

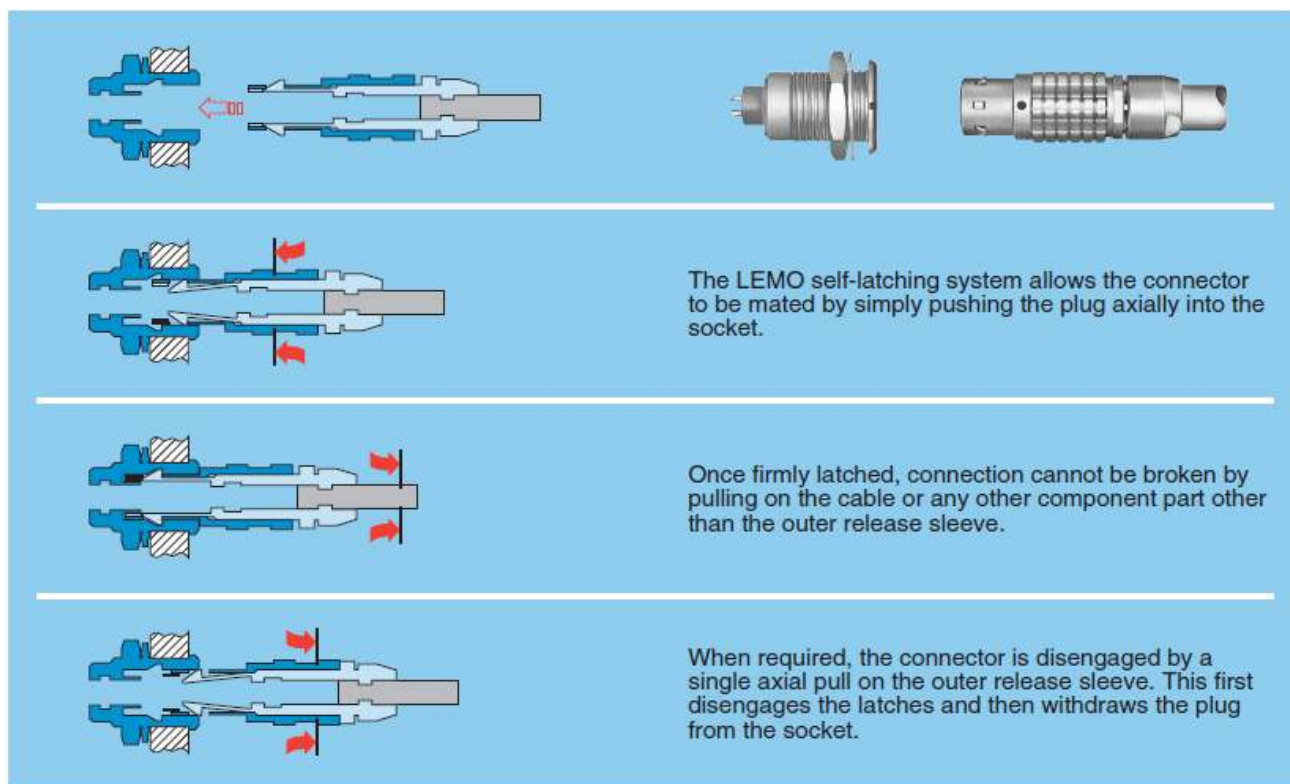
JAB PUSH PULL CONNECTOS



Features & Benefits

- Push pull locking system
- Metal housing / plastic housing
- Coax / Single pole / multi poles
- IP50 / IP68 water proof
- Vacuum airtight
- Cable assembly
- Customer design

JAB PUSH PULL CONNECTORS



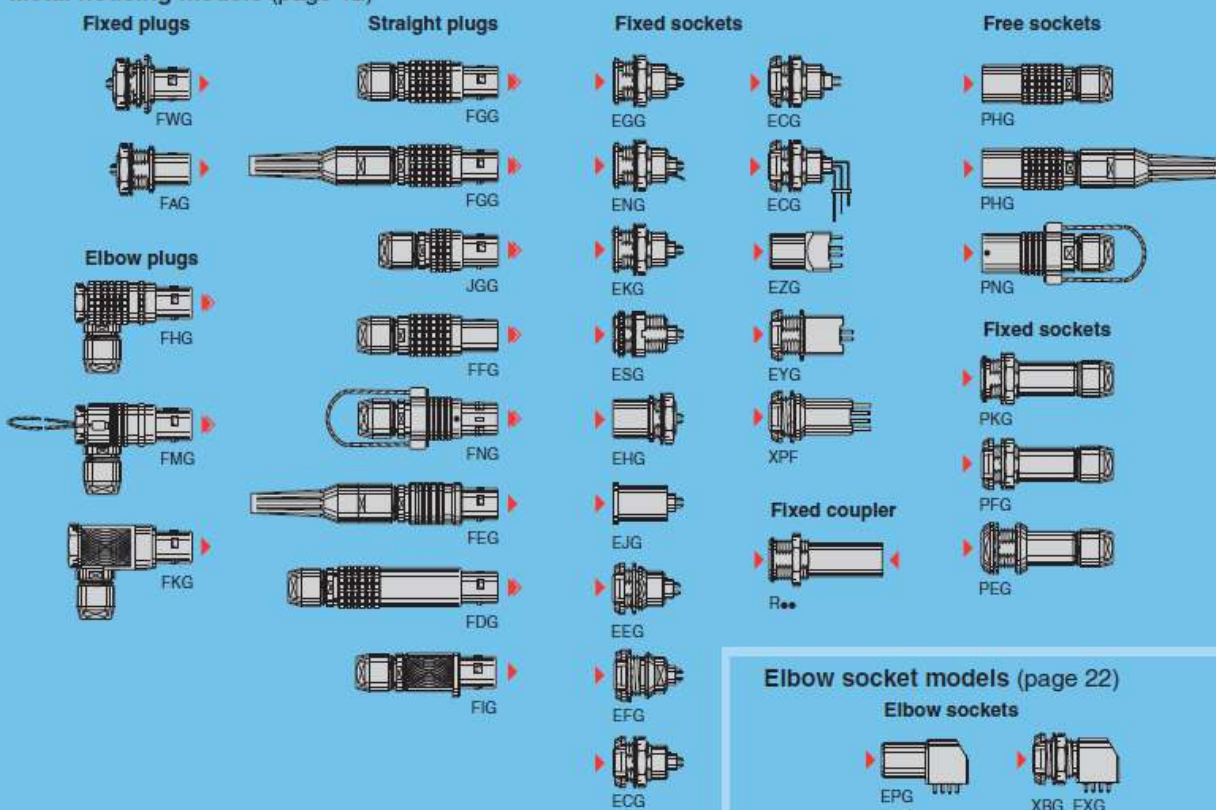
Series	00 multipole B	K	00 unipole S	E	L	G	C	D
Environment	indoor	outdoor or harsh env.	indoor	outdoor or harsh environment		indoor		
Ingress ¹⁾ protection	IP50	IP66 to IP68	IP50	IP66 to IP68		IP50		
Ingress ²⁾ protection	IP50 to IP68 vacuumtight	IP66 to IP68 vacuumtight	IP50 to IP68 vacuumtight	IP66 to IP68 vacuumtight		IP50	IP50 to IP68 vacuumtight	IP50
Temperature range	- 55 to 250°C	- 55 to 200°C	- 55 to 250°C	- 55 to 200°C		- 55 to 250°C		- 40 to 120°C
Latching	Push-Pull self-latching							
Shell sizes	7 metal and 4 plastic	6 metal	7 metal and 5 plastic	6 metal		3 metal	4 metal	1 metal
Insulator type	Multipole		Unipole or multipole hermaphroditic		Multipole hermaphroditic	Multipole	Multipole hermaphroditic	Quadrax
Contact type	Solder, crimp or print		Solder, crimp or print		Solder, crimp or print	Solder or print		Solder
Features	13 keyways	9 keyways	Stepped insert		Stepped insert	1 keyway	Stepped insert	4 concentric contacts

B Series

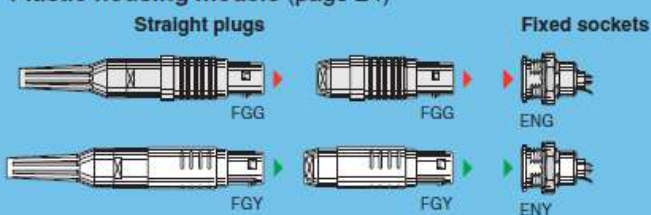
B series connectors provide the following main features:

- security of the Push-Pull self-latching system
- solder, crimp or print contacts (straight or elbow)
- multiple key options to avoid cross mating of similar connectors
- 360° screening for full EMC shielding.
- multipole types 2 to 64 contacts
- high packing density for space savings
- keying system («G» key standard) for connector alignment

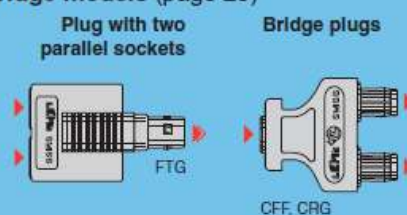
Metal housing models (page 12)



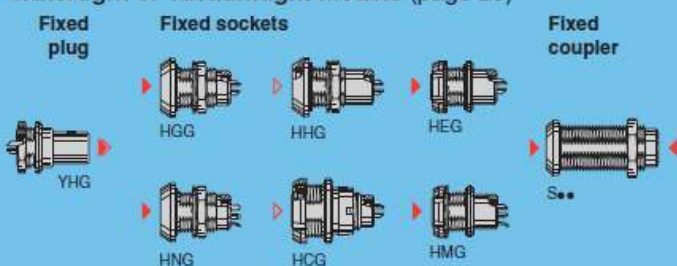
Plastic housing models (page 24)



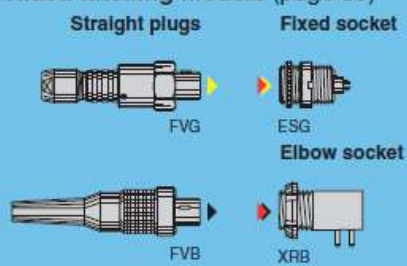
Bridge models (page 29)



Watertight or vacuumtight models (page 26)

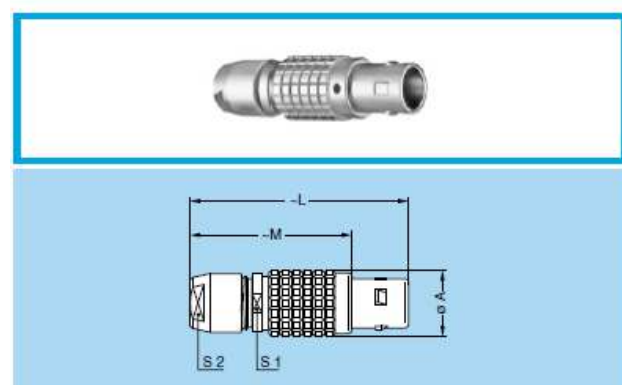
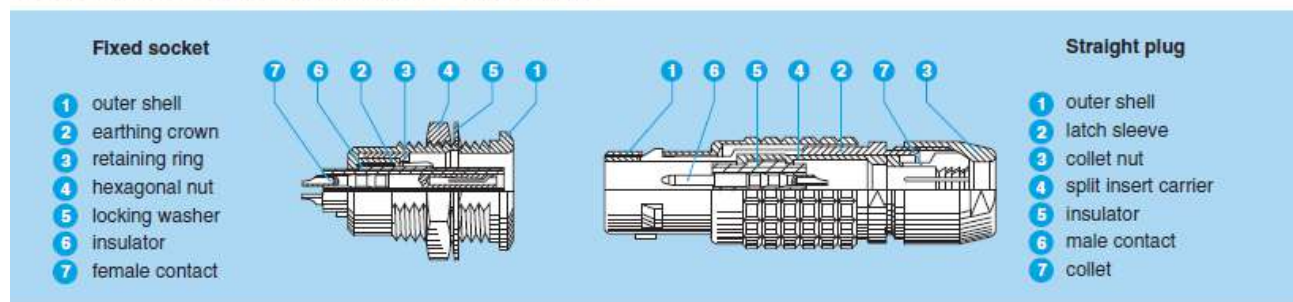


Threaded-latching models (page 30)



B Series

Part Section Showing Internal Components

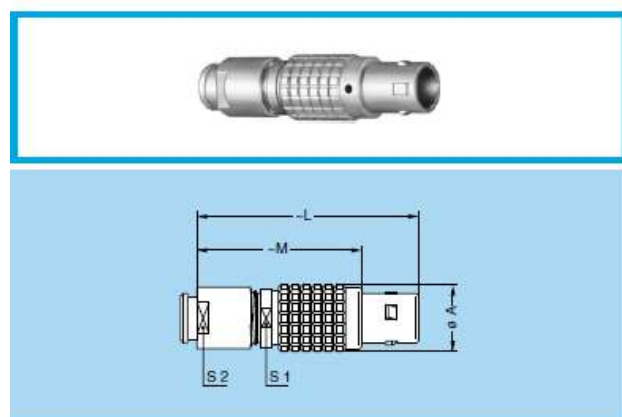


FGG Straight plug, key (G) or keys (A...M and R), cable collet

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FGG	00 ¹⁾	6.4	28.5	20.5	5.5	5
FGG	0B	9.5	36.0	26.0	8.0	7
FGG	1B	12.0	43.0	32.0	10.0	9
FGG	2B	15.0	50.0	38.0	13.0	12
FGG	3B	18.0	58.0	43.0	15.0	14
FGG	4B	25.0	75.0	57.0	21.0	20
FGG	5B	35.0	103.0	78.0	31.0	30

M1
Cable assembly
(page 161)

Note: ¹⁾ the surface design of the 00 series is different.



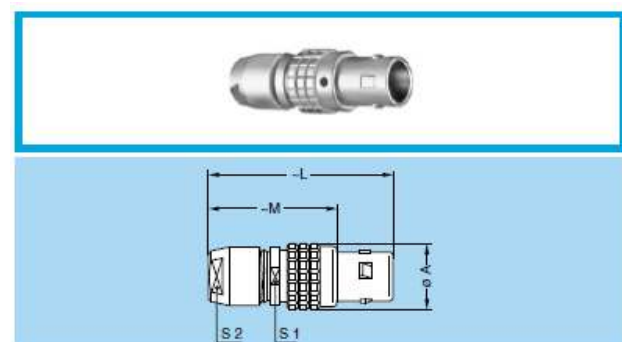
FGG Straight plug, key (G) or keys (A...M), cable collet and nut for fitting a bend relief ²⁾

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FGG	00 ¹⁾	6.4	28.7	20.7	5.5	6
FGG	0B	9.5	35.0	25.0	8.0	7
FGG	1B	12.0	42.0	31.0	10.0	9
FGG	2B	15.0	49.0	37.0	13.0	12
FGG	3B	18.0	56.5	41.5	15.0	15
FGG	4B	25.0	71.0	53.0	21.0	20

M1
Cable assembly
(page 161)

Note: ¹⁾ the surface design of the 00 series is different.
²⁾ to order, add a «Z» at the end of the reference.

The bend relief must be ordered separately (see page 141).

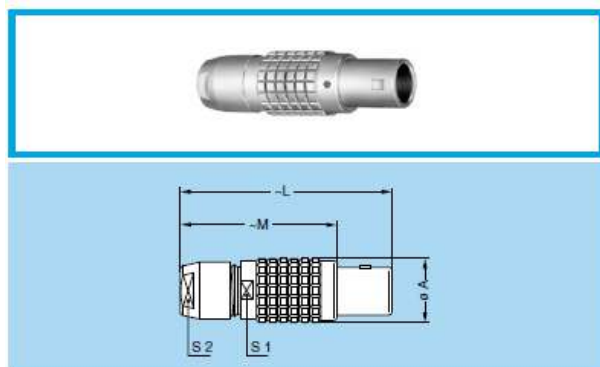


JGG Straight plug, short version, key (G), cable collet

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
JGG	0B	9.5	32.0	22.0	8.0	7

M4 Cable assembly (page 161)

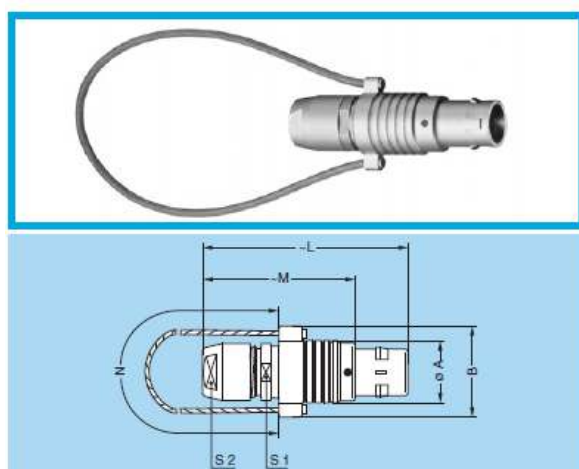
B Series



FFG Straight plug, non-latching, key (G) or keys (A...M), cable collet

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FFG	0B	9.5	36	26	8	7
FFG	1B	12.0	43	32	10	9
FFG	2B	15.0	50	38	13	12
FFG	3B	18.0	58	43	15	14
FFG	4B	25.0	75	57	21	20

M1 Cable assembly (page 161)

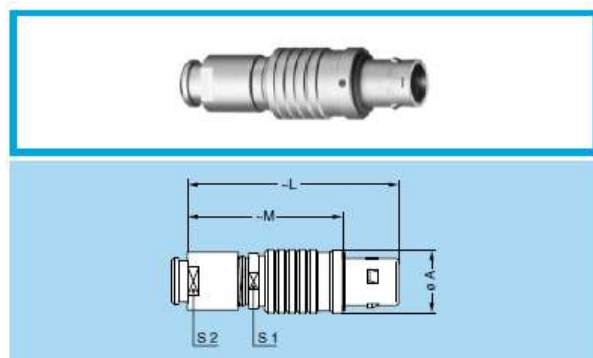


FNG Straight plug, key (G) or keys (A...M and R), cable collet and lanyard release

Reference		Dimensions (mm)						
Model	Series	A	B	L	M	N	S1	S2
FNG	0B	9.5	15.5	36.0	26.0	140	8	7
FNG	1B	12.0	18.0	43.0	32.0	140	10	9
FNG	2B	15.0	21.0	49.0	37.0	160	13	12
FNG	3B	18.0	25.0	58.0	43.0	190	15	14
FNG	4B	25.0	32.0	75.0	57.0	230	21	20
FNG	5B	35.0	42.0	103.0	78.0	300	31	30

M1 Cable assembly (page 161)

Note: cable material: stainless steel with Polyamide sheath.

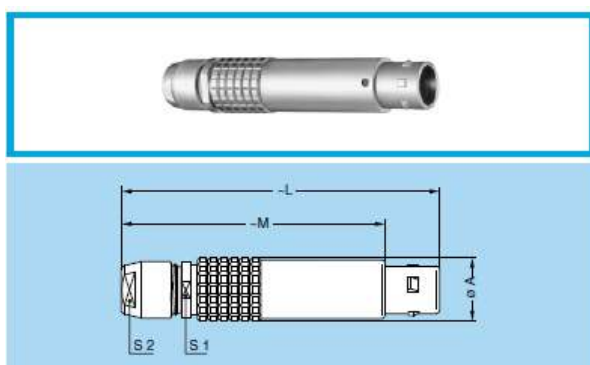


FEG Straight plug, key (G) or keys (A...L), cable collet, front seal and nut for fitting a bend relief ¹⁾ (IP 54 protection index when mated)

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FEG	0B	11.0	35.0	25.0	8	7
FEG	1B	13.5	42.0	33.0	10	9
FEG	2B	16.5	48.0	36.0	13	12
FEG	3B	19.0	56.5	41.5	15	15

M1
Cable assembly
(page 161)

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately (see page 141).



FDG Straight plug, long version, key (G) or keys (A...L), cable collet

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FDG	1B	12	68	57	10	9
FDG	2B	15	79	67	13	12

M2 Cable assembly (page 162)

B Series

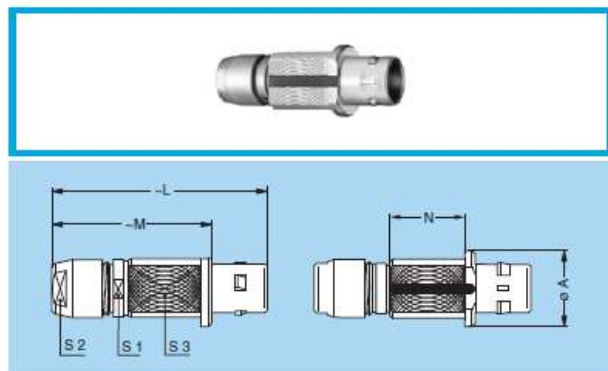
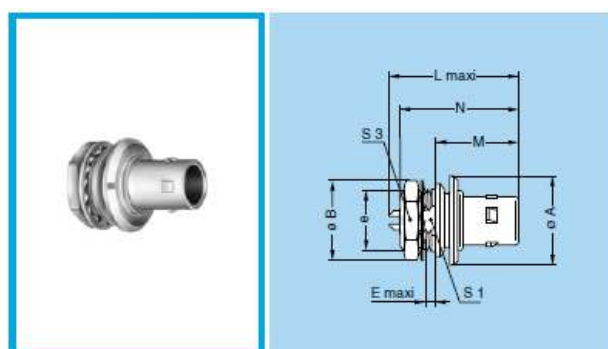


FIG Straight plug for remote handling, key (G) or keys (A...L and R), special alignment mark, knurled handling surface, cable collet

Reference		Dimensions (mm)						
Model	Series	A	L	M	N	S1	S2	S3
FIG	2B	20	49	37	17.5	13	12	15
FIG	3B	22	58	43	21.5	15	14	18
FIG	4B	30	75	57	28.5	21	20	25
FIG	5B	40	103	78	41.0	31	30	35

M1 Cable assembly (page 161)

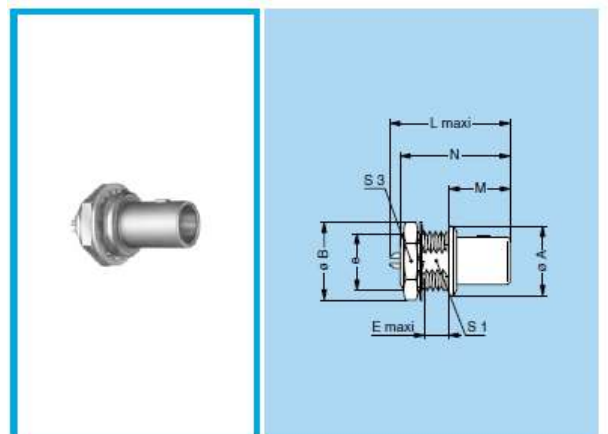


FWG Fixed plug, nut fixing, key (G) or keys (A...L)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
FWG	0B	14.0	12.4	M9x0.6	1.8	22.5	14.5	19.5	8.2	11
FWG	1B	18.0	15.8	M12x1.0	2.9	24.9	17.0	24.8	10.5	14
FWG	2B	19.5	19.2	M15x1.0	4.1	28.6	18.0	27.3	13.5	17
FWG	3B	25.0	25.0	M18x1.0	4.2	32.1	23.0	31.5	16.5	22

P9 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts

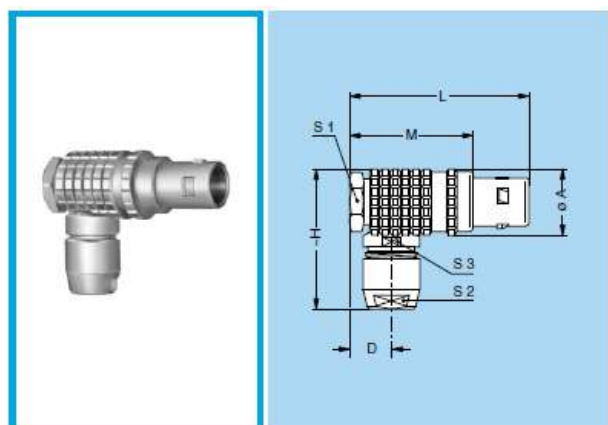


FAG Fixed plug, non-latching, nut fixing, key (G) or keys (A...M and R)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
FAG	00	8	10.2	M7x0.5	2.9	18.1	9.0	15.0	6.3	9
FAG	0B	10	12.4	M9x0.6	4.2	20.8	11.5	18.9	8.2	11
FAG	1B	14	15.8	M12x1.0	5.4	25.2	12.5	21.6	10.5	14
FAG	2B	18	19.2	M15x1.0	6.0	28.7	13.8	23.9	13.5	17
FAG	3B	22	25.0	M18x1.0	5.8	32.1	17.0	30.2	16.5	22
FAG	4B	29	34.0	M25x1.0	6.8	37.1	20.5	34.7	23.5	30
FAG	5B	40	40.0	M35x1.0	6.8	47.1	28.0	42.8	33.5	—

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts. The 5B series is delivered without locking washer or tapered washer and with a round nut.



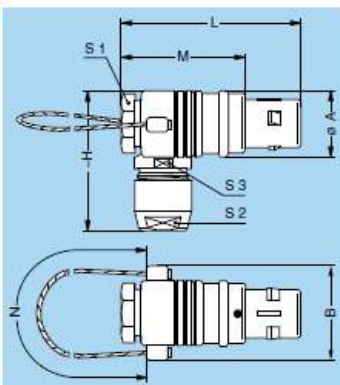
FHG Elbow (90°) plug, key (G) or keys (A...M and R), cable collet

Reference		Dimensions (mm)							
Model	Series	A	D	H	L	M	S1	S2	S3
FHG	00 ¹⁾	7.7	5.2	18.0	24.5	16.5	7	5	5.5
FHG	0B	11.0	6.5	26.0	30.0	21.6	10	7	8.0
FHG	1B	13.5	8.0	30.5	36.0	25.0	11	9	10.0
FHG	2B	16.5	9.0	34.0	41.5	29.5	14	12	13.0
FHG	3B	19.0	10.0	37.0	50.0	35.0	17	14	15.0
FHG	4B	26.0	15.0	52.0	67.0	49.0	22	20	21.0
FHG	5B	36.0	21.0	74.0	90.0	65.0	32	30	31.0

M3 Cable assembly (page 161)

Note: ¹⁾ the surface design of the 00 series is different.

B Series

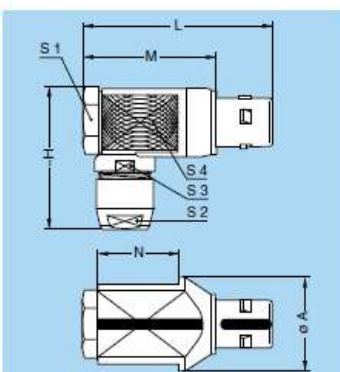


FMG Elbow (90°) plug, key (G) or keys (A...M), cable collet and lanyard release, long key ¹⁾

Reference		Dimensions (mm)								
Model	Series	A	B	H	L	M	N	S1	S2	S3
FMG	0B	11	17	26	31.6	21.6	140	10	7	8
FMG	3B	19	26	39	50.0	35.0	190	17	14	15

M3 Cable assembly (page 161)

Note: ¹⁾ long key: only in 0B series and with key (G).
Cable material: stainless steel with Polyamide sheath.

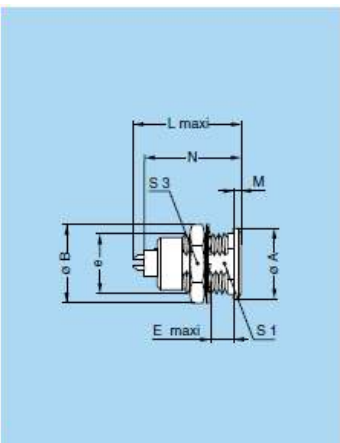


FKG Elbow (90°) plug for remote handling, key (G) or keys (A...L), special alignment mark, knurled handling surface, cable collet

Reference		Dimensions (mm)								
Model	Series	A	H	L	M	N	S1	S2	S3	S4
FKG	3B	25	37.0	50.0	35.0	21.0	17	14	15	21
FKG	4B	32	52.0	67.0	49.0	28.5	22	20	21	26
FKG	5B	46	74.2	89.5	64.5	40.0	32	30	31	38

M3 Cable assembly (page 161)

Note: dimension D is the same as for the FHG model.

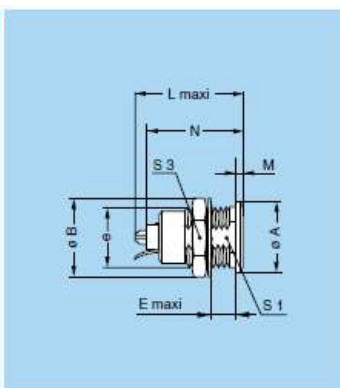


EGG Fixed socket, nut fixing, key (G) or keys (A...M and R)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
EGG	00	8	10.2	M7x0.5	6.0	15.5	1.0	13.7	6.3	9
EGG	0B	10	12.4	M9x0.6	7.0	20.7	1.2	19.1	8.2	11
EGG	1B	14	15.8	M12x1.0	7.5	23.0	1.5	21.1	10.5	14
EGG	2B	18	19.2	M15x1.0	8.5	26.7	1.8	24.6	13.5	17
EGG	3B	22	25.0	M18x1.0	11.5	30.7	2.0	28.1	16.5	22
EGG	4B	28	34.0	M25x1.0	12.0	35.7	2.5	34.1	23.5	30
EGG	5B	40	40.0	M35x1.0	11.0	43.5	3.0	39.6	33.5	—

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.
The 5B series is delivered with a tapered washer and a round nut.



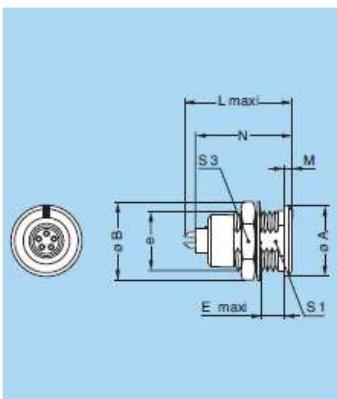
ENG Fixed socket with earthing tag, nut fixing, key (G) or keys (A...M)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
ENG	0B	10	12.4	M9x0.6	7.0	20.7	1.2	19.1	8.2	11
ENG	1B ²⁾	14	15.8	M12x1.0	7.5	23.0	1.5	21.1	10.5	14
ENG	2B	18	19.2	M15x1.0	8.5	26.7	1.8	24.6	13.5	17
ENG	3B	22	25.0	M18x1.0	11.5	30.7	2.0	28.1	16.5	22
ENG	4B	28	34.0	M25x1.0	12.0	35.7	2.5	34.1	23.5	30

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.
²⁾ for the 1B series the earthing tag is on the same side of the key.

B Series

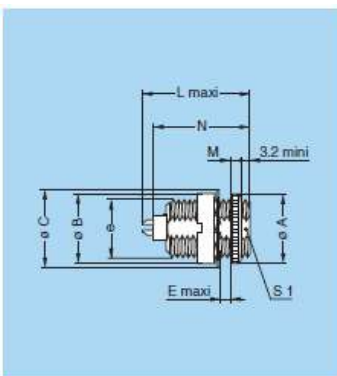


EKG Fixed socket, nut fixing, key (G) or keys (A...L and R), special alignment mark on the front

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
EKG	2B	18	19.2	M15x1.0	8.5	26.7	1.8	24.6	13.5	17
EKG	3B	22	25.0	M18x1.0	11.5	30.7	2.0	28.1	16.5	22
EKG	4B	28	34.0	M25x1.0	12.0	35.7	2.5	34.1	23.5	30
EKG	5B	40	40.0	M35x1.0	11.0	43.5	3.0	39.6	33.5	—

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.
The 5B series is delivered with a tapered washer and a round nut.



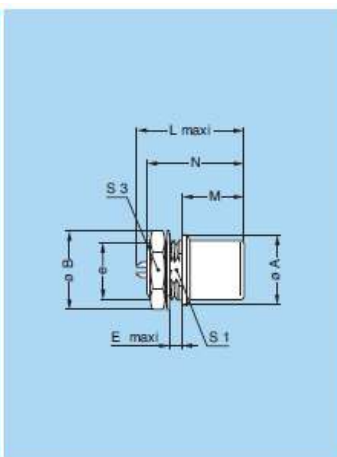
ESG Fixed socket with two round nuts, key (G) or keys (A...L), long threaded shell (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	C	e	E	L	M	N ¹⁾	S1
ESG	00	9	9	9.5	M7x0.5	3.2	15.5	2	13.7	—
ESG	1B	14	14	16.0	M12x1.0	8.0	23.0	2	21.1	10.5

P1 Panel cut-out 1B series (page 152)

P2 Panel cut-out 00 series (page 152)

Note: ¹⁾ maximum length with crimp contacts.

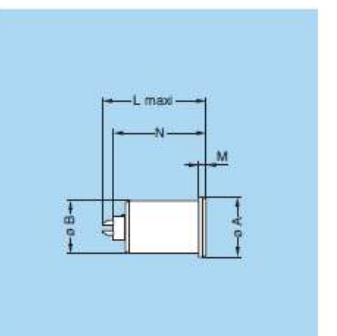


EHG Fixed socket, nut fixing, key (G) or keys (A...M and R), and protruding shell

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
EHG	00	8.0	10.2	M7x0.5	2.0	15.5	8.5	13.7	6.3	9
EHG	0B	10.0	12.4	M9x0.6	2.0	19.5	12.5	19.1	8.2	11
EHG	1B	14.0	15.8	M12x1.0	4.0	21.7	12.0	21.1	10.5	14
EHG	2B	18.0	19.2	M15x1.0	5.1	22.7	12.5	24.6	13.5	17
EHG	3B	22.0	25.0	M18x1.0	7.1	30.7	13.5	30.3	16.5	22
EHG	5B	40.0	40.0	M35x1.0	2.5	43.5	28.0	38.5	33.5	—

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.
The 5B series is delivered without locking washer or tapered washer and with a round nut.



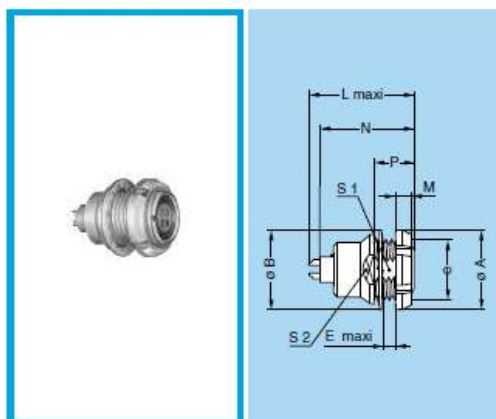
EJG Fixed socket, press or adhesive fit, key (G) or keys (A...M)

Reference		Dimensions (mm)				
Model	Series	A	B	L	M	N ¹⁾
EJG	0B	9.2	8.35	20.7	1.5	19.1
EJG	1B	12.5	11.20	23.0	1.5	21.1
EJG	2B	16.5	14.00	26.7	1.5	24.6

P5 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.

B Series

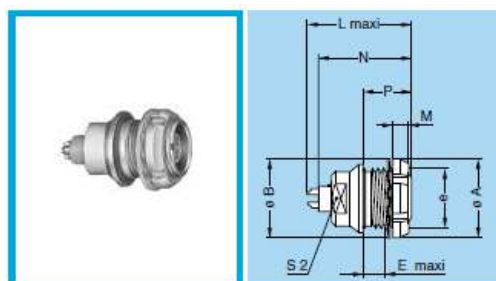


EEG Fixed socket, nut fixing, key (G) or keys (A...M and R) (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	N ¹⁾	P	S1	S2
EEG	00	10	9.5	M7x0.5	2.3	15.5	2.5	13.7	6.0	6.3	7.5
EEG	0B	12	12.5	M9x0.6	2.4	20.7	2.5	19.1	6.3	8.2	9.0
EEG	1B	16	16.0	M12x1.0	6.5	23.0	3.5	21.1	11.0	10.5	13.0
EEG	2B	20	20.0	M15x1.0	3.0	26.7	3.5	24.6	9.0	13.5	15.0
EEG	3B	24	25.0	M18x1.0	5.0	30.7	4.5	28.1	12.0	16.5	20.0
EEG	5B	41	40.0	M35x1.0	13.5	43.5	5.0	39.6	19.5	33.5	38.0

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts. The 3B and 5B series are delivered with a conical nut. The 5B series is delivered without locking washer or tapered washer.

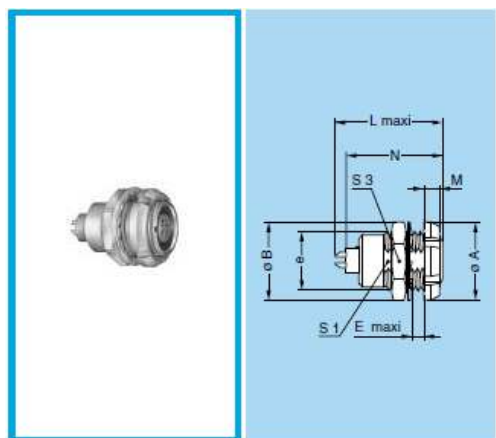


EFG Fixed socket, nut fixing, key (G) or keys (A...M), with two flats on the shell and O-ring (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	N ¹⁾	P	S2	
EFG	0B	12	12.5	M9x0.6	5.5	20.7	2.5	19.1	9	8	

P2 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts.

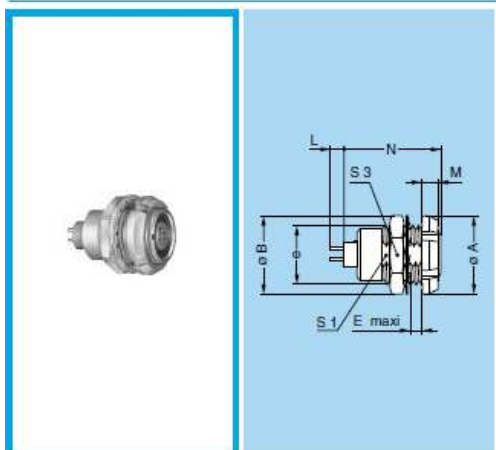


ECG Fixed socket with two nuts, key (G) or keys (A...M and R) (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
ECG	00	10	10.2	M7x0.5	4.3	13.7	2.5	13.7	6.3	9
ECG	0B	12	12.4	M9x0.6	5.5	20.7	2.5	19.1	8.2	11
ECG	1B	16	15.8	M12x1.0	6.0	23.0	3.5	21.1	10.5	14
ECG	2B	20	19.2	M15x1.0	6.5	26.7	3.5	24.6	13.5	17
ECG	3B	24	25.0	M18x1.0	9.0	30.7	4.5	28.1	16.5	22
ECG	4B	30	34.0	M25x1.0	10.0	35.7	4.5	32.6	23.5	30
ECG	5B	41	40.0	M35x1.0	9.0	43.5	5.0	39.6	33.5	

P1 Panel cut-out (page 152)

Note: ¹⁾ maximum length with crimp contacts. The 3B, 4B and 5B series are delivered with a conical nut. The 5B series is delivered with a tapered washer and a round nut.



ECG Fixed socket with two nuts, key (G) or keys (A...F and R) and straight contact for printed circuit (back panel mounting)

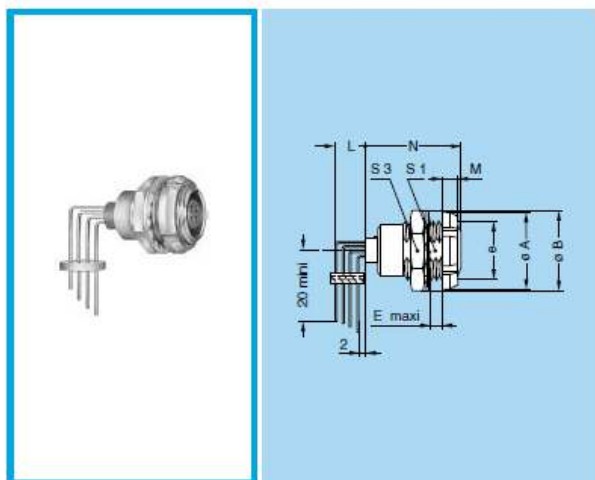
Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	S1	S3
ECG	00	10	10.2	M7x0.5	4.3	2.5	13.7	6.3	9
ECG	0B	12	12.4	M9x0.6	5.5	2.5	16.1	8.2	11
ECG	1B	16	15.8	M12x1.0	6.0	3.5	19.8	10.5	14
ECG	2B	20	19.2	M15x1.0	6.5	3.5	21.8	13.5	17
ECG	3B	24	25.0	M18x1.0	9.0	4.5	25.8	16.5	22
ECG	4B	30	34.0	M25x1.0	10.0	4.5	29.8	23.5	30
ECG	5B	41	40.0	M35x1.0	9.0	5.0	36.8	33.5	—

P1
Panel cut-out (page 152)

P15
PCB drilling pattern (page 154)

Note: this contact type is available for E●● socket models fitted with female contacts. Length «L» depends on the number of contacts, see table on page 156. The 5B series is delivered with a tapered washer and a round nut. The 3B, 4B and 5B series are delivered with a conical nut.

B Series



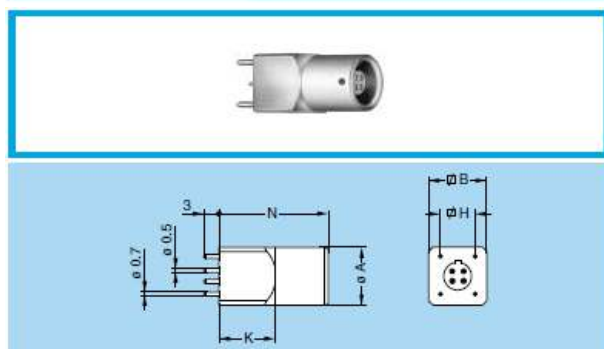
ECG Fixed socket with two nuts, key (G) or keys (A...F) with elbow (90°) contact for printed circuit (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N _{max}	S1	S3	
ECG	0B	12	12.4	M9x0.6	5.5	2.5	18.3	8.2	11	
ECG	1B	16	15.8	M12x1.0	6.0	3.5	20.3	10.5	14	
ECG	2B	20	19.2	M15x1.0	6.5	3.5	22.3	13.5	17	
ECG	3B	24	25.0	M18x1.0	9.0	4.5	25.8	16.5	22	

P1 Panel cut-out (page 152)

P17 PCB drilling pattern (page 157)

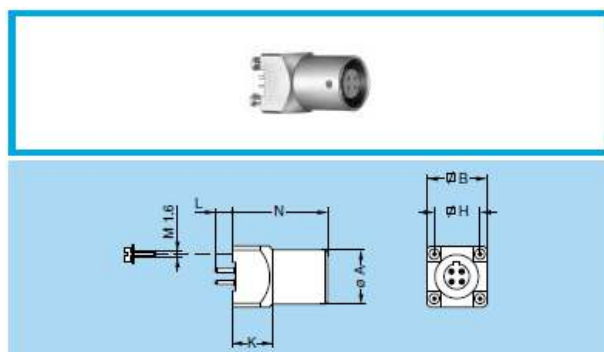
Note: this female contact type is available for all back panel mounting socket models. Length «L» depends on the number of contacts, see PCB drilling pattern on page 157.
For male contacts, sockets are available upon request, with J, K or L keys. The 3B series is delivered with a conical nut.



EZG Straight socket for printed circuit, key (G) or keys (A, B)

Reference		Dimensions (mm)				
Model	Series	A	B	H	K	N
EZG	00	6.8	7	5.08	7	14

P15+**P16** PCB drilling pattern (pages 154 and 156)

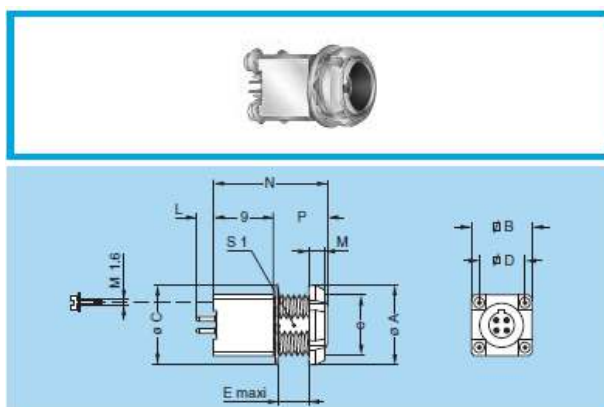


EZG Straight socket for printed circuit, key (G) or keys (A...F)

Reference		Dimensions (mm)				
Model	Series	A	B	H	K	N
EZG	0B	9	10	7.62	8	15.0
EZG	1B	11	12	7.62	8	19.0
EZG	2B	14	15	10.16	9	22.5

P15+**P16** PCB drilling pattern (pages 154 and 156)

Note:
Length «L» depends on the number of contacts, see table on page 156.



EYG Fixed socket for printed circuit, nut fixing, key (G) or keys (A...F) (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	C	D	e	E	M	N	P	S1
EYG	0B	12	10	12.5	7.62	M9x0.6	2.6	2.5	15.0	6.0	8.2
EYG	1B	14	12	16.0	7.62	M11x0.5	5.0	3.5	19.0	10.0	—
EYG	2B	20	15	19.5	10.16	M15x1.0	7.5	3.5	22.5	13.5	13.5

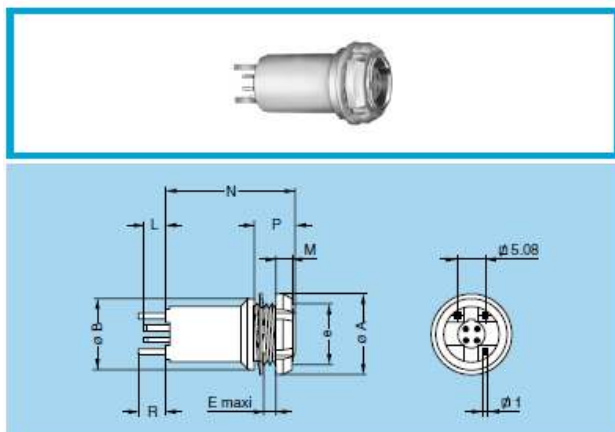
P1 Panel cut-out 0B and 2B series (page 152)

P10 Panel cut-out 1B series (page 152)

P15+**P16** PCB drilling pattern (pages 154 and 156)

Note: Length «L» depends on the number of contacts, see page 156.

B Series



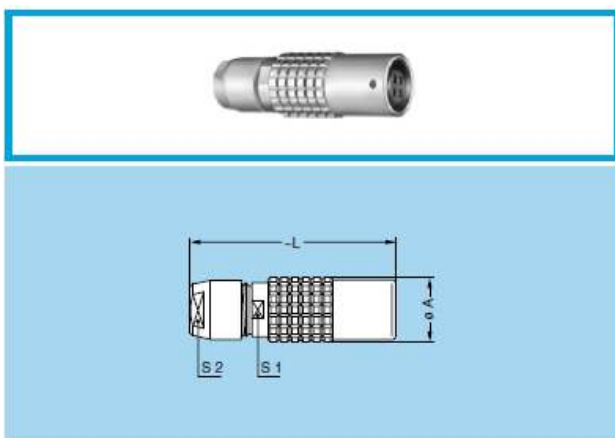
XPF Fixed socket, nut fixing, long shell, keys (F) for printed circuit (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	P	R
XPF	0B	12	11	M9x0.6	1.5	2.5	19	5	4

P2 Panel cut-out (page 152)

P15+**P16** PCB drilling pattern (pages 154 and 156)

Note: Length «L» depends on the number of contacts, see table on page 156.

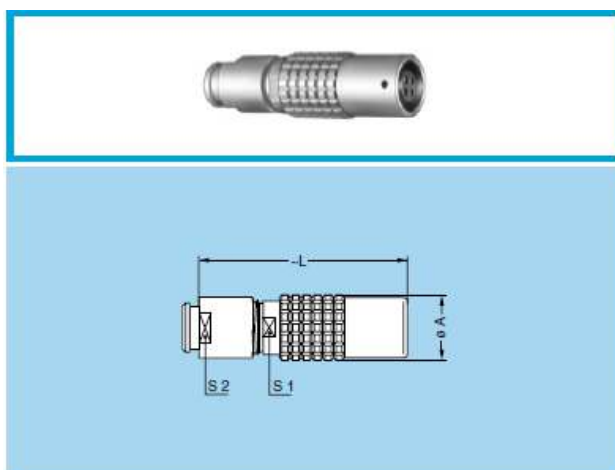


PHG Free socket, key (G) or keys (A...M and R), cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
PHG	00 ¹⁾	6.8	26.0	5.5	5
PHG	0B	9.5	35.5	8.0	7
PHG	1B	12.5	40.5	10.0	9
PHG	2B	16.5	47.0	13.0	12
PHG	3B	19.0	56.0	15.0	14
PHG	4B	26.0	73.0	21.0	20
PHG	5B	36.0	99.0	31.0	30

M1 Cable assembly (page 161)

Note: ¹⁾ the surface design of the 00 series is different.



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

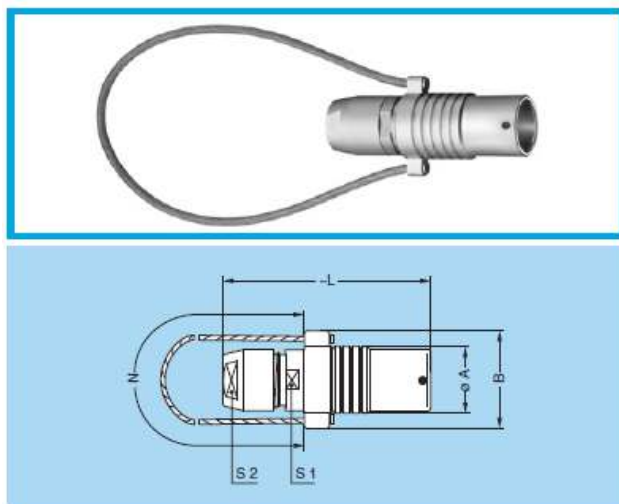
Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
PHG	00 ¹⁾	6.8	34.0	5.5	6
PHG	0B	9.5	34.5	8.0	7
PHG	1B	12.5	39.5	10.0	9
PHG	2B	16.5	46.0	13.0	12
PHG	3B	19.0	54.5	15.0	15
PHG	4B	26.0	69.0	21.0	20

M1 Cable assembly (page 161)

Note: ¹⁾ the surface design of the 00 series is different.
²⁾ to order, add a «Z» at the end of the reference.

The bend relief must be ordered separately (see page 141).

B Series

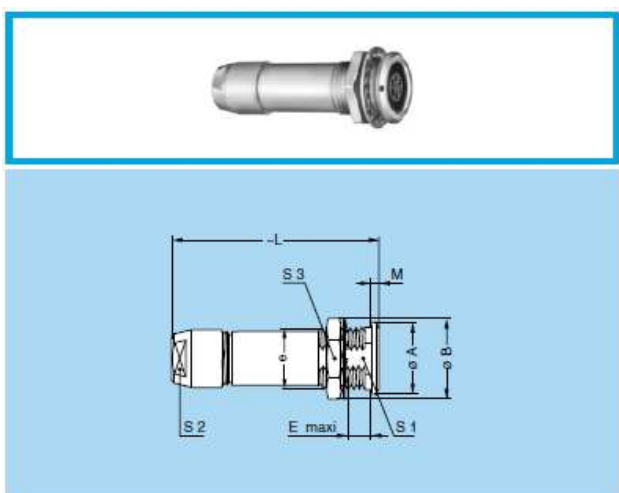


PNG Free socket, nut fixing, key (G) or keys (A...L and R), cable collet with lanyard release

Reference		Dimensions (mm)					
Model	Series	A	B	L	N	S1	S2
PNG	1B	12.4	18.4	40.5	140	10	9
PNG	2B	16.5	22.5	47.0	160	13	12
PNG	3B	19.0	26.0	56.0	190	15	14
PNG	4B	26.0	33.0	73.0	230	21	20
PNG	5B	36.0	43.0	99.0	300	31	30

M1 Cable assembly (page 161)

Note: cable material: stainless steel with Polyamide sheath



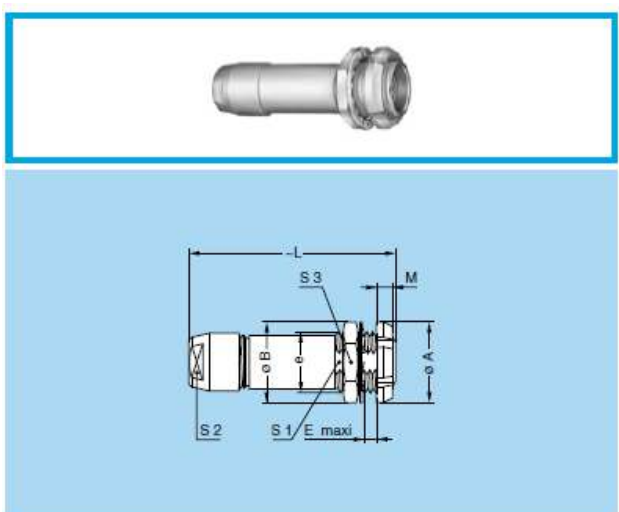
PKG Fixed socket, nut fixing, key (G) or keys (A...M and R), cable collet

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S2	S3
PKG	00	8	10.2	M7x0.5	6.5	26.0	1.0	6.3	5	9
PKG	0B	10	12.4	M9x0.6	7.0	35.5	1.2	8.2	7	11
PKG	1B	14	15.8	M12x1.0	7.5	40.5	1.5	10.5	9	14
PKG	2B	18	19.2	M15x1.0	8.5	47.0	1.8	13.5	12	17
PKG	3B	22	25.0	M18x1.0	11.5	56.0	2.0	16.5	14	22
PKG	4B	28	34.0	M25x1.0	12.0	73.0	2.5	23.5	20	30
PKG	5B	40	40.0	M35x1.0	11.0	99.0	3.0	33.5	30	—

P1 Panel cut-out (page 152)

M1 Cable assembly (page 161)

Note: the 5B series is delivered with a tapered washer and a round nut.



PFG Fixed socket, with two nuts, key (G) or keys (A...M and R), cable collet (back panel mounting)

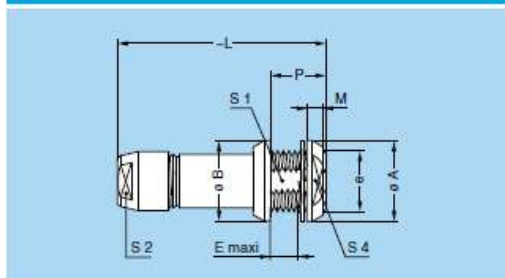
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S2	S3
PFG	00	10	10.2	M7x0.5	5.3	26.0	2.5	6.3	5	9
PFG	0B	12	12.4	M9x0.6	5.0	35.5	2.5	8.2	7	11
PFG	1B	16	15.8	M12x1.0	5.0	40.5	3.5	10.5	9	14
PFG	2B	20	19.2	M15x1.0	6.5	47.0	3.5	13.5	12	17
PFG	3B	24	25.0	M18x1.0	9.0	56.0	4.5	16.5	14	22
PFG	4B	30	34.0	M25x1.0	11.0	73.0	4.5	23.5	20	30
PFG	5B	41	40.0	M35x1.0	10.0	99.0	5.0	33.5	30	—

P1 Panel cut-out (page 152)

M1 Cable assembly (page 161)

Note: the 3B, 4B and 5B series are delivered with a conical nut. The 5B series is delivered with a tapered washer and a round nut.

B Series



PEG Fixed socket, nut fixing, key (G) or keys (A...L), cable collet (back panel mounting)

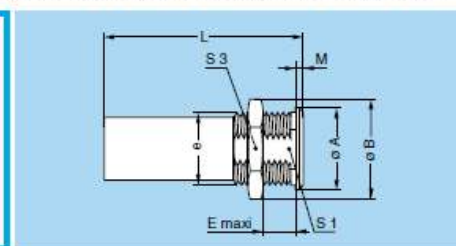
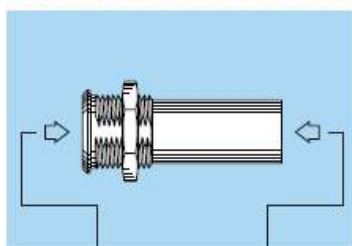
Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	S1	S2	S4	P
PEG	3B	24	25	M18x1.0	5.0	56	4.5	16.5	14	20	12
PEG	4B	32	34	M25x1.0	12.5	73	5.0	23.5	20	27	20

P1 Panel cut-out (page 152)

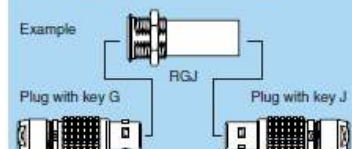
M1 Cable assembly (page 161)

Note: the 4B series has an o-ring on the flange.

R●● Fixed coupler, nut fixing, key (G) or keys (A and J) at the flange end and keys (J, K or M) at the other end



G	RGG	G
J	RJG	G
G	RGJ	J
A	RAK	K
G	RGM	M



Alignment key see page 31.

Reference		Contacts	Dimensions (mm)								
Model	Series	Type	A	B	e	E	L	M	S1	S3	
RGG ¹⁾	0B	female – female	12	13.8	M10x0.75	8.0	34	2.0	9.0	12	
RGG ²⁾	0B	female – female	12	13.8	M10x0.75	8.0	43	2.0	9.0	12	
RJG	0B	male – female	12	13.8	M10x0.75	8.0	34	2.0	9.0	12	
RGJ		female – male									
RAK		female – male									
RGM		female – male									
RGG ³⁾	1B	female – female	16	19.2	M14x1.00	8.5	47	2.5	12.5	17	
RJG	1B	male – female	16	19.2	M14x1.00	8.5	39	2.5	12.5	17	
RGJ		female – male									
RJG	2B	male – female	20	21.5	M16x1.00	12.0	44	4.0	15.0	19	
RGJ		female – male									
RGJ	3B	female – male	25	27.0	M20x1.00	32.0	53	4.0	18.5	24	
RGJ	4B	female – male	34	34.0	M25x1.00	50.0	65	4.0	23.5	30	

P4 Panel cut-out (page 152)

Note:

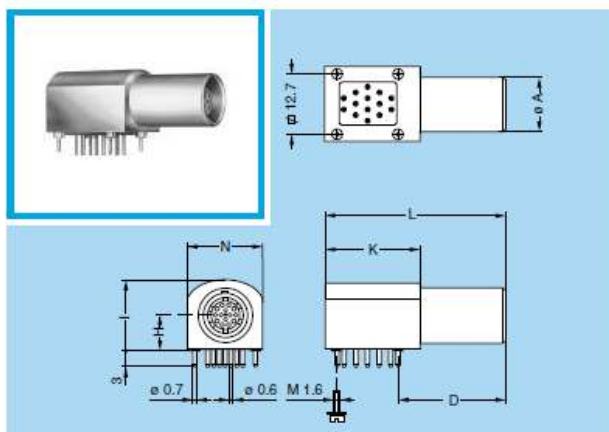
¹⁾ only available with two contacts.

²⁾ only available with three and four contacts.

³⁾ only available with three contacts.

For this fixed coupler, the first contact type mentioned is always the one at the flange end. On request, these couplers can be produced in other series, with other keys.

B Series

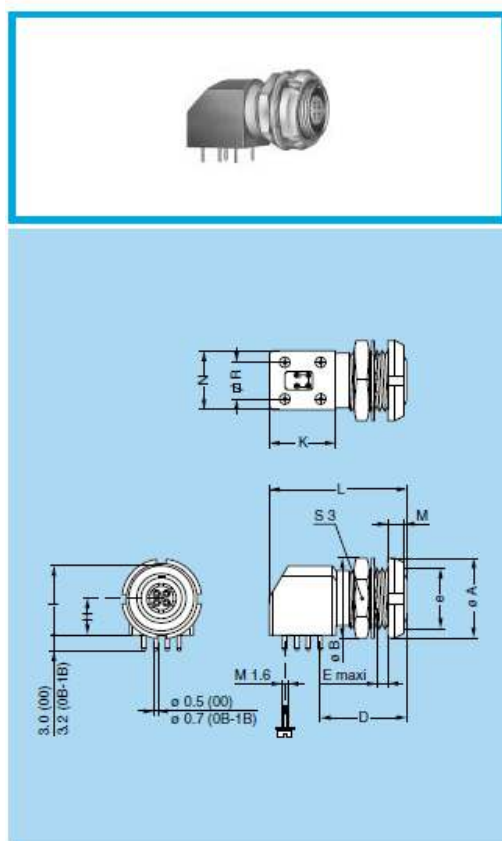


EPG Elbow (90°) socket for printed circuit, key (G) or keys (A...F) (solder or screw fixing)

Reference	Dimensions (mm)						
	A	D	H	I	K	L	N
EPG.1B.314.NLN	11	21	7.7	14.3	19	36	15.4

P20 PCB drilling pattern (page 158)

Note: to replace the 4 ground pins by 4 screws (M1.6) add an «S» to the end of the part number. (e.g.: EPG.1B.314.NLNS)



EXG Elbow (90°) socket for printed circuit with two nuts, key (G) or keys (A...F) (solder or screw fixing) (back panel mounting)

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

Reference	Dimensions (mm)												
	A	B	D	e	E	H	I	K	L	M	N	R	S3
XBG.00.302.HLN													
XBG.00.303.HLN	10	10.2	11.5	M7x0.5	2.1	3.5	7.0	8.7	19	2.5	7.1	5.08	9
XBG.00.304.HLN													
EXG.0B.302.HLN													
EXG.0B.303.HLN													
EXG.0B.304.HLN													
EXG.0B.305.HLN	12	12.4	14.6	M9x0.6	6.0	6.7	12.6	13.3	25	2.5	11.7	7.62	11
EXG.0B.306.HLN													
EXG.0B.307.HLN													
EXG.0B.309.HLN													
EXG.1B.302.HLN													
EXG.1B.303.HLN													
EXG.1B.304.HLN													
EXG.1B.305.HLN	14	15.0	16.6	M11x0.5	7.5	7.5	14.0	13.3	27	3.5	12.6	7.62	13
EXG.1B.306.HLN													
EXG.1B.307.HLN													
EXG.1B.308.HLN													
EXG.1B.310.HLN													

P2 Panel cut-out 00, 0B series (page 152)

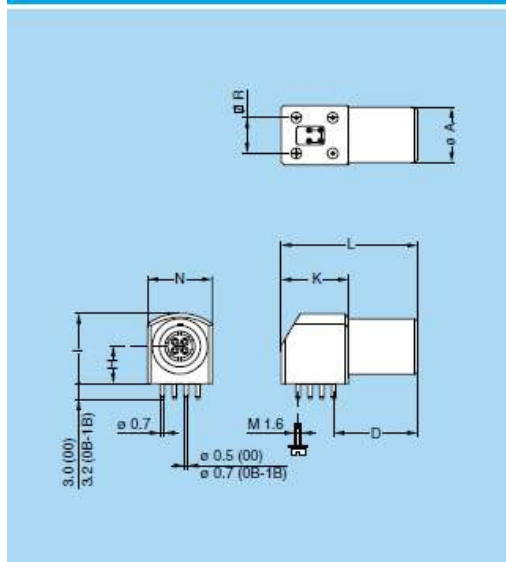
P10 Panel cut-out 1B series (page 152)

P18 PCB drilling pattern 00 series (page 158)

P19 PCB drilling pattern 0B, 1B series (page 158)

Note: In the 0B and 1B series, it is possible to replace the 4 ground pins by 4 screws (M1.6) add an «S» to the end of the part number. (e.g.: EXG.0B.307.HLNS).

B Series



EPG Elbow (90°) socket for printed circuit,
key (G) or keys (A...F) (solder or screw fixing)

Reference	Dimensions (mm)							
	A	D	H	I	K	L	N	R
EPG.00.302.HLN								
EPG.00.303.HLN	6.8	11.5	3.5	7.0	8.7	19	7.1	5.08
EPG.00.304.HLN								
EPG.0B.302.HLN								
EPG.0B.303.HLN								
EPG.0B.304.HLN								
EPG.0B.305.HLN	9.0	14.6	6.7	12.6	13.3	25	11.7	7.62
EPG.0B.306.HLN								
EPG.0B.307.HLN								
EPG.0B.309.HLN								
EPG.1B.302.HLN								
EPG.1B.303.HLN								
EPG.1B.304.HLN								
EPG.1B.305.HLN	11.0	16.6	7.5	14.0	13.3	27	12.6	7.62
EPG.1B.306.HLN								
EPG.1B.307.HLN								
EPG.1B.308.HLN								
EPG.1B.310.HLN								

P18 PCB drilling pattern 00 series (page 158)

P19 PCB drilling pattern 0B, 1B series (page 158)

Note: In the 0B and 1B series, it is possible to replace the 4 ground pins by 4 screws (M1.6) add an «S» to the end of the part number. (e.g.: EPG.0B.307.HLNS)

B Series



Watertight or vacuumtight models

These plug, socket and coupler models 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.

Most of 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).

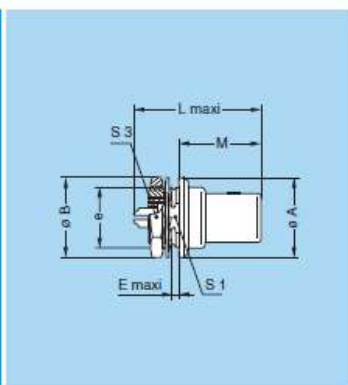
Epoxy resin is used to seal these models.

Technical Characteristics

Mechanical and Climatical

Characteristics	Value	Standard
Endurance	> 5000 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range (00 to 1B)	- 20° C/+100° C	
Temperature range (2B to 5B)	- 20° C/+80° C	
Salt spray corrosion test	> 144h	IEC 60512-6 test 11f
Climatical category	20/80/21	IEC 60068-1
Leakage rate (He) ¹⁾	< 10 ⁻⁷ mbar.L.s ⁻¹	IEC 60512-7 test 14b

Characteristics	Value	Standard
Maximum operating pressure ²⁾	00	60 bars
	0B	60 bars
	1B	60 bars
	2B	40 bars
	3B	30 bars
	4B	15 bars
	5B	5 bars
		IEC 60512-7 test 14d

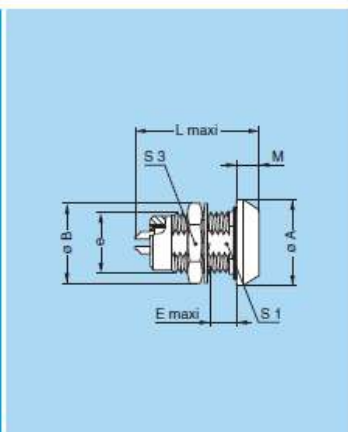


YHG Fixed plug, nut fixing, non-latching, key (G) or keys (A...M)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
YHG	0B	13.0	12.4	M9x0.6	2.4	24.1	14.2	8.2	11
YHG	1B	16.0	15.8	M12x1.0	3.9	28.0	16.2	10.5	14
YHG	2B	19.0	19.2	M15x1.0	5.5	33.1	17.8	13.5	17
YHG	3B	22.0	25.0	M18x1.0	5.1	38.2	22.2	16.5	22

P9 Panel cut-out (page 152)

Note: this model does not include an O-ring behind the flange, it ensures only IP61 protection index. Consequently, it is not vacuumtight. Watertightness (when mated) is only ensured with HHG and HCG sockets.



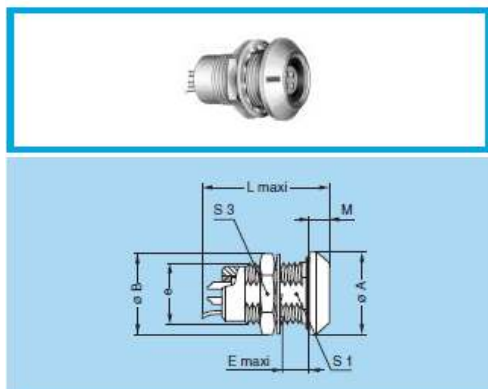
HGG Fixed socket, nut fixing, key (G) or keys (A...M and R), watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HGG	00	11	10.2	M7x0.5	8.0	18.0	1.5	—	9
HGG	0B	13	12.4	M9x0.6	7.0	21.5	3.0	8.2	11
HGG	1B	18	15.8	M12x1.0	7.0	26.6	4.5	10.5	14
HGG	2B	20	19.2	M15x1.0	8.0	31.6	4.0	13.5	17
HGG	3B	25	25.0	M18x1.0	11.5	36.1	4.0	16.5	22
HGG	4B	34	34.0	M25x1.0	11.0	43.1	4.0	23.5	30
HGG	5B	45	40.0	M35x1.0	11.0	53.6	5.0	33.5	—

P9 Panel cut-out (page 152)

Note: the 5B series is delivered with a tapered washer and a round nut.

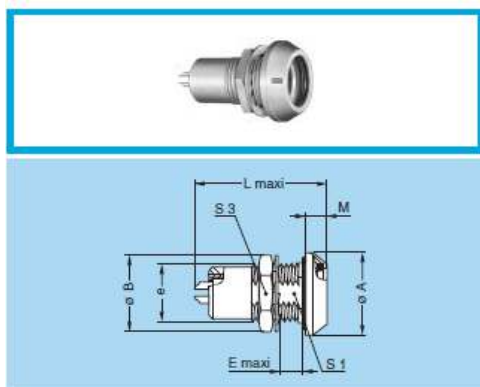
B Series



HNG Fixed socket, nut fixing, with earthing tag, key (G) or keys (A...M), watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HNG	0B	13	12.4	M9x0.6	7	21.5	3	8.2	11

P9 Panel cut-out (page 152)

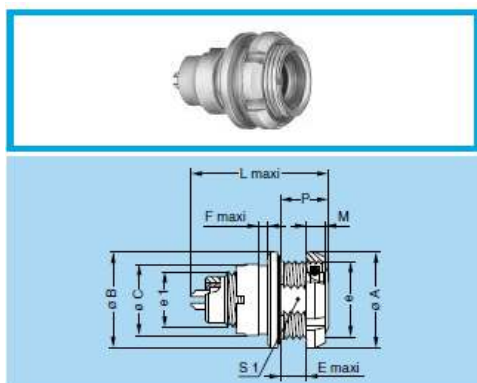


HHG Fixed socket, nut fixing, key (G) or keys (A...M), watertight or vacuumtight (watertight when mated)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HHG	0B	13	12.4	M9x0.6	7.0	24.5	4.8	8.2	11
HHG	1B	18	15.8	M12x1.0	7.0	30.3	5.2	10.5	14
HHG	2B	22	19.2	M15x1.0	8.0	35.6	6.0	13.5	17
HHG	3B	25	25.0	M18x1.0	11.5	41.3	7.2	16.5	22

P9 Panel cut-out (page 152)

Note: this model ensures watertightness (IP66) in the mating area when mated with FGG or similar plug.

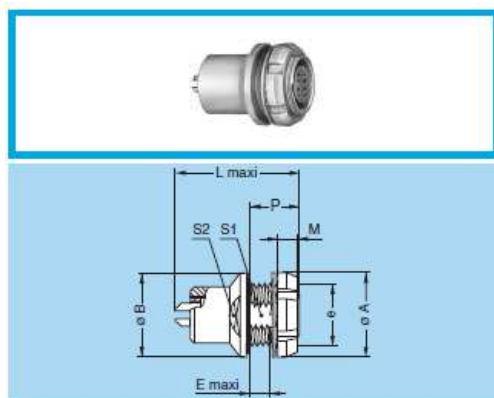


HCG Fixed socket, nut fixing, key (G) or keys (A...M), watertight or vacuumtight (watertight when mated) (back panel mounting)

Reference		Dimensions (mm)										
Model	Series	A	B	C	e	e1	E	F	L	M	P	S1
HCG	0B	18	18	12.0	M14x1.0	M9x0.6	3.9	1.0	24.5	3.5	7.5	12.5
HCG	1B	20	20	14.5	M16x1.0	M12x1.0	6.2	2.0	30.3	3.5	10.0	14.5
HCG	2B	24	24	17.5	M19x1.0	M14x1.0	6.7	1.5	35.6	3.5	11.3	17.0

P3 Panel cut-out (page 152)

Note: this model ensures watertightness (IP66) in the mating area when mated with FGG or similar plug.

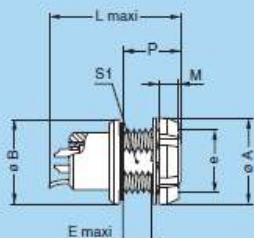


HEG Fixed socket, nut fixing, key (G) or keys (A...M), watertight or vacuumtight (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	P	S1
HEG	00	10	11	M7x0.5	2.5	18.2	2.5	6.0	6.3
HEG	0B	12	13	M9x0.6	5.5	21.5	2.5	9.0	8.2
HEG	1B	16	18	M12x1.0	6.5	26.6	3.5	11.0	10.5
HEG	2B	20	20	M15x1.0	5.0	31.6	3.5	9.6	13.5

P9 Panel cut-out (page 152)

B Series



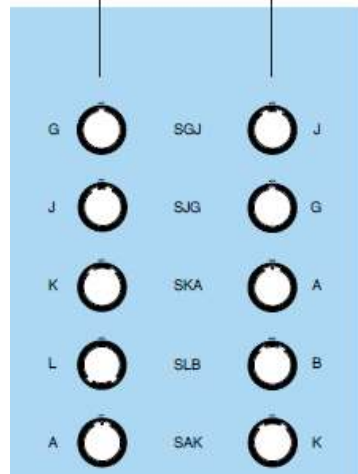
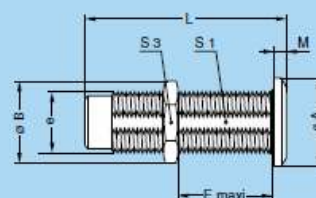
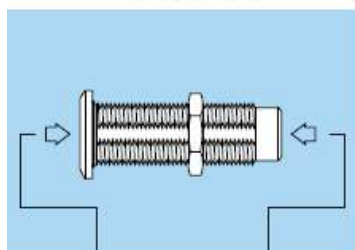
HMG Fixed socket with earthing tag, nut fixing, key (G) or keys (A...M), watertight or vacuumtight (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	P	S1
HMG	00	10	11	M7x0.5	2.5	18.0	2.5	6.0	6.3
HMG	0B	12	13	M9x0.6	5.5	21.5	2.5	9.0	8.2
HMG	1B	16	18	M12x1.0	5.5	26.6	3.5	11.0	10.5
HMG	2B ¹⁾	20	20	M15x1.0	5.5	31.6	3.5	9.6	13.5
HMG	3B	24	25	M18x1.0	7.5	36.1	4.5	14.0	16.5

P9 Panel cut-out (page 152)

Note: ¹⁾ the surface design of the 2B series is different. The 3B series is delivered with a conical nut.

S • • Fixed coupler, nut fixing, key (G) or keys (A, B, J, K and L) at the flange end and key (G) or keys (A, B, J, K and L) at the other end, watertight or vacuumtight



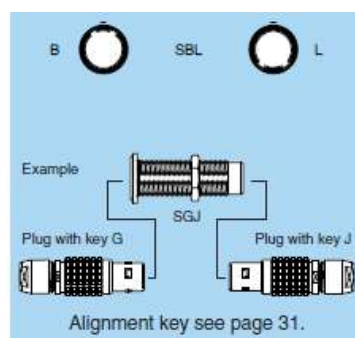
Reference		Contacts	Dimensions (mm)							
Model	Series	Type	A	B	e	E	L	M	S1	S3
SGJ	0B	female – male	14	13.8	M10x0.75	17	34	2.0	9.0	12
SJG		male – female								
SGJ	1B	female – male	17	15.8	M12x1.00	28	39	2.5	10.5	14
SJG		male – female								
SGJ	2B	female – male	20	21.5	M16x1.00	25	44	4.0	15.0	19
SJG		male – female								
SGJ	3B	female – male	25	27.0	M20x1.00	30	53	4.0	18.5	24
SJG		male – female								
SAK		female – male								
SBL		female – male								
SGJ	4B	female – male	34	34.0	M25x1.00	50	65	4.0	23.5	30
SJG		male – female								
SAK		female – male								
SBL		female – male								

SGJ	5B	female – male	45	40.0	M35x1.00	58	80	5.0	33.5	–
SJG		male – female								
SKA		male – female								
SLB		male – female								
SAK		female – male								
SBL		female – male								

P4 Panel cut-out (page 152)

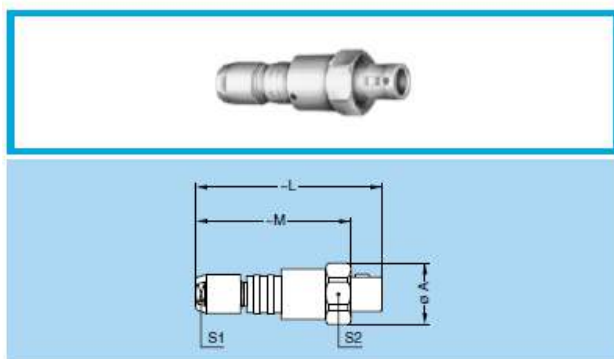
P9 Panel cut-out 1B series (page 152)

Note: for this fixed coupler, the first contact type mentioned is always the one at the flange end. On request these couplers can be produced in other series, with other keys. The 5B series is delivered with a round nut.



B Series

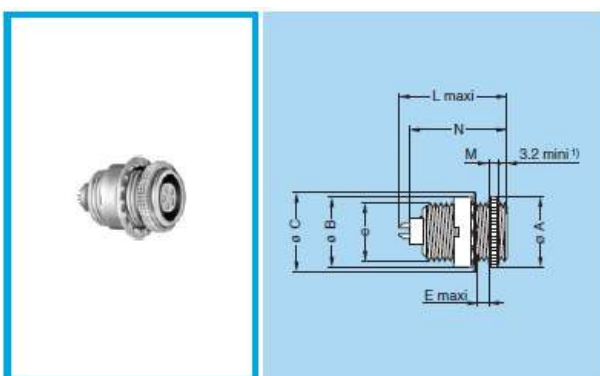
Threaded-latching models



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

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FVG	00	9	28.5	24	5	8

Note: to be ordered with nut for fitting a bend relief to obtain the rating IP 64.

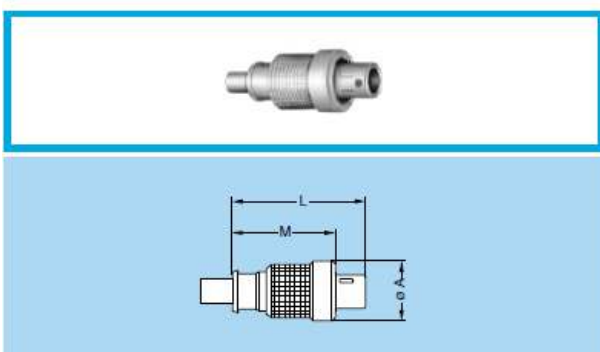


ESG Fixed socket with two round nuts, key (G) or keys (B), long threaded shell (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	C	e	E	L	M	N
ESG	00	9	9	9.5	M7x0.5	3.2	15.5	2	13.7

P2 Panel cut-out (page 152)

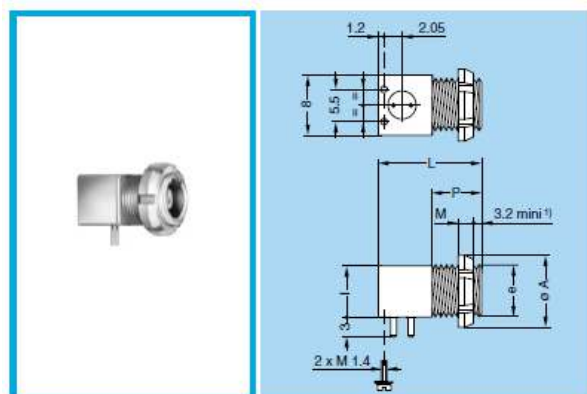
Note: ¹⁾ minimum length of free thread to ensure mating.



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

Reference		Dimensions (mm)		
Model	Series	A	L	M
FVB	00	9	20	15.4

Note: after assembly the special bend relief GMF.00.018.D (to be ordered separately) is to be fitted.



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

Reference		Dimensions (mm)					
Model	Series	A	e	I	L	M	P
XRB	00	10	M7x0.5	7	14	2.5	7

P2 Panel cut-out (page 152)

P18 PCB drilling pattern for contact only (page 158)

Note: ¹⁾ minimum length of free thread to ensure mating.

B Series



Alignment Key (B series)

Alignment Key and Polarized Keying System

B series connector model part numbers are composed of three letters. The LAST LETTER indicates the key position and the contact type (male or female).

Front view of a socket	Reference	Nb of keys	Angles	Series			Reference	Nb of keys	Angles	Series				Contact type		Note
				00	0B	1B				2B	3B	4B	5B	Plug	Socket	
	G	1		0°	0°	0°	G	1		0°	0°	0°	0°	male	female	●
	A	2		30°	30°	30°	A	2		30°	30°	30°	30°	male	female	●
	B	2		60°	60°	60°	B	2		45°	45°	45°	45°	male	female	●
	C	2		—	90°	90°	C	2		60°	60°	60°	60°	male	female	●
	D	2		—	135°	135°	D	2		95°	95°	95°	95°	male	female	○
	E	2		—	145°	145°	E	2		120°	120°	120°	120°	male	female	○
	F	2		—	155°	155°	F	2		145°	145°	145°	145°	male	female	○
	J	2		45°	45°	45°	J	2		37.5°	37.5°	37.5°	37.5°	female	male	●
	K	2		—	70°	70°	K	2		52.5°	52.5°	52.5°	52.5°	female	male	○
	L	2		—	80°	80°	L	2		70°	70°	70°	70°	female	male	○
	M	2		—	110°	—	M	2		—	—	—	—	female	male	○
	Y	3		—	—	—	Y	3		—	—	—	—	male	female	● ¹⁾

Front view of a socket	Reference	Nb of keys	Angles	Series			Reference	Nb of keys	Angles	Series				Contact type		Note
				00	0B	1B				2B	3B	4B	5B	Plug	Socket	
	R	5	α	—	—	—	R	5	α	—	—	—	95°	male	female	●
			β	—	—	—			β	—	—	—	115°			
			γ	—	—	—			γ	—	—	—	20°			
			δ	—	—	—			δ	—	—	—	30°			

K Series / IP 68

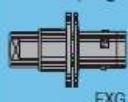
K series connectors have been specifically designed for outdoor applications. They include an inner sleeve and two seals to prevent penetration of solids or liquids into the housing formed by the plug, free socket, fixed socket or coupler. All models of this series are watertight when mated to give a 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
- multipole types 2 to 64 contacts
- keying system («G» key standard) for connector alignment
- 360° screening for full EMC shielding
- rugged housing for extreme working conditions.
- watertight connection (IP 68/IP 66)
- solder, crimp or print (straight or elbow) contacts
- multiple key options to avoid cross mating of similar connectors
- high packing density for space savings

Metal housing models (page 34)

Fixed plugs



Straight plugs



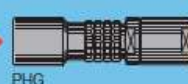
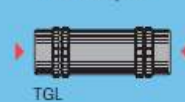
Fixed sockets



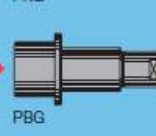
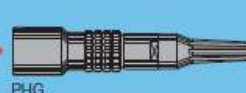
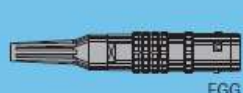
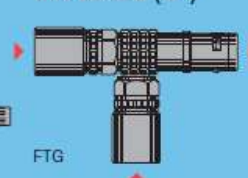
Free sockets



Free coupler



T-plug with sockets (90°)



Watertight or vacuumtight models (page 41)

Fixed sockets



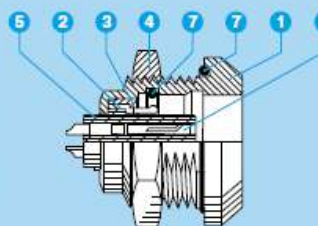
Fixed coupler



Part Section Showing Internal Components

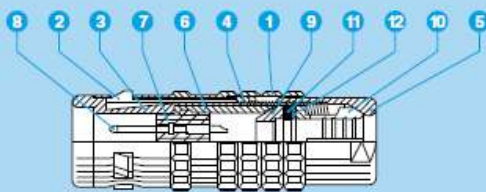
Fixed socket

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



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



K Series / IP 68



Metal housing models

Technical Characteristics

Mechanical and Climatical

Characteristics	Value	Standard
Endurance	> 5000 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range ¹⁾	-55° C, +200° C	
Resistance to vibrations	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	> 144h	IEC 60512-6 test 11f
Protection index (mated) ²⁾	IP 68/IP 66	IEC 60529
Climatical category	50/175/21	IEC 60068-1

Electrical

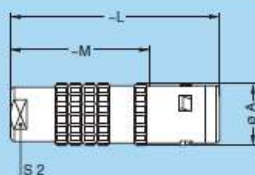
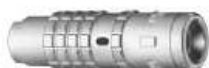
Characteristics		Value	Standard
Shielding efficiency	at 10 MHz	> 95 dB	IEC 60169-1-3
	at 1 GHz	> 80 dB	IEC 60169-1-3

Note:

Note: The various tests have been carried out with FGG and EGG connector pairs, with chrome-plated brass shell, PEEK insulator and silicone O-ring. Detailed electrical characteristics, as well as materials and treatment are presented in the chapter Technical Characteristics on page 171.

¹⁾ minimum operating temperature is -20°C for sockets fitted with an FPM (Viton®) O-ring.

²⁾ IP68 achieved providing that the cable is perfectly circular and that assembly process ensures a high integrity seal.



FGG Straight plug, key (G) or keys (A to F, L and R), cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FGG	0K	11	34	23.0	8
FGG	1K	13	42	28.0	9
FGG	2K	16	52	36.0	12
FGG	3K	19	61	41.0	15
FGG	4K	25	71	50.5	19
FGG	5K	38	92	67.0	30

M1 Cable assembly (page 162)

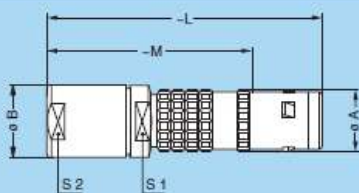


FIG Straight plug, key (G) or keys (A to F, L and R), cable collet and oversize cable collet ¹⁾

Reference		Dimensions (mm)					
Model	Series	A	B	L	M	S1	S2
FGG	1K	13	14.5	60.0	46	12	12
FGG	2K	16	17.0	68.0	52	15	15
FGG	3K	19	22.0	85.0	65	19	19
FGG	4K	25	36.0	119.5	99	30	32

M2 Cable assembly (page 163)

Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 53).

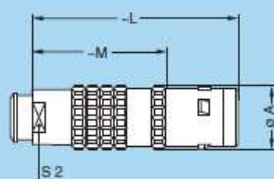


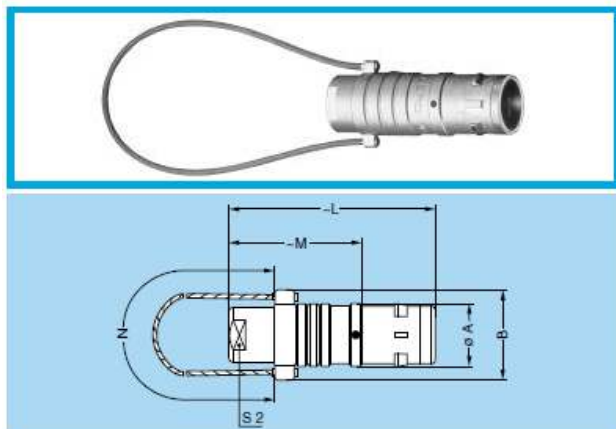
FIG Straight plug, key (G) or keys (A to F, L and R) cable collet and nut for fitting a bend relief ¹⁾

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FGG	0K	11	34	23.0	7
FGG	1K	13	42	28.0	9
FGG	2K	16	52	36.0	12
FGG	3K	19	60	40.0	15
FGG	4K	25	71	50.5	19

M1
Cable assembly
(page 162)

Note: 1) to order, add a «Z» at the end of the reference.
The bend relief must be ordered separately (see page 141).

K Series / IP 68

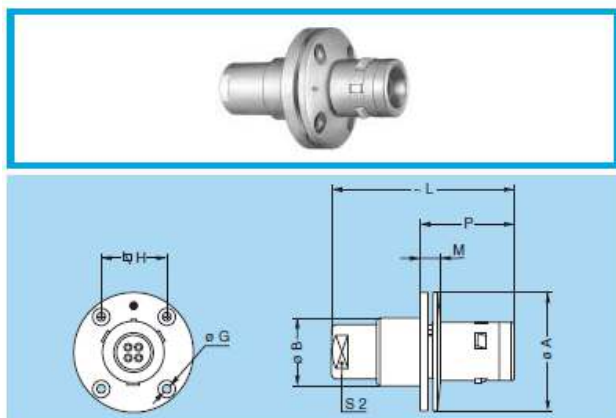


FNG Straight plug, key (G) or keys (A to F and L), cable collet and lanyard release

Reference		Dimensions (mm)						
Model	Series	A	B	L	M	N	S2	
FNG	2K	16	22	52	36.0	160	12	
FNG	4K	25	32	71	50.5	230	19	

M1 Cable assembly (page 162)

Note: cable material: stainless steel with Polyamide sheath

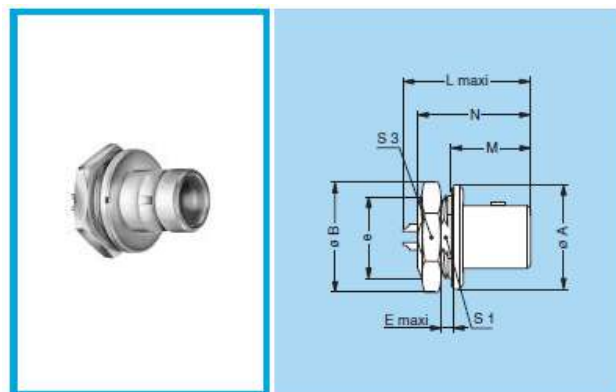


FXG Fixed plug with round flange, key (G) or keys (A to F, L and R) and screw fixing

Reference		Dimensions (mm)							
Model	Series	A	B	G	H	L	M	P	S2
FXG	3K	38	22.5	3.4	20.6	61	10.0	30.0	15
FXG	4K	47	28.5	3.4	27.0	71	11.0	32.0	19
FXG	5K	65	42.5	4.4	38.0	100	12.5	38.5	30

P6 Panel cut-out (page 153)

Note: this model does not include an O-ring behind the flange, it allows the device on which it is fitted to reach only IP50 protection index. It does not have a cable collet.

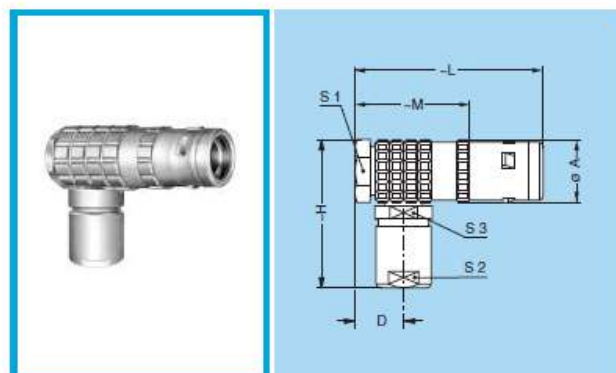


FAG Fixed plug, nut fixing, non-latching, key (G) or keys (A to F, L and R)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
FAG	1K	20	21.5	M16x1.0	2.3	22.6	16.0	22.5	14.5	19
FAG	2K	25	27.0	M20x1.0	4.5	33.6	18.0	28.3	18.5	24
FAG	3K	31	34.0	M24x1.0	4.0	34.3	22.5	33.8	22.5	30
FAG	4K	37	40.5	M30x1.0	4.0	35.3	23.0	36.3	28.5	36
FAG	5K	55	54.0	M45x1.5	4.0	43.5	28.5	42.3	42.5	—

P1 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts. The 1K series is delivered with a locking washer. The 5K series is delivered with a round nut.

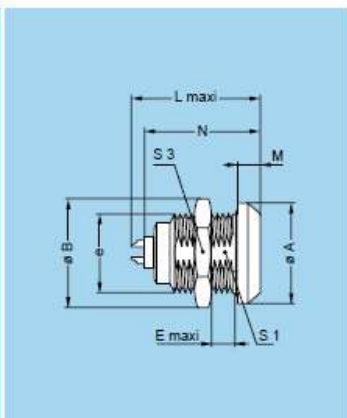


FHG Elbow (90°) plug, key (G) or keys (A to F, L and R), cable collet

Reference		Dimensions (mm)							
Model	Series	A	D	H	L	M	S1	S2	S3
FHG	0K	11.5	7.6	27	36	25.0	10	8	8
FHG	1K	14.0	8.8	33	43	29.0	12	9	10
FHG	2K	17.5	10.5	40	51	35.0	15	12	13
FHG	3K	21.0	11.5	47	60	40.0	18	15	15
FHG	4K	27.5	15.5	57	72	51.5	24	19	20

M3 Cable assembly (page 162)

K Series / IP 68

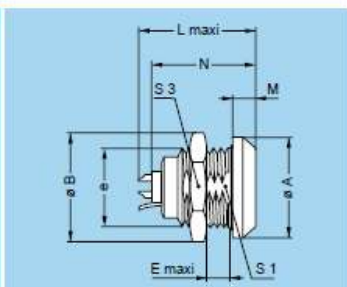


EGG Fixed socket, nut fixing, key (G) or keys (A to F, L and R)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
EGG	0K	18	19.2	M14x1.0	6	21.7	4.0	20.1	12.5	17
EGG	1K	20	21.5	M16x1.0	9	27.0	4.5	25.1	14.5	19
EGG	2K	25	27.0	M20x1.0	9	30.7	5.0	28.6	18.5	24
EGG	3K	31	34.0	M24x1.0	11	36.2	6.0	33.6	22.5	30
EGG	4K	37	40.5	M30x1.0	9	40.2	6.5	38.6	28.5	36
EGG	5K	55	54.0	M45x1.5	10	47.5	9.0	43.6	42.5	-

P1 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.
The 5K series is delivered with a round nut.

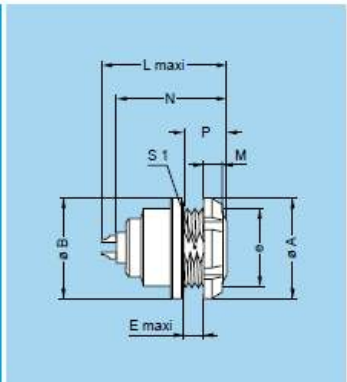


ENG Fixed socket, nut fixing, key (G) or keys (A to F, L and R) and earthing tag

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3
ENG	3K	31	34	M24x1.0	11.3	36.2	6	33.6	22.5	30

P1 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.

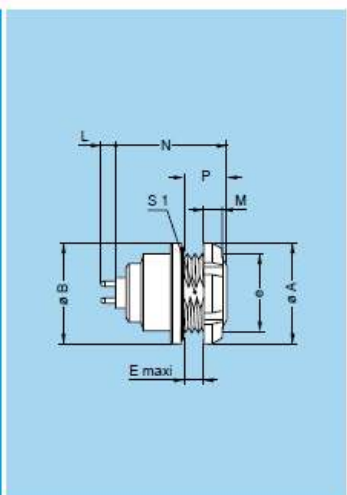


EEG Fixed socket, nut fixing, key (G) or keys (A to F, L and R) (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N ¹⁾	P	S1
EEG	0K	18.0	18	M14x1.0	3.4	21.7	3.5	20.1	7.0	12.5
EEG	1K	20.0	20	M16x1.0	6.2	27.0	3.5	25.1	10.0	14.5
EEG	2K	25.0	25	M20x1.0	5.0	30.7	3.5	28.6	10.0	18.5
EEG	3K	30.0	31	M24x1.0	7.5	36.2	4.5	33.6	12.0	22.5
EEG	4K	41.5	37	M30x1.0	6.0	40.2	7.0	38.6	13.5	28.5

P1 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.
The 3K and 4K series are delivered with a conical nut.



EEG Fixed socket, nut fixing, key (G) or keys (A to F and R) with straight print contacts for printed circuit (back panel mounting)

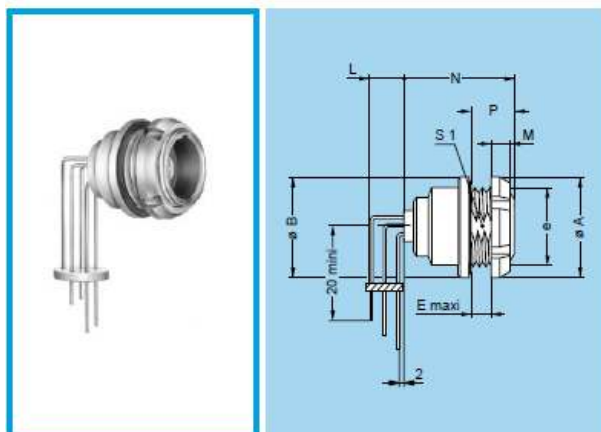
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	P	S1	
EEG	0K	18.0	18	M14x1.0	3.4	3.5	17.6	7.0	12.5	
EEG	1K	20.0	20	M16x1.0	6.2	3.5	23.8	10.0	14.5	
EEG	2K	25.0	25	M20x1.0	5.0	3.5	25.8	10.0	18.5	
EEG	3K	30.0	31	M24x1.0	7.5	4.5	31.3	12.0	22.5	
EEG	4K	41.5	37	M30x1.0	6.0	7.0	34.3	13.5	28.5	

P1 Panel cut-out (page 153)

P15 PCB drilling pattern (page 154)

Note: this contact type is available for E●● socket models fitted with female contact.
Length «L» depends on the number of contacts, see table page 156.
The 3K and 4K series are delivered with a conical nut.

K Series / IP 68



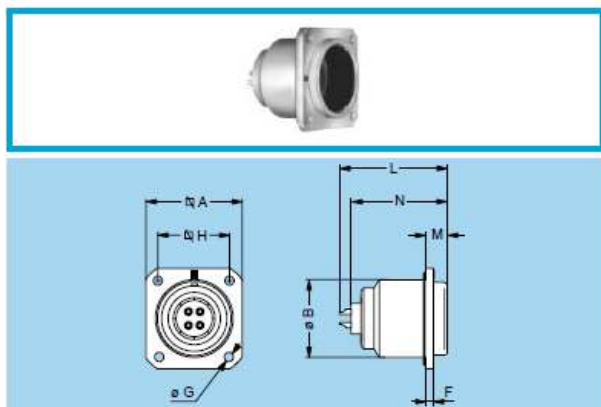
EEG Fixed socket, nut fixing, key (G) or keys (A to F and R) with elbow (90°) contacts for printed circuit (back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	P	S1	
EEG	0K	18	18	M14x1.0	3.4	3.5	19.3	7	12.5	
EEG	1K	20	20	M16x1.0	6.2	3.5	24.3	10	14.5	
EEG	2K	25	25	M20x1.0	5.0	3.5	26.6	10	18.5	
EEG	3K	30	31	M24x1.0	7.5	4.5	31.3	12	22.5	

P1 Panel cut-out (page 153)

P17 PCB drilling pattern (page 157)

Note: length «L» depends on the number of contacts, see PCB drilling pattern page 157. The 3K series is delivered with a conical nut.

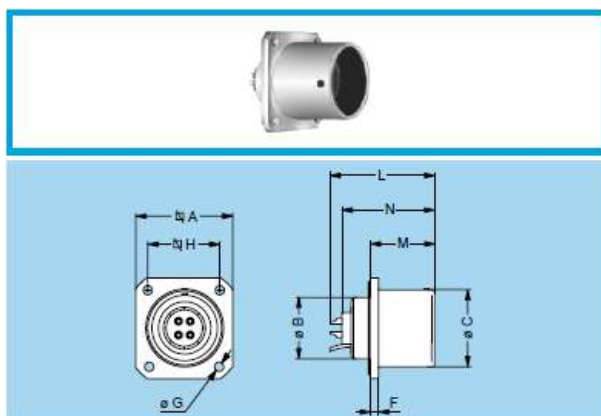


EBG Fixed socket with square flange, key (G) or keys (A to F, L and R) and screw fixing

Reference		Dimensions (mm)								
Model	Series	A	B	F	G	H	L	M	N ¹⁾	
EBG	3K	29	23	3	3.4	23	36.2	6.0	32.6	
EBG	4K	37	30	3	3.4	29	40.2	6.5	36.6	
EBG	5K	54	45	4	4.4	44	47.5	8.0	42.1	

P7 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.

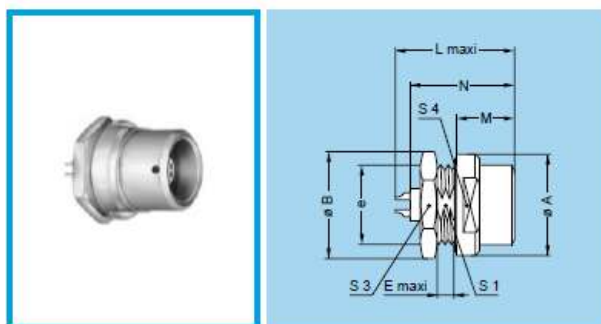


EDG Fixed socket with square flange, key (G) or keys (A to F, L and R), protruding shell and earthing tag, screw fixing

Reference		Dimensions (mm)									
Model	Series	A	B	C	F	G	H	L	M	N ¹⁾	
EDG	3K	29	18	23	3	3.4	23	36.2	22.5	32.6	

P7 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.



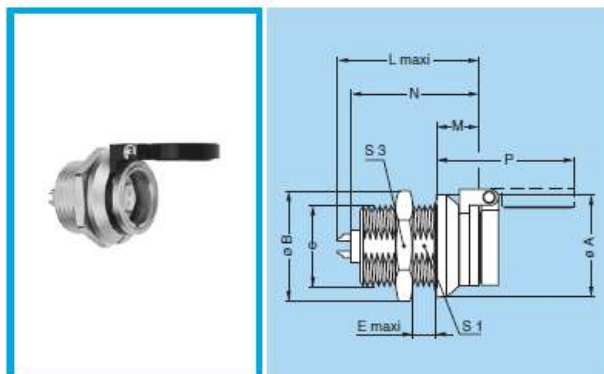
EHG Fixed socket, nut fixing, key (G) or keys (A to F and L), protruding shell

Reference		Dimensions (mm)										
Model	Series	A	B	e	E	L	M	N ¹⁾	S1	S3	S4	
EHG	0K	18	19.2	M14x1.0	1.5	21.7	10.5	20.1	12.5	17	15	
EHG	1K	20	21.5	M16x1.0	1.5	27.0	15.5	25.1	14.5	19	17	
EHG	2K	25	27.0	M20x1.0	1.5	30.7	17.0	27.1	18.5	24	20	

P1 Panel cut-out (page 153)

Note: ¹⁾ maximum length with crimp contacts.

K Series / IP 68

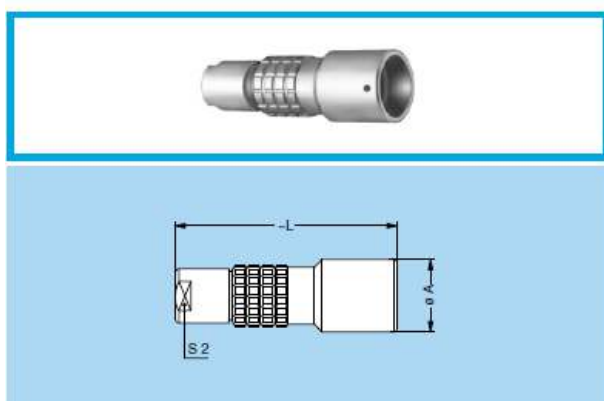


EVG Fixed socket, nut fixing, key (G) or keys (A to F and L) and dust cap (spring loaded)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	N ¹⁾	P	S1	S3
EVG	0K	18	19.2	M14x1.0	6.5	24.8	6.3	23.3	23.3	12.5	17

P1 Panel cut-out (page 153)

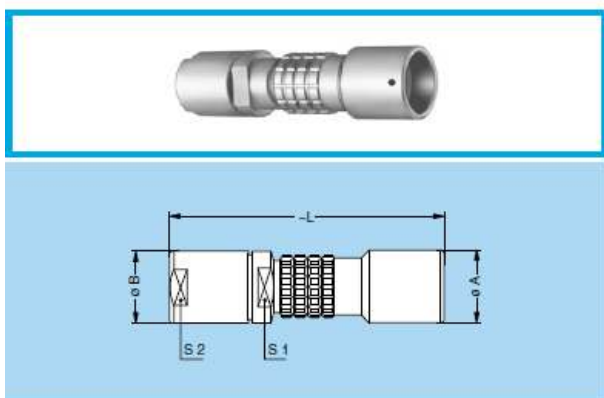
Note: ¹⁾ maximum length with crimp contacts.



PHG Free socket, key (G) or keys (A to F, L and R), cable collet

Reference		Dimensions (mm)		
Model	Series	A	L	S2
PHG	0K	13	34.0	8
PHG	1K	15	45.0	9
PHG	2K	19	54.0	12
PHG	3K	23	65.0	15
PHG	4K	29	75.5	19
PHG	5K	42	95.0	32

M1 Cable assembly (page 162)

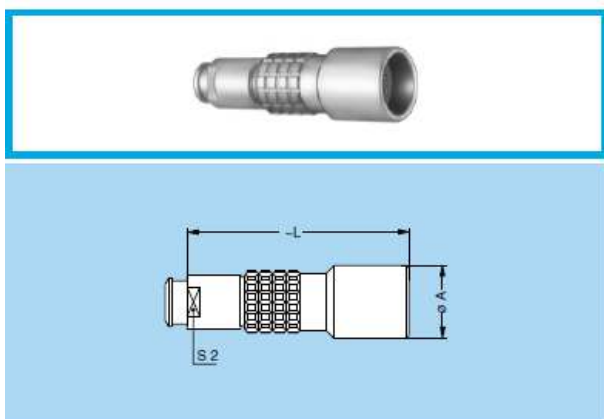


PHG Free socket, key (G) or keys (A to F, L and R), cable collet and oversize cable collet ¹⁾

Reference		Dimensions (mm)					
Model	Series	A	B	L	S1	S2	
PHG	1K	15	14.5	63	12	12	
PHG	2K	19	17.0	70	15	15	
PHG	3K	23	22.0	89	19	19	
PHG	4K	29	36.0	124	30	32	

M2 Cable assembly (page 163)

Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 53).



PHG Free socket, key (G) or keys (A to F, L and R), cable collet and nut for fitting a bend relief ¹⁾

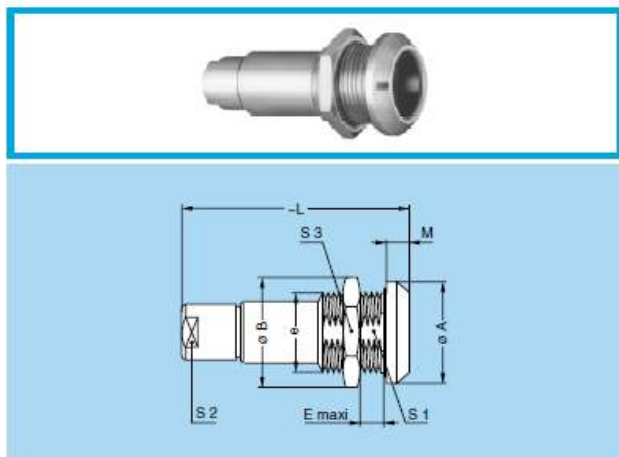
Reference		Dimensions (mm)		
Model	Series	A	L	S2
PHG	0K	13	34.0	7
PHG	1K	15	45.0	9
PHG	2K	19	54.0	12
PHG	3K	23	64.0	15
PHG	4K	29	75.5	19

M1 Cable assembly (page 162)

Note: ¹⁾ to order, add a «Z» at the end of the reference.

The bend relief must be ordered separately (see page 141).

K Series / IP 68



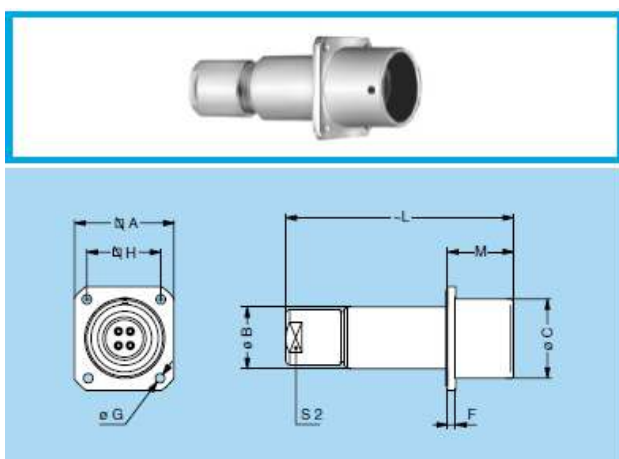
PKG Fixed socket, nut fixing, key (G)
or keys (A to F, L and R), cable collet

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S2	S3
PKG	0K	18	19.2	M14x1.0	6.0	34.0	4.0	12.5	8	17
PKG	1K	20	21.5	M16x1.0	9.0	45.0	4.5	14.5	9	19
PKG	2K	25	27.0	M20x1.0	9.0	54.0	5.0	18.5	12	24
PKG	3K	31	34.0	M24x1.0	11.5	65.0	6.0	22.5	15	30
PKG	4K	37	40.5	M30x1.0	9.0	75.5	6.5	28.5	19	36
PKG	5K	55	54.0	M45x1.0	15.0	98.0	9.0	42.5	30	—

P1 Panel cut-out (page 153)

M1 Cable assembly (page 162)

Note: the 5K series is delivered with a round nut.

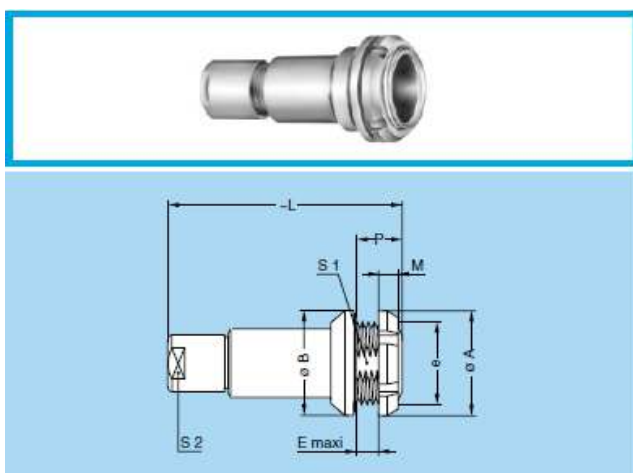


PBG Fixed socket, key (G) with square flange,
cable collet and screw fixing

Reference		Dimensions (mm)								
Model	Series	A	B	C	F	G	H	L	M	S2
PBG	3K	29	19	23	3	3.4	23	65	22.5	15

P7 Panel cut-out (page 153)

M1 Cable assembly (page 162)



PEG Fixed socket, nut fixing, key (G)
or keys (A to F, L and R), cable collet
(back panel mounting)

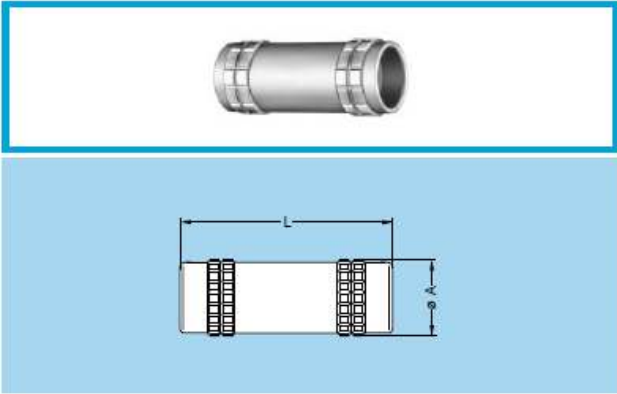
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	P	S1	S2
PEG	0K	18	18	M14x1.0	5.0	34	3.5	8.5	12.5	8
PEG	1K	20	20	M16x1.0	6.5	45	3.5	10.0	14.5	9
PEG	2K	25	25	M20x1.0	4.0	54	3.5	7.5	18.5	12
PEG	3K	30	31	M24x1.0	7.5	65	4.5	12.0	22.5	15

P1 Panel cut-out (page 153)

M1 Cable assembly (page 162)

Note: the 3K series is delivered with a conical nut.

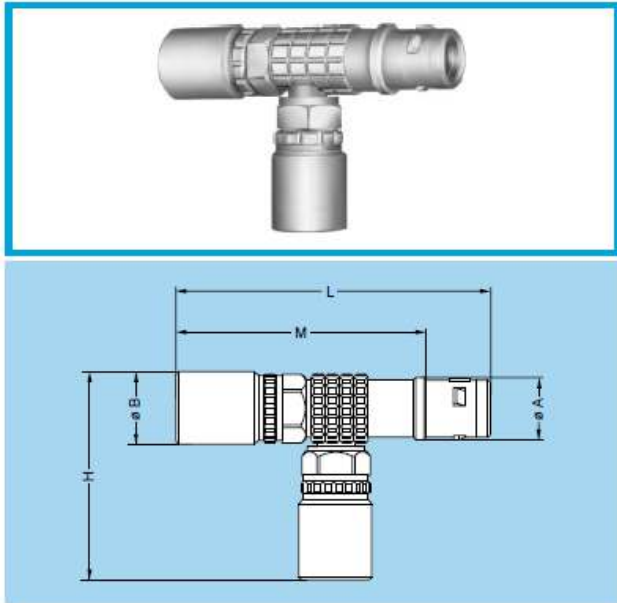
K Series / IP 68



TGL Free coupler, key (G) on one side and keys (L) on the other

Reference	Dim. (mm)	
	A	L
TGL.3K.3●●.CLLP	24	64.2

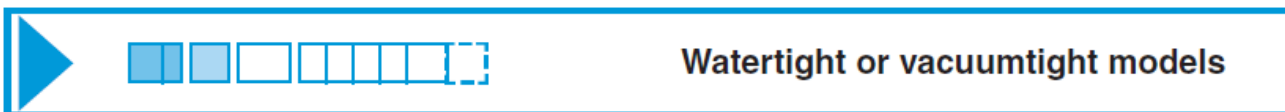
Note: this model is only available in type 308, 310, 316, 318, 320, 324 and 330.



FTG T-plug, key (G) with sockets (90°), key (G)

Reference	Dimensions (mm)				
	A	B	H	L	M
FTG.2K.304.CLF	16	19	48	77	60
FTG.2K.308.CLF	16	19	48	77	60

K Series / IP 68



These socket and coupler models 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.

Most of 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

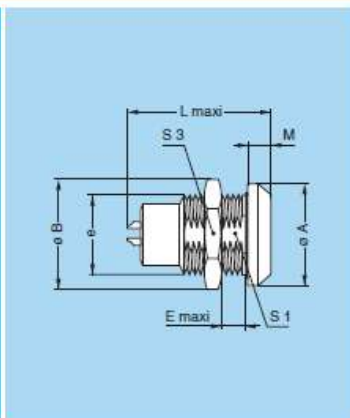
Mechanical and Climatcal

Characteristics	Value	Standard
Endurance	> 5000 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range (0K-1K)	- 20° C/+100° C	
Temperature range (2K to 5K)	- 20° C/+80° C	
Salt spray corrosion test	> 144h	IEC 60512-6 test 11f
Climatcal category	20/80/21	IEC 60068-1
Leakage rate (He) ¹⁾	< 10 ⁻⁷ mbar.l.s ⁻¹	IEC 60512-7 test 14b

Note: ¹⁾ only for vacuumtight models.

Characteristics	Value	Standard
Maximum operating pressure ²⁾	0K	60 bars
	1K	60 bars
	2K	40 bars
	3K	30 bars
	4K	15 bars
	5K	5 bars
		IEC 60512-7 test 14d

Note: ²⁾ this value corresponds to the maximum allowed pressure difference for the assembled socket.

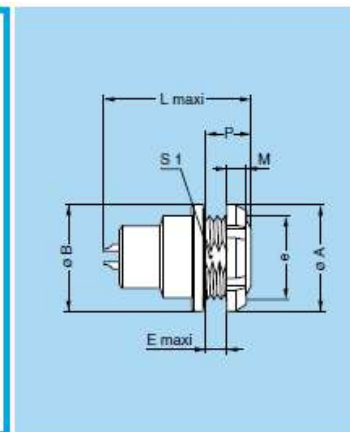


HGG Fixed socket, nut fixing, key (G) or keys (A to F and L), watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
HGG	0K	18	19.2	M14x1.0	5.5	23.0	4.0	12.5	17
HGG	1K	20	21.5	M16x1.0	9.0	30.0	4.5	14.5	19
HGG	2K	25	27.0	M20x1.0	13.0	33.7	5.0	18.5	24
HGG	3K	31	34.0	M24x1.0	16.0	41.7	6.0	22.5	30
HGG	4K	37	40.5	M30x1.0	14.0	49.2	6.5	28.5	36
HGG	5K	55	54.0	M45x1.5	10.0	55.7	9.0	42.5	—

P1 Panel cut-out (page 153)

Note: the 5K series is delivered with a round nut.



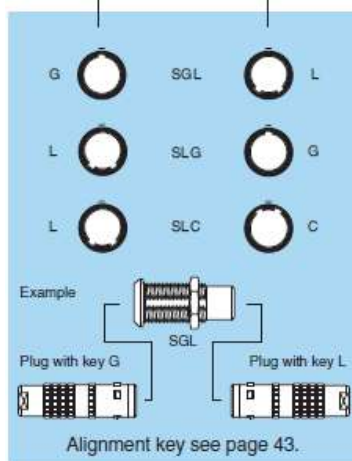
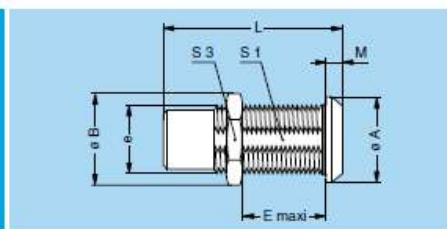
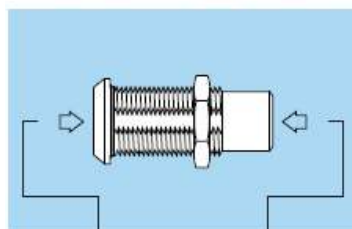
HEG Fixed socket, nut fixing, key (G) or keys (A to F and L), watertight or vacuumtight (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	P	S1
HEG	0K	18	18	M14x1.0	3.4	23.0	3.5	7	12.5
HEG	1K	20	20	M16x1.0	6.2	30.0	3.5	10	14.5
HEG	2K	25	25	M20x1.0	5.0	33.7	3.5	10	18.5

P1 Panel cut-out (page 153)

K Series / IP 68

S●● Fixed coupler, nut fixing, key (G) or keys (L) at the flange end, and key (G) or keys (C or L) at the other end, watertight or vacuumtight



Reference		Contacts	Dimensions (mm)							
Model	Series	Type	A	B	e	E	L	M	S1	S3
SGL	2K	female – male	25	27.0	M20x1.0	25	52.4	5.0	18.5	24
SLG		male – female								
SLG	3K	male – female	31	34.0	M24x1.0	33	64.0	6.0	22.5	30
SLG										
SLC	4K	male – female	37	40.5	M30x1.0	48	74.0	6.5	28.5	36
SLC										
SLG	5K	male – female	55	54.0	M45x1.5	58	88.0	9.0	42.5	–
SLC										

P1 Panel cut-out (page 153)



Note: for this fixed coupler, the first contact type mentioned is always the one at the flange end. On request, these couplers can be produced in other series, with other keys. The 5K series is delivered with a round nut.



Alignment Key and Polarized Keying System

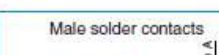

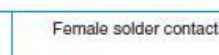

K series connector model part numbers are composed of three letters. The LAST LETTER indicates the key position and the contact type (male or female).

Front view of a socket	Reference	Nb of keys	Angles	Series						Contact type		Note
				0K	1K	2K	3K	4K	5K	Plug	Socket	
				0°	0°	0°	0°	0°	0°	male	female	
	A	2	α	30°	30°	30°	30°	30°	30°	male	female	●
	B	2		45°	45°	45°	45°	45°	45°	male	female	●
	C	2		60°	60°	60°	60°	60°	60°	male	female	●
	D	2		95°	95°	95°	95°	95°	95°	male	female	○
	E	2	β	120°	120°	120°	120°	120°	120°	male	female	○
	F	2		145°	145°	145°	145°	145°	145°	male	female	○
	L	2	γ	75°	75°	75°	75°	75°	75°	female	male	●

Front view of a socket 	Reference	Nb of keys	Angles	Series						Contact type		Note
				0K	1K	2K	3K	4K	5K	Plug	Socket	
	R	5	α	—	—	—	95°	—	—	male	female	
			β	—	—	—	115°	—	—			
			γ	—	—	—	35°	—	—			
δ			—	—	—	25°	—	—				

B/K Series

Multipole

Male solder contacts		Female solder contacts		Reference	Number of contacts	ø A (mm)	Contact type				Solder contact		Crimp contact		Rated current (A) ¹⁾
Male crimp contacts		Female crimp contacts					Solder	Crimp	Print (straight)	Print (elbow)	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 4)} Contact-shell	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 4)} Contact-shell	
															

2B
2K

		302	2	2.0	•	•	•	•	2.10	1.75	2.85	2.70	25.0 ³⁾
		303	3	1.6	•	•	•	•	2.40	1.85	1.90	1.90	17.0 ³⁾
		304	4	1.3	•	•	•	•	1.85	1.85	2.20	2.20	15.0 ³⁾
		305	5	1.3	•	•	•	•	1.75	1.60	2.15	2.15	14.0 ³⁾
		306	6	1.3	•	•	•	•	1.35	1.45	2.00	2.35	12.0
		307	7	1.3	•	•	•	•	1.75	1.60	1.95	2.15	11.0
		308	8	0.9	•	•	•	•	1.50	1.25	1.95	1.95	10.0 ²⁾
		310	10	0.9	•	•	•	•	1.45	1.30	1.80	2.10	8.0 ²⁾
		312	12	0.7	•	•	•	•	1.25	1.35	1.65	2.00	7.0 ²⁾
		314	14	0.7	•	•	•	•	1.15	1.35	1.55	1.55	6.5 ²⁾
		316	16	0.7	•	•	•	•	0.95	1.25	1.55	1.75	6.0
		318	18	0.7	•	•	•	•	0.85	1.20	1.45	2.10	5.5
		319	19	0.7	•	•	•	•	0.95	1.25	1.55	1.65	5.0
		326	26	0.5	•	—	•	○	0.95	1.30	1.20	1.80	2.0
		332	32	0.5	•	—	•	○	0.80	1.2	0.95	1.60	1.5

B/K Series

Multipole

Male solder contacts	Female solder contacts	Reference	Number of contacts	ø A (mm)	Contact type				Solder contact		Crimp contact		Rated current (A) ¹⁾
					Solder	Crimp	Print (straight)	Print (elbow)	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 3)} Contact-shell	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 3)} Contact-shell	

3B 3K			302	2	3.0	•	•	○	—	2.10	1.55	2.30	1.80	35.0
			303	3	2.0	•	•	•	○	1.90	1.50	3.20	2.65	25.0
			304	4	2.0	•	•	•	○	1.45	1.25	2.50	2.20	19.0
			305	5	1.6	•	•	•	○	1.90	1.25	2.40	1.75	19.0
			306	6	1.6	•	•	•	•	1.60	1.15	1.90	1.80	17.0
			307	7	1.6	•	•	•	○	1.70	1.25	2.00	2.05	15.0
			308	8	1.3	•	•	•	•	1.65	1.15	1.85	1.75	13.0
			309	8 1	1.3 2.0	•	•	•	—	1.35 1.35	1.05 1.05	1.10 1.10	1.05 1.05	6.0 15.0
			310	10	1.3	•	•	•	•	1.25	0.90	1.50	1.80	12.0
			312	12	0.9	•	•	•	•	1.45	1.00	1.65	1.85	9.0
			314	14	0.9	•	•	•	•	1.20	1.20	1.80	1.65	9.0 ²⁾
			316	16	0.9	•	•	•	•	1.20	0.85	1.80	1.50	8.0
			318	18	0.9	•	•	•	•	1.20	1.05	1.85	1.60	7.0
			320	20	0.7	•	•	•	•	1.00	0.90	1.35	1.55	6.0
			322	22	0.7	•	•	•	○	1.00	0.90	1.70	1.45	5.5
			324	24	0.7	•	•	•	•	0.95	0.80	1.35	1.35	4.0
			326	26	0.7	•	•	•	○	0.95	0.70	1.50	1.30	4.0
			330	30	0.7	•	•	•	•	0.80	0.70	1.35	1.20	3.5

Multipole

4B
4K

304	4	3.0	●	●	○	2.10	1.50	1.80	1.20	30.0
306	6	2.0	●	●	○	2.00	1.75	2.75	2.40	24.0
307	7	2.0	●	●	○	2.00	1.80	1.50	1.35	20.0
310	10	1.6	●	●	○	1.85	1.30	1.90	1.95	17.0
312	12	1.3	●	●	○	1.45	1.60	1.90	1.85	12.0
316	16	0.9	●	●	●	1.35	1.50	2.30	2.10	10.0
320	20	0.9	●	●	●	1.35	1.00	1.05	0.95	8.0
324	24	0.9	●	●	●	1.20	1.45	1.80	2.05	7.0

330	30	0.9	●	●	●	0.95	0.85	1.75	1.45	5.0
340	40	0.7	●	●	●	0.90	0.90	1.30	1.30	2.0
348	48	0.7	●	●	●	0.70	0.70	1.00	1.00	1.5

B/K Series

Multipole

Reference	Number of contacts	ø A (mm)	Contact type			Solder contact		Crimp contact		Rated current (A) ¹⁾
			Solder	Crimp	Print (straight)	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 2)} Contact-shell	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ^{1) 2)} Contact-shell	

5B 5K			302	2	6.0	●	—	—	3.60	2.95	—	—	50.0
			304	4	4.0	●	●	○	2.95	2.65	3.20	2.40	35.0
			310	10	3.0	●	●	○	2.35	2.30	2.65	3.20	20.0
			314	14	2.0	●	●	○	2.10	2.00	2.85	2.95	18.0
			316	16	2.0	●	●	○	1.85	1.95	2.45	3.05	12.0
			320	20	1.6	●	●	○	1.90	1.70	2.20	2.40	10.0
			330	30	1.3	●	●	○	1.45	1.60	2.05	2.45	8.0
			340	40	1.3	●	●	○	1.30	1.45	2.00	1.95	7.0
			348	48	1.3	●	●	●	1.20	1.10	2.00	1.55	6.0
			350	50	0.9	●	●	●	1.30	1.60	1.20	1.45	6.0
			354	54	0.9	●	●	●	1.15	1.55	2.00	2.10	5.0
			364	64	0.9	●	●	●	1.30	1.55	1.35	1.85	3.0

B/K Series

Variant (B and K series)

Bend relief for B series models with collet

				Need to be ordered
	Ref.	Collet		Need to be ordered separately (see pages 141 and 142)
		Type	Code	
00	Z	D	22 to 35	GMA.00.***.## GMB.00.***.##
0B	Z	D	21 to 52	GMA.0B.***.##
1B	Z	M	27 and 31	GMA.1B.***.##
		D	42 to 72	GMA.1B.***.##
2B	Z	M	21 and 31	GMA.0B.***.##
		D	42 to 92	GMA.2B.***.##
3B	Z	M	52	GMA.1B.***.##
		D	62 to 10	GMA.3B.***.##
4B	Z	M	62 and 72	GMA.2B.***.##
		M	92	GMA.4B.***.##
		D	10 to 15	GMA.4B.***.##
5B	Z	D	11 to 15	GMA.4B.***.##

Bend relief for K series models with collet

				Need to be ordered
	Ref.	Collet		Need to be ordered separately (see pages 141 and 142)
		Type	Code	
0K	Z	C	10 to 50	GMA.0B.***.##
1K	Z	C	15 to 65	GMA.1B.***.##
		K	70 to 85	GMA.2B.***.##
2K	Z	C	15 to 85	GMA.2B.***.##
		K	90 to 10	GMA.3B.***.##
3K	Z	C	30 to 10	GMA.3B.***.##
		K	11 to 15	GMA.4B.***.##
4K	Z	C	50 to 15	GMA.4B.***.##

Note: All dimensions are in millimetres.

Colour of the bridge plug shells and connectors shell made of plastic material and aluminium alloys

Reference	Colour	Bridge plug and plastic shell			Aluminium alloys	
		PSU	PPSU	PA.6	Anodized colour	Anodized colour for bend relief collet nut
A	blue			●	●	
B	white	●		●		
G	grey	●		●		
J	yellow			●	●	
M	brown			●		
N	black			●	●	
R	red			●	●	
S	orange			●		
T	natural				●	
V	green			●	●	
L	black					●
X	natural					●
F	cream		●			

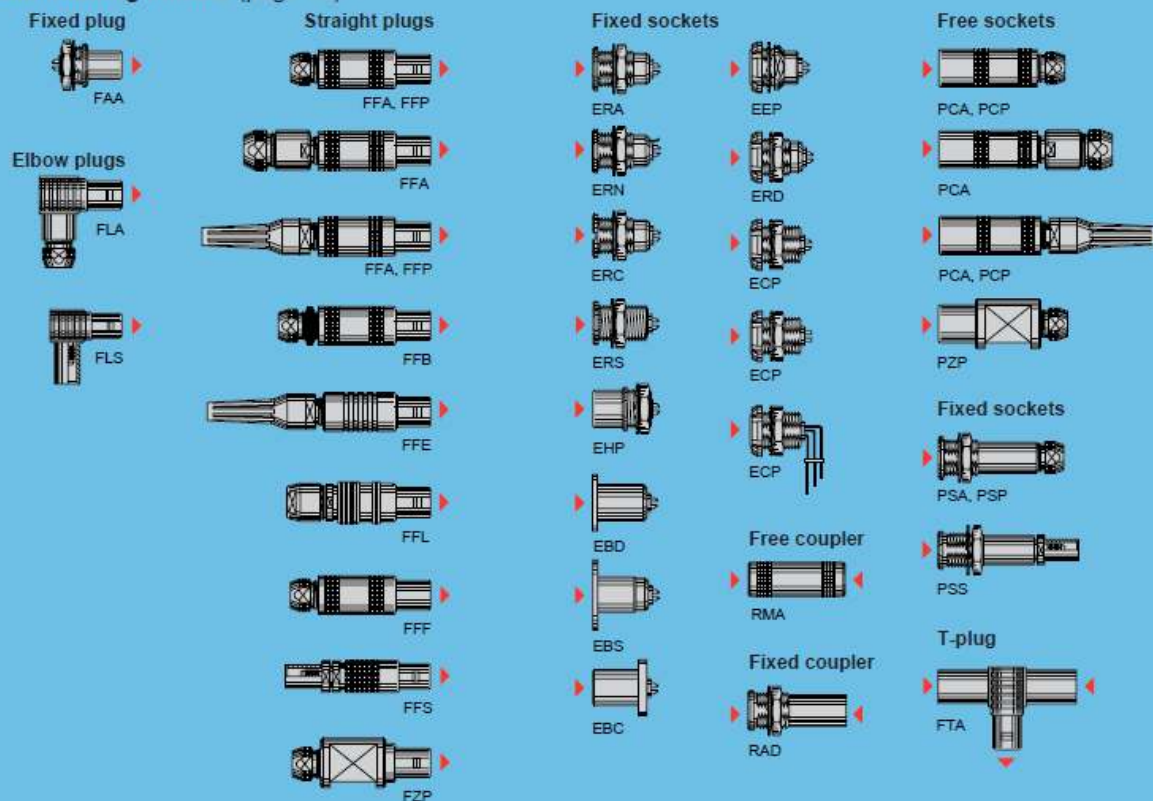
Note: other anodizing colours are available for connectors with collet nut for bend relief. Please consult us.

S Series

S series connectors have main features as follows:

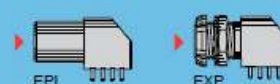
- security of the Push-Pull self-latching system
- unipole types transmitting current up to 230 A and multipole types with up to 106 contacts
- 360° screening for full EMC shielding.
- solder or print contacts (straight or elbow)
- polarisation by stepped insert (half-moon) fitted with male and female contacts

Metal housing models (page 58)

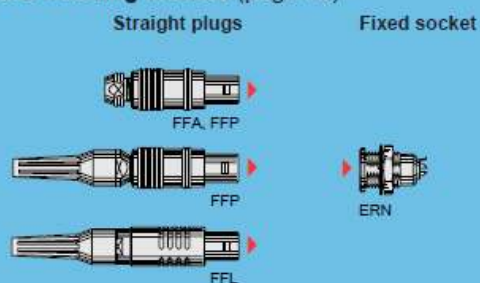


Elbow socket models (page 68)

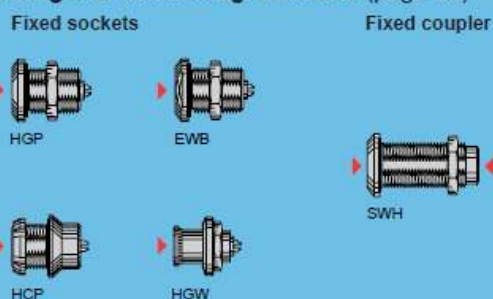
Elbow sockets



Plastic housing models (page 70)



Watertight or vacuumtight models (page 72)



S Series



Metal housing models

Technical Characteristics

Mechanical and Climatical

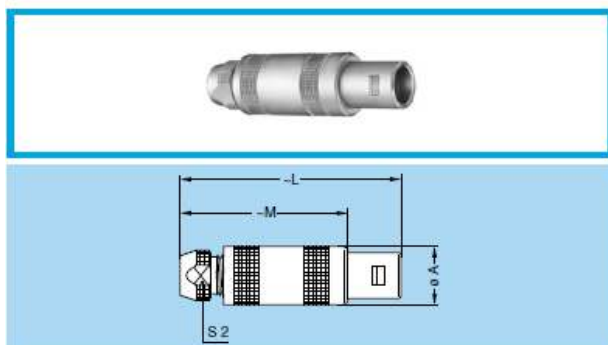
Characteristics	Value	Standard
Endurance	> 5000 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range	-55° C, +250° C	
Resistance to vibrations	10-2000 Hz, 15 g	IEC 60512-4 test 6d
Shock resistance	100 g, 6 ms	IEC 60512-4 test 6c
Salt spray corrosion test	> 144h	IEC 60512-6 test 11f
Protection index (mated)	IP 50	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Electrical

Characteristics	Value	Standard
Shielding efficiency	at 10 MHz	> 75 dB
	at 1 GHz	> 40 dB
		IEC 60169-1-3
		IEC 60169-1-3

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 chapter Technical Characteristics on page 171.

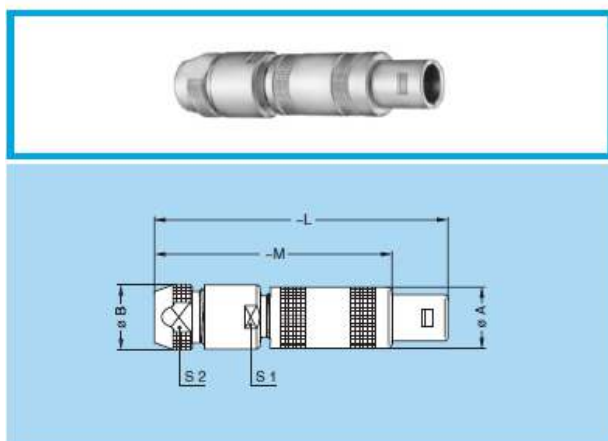


FFA Straight plug, cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFA	00	6.4	26.0	18.0	4.5
FFA	0S	9.0	34.5	24.5	6.5
FFA	1S	12.0	42.5	31.5	8.5
FFA	2S	14.8	52.0	40.0	11.0
FFA	3S	17.8	61.0	46.0	14.0
FFA	4S	24.8	77.0	59.0	19.0
FFA	5S	35.0	103.0	78.0	29.0
FFA	6S	46.0	106.0	81.0	38.0

M1

Cable assembly
(pages 163 to 165)

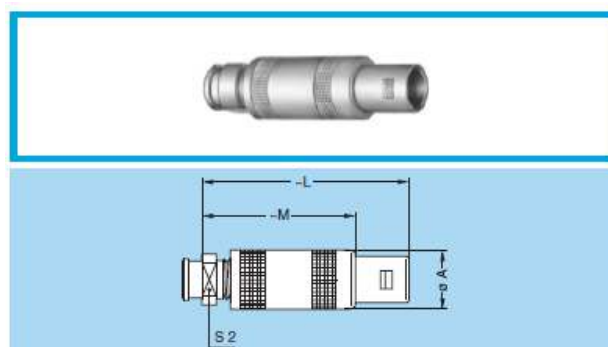


FFA Straight plug with oversize cable collet ¹⁾

Reference		Dimensions (mm)					
Model	Series	A	B	L	M	S1	S2
FFA	00	6.4	8.0	34.0	26.0	7.0	6.5
FFA	0S	9.0	10.0	45.5	35.5	9.0	8.5
FFA	1S	12.0	13.0	57.0	46.0	12.0	11.0
FFA	2S	14.8	18.0	67.0	55.0	14.0	14.0
FFA	3S	17.8	21.0	85.0	70.0	19.0	19.0
FFA	4S	24.8	31.8	107.0	89.0	28.5	29.0
FFA	5S	35.0	41.8	138.0	113.0	37.5	38.0

M2 Cable assembly (pages 164 and 166)

Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 102).



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

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFA	00	6.4	26.0	18.0	6
FFA	0S	9.0	34.5	24.5	7
FFA	1S	12.0	42.5	31.5	9
FFA	2S	14.8	52.0	40.0	12
FFA	3S	17.8	61.0	46.0	14
FFA	4S	24.8	77.0	59.0	20

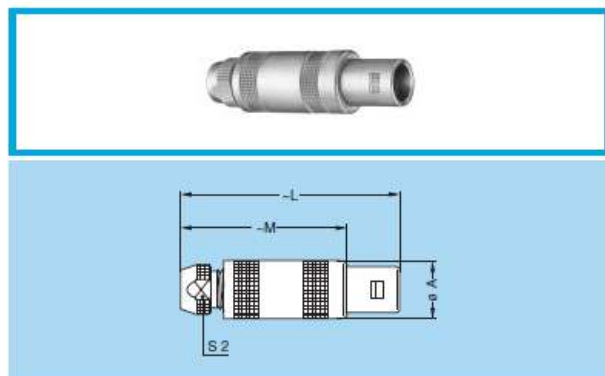
M1

Cable assembly
(pages 163 and 164)

Note:

¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately (see page 141).

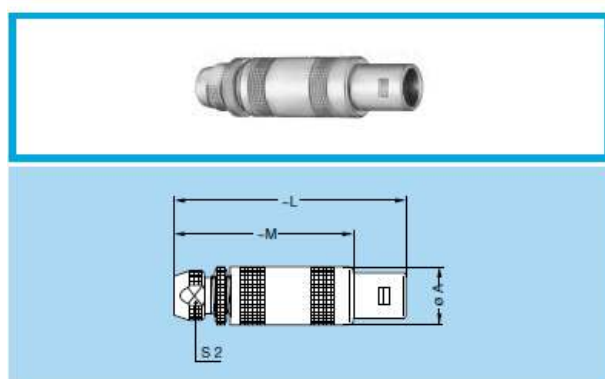
S Series



FFP Straight plug, cable collet and inner anti-rotating device

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFP	1S	12.0	42.5	31.5	8.5
FFP	2S	14.8	52.0	40.0	11.0
FFP	3S	17.8	61.0	46.0	14.0
FFP	4S	24.8	77.0	59.0	19.0

M1 Cable assembly (pages 163 and 164)

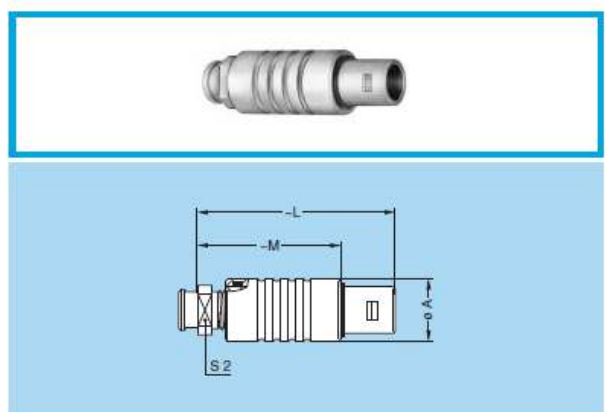


FFB Straight plug, cable collet and safety locking ring

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFB	0S	9.0	36.8	26.8	6.5
FFB	1S	12.0	45.0	34.0	8.5
FFB	2S	14.8	55.5	43.5	11.0
FFB	3S	17.8	65.0	50.0	14.0

M1 Cable assembly (pages 163 and 164)

Note: nut for fitting a bend relief (available only for size 1S).

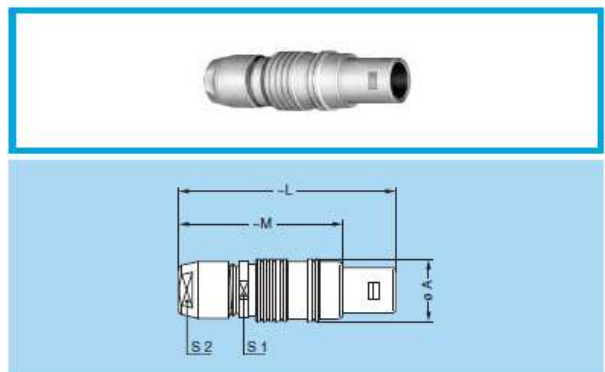


FFE Straight plug, cable collet, front seal and nut for fitting a bend relief ¹⁾
(protected to IP54 when mated)

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFE	00	7.4	26.0	18.0	6
FFE	0S	10.0	34.5	24.5	7
FFE	1S	13.0	42.5	31.5	9
FFE	2S	16.0	52.0	40.0	12
FFE	3S	19.0	61.0	46.0	14

M1 Cable assembly (pages 163 and 164)

Note: ¹⁾ to order, add a «Z» at the end of the reference.
The bend relief must be ordered separately (see page 141).



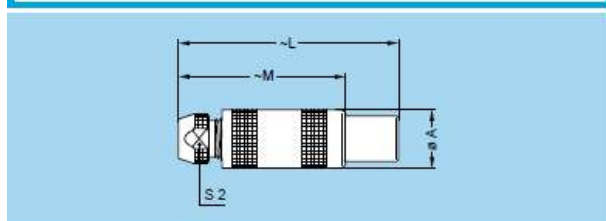
FFL Straight plug, flats on latch sleeve, cable collet and inner anti-rotating device

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FFL	2S	15.0	49.0	37.0	13	12

M4 Cable assembly (page 165)

Note: this model is fitted with a «D or M» type collet system.
It is also adapted for crimp contacts.
Available only for multipole.

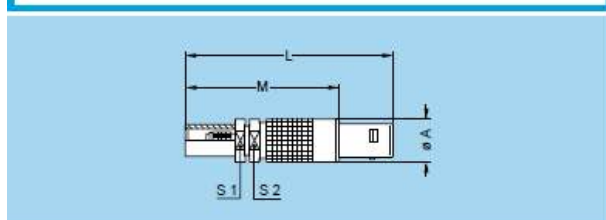
S Series



FFF Straight plug, non-latching, cable collet

Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
FFF	00	6.4	26.0	18.0	4.5
FFF	0S	9.0	34.5	24.5	6.5
FFF	1S	12.0	42.5	31.5	8.5
FFF	2S	14.8	52.0	40.0	11.0

M1 Cable assembly (pages 163 and 164)

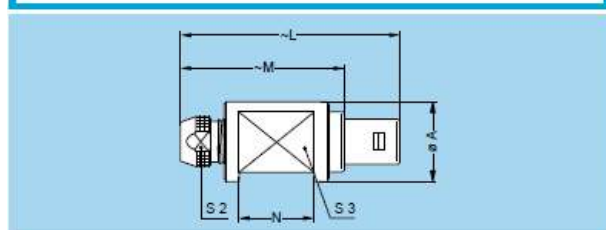
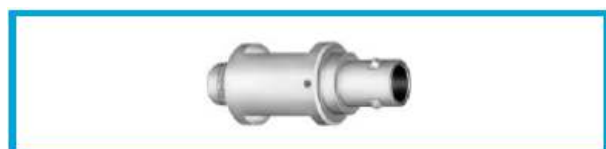


FFS Straight plug for cable crimping

Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
FFS	00	6.4	31	23	5.5	5.5

M5 Cable assembly (page 163)

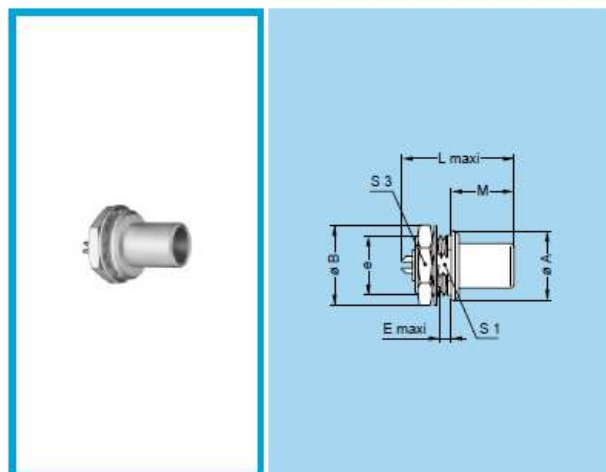
Note: Model available only with crimp backnut E31 similar to 00.250 series.



FZP Straight plug for remote handling, cable collet and inner anti-rotating device

Reference		Dimensions (mm)					
Model	Series	A	L	M	N	S2	S3
FZP	1S	16	42.5	31.5	15	8.5	12
FZP	2S	24	52.0	40.0	21	11.0	18
FZP	3S	24	61.0	46.0	24	14.0	18
FZP	4S	35	77.0	59.0	30	19.0	28
FZP	5S	43	103.0	78.0	44	29.0	35
FZP	6S	60	106.0	81.0	44	38.0	50

M1 Cable assembly (pages 163 to 165)



FAA Fixed plug non-latching, nut fixing

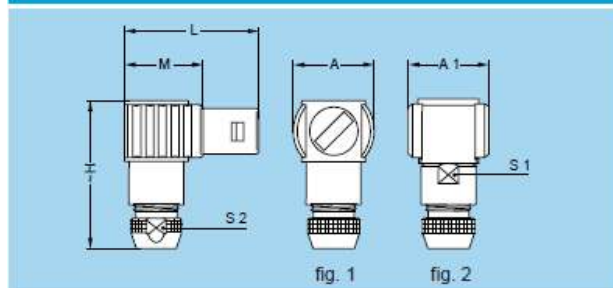
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
FAA	00	8	10.2	M7x0.5	2.0	—	15.5	9.0	6.3	9
FAA	0S	10	12.4	M9x0.6	2.0	18.5	18.0	11.2	8.2	11
FAA	1S	14	15.8	M12x1.0	2.5	22.5	21.7	12.5	10.5	14
FAA	2S	18	19.2	M15x1.0	4.0	25.0	25.3	13.8	13.5	17
FAA	3S	22	25.0	M18x1.0	4.0	31.0	29.0	17.0	16.5	22
FAA	4S	28	34.0	M25x1.0	2.5	35.5	39.0	20.5	23.5	30
FAA	5S	40	40.0	M35x1.0	2.5	45.0	—	28.0	33.5	—
FAA	6S	54	54.0	M48x1.5	2.5	45.0	—	28.0	—	—

P1 Panel cut-out (page 152)

P2 Panel cut-out 6S series (page 152)

Note: ¹⁾ unipole model

S Series



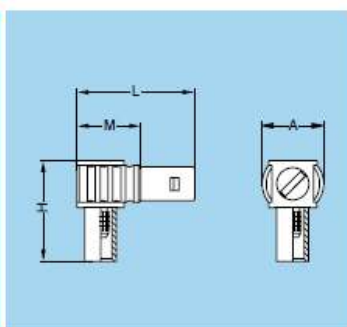
FLA Elbow (90°) plug, cable collet

Reference		Dimensions (mm)						
Model	Series	A	A1	H	L	M	S1	S2
FLA	00	9	—	16.0	17.5	9.5	—	4.5
FLA	0S	13	13	24.5	23.0	13.0	8	6.5
FLA	1S	16	16	28.5	26.5	15.5	10	8.5
FLA	2S	20	20	37.0	31.0	19.0	13	11.0
FLA	3S	21	21	44.0	38.5	23.5	15	14.0
FLA	4S	28	28	56.0	49.0	31.0	20	19.0
FLA	5S	—	37	76.5	65.0	40.0	30	29.0
FLA	6S	—	48	94.0	81.0	56.0	40	38.0

M3 Cable assembly (pages 163 to 165)

Note:
fig. 1 is used for the unipole type, fig. 2 is used for the multipole type.

- Maximum operating temperature: 120°C



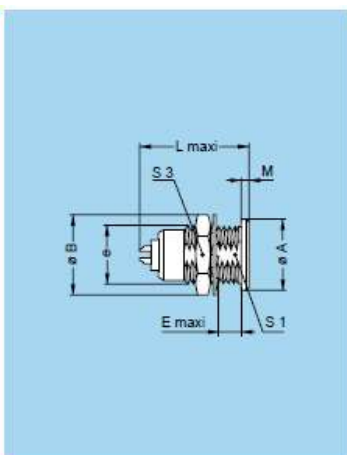
FLS Elbow (90°) plug for cable crimping

Reference		Dimensions (mm)			
Model	Series	A	H	L	M
FLS	00	9	16	17.5	9.5

M6 Cable assembly (page 163)

Note: Model available only with crimp backnut E31 similar to 00.250 series.

- Maximum operating temperature: 120°C



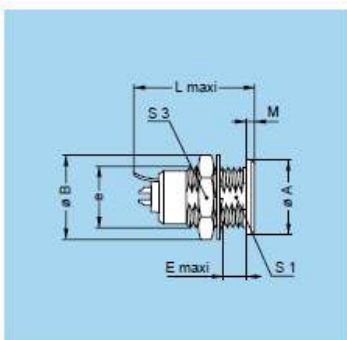
ERA Fixed socket, nut fixing

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
ERA	00	8	10.2	M7x0.5	5.5	—	14.5	1.0	6.3	9
ERA	0S	10	12.4	M9x0.6	7.0	17.5	18.0	1.2	8.2	11
ERA	1S	14	15.8	M12x1.0	7.5	20.2	20.5	1.5	10.5	14
ERA	2S	18	19.2	M15x1.0	8.5	24.5	23.5	1.8	13.5	17
ERA	3S	22	25.0	M18x1.0	11.5	29.0	27.5	2.0	16.5	22
ERA	4S	28	34.0	M25x1.0	12.0	34.0	33.5	2.5	23.5	30
ERA	5S	40	40.0	M35x1.0	15.5	45.0	78.5	3.0	33.5	—
ERA	6S	54	54.0	M48x1.5	16.0	45.0	—	3.5	45.5	—

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model

Note: the 5S series is delivered with a tapered washer and a round nut. The 6S series is delivered without a locking washer and with a round nut.



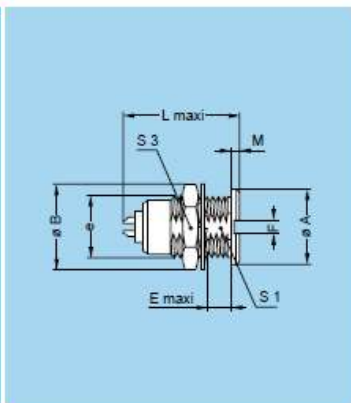
ERN Fixed socket, nut fixing, with earthing tag

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
ERN	0S	10	12.4	M9x0.6	7.0	19.3	19.3	1.2	8.2	11
ERN	1S	14	15.8	M12x1.0	7.5	22.4	22.4	1.5	10.5	14
ERN	2S	18	19.2	M15x1.0	8.5	26.3	26.3	1.8	13.5	17
ERN	3S	22	25.0	M18x1.0	11.5	29.8	29.8	2.0	16.5	22

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model

S Series

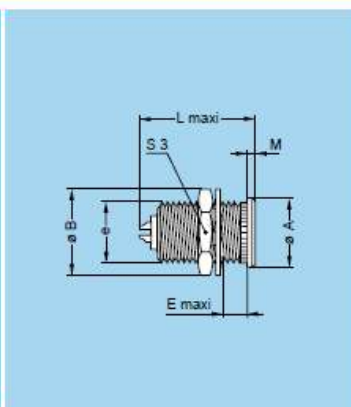


ERC Fixed socket, nut fixing with slot in the flange

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	F	L	L ¹⁾	M	S1	S3
ERC	00	8	10.2	M7x0.5	5.5	1.6	—	14.5	1.0	6.3	9
ERC	0S	10	12.4	M9x0.6	7.0	2.0	17.5	18.0	1.2	8.2	11
ERC	1S	14	15.8	M12x1.0	7.5	2.5	20.2	20.5	1.5	10.5	14

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model

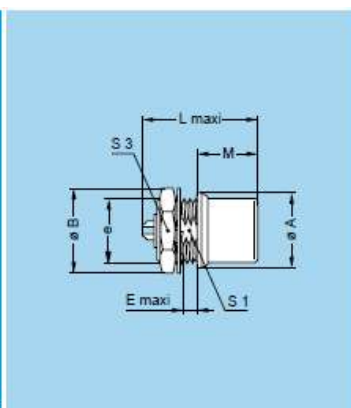


ERS Fixed socket, nut fixing, long threaded shell, without flats

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	L ¹⁾	M	S3
ERS	0S	10	12.4	M9x0.6	10.5	17.5	18.0	1.2	11

P2 Panel cut-out (page 152)

Note: ¹⁾ unipole model



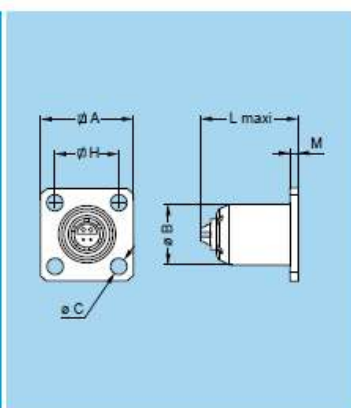
EHP Fixed socket, nut fixing, protruding shell

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
EHP	0S	10	12.4	M9x0.6	2.0	20.5	18.0	12.5	8.2	11
EHP	1S	14	15.8	M12x1.0	3.5	20.2	20.5	12.0	—	14
EHP	3S	22	25.0	M18x1.0	4.0	29.0	29.0	18.7	—	22

P1 Panel cut-out 0S series (page 152)

P2 Panel cut-out (page 152)

Note: ¹⁾ unipole model



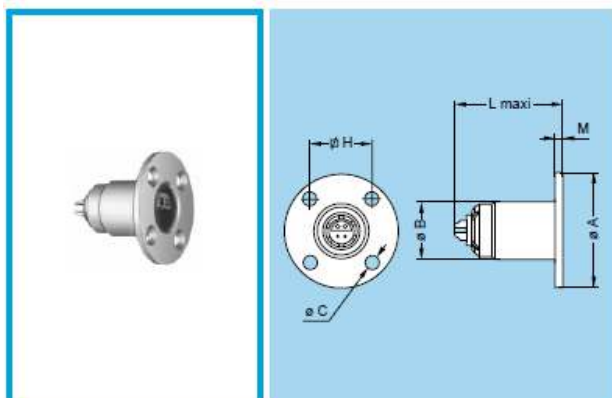
EBD Fixed socket with square flange and screw fixing

Reference		Dimensions (mm)						
Model	Series	A	B	C	H	L	L ¹⁾	M
EBD	2S	22	15	3.2	15.5	24.5	26	2

P6 Panel cut-out (page 152)

Note: ¹⁾ unipole model

S Series

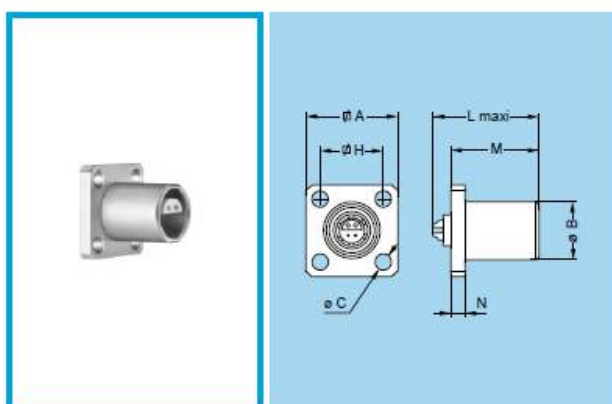


EBS Fixed socket with round flange and screw fixing

Reference		Dimensions (mm)						
Model	Series	A	B	C	H	L	L ¹⁾	M
EBS	1S	22	11	2.5	12.4	20.2	20.5	1.5

P7 Panel cut-out (page 152)

Note: ¹⁾ unipole model

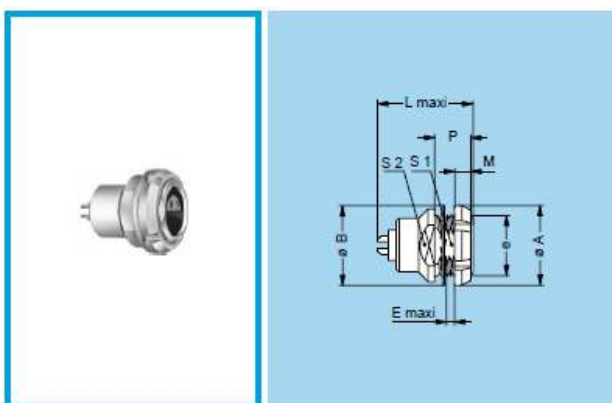


EBC Fixed socket with square flange, protruding shell and screw fixing

Reference		Dimensions (mm)							
Model	Series	A	B	C	H	L	L ¹⁾	M	N
EBC	1S	18	11.5	3.2	12.7	20.2	20.5	16.5	2.8
EBC	2S	22	15.0	3.2	15.5	24.5	23.5	18.5	4.4
EBC	3S	25	18.0	3.2	18.0	29.0	27.5	23.5	3.0
EBC	5S	45	40.0	4.3	36.8	45.0	78.5	15.0	4.0

P6 Panel cut-out (page 152)

Note: ¹⁾ unipole model

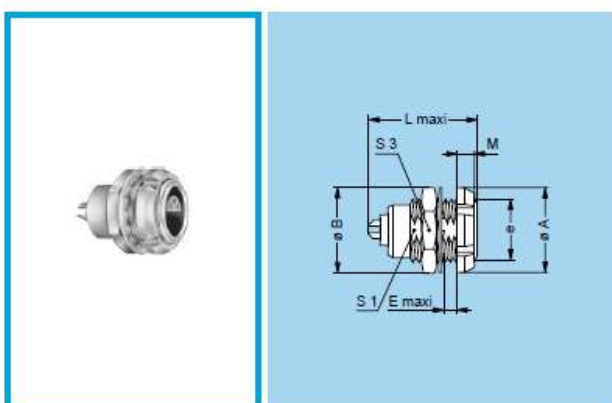


EEP Fixed socket, nut fixing (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	L ¹⁾	M	P	S1	S2
EEP	2S	20	19.5	M15x1	3.5	24.5	23.5	3.5	9	13.5	15

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model



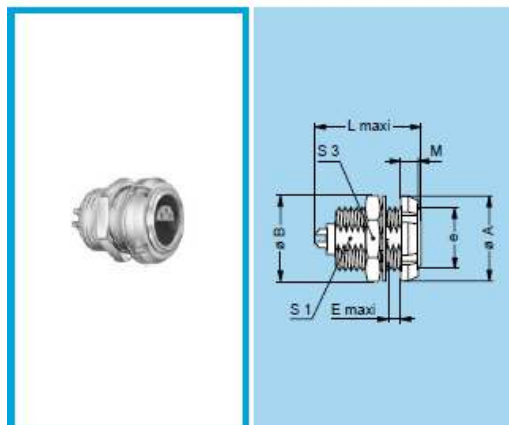
ERD Fixed socket with two nuts (back panel mounting)

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3	
ERD	0S	12	12.4	M9x0.6	5.5	17.5	18.0	2.5	8.2	11	
ERD	1S	16	15.8	M12x1.0	6.0	20.2	20.5	3.5	10.5	14	
ERD	2S	20	19.2	M15x1.0	6.5	24.5	23.5	3.5	13.5	17	
ERD	3S	24	25.0	M18x1.0	9.0	29.0	27.5	4.5	16.5	22	
ERD	4S	30	34.0	M25x1.0	10.0	34.0	33.5	4.5	23.5	30	

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model.
The 3S and 4S series are delivered with a conical nut.

S Series

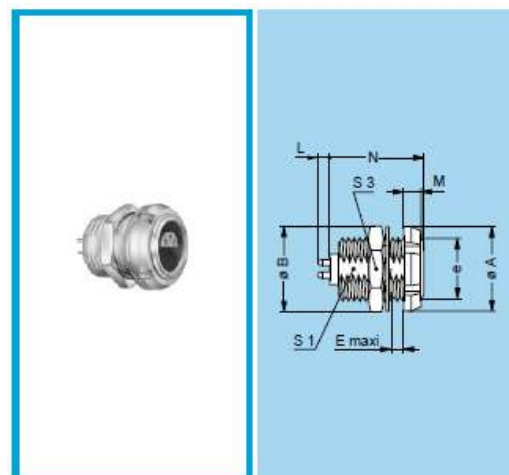


ECP Fixed socket with two nuts, long threaded shell
(back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
ECP	0S	12	12.4	M9x0.6	8.5	17.5	18.5	2.5	8.2	11
ECP	1S	16	15.8	M12x1.0	10.0	20.2	21.5	3.5	10.5	14
ECP	2S	20	19.2	M15x1.0	11.0	24.5	26.0	3.5	13.5	17
ECP	3S	24	25.0	M18x1.0	14.0	29.0	30.0	4.5	16.5	22

P1 Panel cut-out (page 152)

Note: ¹⁾ unipole model.
The 3S series is delivered with a conical nut.



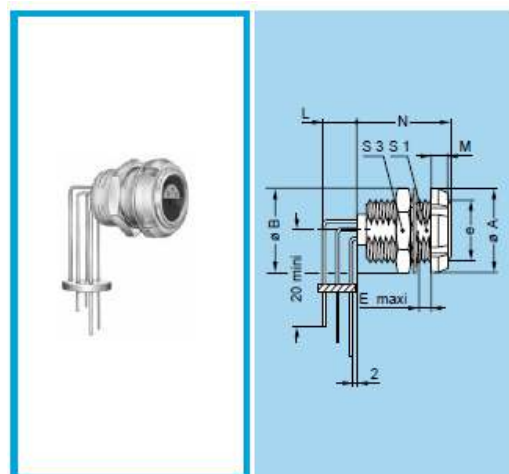
ECP Fixed socket with two nuts, long threaded shell,
with straight contact for printed circuit
(back panel mounting)

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	S1	S3	
ECP	0S	12	12.4	M9x0.6	8.5	2.5	15.0	8.2	11	
ECP	1S	16	15.8	M12x1.0	10.0	3.5	17.5	10.5	14	
ECP	2S	20	19.2	M15x1.0	11.0	3.5	20.0	13.5	17	
ECP	3S	24	25.0	M18x1.0	14.0	4.5	24.0	16.5	22	

P1 Panel cut-out (page 152)

P21 PCB drilling pattern (page 159)

Note: this contact type is available for all E●● socket models.
See page 159 for table of available types.
Length «L» depends on the number of contacts, see table on page 159.
The 3S series is delivered with a conical nut.



ECP Fixed socket with two nuts, long threaded shell,
with elbow (90°) contacts for printed circuit
(back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	M	N	S1	S3
ECP	0S	12	12.4	M9x0.6	8.5	2.5	15.0	8.2	11
ECP	1S	16	15.8	M12x1.0	10.0	3.5	17.5	10.5	14
ECP	2S	20	19.2	M15x1.0	11.0	3.5	20.0	13.5	17
ECP	3S	24	25.0	M18x1.0	14.0	4.5	24.0	16.5	22

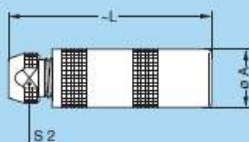
P1 Panel cut-out (page 152)

P24 PCB drilling pattern (page 160)

Note: this contact type is available for all back panel mounting socket types.
See page 160 for available types.
Length «L» depends on the number of contacts, see PCB drilling pattern on page 160.
The 3S series is delivered with a conical nut.

S Series

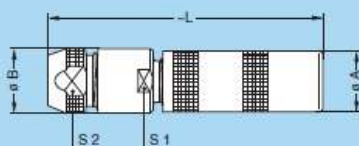
PCA Free socket, cable collet



Reference		Dimensions (mm)		
Model	Series	A	L	S2
PCA	00	6.5	25.0	4.5
PCA	0S	8.9	33.5	6.5
PCA	1S	11.9	40.5	8.5
PCA	2S	14.8	50.0	11.0
PCA	3S	17.8	59.0	14.0
PCA	4S	24.8	75.0	19.0
PCA	5S	34.7	99.0	29.0
PCA	6S	46.0	102.0	38.0

M1 Cable assembly (pages 163 to 165)

PCA Free socket with oversize cable collet ¹⁾

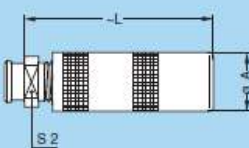


Reference		Dimensions (mm)					
Model	Series	A	B	L	S1	S2	
PCA	00	6.5	8.0	33.0	7.0	6.5	
PCA	0S	8.9	10.0	44.5	9.0	8.5	
PCA	1S	11.9	13.0	55.0	12.0	11.0	
PCA	2S	14.8	18.0	65.0	14.0	14.0	
PCA	3S	17.8	21.0	83.0	19.0	19.0	
PCA	4S	24.8	31.8	105.0	28.5	29.0	

M2 Cable assembly (pages 164 and 166)

Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 102).

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

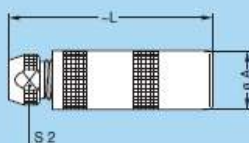


Reference		Dimensions (mm)		
Model	Series	A	L	S2
PCA	00	6.5	25.0	6
PCA	0S	8.9	33.5	7
PCA	1S	11.9	40.5	9
PCA	2S	14.8	50.0	12
PCA	3S	17.8	59.0	14
PCA	4S	24.8	75.0	20

M1
Cable assembly
(pages 163 and 164)

Note: ¹⁾ to order, add a «Z» at the end of the reference.
The bend relief must be ordered separately (see page 141).

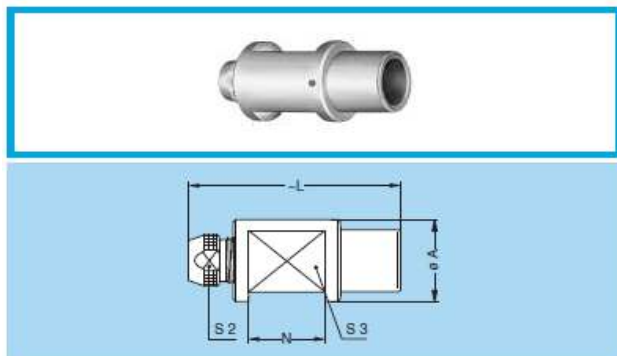
PCP Free socket, cable collet and inner anti-rotating device



Reference		Dimensions (mm)		
Model	Series	A	L	S2
PCP	1S	11.9	40.5	8.5
PCP	2S	14.8	50.0	11.0
PCP	3S	17.8	59.0	14.0
PCP	4S	24.8	75.0	19.0

M1 Cable assembly (pages 163 and 164)

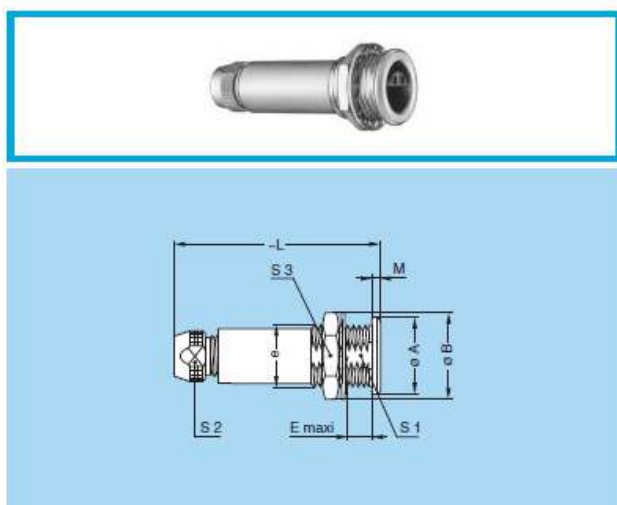
S Series



PZP Free socket for remote handling
with cable collet and inner anti-rotating device

Reference		Dimensions (mm)				
Model	Series	A	L	N	S2	S3
PZP	1S	16	40.5	15	8.5	12
PZP	2S	24	50.0	21	11.0	18
PZP	3S	24	59.0	24	14.0	18

M1 Cable assembly (pages 163 and 164)



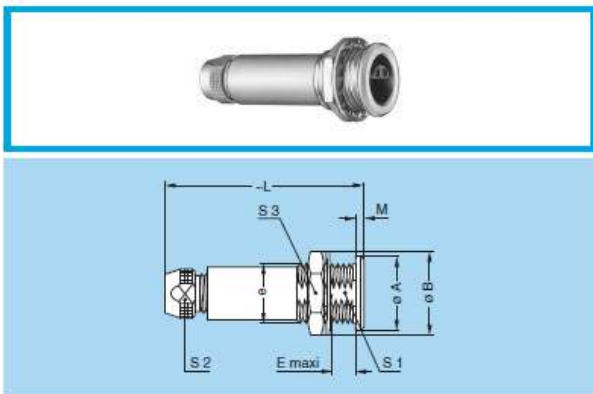
PSA Fixed socket, nut fixing, cable collet

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S2	S3
PSA	00	8	10.2	M7x0.5	5.5	25.0	1.0	6.3	4.5	9
PSA	0S	10	12.4	M9x0.6	7.0	33.5	1.2	8.2	6.5	11
PSA	1S	14	15.8	M12x1.0	7.5	40.5	1.5	10.5	8.5	14
PSA	2S	18	19.2	M15x1.0	8.5	50.0	1.8	13.5	11.0	17
PSA	3S	22	25.0	M18x1.0	11.5	59.0	2.0	16.5	14.0	22
PSA	4S	28	34.0	M25x1.0	12.0	75.0	2.5	23.5	19.0	30
PSA	5S	40	40.0	M35x1.0	15.5	99.0	3.0	33.5	29.0	—
PSA	6S	54	54.0	M48x1.5	16.0	102.0	3.5	45.5	38.0	—

M1 Cable assembly (pages 163 to 165)

P1 Panel cut-out (page 152)

Note: the 5S series is delivered with a tapered washer and a round nut.
The 6S series is delivered without a locking washer and with a round nut.

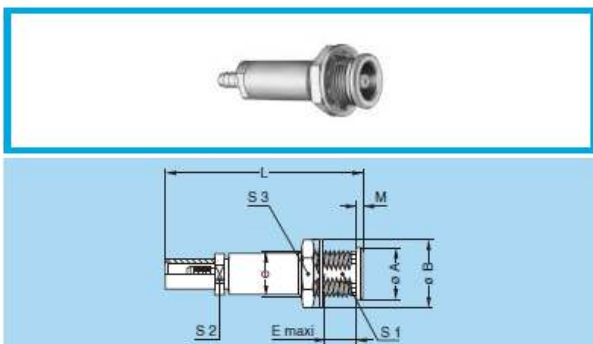


PSP Fixed socket, nut fixing, cable collet
and inner anti-rotating device

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	S1	S2	S3	
PSP	1S	14	15.8	M12x1.0	7.5	40.5	1.5	10.5	8.5	14	
PSP	2S	18	19.2	M15x1.0	8.5	50.0	1.8	13.5	11.0	17	
PSP	3S	22	25.0	M18x1.0	11.5	59.0	2.0	16.5	14.0	22	
PSP	4S	28	34.0	M25x1.0	12.0	75.0	2.5	23.5	19.0	30	

M1 Cable assembly (pages 163 and 164)

P1 Panel cut-out (page 152)



PSS Free socket, nut fixing for cable crimping

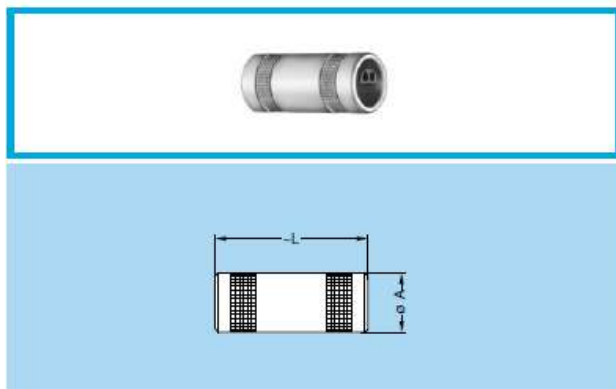
Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S2	S3
PSS	00	8	10.2	M7x0.5	5.5	30	1	6.3	5.5	9

M5 Cable assembly (page 163)

P1 Panel cut-out (page 152)

Note: Model available only with crimp backnut E31 similar to 00.250 series.

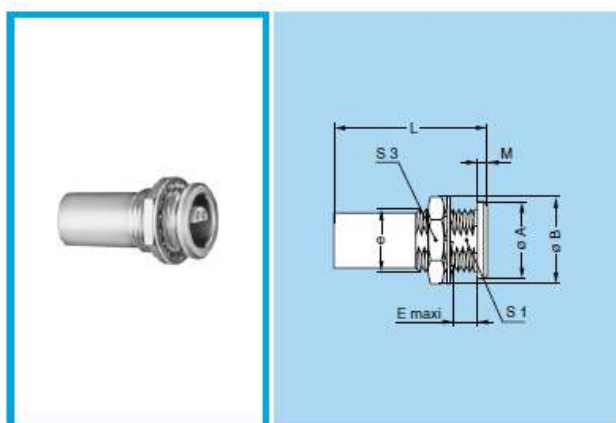
S Series



RMA Free coupler

Reference		Dim. (mm)	
Model	Series	A	L
RMA	00	6.4	22.0
RMA	0S	8.9	25.0
RMA	1S	11.9	28.5
RMA	2S	14.8	31.5
RMA	3S	17.8	38.5
RMA	4S	24.8	46.5
RMA	5S	34.7	60.5

Note: see page 101 for the available plug and contact configurations and in order to ensure correct contact alignment.



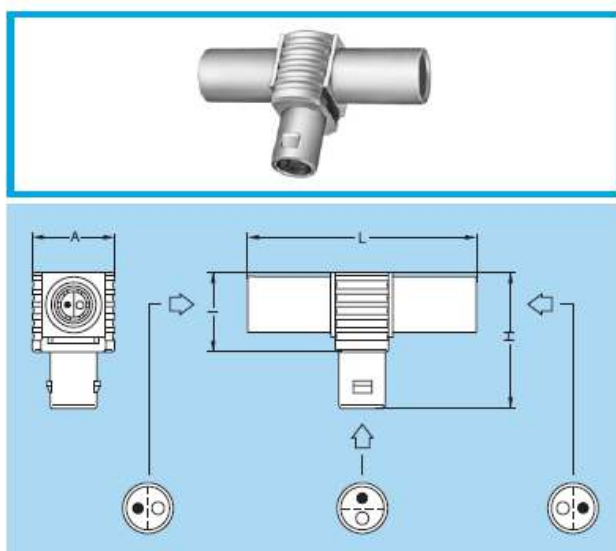
RAD Fixed coupler, nut fixing

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S2
RAD	00	8	10.2	M7x0.5	5.5	22.0	1.0	6.3	9
RAD	0S	10	12.4	M9x0.6	7.0	25.0	1.2	8.2	11
RAD	1S	14	15.8	M12x1.0	7.5	28.5	1.5	10.5	14
RAD	2S	18	19.2	M15x1.0	8.5	31.5	1.8	13.5	17
RAD	3S	22	25.0	M18x1.0	11.5	38.5	2.0	16.5	22
RAD	4S	28	34.0	M25x1.0	12.0	46.5	2.5	—	30
RAD	5S	40	40.0	M35x1.0	15.5	60.5	3.0	—	—

P1 Panel cut-out (page 152)

P2 Panel cut-out 4S and 5S series (page 152)

Note: the 5S series is delivered with a tapered washer and a round nut.



FTA T-plug with two in line sockets

Reference		Dimensions (mm)			
Model	Series	A	H	I	L
FTA	00	9	17.5	9.5	30
FTA	0S	13	23.0	13.0	38
FTA	1S	16	26.5	16.5	45
FTA	3S	21	38.5	23.5	64

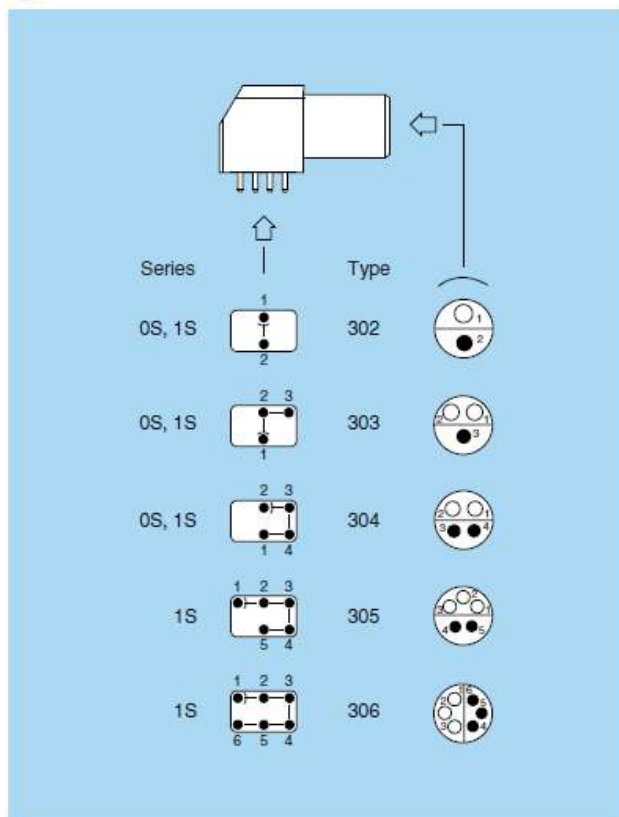
Note: multipole version available only with 2 contacts (type 302).

S Series

Elbow socket models

Technical Characteristics

Types



Materials and Treatment

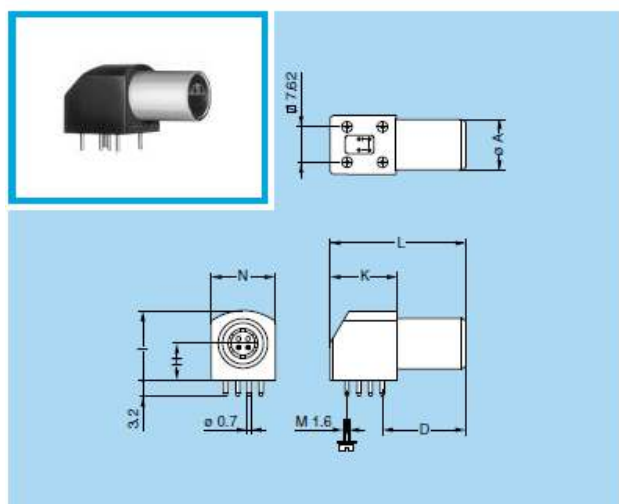
Component	Material	Surface Treat. (µm)		
		Cu	Ni	Au
Housing	PPS ¹⁾	–	–	–
	Brass	0.5	3	–
Metallic parts	Brass	0.5	3	–
Earthing crown	Bronze	0.5	3	–
Insulator	PEEK	–	–	–
Female contact	Bronze	0.5	3	1.5

Note: ¹⁾ not used for all sizes.
The surface treatment standards are as follows:
– Nickel FS QQ-N-290A
– Gold: ISO 27874

Electrical

Model	Series	Types	Test voltage (kV rms) ¹⁾	Rated current (A)
EPL	0S	302-303-304	1.20	4.5
EXP	0S			
EPL	1S			
EXP	1S	305-306	0.70	4.5
EPL	1S			
EXP	1S			

Note:
¹⁾ see calculation method, caution and suggested standard on page 178.



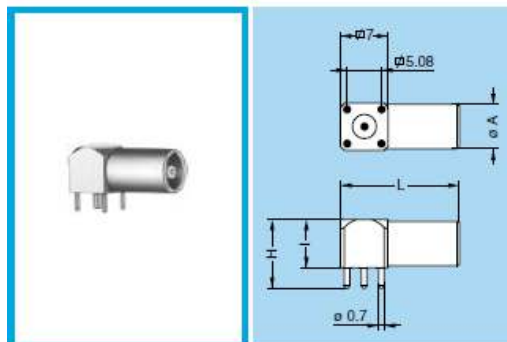
EPL Elbow (90°) socket for printed circuit (solder or screw fixing)

Part Number	Dimensions (mm)						
	A	D	H	I	K	L	N
EPL.0S.302.HLN	9	14.6	6.7	12.6	13.3	25	11.7
EPL.0S.303.HLN							
EPL.0S.304.HLN							
EPL.1S.302.HLN	11	16.6	7.5	14.0	13.3	27	12.6
EPL.1S.303.HLN							
EPL.1S.304.HLN							
EPL.1S.305.HLN							
EPL.1S.306.HLN							

Note: to replace the 4 ground pins by 4 screws (M1.6) add an «S» to the end of the part number. (e.g.: EPL.1S.303.HLNS)

P22 PCB drilling pattern (page 160)

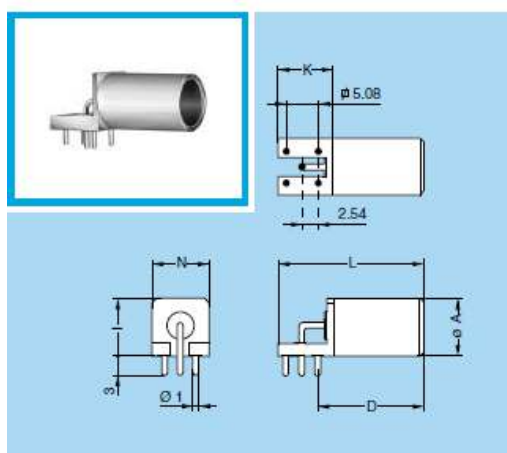
S Series



EPL Elbow (90°) socket for printed circuit

Part Number	Dim. (mm)		
	A	H	I
EPL.00.113.NLN	6.8	10	7

P23 PCB drilling pattern (page 160)

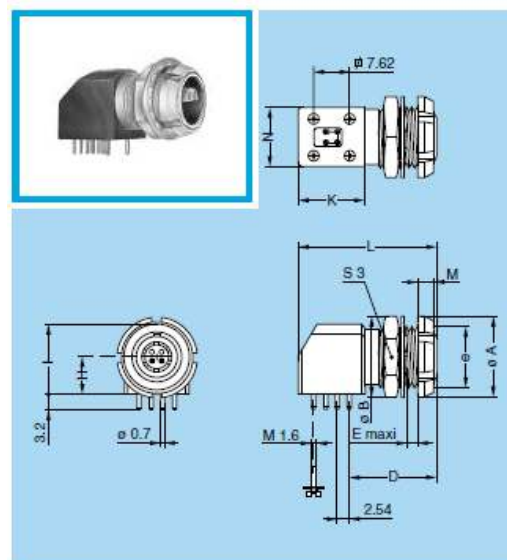


EPL Elbow (90°) socket for printed circuit

Part Number	Dimensions (mm)						
	A	D	H	I	K	L	N
EPL.0S.116.DTL	8.8	16	12	9	7.7	22.7	9

Note: available only in unipole version.

P23 PCB drilling pattern (page 160)



EXP Elbow (90°) socket for printed circuit with two nuts (solder or screw fixing)

Part Number	Dimensions (mm)											
	A	B	D	e	E	H	I	K	L	M	N	S3
EXP.0S.302.HLN												
EXP.0S.303.HLN	12	12.4	14.6	M9x0.6	6.0	6.7	12.6	13.3	25	2.5	11.7	11
EXP.0S.304.HLN												
EXP.1S.302.HLN												
EXP.1S.303.HLN												
EXP.1S.304.HLN	14	15.0	16.6	M11x0.5	7.5	7.5	14.0	13.3	27	3.5	12.6	13
EXP.1S.305.HLN												
EXP.1S.306.HLN												

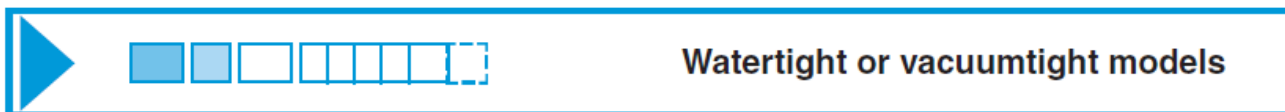
Note: to replace the 4 ground pins by 4 screws (M1.6) add an «S» to the end of the part number. (e.g.: EXP.1S.303.HLNS).

P2 Panel cut-out 0S series (page 152)

P10 Panel cut-out 1S series (page 152)

P22 PCB drilling pattern (page 160)

S Series



Watertight or vacuumtight models

These socket or coupler models 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.

Most of 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).

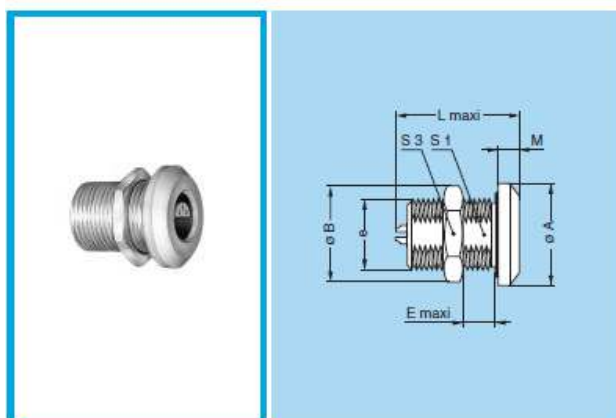
Epoxy resin is used to seal these models.

Technical Characteristics

Mechanical and Climatcal

Characteristics	Value	Standard
Endurance	> 5000 cycles	IEC 60512-5 test 9a
Humidity	up to 95% at 60° C	
Temperature range (0S-1S)	- 20° C/+100° C	
Temperature range (2S-6S)	- 20° C/+80° C	
Salt spray corrosion test	> 144h	IEC 60512-6 test 11f
Climatical category	20/80/21	IEC 60068-1
Leakage rate (He) ¹⁾	< 10 ⁻⁷ mbar.L.s ⁻¹	IEC 60512-7 test 14b

Characteristics	Value	Standard
Maximum operating pressure ²⁾	0S	60 bars
	1S	60 bars
	2S	40 bars
	3S	30 bars
	4S	15 bars
	5S	5 bars
	6S	5 bars
		IEC 60512-7 test 14d



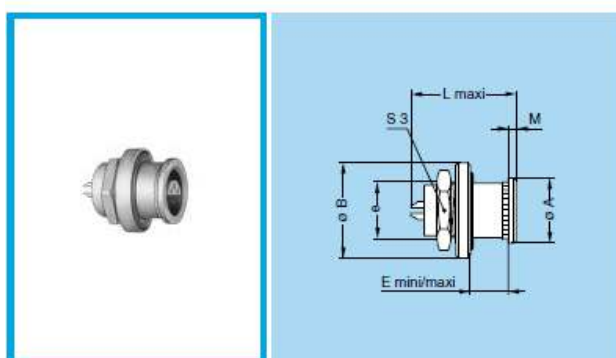
HGP Fixed socket, nut fixing, watertight or vacuumtight

Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3
HGP	0S	18	15.8	M12x1.0	11.5	20.5	21.5	4.0	10.5	14
HGP	1S	20	19.2	M14x1.0	15.5	25.0	22.0	4.0	12.5	17
HGP	2S	20	21.5	M16x1.0	17.0	29.5	28.0	4.0	14.5	19
HGP	3S	28	27.0	M20x1.0	18.0	33.0	34.0	6.0	18.5	24
HGP	4S	34	34.0	M25x1.0	22.5	39.0	43.0	6.5	23.5	30
HGP	5S	45	40.0	M35x1.0	28.0	50.5	78.5	7.5	33.5	—
HGP	6S	58	54.0	M48x1.5	22.0	51.0	—	6.0	45.5	—

P3 Panel cut-out (page 152)

Note: ¹⁾ unipole model

Note: the 5S and 6S series are delivered with a round nut.



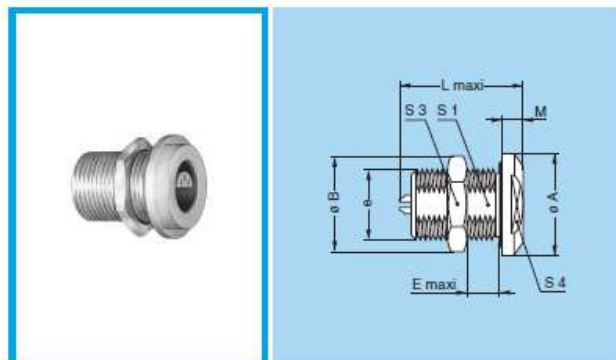
HGW Fixed socket, nut fixing, with back washer, watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E _{mini}	E _{maxi}	L	M	S3
HGW	0S	10	15	M9x0.6	2.0	3.0	20.5	1.2	11
HGW	1S	14	18	M12x1.0	2.0	4.0	25.0	1.5	14

P11 Panel cut-out (page 152)

Note: vacuumtight version is only available in the 0S series.

S Series

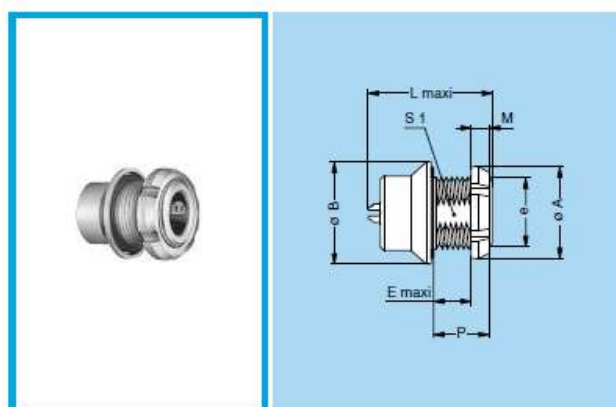


EWB Fixed socket, nut fixing, with two flats on the flange, watertight or vacuumtight

Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	L ¹⁾	M	S1	S3	S4
EWB	0S	18	15.8	M12x1.0	11.0	20.5	—	4.0	10.5	14	14
EWB	1S	20	19.2	M14x1.0	15.5	25.5	25.5	4.0	12.5	17	16
EWB	2S	20	21.5	M16x1.0	17.0	28.0	26.5	4.0	14.5	19	16
EWB	4S	34	34.0	M25x1.0	22.5	43.0	—	6.5	23.5	30	27

P3 Panel cut-out (page 152)

Note: ¹⁾ unipole model

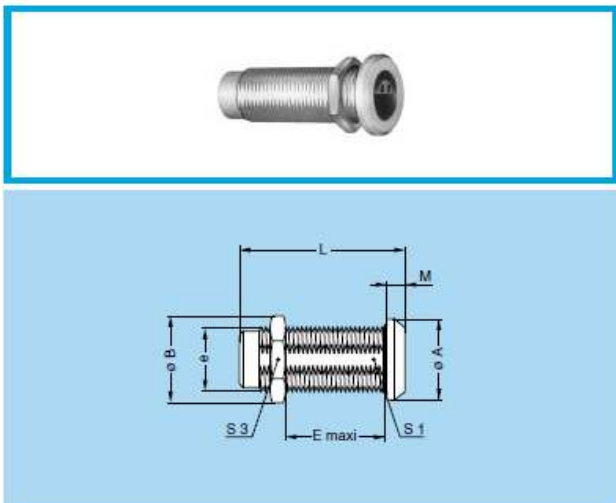


HCP Fixed socket, nut fixing, watertight or vacuumtight (back panel mounting)

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	P	S1
HCP	1S	18	20	M14x1.0	8.6	25.5	3.5	12.0	—
HCP	2S	20	20	M16x1.0	12.5	29.0	3.5	16.5	14.5
HCP	4S	27	34	M25x1.0	15.5	41.0	4.5	20.0	23.5

P3 Panel cut-out (page 152)

Note: the 2S and 4S series are delivered with a conical nut.



SWH Fixed coupler, nut fixing, watertight or vacuumtight

Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
SWH	0S	14	13.8	M10x0.75	17	34	2.0	9.0	12
SWH	1S	17	15.8	M12x1.00	28	39	2.5	10.5	14
SWH	2S	20	21.5	M16x1.00	25	44	4.0	15.0	19
SWH	3S	25	27.0	M20x1.00	30	53	4.0	18.5	24
SWH	4S	34	34.0	M25x1.00	50	65	4.0	23.5	30
SWH	5S	45	40.0	M35x1.00	58	80	5.0	33.5	—
SWH	6S	58	54.0	M48x1.50	55	81	6.0	45.5	—

P4 Panel cut-out (page 152)

























Note: see page 101 for the available plug and contact configurations and in order to ensure correct contact alignment.
The 5S and 6S series are delivered with a round nut.

S Series

Insert configuration (S, E and L series)

Unipole

Unipole

	 Male solder contacts	 Female solder contacts	Reference	Series		ø A (mm)	Contact type		Test voltage (kV rms) ¹⁾	Test voltage (kV dc) ¹⁾	Rated current (A) ¹⁾
				Standard	Watertight		Solder	Crimp			
00			113	00	-	1.3	● ²⁾	●	0.8	1.2	8
0S 0E			116	0S	0E	1.6	● ²⁾	-	1.5	2.1	12
1S 1E			120	1S	1E	2.0	● ²⁾	-	1.9	2.7	18
			130	1S	1E	3.0	●	-	1.5	2.1	25
2S 2E			130	2S	2E	3.0	●	-	2.1	3.0	30
			140	2S	2E	4.0	●	-	1.7	2.4	40
3S 3E			140	3S	3E	4.0	●	-	2.3	3.3	43
			160	3S	3E	6.0	●	-	1.7	2.4	65
4S 4E			140	4S	-	4.0	●	-	3.0	4.2	46
			160	4S	4E	6.0	●	-	2.7	3.9	70
5S 5E			112	5S	5E	12.0	●	-	1.5	2.1	230

S Series

Multipole

				Reference	Series		Number of contacts	ø A (mm)	Contact type				Test voltage (kV rms) ^{(1) (2)}	Test voltage (kV dc) ^{(1) (2)}	Rated current (A) ⁽¹⁾
		Male solder contacts	Female solder contacts		Standard	Watertight			Solder	Crimp	Print (straight)	Print (elbow)			
0S 0E 0L				302	0S	0E	2	0.9	●	●	●	●	1.1	1.6	10 ⁽³⁾
				303	0S	0E	3	0.7	●	○	●	●	1.0	1.5	7 ⁽³⁾
				304	0S	0E	4	0.7	●	●	●	●	1.0	1.5	7 ⁽³⁾
1S 1E 1L				302	1S	1E	2	1.3	●	●	●	●	1.2	1.8	15 ⁽³⁾
				303	1S	1E	3	0.9	●	○	●	●	1.2	1.8	10 ⁽³⁾
				304	1S	1E	4	0.9	●	●	●	●	1.2	1.8	10 ⁽³⁾
				305	1S	1E	2/3	0.9/0.7	●	○	●	●	1.5/1.5	2.1/2.1	10 ⁽³⁾ /7 ⁽³⁾
				306	1S	1E	6	0.7	●	○	●	●	1.5	2.1	7 ⁽³⁾
2S 2E 2L				302	2S	2E	2	1.6	●	○	○	○	1.7	2.4	20 ⁽⁴⁾
				303	2S	2E	3	1.3	●	○	●	○	1.5	2.1	15 ⁽⁴⁾
				304	2S	2E	4	1.3	●	○	●	●	1.7	2.4	15 ⁽⁴⁾
				305	2S	2E	5	1.3	●	○	●	●	1.5	2.1	13 ⁽⁴⁾
				306	2S	2E	6	1.3	●	● ⁽⁵⁾	●	●	1.5	2.1	12
				307	2S	2E	3/4	1.3/0.9	●	○	●	●	0.8/0.8	1.2/1.2	12 ⁽³⁾ /9 ⁽³⁾
				308	2S	2E	8	0.9	●	○	●	●	0.8	1.2	9 ⁽³⁾
				310	2S	2E	10	0.9	●	○	●	●	0.8	1.2	7 ⁽³⁾
3S 3E				302	3S	3E	2	2.0	●	—	○	—	3.0	4.2	23
				303	3S	3E	3	2.0	●	—	○	—	1.5	2.1	20
				304	3S	3E	4	2.0	●	—	○	—	1.5	2.1	18
				305	3S	3E	2/3	2.0/1.3	●	—	○	—	1.5/1.5	2.1/2.1	18/14
				306	3S	3E	6	1.3	●	—	●	—	2.1	3.0	14
				307	3S	3E	7	1.3	●	—	●	—	1.0	1.5	12

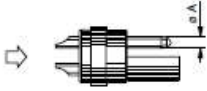
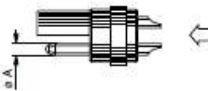
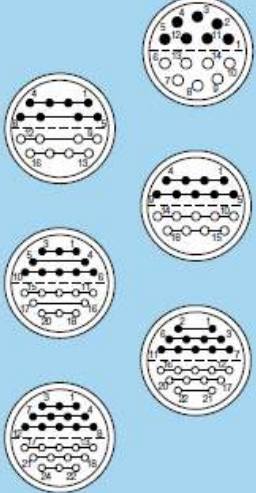
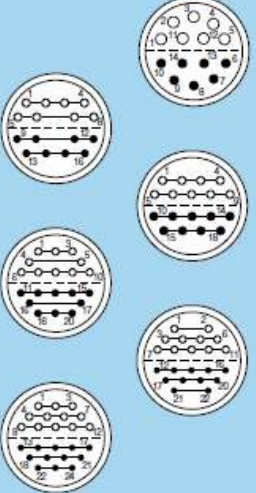
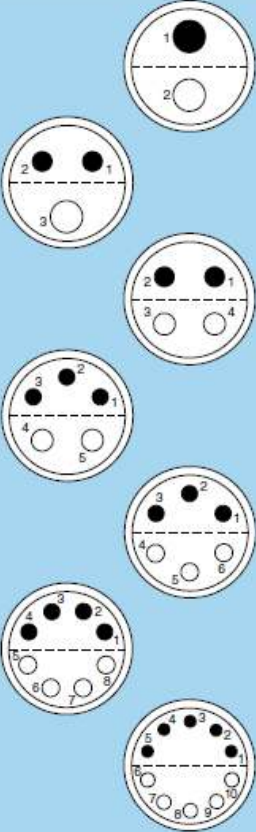
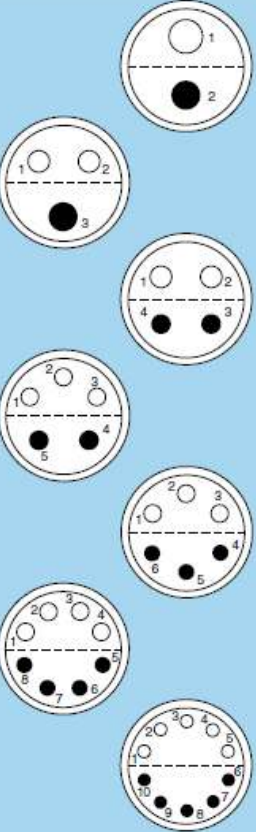
S Series

Multipole

				Reference	Series		Number of contacts	ø A (mm)	Contact type				Test voltage (kV rms) ^{(1) (2)}	Test voltage (kV dc) ^{(1) (2)}	Rated current (A) ⁽¹⁾
		Male solder contacts	Female solder contacts		Standard	Watertight			Solder	Crimp	Print (straight)	Print (elbow)			
3S 3E				308	3S	3E	8	1.3	●	—	●	○	1.0	1.5	10
				310	3S	3E	10	1.3	●	—	●	●	1.0	1.5	9
				312	3S	3E	12	0.9	●	—	●	●	1.5	2.1	8
				313	3S	3E	13	0.9	●	—	●	○	1.5	2.1	8
				314	3S	3E	14	0.9	●	—	●	●	1.5	2.1	7
				316	3S	3E	16	0.9	●	—	●	●	1.0	1.5	7
				318	3S	3E	18	0.9	●	—	●	○	1.0	1.5	6
4S 4E				302	4S	4E	2	4.0	●	—	○	—	2.1	3.0	35
				303	4S	4E	3	3.0	●	—	○	—	2.1	3.0	25
				304	4S	4E	4	3.0	●	—	○	—	2.1	3.0	22
				305	4S	4E	2 3	3.0 2.0	●	—	○	—	2.1 2.1	3.0 3.0	22 16
				306	4S	4E	6	2.0	●	—	○	—	2.1	3.0	16
				307	4S	4E	3 4	2.0 1.3	●	—	○	—	2.1 2.1	3.0 3.0	16 13
				308	4S	4E	8	1.3	●	—	○	—	2.7	3.9	13
				309	4S	4E	9	1.3	●	—	○	—	2.1	3.0	12
				310	4S	4E	10	1.3	●	—	○	—	2.1	3.0	11
				312	4S	4E	12	1.3	●	—	○	—	2.1	3.0	9
				313	4S	—	13	1.3	●	—	○	—	2.1	3.0	9

S Series

Multipole

				Reference	Series		Number of contacts	ø A (mm)	Contact type			Test voltage (kV rms) ^{(1) (2)}	Test voltage (kV dc) ^{(1) (2)}	Rated current (A) ⁽¹⁾	
					Standard	Watertight			Solder	Print (straight)	Print (elbow)				
															
		Male solder contacts													
															
		Female solder contacts													
4S 4E					314	4S	4E	14	1.3	●	○	—	2.1	3.0	9
					316	4S	4E	16	0.9	●	○	—	2.1	3.0	7
					318	4S	4E	18	0.9	●	○	—	2.1	3.0	7
					320	4S	4E	20	0.9	●	○	—	2.1	3.0	7
					322	4S	4E	22	0.9	●	○	—	2.1	3.0	7
					324	4S	4E	24	0.9	●	○	—	2.1	3.0	7
5S 5E					302	5S	5E	2	6.0	●	—	—	3.7	5.2	50
					303	5S	5E	1 2	6.0 4.0	●	—	—	3.7 3.7	5.2 5.2	50 35
					304	5S	5E	4	4.0	●	—	—	3.7	5.2	35
					305	5S	5E	2 3	4.0 3.0	●	—	—	3.0 3.0	4.2 4.2	35 25
					306	5S	5E	6	3.0	●	—	—	3.0	4.2	25
					308	5S	5E	8	3.0	●	—	—	2.1	3.0	22
					310	5S	5E	10	2.0	●	—	—	2.1	3.0	18

S Series

Multipole

Reference	Series		Number of contacts	ø A (mm)	Contact type			Test voltage (kV rms) ^{1) 2)}	Test voltage (kV dc) ^{1) 2)}	Rated current (A) ¹⁾
	Standard	Watertight			Solder	Print (straight)	Print (elbow)			



Male solder contacts



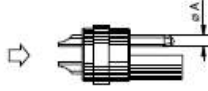
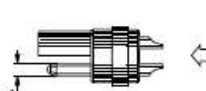
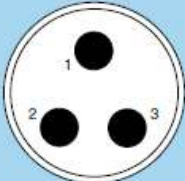
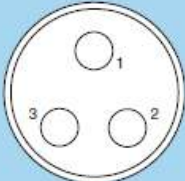
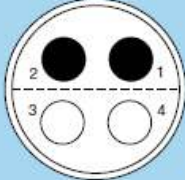
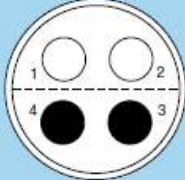
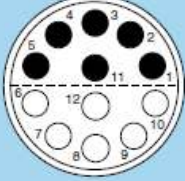
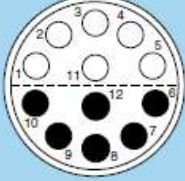
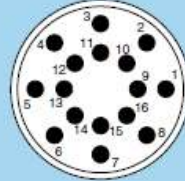
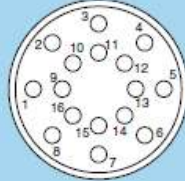
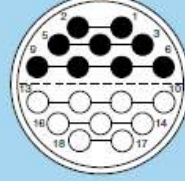
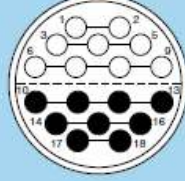
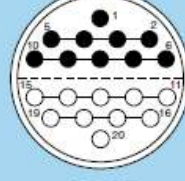
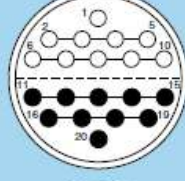
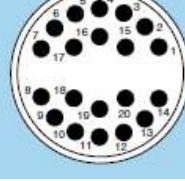
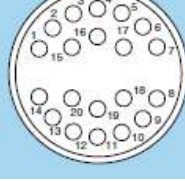
Female solder contacts

5S
5E

	312	5S	5E	12	2.0	●	-	-	2.1	3.0	18
	314	5S	5E	2 12	3.0 2.0	●	-	-	1.8 1.8	2.4 2.4	20 15
	316	5S	5E	16	2.0	●	-	-	1.8	2.4	15
	318	5S	5E	2 16	3.0 1.6	●	-	-	1.8 1.8	2.4 2.4	18 11
	320	5S	5E	20	1.6	●	-	-	1.8	2.4	11
	322	5S	5E	2 20	3.0 1.6	●	-	-	1.8 1.8	2.4 2.4	16 9
	324	5S	5E	24	1.6	●	-	-	2.7	3.9	9
	330	5S	5E	30	1.3	●	-	-	1.8	2.4	8
	336	5S	5E	36	1.3	●	-	-	1.8	2.4	7
	340	5S	5E	40	1.3	●	-	-	1.2	1.8	7
	344	5S	5E	44	1.3	●	-	-	1.2	1.8	6
	348	5S	5E	48	1.3	●	-	-	1.2	1.8	6



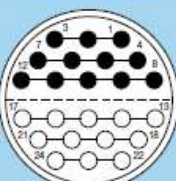
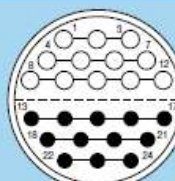
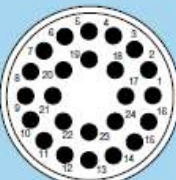
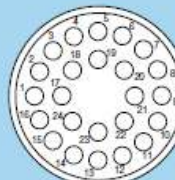
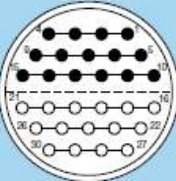
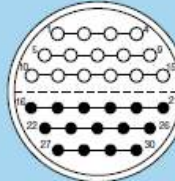
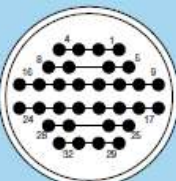
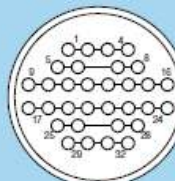
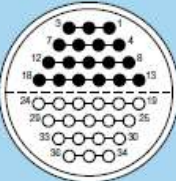
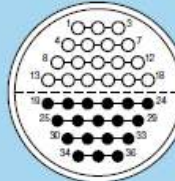
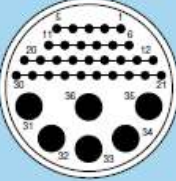
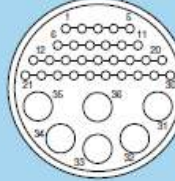
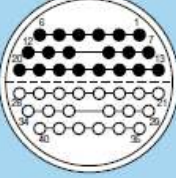
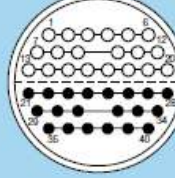
S Series

Multipole

	 Male solder contacts	 Female solder contacts	Reference	Series		Number of contacts	ø A (mm)	Solder contacts	Test voltage (kV rms) ^{1) 2)}	Test voltage (kV dc) ^{1) 2)}	Rated current (A) ¹⁾
				Standard	Watertight						
6S 6E			303	—	6E	3	6.0	●	3.0	4.2	50
			304	6S	6E	4	8.0	●	3.0	4.2	60
			312	6S —	— 6E	12 12	4.0 5.0	●	2.1	3.0	22
			316	—	6E	16	3.0	●	1.5	2.1	14
			318	6S	—	18	4.0	●	1.2	1.8	16
			320	6S	—	20	3.0	●	1.5	2.1	14
			320	—	6E	20	3.0	●	1.5	2.1	14


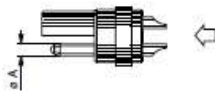
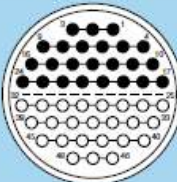
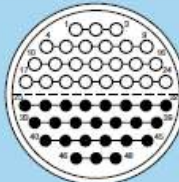
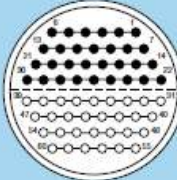
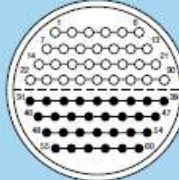
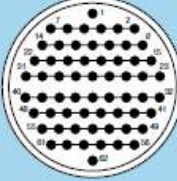
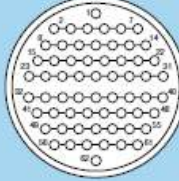
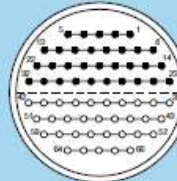
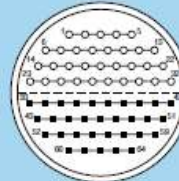
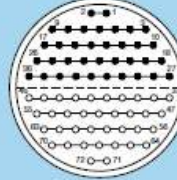
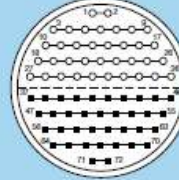
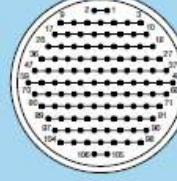
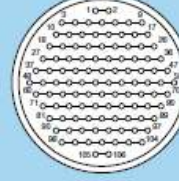
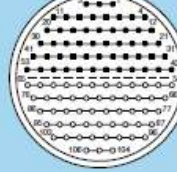
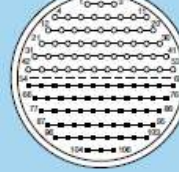
S Series

Multipole

				Reference	Series		Number of contacts	ø A (mm)	Solder contacts	Test voltage (kV rms) ^{(1) (2)}	Test voltage (kV dc) ^{(1) (2)}	Rated current (A) ⁽¹⁾
		Male solder contacts	Female solder contacts		Standard	Watertight						
6S 6E			324	6S	—	24	3.0	●	1.2	1.8	12	
			324	—	6E	24	3.0	●	1.2	1.8	12	
			330	6S	6E	30	2.0	●	2.1	3.0	10	
			332	—	6E	32	2.0	●	1.5	2.1	10	
			336	6S	—	36	2.0	●	1.5	2.1	8	
			336	—	6E	30 6	1.3 5.0	●	1.5 1.5	2.1 2.1	4 22	
			340	—	6E	40	2.0	●	1.5	2.1	8	

S Series

Multipole

 Male solder contacts		 Female solder contacts		Reference	Series		Number of contacts	ø A (mm)	Solder contacts	Test voltage (kV rms) ^{1) 2)}	Test voltage (kV dc) ^{1) 2)}	Rated current (A) ¹⁾
					Standard	Watertight						
6S 6E			348	6S	6E	48	2.0	●	1.5	2.1	7	
			360	6S	6E	60	1.6	●	1.5	2.1	5	
			362	—	6E	62	1.6	●	1.5	2.1	5	
			364	6S	6E	64	1.3	●	1.2	1.8	4	
			372	6S	6E	72	1.3	●	1.2	1.8	4	
			106	—	6E	106	0.9	●	0.8	1.2	2	
			106	6S	—	106	0.9	●	0.8	1.2	2	

S Series



Bend relief for S series models with collet

		Need to be ordered	
Ref.	Type	Collet	
		Type	Code
00	Z	C	17 to 31
		K	37 to 42
		L	27 to 31
0S	Z	C	32 to 44
		K	52 to 62
		L	32 to 48
1S	Z	C	32 to 62
		K	72 to 87
		L	32 to 66
2S	Z	C	42 to 87
		K	97 to 11
		L	42 to 87
3S	Z	C	57 to 97
		K	12 to 13
		L	57 to 97
4S	Z	C	82 to 13
		L	82 to 13

Bend relief for E and L series models with collet

		Need to be ordered	
Ref.	Type	Collet	
		Type	Code
0E 0L	Z	C	10 to 50
1E 1L	Z	C	15 to 65
		K	70 to 85
2E 2L	Z	C	15 to 85
		K	90 to 10
3E	Z	C	30 to 10
		K	11 to 15
4E	Z	C	50 to 15

Note: All dimensions are in millimetres.

Colour of connectors shell made of plastic material and aluminium alloys

Reference	Colour	Plastic shell			Aluminium alloys	
		PSU	PPSU	PA.6	Anodized colour	Anodized colour for bend relief collet nut
A	blue					
B	white					
G	grey					
J	yellow					
M	brown					
N	black					
R	red					
S	orange					
T	natural					
V	green					
L	black					
X	natural					
F	cream					

Note: other anodizing colours are available for connectors with collet nut for bend relief. Please consult us.

Watertight and vacuumtight socket and coupler models (S, E and L series)

	Model	Reference	
		Watertight	Vacuumtight
S	EWB, HCP, HGP, HGW, SWH	P	PV
E	EBR, HGP, SWH	P	PV
L	HGG	P	PV

O-ring and gasket material (E and L series)

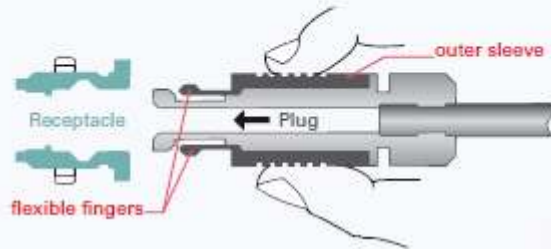
Standard connectors are delivered with silicone o-ring and gaskets. The vacuumtight models, identified with the letter «PV», are delivered with Viton® gaskets. Other gaskets material can be delivered upon special request.

O-ring material	Reference
FPM (Viton®)	H
EPDM	E
FPM (Viton®) and collet nut for bend relief	D

F series

How Does it Work ?

The plug has an outer sleeve, with flexible fingers, which slides forward and backwards along the plug body.



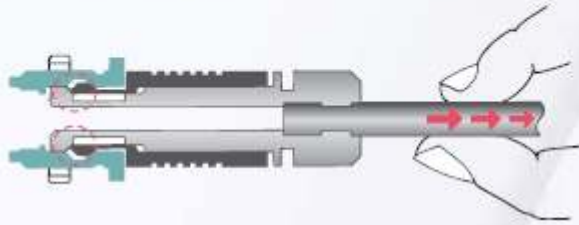
When Mated

The bevelled edges are firmly captured by a locking groove located inside the receptacle.



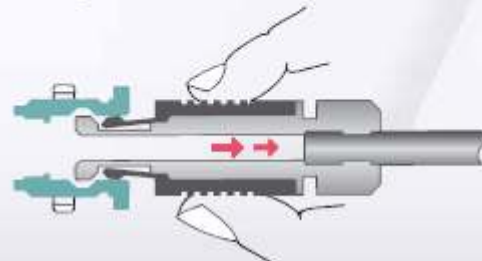
When Cable Pulled

The bevelled edges of the fingers are forced into the groove, securing the connection.



When Unplugging

Pulling on the outer sleeve of the plug unlocks the latching mechanism.



■ Designed for Easy Connect/Disconnect Operations

- **Easy connection, can be blind-mated**
guiding mechanism ensures precise alignment
- **Increased safety and user friendliness**
mechanical and color coding prevent misconnection
- **Convenient grip even with gloves**
circular connectors with ribbed housing profile
- **Increased equipment life span**
guiding mechanism optimally protects the contacts



F series

Sizes

- All Body styles available in several sizes (101 to 107) or (08 to 18) depending on connectors series
- From 1.5 to 22.7mm cable diameters
- From 1 to 55 contacts



*Pictures represent plug UP01.
Total length will depend on chosen overmolding solution.*











Pictures represent plug S.













F series

Cable Plugs

		Connector Style	Protection			Locking System				Contacts			Design			Assembly						
			Sealed up to IP68	Hermetic	360°EMC shielded	None	Push-pull	Emergency release	Lanyard	Tamperproof	Crimp	Solder	PCB	Shortened body	Right angle	Disposable	Cable mounted	Overmoldable ¹⁾	Heat shrinkable ¹⁾	Panel mounted	Front mounting	Rear mounting
Metal		S	•		•		•				•	•					•					
		SC	•		•			•			•	•					•					
		SOV	•		•	•					•	•					•					
		SA	•		•		•		•		•	•					•					
		SV	•		•		•			•	•	•					•					
		SS	•		•		•				•	•		•			•	•	•			
		SSC	•		•			•			•	•		•			•	•	•			
		WSO	•		•		•				•	•			•		•					
		UP01	• ²⁾	• ²⁾	•		•	•			• ³⁾	• ³⁾		•			•	•	•			




F series

Panel Receptacles

		Connector Style	Protection			Contacts			Design				Assembly	
			Sealed up to IP68	Hermetic	360°EMC shielded	Crimp	Solder	PCB	Right angle	Flush	Front projecting	Bulkhead feedthrough	Front mounting	Rear mounting
Metal		D			•	•	•	•		•			•	
		DEU	•		•		•	•		•			•	
		DEE	•	•	•		•	•		•			•	
		DB			•	•	•	•			•		•	
		DBEU	•		•		•	•			•		•	
		DBEE	•	•	•		•	•			•		•	
		DBP			•	•	•	•		•				•
		DBPU	•		•		•	•		•				•
		DBPE	•	•	•		•	•		•				•
		DBPLU	•		•		•	•			•			•
		DBPLE	•	•	•		•	•			•			•
		DG			•	•	•			•	•		•	•
		DGP			•			•		•	•		•	•
		DBPC			•			•	•	•				•
		WDE	•	•	•	NA ¹⁾	NA ¹⁾	NA ¹⁾		•	•	•	•	







F series

Panel Receptacles

		Connector Style	Protection			Contacts			Design				Assembly	
			Sealed up to IP68	Hermetic	360°EMC shielded	Crimp	Solder	PCB	Right angle	Flush	Front projecting	Bulkhead feedthrough	Front mounting	Rear mounting
Metal		UR01	●	●	●		● ¹⁾	●			●			●
		UR02	●	●	●		● ¹⁾	●		●				●
		UR03	●	●	●		●	●			●		●	

F series

Cable Receptacles

		Connector Style	Protection		Contacts		Design	Assembly			
			Sealed up to IP68	360°EMC shielded	Crimp	Solder	Shortened body	Cable mounted	Overmoldable	Heat shrinkable	Panel mounted
Metal		K		•	•	•		•			
		KE	•	•	•	•		•			
		KS		•	•	•	•	•	•	•	
		KSE	•	•	•	•	•	•	•	•	
		DKBE	•	•	•	•		•			•
		DK		•	•	•		•			•
		DKE	•	•	•	•		•			•
		UR50	• ¹⁾	•		•	•	•	•	•	

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