COAXIAL, TRIAXIAL, MULTI & MIXED CONNECTORS

SHORT FORM CATALOGUE

LEMO®

Precision modular connectors to suit your application

Since its creation in Switzerland in 1946 the LEMO Group has been recognized as a global leader of circular Push-Pull connectors and connector solutions. Today LEMO and its affiliated companies, REDEL and COELVER, are active in more than 80 countries with the help of over 40 subsidiaries and distributors.

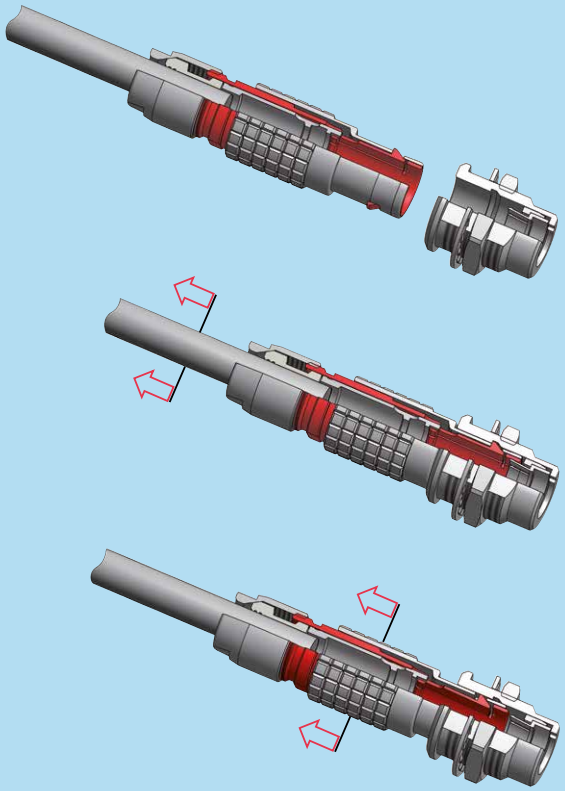
Over 75000 connectors

The modular design of the LEMO range provides over 75000 connectors from miniature ø 3 mm to ø 50 mm, capable of handling cable diameters up to 30 mm and for up to 114 contacts.

This vast portfolio enables you to select the ideal connector configuration to suit almost any specific requirement in most markets, including medical devices, test and measurement instruments, machinery, audio video broadcast, telecommunications and military.

LEMO's Push-Pull Self-Latching Connection System

This self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable, and facilitates operation in a very limited space.



The LEMO self-latching system allows the connector to be mated by simply pushing the plug axially into the socket.

Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.

When required, the connector is disengaged by a single axial pull on the outer release sleeve.
This first disengages the latches and then withdraws the plug from the socket.

UL Recognition

LEMO connectors are recognized by the Underwriters Laboratories (UL). The approval of the complete system (LEMO connector, cable and your equipment) will be easier because LEMO connectors are recognized.

CE marking

CE marking means that the appliance or equipment bearing it complies with the protection requirements of one or several European safety directives. CE marking applies to complete products or equipment, **but not to electromechanical components, such as connectors**.

RoHS

LEMO connector specifications conforms the requirements of the RoHS directive (2011/65/EU) of the European Parliament and the latest amendments. This directive specifies the restrictions of the use of hazardous substances in electrical and electronic equipment marketed in Europe.

Introduction

This catalogue gives the complete description of LEMO connectors with coaxial, triaxial and mixed contacts.
Mixed contacts include coaxial and low voltage contact configurations, as well as multi-coaxial contact configurations.

The LEMO manufacturing programme has been extended to almost 40 series divided into 7 product families with specific mating and environmental characteristics. Each series includes a wide variety of plug, socket and coupler models, available in contact configurations adapted to all round cables. The catalogue includes the B, K, S and E Series of the LEMO product range. In addition the 00 Series (triaxial) connector is also represented.
Watertight and vacuumtight models are also available. Since LEMO connectors are perfectly screened and designed to guarantee very low resistance to shell electrical continuity, they are particularly adapted to applications where electromagnetic compatibility (EMC) is important.

Material and treatment

Component	Material (Standard)	Surface treatment (µm)										Notes
		chrome			nickel		gold			black chr.		
		Cu	Ni	Cr	Cu	Ni	Cu	Ni	Au	Ni	Cr	
Outer shell, collet nut, conical nut or notched nut and oversized collet	Brass (UNS C 38500)	0.5	3	0.3	0.5	3	0.5	3	0.5	1	2	
	Stainless steel (AISI 303, 304 or 316L)	without treatment										
	Aluminium alloy (AA 6262A or AA 6023)	anodized										
	POM (Delrin® or Ertacetal®), Polyoxymethylene, black	–										1)
	PEEK, Polyether ethercetone, beige	–										2)
	PSU (Udel®), Polysulfone, grey or white	–										3)
	PPSU (Radel®), Polyphenylsulfone, cream	–										3)
	PPS (Ryton®), Polyphenilene sulfide, brown	–										4)
Earthing crown	Bronze (UNS C 54400) or special brass	–	–	–	0.5	3	0.5	3	1.0	–	–	5)
	Beryllium Copper (UNS C 17300)	–	–	–	0.5	3	0.5	3	1.0	–	–	6)
	Stainless steel (AISI 416 or 316L)	without treatment										7)
Latch sleeve	Special brass	0.5	3	0.3	0.5	3	0.5	3	0.5	–	–	
	Stainless steel (AISI 416 or 316L)	without treatment										7)
Locking washer	Bronze (UNS C 52100)	–	–	–	0.5	3	0.5	3	0.5	–	–	
Hexagonal or round nut	Brass (UNS C 38500)	–	–	–	0.5	3	0.5	3	0.5	–	–	
	Stainless steel (AISI 303, 304 or 316L)	without treatment										8)
	Aluminium alloy (AA 6262A or AA 6023)	anodized natural										8)
Other metallic components	Brass (UNS C 38500)	–	–	–	0.5	3	0.5	3	0.5	–	–	
	Stainless steel (AISI 303, 304 or 316L)	without treatment										
O-ring and gaskets	Silicone MQ/MVQ or FPM/FKM (Viton®)	–										9)
Sealing resin	Epoxy (Araldite® or Stycast®)	–										

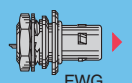
Notes:
standards for surface treatment are as follows:
– chrome-plated: SAE AMS 2460
– nickel-plated: SAE AMS QQ N 290, or MIL DTL 32119
– gold-plated: ISO 27874
– black chrome: MIL-C-14538C with a minimum of 10 µm of lacquer protection
1) for FFP, PCP and ERN models of the 0S to 3S series
2) for FFP, PCP and ERN models of the 0S to 3S series, FGG and ENG models of the 0B, 1B, 3B and 4B series, FFA and FFC models of the 00 triaxial series
3) for the FGG, FGY and ENY models of the 2B to 4B series
4) for 00 triaxial series (elbow sockets for printed circuits)
5) gold-plating for unipole types
6) used in 00 series free and fixed sockets
7) AISI 416 steel is used with shells made of AISI 303 or 304
8) delivered with free and fixed sockets with aluminium alloy or stainless steel shell
9) FPM/FKM (Viton®) o-ring and gaskets are installed upon special request. However standard for vacuumtight models.

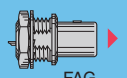
B Series

B series connectors provide the following main features:
– security of the Push-Pull self-latching system
– coaxial, triaxial and mixed contact configurations
– plastic models made of PSU or PPSU
– multiple key options to avoid cross mating of similar connectors («G» key standard).
– up to 10 coaxial contacts
– solder or crimp contacts
– high packing density for space savings
– 360° screening for full EMC shielding

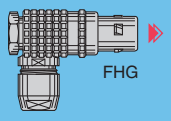
Metal housing models

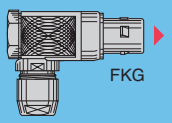
Fixed plugs



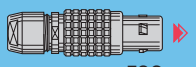


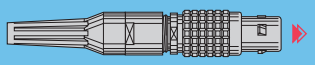
Elbow plugs

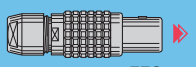


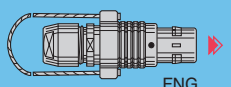


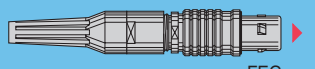
Straight plugs

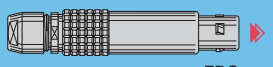


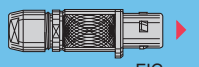




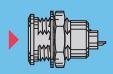


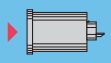


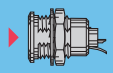


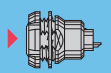


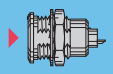
Fixed sockets

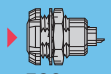


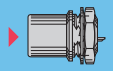




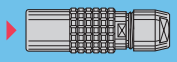


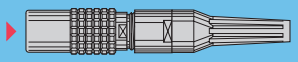


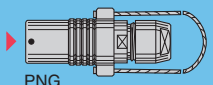




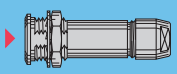
Free sockets

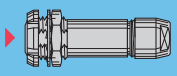


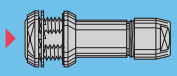




Fixed sockets

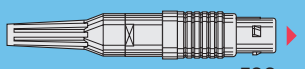


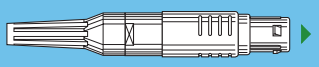


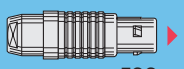


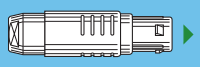
Plastic housing models

Straight plugs

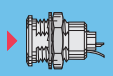


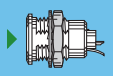






Fixed sockets

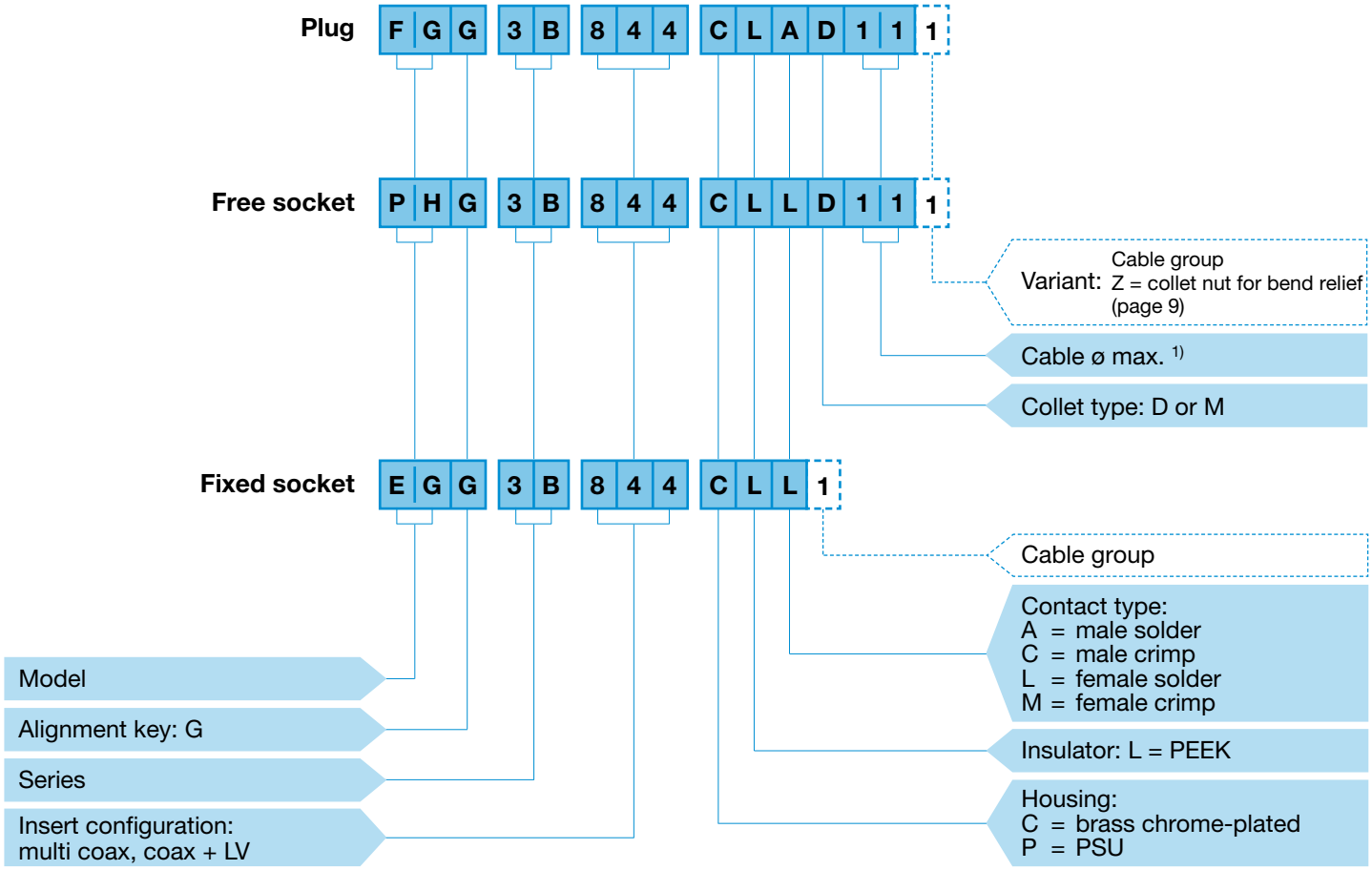




Model Description

ECG Fixed socket with two nuts, key (G) or keys (A…L and R) (back panel mounting)
EEG Fixed socket, nut fixing, key (G) or keys (A…L and R) (back panel mounting)
EGG Fixed socket, nut fixing, key (G) or keys (A…L and R)
EHG Fixed socket, nut fixing, key (G) or keys (A…L and R), and protruding shell
EJG Fixed socket, press or adhesive fit, key (G) or keys (A…L)
EKG Fixed socket, nut fixing, key (G) or keys (A…L and R), special alignment mark on the front
ENG Fixed socket with earthing tag, nut fixing, key (G) or keys (A…L)
ENG Fixed socket with earthing tag, nut fixing, key (G or J), PEEK outer shell
ENY Fixed socket with earthing tag, nut fixing, keys (Y), PSU or PPSU outer shell
FAG Fixed plug, non-latching, nut fixing, key (G) or keys (A…L and R)
FDG Straight plug, long version, key (G) or keys (A…L), cable collet
FEG Straight plug, key (G) or keys (A…L), cable collet, front seal and nut for fitting a bend relief (IP 54 protection index when mated)
FFG Straight plug, non-latching, key (G) or keys (A…L), cable collet
FGG Straight plug, key (G) or keys (A…L and R), cable collet
FGG Straight plug, key (G) or keys (A…L), cable collet and nut for fitting a bend relief
FGG Straight plug, key (G or J), cable collet, PEEK outer shell
FGG Straight plug, key (G or J), cable collet, PEEK outer shell, nut for fitting a bend relief
FGY Straight plug, keys (Y), cable collet and PSU or PPSU outer shell
FGY Straight plug, keys (Y), cable collet and PSU or PPSU outer shell and nut for fitting a bend relief
FHG Elbow (90°) plug, key (G) or keys (A…L and R), cable collet
FIG Straight plug for remote handling, key (G) or keys (A…L and R), special alignment mark, knurled handling surface, cable collet
FKG Elbow (90°) plug for remote handling, key (G) or keys (A…L), special alignment mark, knurled handling surface, cable collet
FNG Straight plug, key (G) or keys (A…L and R), cable collet and lanyard release
FWG Fixed plug, nut fixing, key (G) or keys (A…L)
PEG Fixed socket, nut fixing, key (G) or keys (A…L), cable collet (back panel mounting)
PFG Fixed socket, with two nuts, key (G) or keys (A…L and R), cable collet (back panel mounting)
PHG Free socket, key (G) or keys (A…L and R), cable collet
PHG Free socket, key (G) or keys (A…L), cable collet and nut for fitting a bend relief
PKG Fixed socket, nut fixing, key (G) or keys (A…L and R), cable collet
PNG Free socket, nut fixing, key (G) or keys (A…L and R), cable collet with lanyard release

Part Numbering System



FGG.3B.844.CLAD111 = straight plug with key (G) and cable collet, 3B series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome-plated brass, PEEK insulator, male solder contacts, D type collet for up to 11 mm diameter cable. Cable group 1.

PHG.3B.844.CLLD111 = free socket with key (G) and cable collet, 3B series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome-plated brass, PEEK insulator, female solder contacts, D type collet for up to 11 mm diameter cable. Cable group 1.

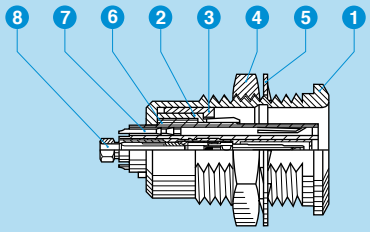
EGG.3B.844.CLL1= fixed socket, nut fixing, with key (G), 3B series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome plated brass, PEEK insulator, female solder contacts. Cable group 1.

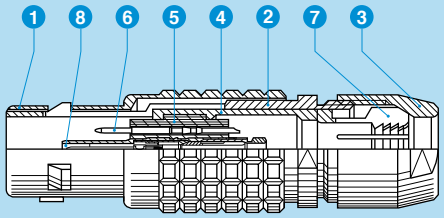
Note: 1) see unipole-multipole catalogue.

Part Section Showing Internal Components (mixed coax + LV)

Fixed socket

1. outer shell
2. earthing crown
3. retaining ring
4. hexagonal nut
5. locking washer
6. insulator
7. female contact
8. female coaxial contact





Straight plug

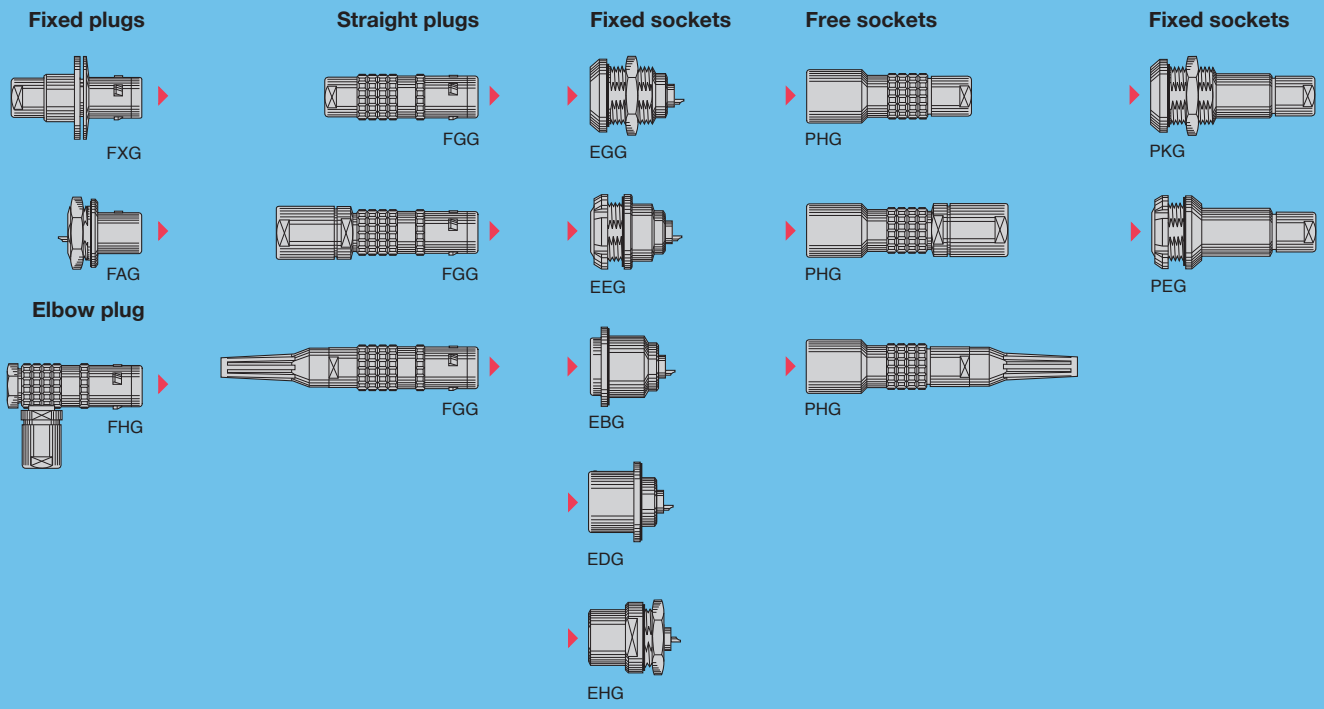
1. outer shell
2. latch sleeve
3. collet nut
4. split insert carrier
5. insulator
6. male contact
7. collet
8. male coaxial contact

K Series

K series connectors have been specifically designed for outdoor applications.
They include an inner sleeve and two seals to prevent penetration of solids or liquids into the housing formed by the plug, free socket or fixed socket. All models of this series are watertight when mated to give a protection index of IP68 as per IEC 60529 standard (in mated condition) when correctly assembled to an appropriate cable (IP66 otherwise).
K series connectors have the same insulators as the B series and have the following main features:

– security of the Push-Pull latching system
– coaxial, triaxial and mixed contact configurations
– solder or crimp contacts
– multiple key options to avoid cross mating of similar connectors («G» key standard)
– watertight connection (IP 68/IP 66)
– up to 10 coaxial contacts
– 360° screening for full EMC shielding
– high packing density for space savings
– rugged housing for extreme working conditions.

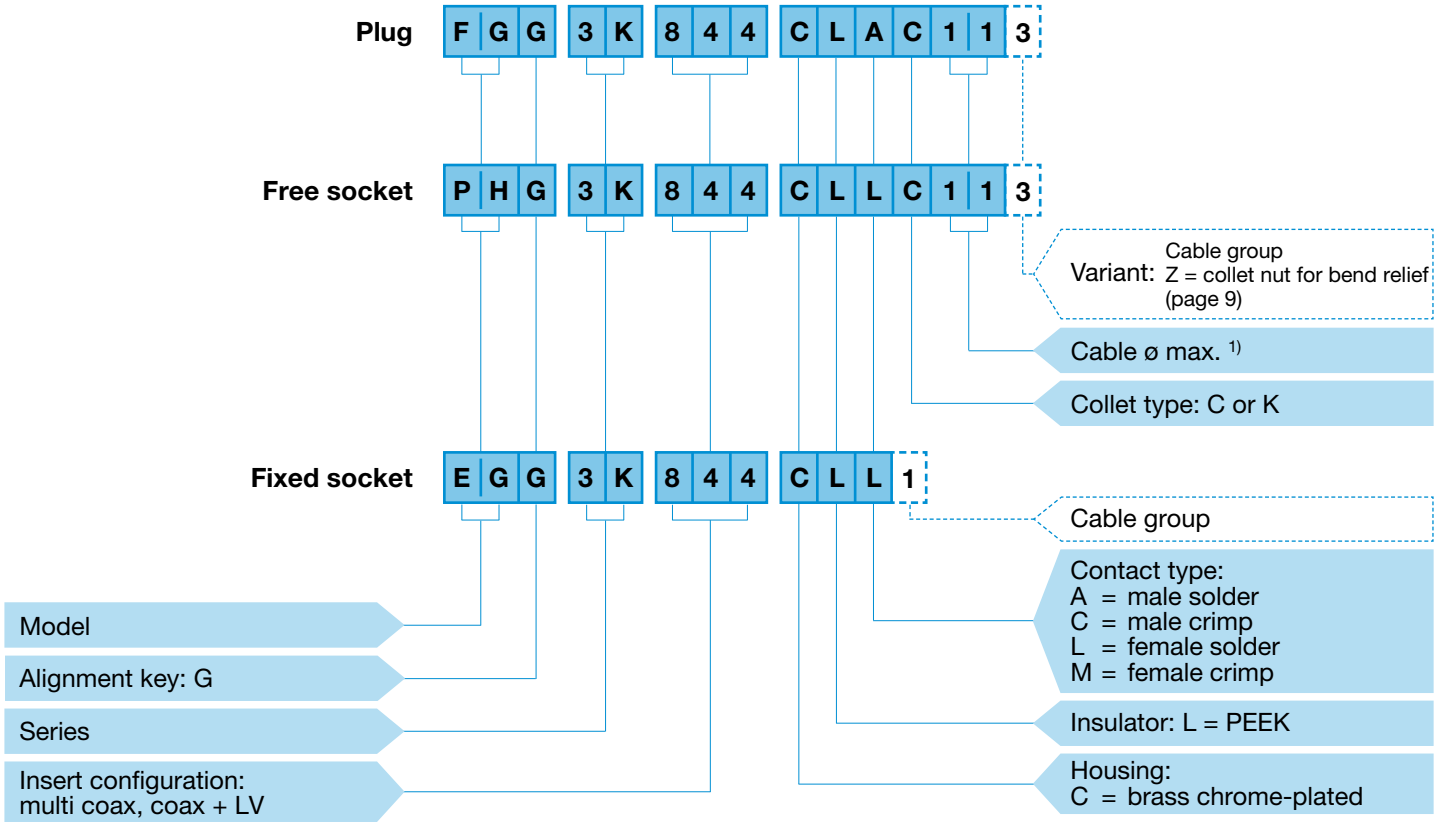
Models



Model Description

EBG Fixed socket with square flange, key (G) or keys (A to F, L and R) and screw fixing
EDG Fixed socket with square flange, key (G) or keys (A to F, L and R), protruding shell and earthing tag, screw fixing
EEG Fixed socket, nut fixing, key (G) or keys (A to F, L and R) (back panel mounting)
EGG Fixed socket, nut fixing, key (G) or keys (A to F, L and R)
EHG Fixed socket, nut fixing, key (G) or keys (A to F and L), protruding shell
FAG Fixed plug, nut fixing, non-latching, key (G) or keys (A to F, L and R)
FGG Straight plug, key (G) or keys (A to F, L and R), cable collet
FGG Straight plug, key (G) or keys (A to F, L and R), cable collet and oversize cable collet
FGG Straight plug, key (G) or keys (A to F, L and R), cable collet and nut for fitting a bend relief
FHG Elbow (90°) plug, key (G) or keys (A to F, L and R), cable collet
FXG Fixed plug with round flange, key (G) or keys (A to F, L and R) and screw fixing
PEG Fixed socket, nut fixing, key (G) or keys (A to F, L and R), cable collet (back panel mounting)
PHG Free socket, key (G) or keys (A to F, L and R), cable collet
PHG Free socket, key (G) or keys (A to F, L and R), cable collet and oversize cable collet
PHG Free socket, key (G) or keys (A to F, L and R), cable collet and nut for fitting a bend relief
PKG Fixed socket, nut fixing, key (G) or keys (A to F, L and R), cable collet

Part Numbering System



FGG.3K.844.CLAC113 = straight plug with key (G) and cable collet, 3K series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome-plated brass, PEEK insulator, male solder contacts, C type collet for 10.5 mm diameter cable. Cable group 3.

PHG.3K.844.CLLC113 = free socket with key (G) and cable collet, 3K series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome-plated brass, PEEK insulator, female solder contacts, C type collet for 10.5 mm diameter cable. Cable group 3.

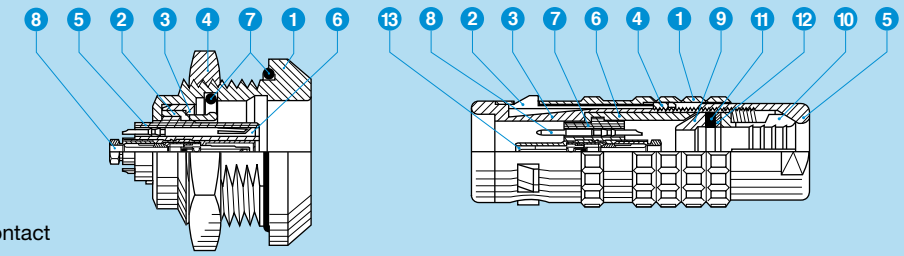
EGG.3K.844.CLL1 = fixed socket, nut fixing, with key (G), 3K series, mixed coax & low voltage type (1 coax and 4 low voltage contacts), outer shell in chrome-plated brass, PEEK insulator, female solder contacts. Cable group 1.

Note: 1) see unipole-multipole catalogue.

Part Section Showing Internal Components (mixed coax + LV)

Fixed socket

1. outer shell
2. earthing crown
3. retaining ring
4. hexagonal nut
5. insulator
6. female contact
7. o-ring
8. female coaxial contact

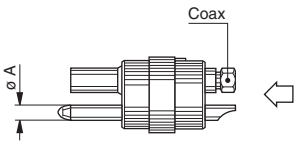


Straight plug

1. outer shell
2. latch sleeve
3. inner shell
4. retaining ring
5. collet nut
6. split insert carrier
7. insulator
8. male contact
9. earthing cone
10. collet
11. gasket
12. washer
13. male coaxial contact

Insert configuration (B and K series)

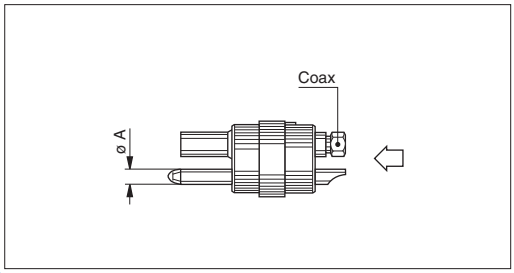
Mixed: multi coax, coax + LV



	Reference	Coax				Low voltage (LV)						
		Number of contacts	Impedance (Ω)	Type (see page 10)	Cable group	Number of contacts	ø A (mm)	Contacts type: Solder	Contacts type: Crimp	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
1B 1K	801	1	50	F	2	1	0.9	●	●	0.85	1.20	10
	803	1	50	F	2	3	0.9	●	●	0.75	1.05	10
2B 2K	802	1	50	A1	1-2-3	2	0.9	●	●	0.85	1.20	10
	804	1	50	A1	1-2-3	4	0.7	●	●	0.75	1.05	7
	806	1	50	A1	1-2-3	6	0.7	●	●	0.75	1.05	7
	810	1	50	C	1-2-3	10	0.7	●	●	0.95	1.35	7
	841	2	50	E	2	1	1.6	●	●	1.90	2.70	17
	232	2	50	G	–	–	–	–	–	–	–	–
	243	3	50	E	2	–	–	–	–	–	–	–
3B 3K	803	1	50	A0	6	3	0.9	●	–	1.10	1.55	8
	806	1	50	A1	1-2-3	6	0.7	●	●	1.00	1.50	7
	809	1	50	A1	1-2-3	9	0.7	●	●	1.00	1.50	7
	812	1	50	A1	1-2-3	12	0.9	●	●	0.80	1.10	5
	813	1	50	A1	1-2-3	13	0.7	●	●	0.90	1.30	7
	822	1	50	C	1-2-3	22	0.7	●	●	0.70	1.00	5
	844	2	50	C	1-2-3	4	0.9	●	●	0.90	1.30	10
	846	2	50	C	1-2-3	6	0.9	●	●	0.90	1.30	10
	850	2	50	C	1-2-3	10	0.7	●	●	0.75	1.05	8
	856	2	50	C	1-2-3	16	0.7	●	●	0.70	1.00	7
	242	2	50	C	1-2-3	–	–	–	–	–	–	–
	243	3	50	C	1-2-3	–	–	–	–	–	–	–
	862	3	50	C	1-2-3	2	0.9	●	●	1.10	1.60	9

● First choice alternative ○ Special order alternative

Mixed: multi coax, coax + LV



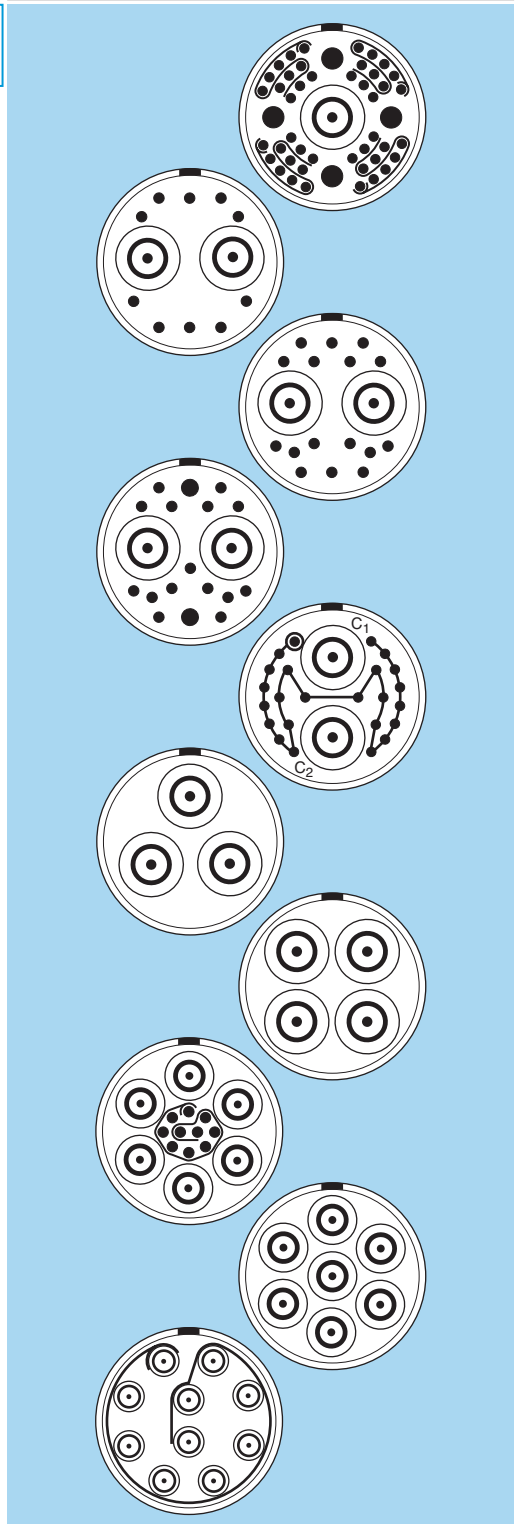
	Reference	Coax				Low voltage (LV)						
		Number of contacts	Impedance (Ω)	Type (see page 10)	Cable group	Number of contacts	ø A (mm)	Contacts type: Solder	Contacts type: Crimp	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
4B 4K	802 822	1	50 75	A A	5-6 4 to 6	2	0.9	●	●	1.00	1.40	12
	804 824	1	50 75	A A	5-6 4 to 6	4	0.9	●	●	1.00	1.40	10
	806 826	1	50 75	A A	5-6 4 to 6	6	0.9	●	●	1.00	1.40	10
	842	2	50	A1	1-2-3	2	0.9	●	●	1.70	2.40	12
	844	2	50	A1	1-2-3	4	0.9	●	●	1.70	2.40	10
	852	2	50	C	1-2-3	12	0.9	●	●	0.90	1.30	8
	856	2	50	C	1-2-3	16	0.9	●	●	0.90	1.30	8
	858	2	50	C	1-2-3	18	0.7	●	●	0.80	1.10	7
	866	3	50	C	1-2-3	6	0.7	●	●	0.80	1.10	7
	885	3	50	C	1-2-3	12	0.7	●	●	0.80	1.10	8
	244	4	50	C	1-2-3	–	–	–	–	–	–	–
	879	4	50	C	1-2-3	9	0.7	●	●	0.90	1.30	8
	890	6	50	E	2	18	0.7	●	○	0.90	1.30	5
	894	6	50	E	2	22	0.7	●	○	0.90	1.30	4
5B 5K	997[1)]	1	75	A4	N/A	32	1.3	●	○	1.20	1.70	8
	840	1	50	A	5-6	40	0.9	●	●	1.30	1.80	7

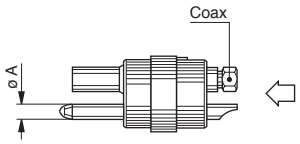
● First choice alternative ○ Special order alternative

Note: [1)] only available in 5B series. Solution for triaxial cable fixing.

Mixed: multi coax, coax + LV

5B
5K

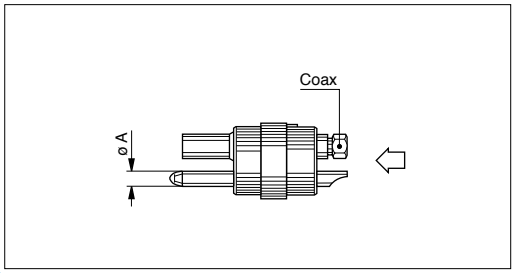
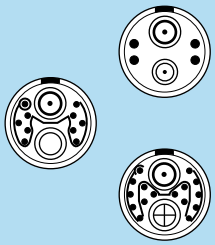




Reference	Coax				Low voltage (LV)						
	Number of contacts	Impedance (Ω)	Type (see page 10)	Cable group	Number of contacts	ø A (mm)	Contacts type: Solder	Contacts type: Crimp	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
868 **878**	1	50 75	B B	6 3-5	4 44	3.0 0.9	● ○	○ ●	0.80	1.15	35 6
850 **870**	2	50 75	B B	6 3-5	10	0.9	○ ●	● ○	1.40	2.00	8
856 **876**	2	50 75	B B	6 3-5	16	0.9	○ ●	● ○	1.40	2.00	7
857 **877**	2	50 75	B B	6 3-5	2 15	2.0 0.9	○ ○	● ●	1.40 1.40	2.00 2.00	30 7
864	2	75	B0	1-6	24	1.3	●	○	0.90	1.30	8
273	3	75	B1	5	–	–	–	–	–	–	–
274	4	75	B1	5	–	–	–	–	–	–	–
892	6	75	D	5-8-9	10	0.9	●	○	0.70	1.00	7
260	7	75	D	5-8-9	–	–	–	–	–	–	–
240	10	50	C	1-2-3	–	–	–	–	–	–	–

● First choice alternative ○ Special order alternative

Mixed: coax + LV + HV, coax + LV + Fluidic, coax + LV + Fibre optic

		Reference	Coax					Low volt. (LV)		High volt. (HV)		Fibre optic (FO)		Fluidic (FL)	
			Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 10)	Cable group	Number of contacts	ø A (mm)	Number of contacts	ø A (mm)	Number of contacts	Type	Number of contacts	Inner tube ø (mm)
2B 2K		**932**	1	50	2.0	C	1	2 [1]	0.7	1 [2]	0.7	–	–	–	–
3B 3K		**934**	1	50	2.0	C	1	4	0.9	1	0.9	–	–	–	–
		970	1	50	2.0	C	1	10	0.7	–	–	–	–	1	1.3
		986	1	50	2.0	C	1	16	0.7	–	–	1	F2	–	–

Note: [1] Test voltage LV contact-shell 1.9 (kV rms). [2] Test voltage HV contact-shell 7.5 (kV rms). Total rated current for 2B.932 configuration 6 (A).

Collet nut for fitting a bend relief (B and K series)

D type collets for B series

	Clamping	Coax cable groupe		
		1	2	3
B	**D52Z**	D51Z	D52Z	D53Z
	D62Z	D61Z	D62Z	D63Z
	D92Z	D91Z	D92Z	D93Z
	D10Z	D01Z	D02Z	D03Z
	D11Z	D11Z	D12Z	D13Z
	D12Z	D21Z	D22Z	D23Z

C type collets for K series

	Clamping	Coax cable groupe		
		1	2	3
K	**C50Z**	C51Z	C52Z	C53Z
	C55Z	C56Z	C57Z	C58Z
	C80Z	C81Z	C82Z	C83Z
	C85Z	C86Z	C87Z	C88Z
	C90Z	C91Z	C92Z	C93Z
	C95Z	C96Z	C97Z	C98Z
	C10Z	C11Z	C12Z	C13Z

Note: see unipole-multipole catalogue for others available collets.

Coaxial contacts for B and K series

Type	Impedance (Ω)	ø A (mm)	Cond. fixing	Screen fixing	Cable group	Mini Cond. ø maxi Maxi	Dielectric ø maxi	Sheath ø Mini	Sheath ø Maxi	VSWR (f=GHz)	Test voltage (kV rms)	Rated current (A)
F [1) 3)]	50	0.5	solder	crimp	2	0.35	1.05	–	2.10	1.05 +1.83f	0.8	2
A1	50	0.7	solder	collet	1 2 3	0.60 0.60 0.60	1.90 1.90 1.90	2.5 1.7 2.2	3.00 2.10 2.60	1.01 +0.127f	0.9	5
C [1)]	50	0.6	crimp	crimp	1 2 3	0.50 0.58 0.28 0.35 0.28 0.35	1.65 1.05 1.65	–	3.00 2.35 3.00	1.04 +0.1f	1.6	2
E [1) 3)]	50	0.5	solder	crimp	2	0.35	0.95	–	2.00	1.02 +0.93f	0.8	2
A	50	1.6	solder	collet	5 6	1.35 1.35	3.95 3.95	4.3 5.3	5.10 6.10	1.01 +0.146f	1.8	12
	75	1.3	solder	collet	4 5 6	1.05 1.05 1.05	3.95 3.95 3.95	3.8 4.3 5.3	4.60 5.10 6.10	1.01 +0.19f	2.4	7
A4	75	1.3	solder	collet	none	1.05	3.95	6.7	7.60	1.01 +0.19f	2.4	7
B [1)]	50	0.9	solder	crimp	6	1.05	3.75	–	6.25	1.06 +0.156f	0.8	11
	75	0.6	solder	crimp	3 5	0.80 0.80	2.45 3.75	–	6.25	1.00 +0.22f	2.1	6
B0	75	0.6	solder	solder	1 6	0.75 0.75	2.95 3.75	–	4.25	1.00 +0.22f	2.1	6
B1 [1)]	75	0.6	crimp	crimp	5	0.55 0.80	3.75	–	6.25	1.00 +0.22f	2.1	6
D [1)]	75	0.5	solder	crimp	5 8 9	0.75 0.75 0.75	3.75 2.45 3.00	–	5.40 3.90 4.90	1.00 +0.38f	1.0	5
G [3)]	50	0.5	solder	crimp	1	0.35	1.65	–	3.00	1.01 +0.73f	0.4	2
A0	50	1.3	solder	collet	6	0.95	–	3.3	4.10	1.02 +0.3f [2)]	3.0	12

Note:
[1)] These contacts require specific tools for assembly on the cable, see page 11.
[2)] Frequency range with SWR ≤ 1.2 = 0 - 1.5 GHz.
[3)] Coax contact design differs, the central pin is reverse gender.

Recommended coaxial cables for mixed coax, multi coax for B and K Series

LEMO cable Part Number	Type	LEMO cable group	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen ø (mm)	Sheath ø (mm)
	RG 6 A/U	7	75 ± 3	0.73	4.70	6.20	8.45
311 100 LEDE	RG 11 A/U	9	75 ± 2	1.17	7.25	8.15	10.10
CCX.50.RG5.8CU50N	RG 58 C/U	6	50 ± 2	0.90	2.95	3.60	5.00
CCX.50.RG5.9BU62N	RG 59 B/U	5	75 ± 3	0.60	3.70	4.50	6.20
CCX.50.RG1.74AU27N	RG 174 A/U	1	50 ± 2	0.48	1.50	2.00	2.80
CCX.50.RG1.78BU18M	RG 178 B/U	2	50 ± 2	0.30	0.84	1.30	1.80
CCX.75.RG1.79BU26M	RG 179 B/U	3	75 ± 3	0.30	1.50	2.00	2.50
	RG 180 B/U	4	95 ± 5 [1)]	0.30	2.60	3.10	3.60
CCX.75.RG1.87AU26B	RG 187 A/U	2	75 ± 3	0.30	1.50	2.00	2.60
CCX.50.RG1.88AU26B	RG 188 A/U	1	50 ± 2	0.54	1.50	2.00	2.60
CCX.50.RG1.96AU20B	RG 196 A/U	1	50 ± 2	0.30	0.84	1.30	1.95
CCX.50.RG3.16U26M	RG 316 /U	1	50 ± 2	0.60	1.60	2.10	2.80

Note: [1)] when no defined impedance is required.
The cable group number corresponding to the chosen cable must be written in the variant position, see pages 3 and 5.

Tooling for coaxial contacts of B and K series

Coaxial contact type	Imp. Ω	Cable group	Reference		
			Crimping tool with die	Spanner for tightening the contact	Extractor
F	50	2	**DPE.99.025.45K**	**DCC.91.019.1AK**	–
C[1)]	50	1-3	**DPE.99.103.8K**	–	**DCC.91.384.5LA**
	50	2	**DPE.99.103.1K**	–	**DCC.91.384.5LA**
E	50	2	**DPE.99.002.5K**	**DCC.91.050.2LA**	–
B	50	6	**DPE.99.176.2K**	–	**DCC.91.804.5LA**
	75	3	**DPE.99.125.2K**	–	**DCC.91.804.5LA**
	75	5	**DPE.99.127.0K**	–	**DCC.91.804.5LA**
B1	75	5	**DPE.99.127.0K**	–	**DCC.91.808.0LC**
D	75	5	**DPE.99.006.2K**	**DCB.91.685.8TN**	–
	75	8	**DPE.99.005.2K**	**DCB.91.685.8TN**	–
	75	9	**DPE.99.005.5K**	**DCB.91.685.8TN**	–

Note: [1)] for the 3B.243/3K.243 and 3B.862/3K.862 the extractor is part number DCC.91.393.4LT.

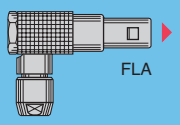
00.650 Series

The 00 Series are available in triax configuration, allowing a very compact solution for triaxial cables.
These connectors are designed for small diameter ranging from 1.1 to 3.5 mm.
Either twinax (2 shielded connectors) or triax (1 conductor and 2 concentric separate screens) can be used with the 00 Series.
The 00 Series with a 650 configuration insert are mostly used in audio-video applications where a large density of connection is required.
LEMO 00 Series connectors offer customers many benefits including:

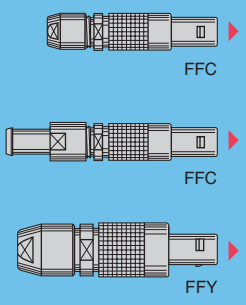
- self-latching push-pull system
- aesthetically pleasing appearance
- small size
- high packing density
- rugged construction.
- ease of use
- low weight
- reliable performances
- wide choice to suit application

Metal housing models

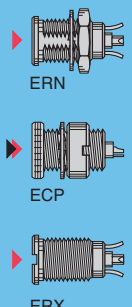
Elbow plug

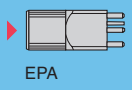


Straight plugs

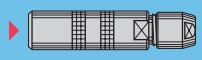


Fixed and free sockets

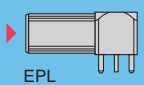




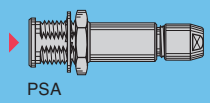
Free socket



Elbow socket

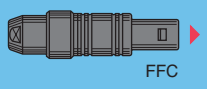


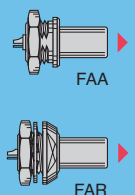
Fixed socket

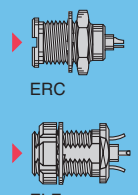


Plastic housing model

Straight plug

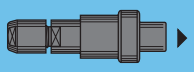




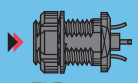


Threaded latching models

Straight plug



Fixed socket



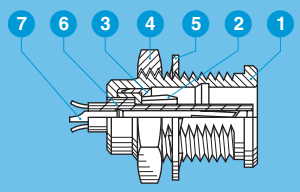
Model Description

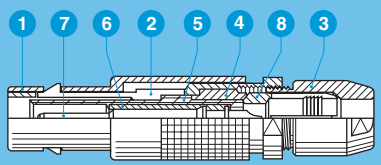
ECP Fixed socket with 2 round nuts (back panel mounting)
ELF Fixed socket, nut fixing, threaded shell with tag (back panel mounting)
ELF Fixed socket, nut fixing, threaded shell with tag, black chromium-plated outer shell (back panel mounting)
EPA Straight socket for printed circuit board
EPL Elbow plug (90°) for printed circuit board
ERC Fixed socket, with thread, with slots in flange
ERN Fixed socket with nut fixing and tags
ERX Fixed socket with nut fixing, slots on flange and tags
FAA Straight plug non latching with nut
FAR Straight plug non latching with 2 nuts (back panel mounting)
FFC Straight plug with flats on latch sleeve and cable collet
FFC Straight plug with flats on latch sleeve and cable collet and nut for fitting a bend relief
FFC Straight plug with flats on latch sleeve and cable collet, black POM (Delrin® outershell)
FFY Straight plug, large shell with cable collet
FLA Elbow socket (90°) with cable collet
FVN Straight plug with cable collet, black chromium-plated outer shell
PCA Free socket with cable collet
PSA Fixed socket, nut fixing, cable collet

Part Section Showing Internal Components

Fixed socket

1. outer shell
2. earthing crown
3. retaining ring
4. hexagonal nut
5. locking washer
6. insulator
7. female triaxial contact

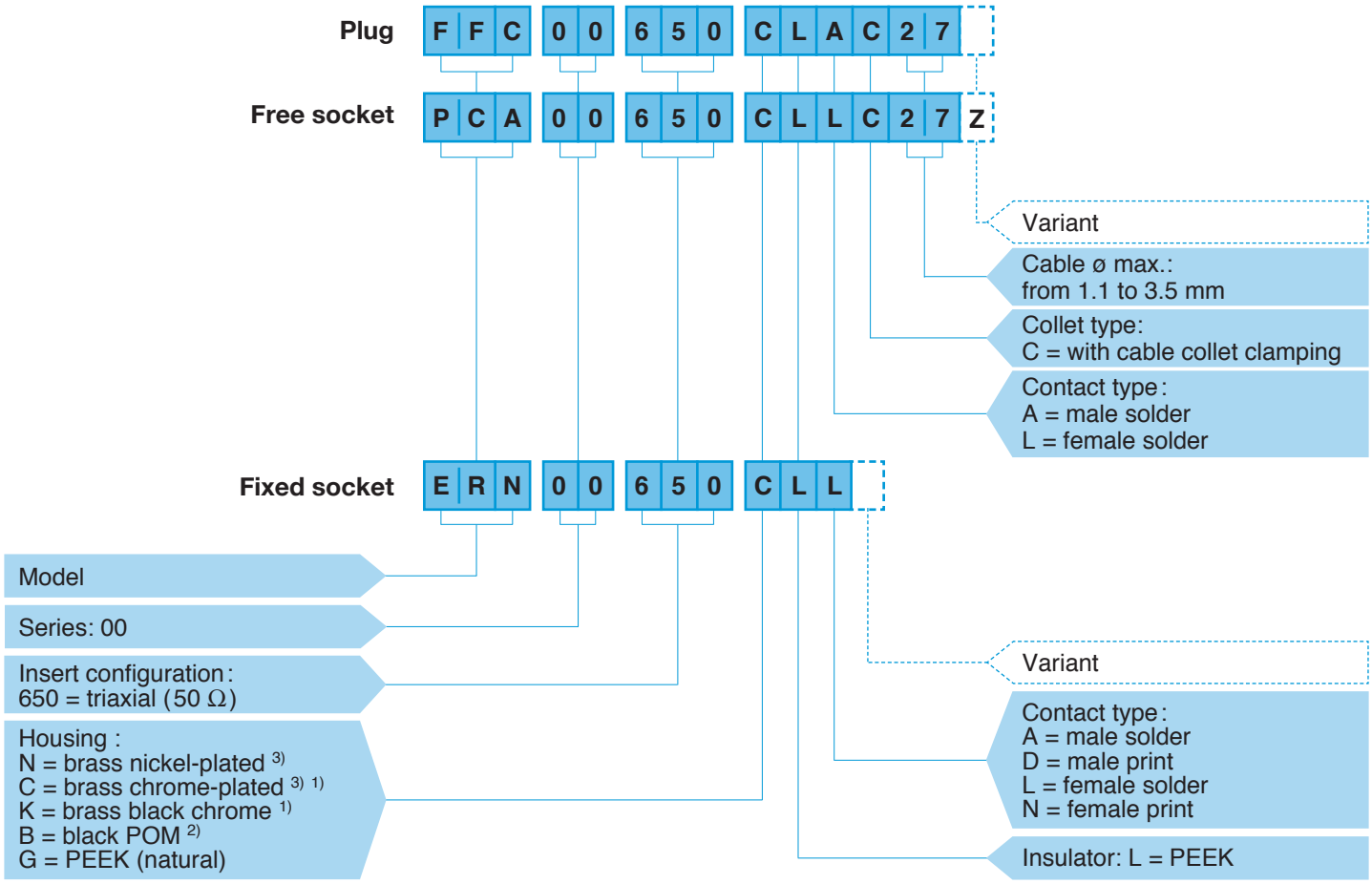




Straight plug

1. outer shell
2. latch sleeve
3. collet nut
4. earthing sleeve
5. rear insulator
6. insulator
7. male triaxial contact
8. collet

Part Numbering System



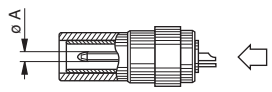
FFC.00.650.CLAC27 = straight plug with flats on latch sleeve and cable collet, 00 Series, triaxial (50 Ω), outer shell in chrome-plated brass, PEEK insulator, C type collet for an up to 2.6 mm diameter cable.

PCA.00.650.CLLC27Z = free socket with cable collet, 00 Series, triaxial (50 Ω), outer shell in chrome-plated brass, PEEK insulator, C type collet for an up to 2.6 mm diameter cable and nut for fitting a bend relief.

ERN.00.650.CLL = fixed socket with nut fixing and tags, 00 Series, triaxial (50 Ω), outer shell in chrome-plated brass, PEEK insulator.

Note: 1) treatment not available for the printed circuit models. 2) available for the FFC model only. 3) standard.

Insert configuration



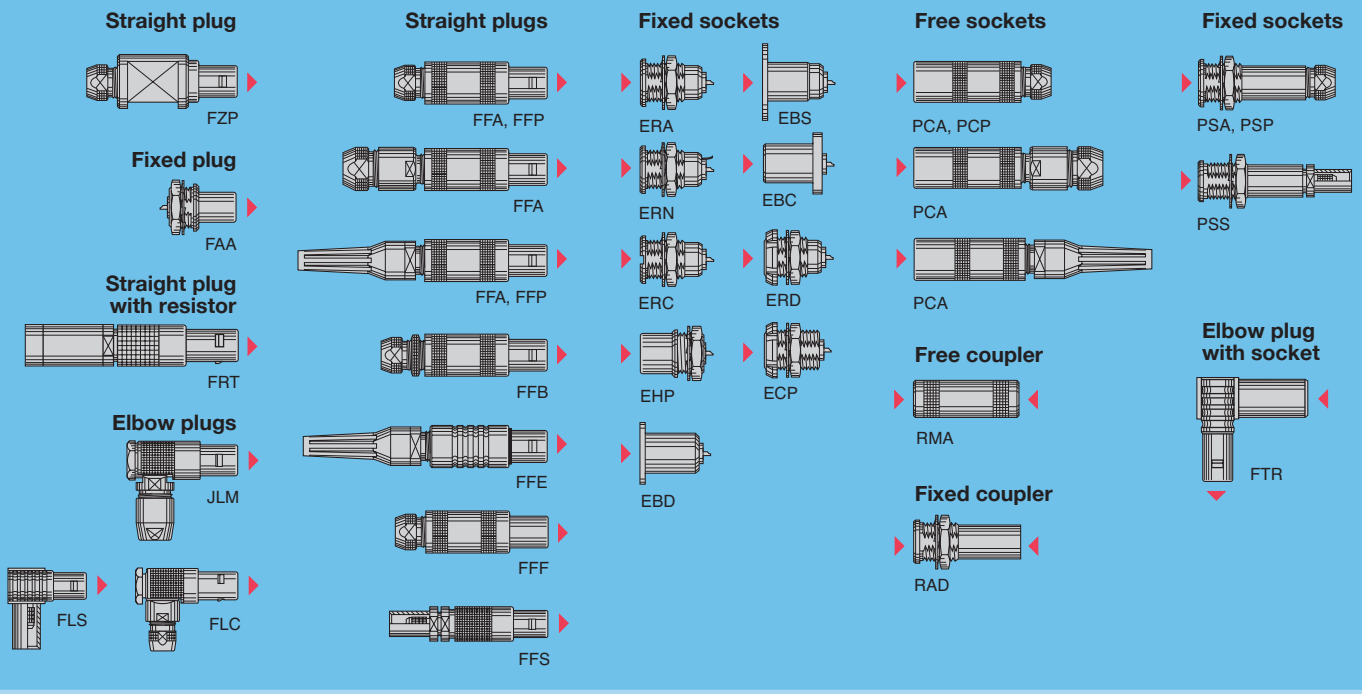
Reference	Series		Impedance (Ω)	ø A (mm)	Cable group	Cond. ø max	Dielectric ø maxi	Sheath ø maxi	VSWR (f=GHz)	Test voltage (kV rms)	Rated current (A)
	Standard	Watertight									
650	00	–	50	0.5	1)	0.55	2.9	3.5	1.02 +0.9f	0.6	4

Note: 1) 00.650 is designed for use with 2 conductors screened cable (twinax).

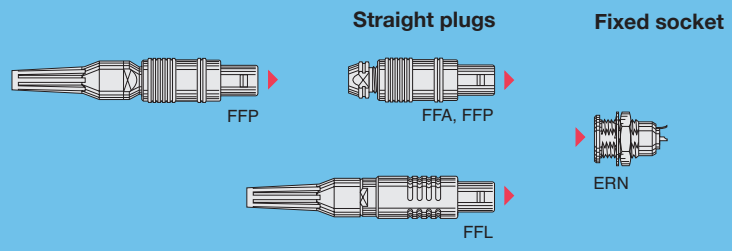
S Series

S series connectors have main features as follows:
– security of the Push-Pull self-latching system
– solder contacts, print contacts only for coaxial and triaxial configurations
– 360° screening for full EMC shielding.
– coaxial, triaxial and mixed contact configurations
– polarisation by stepped insert (half-moon)
– up to 8 coaxial contacts

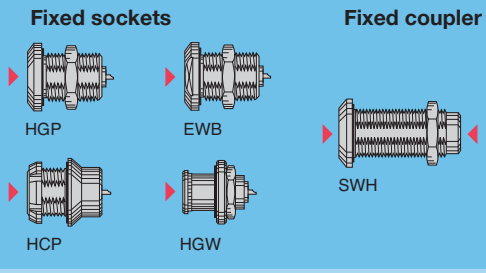
Metal housing models



Plastic housing models



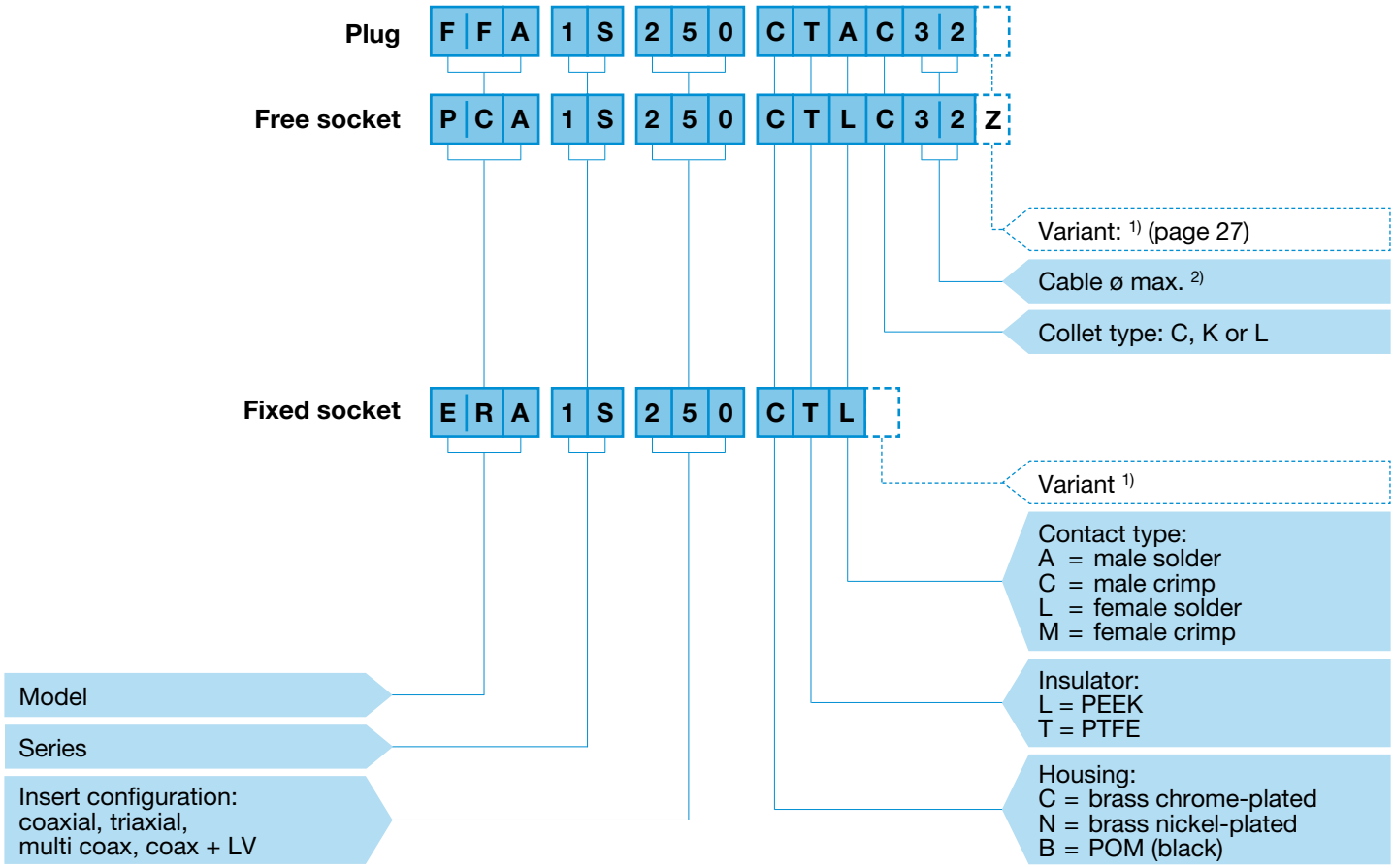
Watertight or vacuumtight models



Model Description

EBC Fixed socket with square flange, protruding shell and screw fixing
EBD Fixed socket with square flange, screw fixing
EBS Fixed socket with round flange, screw fixing
ECP Fixed socket with two nuts, long threaded shell (back panel mounting)
EHP Fixed socket, nut fixing, protruding shell
ERA Fixed socket, nut fixing
ERC Fixed socket, nut fixing, slot in the flange
ERD Fixed socket with two nuts (back panel mounting)
ERN Fixed socket, nut fixing, with earthing tag
ERN Fixed socket, nut fixing, with earthing tag, PEEK or POM outer shell
EWB Fixed socket, nut fixing, with two flats on the flange, watertight or vacuumtight
FAA Fixed plug non-latching, nut fixing
FFA Straight plug, cable collet
FFA Straight plug with oversize cable collet
FFA Straight plug, cable collet and nut for fitting a bend relief
FFA Straight plug, cable collet, PEEK or POM outer shell
FFB Straight plug, cable collet and safety locking ring
FFE Straight plug, cable collet, front seal and nut for fitting a bend relief (protected to IP54 when mated)
FFF Straight plug, non-latching, cable collet
FFP Straight plug, cable collet and inner anti-rotating device
FFP Straight plug, cable collet, PEEK or POM outer shell and inner anti-rotating device
FFP Straight plug, cable collet, PEEK or POM outer shell, inner anti-rotating device and nut for fitting a bend relief
FFS Straight plug for cable crimping
FLC Elbow (90°) plug, cable collet
FLC Elbow (90°) plug, cable collet and nut for fitting a bend relief
FLS Elbow (90°) plug for cable crimping
FRT Straight plug with resistor
FTR Elbow (90°) plug with socket
FZP Straight plug for remote handling, cable collet and inner anti-rotating device
HCP Fixed socket, nut fixing, watertight or vacuumtight (back panel mounting)
HGP Fixed socket, nut fixing, watertight or vacuumtight
HGW Fixed socket, nut fixing, with back washer, watertight or vacuumtight
JLM Elbow (90°) plug, cable collet
PCA Free socket, cable collet
PCA Free socket with oversize cable collet
PCA Free socket, cable collet and nut for fitting a bend relief
PCP Free socket, cable collet and inner anti-rotating device
PSA Fixed socket, nut fixing, cable collet
PSP Fixed socket, nut fixing, cable collet and inner anti-rotating device
PSS Free socket, nut fixing for cable crimping
RAD Fixed coupler, nut fixing
RMA Free coupler
SWH Fixed coupler, nut fixing, watertight or vacuumtight

Part Numbering System



FFA.1S.250.CTAC32 = straight plug with cable collet, 1S series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator, male solder contact, C type collet for a 3.2 mm diameter cable.

PCA.1S.250.CTLC32Z = free socket with cable collet, 1S series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator, female solder contact, C type collet for a 3.2 mm diameter cable and nut for fitting a bend relief.

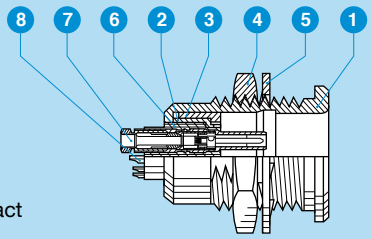
ERA.1S.250.CTL = fixed socket, nut fixing, 1S series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator, female solder contact.

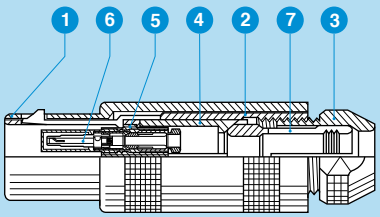
Note: 1) for mixed contacts, add cable group to the part number.
2) see unipole-multipole catalogue.

Part Section Showing Internal Components (mixed coax + LV)

Fixed socket

1. outer shell
2. earthing crown
3. retaining ring
4. hexagonal nut
5. locking washer
6. insulator
7. male coaxial contact
8. female contact





Straight plug

1. outer shell
2. latch sleeve
3. collet nut
4. centre-piece
5. insulator
6. female coaxial contact
7. collet

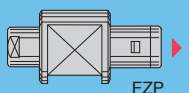
E Series

E series connectors have been specifically designed for outdoor applications.
They include an inner sleeve and two seals to prevent penetration of solids or liquids into the housing formed by the plug, free socket or fixed socket. All models of these series are watertight when mated and give a protection index of IP 68 as per IEC 60529 standard (in mated condition) when correctly assembled to an appropriate cable (IP 66 otherwise).

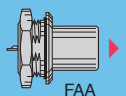
– security of the Push-Pull latching system
– watertight connection (IP 68/IP 66)
– solder contacts, print contacts only for coaxial and triaxial configurations
– coaxial, triaxial and mixed contact configurations
– polarization by stepped insert (half-moon)
– 360° screening for full EMC shielding
– rugged housing for extreme working condition.

Models

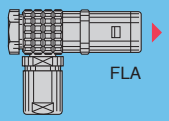
Straight plug


FZP

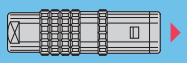
Fixed plug

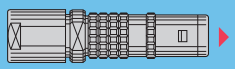

FAA

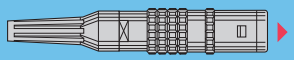
Elbow plug

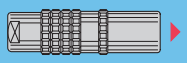

FLA

Straight plugs

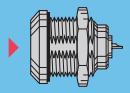

FFA

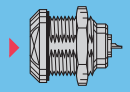

FFA

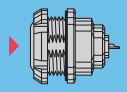

FFA

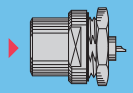

FFF

Fixed sockets

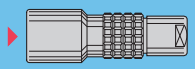

ERA

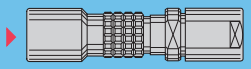

ERB

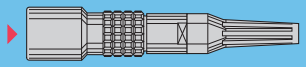

EEP


EHP

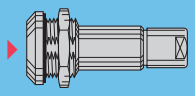
Free sockets


PCA

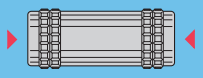

PCA


PCA

Fixed socket

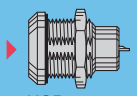

PSA

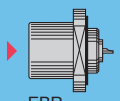
Free coupler


RMA

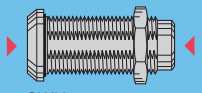
Watertight or vacuumtight models

Fixed sockets


HGP


EBR

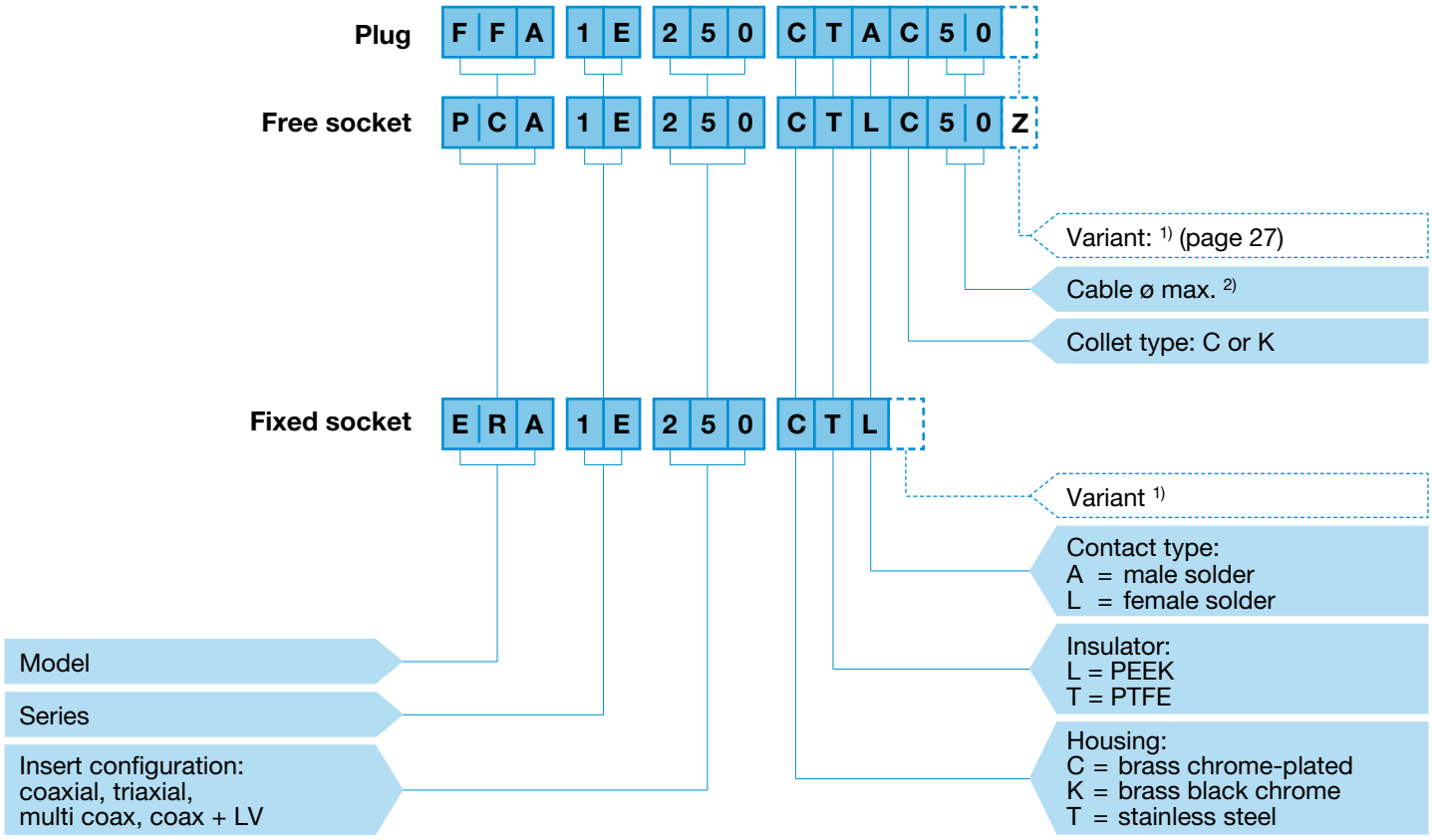
Fixed coupler


SWH

Model Description

EBR Fixed socket with round flange, watertight, protruding shell and screw fixing
EEP Fixed socket, nut fixing (back panel mounting)
EHP Fixed socket, nut fixing, protruding shell
ERA Fixed socket, nut fixing
ERB Fixed socket, nut fixing with two flats in the flange
FAA Fixed plug non-latching, nut fixing
FFA Straight plug, cable collet
FFA Straight plug with oversize cable collet
FFA Straight plug, cable collet and nut for fitting a bend relief
FFF Straight plug non-latching, cable collet
FLA Elbow (90°) plug, cable collet
FZP Straight plug for remote handling, cable collet and inner anti-rotating device
HGP Fixed socket, nut fixing, watertight or vacuumtight
PCA Free socket, cable collet
PCA Free socket with oversize cable collet
PCA Free socket, cable collet and nut for fitting a bend relief
PSA Fixed socket, nut fixing, cable collet
RMA Free coupler
SWH Fixed coupler, nut fixing, watertight or vacuumtight

Part Numbering System



FFA.1E.250.CTAC50 = straight plug with cable collet, 1E series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator, C type collet for an up to 5.0 mm diameter cable.

PCA.1E.250.CTLC50Z = free socket with cable collet, 1E series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator, C type collet for an up to 5.0 mm diameter cable and collet nut for fitting a bend relief.

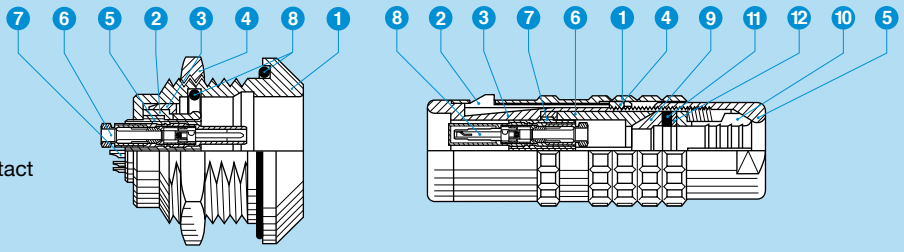
ERA.1E.250.CTL = fixed socket, nut fixing, 1E series, coaxial (50 Ω), outer shell in chrome-plated brass, PTFE insulator.

Note: 1) for mixed contacts, add cable group to the part number.
2) see unipole-multipole catalogue.

Part Section Showing Internal Components (mixed coax + LV)

Fixed socket

1. outer shell
2. earthing crown
3. retaining ring
4. hexagonal nut
5. insulator
6. male coaxial contact
7. female contact
8. o-ring

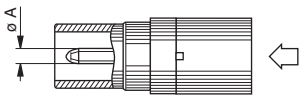


Straight plug

1. outer shell
2. latch sleeve
3. inner shell
4. retaining ring
5. collet nut
6. centre-piece
7. insulator
8. female coaxial contact
9. earthing cone
10. collet
11. gasket
12. washer

Insert configuration (S and E series)

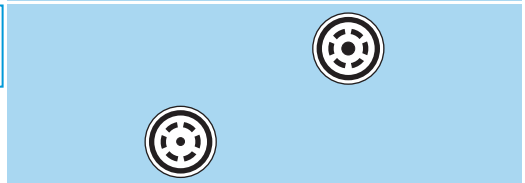
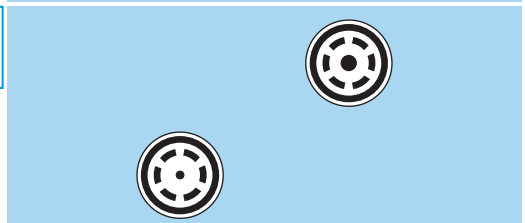
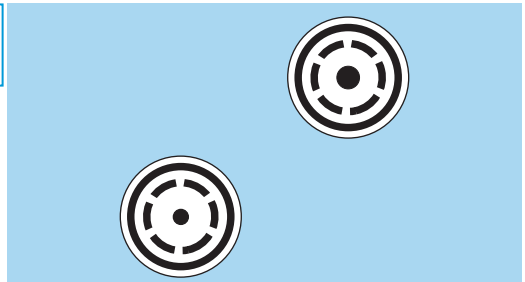
Coaxial



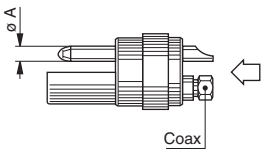
	Reference	Series		Impedance (Ω)	ø A (mm)	Cable group	Cond. ø max	Dielectric ø maxi	Sheath ø		VSWR (f=GHz)	Test voltage (kV rms)	Rated current (A)
		Standard	Watertight						Maxi S series	Maxi E series			
00	**250**[1)]	00	–	50	0.7	1 to 9	1.05	3.05	5.5		1.09 +0.11f	2.1	4
0S 0E	**250**	0S	0E	50	0.9	1-2 3-4	0.95	2.95	6.7	5.0	1.02 +0.25f	3.0	6
1S 1E	**250**	1S	1E	50	1.6	1-2 3-4	1.35	3.95	8.5	8.5	1.01 +0.23f	3.0	12
	275	1S	1E	75	1.3	5-6-7	1.05	3.95	8.5	8.5	1.02 +0.08f	2.4	10
2S 2E	**250**	2S	2E	50	2.0	6-7	1.75	5.95	10.5	10.5	1.01 +0.95f	3.0	15
	275	2S	2E	75	1.6	6-7	1.35	5.95	10.5	10.5	1.02 +0.03f	1.5	12
3S 3E	**250**	3S	3E	50	3.0	8	2.65	8.15	13.0	15.0	1.06 +0.5f	3.0	26
	275	3S	3E	75	2.0	8	1.75	8.15	13.0	15.0	1.04 +0.05f	2.7	15
4S 4E	**250**	4S	4E	50	4.0	8-9	3.65	10.05	22.0	23.5	1.01 +1.9f	2.1	36
	275	4S	4E	75	3.0	8-9-0	2.65	10.05	22.0	23.5	1.01 +0.12f	1.8	26
5S	**250**	5S	–	50	5.0	9	5.15	17.45	30.0	30.0	1.02 +2.3f	3.0	45

Note: [1)] see NIM-CAMAC catalogue.

Triaxial

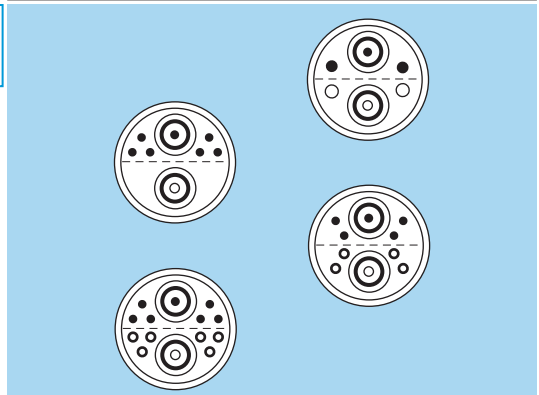
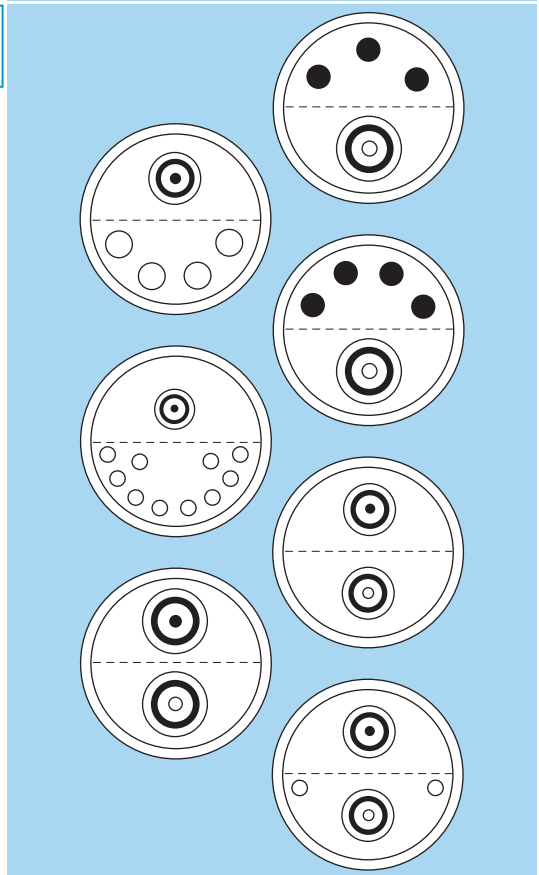
		Reference	Series		Impedance (Ω)	ø A (mm)	Cable group	Cond. ø max	Dielectric ø maxi	Sheath ø		VSWR (f=GHz)	Test voltage (kV rms) (contact/screen)	Rated current (A)
			Standard	Watertight						Maxi S series	Maxi E series			
0S 0E		650	0S	0E	50	0.9	1-2	0.75	2.95	6.7	5.0	1.03 +0.34f	1.0	6
1S 1E		650	1S	1E	50	0.9	1-2-3	0.75	3.95	8.5	8.5	1.01 +0.17f	1.0	6
2S 2E		650	2S	2E	50	1.6	2-3-4	1.35	5.95	10.5	10.5	1.01 +0.3f	1.5	12
		675	2S	2E	75	0.9	4-6	0.75	5.95	10.5	10.5	1.01 +0.07f	1.5	6
3S 3E		650	3S	3E	50	2.0	3-4-5	1.75	8.45	13.0	15.0	1.01 +0.27f	2.4	15
		675	3S	3E	75	0.9	4-5	0.75	8.45	13.0	15.0	1.01 +0.05f	1.8	6
4S 4E		650	4S	4E	50	3.0	4-5	2.65	10.05	22.0	23.5	1.01 +0.38f	2.7	26
		675	4S	4E	75	2.0	4-5-7	2.25	10.05	22.0	23.5	1.01 +0.14f	2.2	15

Mixed: coax + LV, multi coax

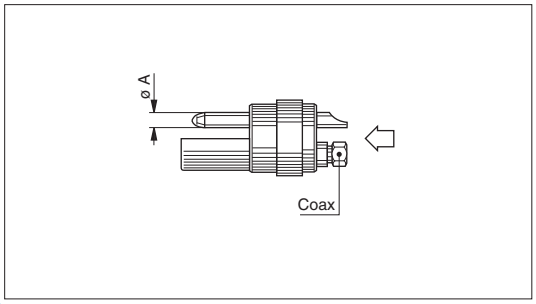


	Reference	Series		Coaxial					Low voltage				
		Standard	Watertight	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
3S 3E	801	3S	3E	1	50	5	A1	1-2-3	1	1.3	2.7	3.9	14
	802	3S	3E	1	50	5	A1	1-2-3	2	1.3	1.2	1.8	14
	803	3S	3E	1	50	5	A1	1-2-3	3	1.3	2.7	3.9	14
	804	3S	3E	1	50	5	A1	1-2-3	4	1.3	1.2	1.8	10
	805	3S	3E	1	50	5	A1	1-2-3	5	0.9	1.8	2.4	8
	806	3S	3E	1	50	5	A1	1-2-3	6	0.9	0.8	1.2	8
	807	3S	3E	1	50	5	A1	1-2-3	7	0.9	0.8	1.2	7
4S 4E	802	4S	4E	1	50	5	A1	1-2-3	2	3.0	2.1	3.0	21
	803	4S	4E	1	50	5	A1	1-2-3	3	2.0	2.1	3.0	16
	804	4S	4E	1	50	5	A1	1-2-3	4	1.3	2.7	3.9	13
	805	4S	4E	1	50	5	A1	1-2-3	5	1.3	2.1	3.0	11
	806	4S	4E	1	50	5	A1	1-2-3	6	1.3	2.1	3.0	9
	807	4S	4E	1	50	5	A1	1-2-3	7	1.3	2.1	3.0	8
	809	4S	4E	1	50	5	A1	1-2-3	9	0.9	2.1	3.0	7
	810	4S	4E	1	50	5	A1	1-2-3	10	0.9	2.1	3.0	7
	812	4S	4E	1	50	5	A1	1-2-3	12	0.9	2.1	3.0	7
	202	4S	4E	2	50	5	A1	1-2-3	–	–	–	–	–
	832	4S	4E	2	50	5	A1	1-2-3	2	1.3	2.1	3.0	13

Mixed: coax + LV, multi coax

		Reference	Series		Coaxial					Low voltage				
			Standard	Watertight	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
4S 4E		**834**	4S	4E	2	50	5	A1	1-2-3	4	1.3	2.1	3.0	13
		836	4S	4E	2	50	5	A1	1-2-3	6	0.9	1.8	2.4	7
		838	4S	4E	2	50	5	A1	1-2-3	8	0.9	1.8	2.4	7
		842	4S	4E	2	50	5	A1	1-2-3	12	0.9	1.8	2.4	7
5S 5E		**803**	–	5E	1	50	12	A	4-6	3	3.0	3.0	4.2	25
		804	5S	–	1	50	6	A0	1-3-4	4	3.0	2.1	3.0	22
		804	–	5E	1	75	7	A	3-4-5	4	3.0	2.1	3.0	22
		810	5S	5E	1	50	5	A1	1-2-3	10	1.6	1.8	2.4	11
		232	5S	–	2	50	6	A0	1-3-4	–	–	–	–	–
		282 **292**	5S	5E	2	50 75	12 7	A	4-6 3-4-5	–	–	–	–	–
		832	5S	5E	2	50	6	A0	1-3-4	2	2.0	2.1	3.0	18

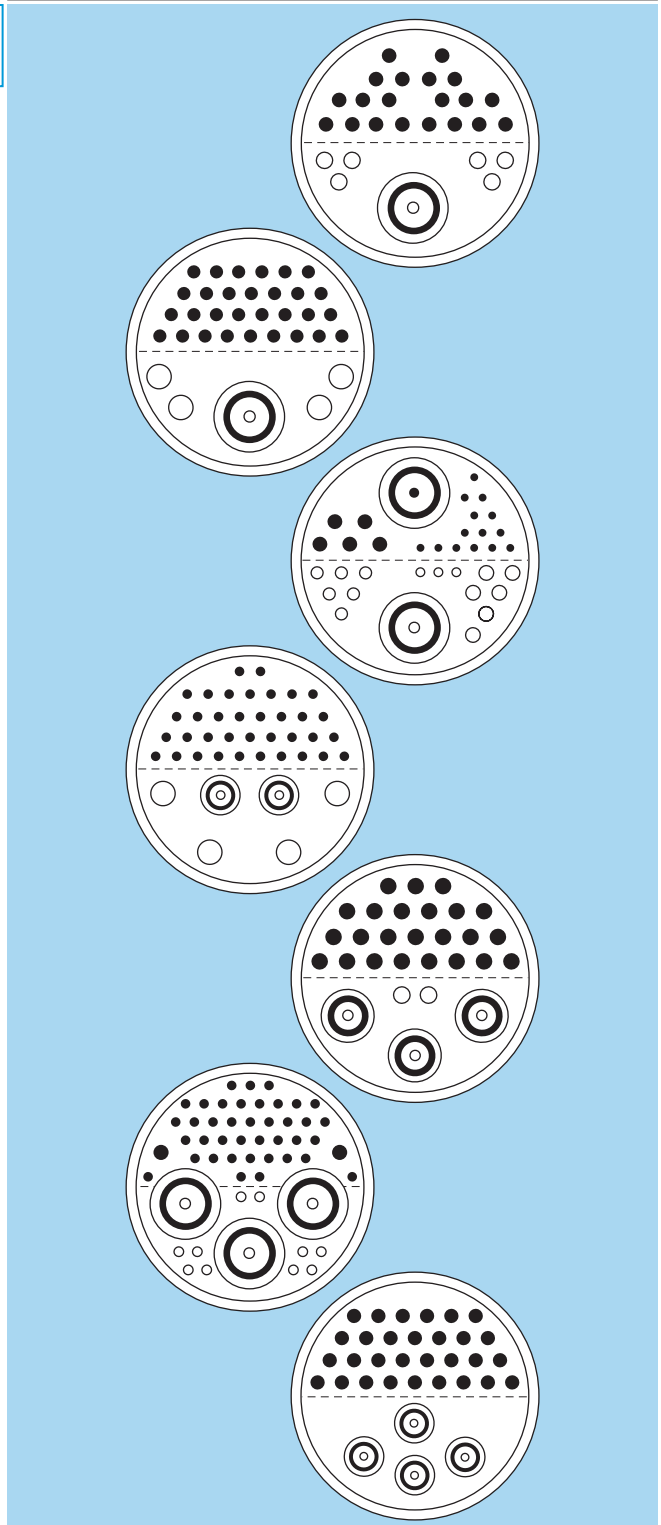
Mixed: coax + LV, multi coax



	Reference	Series		Coaxial					Low voltage				
		Standard	Watertight	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
5S 5E	**834**	5S	5E	2	50	6	A0	1-3-4	4	2.0	2.1	3.0	18
	838	5S	–	2	50	6	A0	1-3-4	8	1.6	1.8	2.4	12
	842	5S	5E	2	50	6	A0	1-3-4	12	1.3	1.8	2.4	9
	846	–	5E	2	75	7	A	3-4-5	16	1.3	0.8	1.2	8
	850	5S	–	2	50	6	A0	1-3-4	20	1.3	0.8	1.2	7
	854	5S	–	2	50	6	A0	1-3-4	24	1.3	0.8	1.2	6
	234	5S	5E	4	50	5	A1	1-2-3	–	–	–	–	–
	876	5S	5E	4	50	5	A1	1-2-3	6	1.3	0.8	1.2	6

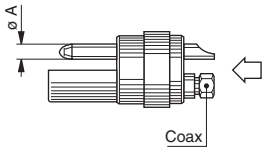
Mixed: coax + LV, multi coax

6S

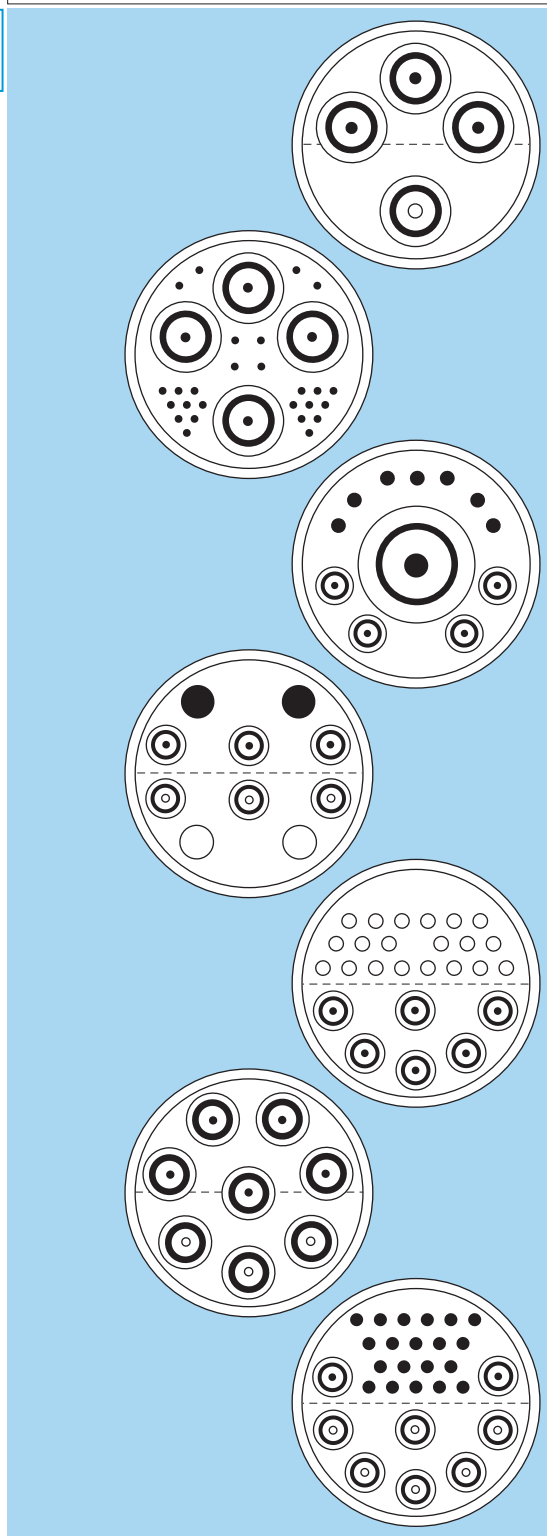


Reference	Coaxial					Low voltage				
	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
826	1	75	7	A	3-4-5	26	2.0	1.5	2.1	7
830	1	75	7	A	3-4-5	4 30	3.0 1.6	1.5 1.5	2.1 2.1	14 5
858	2	75	7	A	3-4-5	6 6 5 17	1.3 1.6 2.0 1.9	1.2 1.2 1.2 1.2	1.8 1.8 1.8 1.8	4 5 10 2
859	2	50	5	A1	1-2-3	36 4	1.3 3.0	1.2 1.2	1.8 1.8	4 14
866	3	50	6	A0	1-3-4	26	2.0	1.5	2.1	7
867	3	75	7	A	3-4-5	49 2	0.9 1.6	1.2 1.2	1.8 1.8	2 5
883	4	50	4	A1	1-2-3	30	1.6	1.5	2.1	5

Mixed: coax + LV, multi coax



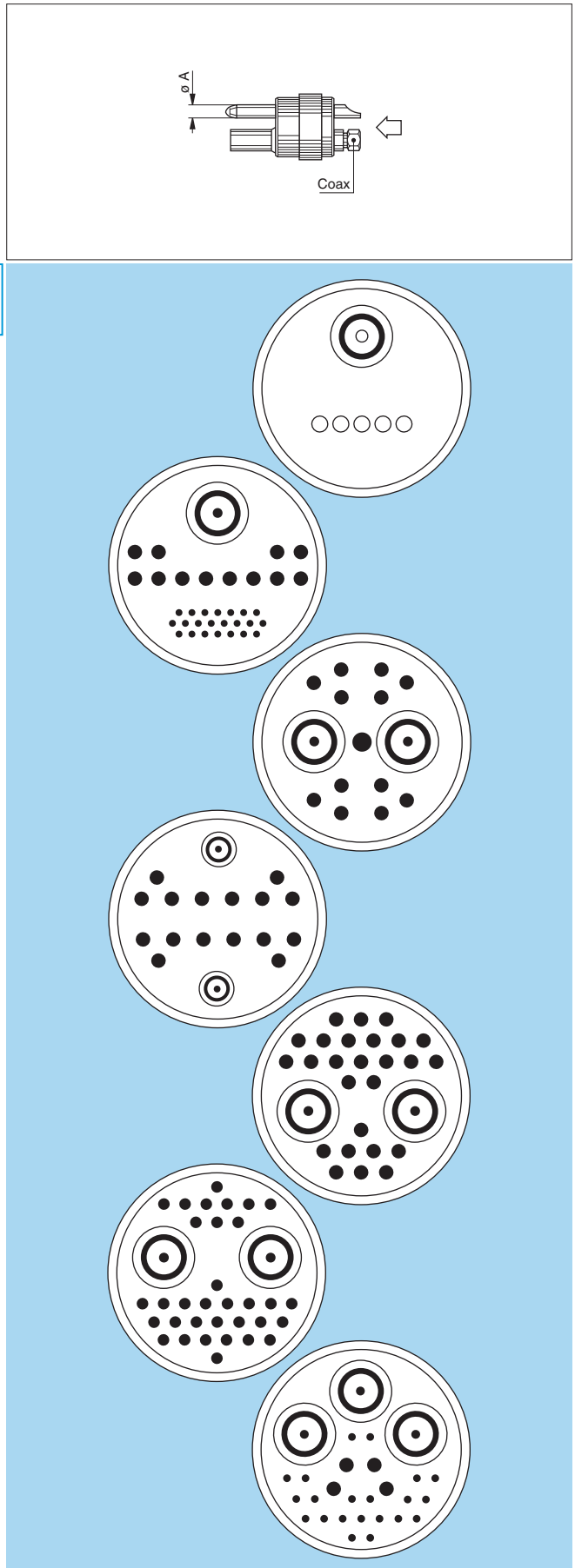
6S



Reference	Coaxial					Low voltage				
	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
284 **294**	4	50 75	12 7	A	4-6 3-4-5	–	–	–	–	–
882	4	75	7	A	3-4-5	26	0.9	0.8	1.2	2
887	1 4	50 50	26 5	A3 A1	7 3 } 9	7	2.0	1.5	2.1	10
890	6	50	5	A1	1-2-3	4	4.0	1.5	2.1	16
893	6	50	5	A1	1-2-3	20	1.6	1.5	2.1	5
238	8	50	6	A0	1-3-4	–	–	–	–	–
899	8	50	5	A1	1-2-3	20	1.6	1.5	2.1	5

Mixed: coax + LV, multi coax

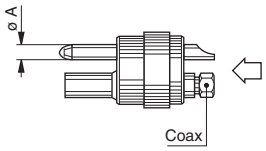
6E



Reference	Coaxial					Low voltage				
	Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
805[1)]	1	75	7	A	3-4-5	5	2.0	1.5	2.1	10
831	1	75	7	A	3-4-5	24 12	0.9 2.0	0.8 1.5	1.2 2.1	2 10
843	2	75	7	A	3-4-5	12 1	2.0 3.0	1.5 1.5	2.1 2.1	10 14
847	2	50	5	A1	1-2-3	17	2.0	1.5	2.1	10
856	2	75	7	A	3-4-5	26	2.0	1.5	2.1	7
857	2	75	7	A	3-4-5	33	1.3	1.2	1.8	4
865	3	75	7	A	3-4-5	21 4	1.3 2.0	1.2 1.2	1.8 1.8	4 10

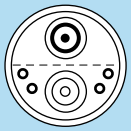
Note: [1)] The type 6E.805 is delivered with female contacts in the plug.

Mixed: coax + LV, multi coax



	Reference	Coaxial					Low voltage				
		Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Test voltage (kV rms)	Test voltage (kV dc)	Rated current (A)
6E	**866**	3	75	7	A	3-4-5	26	1.3	1.2	1.8	4
	880	4	50	5	A1	1-2-3	20	1.3	1.2	1.8	4
	882	4	75	7	A	3-4-5	20	0.9	0.8	1.2	2
	884	4	75	7	A	3-4-5	38	0.9	0.8	1.2	2
	235	5	50	6	A0	1-3-4	–	–	–	–	–
	899	8	50	5	A1	1-2-3	20	1.6	1.5	2.1	5

Mixed: coax + LV + HV

		Reference	Coax					Low voltage (LV)		High voltage (HV)	
			Number of contacts	Impedance (Ω)	Rated current (A)	Type (see page 27)	Cable group	Number of contacts	ø A (mm)	Number of contacts	ø A (mm)
4S 4E		934	1	50	5	A1	1-2-3	4	0.9	1	2.0

Collet nut for fitting a bend relief (S and E series)

C type collets for S series

	Clamping	Coax cable groupe		
		1	2	3
S	**C42Z**	C41Z	C42Z	C43Z
	C57Z	C51Z	C52Z	C53Z
	C72Z	C71Z	C72Z	C73Z
	C87Z	C81Z	C82Z	C83Z
	C97Z	C91Z	C92Z	C93Z
	C11Z	C11Z	C12Z	C13Z
	C12Z	C21Z	C22Z	C23Z

C type collets for E series

	Clamping	Coax cable groupe		
		1	2	3
E	**C50Z**	C51Z	C52Z	C53Z
	C55Z	C56Z	C57Z	C58Z
	C80Z	C81Z	C82Z	C83Z
	C85Z	C86Z	C87Z	C88Z
	C90Z	C91Z	C92Z	C93Z
	C95Z	C96Z	C97Z	C98Z
	C10Z	C11Z	C12Z	C13Z

Note: see unipole-multipole catalogue for others available collets.

Coaxial contacts for S and E series

Type	Impedance (Ω)	ø A (mm)	Cond. fixing	Screen fixing	Cable group	Cond. ø maxi	Dielectric ø maxi	Sheath ø		VSWR (f=GHz)	Test voltage (kV rms)	Rated current (A)
								Mini	Maxi			
A1	50	0.7	solder	collet	1 2 3	0.55 0.55 0.55	1.90 1.90 1.90	2.5 1.7 2.2	3.0 2.1 2.6	1.01 +0.127f	0.9	5
A0	50	0.9	solder	collet	2 3 4	0.95 0.95 0.95	2.95 2.95 2.95	1.7 2.7 3.3	2.1 3.1 4.1	1.06 +0.1f	3.0	6
A	50	1.6	solder	collet	4 6	1.35 1.35	3.95 3.95	3.3 4.3	4.1 5.1	1.01 +0.146f	1.8	12
	75	1.3	solder	collet	3 4 5	1.05 1.05 1.05	3.95 3.95 3.95	2.2 3.3 5.3	2.6 4.1 6.1	1.01 +0.19f	2.4	7
A3	50	3.0	solder	collet	7	2.60	8.10	10.0	10.6	1.06 +0.5f	3.0	15

Recommended coaxial cables for 00 Series (page 18)

	LEMO cable Part Number	Type	LEMO cable group	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen ø (mm)	Sheath ø (mm)
Standard	**CCX.50.RG5.8CU50N**	RG 58 C/U	6	50 ± 2	0.90	2.95	3.60	5.00
	CCX.50.RG1.42BU50M	RG 142 B/U	7	50 ± 2	0.95	2.95	3.53 / 4.30	5.00
	CCX.50.RG1.74U25N	RG 174 /U	3	50 ± 2	0.48	1.50	2.00	2.55
	CCX.50.RG1.74AU27N	RG 174 A/U	3	50 ± 2	0.48	1.50	2.00	2.80
	CCX.50.RG1.78BU18M	RG 178 B/U	1	50 ± 2	0.30	0.84	1.30	1.80
	CCX.75.RG1.79BU26M	RG 179 B/U	2	75 ± 3	0.30	1.50	2.00	2.50
	CCX.75.RG1.87AU26B	RG 187 A/U	2	75 ± 3	0.30	1.50	2.00	2.60
	CCX.50.RG1.88AU24B	RG 188 A/U	4	50 ± 2	0.54	1.50	2.00	2.60
	CCX.95.RG1.95AU37B	RG 195 A/U	5	95 ± 5	0.30	2.52	3.10	3.70
	CCX.50.RG1.96AU20B	RG 196 A/U	1	50 ± 2	0.30	0.84	1.30	1.95
	CCX.50.RG3.16U26M	RG 316 /U	4	50 ± 2	0.54	1.50	2.10	2.60
Non standard		Huber+Suhner, G02232D-60	8	50 ± 2	0.50	1.50	1.95 / 2.40	3.10
		Huber+Suhner, K01152-07	9	50 ± 5	0.19	0.52	0.90	1.25
		Storm, 421-099	8	50 ± 2	0.50	1.52	2.00 / 2.50	3.05

Note: for more details on cable properties, see NIM-CAMAC catalogue.

Recommended triaxial cables for 00 Series (page 13)

	LEMO cable Part Number	Type	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen 1 ø (mm)	Screen 2 ø (mm)	Sheath ø (mm)
Standard		RGT 316	50 ± 2	0.51	1.50	2.05	3.15	3.60
		RGT 403	50 ± 2	0.30	0.84	1.30	2.35	2.95
	017 410 LEDE	RGT 174	50 ± 2	0.48	1.55	1.90	2.90	3.90
	017 820 LEDE	RGT 178	50 ± 2	0.30	0.90	1.37	2.30	2.80
		Huber + Suhner G 02332	50 ± 2	0.49	1.50	2.00	3.05	4.25
		SMT 50	50 ± 2	0.16	0.52	0.85	1.35	1.60

Recommended coaxial cables for S and E Series (page 18)

LEMO cable Part Number	Type	LEMO cable group	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen ø (mm)	Sheath ø (mm)
311 100 LEDE	RG 11 A/U	8	75 ± 2	1.17	7.25	8.15	10.10
	RG 12 A/U	0	75 ± 3	1.20	7.25	8.20	11.80
CCX.50.RG5.8CU50N	RG 58 C/U	6	50 ± 2	0.90	2.95	3.60	5.00
CCX.50.RG5.9BU62N	RG 59 B/U	7	75 ± 3	0.60	3.70	4.50	6.20
	RG 115 A/U	8	50 ± 2	2.25	6.50	8.00	10.50
	RG 122 /U	4	50 ± 2	0.80	2.50	3.20	4.10
CCX.50.RG1.42BU50M	RG 142 B/U	6	50 ± 2	0.95	2.95	4.30	5.00
	RG 144 /U	8	75 ± 3	1.35	7.25	8.00	10.40
	RG 165 /U	8	50 ± 2	2.46	7.25	8.00	10.40
CCX.50.RG1.74AU27N	RG 174 A/U	3	50 ± 2	0.48	1.50	2.00	2.80
CCX.50.RG1.78BU18M	RG 178 B/U	1	50 ± 2	0.30	0.84	1.30	1.80
CCX.75.RG1.79BU26M	RG 179 B/U	5	75 ± 3	0.30	1.50	2.00	2.50
CCX.75.RG1.87AU26M	RG 187 A/U	5	75 ± 3	0.30	1.50	2.00	2.60
CCX.50.RG1.88AU26B	RG 188 A/U	2	50 ± 2	0.54	1.50	2.00	2.60
CCX.50.RG1.96AU20B	RG 196 A/U	1	50 ± 2	0.30	0.84	1.30	1.95
213 000 LEDE	RG 213 /U	8	50 ± 2	2.25	7.25	8.20	10.30
	RG 214 /U	9	50 ± 2	2.25	7.25	8.80	10.80
	RG 216 /U	9	75 ± 3	1.20	7.25	8.80	10.80
	RG 223 /U	7	50 ± 2	0.89	2.95	4.30	5.40
	RG 225 /U	9	50 ± 2	2.40	7.25	8.80	10.90
	RG 302 /U	6	75 ± 3	0.64	3.70	4.40	5.10
CCX.50.RG3.16U26M	RG 316 B/U	2	50 ± 2	0.60	1.60	2.10	2.80
	RG 400 /U	6	50 ± 2	1.00	2.98	4.20	5.00
	HF-2114 Dätwyler	3	50 ± 2	0.48	1.30	1.90	2.70
	HF-5408/1 Dätwyler	7	75 ± 3	0.60	3.80		5.60
	2YCCY 0.4/2.5 Siemens	6	75 ± 2	0.40	2.50	3.70	4.50

Recommended coaxial cables for mixed coax, multi coax for S and E Series (pages 20 to 26)

LEMO cable Part Number	Type	LEMO cable group	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen ø (mm)	Sheath ø (mm)
CCX.50.RG5.8CU50N	RG 58 C/U	6	50 ± 2	0.90	2.95	3.60	5.00
CCX.50.RG5.9BU62N	RG 59 B/U	5	75 ± 3	0.60	3.70	4.50	6.20
	RG 122 /U	4	50 ± 2	0.80	2.50	3.20	4.10
CCX.50.RG1.42BU50M	RG 142 B/U	6	50 ± 2	0.95	2.95	4.30	5.00
CCX.50.RG1.74.AU27N	RG 174 A/U	1	50 ± 2	0.48	1.50	2.00	2.80
CCX.50.RG1.78BU18M	RG 178 B/U	2	50 ± 2	0.30	0.84	1.30	1.80
CCX.75.RG1.79BU26M	RG 179 B/U	3	75 ± 3	0.30	1.50	2.00	2.50
CCX.75.RG1.87AU26M	RG 187 A/U	3	75 ± 3	0.30	1.50	2.00	2.60
CCX.50.RG1.88AU26B	RG 188 A/U	1	50 ± 2	0.54	1.50	2.00	2.60
CCX.50.RG1.96AU20B	RG 196 A/U	2	50 ± 2	0.30	0.84	1.30	1.95
213 000 LEDE	RG 213 /U	7	50 ± 2	2.25	7.25	8.20	10.30
	RG 223 /U	6	50 ± 2	0.89	2.95	4.30	5.40
	RG 302 /U	5	75 ± 3	0.64	3.70	4.40	5.10
CCX.50.RG3.16U26M	RG 316 /U	1	50 ± 2	0.54	1.50	2.10	2.60
	RG 400 /U	5	50 ± 2	1.00	2.98	4.20	5.00

Note: the cable group number corresponding to the chosen cable must be written in the variant position, see pages 15 and 17.

Recommended triaxial cables for S and E Series (page 19)

LEMO cable Part Number	Type	LEMO cable group	Impedance (Ω)	Conductor ø (mm)	Dielectric ø (mm)	Screen 1 ø (mm)	Screen 2 ø (mm)	Sheath ø (mm)
CTR.50.RG1.78BU29M	RGT 178	1	50 ± 2	0.30	0.90	1.37	2.30	2.80
CTR.50.RG1.74AU39N	RGT 174	2	50 ± 2	0.48	1.55	1.90	2.90	3.90
	9222 Belden [1)]	3	50 ± 2	0.94	2.90	3.50	5.20	6.10
	HF-2318 Dätwyler	5	50 ± 2	1.60	4.80	–	–	10.20
	8215 Belden	4	75 ± 3	0.72	4.55	–	–	8.43
	8232A Belden	4	75 ± 3	0.80	3.70	–	–	8.00
	HF-2426 Dätwyler	4	75 ± 3	0.60	3.70	–	–	8.00
	RGT 179	6	75 ± 3	0.30	1.60	2.10	3.10	3.60
375 029 LEDE	Triax 8 Nokia	4	75 ± 3	1.00	4.50	5.20	7.20	8.50
	9267 Belden	5	75 ± 3	0.84	3.70	–	–	9.20
466 140 LEDE	Triax 11 Nokia	7	75 ± 3	1.40	6.50	7.20	9.40	10.90
	8233A Belden	7	75 ± 3	1.60	7.30	–	–	12.10

Note: [1)] when used with 1S.650 / 1E.650, please request large contact bucket («W» type).

Product safety notice

PLEASE READ AND FOLLOW ALL INSTUCTIONS CAREFULLY AND CONSULT ALL RELEVENT NATIONAL AND INTERNATIONAL SAFETY REGULATIONS FOR YOUR APPLICATION.
IMPROPER HANDLING, CABLE ASSEMBLY, OR WRONG USE OF CONNECTORS CAN RESULT IN HAZARDOUS SITUATIONS.

1. **SHOCK AND FIRE HAZARD**
   Incorrect wiring, the use of damaged components, presence of foreign objects (such as metal debris), and / or residue (such as cleaning fluids), can result in short circuits, overheating, and / or risk of electric shock.
   Mated components should never be disconnected while live as this may result in an exposed electric arc and local overheating, resulting in possible damage to components.

2. **HANDLING**
   Connectors and their components should be visually inspected for damage prior to installation and assembly. Suspect components should be rejected or returned to the factory for verification.
   Connector assembly and installation should only be carried out by properly trained personnel. Proper tools must be used during installation and / or assembly in order to obtain safe and reliable performance.

3. **USE**
   Connectors with exposed contacts should never be live (or on the current supply side of a circuit). Under general conditions voltages above 30 VAC and 42 VDC are considered hazardous and proper measures should be taken to eliminate all risk of transmission of such voltages to any exposed metal part of the connector.

4. **TEST AND OPERATING VOLTAGES**
   The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage; reference values are indicated in the catalog however these may be influenced by PC board design and / or wiring harnesses.
   The test voltage indicated in the catalog is 75% of the mean breakdown voltage; the test is applied at 500 V/s and the test duration is 1 minute.

5. **CE MARKING** CE
   CE marking CE means that the appliance or equipment bearing it complies with the protection requirements of one or several European safety directives.
   CE marking CE applies to complete products or equipment, **but not to electromechanical components, such as connectors**.

6. **PRODUCT IMPROVEMENTS**
   The LEMO Group reserves the right to modify and improve to our products or specifications without providing prior notification.

7. ⚠ **WARNING (Prop 65 State of California)**
   Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm. LEMO products are exempt from proposition 65 warnings because they are manufactured, marketed, and sold solely for commercial and industrial use. For further information, please visit https://www.lemo.com/quality/LEMO-Prop-65-compliance-declaration.pdf.

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