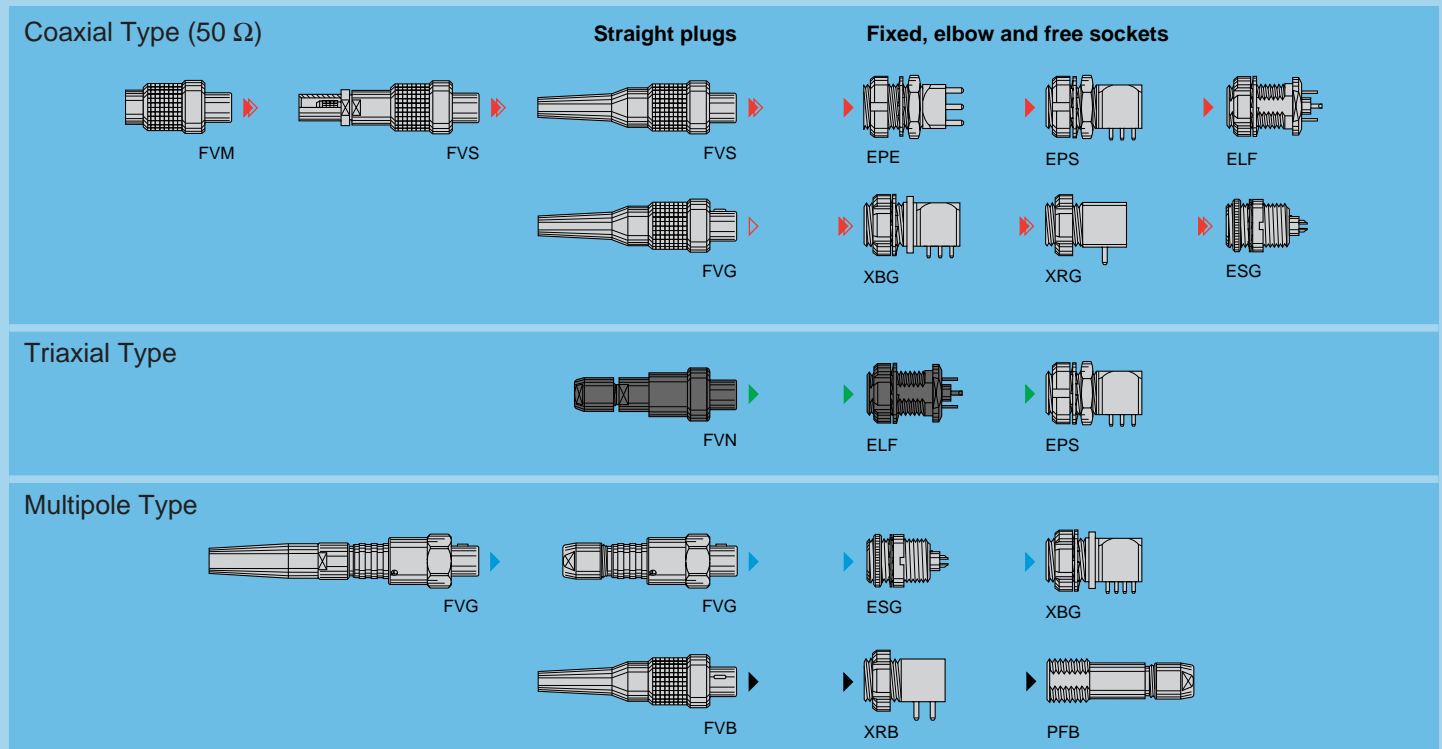


00 Series

This family of screw-coupling miniature connectors is particularly adapted to connecting professional mini-receivers and miniature microphones. These connectors are available in coaxial, triaxial or multicontact types up to 4 LV. The keying system, available even for the coaxial type, guarantees perfect connection in the case of similar connectors used for different applications.

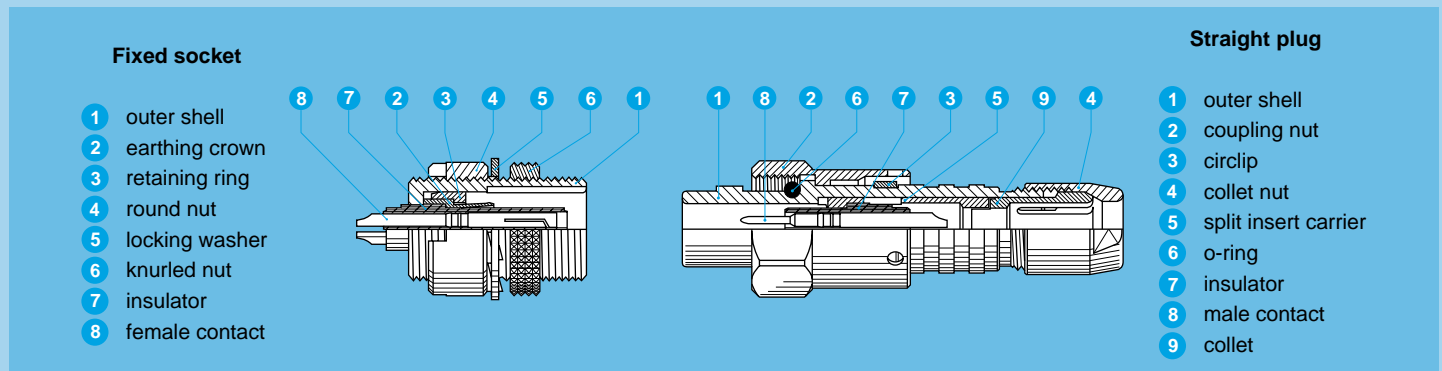
Interconnections



Model Description

- | | | |
|---|---|--|
| <p>ELF Fixed socket, nut fixing, long threaded shell with tag (back panel mounting)</p> <p>EPE Fixed socket for printed circuit with two nuts (back panel mounting)</p> <p>EPS Elbow (90°) socket for printed circuit with two nuts (back panel mounting)</p> <p>ESG Fixed socket with two round nuts, key (G) or keys (B), long threaded shell (back panel mounting)</p> <p>FVB Straight plug, keys (B), short shell for special cable crimping and for fitting a bend relief</p> | <p>FVG Straight plug, key (G) or keys (B), cable collet</p> <p>FVG Straight plug, key (G), short shell for fitting a bend relief</p> <p>FVM Straight plug, adapter for microphone</p> <p>FVN Straight plug, cable collet</p> <p>FVS Straight plug for cable crimping</p> <p>FVS Straight plug, short shell for fitting a bend relief</p> <p>PFB Free socket, keys (B), cable collet for threaded coupling</p> <p>XBG Elbow (90°) socket fixing nut for printed circuit, key (G) or keys (B)</p> | <p>XRB Elbow (90°) socket for printed circuit, keys (B), short shell with one nut, screw fixing (back panel mounting)</p> <p>XRG Elbow (90°) socket for printed circuit, key (G), short shell with one nut, screw fixing (back panel mounting)</p> |
|---|---|--|

Part Section Showing Internal Components



Technical Characteristics

Mechanical and Climatical

Characteristics	Value	Standard	Note
Endurance	> 5000 cycles	IEC 60512-5 test 9a	
Humidity	up to 95% at 60° C		
Temperature range	-50° C, +200° C		
Resistance to vibration	10-2000 Hz, 15 g	IEC 60512-4 test 6d	
Shock resistance	100 g, 6 ms	IEC 60512-4 test 6c	
Salt spray corrosion test	> 144 h	IEC 60512-6 test 11f	
Protection index	> IP64	IEC 60529	For mated plug and socket
Climatical category	20/200/21	IEC 60068-1	

Electrical (see also page 8 under the type section)

Characteristic	Value	Standard	Section
Insulation resistance (new)	> 10 ¹² Ω	IEC 60512-2	test 3a
Insulation resistance ¹⁾	> 10 ¹⁰ Ω	IEC 60512-2	test 3a
Shell electrical continuity	5.0 mΩ	IEC 60512-2	test 2f
Shielding efficiency	at 10 MHz	> 100 dB	IEC 60169-1-3
	at 1 GHz	> 80 dB	IEC 60169-1-3


Characteristic	∅ A (mm)	Value	Standard	Section
Contact resistance ²⁾	0.5	≤ 8.7 mΩ	IEC 60512-2	test 2a
Contact resistance ²⁾	0.7	≤ 6.1 mΩ	IEC 60512-2	test 2a
Max. working frequency		1450 MHz	For coaxial type	
Max. working frequency		200 MHz	For triaxial type	

Notes:

- ¹⁾ after humidity test: 21 days at 95% RH according to IEC 60068-2.
²⁾ after 5000 mating cycles and the salt spray test according to IEC 60512-6 test 11 f.

Alignment Key and Polarized Keying System

Some of the 00 series are designed with keys. For those models part numbers are composed of three letters. The LAST LETTER indicates the key position and the contact type (male or female). For example, straight plugs with «G» key or «B» keys, are fitted with male contacts. Sockets with «G» key or «B» keys, are fitted with female contacts.

Front view of a socket 	Model	Nb of keys	Angles	Series	Contact type	
				00	Plug	Socket
●●G	1		0°	male	female	
●●B	2	α	60°	male	female	

Notes: the plugs without keys fit also into the sockets that are keyed.

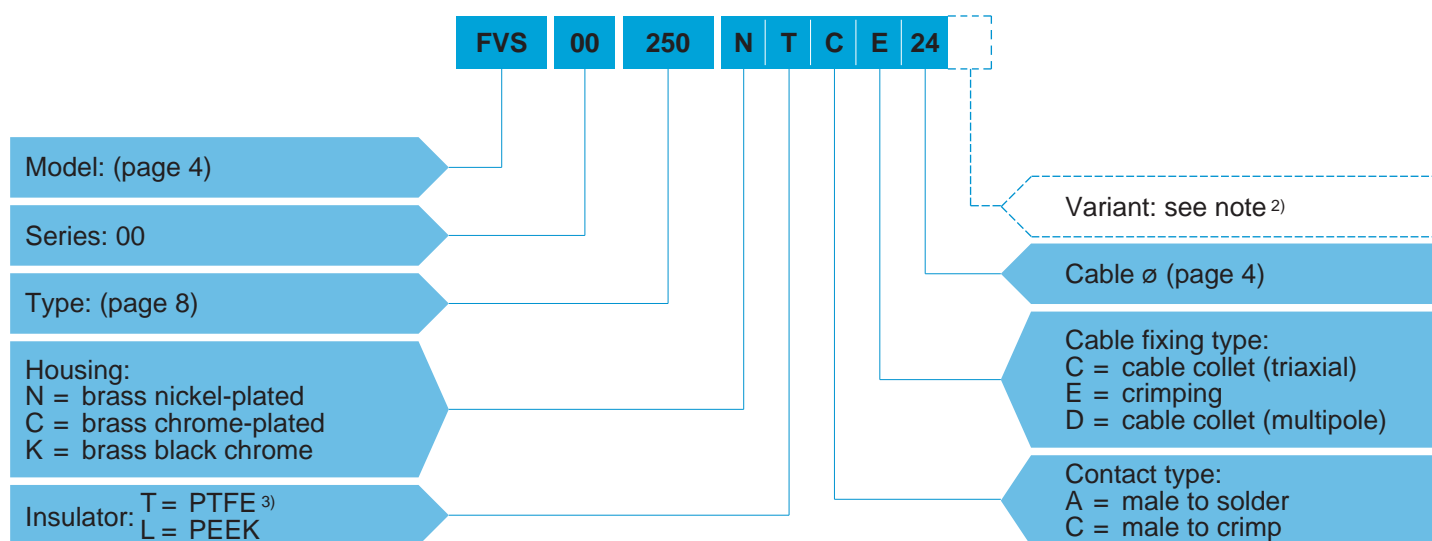
Recommended cables

Cable group	Standard			Type	Imp. (Ω)	Sheath ∅
	MIL-C-17	IEC 96-2	CCTU 10-01A			
3	RG.174 A/U	50.2.1	KX 3A	Coaxial	50 ± 2 Ω	2.6
1	RG.178 B/U	50.1.1	KX 21A	Coaxial	50 ± 2 Ω	1.8
4	RG.188 A/U	50.2.3		Coaxial	50 ± 2 Ω	2.6
1	RG.196 A/U	50.1.2		Coaxial	50 ± 2 Ω	2.1
4	RG.316 /U	50.2.2	KX 22A	Coaxial	50 ± 2 Ω	2.5
	–	–	–	2 x 0.055 mm ² + screen	–	2.1
	–	–	–	3 x 0.04 mm ² + screen	–	2.8

Notes: all dimensions are in millimetres.

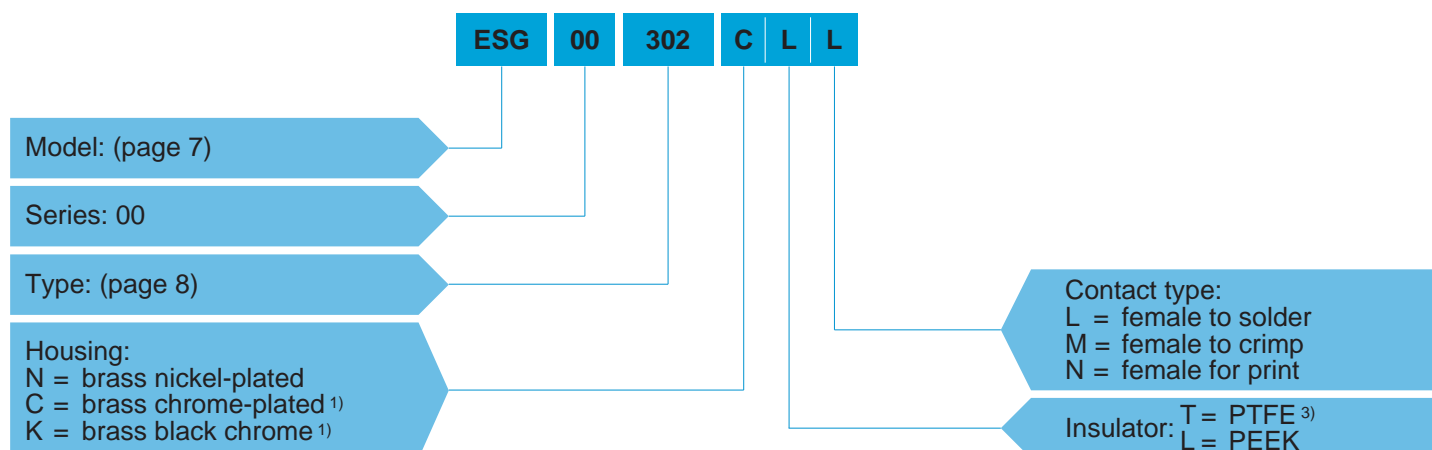
Part Number Example

Straight plug for cable crimping



FVS.00.250.NTCE24 = straight plug for cable crimping, series 00, coaxial type (50 Ω), outer shell in nickel-plated brass, PTFE insulator, male crimp contact, crimping collet of 2.4 mm diameter.

Fixed socket

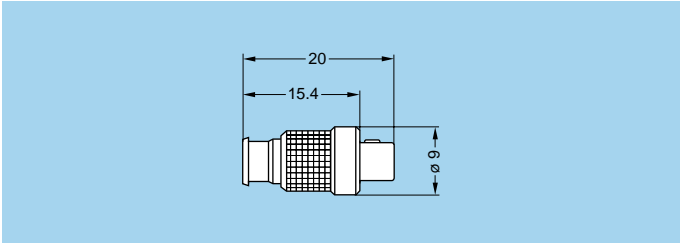
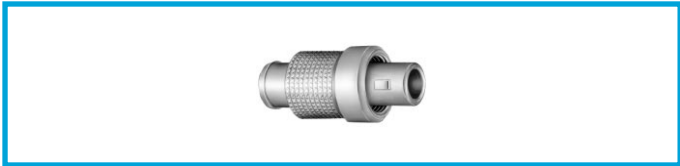


ESG.00.302.CLL = fixed socket, two round nuts fixing, with key (G), series 00, multipole type with 2 contacts, outer shell in chrome-plated brass, PEEK insulator, female solder contact.

Note:

- ¹⁾ treatment not available for the printed circuit models.
- ²⁾ the «Variant» position in the reference is used to specify models with a collet nut for fitting a bend relief «Z». The bend relief can be ordered separately.
- ³⁾ PTFE insulator for coaxial type only.

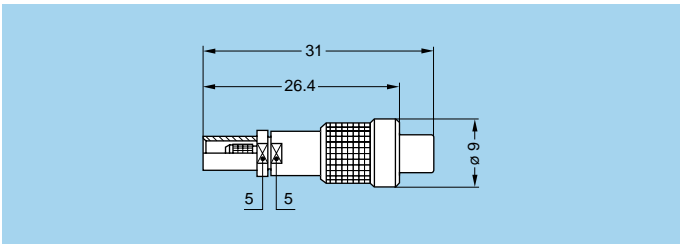
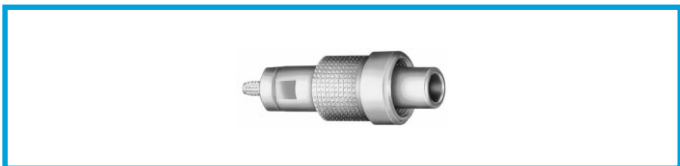
Models - Series - Coaxial Type



FVG Straight plug, key (G), short shell for fitting a bend relief

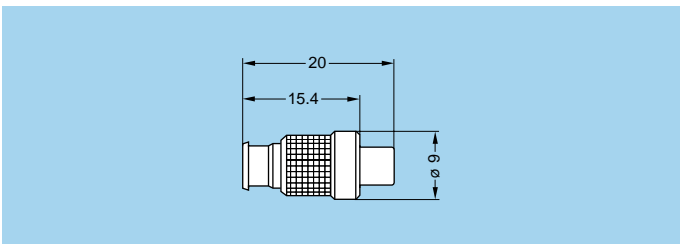
Part number	Cable group
FVG.00.250.NTC	

Note: The GMF bend relief must be ordered separately (see page 9).



FVS Straight plug for cable crimping

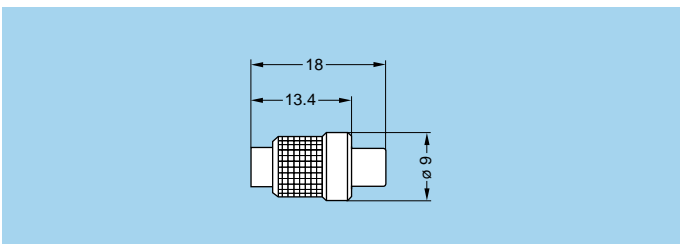
Part number	Cable group
FVS.00.250.NTCE24	1
FVS.00.250.NTCE31	3-4



FVS Straight plug, short shell for fitting a bend relief

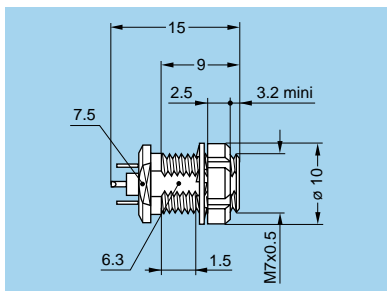
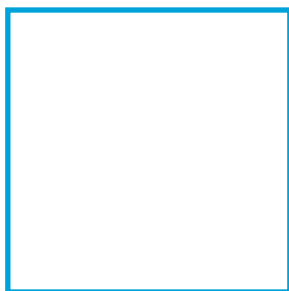
Part number	Cable group
FVS.00.250.NTA	

Note: The GMF bend relief must be ordered separately (see page 9).



FVM Straight plug, adapter for microphone

Part number
FVM.00.250.NLC

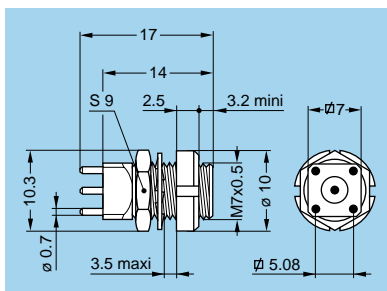
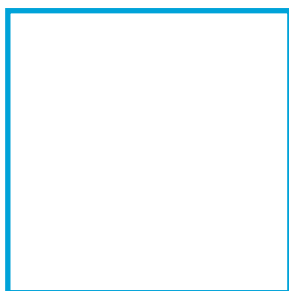


ELF Fixed socket, nut fixing, long threaded shell with tag (back panel mounting)

Part number
ELF.00.250.NLL

Note: Model fitted with special nut GEB.00.242.LN.

Panel cut-out (page 12)

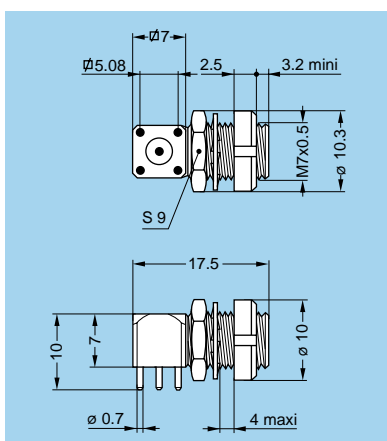
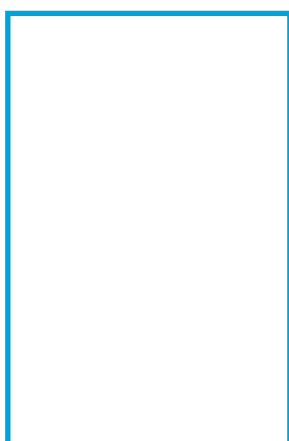


EPE Fixed socket for printed circuit with two nuts (back panel mounting)

Part number
EPE.00.250.NTN

Panel cut-out (page 12)

PCB drilling pattern (page 12)

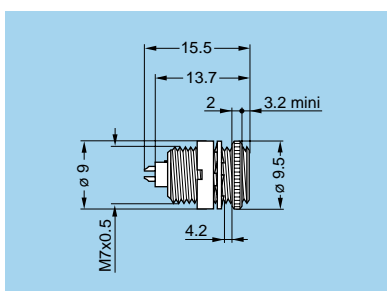
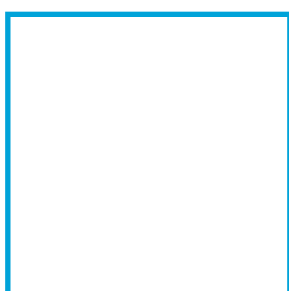


EPS Elbow (90°) socket for printed circuit with two nuts (back panel mounting)

Part number
EPS.00.250.NTN

Panel cut-out (page 12)

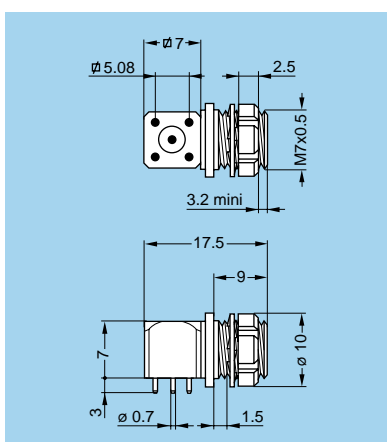
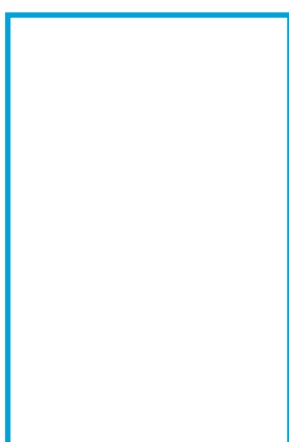
PCB drilling pattern (page 12)



ESG Fixed socket with two round nuts, key (G) or keys (B), long threaded shell (back panel mounting)

Part number
ESG.00.250.CLL

Panel cut-out (page 12)

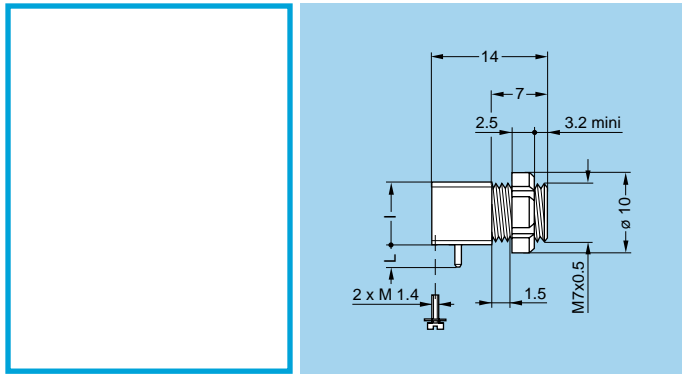


XBG Elbow (90°) socket fixing nut for printed circuit, key (G) or keys (B)

Part number
XBG.00.250.NTN

Note: Model fitted with special nut GEB.00.242.LN.

Panel cut-out (page 12)



XRG Elbow (90°) socket for printed circuit, key (G), short shell with one nut, screw fixing (back panel mounting)

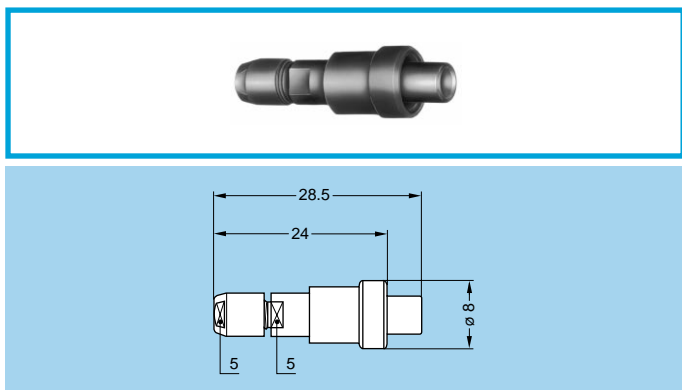
Part number	Dim. (mm)	
	I	L
XRG.00.250.NTN	7.0	3.0
XRG.00.250.NTNY	7.5	1.5

Note: Model fitted with special nut GEB.00.242.LN.

Panel cut-out (page 12)

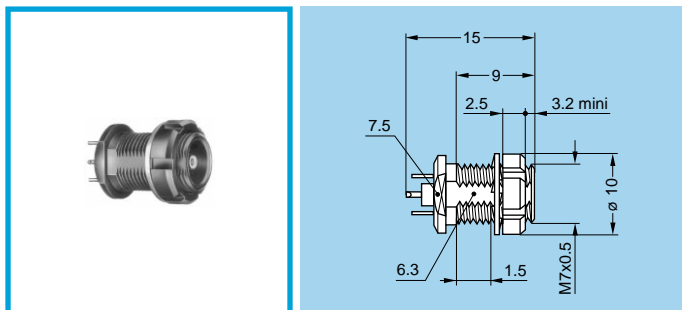
PCB drilling pattern (page 12)

Models - Series - Triaxial Type



FVN Straight plug, cable collet

Part number	Cable group
FVN.00.650.KLAC31Y	
FVN.00.652.KLAC31Y	

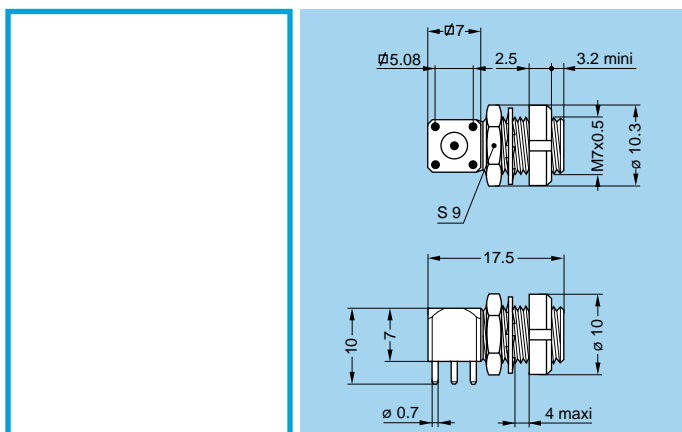


ELF Fixed socket, nut fixing, long threaded shell with tag (back panel mounting)

Part number
ELF.00.650.KLL

Note: Model fitted with special nut GEB.00.242.LN.

Panel cut-out (page 12)



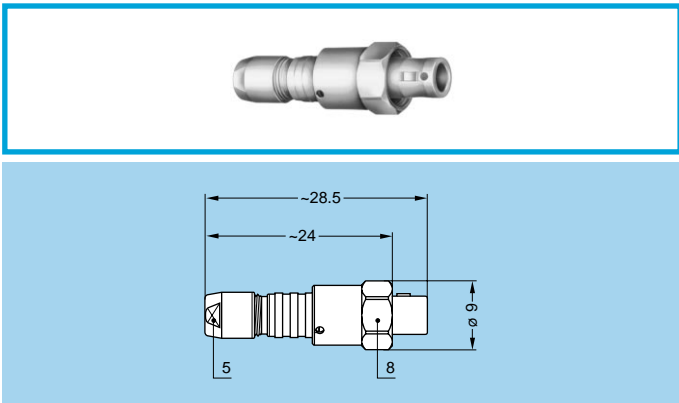
EPS Elbow (90°) socket for printed circuit with two nuts (back panel mounting)

Part number
EPS.00.652.NLN

Panel cut-out (page 12)

PCB drilling pattern (page 12)

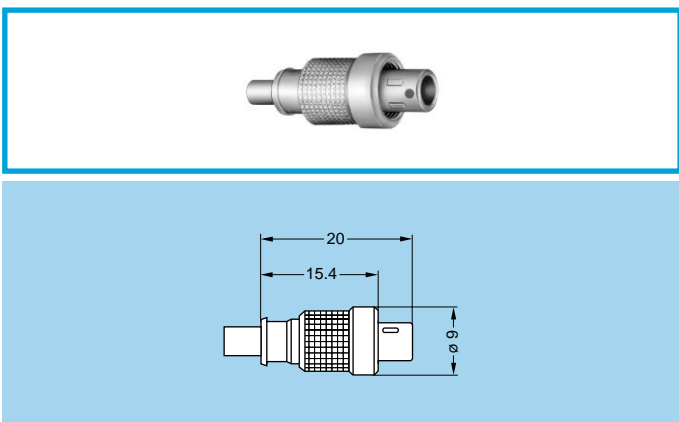
Models - Series - Multipole Type



FVG Straight plug, key (G) or keys (B), cable collet

Part number	Cable \varnothing (mm)	
	min.	max.
FVG.00.30▲.CLAD17	1.1	1.6
FVG.00.30▲.CLAD22	1.6	2.1
FVG.00.30▲.CLAD27	2.1	2.6
FVG.00.30▲.CLAD30	2.5	3.0
FVG.00.30▲.CLAD35	2.9	3.4

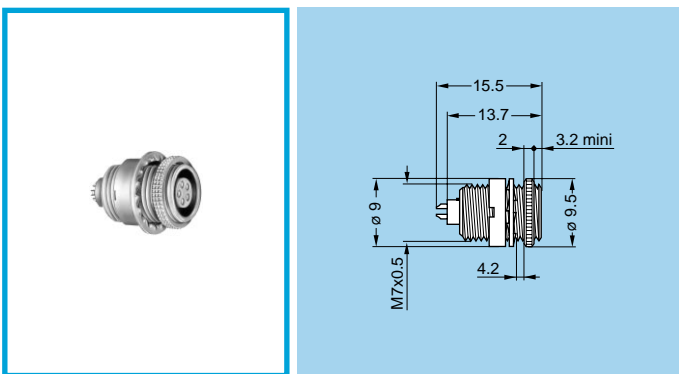
Note: ▲ = type (see page 8).
Also available with nut for fitting a bend relief.



FVB Straight plug, keys (B), short shell for special cable crimping and for fitting a bend relief

Part number	Cable group
FVB.00.303.NLAE13	
FVB.00.303.NLAE24	
FVB.00.303.NLA	

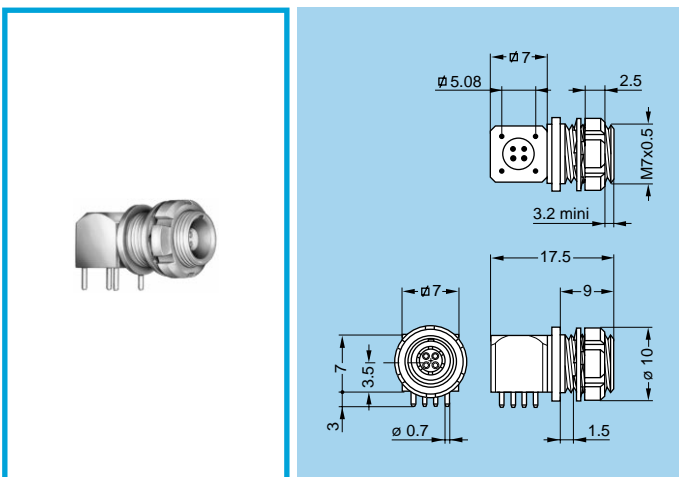
Note: The GMF bend relief must be ordered separately (see page 9).



ESG Fixed socket with two round nuts, key (G) or keys (B), long threaded shell (back panel mounting)

Part number
ESG.00.30▲.CLL

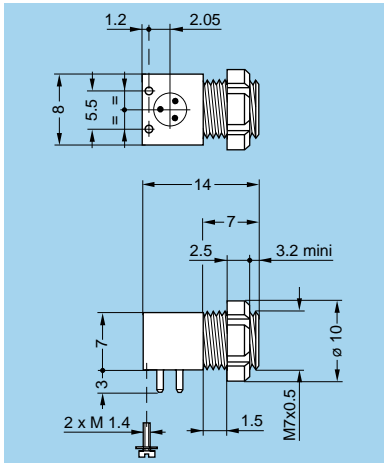
Note: ▲ = type (see page 8).
Panel cut-out (page 12)



XBG Elbow (90°) socket fixing nut for printed circuit, key (G) or keys (B)

Part number
XBG.00.30▲.NLN

Note: ▲ = type (see page 8).
Model fitted with special nut GEB.00.242.LN.
Panel cut-out (page 12)
PCB drilling pattern (page 12)



XRБ Elbow (90°) socket for printed circuit, keys (B), short shell with one nut, screw fixing (back panel mounting)

Part number
XRБ.00.303.NLN

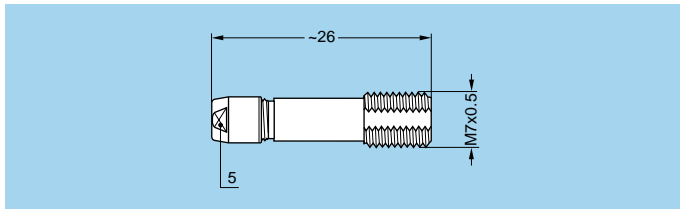
Note: Model fitted with special nut GEB.00.242.LN.

Panel cut-out (page 12)

PCB drilling pattern (page 12)



PFB Free socket, keys (B), cable collet for threaded coupling



Part number	Cable \varnothing (mm)	
	min.	max.
PFB.00.30▲.CLLD17	1.1	1.6
PFB.00.30▲.CLLD22	1.6	2.1
PFB.00.30▲.CLLD27	2.1	2.6
PFB.00.30▲.CLLD30	2.5	3.0
PFB.00.30▲.CLLD35	2.9	3.4

Note: ▲ = type (see page 8).

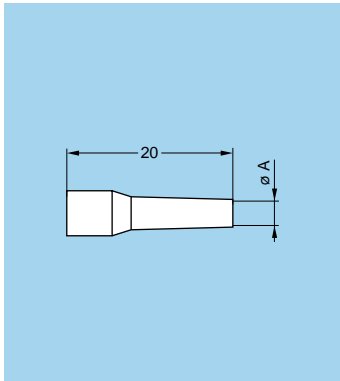
Also available with nut for fitting a bend relief.

Type

Coaxial, triaxial, multipole

		Reference	Number of contacts	\varnothing A (mm)	Impedance (Ω)	Solder contact		Crimp contact		Rated current (A)
Male solder contacts	Female solder contacts					Test voltage (kV rms) Contact-contact	Test voltage (kV rms) Contact-shell	Test voltage (kV rms) Contact-contact	Test voltage (kV rms) Contact-shell	
 Male crimp contacts	 Female crimp contacts									
Coaxial		250	1	0.7	50	-	2.1	-	2.1	4.0
Triaxial		650	1	0.5	-	0.6	1.0	-	-	4.0
		652	1	0.7	-	0.3	1.0	-	-	4.0
Multipole		302	2	0.5	-	1.00	0.95	1.15	1.20	5.0
		303	3	0.5	-	0.80	0.95	1.35	1.10	3.0
		304	4	0.5	-	0.80	0.65	1.05	1.05	2.0

Accessories

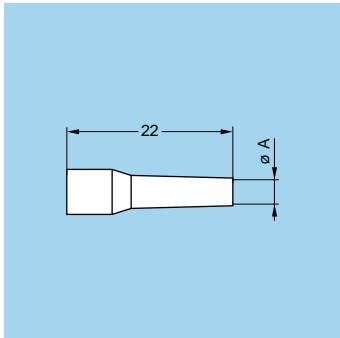


GMF Bend relief (for fitting on short shell plugs)

Part number	ø Cable		Dim.
	max	min	A
GMF.00.010.DG	1.3	1.0	1.0
GMF.00.018.DG	2.1	1.8	1.8

Note: the last letter of the part number «G» specifies the colour grey. For black colour replace the letter «G» by «N».

- Material: Polyurethan (Desmopan 786)
- Operating temperature: -40°C + 80°C



GMMA-GMD Bend relief (with thin wall)

Part number	ø Cable		Dim.	Nut for fitting the bend relief part nb
	max	min	A	
GMA.00.012.DG	1.5	1.2	1.2	FFM.00.131.LC (for multipole)
GMA.00.018.DG	2.1	1.8	1.8	
GMD.00.025.DG	2.8	2.5	2.5	
GMD.00.028.DG	3.1	2.8	2.8	
GMD.00.032.DG	3.5	3.2	3.2	

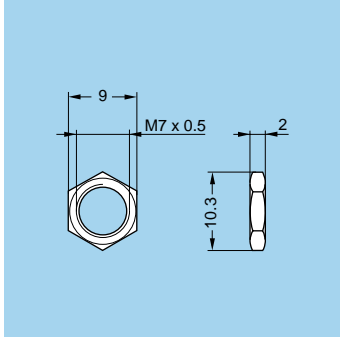
Note: for use with all crimp models and nut for fitting a bend relief. The last letter of the part number «G» specifies the colour grey. Refer to the table to the left to define another colour and replace the letter «G» by the one corresponding to the colour required.

- Material: Polyurethan (Desmopan 786)
- Operating temperature: -40°C + 80°C

Ref.	Colour
A	blue
B	white
G	grey

Ref.	Colour
J	yellow
M	brown
N	black

Ref.	Colour
R	red
S	orange
V	green

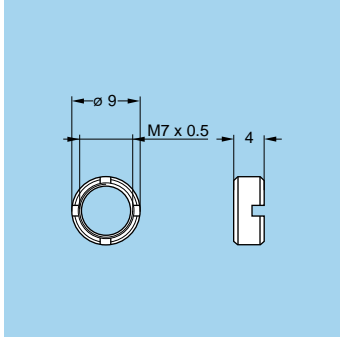


GEA Hexagonal nut

Part number
GEA.00.240.LN

Note: to order this accessory separately, use the above part numbers.

- Material: Nickel-plated brass (3 µm)

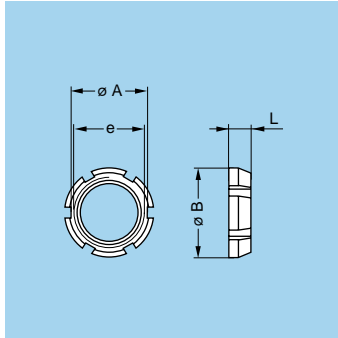


GEB Round nut

Part number
GEB.00.240.LN

Note: to order this accessory separately, use the above part numbers.

- Material: Nickel-plated brass (3 µm)

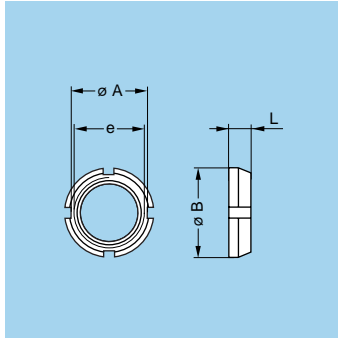


GEB Round nut

Part number	Dimensions (mm)			
	A	B	e	L
GEB.00 242.L●	8.5	10	M7 x 0.5	2.5

Note: to order this accessory separately, use the above part numbers.

- Body material: ● = N, nickel-plated brass
- = D, black chrome-plated brass

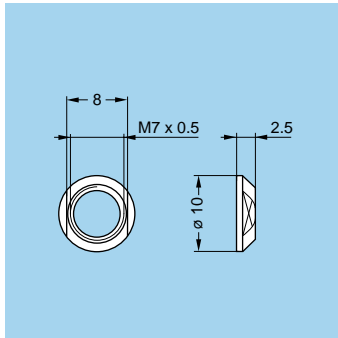
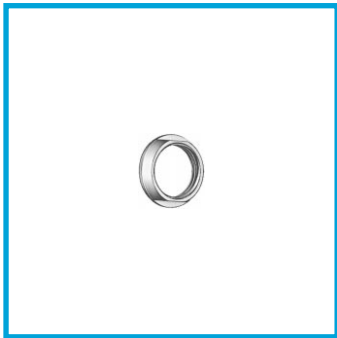


GEG Notched nut

Part number	Dimensions (mm)			
	A	B	e	L
GEG.00 240.L●	8.6	10	M7 x 0.5	2.5

Note: to order this accessory separately, use the above part numbers.

- Body material: ● = N, nickel-plated brass
- = C, chrome-plated brass

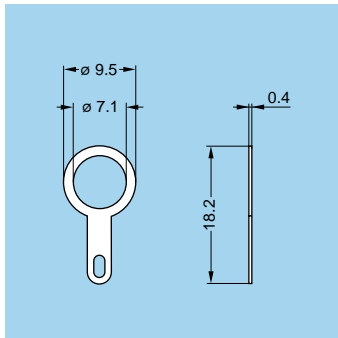


GEC Conical nut

Part number	Weight (g)
GEC.00 240.L●	0.6

Note: to order this accessory separately, use the above part number.

- Body material: ● = N, nickel-plated brass
- = C, chrome-plated brass

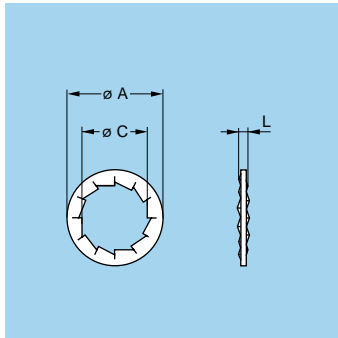
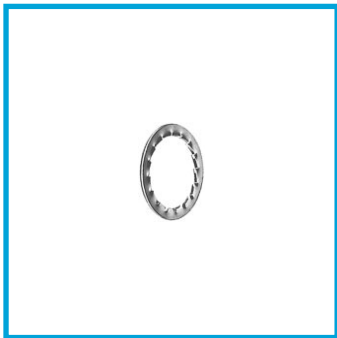


GCA Earthing Washer

Part number	Weight (g)
GCA.00.255.LT	0.2

Note: to order this accessory separately, use the above part number.

- Material: CuSnZn plated brass (2 μ m)



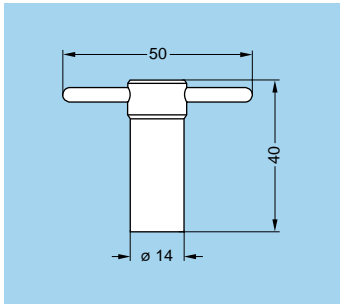
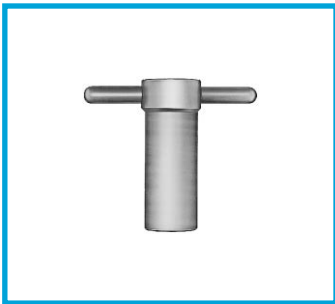
GBA Locking washers

Part number	Series	Dimensions (mm)		
		A	C	L
GBA.00.250.FN	00	9.5	7.1	1.0

Note: to order this accessory separately, use the above part numbers.

- Material: Nickel-plated bronze (3 μ m)

Tooling



DCG Spanner for hexagonal nut

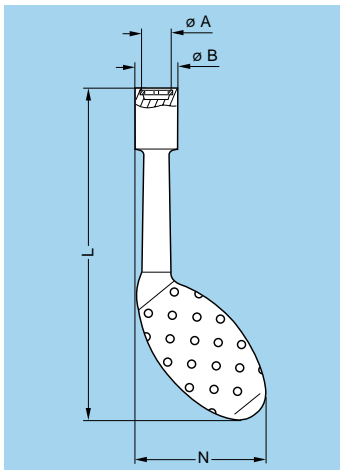
Part number	Part number of the nut
DCG.91.149.0TN	GEA.00.240.LN

- Material: Blackened steel



DC● Spanner for round nut

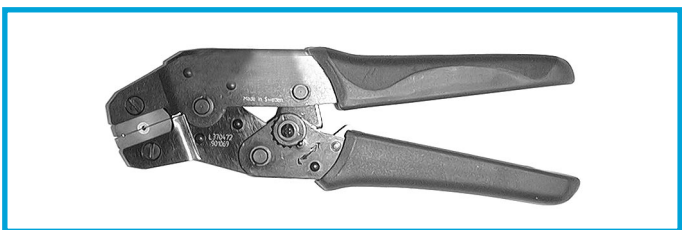
Part number	Part number of the nut
	GEB.00.242.LN



DCH Spanner for notched nut

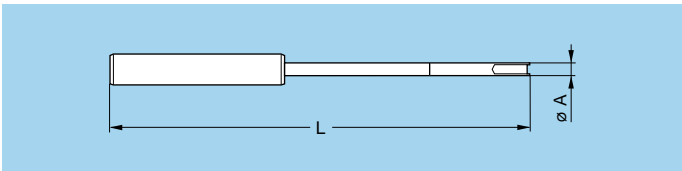
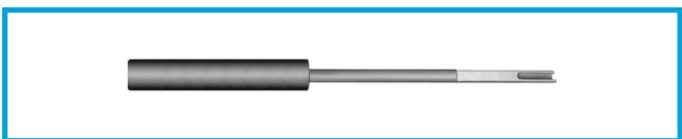
Part number	Dimensions (mm)				Part number of the nut
	A	B	L	N	
DCH.91.101.PA	10.1	12.8	124	48.3	GEG.00.240.LN

- Material: blue polyurethane



DPE Crimping tool (for.....)

Part number
DPE.99.002.1K

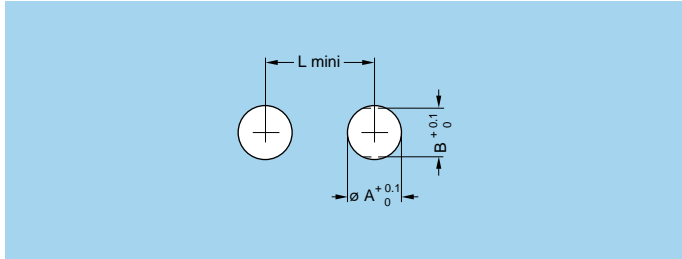


DCL Assembly tool for plugs with short shell

Part number	Series	Dim. (mm)	
		A	L
DCL.91.516.5TK	00	5	165

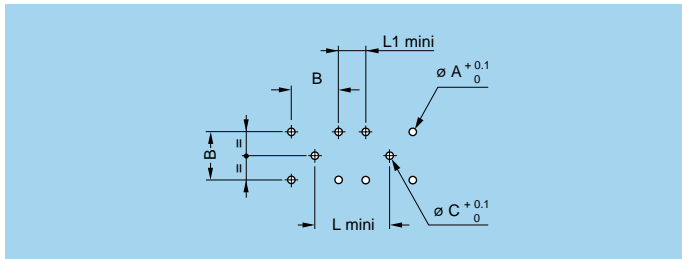
Panel Cut-outs

Panel Cut-outs



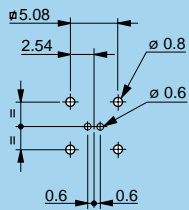
Model	Dimensions		
	A	B	L
EPE-EPS-ESG-XBG XRB-XSG-XRG	7.1	–	14.5
ELF	7.1	6.4	14.5

PCB drilling pattern

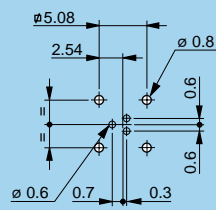


Model	Dimensions				
	A	B	L	L1	C
EPE-EPS-XRG-XSG	0.8	5.08	14.5	9.4	0.8

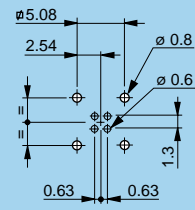
XBG.00.302 - XRB.00.302¹⁾



XBG.00.303 - XRB.00.303¹⁾



XBG.00.304 - XRB.00.304¹⁾



Note: ¹⁾ for the XRB.00 series the holes for shell fixing are different (see p. 8).