

2G/2C SERIES MULTIPOLE CONNECTORS



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://lemo.nt-rt.ru/> || ome@nt-rt.ru

Precision modular connectors to suit your application

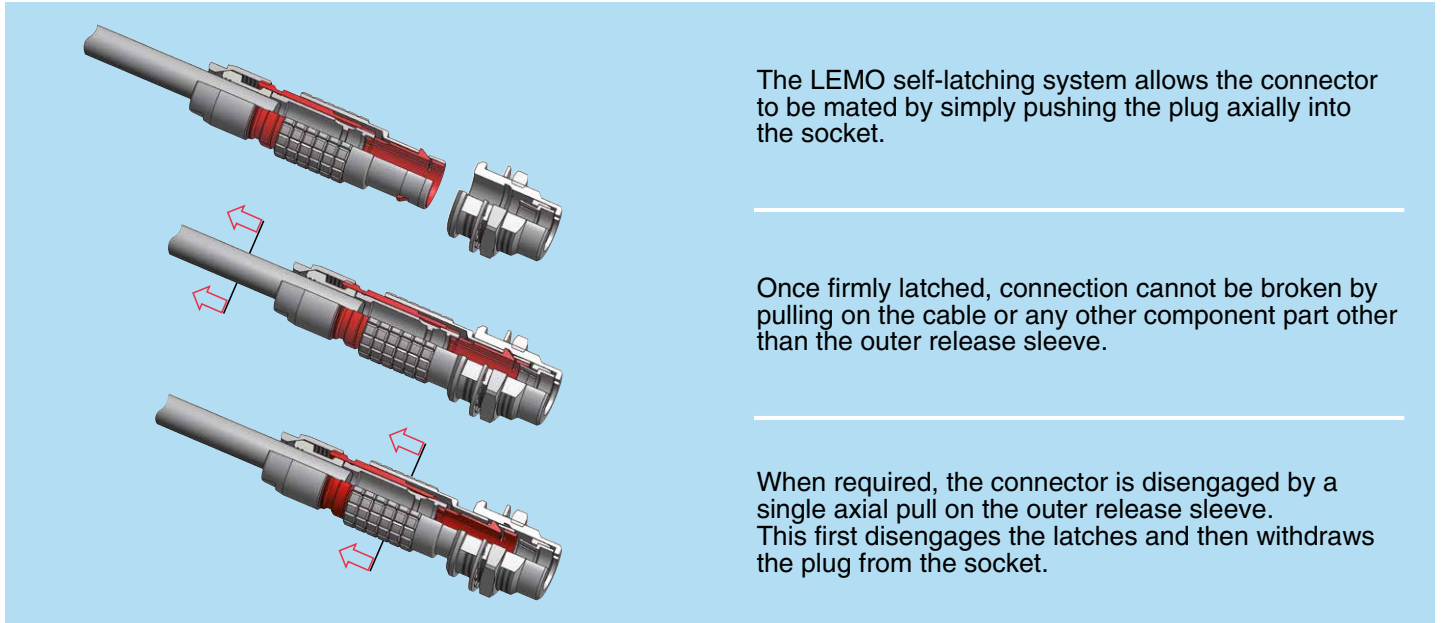
Since its creation in Switzerland in 1946 the LEMO Group has been recognized as a global leader of circular Push-Pull connectors and connector solutions. Today LEMO and its affiliated companies, REDEL and COELVER, are active in more than 80 countries with the help of over 40 subsidiaries and distributors.

Over 75000 connectors

The modular design of the LEMO range provides over 75000 connectors from miniature \varnothing 3 mm to \varnothing 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.



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.**

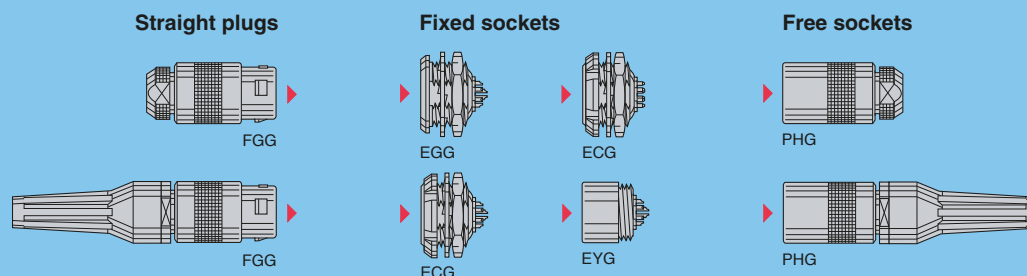
RoHS

LEMO connector specifications conform to 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.

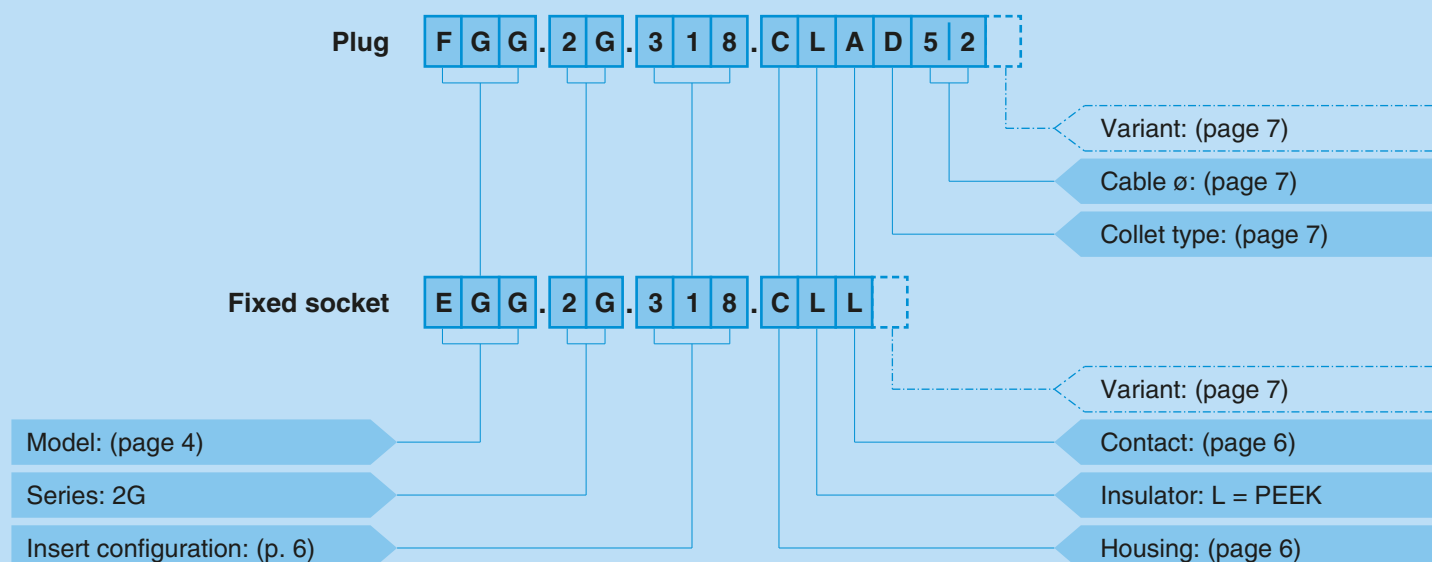
2G Series

The 2G series with key (G) provides the same advantages of space saving due to its small dimensions as the 2C series and is available in multipole type with 18 contacts.

Metal housing models (page 4)



Part Numbering System

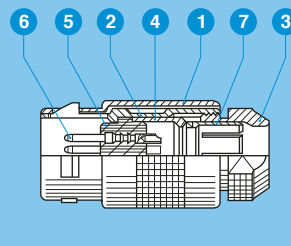
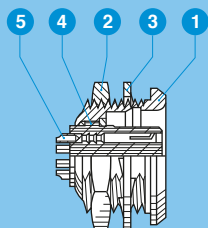


FGG.2G.318.CLAD52 = straight plug with cable collet, 2G series, multipole type with 18 contacts, outer shell in chrome-plated brass, PEEK insulator, male solder contacts, D type collet for 5.2 mm diameter cable.

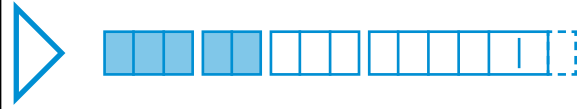
EGG.2G.318.CLL = fixed socket, 2G series, multipole type with 18 contacts, outer shell in chrome-plated brass, PEEK insulator, female solder contacts.

Part Section Showing Internal Components

- Fixed socket**
- 1 outer shell
 - 2 hexagonal nut
 - 3 locking washer
 - 4 insulator
 - 5 female contact



- Straight plug**
- 1 outer shell
 - 2 latch sleeve
 - 3 collet nut
 - 4 split centre-piece
 - 5 insulator
 - 6 male contact
 - 7 collet



Metal housing models

Technical Characteristics

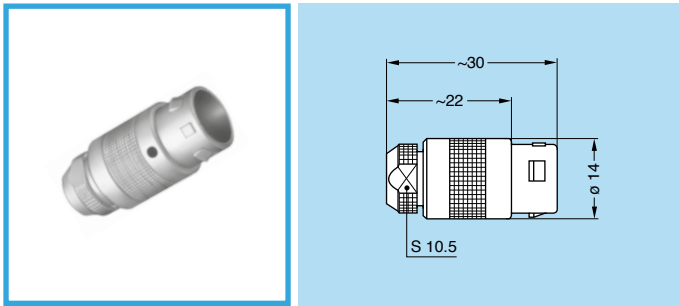
Mechanical and Climatical

Characteristics	Value	Standard
Endurance	> 500 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range	- 55° C, + 250° C	
Salt spray corrosion test	> 1000h	IEC 60512-6 test 11f
Protection index	IP50	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Note:

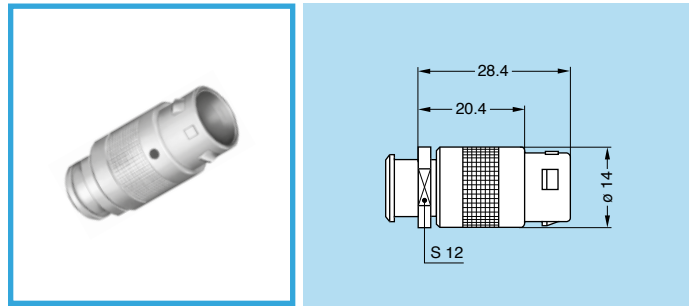
The various tests have been carried out with FGG and EGG connector pairs, with chrome-plated brass shell and PEEK insulator. Detailed electrical characteristics, as well as materials and treatment are presented in the unipole-multipole catalogue.

FGG.2G Straight plug, key (G), cable collet



Cable assembly (page 9)

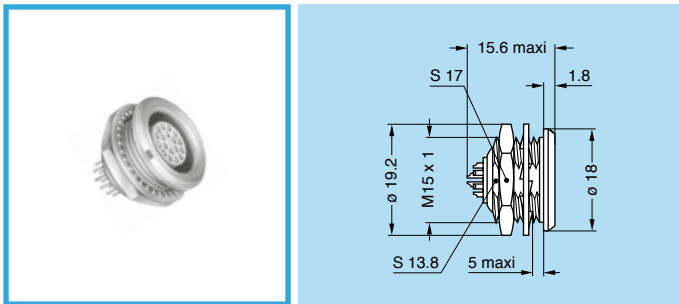
FGG.2G Straight plug, key (G), cable collet and nut for fitting a bend relief ¹⁾



Cable assembly (page 9)

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately.

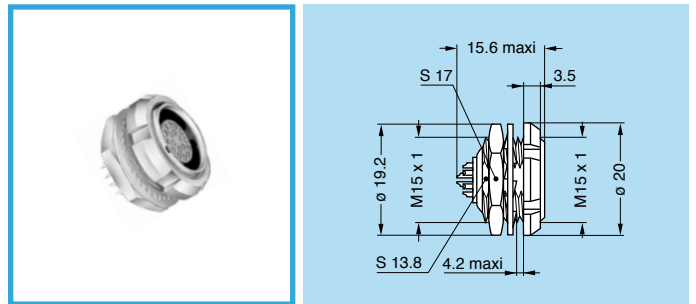
EGG.2G Fixed socket, nut fixing, key (G)



Panel cut-out (page 9)

Note: all dimensions are in millimetres.

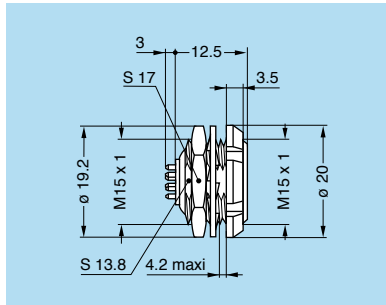
ECG.2G Fixed socket with two nuts, key (G) (back panel mounting)



Panel cut-out (page 9)



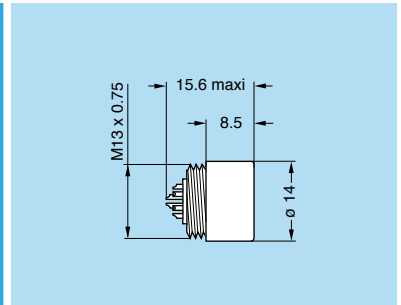
ECG.2G Fixed socket with two nuts, key (G), straight contact for printed circuit (back panel mounting)



Panel cut-out (page 9)

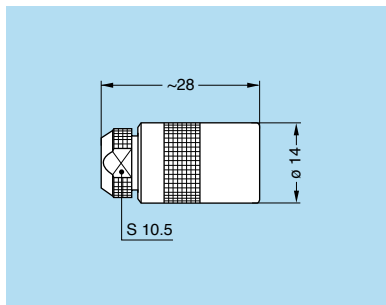
PCB drilling pattern (page 9)

EYG.2G Fixed socket, key (G), protruding shell (screw fixing on the panel)



Panel cut-out (page 9)

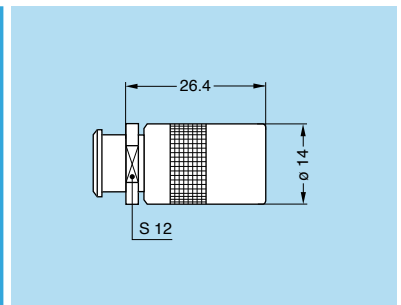
PHG.2G Free socket, key (G), cable collet



Cable assembly (page 9)

Note: all dimensions are in millimetres.

PHG.2G Free socket, key (G), cable collet and nut for fitting a bend relief ¹⁾



Cable assembly (page 9)

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately.

Insert configurations (2G series)

	Male solder contacts	Female solder contacts	Reference	Series	Contact \varnothing (mm)	Contact type		Test voltage (kV rms) ^{1) 2)}	Test voltage (kV dc) ^{1) 2)}	Rated current (A) ¹⁾
						Solder	Print			
18			318	2G	0.7	●	●	0.85	1.2	5.5

Note: 1) see calculation method, caution and suggested standard in the unipole-multipole catalogue.
 2) lowest measured value; contact to contact or contact to shell.

Housings (2G series)

Ref.	Outer shell and collet nut		Latch sleeve		Other metallic components		Note
	Material	Surf. treatment	Material	Surf. treatment	Material	Surf. treatment	
C	Brass	chrome	brass/bronze	nickel	brass	nickel	●
N	Brass	nickel	brass/bronze	nickel	brass	nickel	○
K	Brass	black chrome	brass/bronze	nickel	brass	nickel	●

● First choice alternative
 ○ Special order alternative

Note: detailed characteristics of these materials and treatments are presented in the unipole-multipole catalogue.

Contacts (2G series)

Ref.	Contact type	Ref.	Contact type
A	Male solder	N	Female print
L	Female solder		


Collets (2G series)

D type collets for 2G series

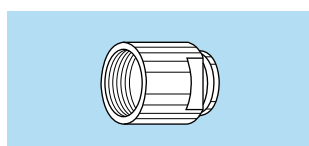
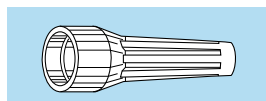
D type



Reference		Collet \varnothing		Cable \varnothing		
Type	Code	\varnothing A	\varnothing B	max.	min.	
2G	D	52	5.2	–	5.1	4.5
	D	62	6.2	–	6.1	5.5
	D	72	7.2	6.2	7.1	6.5
	D	80	8.0	6.2	7.9	7.5

Note: all dimensions are in millimetres.

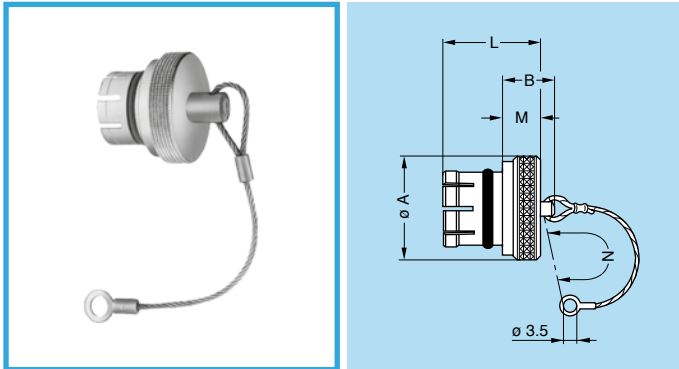

Variant (2G series)

Bend relief for 2G series models with collet

Need to be ordered


Ref.	Collet		Need to be ordered separately
	Type	Code	
2G	Z	D	GMA.2B.●●●●●
		52 to 80	

Accessories (2G series)

BRE Blanking caps for fixed and free sockets



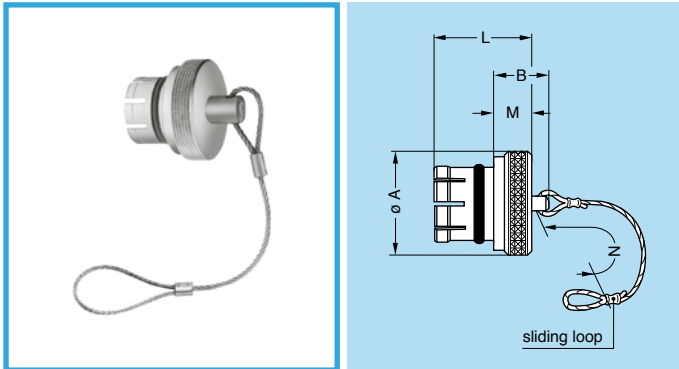
- Body material: Nickel-plated brass (Ni 3 μ m)
- Lanyard material: Stainless steel
- O-ring material: Silicone rubber or FPM

Part number	Dimensions (mm)				
	A	B	L	M	N ¹⁾
BRE.2G.200.NAS	18	12	10.6	6	85

Note: ¹⁾ the tolerance on this dimension is ± 5 mm. These caps are suitable for use with any alignment key configuration. The last letter «S» of the part number stands for the material of the O ring (silicone rubber). O-ring's made from FPM are also available; if required, replace the letter «S» by «V».

- Maximum operating temperature: 200°C
- Watertightness: IP61 according to IEC 60529

BRF Blanking caps for fixed sockets



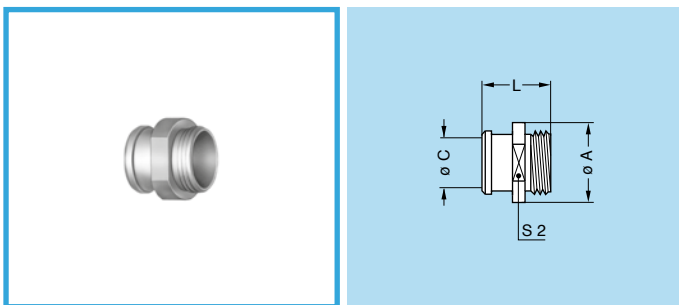
- Body material: Nickel-plated brass (Ni 3 μ m)
- Lanyard material: Stainless steel
- O-ring material: Silicone rubber or FPM

Part number	Dimensions (mm)				
	A	B	L	M	N ¹⁾
BRF.2G.200.NAS	18	12	14	6	85

Note: ¹⁾ the tolerance on this dimension is ± 5 mm. This caps are suitable for use with any alignment key configuration. The last letter «S» of the part number stands for the material of the O ring (silicone rubber). O-ring's made from FPM are also available; if required, replace the letter «S» by «V».

- Maximum operating temperature: 200°C
- Watertightness: IP61 according to IEC 60529

FFM Nut for bend relief



Part number	Dimensions (mm)			
	A	C	L	S2
FFM.2C.130.LC	14	8	12.2	12

Note: for bend reliefs to be used with this nut see section «Accessories» page 141.

- Material: Chrome-plated brass (0.3 μ m)

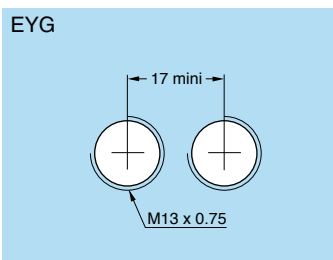
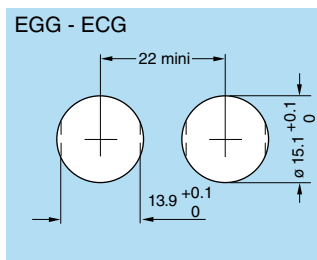
Note: other accessories are also available. See section «Accessories» in the unipole-multipole catalogue.

Tooling (2G series)

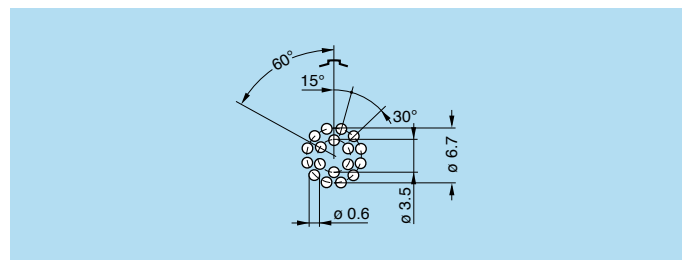
Please consult the «Tooling» section in the unipole-multipole catalogue

Panel cut-outs (2G series)

Panel cut-outs



PCB drilling pattern

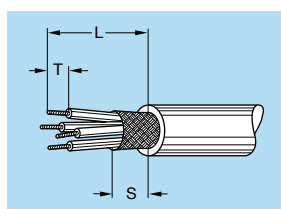


Note: mounting nut torque: 6 Nm (1N = 0.102 kg)

Cable assembly (2G series)

Cable stripping lengths

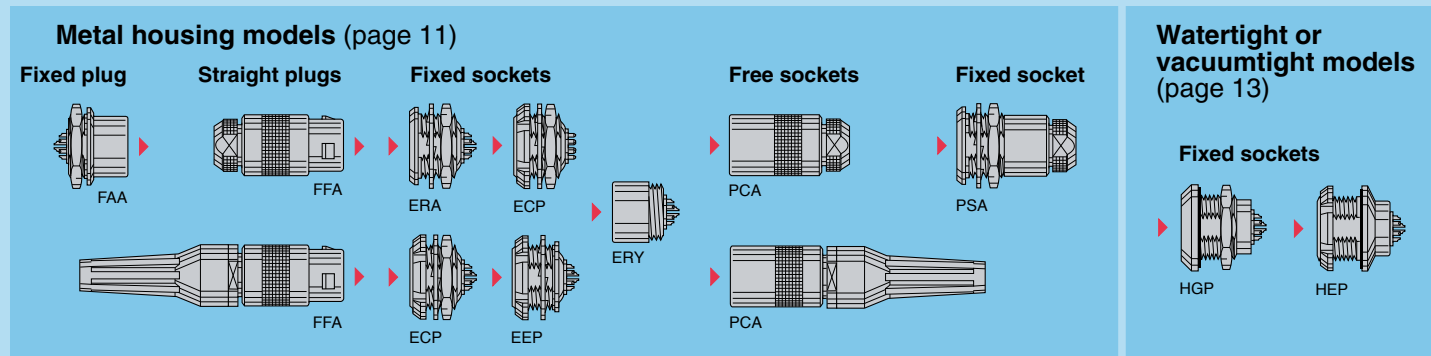
Type	Contact ϕ (mm)	Cable stripping lengths (mm)		
		L	S	T
2G	318	9	7	3



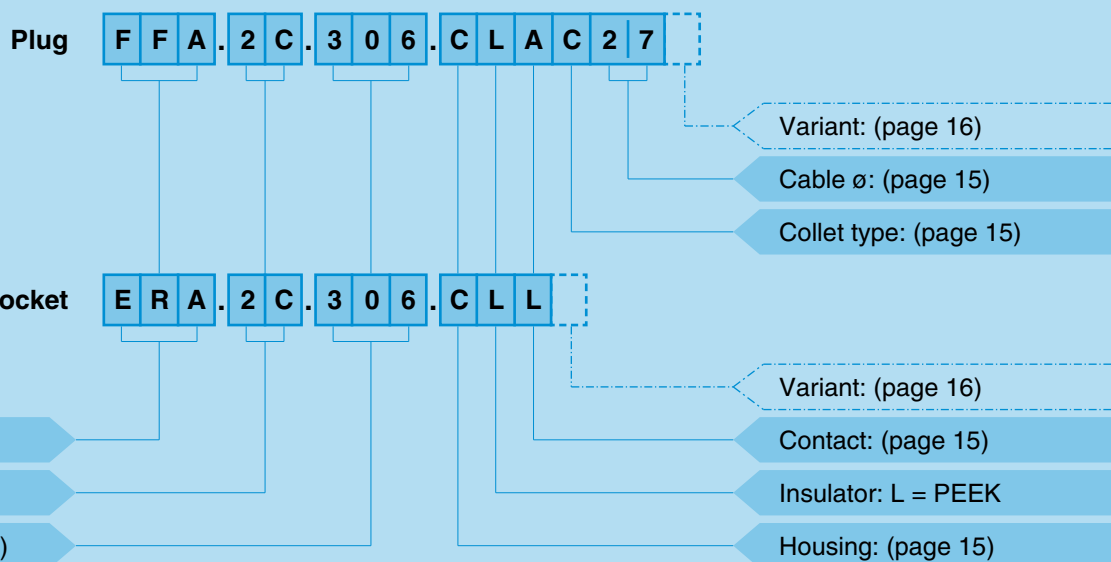
Note: the tolerances on these dimensions are: L: ± 0.5 mm; S: ± 0.5 mm; T: ± 0.2 mm.

2C Series

In many applications, it is necessary to use multipole connectors which have shortened dimensions but require high contact density. LEMO short series connectors, which are shorter than 30 mm, perfectly meet these needs. The 2C series, featuring a hermaphroditic insert, is available in multipole type up to 14 contacts.



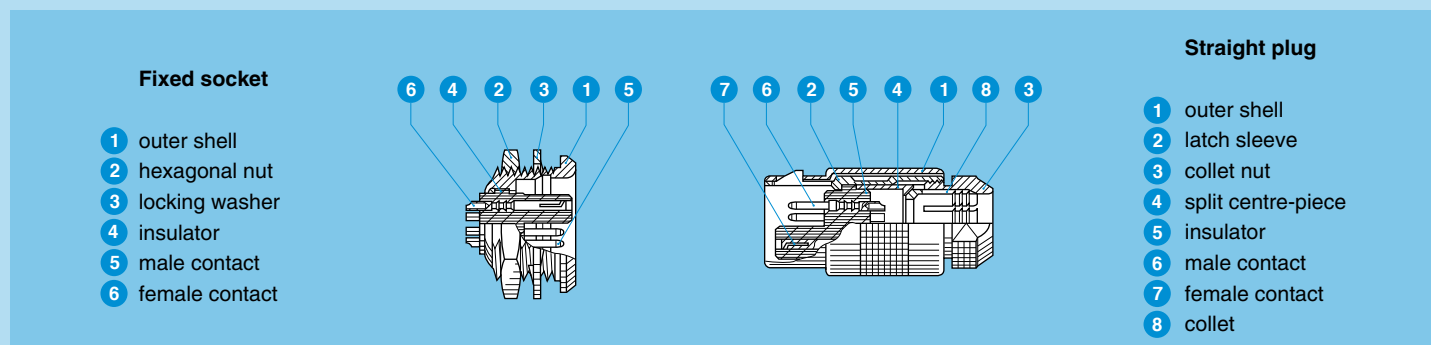
Part Numbering System



FFA.2C.306.CLAC27 = straight plug with cable collet, 2C series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK insulator, male solder contacts, C type collet for 2.7 mm diameter cable.

ERA.2C.306.CLL = fixed socket, nut fixing, 2C series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK insulator, female solder contacts.

Part Section Showing Internal Components





Metal housing models

Technical Characteristics

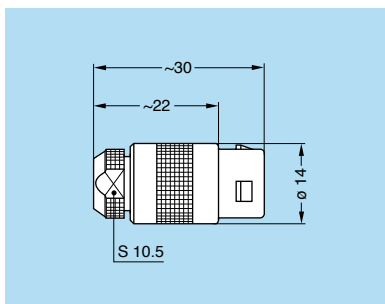
Mechanical and Climatical

Characteristics	Value	Standard
Endurance	> 500 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range	- 55° C, + 250° C	
Salt spray corrosion test	> 1000h	IEC 60512-6 test 11f
Protection index	IP50	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Note:

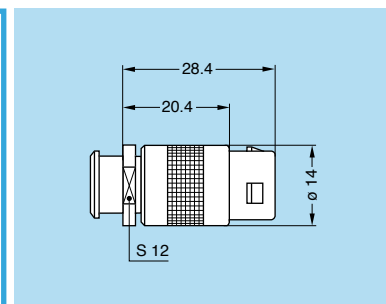
The various tests have been carried out with FFA and ERA connector pairs, with chrome-plated brass shell and PEEK insulator. Detailed electrical characteristics, as well as materials and treatment are presented in the unipole-multipole catalogue.

FFA.2C Straight plug, cable collet



Cable assembly (page 17)

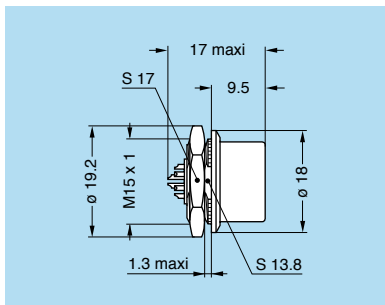
FFA.2C Straight plug, cable collet and nut for fitting a bend relief ¹⁾



Cable assembly (page 17)

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately.

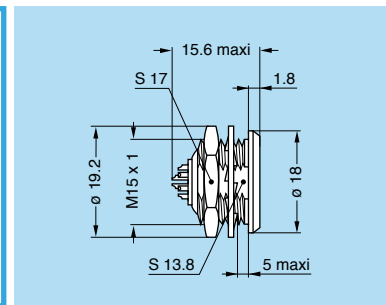
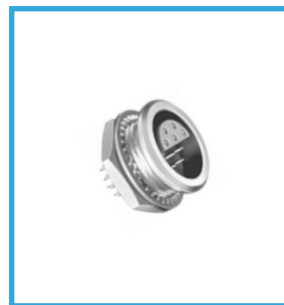
FAA.2C Fixed plug, nut fixing, non-latching



Panel cut-out (page 16)

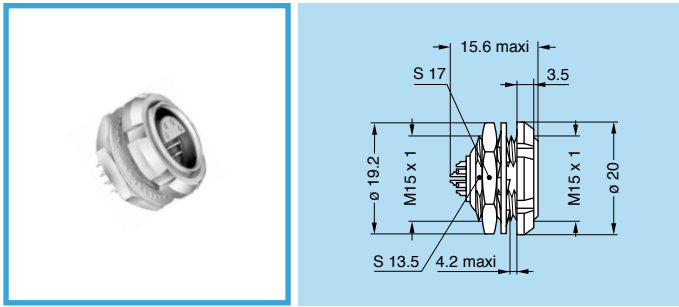
Note: all dimensions are in millimetres.

ERA.2C Fixed socket, nut fixing



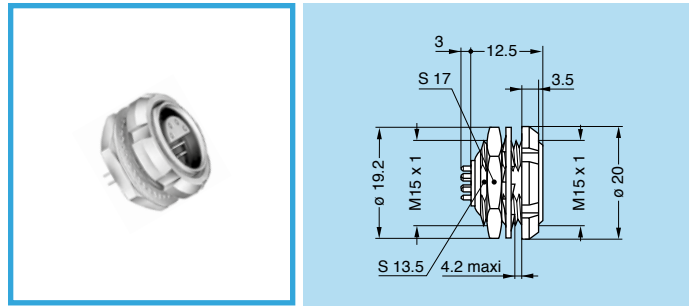
Panel cut-out (page 16)

ECP.2C Fixed socket with two nuts
(back panel mounting)



Panel cut-out (page 16)

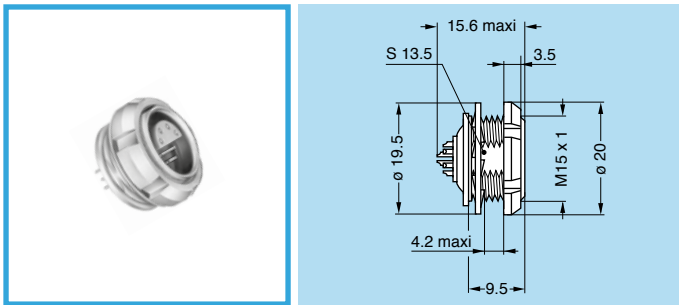
ECP.2C Fixed socket with two nuts, straight contact
for printed circuit (back panel mounting)



Panel cut-out (page 16)

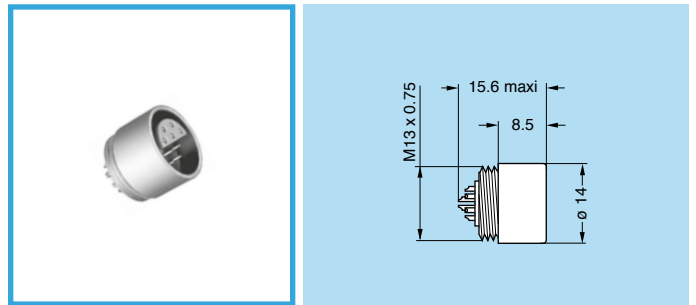
PCB drilling pattern (page 16)

ECP.2C Fixed socket, nut fixing
(back panel mounting)



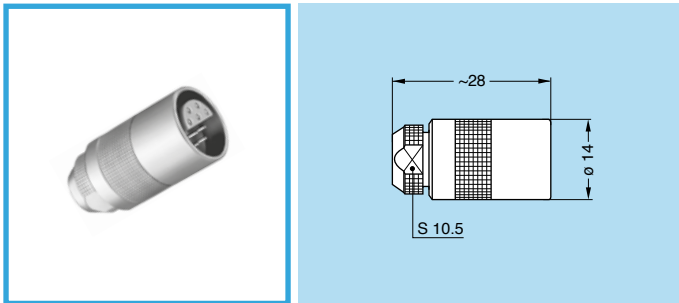
Panel cut-out (page 16)

ERY.2C Fixed socket, protruding shell,
(screw fixing on the panel)



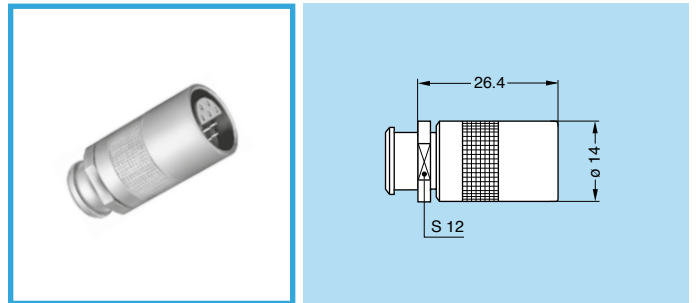
Panel cut-out (page 16)

PCA.2C Free socket, cable collet



Cable assembly (page 17)

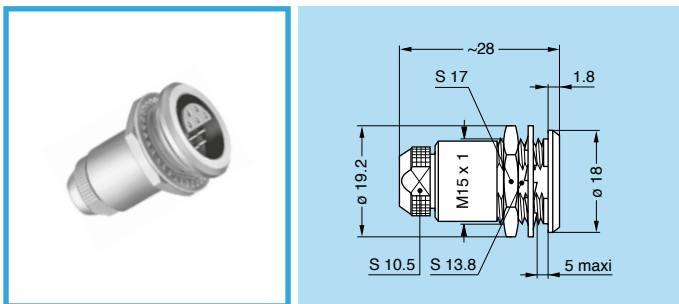
PCA.2C Free socket, cable collet
and nut for fitting a bend relief ¹⁾



Cable assembly (page 17)

Note: ¹⁾ to order, add a «Z» at the end of the reference.
The bend relief must be ordered separately.

PSA.2C Fixed socket nut fixing, cable collet



Panel cut-out (page 16)

Cable assembly (page 17)

Note: all dimensions are in millimetres.



Watertight or vacuumtight models

These socket allow the device on which they are fitted to reach a protection index of IP68 as per IEC 60529. They are fully compatible with plugs of the same series and are widely used for portable radios, military, laboratory equipment, aviation, etc. These models are identified by a letter «P» at the end of the reference.

These models are also available in a vacuumtight version. Such models are identified by an additional letter «V» at the end of the part number (certificate on request).

Epoxy resin is used to seal these models.

Technical Characteristics

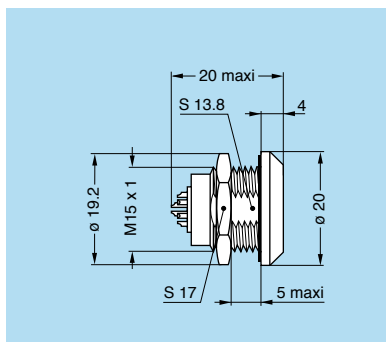
Mechanical and Climatical

Characteristics	Value	Standard
Endurance	> 500 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range	- 20° C, + 80° C	
Salt spray corrosion test	> 1000h	IEC 60512-6 test 11f

Characteristics	Value	Standard
Climatical category	20/80/21	IEC 60068-1
Leakage rate (He) ¹⁾	< 10 ⁻⁷ mbar.l.s ⁻¹	IEC 60512-7 test 14b
Maximum operating pressure	5 bar	IEC 60512-7 test 14d

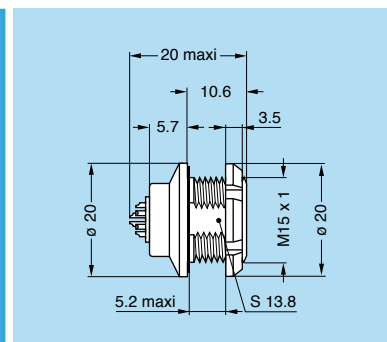
Note: ¹⁾ only for vacuumtight models.

HGP.2C Fixed socket, nut fixing, watertight or vacuumtight

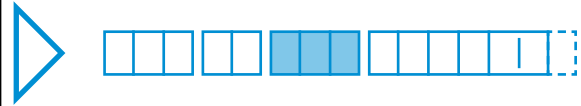


Panel cut-out (page 16)

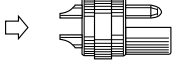
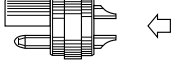
















HEP.2C Fixed socket, nut fixing, watertight or vacuumtight (back panel mounting)



Panel cut-out (page 16)



Insert configurations (2C series)

	 Male solder contacts	 Female solder contacts	Reference	Series	Contact \varnothing (mm)	Contact type		Test voltage (kV rms) ^{1) 2)}	Test voltage (kV dc) ^{1) 2)}	Rated current (A) ¹⁾
						Solder	Print			
2			302	2C	1.6	●	–	1.80	2.40	20
3			303	2C	1.3	●	–	1.50	2.10	15
4			304	2C	1.3	●	–	1.80	2.40	15
6			306	2C	1.3	●	–	1.50	2.10	12
8			308	2C	0.7	●	●	0.95	1.35	7
10			310	2C	0.7	●	●	0.95	1.35	7
12			312	2C	0.7	●	●	0.60	0.90	5
14			314	2C	0.7	●	●	0.60	0.90	5

Note: 1) see calculation method, caution and suggested standard in the unipole-multipole catalogue.
 2) lowest measured value; contact to contact or contact to shell.

Housings (2C series)

Ref.	Outer shell and collet nut		Latch sleeve		Other metallic components		Note
	Material	Surf. treatment	Material	Surf. treatment	Material	Surf. treatment	
C	Brass	chrome	brass/bronze	nickel	brass	nickel	●
N	Brass	nickel	brass/bronze	nickel	brass	nickel	○
K	Brass	black chrome	brass/bronze	nickel	brass	nickel	●

● First choice alternative
○ Special order alternative

Note: detailed characteristics of these materials and treatments are presented in the unipole-multipole catalogue.

Contacts (2C series)

Ref.	Contact type
A	Male solder
L	Female solder
N	Female print

Multipole connectors are fitted with hermaphroditic inserts including male and female contacts. However, by convention, the letter indicating the contact type in the part number composition will be the male contact (reference A) for plugs and female contact (reference L) for sockets.

Collets (2C series)

C and L type collets for 2C series

C type



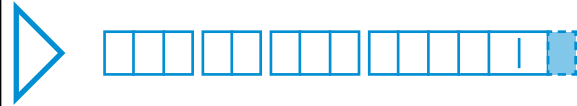
L type
(non EMC)



Reference	Collet ø		Cable ø			
	Type	Code	ø A	ø B	max.	min.
2C	C	27	2.7	–	2.6	2.2
	C	32	3.2	–	3.1	2.7
	C	37	3.7	–	3.6	3.2
	C	42	4.2	–	4.1	3.7
	C	47	4.7	–	4.6	4.2
	C	52	5.2	–	5.1	4.7
	C	57	5.7	–	5.6	5.2
	C	62	6.2	–	6.1	5.7
	C	67	6.7	6.2	6.6	6.2
	C	72	7.2	6.2	7.1	6.7
	C	75	7.5	6.2	7.4	7.2
	C	80	8.0	6.2	7.9	7.5

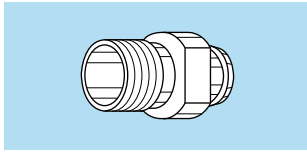
Reference	Collet ø		Cable ø			
	Type	Code	ø A	ø B	max.	min.
2C	L	14	1.4	–	1.3	0.8
	L	27	2.7	–	2.6	2.2
	L	32	3.2	–	3.1	2.7
	L	37	3.7	–	3.6	3.2
	L	42	4.2	–	4.1	3.7
	L	47	4.7	–	4.6	4.2
	L	52	5.2	–	5.1	4.7
	L	57	5.7	–	5.6	5.2
	L	62	6.2	–	6.1	5.7
	L	67	6.7	–	6.6	6.2
	L	72	7.2	–	7.1	6.7
	L	77	7.5	–	7.6	7.2
	L	82	8.2	–	8.1	7.7

Note: all dimensions are in millimetres.

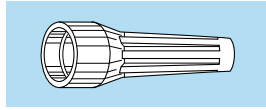


Variant (2C series)

Bend relief for 2C series models with collet



Need to be ordered



Ref.	Collet		Need to be ordered separately
	Type	Code	
2C	z	C	42 to 80
		L	42 to 82

Watertight and vacuumtight socket models (2C series)

Ref.	Model (HEP or HGP)	
	Watertight	Vacuumtight
2C	P	•
	PV	•

Accessories (2C series)

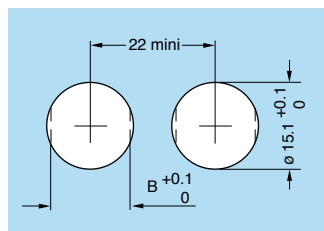
Accessories for the 2C series are identical with the 2G series. Please refer to corresponding pages in the unipole-multipole catalogue.

Tooling (2C series)

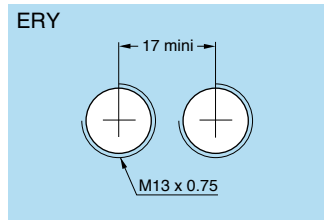
Please consult the «Tooling» section in the unipole-multipole catalogue.

Panel cut-outs (2C series)

Panel cut-outs

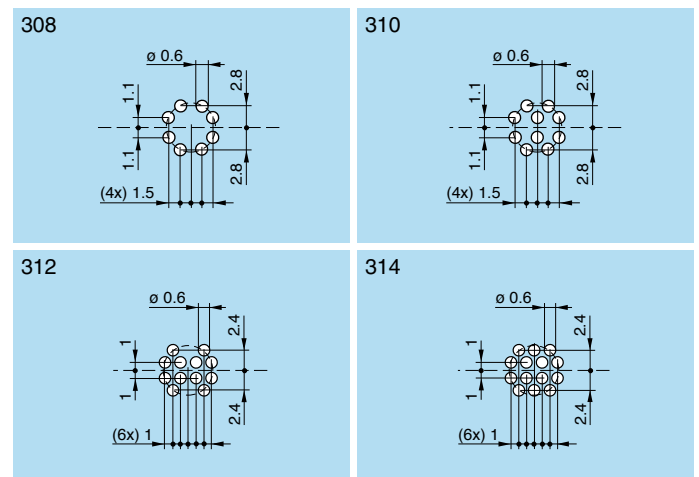


Model	B (mm)	Model	B (mm)
ECP	13.6	HEP	13.9
EEP	13.6	HGP	13.9
ERA	13.9	PSA	13.9
FAA	13.9		



Note:
mounting nut torque:
6 Nm (1N = 0.102 kg)

PCB drilling patterns



Cable assembly (2C series)

Cable stripping lengths

	Type	ø contact A (mm)	Cable stripping lengths (mm)		
			L	S	T
2C	302	1.6	11	8	3
	303/304/306	1.3	11	8	3
	308/310/312/314	0.7	11	8	3

Note: the tolerances on these dimensions are: L: ± 0.5 mm; S: ± 0.5 mm; T: ± 0.2 mm.

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 Астрахань (8512)99-46-04
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