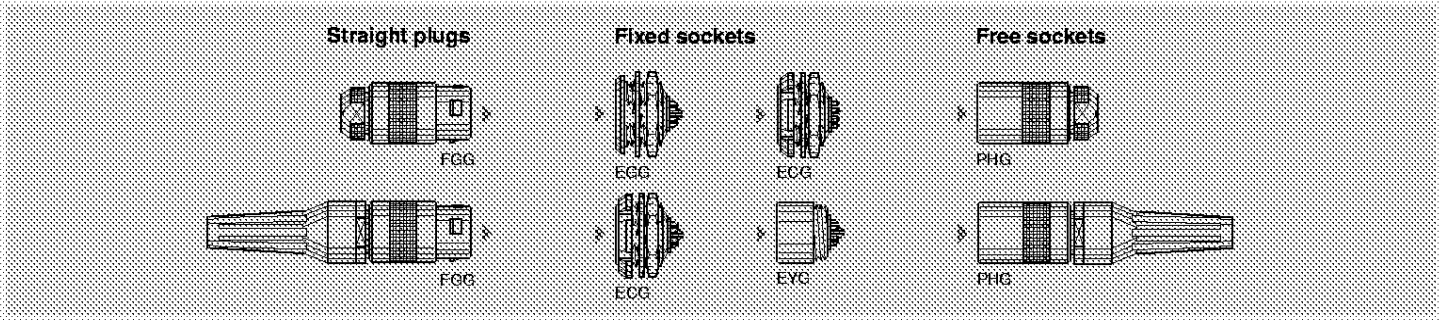
2G Series

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.

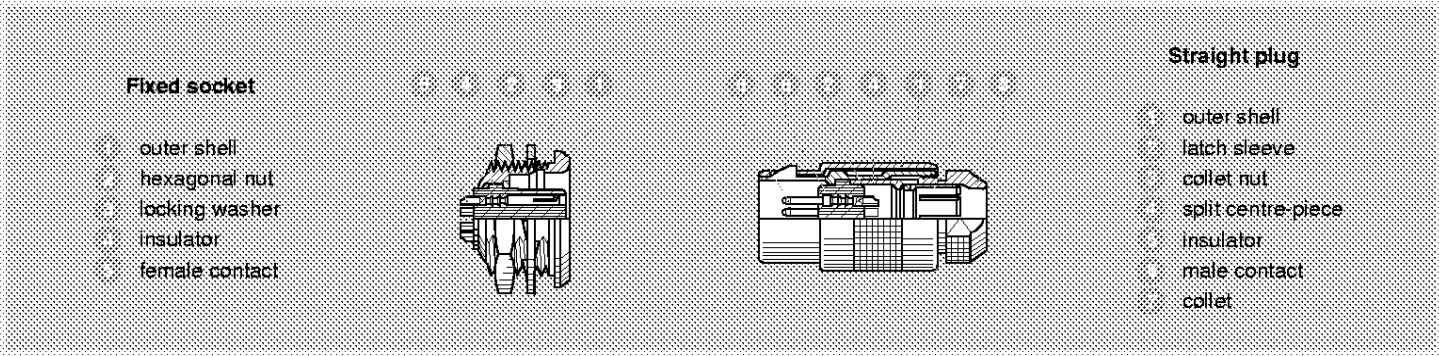
Interconnections



Model Description

ECG Fixed socket with two nuts, key (G) (back panel mounting)
ECG Fixed socket with two nuts, key (G), straight contact for printed circuit (back panel mounting)
EGG Fixed socket, nut fixing, key (G)
EYG Fixed socket, key (G), protruding shell (screw fixing on the panel)
FGG Straight plug, key (G), cable collet
FGG Straight plug, key (G), cable collet and nut for fitting a bend relief
PHG Free socket, key (G), cable collet
PHG Free socket, key (G), cable collet and nut for fitting a bend relief

Part Section Showing Internal Components



Technical Characteristics

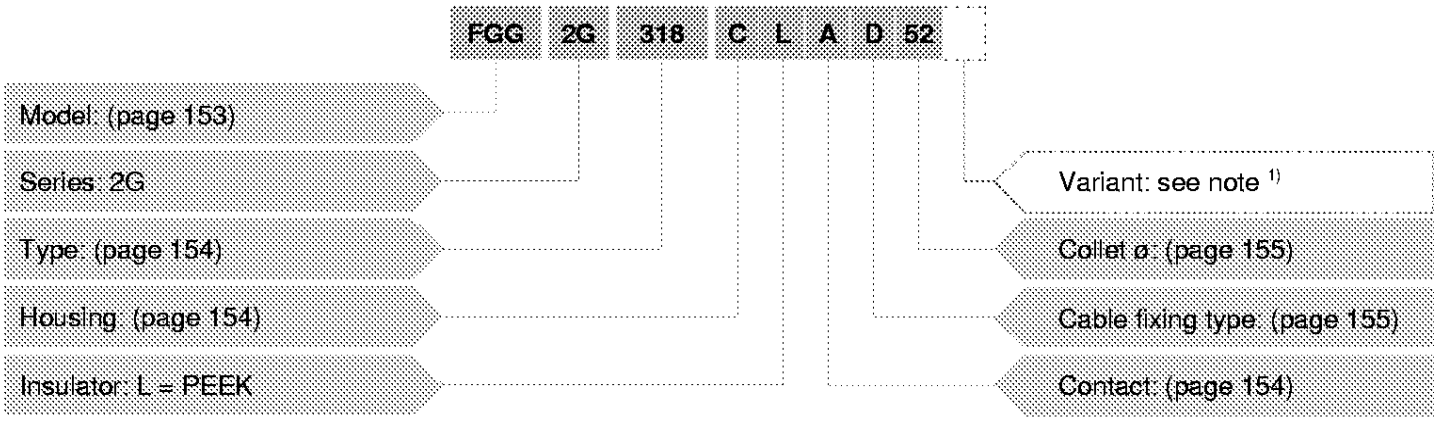
Mechanical and Climatical

Characterisitcs	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	> 144 h	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 chapter Technical Characteristics on page 197.

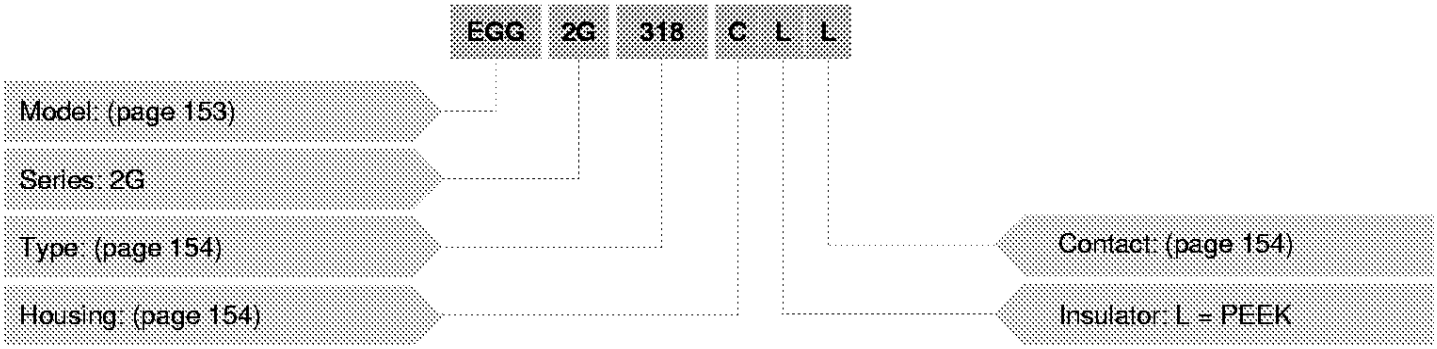
Part Number Example

Straight plug with cable collet



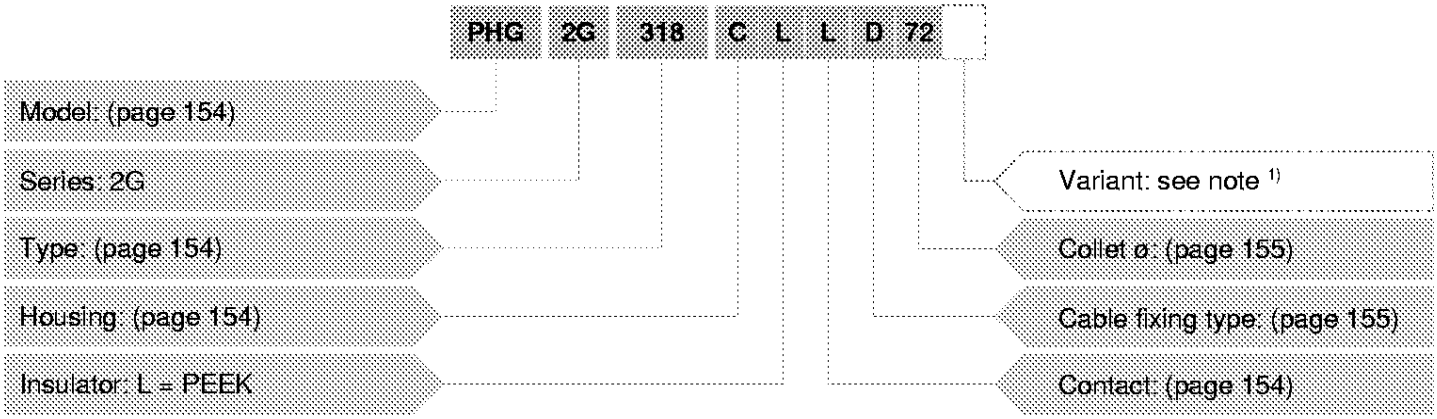
FGG.2G.318.CLAD52 = straight plug with cable collet, 2G series, multipole type with 18 contacts, outer shell in chrome-plated brass, PEEK insulator, male solder contacts, D type collet for 5.2 mm diameter cable.

Fixed socket



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

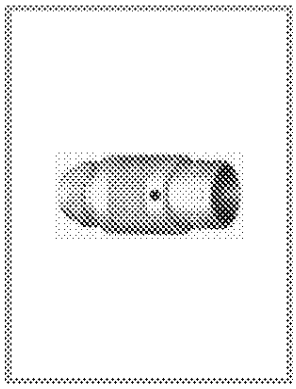
Free socket

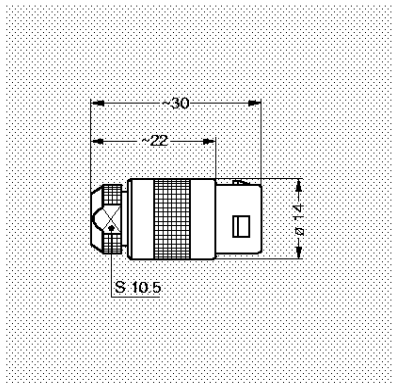


PHG.2G.318.CLLD72 = straight socket with cable collet, 2G series, multipole type with 18 contacts, outer shell in chrome-plated brass, PEEK insulator, female solder contacts, D type collet for 7.2 mm diameter cable.

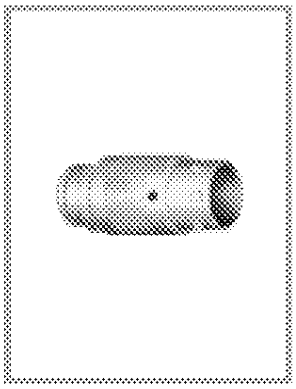
Note: 1) the «Variant» position of the part number is used to specify the presence of a nut for fitting a bend relief, a «Z» should be indicated and a bend relief can be ordered separately as indicated in the «Accessories» section. An order for a connector with bend relief should thus include two part numbers.

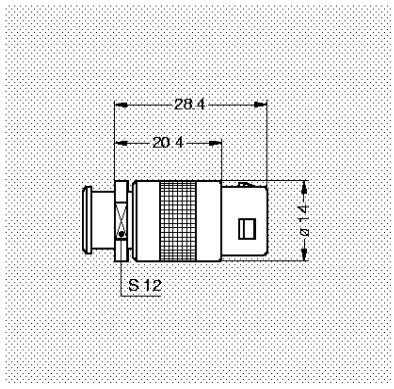
FGG.2G **Straight plug, key (G), cable collet**





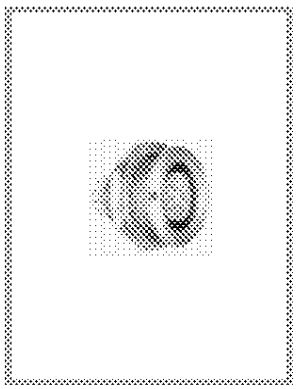
FGG.2G **Straight plug, key (G), cable collet and nut for fitting a bend relief**

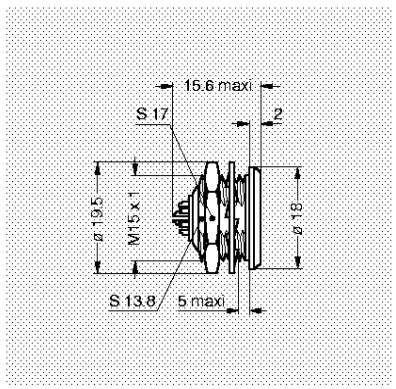




Note: the bend relief must be ordered separately (see page 175).

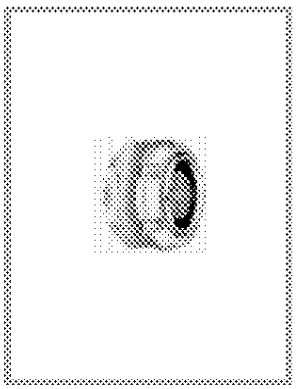
EGG.2G **Fixed socket, nut fixing, key (G)**

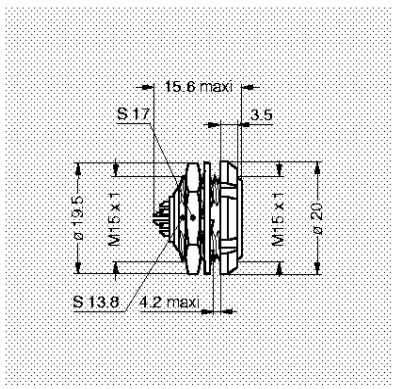




Panel cut-out (p. 156)

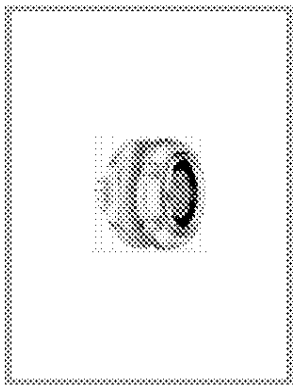
ECG.2G **Fixed socket with two nuts, key (G)** (back panel mounting)

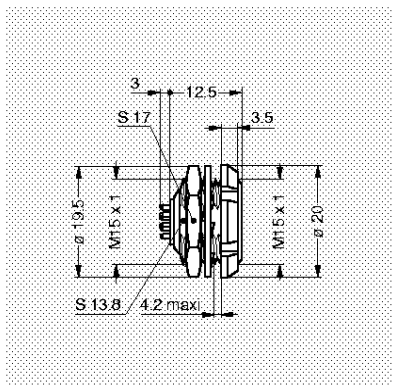




Panel cut-out (p. 156)

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

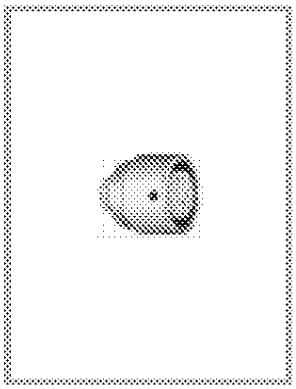


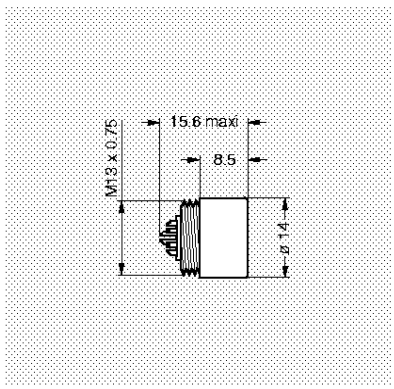


Panel cut-out (p. 156)

PCB drilling pattern (page 156)

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

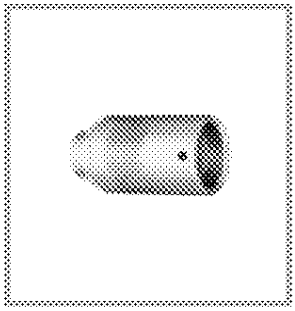


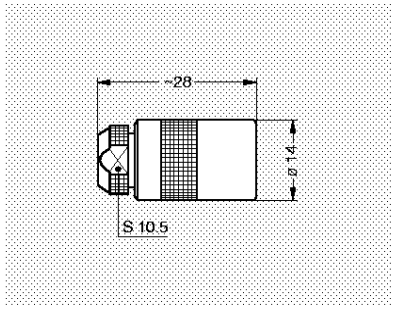


Panel cut-out (p. 156)

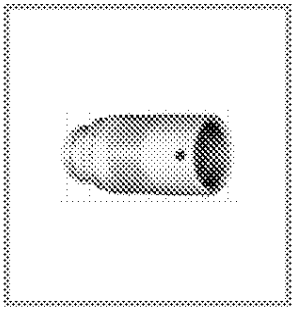
Note: all dimensions are in millimetres.

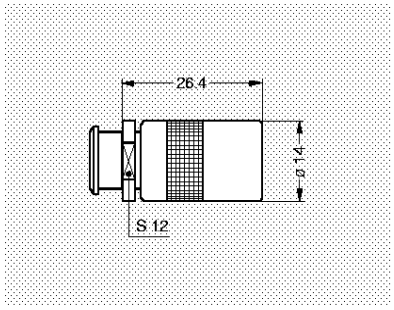
PHG.2G Free socket, key (G), cable collet





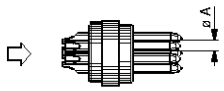
PHG.2G Free socket, key (G), cable collet and nut for fitting a bend relief



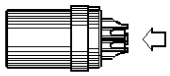


Note: the bend relief must be ordered separately (see page 175).

Type



Male solder contacts



Female solder contacts

Reference	Number of contacts	ø A (mm)	Contact type		Test voltage (kV rms)[1] [2]	Test voltage (kV dc)[1] [2]	Rated current (A)[1]
			Solder	Print			
318	18	0.7	●	●	1.4	2.0	5.5

Note: [1] **see calculation method, caution and suggested standard on page 204.**
[2] lowest measured value; contact to contact or contact to shell.

Housings

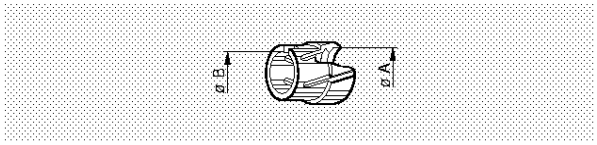
Ref.	Material	Surface treatment		Note
		Outer shell and collet nut	Latch sleeve and earthing crown	
C	Brass	chrome	nickel	●
N	Brass	nickel	nickel	○
K	Brass	black chrome	nickel	●

● First choice alternative ○ Special order alternative

Contact

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

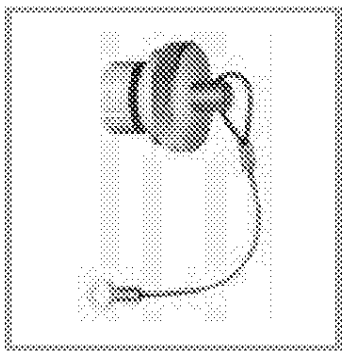
Collets

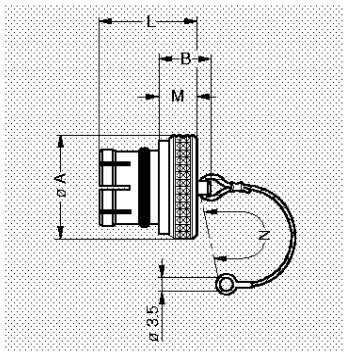


Reference		Collet ø		Cable ø		Part number of the collet [1]
Type	ø	ø A	ø B	max.	min.	
D	52	5.2	–	5.1	4.5	FFA.2C.752.DN
D	62	6.2	–	6.1	5.5	FFA.2C.762.DN
D	72	7.2	6.2	7.1	6.5	FFA.2C.772.DN
D	80	8.0	6.2	7.9	7.5	FFA.2C.780.DN

Note:
[1] for ordering collets separately.
All dimensions are in millimetres.

Accessories



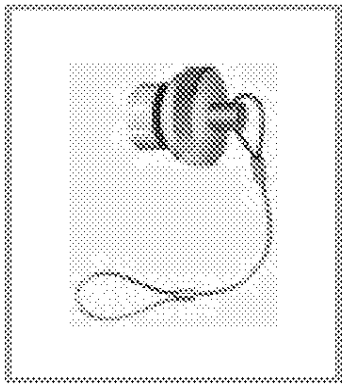


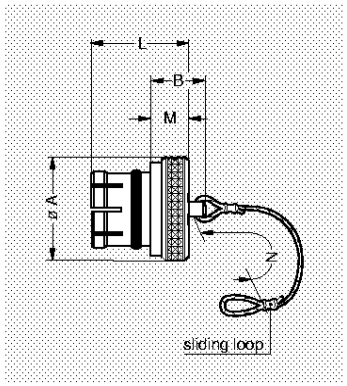
BRE Blanking caps for fixed and free sockets

Part number	Dimensions (mm)				
	A	B	L	M	N
BRE.2G.200.NAS	18	12	10.6	6.0	85

Note: 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».

- Body material: Nickel-plated brass (Ni 3 µm)
- Lanyard material: Stainless steel
- O-ring material: Silicone rubber or FPM
- Maximum operating temperature: 200 °C
- Watertightness: IP61 according to IEC 60529



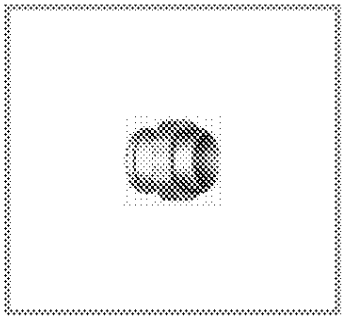


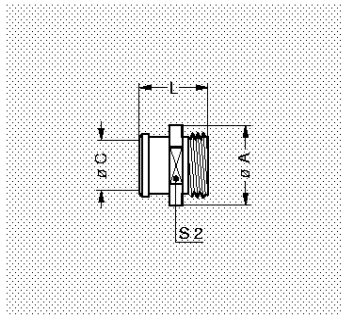
BRF Blanking caps for fixed sockets

Part number	Dimensions (mm)				
	A	B	L	M	N
BRF.2G.200.NAS	18	12	14.0	6.0	85

Note: 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».

- Body material: Nickel-plated brass (Ni 3 µm)
- Lanyard material: Stainless steel
- O-ring material: Silicone rubber or FPM
- 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 175.

Material: Chrome-plated brass (0.3 µm)

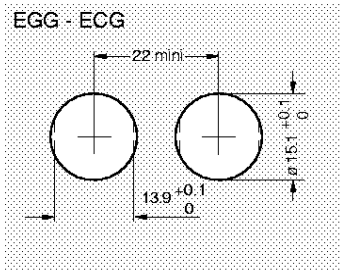
Note: other accessories are also available. See section «Accessories» on page 167.

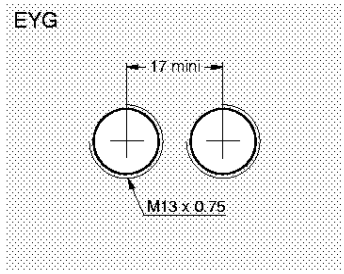
Tooling

Please consult the «Tooling» section (page 183).

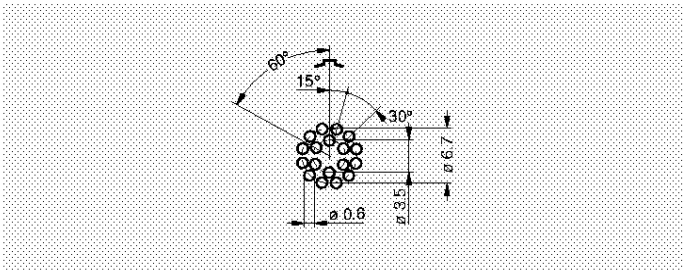
Panel cut-outs

Panel cut-outs

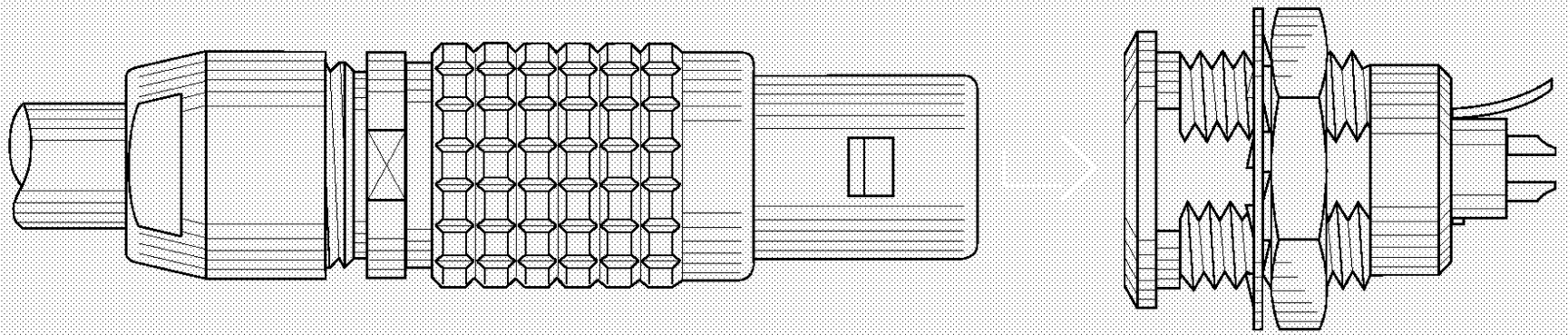




PCB drilling pattern



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



1D SERIES (quadrax)