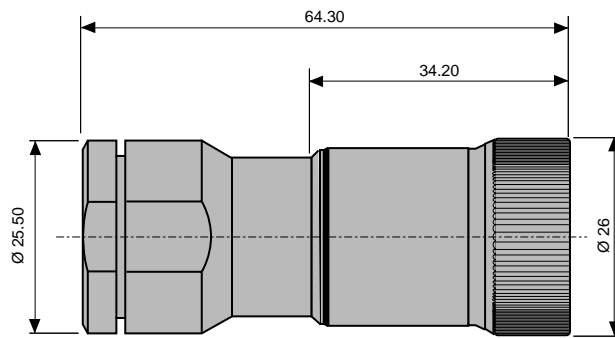
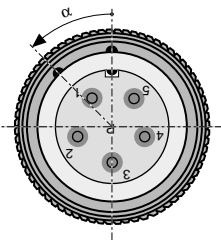


Wiring side

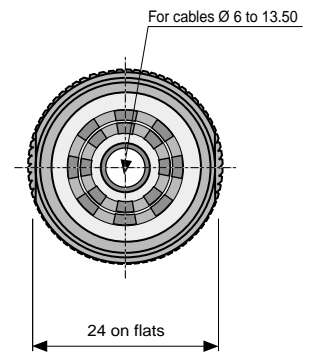


CBC

Mating side



Wiring side



Dimensions are in mm

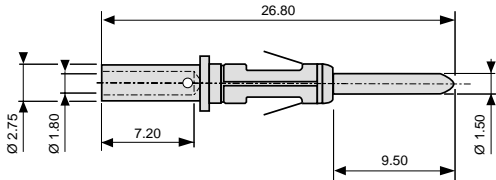
Single polarized connectors

Contacts

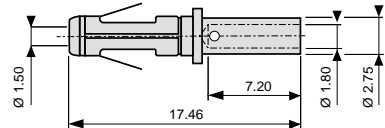
Males

Females

CONTACTS Ø 1.50 FOR ARRANGEMENT 515 [0.34 TO 1.91 mm²]

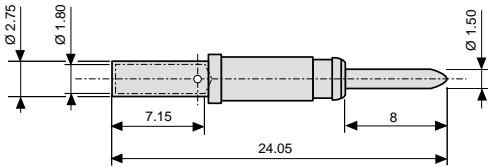


Ref: 0150851-20ROG

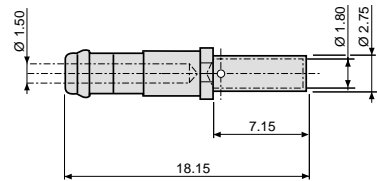


Ref: 0150842-20RG0

CONTACTS Ø 1.50 FOR ARRANGEMENT 615 [0.22 TO 1.91 mm²]

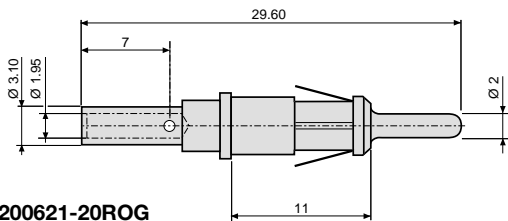


Ref: 0150871-20-OG

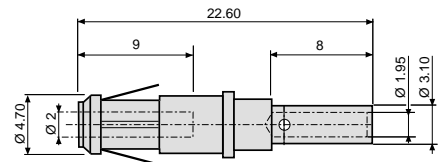


Ref: 0150682-20-G1

CONTACTS Ø 2 FOR ARRANGEMENT 032 [1.34 TO 2 mm²]

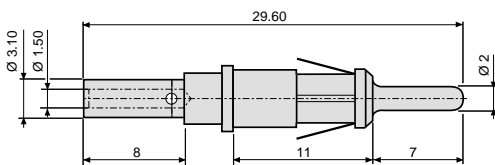


Ref: 0200621-20ROG

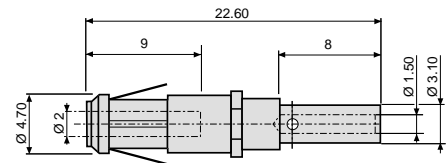


Ref: 0200342-20RN1

CONTACTS Ø 2 FOR ARRANGEMENT 032 [0.34 TO 1.34 mm²]

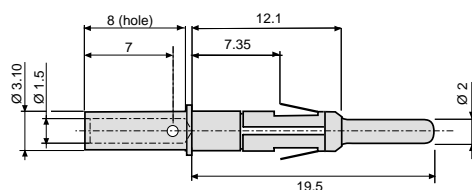


Ref: 0200631-21ROG



Ref: 0200352-21RN1

CONTACTS Ø 2 FOR ARRANGEMENT 042 [0.34 TO 1.34 mm²]



Ref: 0201071-20ROG

Dimensions are in mm

Single polarized connectors

Layouts - wiring side viewed

Receptacle

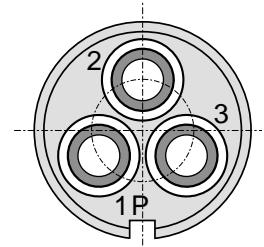
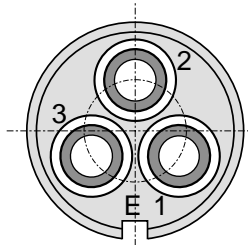
Plug

3 CONTACTS Ø 2

Ref

0	3	2
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Contact termination	Ref.
wire size : 1.34 - 2 mm ²	2 0
wire size : 0.34 - 1.34 mm ²	2 1

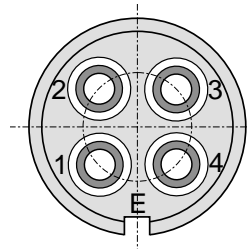


4 CONTACTS Ø 2

Ref

0	4	2
----------	----------	----------

Contact termination	Ref.
wire size : 0.34 - 1.34 mm ²	2 0



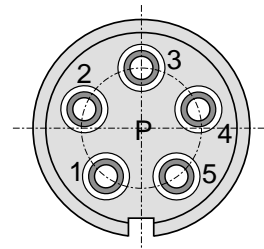
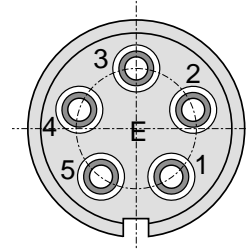
Available only with solder cup termination of contacts

5 CONTACTS Ø 1.5

Ref

5	1	5
----------	----------	----------

Terminaison de contact - Contact termination	Ref.
wire size : 0.34 - 1.91 mm ²	2 0

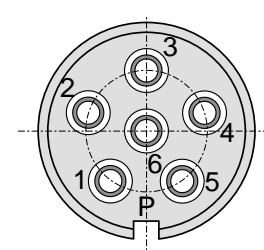
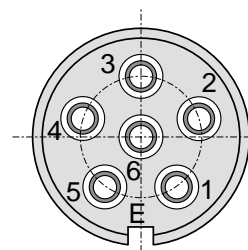


6 CONTACTS Ø 1.5

Ref

6	1	5
----------	----------	----------

Terminaison de contact - Contact termination	Ref.
wire size : 0.22 - 1.91 mm ²	2 0



CONSULT US ABOUT ARRANGEMENTS WITH SOLDER CUP CONTACTS

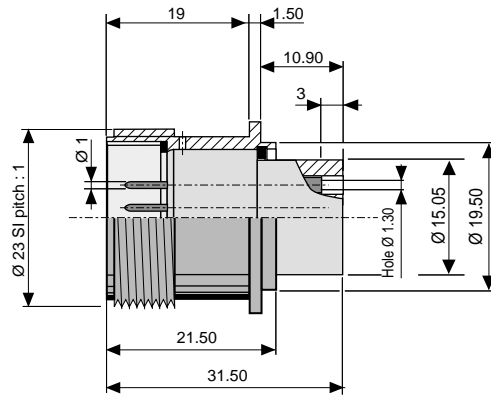
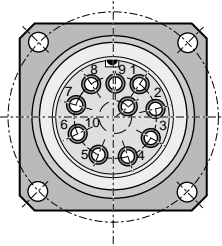
Dimensions are in mm

Five polarized keys connectors

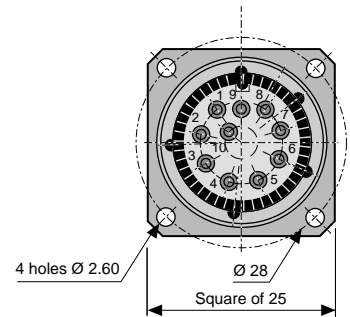
Receptacle dimensions

CLE

Wiring side

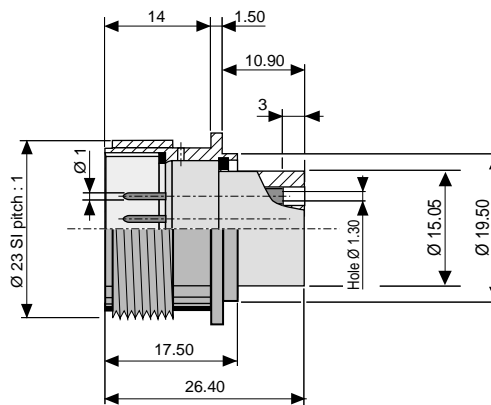
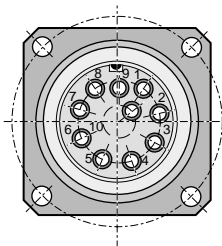


Mating side

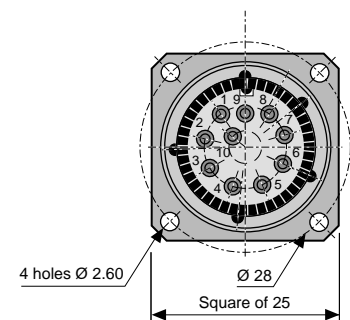


CME

Wiring side



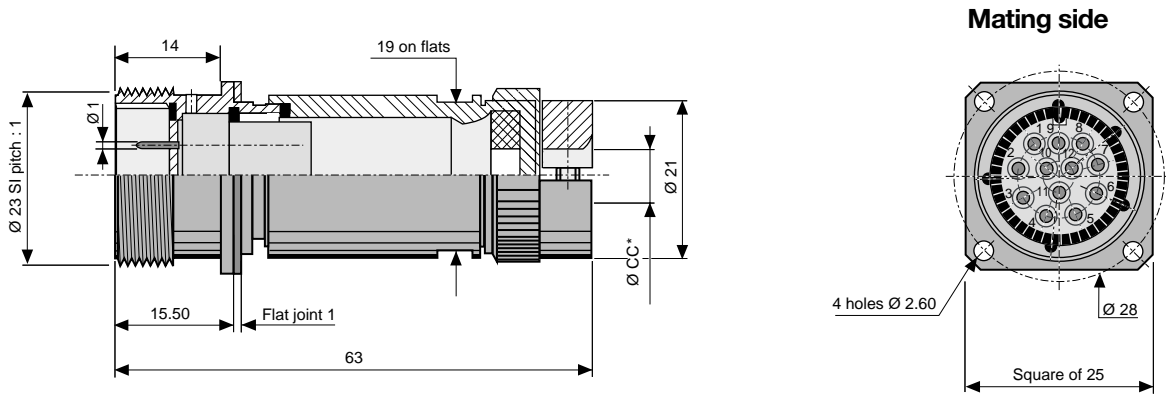
Mating side



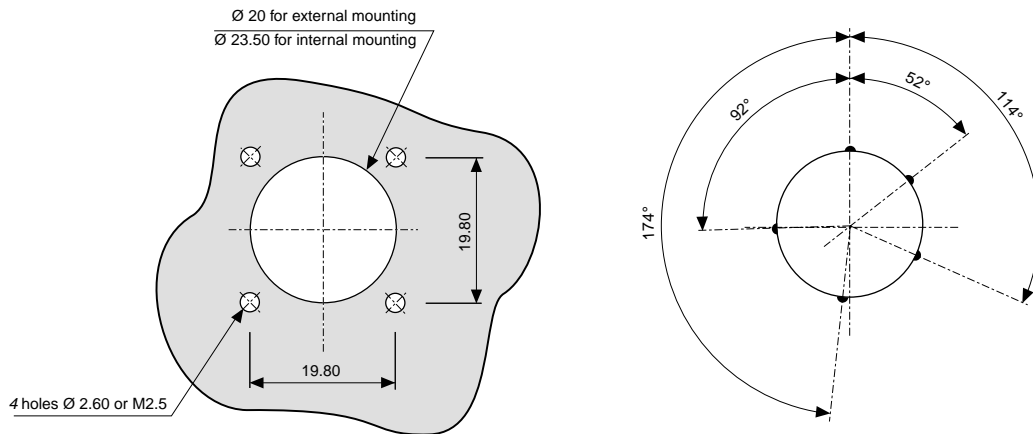
Five polarized keys connectors

Receptacle dimensions

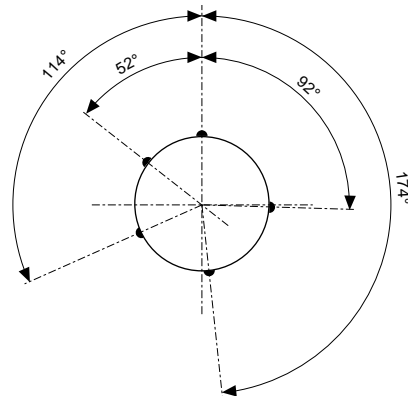
**CMU
Cable receptacle**



Panel cut out and polarized key overview



CB, CBC plug polarized key overview



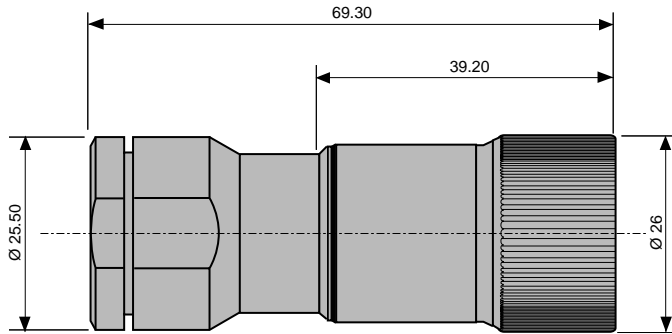
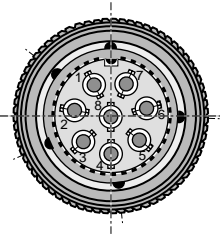
Dimensions are in mm

Five polarized keys connectors

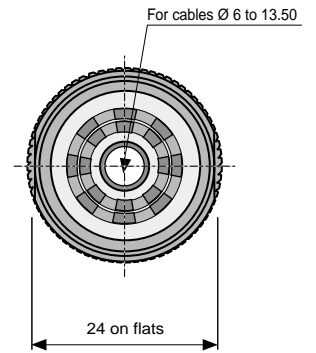
Plug dimensions

CB-

Mating side

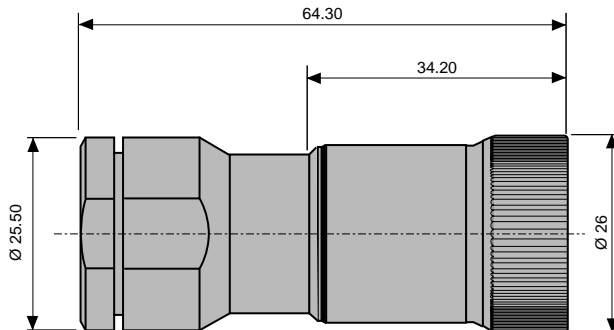
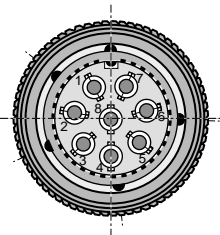


Wiring side

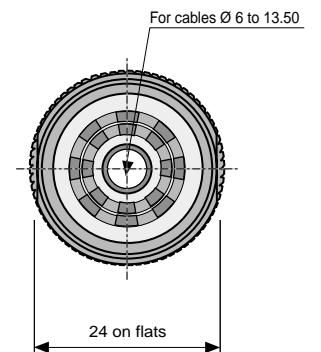


CBC

Mating side



Wiring side



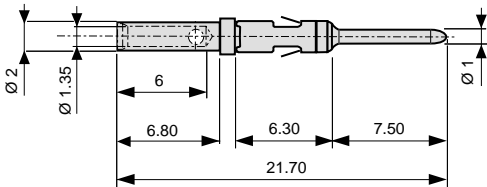
Five polarized keys connectors

Contacts

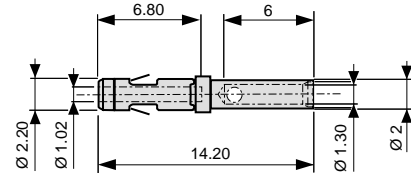
Males

Females

CONTACTS Ø 1 FOR ARRANGEMENT 101 & 121 [0.22 TO 0.93 mm²]

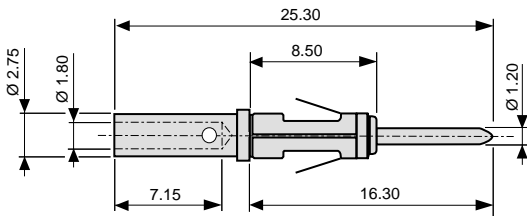


Ref: 0100721-20ROG

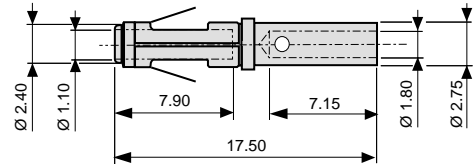


Ref: 0100612-20RGO

CONTACTS Ø 1.20 FOR ARRANGEMENT 812 [0.22 TO 1.91 mm²]



Ref: 0120151-20ROG



Ref: 0120182-20RG1

Five polarized keys connectors

Arrangements - wiring side viewed

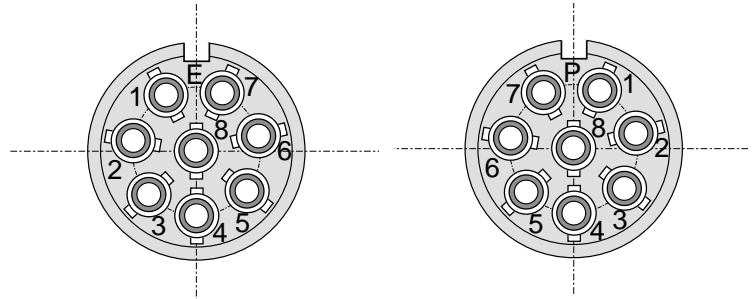
Receptacle

Plug

8 CONTACTS Ø 1.2

Ref

8	1	2
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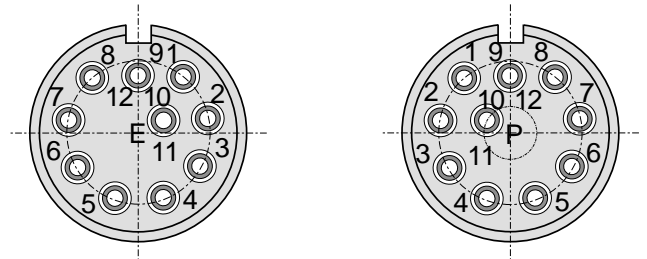


Contact termination	Ref.
wire size : 0.22 - 1.91 mm ²	20

10 CONTACTS Ø 1

Ref

1	0	1
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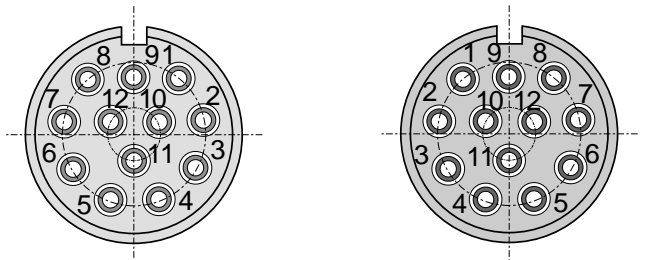


Contact termination	Ref.
wire size : 0.22 - 0.93 mm ²	20

12 CONTACTS Ø 1.02

Ref

1	2	1
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Contact termination	Ref.
wire size : 0.22 - 0.93 mm ²	20

CONSULT US ABOUT ARRANGEMENTS WITH SOLDER CUP CONTACTS

Tooling

CONTACTS	CRIMPING						INSERTION EXTRACTION		
	Contact part number	Crimp tool	AWG	Wire cross section	Positioner	Turret	Selector position	Tool part number	
0150 682-20-G1 0150 761-20-OG	ASTRO TOOL TGV 101	24	0.22	Without	ASTRO TOOL	2			
		22	0.34			3			
		20	0.60			4			
		18	0.93			5			
		16	1.34			6			
		14	1.91			7			
		14	1.91			7			
	DANIELS FT8	24	0.22	Without	DANIELS	2		S_051 or S_059	S_051 or S_072
		22	0.34			3			
		20	0.60			4			
		18	0.93			5			
		16	1.34			6			
	14	1.91	7						
	ASTRO TOOL MS 3191/1	22	0.34	SS.015000002 HYPERTAC			Without		
		20	0.60						
18		0.93							
16		1.34							
14		1.91							
0150 851-20ROG 0150 842-22RG0	ASTRO TOOL TGV 101	22	0.34	Without	ASTRO TOOL	3			
		20	0.60			4			
		18	0.93			5			
		16	1.34			6			
		14	1.91			7			
		14	1.91			7			
		14	1.91			7			
	DANIELS FT8	22	0.34	Without	DANIELS	6		SD-0150000005	
		20	0.60			6			
		18	0.93			7			
16		1.34	7						
14		1.91	7						
0200 621-20ROG 0200 342-20RN1	ASTRO TOOL TGV 101	16	1.34	Without	ASTRO TOOL	6			
		15	1.50			6			
		14	1.91			7			
		14	2.00			7			
	DANIELS FT8	16	1.34	Without	DANIELS	6		SD-0200000001	
		15	1.50			6			
		15	1.91			7			
		14	2.00			7			
0200 631-20ROG 0200 352-20RN1	ASTRO TOOL TGV 101	22	0.34	Without	ASTRO TOOL	5			
		20	0.60			5			
		18	0.93			5			
		16	1.34			6			
	DANIELS FT8	22	0.34	Without	DANIELS	5		SD-0200000001	
		20	0.60			5			
		18	0.93			5			
		16	1.34			6			
0201 071-20ROG	ASTRO TOOL TGV 101	22	0.34	Without	ASTRO TOOL	3			
		20	0.60			4			
		18	0.93			5			
		16	1.34			6			
	DANIELS FT8	22	0.34	Without	DANIELS	5		SD-0200000003	
		20	0.60			5			
		18	0.93			5			
		16	1.34			6			

Tooling

CONTACTS	CRIMPING						INSERTION EXTRACTION			
	Contact part number	Crimp tool	AWG	Wire cross section	Positioner	Turret	Selector position	Tool part number		
0100 612-20RG0 0100 721-20ROG	ASTRO TOOL TGV 101	24	0.22				2			
		22	0.38				3			
		20	0.60				4			
		18	0.93				5			
	DANIELS FT8	24	0.22		Without		2	S_069	S_056	
		22	0.38				3			
		20	0.60				DANIELS TP 945			4
		18	0.93				5			
	ASTRO TOOL M22520/2.01	24	0.22		S_055		Without			
		22	0.38							
		20	0.60							
		18	0.93							
0120 182-20RG1 0120 151-20ROG	ASTRO TOOL TGV 101	24	0.22				2			
		22	0.38				3			
		20	0.60				4			
		18	0.93				5			
		16	1.34				6			
		14	1.91				7			
		DANIELS FT8	24				0.22			
	22		0.38	3						
	20		0.60	DANIELS	4					
	18		0.93	5						
	16		1.34	6						
	14	1.91	7							
ASTRO TOOL MS 3191/1	24	0.22		SS-0150000003 HYPERTAC		Without				
	22	0.38								
	20	0.60								
	18	0.93								
	16	1.34								
14	1.91									