

# SnapTac<sup>®</sup> Series

Circular and rectangular miniature snap fit connectors



# Hyperspring® Technology

Snaptac® product range is equipped with Hyperspring® contacts combining our high-reliability hyperboloid contact technology, with the mechanical features of a spring-loaded contact, to produce interconnections with improved signal integrity, high reliability and current density, and proven parametric stability over time.

A key innovation within the Snaptac® connector range is in the design of the spring loaded contact. For the first time, a hyperboloid socket has been combined with a spring loaded plunger to provide a compressible contact.

This arrangement enables the characteristics of very low and stable contact resistance, high current carrying capability, and extremely low wear mechanisms for extended operation over time to be realised within a sealed while unmated connector system. This unique combination enables the spring loading characteristic to be determined separately from the electrical characteristics thus optimising the mechanical, electrical and environmental performance.



## Technical characteristics

<b>Contact Dia</b>	0.50 mm
<b>Current Rating</b>	3 A
<b>Spring Force (max)</b>	1.5 N
<b>Contact Resistance</b>	<15mΩ
<b>Mating Cycles</b>	100,000
<b>Material</b>	<ul style="list-style-type: none"><li>- Non functional parts Brass plated with Au or Ni</li><li>- Spring contact element CuBe plated with 1.27 μm Au</li><li>- Spring element Stainless steel AISI 302</li><li>- Interface pin connection Bronze or CuBe plated with 1.27 μm Au</li><li>- Contact terminations Brass or Bronze plated with 1.27 μm Au</li></ul>

# Contents

SnapTac® Miniature Connectors .....	2
Applicable documents .....	3
Technical Characteristics - Circular Connector .....	4
How to Order .....	6
Available Polarizations .....	7
Contact Arrangement - View Mating Side .....	8
Plug - Solder Cup Termination .....	9
Plug - Solder Cup Termination with Overmoulding and Cabling .....	9
Plug - Solder Cup Termination with 90° Overmoulding and Cabling .....	9
Receptacle - Straight Through Termination .....	10
Receptacle - Solder Cup Termination .....	10
Panel Cut-out.....	10
Extender - Solder Cup Termination .....	11
Extender with Overmoulding and Cabling.....	11
Receptacle - Front Panel Mounting with Solder Cup Termination .....	12
Panel Cut-out.....	12
Plug - Front Panel Mounting with Solder Cup Termination .....	13
Plug - Rear Panel Mounting with Solder Cup Termination .....	14
Plug - Rear Panel Mounting with Overmoulding and Cabling.....	14
Panel Cut-out.....	14
Extender - Rear Panel Mounting with Solder Cup Termination .....	15
Extender - Rear Panel Mounting with Overmoulding and Cabling.....	15
Panel Cut-out.....	15
How to Order .....	16
Dust Cap .....	17
Cable Preparation .....	18
Technical Characteristics - Rectangular Connectors .....	19
How to Order .....	21
Plug - Solder Cup Termination .....	22
Plug with Overmoulding and Cabling.....	22
Receptacle - Solder Cup Termination .....	23
Receptacle - Straight Through Termination.....	23
Panel Cut-out.....	23
Available polarizations for 12 and 21 ways.....	24
Dust Cap - Accessories .....	25
30 Ways Plug - Solder Cup Termination .....	26
30 Ways Plug with Overmoulding and Cabling.....	26
30 Ways Receptacle - Solder Cup Termination .....	27
30 Ways Receptacle - Straight Through Termination.....	27
30 Ways Plug - Front Panel Mount .....	28

# SnapTac® Miniature Connectors

SnapTac® connectors provide a very reliable and robust connector system ideal for use in potentially dirty environments or where fast and easy mating and demating characteristics are required. Through the use of compressible contacts, potential mating and connectivity problems that can arise when the bores of conventional socket contacts become contaminated by the mud and detritus that may occur in everyday use are avoided. The easy to clean nature of the target and chisel blade contact mechanism, together with the sealed when unmated characteristic of both plug and receptacle, make this connector system ideal for harsh environments where reliability is paramount.

## Available geometries

SnapTac® connectors are available in both circular (7-, 13-, and 19-) and rectangular (12-, 21-, and 30-) way geometries. The SnapTac® connector plugs are available in two versions, with and without over-moulding, following requests for both turn-key solutions and easy integration into existing designs. A 90° overmoulded version is also available for the circular connector. The receptacle offers straight through and solder cup termination styles. The locking mechanism is easy and fast: the circular connector range features a snap on locking, the 12 and 21 way rectangular connectors are push pull, the 30 way rectangular connector has a quick turn locking device. 7, 13 and 19 way circular extenders, with and without overmoulding, are available for applications requiring in-line connection. Several hardware coding are available to avoid mismatching and to satisfy the customer technical needs as many non standard options are available. Please contact our sales office if you don't find in the catalogue the version that meets your requirements.

## Up to 10,000 mating cycles

Tactical communication equipment must survive the rigours of hostile environments and withstand the damage of dust, sand, mud. The connectors used on both the handset and headset can be mated and unmated thousand of times during the equipment life. SnapTac® connectors ensure higher durability and superior performance through the use of the unique Hypertac hyperboloid contact technology, offering shock and vibration immunity, low contact resistance, high current and voltage ratings, low mating forces, long life and low rate of wear.

The HyperSpring® spring loaded contacts used inside the connectors cannot be damaged or bent from mishandling. Their inherent self cleaning wiping action removes surface contamination, thus ensuring that the connector can't be damaged by the building up of surface films.

## Lighter and Compact

SnapTac® connectors combine robust environmental performance with compact size and light weight, which make them ideal for lightweight, compact, wearable EMI shielded electronic systems for applications including communication, identification / recognition, and other critical tasks.

## Waterproof and EMI protected

SnapTac® connectors are IP67 sealed according to IEC529 when mated and unmated. They incorporate full line EMI shielding and provide for high robustness throughout their lifetime.

## Accessories - Dust caps

Dust caps are available to protect the connector when unmated and to ensure full EMI shielding. The metal version is supplied in the same material of the connector (aluminium, brass, stainless steel), the rubber version is available in fluoro-polymer rubber. Special flanges have been designed to facilitate the rectangular connector rear panel mounting.

## Value Added services

Technical performance data hereby reported refer to SnapTac® connectors equipped with Hypertac cabling and overmoulding.

Custom and value added solutions are provided for customers' specific requirements including cabling, mechanical, instrumentation housing and testing. Custom solutions save valuable engineering and manufacturing time for customers and ensure the overall performance of the final product.

# Applicable Documents

## Base Material - Standard Specification

<b>MIL-M-24519</b>	Moulding Plastics, Electrical, Thermoplastic
<b>ASTM-B-16</b>	Free-Cutting Brass Rod, Bar and Shapes for Use in Screw Machines
<b>ASTM-B-121</b>	Leaded Brass Plate, Sheet, Strip, and Rolled Bar
<b>ASTM-B-139</b>	Standard Specification for Phosphor Bronze Rod, Bar, and Shapes
<b>ASTM-B-196</b>	Copper-Beryllium Alloy Rod and Bar
<b>ASTM-B-197</b>	Copper Beryllium Alloy Wire
<b>ASTM-B-209</b>	Aluminum and Aluminum-Alloy Sheet and Plate
<b>ASTM-B-455</b>	Standard Specification for Copper-Zinc-Lead Alloy (Leaded-Brass) Extruded Shapes
<b>ASTM-A-582</b>	Free-Machining Stainless Steel Bars and Heat Resisting Steel Bars, Hot Rolled or Cold Finished

## Surface Treatment - Standard Specification

<b>SAE-AMS-26074</b>	Coatings, Electroless Nickel
<b>MIL-STD-869</b>	Standard Specification for Flame Spraying
<b>ASTM-B-488</b>	Electrodeposited Coatings of Gold for Engineering Uses
<b>ASTM-A-967</b>	Chemical Passivation Treatments for Stainless Steel Parts
<b>QQ-N-290</b>	Nickel Plating Electrodeposited

## Test Procedures

<b>EIA 364</b>	Test Methods For Electrical Connectors
<b>UL94</b>	Test Methods For Flammability Rating
<b>IEC 529</b>	Degrees of protection provided by enclosures
<b>IEC 512</b>	Electromechanical components for electronic equipment

# Technical Characteristics

## Circular Connector

General	
Hyperspring® Contact Number	7,13,19
Receptacle Contact Termination	Solder Cup, Straight PCB
Plug Contact Termination	Solder Cup, Straight PCB
AWG Contact	24-28
Cable Diameter Range	Max 6 mm (7 ways) - Max 7.5 mm (13 ways) - Max 8.5 mm (19 ways)
Materials and Plating	
Inner Insulators	Polyphenylensulfide (PPS) type GST-40F per MIL-M-24519 V0 per UL 94
Interface Insulators	NBR Rubber per CEI 2019 Black V0 per UL 94
Overmoulded	Hot melt Polyamide 6.6
Housing	(see table 1)
Locking Hardware	Canted coil spring: Beryllium Copper
EMI-Gasket	Canted coil spring: Beryllium Copper
Hyperspring® Contacts	
Non Functional Parts	Brass as per ASTM-B-455 plated with Au as per ASTM-B-488
Spring Contact Element	CuBe as per ASTM-B-197 plated with Au as per ASTM-B-488
Spring Element	Stainless Steel AISI 302
Interface Pin Connection	Bronze as per ASTM-B-139 plated with Au as per ASTM-B-488
Plug Contact Terminations (solder cups)	Brass as per ASTM-B-455 plated Au as per ASTM-B-488
Bonding Agent	Epoxy resin
Mass Data	Related to standard connectors configuration (see table 2)
Electrical Characteristics	
EMI Shielding	360° shield coverage
Current Rating	3A@25°C for each contact according to IEC 512-3
Dielectric Withstanding Voltage (between contacts)	500 Vrms at sea level and 150 Vrms at 21336m according to EIA 364.20
Contact Resistance (low level)	< 15 mΩ for each contact according to EIA 364.6
Insulation Resistance	1000 MΩ @ 500V d.c. according to EIA364.21
Electrical Bonding Resistance	(see table 3)
Mechanical and Environmental Characteristics	
Temperature Range	-55°C +85°C
Temperature Cycling	EIA364.32 Method A
Salt Spray	EIA364.26 Condition A - mated connectors
Humidity	EIA364.31 Method IV
IP Level	67 mated and unmated IEC 529
Vibration	EIA364.28 Condition III
Shock	EIA364.27 Condition G
Hyperspring® Force (single contact)	Max 1.5 [N]
Connector Mating / Unmating Force	EIA364.09 (see table 4)

Table 1

Material		N	P	W
Alluminium Alloy AV2024 <i>ASTM-B-209</i>	AA*	Chemical Ni Matt Grey 20 µm SAE AMS-C-26074		Metal Spraying Tungsten Carbide Black 1-5 µm as per MIL-STD-869
	BR*			
Stainless Steel AISI316 <i>ASTM-B-582</i>	XS*			

Table 2

	(grams)	Mass data		
		Plug	Receptacle	Extender
C07	AA	4	4.8	4.2
	BR/XS	7.6	10.2	8
C13	AA	6.7	6.5	6
	BR/XS	11.4	13.5	12
C19	AA	8.4	7.1	7
	BR/XS	13.7	15.1	14.2

AA: Aluminium Alloy; BR: Brass; XS: Stainless Steel

Table 3

Electrical bonding resistance vs material/surface treatment			
AAN	BRN/BRW	XSP	XSW
<15 mΩ	<40 mΩ	<250 mΩ	<40 mΩ

Table 4

		Mating & unmating force				Life [# Cycle]
		Mating [N ]		Unmating [N ]		
		Min	Max	Min	Max	
C07	AAN/BRN/XSP	20	40	18	45	1K Cycles
	BRW/XSW					10K Cycles
C13	AAN/BRN/XSP	20	40	18	45	1K Cycles
	BRW/XSW					10K Cycles
C19	AAN/BRN/XSP	25	45	20	50	1K Cycles
	BRW/XSW					10K Cycles

AA: Aluminium Alloy; BR: Brass; XS: Stainless Steel

# How To Order



ST1091

SNAPTAC

1

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<b>1 Connector family</b>	
<b>2 Connector type</b>	<b>C</b> Circular
<b>3 Number of ways</b>	<b>07</b> <b>13</b> <b>19</b>
<b>4 Connector style</b>	<b>P</b> Plug <b>R</b> Receptacle rear panel mount <b>E</b> Extender in line <b>W</b> Extender rear panel mount <b>X</b> Receptacle front panel mount <b>Y</b> Plug front panel mount <b>Z</b> Plug rear panel mount
<b>5 Termination style</b>	<b>S</b> Solder cup <b>D</b> PCB straight
<b>6 Housing polarizations</b>	From C00 up to C07
<b>7 Wiring diagram <sup>(1)</sup></b>	From CH01 up to CHnn
<b>8 Base material &amp; surface protection</b>	<b>AAN</b> Aluminium alloy (AV2024) - Nickel <b>BRN</b> Brass - Nickel <b>BRW</b> Brass - Black tungsten carbide <b>XSP</b> Stainless steel AISI 316 - Passivated <b>XSW</b> Stainless steel AISI 316 - Black tungsten carbide

(1) Omit in case of connector without cable harnessing  
Contact us for CH number

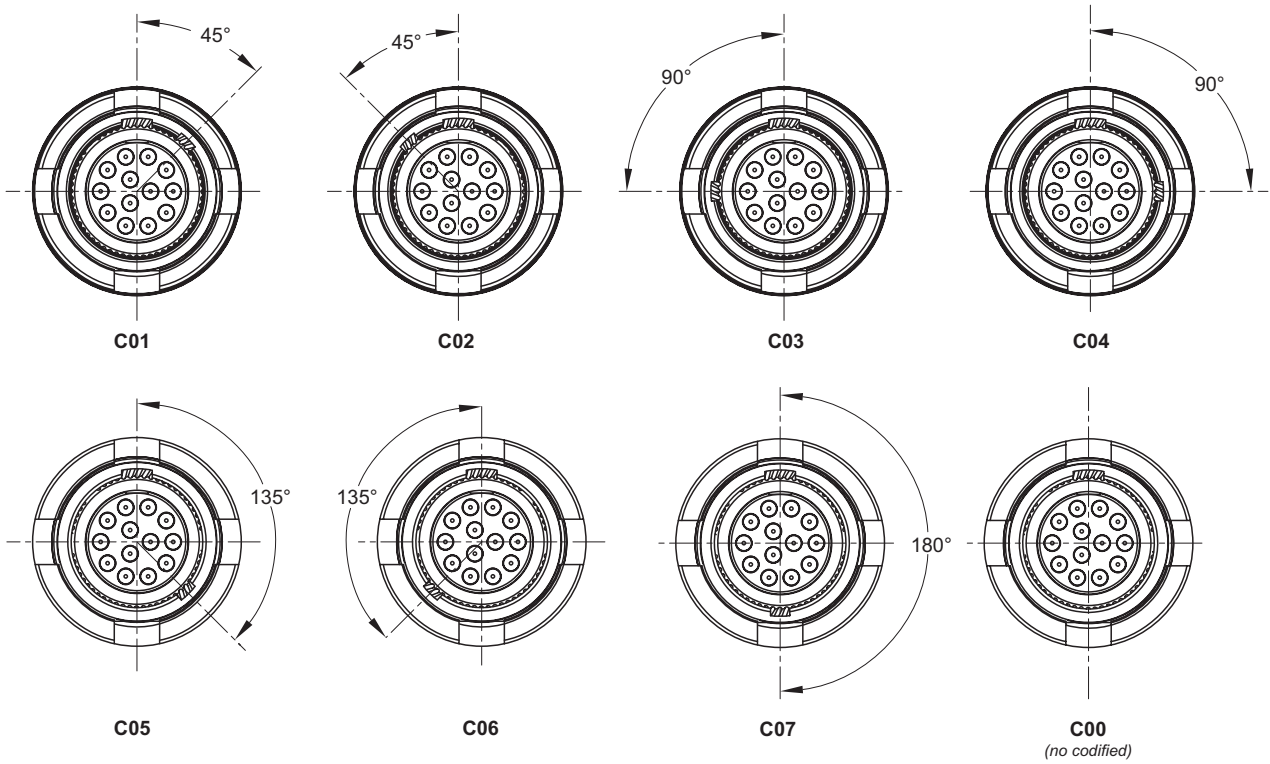
**Notes:**

1. Connectors identification does not require empty space (eg: C13PSC01AAZ)
2. Harnessing identification does not require empty space (eg: C13PSC01CH01AAZ)
3. Harnessing is applicable only to connectors type P, E, W.

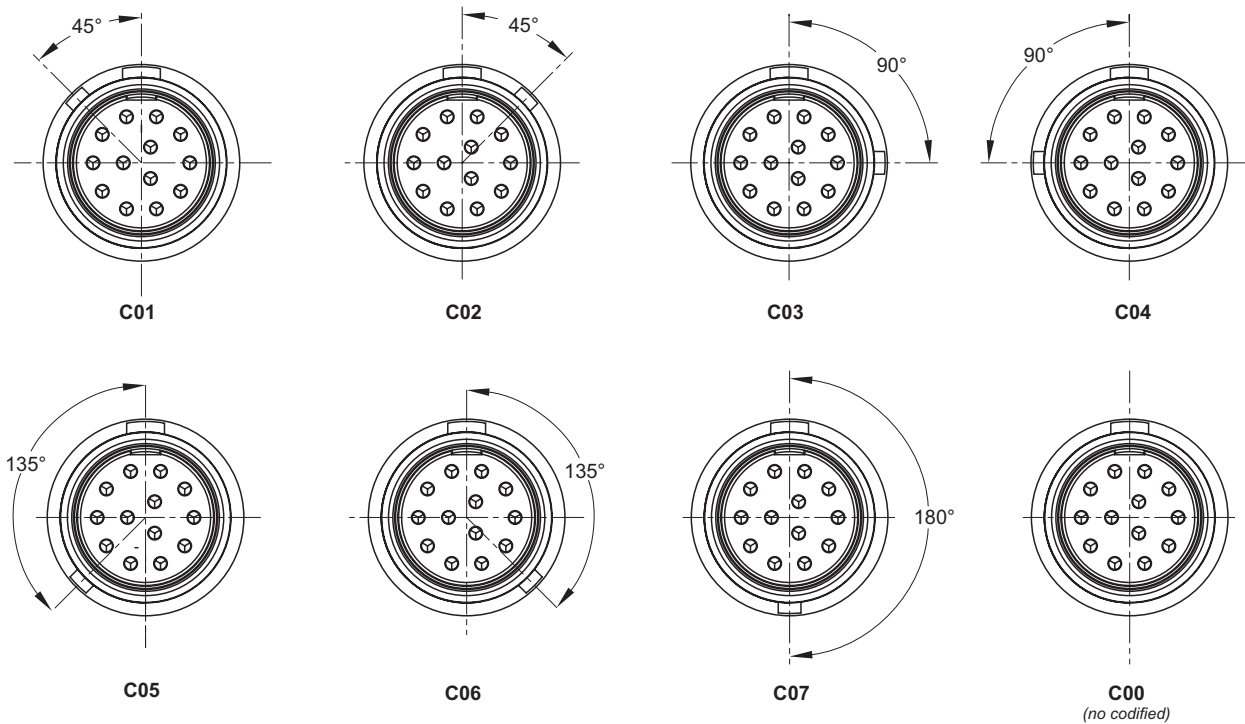


# Available Polarizations

## Receptacle Mating Side View

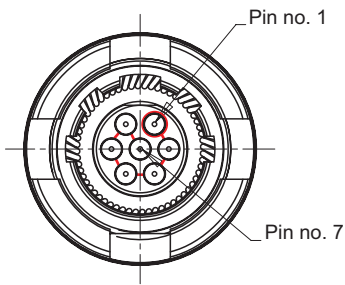


## Plug Mating Side View

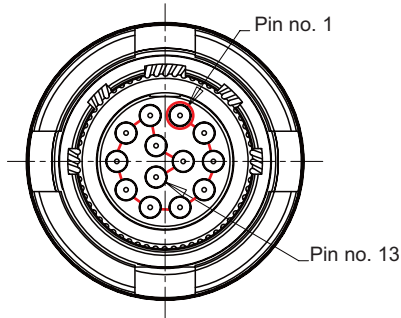


# Contact Arrangement - View Mating Side

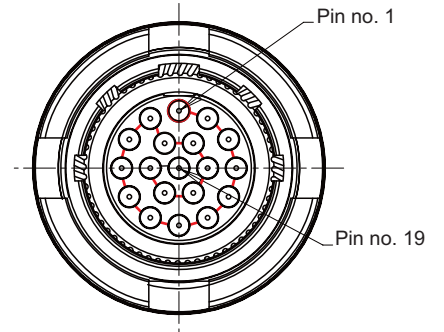
Receptacle C07R



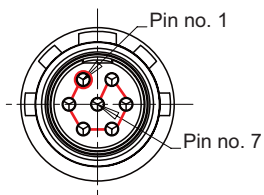
Receptacle C13R



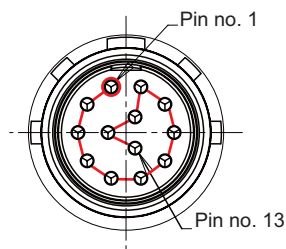
Receptacle C19R



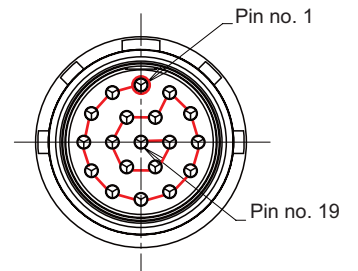
Plug C07P



Plug C13P



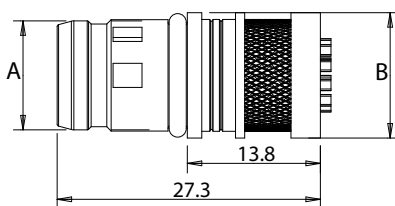
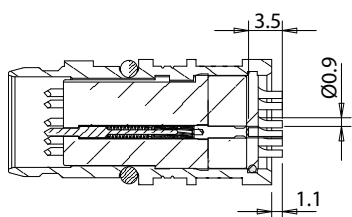
Plug C19P



# Plug

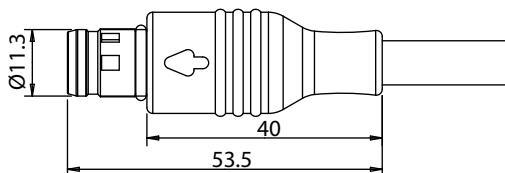
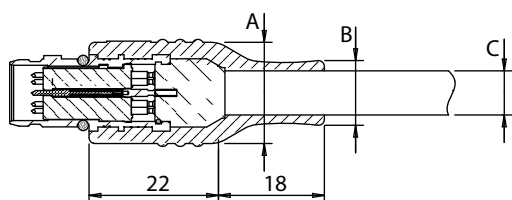
## Plug - Solder Cup Termination

No. of ways	PN	A	B
7	C07PSC-----	Ø 8.30	Ø 10.20
13	C13PSC-----	Ø 11.30	Ø 13.00
19	C19PSC-----	Ø 12.30	Ø 14.00



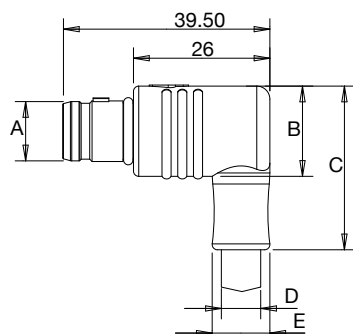
## Plug - Solder Cup Termination with Overmoulding and Cabling

No. of ways	PN	A	B	C	D
7	C07PSC--CH-----	Ø 14.50	Ø 9.50	Ø 6.00 max	Ø 8.30
13	C13PSC--CH-----	Ø 17.20	Ø 11.00	Ø 7.50 max	Ø 11.30
19	C19PSC--CH-----	Ø 18.20	Ø 12.00	Ø 8.50 max	Ø 12.30



## Plug - Solder Cup Termination with 90° Overmoulding and Cabling

No. of ways	PN	A	B	C	D	E
7	C07PSC--CH-----	Ø 8.30	Ø 14.50	28.50	Ø 9.50	Ø 6.00 max
13	C13PSC--CH-----	Ø 11.30	Ø 17.20	31.20	Ø 11.00	Ø 7.50 max
19	C19PSC--CH-----	Ø 12.30	Ø 18.20	32.20	Ø 12.00	Ø 8.50 max



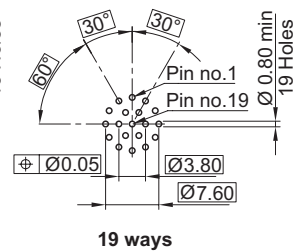
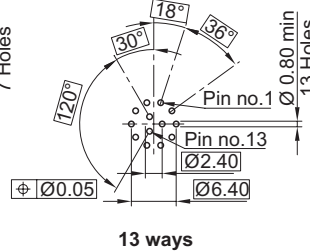
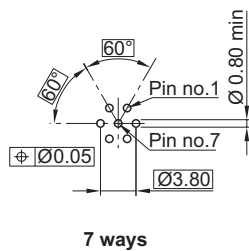
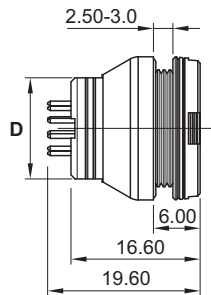
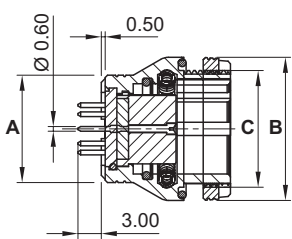
# Receptacle

## Receptacle - Straight Through Termination



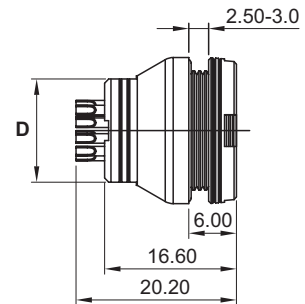
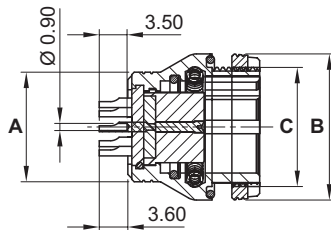
No. of ways	PN	A	B	C	D
7	C07RDC-----	Ø 11.00	Ø 15.40	M12x0.75	10.00
13	C13RDC-----	Ø 13.80	Ø 18.40	M15x0.75	13.00
19	C19RDC-----	Ø 14.80	Ø 19.40	M16x0.75	14.00

## Mounting Pattern - Component Side

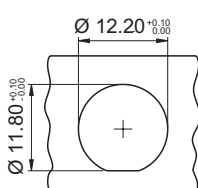


## Receptacle - Solder Cup Termination

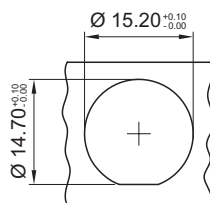
No. of ways	PN	A	B	C	D
7	C07RSC-----	Ø 11.00	Ø 15.40	M12x0.75	10.00
13	C13RSC-----	Ø 13.80	Ø 18.40	M15x0.75	13.00
19	C19RSC-----	Ø 14.80	Ø 19.40	M16x0.75	14.00



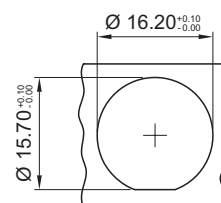
# Panel Cut-out



7 ways



13 ways



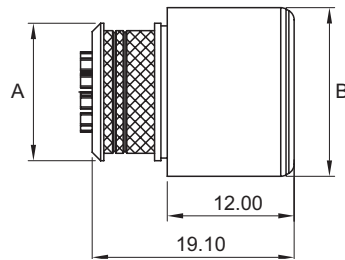
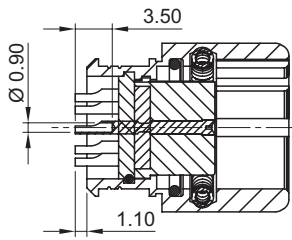
19 ways

Note: panel thickness max 3 mm

# Extender

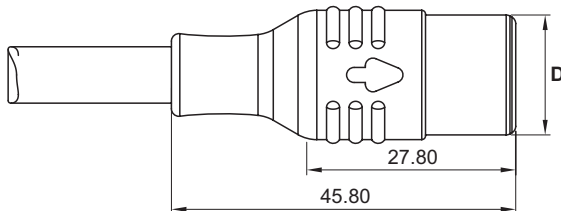
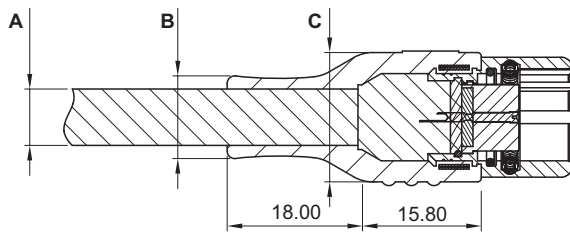
## Extender - Solder Cup Termination

No. of ways	PN	A	B
7	C07ESC-----	Ø 10.20	Ø 13.00
13	C13ESC-----	Ø 13.00	Ø 16.00
19	C19ESC-----	Ø 14.00	Ø 17.00



## Extender with Overmoulding and Cabling

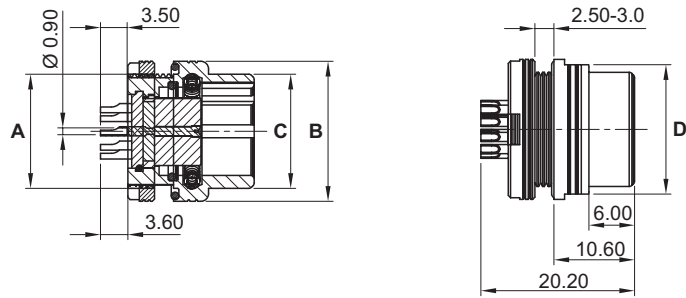
No. of ways	PN	A	B	C	D
7	C07ESC--CH-----	Ø 6.00 max	Ø 9.50	Ø 14.50	Ø 13.00
13	C13ESC--CH-----	Ø 7.50 max	Ø 11.00	Ø 17.20	Ø 16.00
19	C19ESC--CH-----	Ø 8.50 max	Ø 12.00	Ø 18.20	Ø 17.00



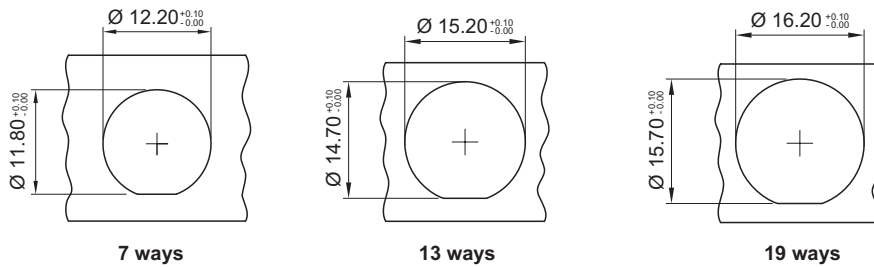
# Receptacle

Front panel mounting with solder cup termination

No. of ways	PN	A	B	C	D
7	C07XSC-----	M12x0.75	Ø 15.40	Ø 12.00	14.00
13	C13XSC-----	M15x0.75	Ø 18.40	Ø 15.00	17.00
19	C19XSC-----	M16x0.75	Ø 19.40	Ø 16.00	18.00



# Panel Cut-out

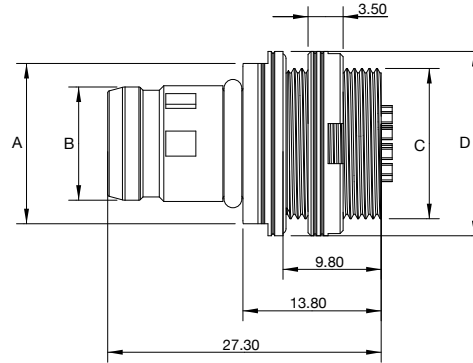
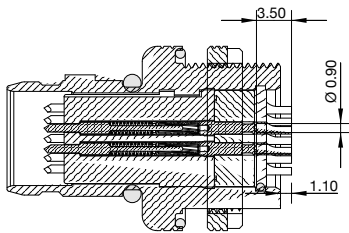


Note: panel thickness max 3 mm

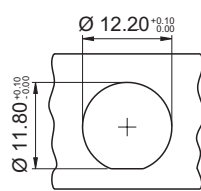
# Plug

Front panel mounting with solder cup termination

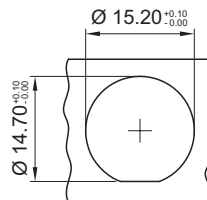
No. of ways	PN	A	B	C	D
7	C07YSC-----	13.00	Ø8.3	M12x0.75	Ø15.40
13	C13YSC-----	16.00	Ø11.30	M15x0.75	Ø18.40
19	C19YSC-----	17.00	Ø12.30	M16x0.75	Ø19.40



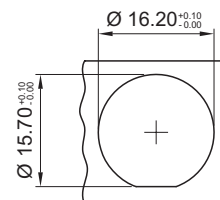
# Panel Cut-out



7 ways



13 ways



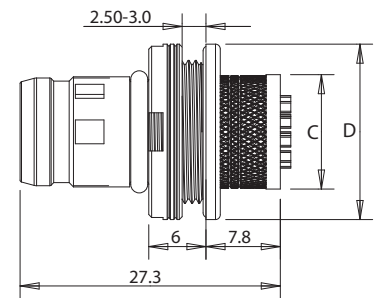
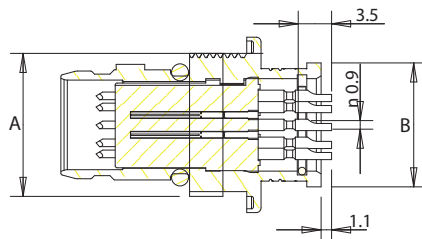
19 ways

Note: panel thickness max 3 mm

# Plug

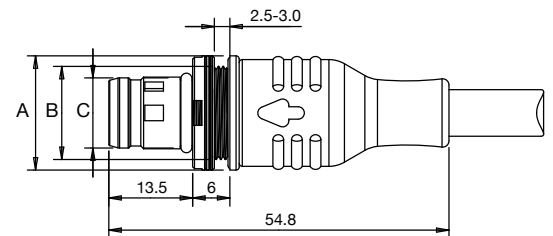
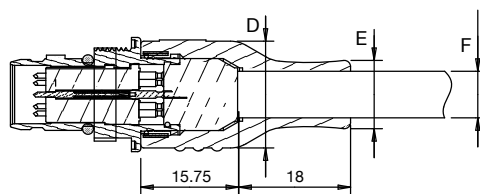
## Rear Panel Mounting with Solder Cup Termination

No. of ways	PN	A	B	C	D
7	C07ZSC-----	M12x0.75	Ø10.20	9.00	Ø15.40
13	C13ZSC-----	M15x0.75	Ø13.00	12.00	Ø18.40
19	C19ZSC-----	M16x0.75	Ø14.00	13.00	Ø19.40



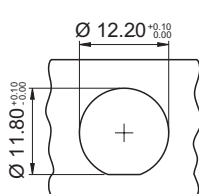
## Rear Panel Mounting with Overmoulding and Cabling

No. of ways	PN	A	B	C	D	E	F
7	C7ZSC--CH-----	Ø15.40	M12x0.75	Ø8.30	Ø14.50	Ø9.50	Ø6.00 max
13	C13ZSC--CH-----	Ø18.40	M15x0.75	Ø11.30	Ø17.20	Ø11.00	Ø7.50 max
19	C19ZSC--CH-----	Ø19.40	M16x0.75	Ø12.30	Ø18.20	Ø12.00	Ø8.50 max

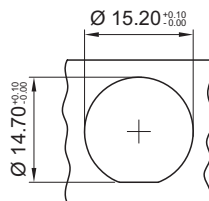


Note: for 7 and 19 ways connector details please contact our sales office.

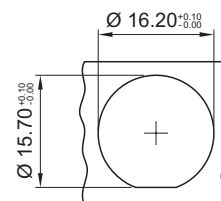
# Panel Cut-out



7 ways



13 ways



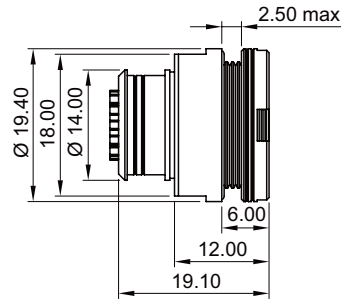
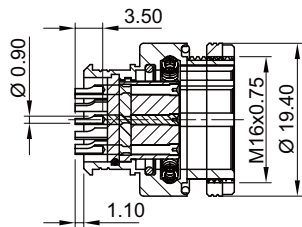
19 ways

Note: panel thickness max 3 mm



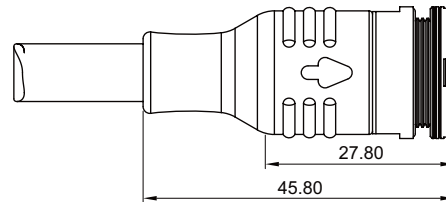
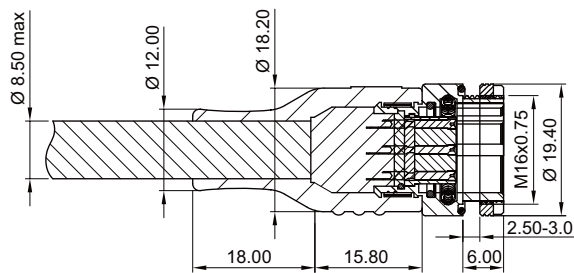
# Extender

## Rear Panel Mounting with Solder Cup Termination



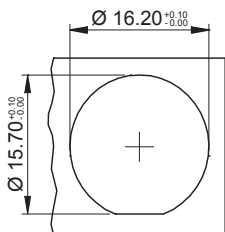
Ref. C19WSC-----

## Rear Panel Mounting with Overmoulding and Cabling



Ref. C19WSC--CH-----

# Panel Cut-out



Note: panel thickness max 3 mm

# How To Order



## Accessories - Dust Cap



<b>1 Connector family</b>	
<b>2 Connector type</b>	<b>C</b> Circular
<b>3 Number of ways</b>	<b>07</b> <b>13</b> <b>19</b>
<b>4 Dust cap type</b>	<b>CP</b> Dust cap for plug <b>CR</b> Dust cap for receptacle
<b>5 Dust cap version</b>	<b>MET</b> Metallic cap <b>RUB</b> Rubber cap
<b>6 Base material &amp; surface protection</b>	<b>AAN</b> * Aluminium alloy (AV2024) - Nickel <b>BRN</b> * Brass - Nickel <b>BRW</b> * Brass - Black tungsten carbide <b>XSP</b> * Stainless steel AISI 316 - Passivated <b>XSW</b> * Stainless steel AISI 316 - Black tungsten carbide <b>FPR</b> ** Fluoro polymer rubber

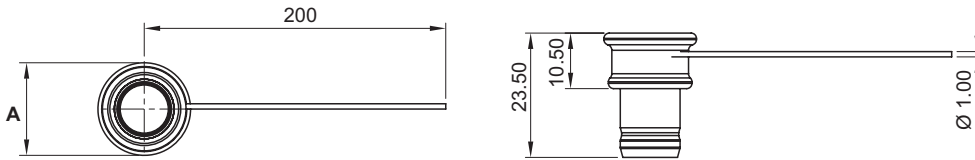
\* Only for MET

\*\* Only for RUB

# Dust Cap

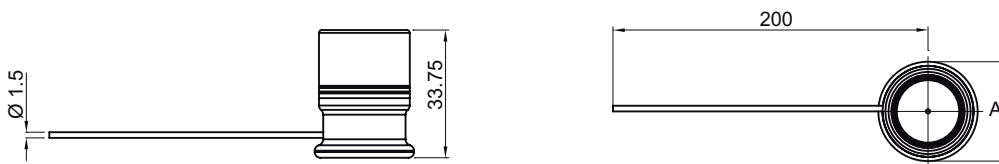
## Metal Version for Receptacle

No. of ways	PN	A
7	C07CRMET---	Ø 15.00
13	C13CRMET---	Ø 17.50
19	C19CRMET---	Ø 18.50



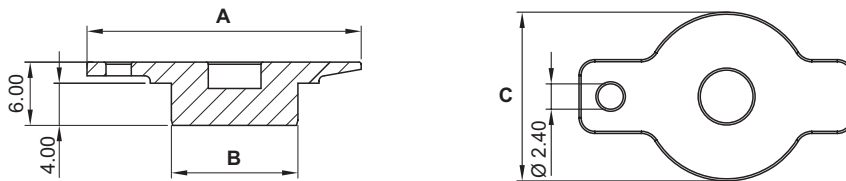
## Metal Version for Plug

No. of ways	PN	A
7	C07CPMET---	Ø 15.00
13	C13CPMET---	Ø 17.50
19	C19CPMET---	Ø 18.50



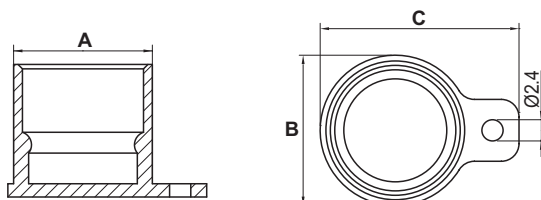
## Rubber Version for Receptacle

No. of ways	PN	A	B	C
7	C07CRRUBFPR	23.00	Ø 9.00	Ø 13.00
13	C13CRRUBFPR	26.00	Ø 12.00	Ø 16.00
19	C19CRRUBFPR	27.00	Ø 13.00	Ø 17.00



## Rubber Version for Plug

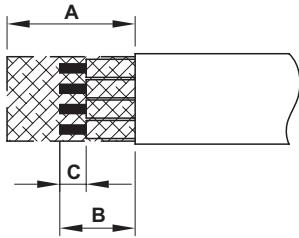
No. of ways	PN	A	B	C
7	C07CPRUBFPR	11.70	13.00	20.50
13	C13CPRUBFPR	14.70	16.50	22.25
19	C19CPRUBFPR	15.70	17.00	22.50



Note: contact us for rubber version for plug

# Cable Preparation

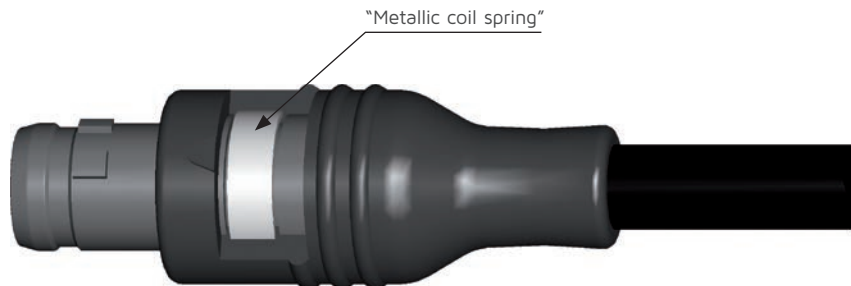
See below the stripping lengths for braid shield (A) and single wire (B & C).



	Plug (ref P)	Extender (ref E)
A	17	13
B	10	10
C	3.5	3.5

## EMI/EMC Protection

Plug (ref. P), extender in line (ref. E) and extender rear panel mounting (ref. W) of this specification are designed to be supplied with assembled cables. The electrical continuity between metal shell and cable shield is granted by a specific metallic coil spring for cable braid as showed in the picture.



Connector Size	Order Reference
C07	M1035
C13	M1036
C19	M1036

See below the knurled area for braid shield connection.



# Technical Characteristics

## Rectangular Connector

General	
Hyperspring® Contact Number	12,21,30
Receptacle Contact Termination	Solder Cup, Straight PCB
Plug Contact Termination	Solder Cup
AWG Contact	24-30
Cable Diameter Range	Max 8 mm

Materials and Plating	
Inner Insulators	Polyphenylensulfide (PPS) type GST-40F per MIL-M-24519 VO per UL 94
Interface Insulators	NBR Rubber per CEI 2019 Black VO per UL 94
Overmoulded Housing	Hot melt Polyamide 6.6 <i>(see table 1)</i>
Locking Hardware	Stainless Steel AISI 3xx - Passivated as per ASTM-A-967 - Coating Oxide Black as per MIL-DTL-13924D - Metal Spraying Tungsten Carbide Black as per MIL-STD-869
EMI-Gasket	Conductive Silicon
Hyperspring® Contacts	
Non Functional Parts	Brass as per ASTM-B-455 plated with Au as per ASTM-B-488
Spring Contact Element	CuBe as per ASTM-B-197 plated with Au as per ASTM-B-488
Spring Element	Stainless Steel AISI 302 passivated as per ASTM-A-967
Interface Pin Connection	Bronze as per ASTM-B-139 plated with Au as per ASTM-B-488
Plug Contact Terminations <i>(solder cups)</i>	Brass as per ASTM-B-455 plated Au as per ASTM-B-488
Bonding Agent	Epoxy resin
Mass Data	Related to standard connectors configuration <i>(see table 2)</i>

Electrical Characteristics	
EMI Shielding	360° shield coverage
Current Rating	3A@25°C for each contact according to IEC 512-3
Dielectric Withstanding Voltage <i>(between contacts)</i>	500 Vrms at sea level and 150 Vrms at 21336m according to EIA 364.20
Contact Resistance <i>(low level)</i>	< 15 mΩ for each contact according to EIA 364.6
Insulation Resistance	1000 MΩ @ 500V d.c. according to EIA364.21

Mechanical and Environmental Characteristics	
Temperature Range	-55°C +85°C
Temperature Cycling	EIA364.32 Method A
Salt Spray	EIA364.26 Condition A - mated connectors
Humidity	EIA364.31 Method IV
IP Level	67 mated and unmated IEC 529
Vibration	EIA364.28 Condition III
Shock	EIA364.27 Condition G
Hyperspring® Force <i>(single contact)</i>	Max 1.5 [N]
Connector Mating / Unmating Force	Max 60 [N] (12 ways) - Max 70 [N] (21 ways) - Max 80 [N] (30 ways)

Table 1

Material		Surface treatment	
		Z	N
<b>Alluminium Alloy AV2024</b>  <i>ASTM-B-209</i>	<b>AA*</b>	Zn/Co on Chemical Ni Black 5 µm SAE AMS-C-26074 Class 1	Chemical Ni Matt Grey 20 µm SAE AMS-C-26074 Class 1

Table 2

(grams)	Mass data		
	Plug	Plug (front panel mount)	Receptacle
<b>R12</b>	16	NA	5.5
<b>R21</b>	23	NA	7.5
<b>R30</b>	38	18	7.5

# How To Order



ST1089

SNAPTAC

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<b>1 Connector family</b>	
<b>2 Connector type</b>	<b>R</b> Rectangular
<b>3 Number of ways</b>	<b>1 2</b> <b>2 1</b> <b>3 0</b>
<b>4 Connector style</b>	<b>P</b> Plug <b>R</b> Receptacle front panel mount <b>Y</b> Plug front panel mount <i>(only 30 ways)</i>
<b>5 Termination style</b>	<b>S</b> Solder cup <b>D</b> PCB straight <i>(length = 3.15 mm)</i> <b>L</b> PCB straight <i>(length = 14 mm)</i>
<b>6 Housing polarizations</b>	From C00 up to C16 <i>(only for 12 &amp; 21 ways) - (preferred polarizations C01 - C06 - C11 - C16)</i>
<b>7 Wiring diagram<sup>(1)</sup></b>	From CH01 up to CHnn
<b>8 Base material &amp; surface protection</b>	<b>A A Z</b> Aluminium alloy (AV2024) - Zinc cobalt <b>A A N</b> Aluminium alloy (AV2024) - Nickel

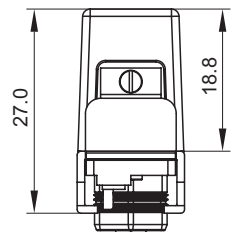
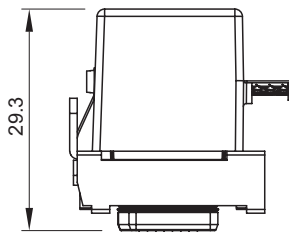
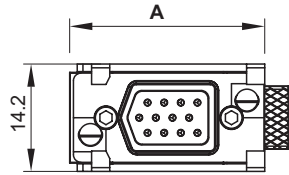
(1) Omit in case of connector without cable harnessing  
Contact us for CH number

**Notes:**

- 1 Connectors identification does not require empty space (eg: R12PSC01AAZ)
- 2 Harnessing identification does not require empty space (eg: R12PSC01CH01AAZ)
- 3 Harnessing is applicable only to connectors type P
- 4 Straight termination contacts are applicable only to R&Y

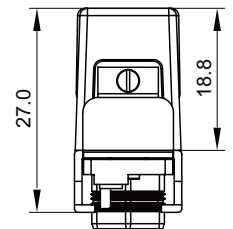
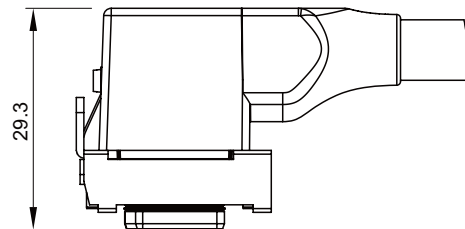
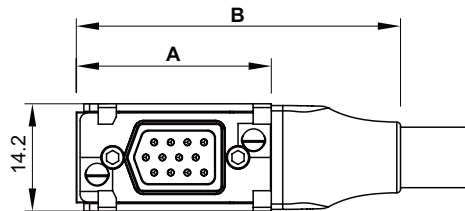
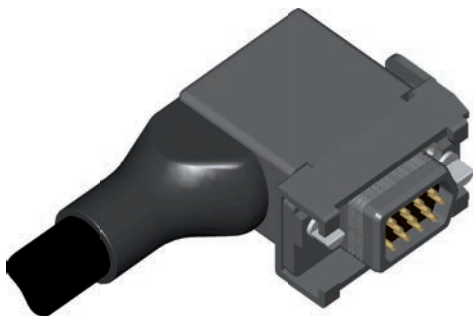
# Plug

## Plug - Solder Cup Termination



No. of ways	PN	A
12	R12PSC-----	25.8
21	R21PSC-----	32.4

## Plug with Overmoulding and Cabling

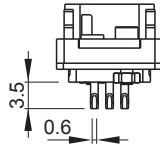
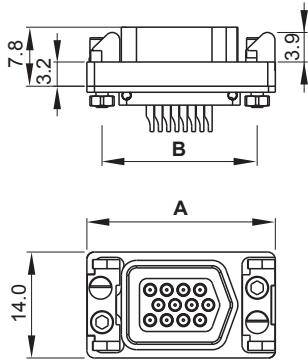


No. of ways	PN	A	B
12	R12PSC--CH-----	25.8	42,9
21	R21PSC--CH-----	32.4	49.6



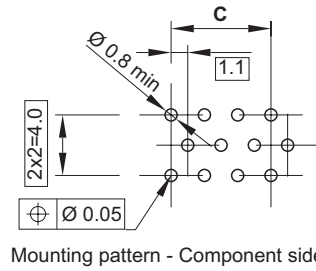
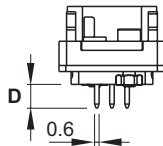
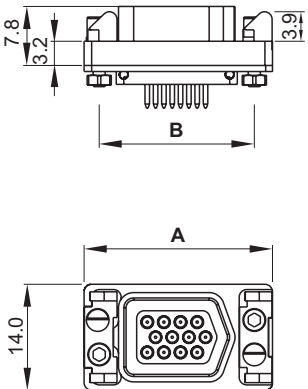
# Receptacle

## Receptacle - Solder Cup Termination



No. of ways	PN	A	B
12	R12RSC-----	24.9	20.5
21	R21RSC-----	31.5	27.1

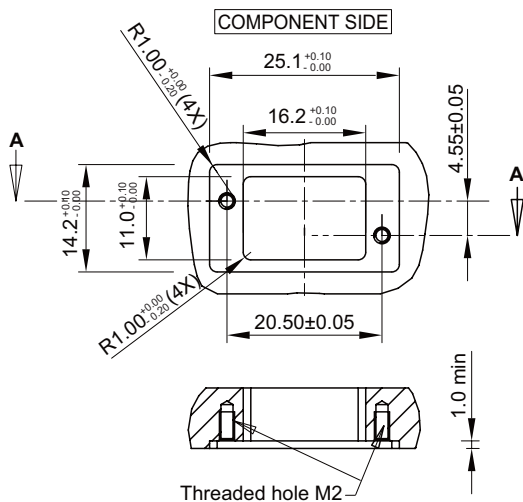
## Receptacle - Straight Through Termination



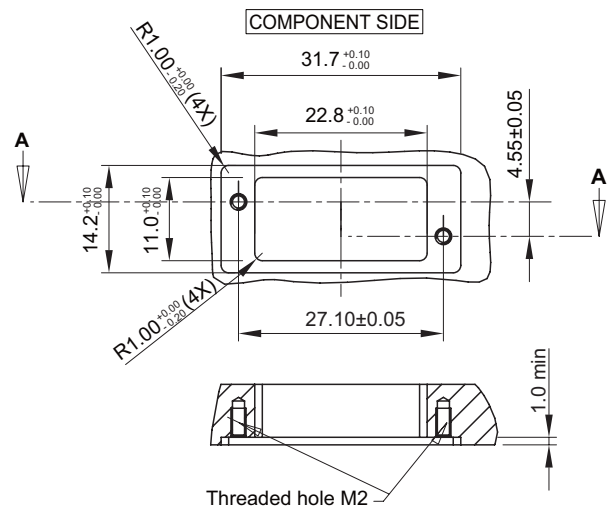
No. of ways	PN	A	B	C	D
12	R12RDC-----	24.9	20.5	6.6	3.15
	R12RLC-----				14
21	R21RDC-----	31.5	27.1	13.2	3.15
	R21RLC-----				14

# Panel Cut-out

## 12 Ways



## 21 Ways



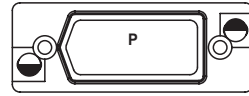
# Available Polarizations for 12 and 21 Ways



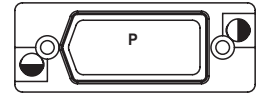
**C01**



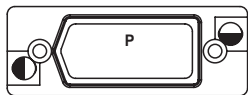
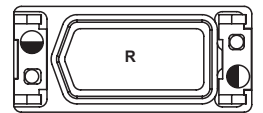
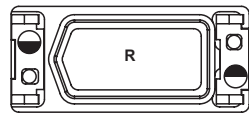
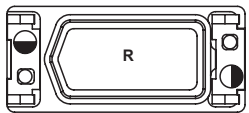
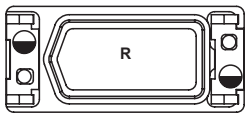
**C02**



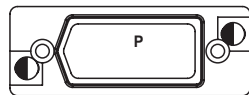
**C03**



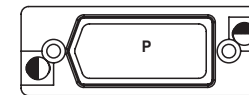
**C04**



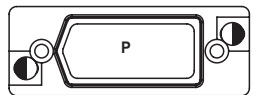
**C05**



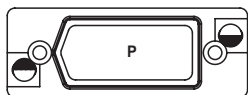
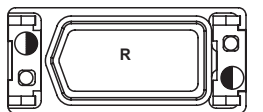
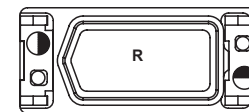
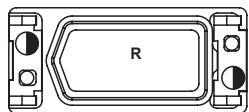
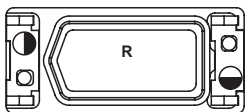
**C06**



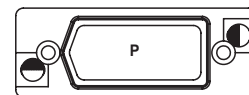
**C07**



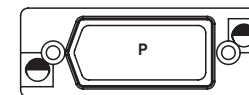
**C08**



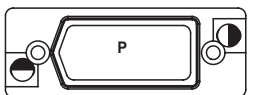
**C09**



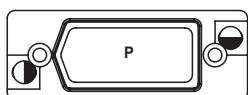
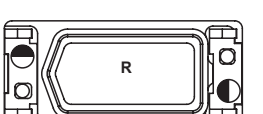
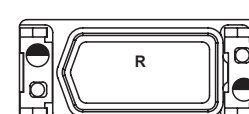
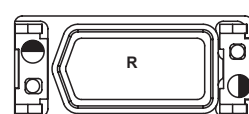
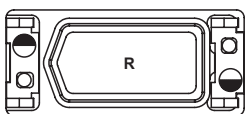
**C10**



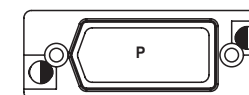
**C11**



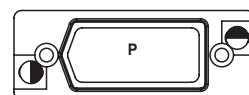
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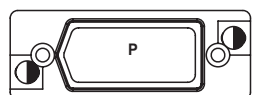
**C13**



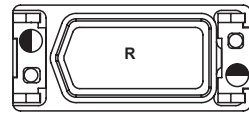
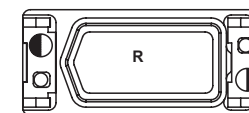
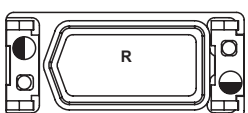
**C14**



**C15**

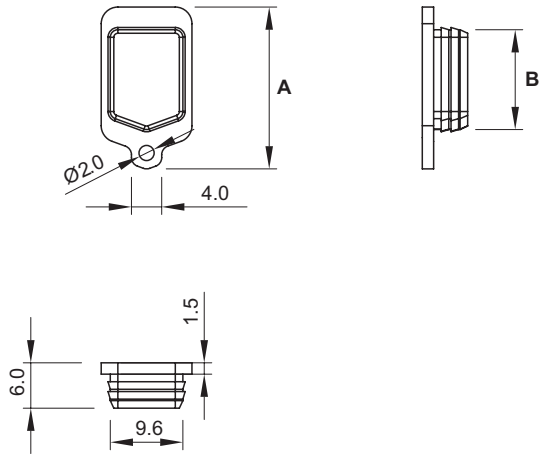


**C16**



# Dust Cap

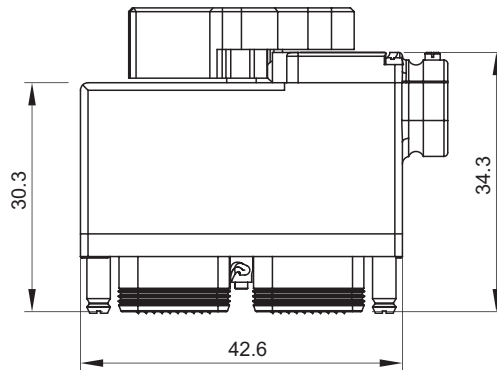
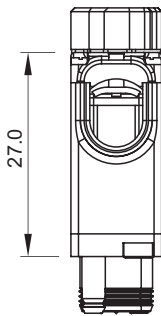
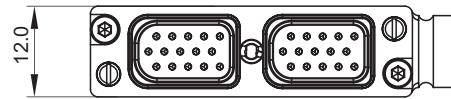
## Accessories



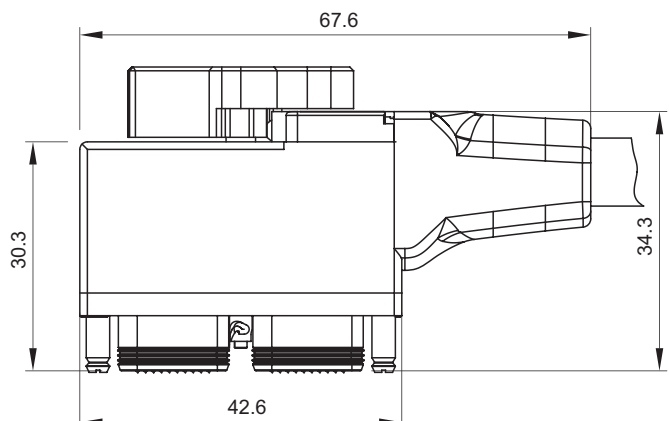
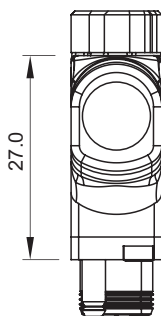
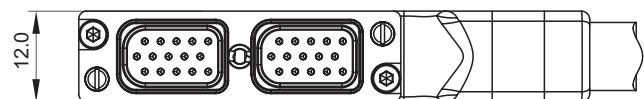
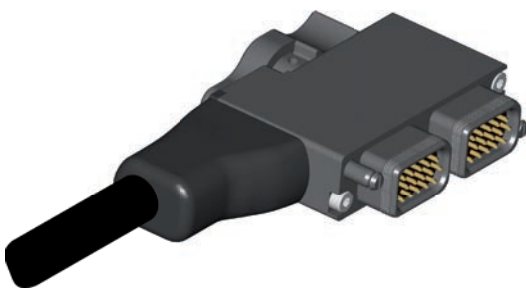
No. of ways	PN	A	B
12	23841	21.4	13.2
21	23840	28	19.8

# 30 Ways Plug

## 30 Ways plug - Solder Cup Termination

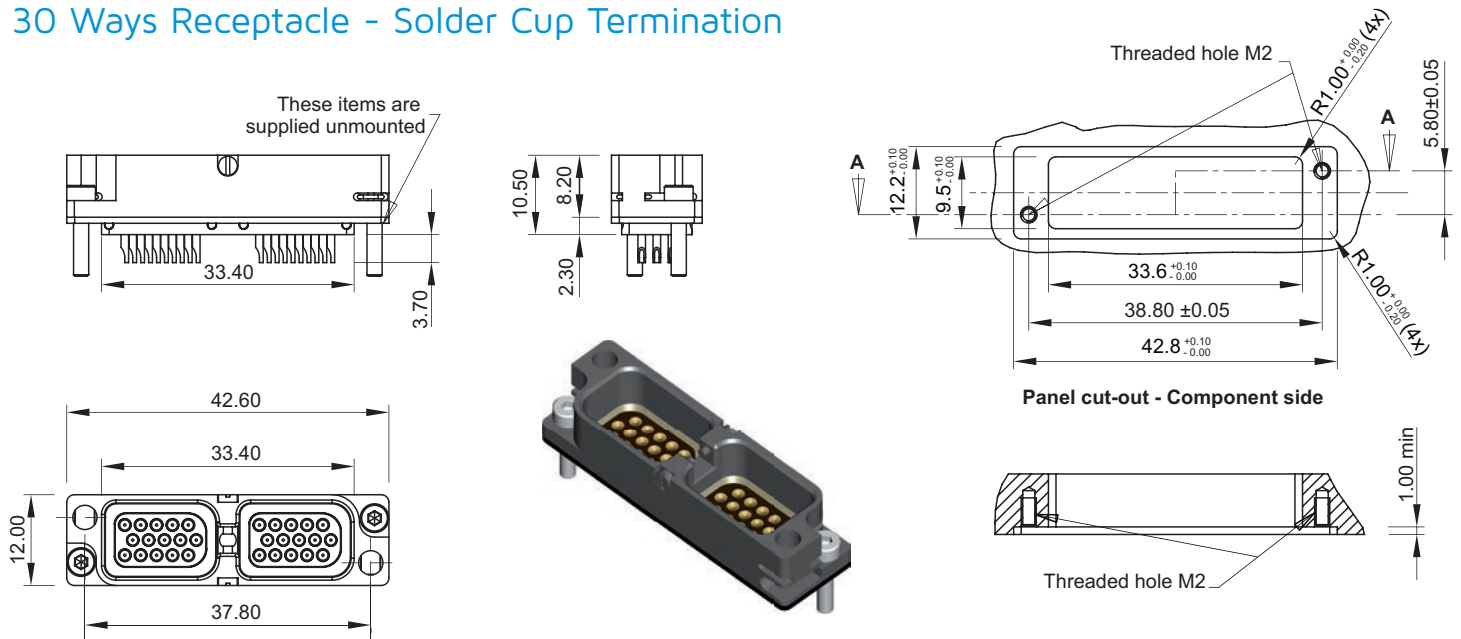


## 30 Ways Plug with Overmoulding and Cabling

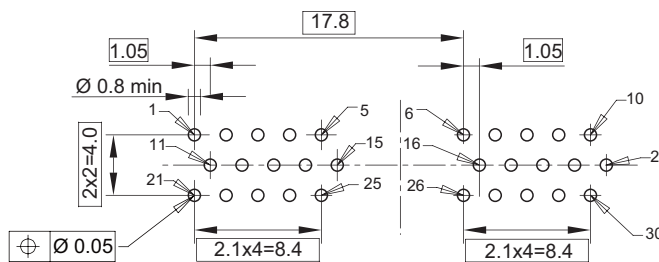
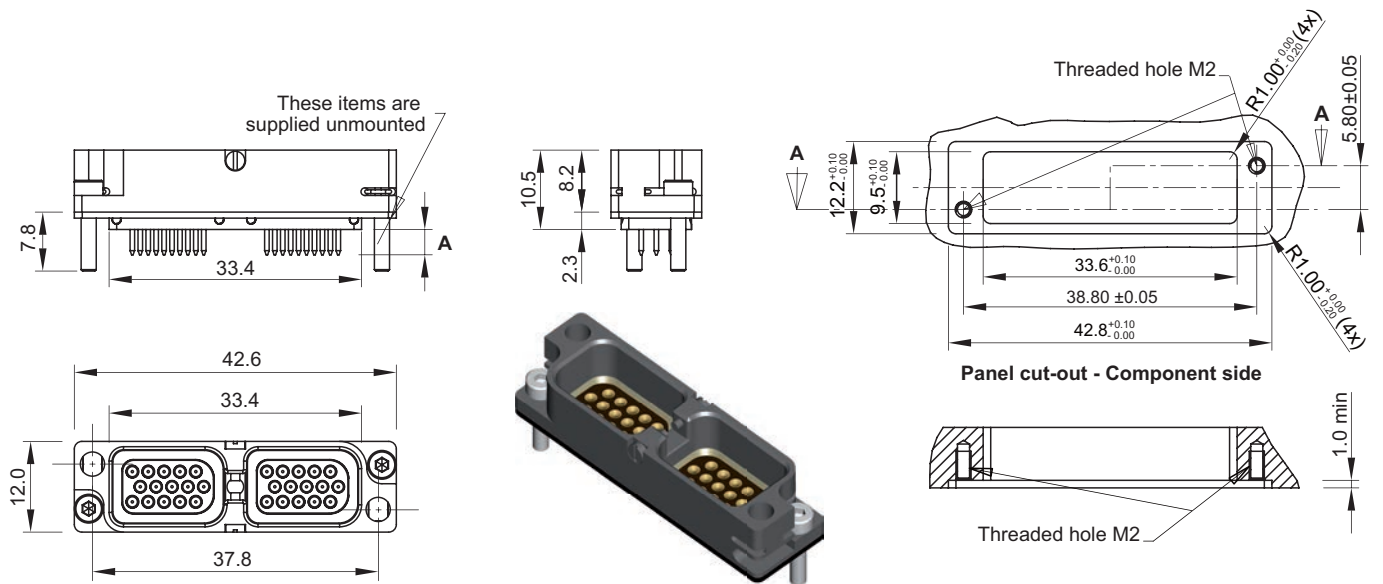


# 30 Ways Receptacle

## 30 Ways Receptacle - Solder Cup Termination



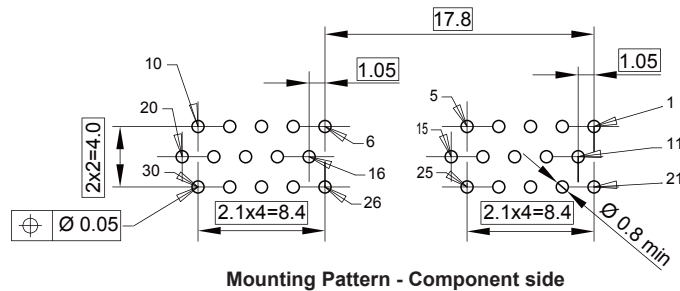
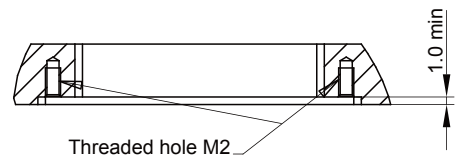
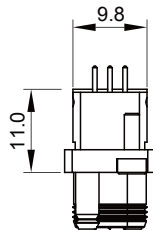
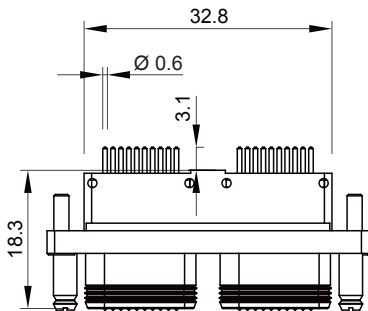
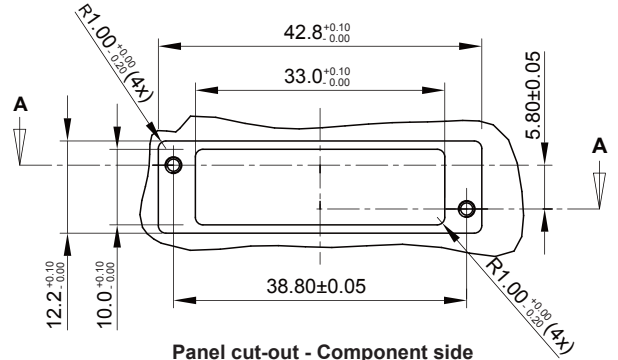
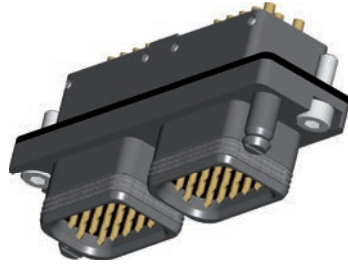
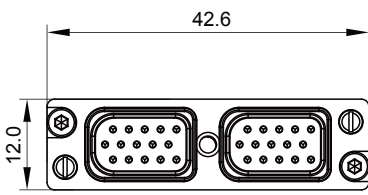
## 30 Ways Receptacle - Straight Through Termination



Mounting Pattern - Component side

	A
R30RDC----	3.15
R30RLC----	14

# 30 Ways Plug - Front Panel Mount



## Disclaimer 2018

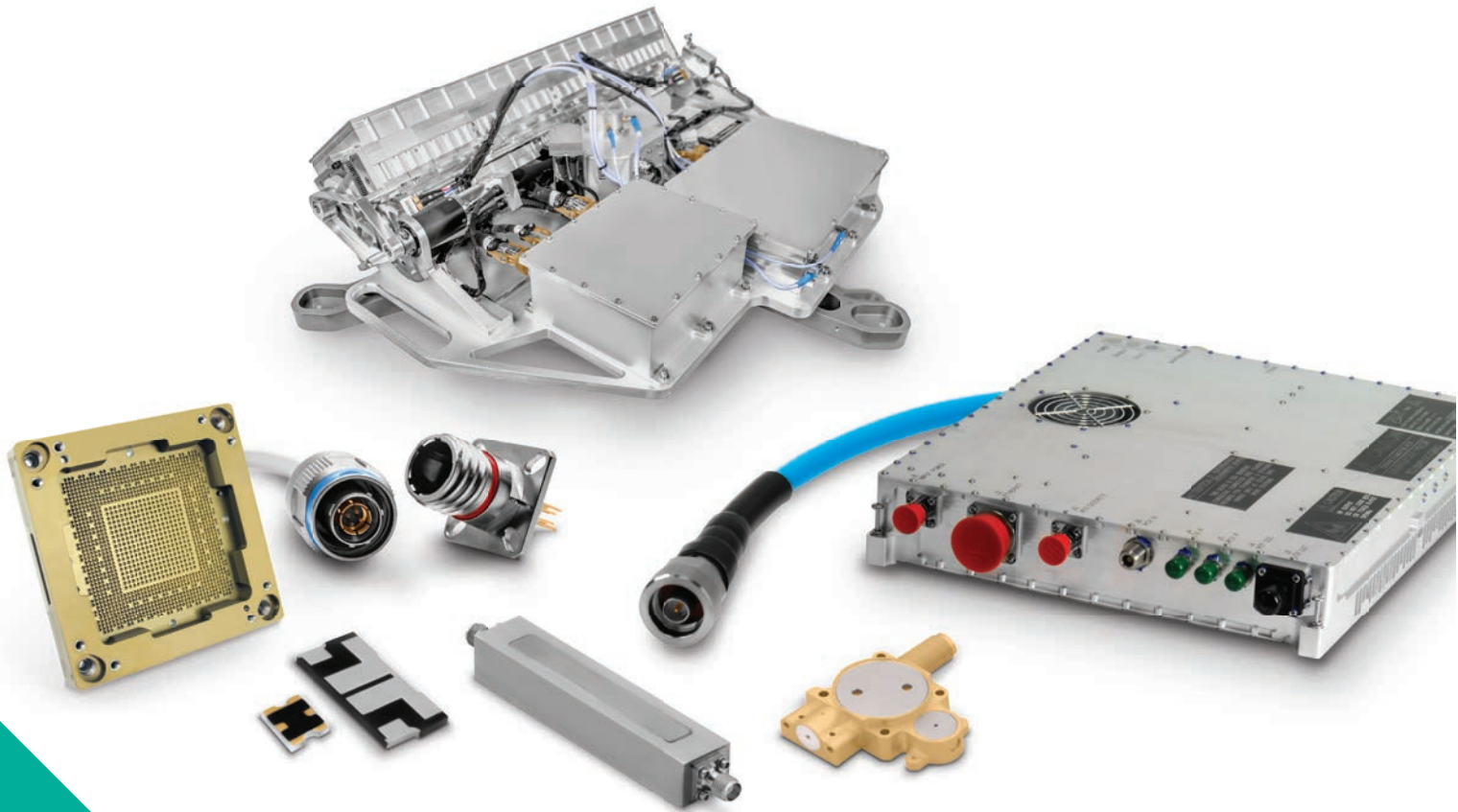
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