



SHENZHEN MOCO INTERCONNECT CO.,LTD.

Address: 2/F of 1st Bldg, XinHao Industrial Park, No.21 XinWei Rd., XinZhuang Community, MaTian, GuangMing District, Shenzhen 518106, China

Tel: +86-755-21061175 Fax: +86-755-33238502 ZIP Code: 518106
www.mococonnectors.com

SOUTH KOREA OFFICIAL BRANCH INSPIRNET. CO.,LTD.

Address: 4804, 8F, Woominuw, 121, Dongtan-daero 23-gil, Hwaseong-si, Gyeonggi-do, Republic of Korea

Tel: +82-31-208-8801 Fax: +82-31-208-8833 Email: marting@inspimat.com Zip code: 18468
Site: www.inspimat.com
Blog: blog.naver.com/inspimat0825

COMPANY PROFILE

MOCO is committed to being one of the world's top manufacturers of industry connectors and cables. Established in 2012, we have been growing stably year by year. With the excellent management and great efforts made during the past few years, we have developed a lot of popular products such as precision circular push-pull connectors, M8/M12 circular connectors, RF coaxial connectors, MIL-Spec electrical connectors, and high quality overmolding cable assemblies. And we are always ready for custom products. MOCO connectors are of stable performance and attractive design which are interchangeable with international brands. Our products are widely used in the fields of military, medical, measurement, audio-video, navigation, security, aviation, industrial control, automotive and power etc.

During the past few years, We have founded CNC Processing Department and Mould Department. Meanwhile, we have obtained UL, CE, RoHS, ISO9001, ISO13485 and IATF16949 certificates. And we have also obtained the National High-Tech Enterprise certification, Specialized-Ratined-Innovative Enterprise certification. We have multifunctional laboratory for both connectors and cables with testing equipment like RoHS 1.0 &2.0 testing equipment, pulling force tester, Insertion and extraction tester, salt spray testing chamber, Temperature & Humidity Chamber, Gas Tightness Tester, Vision Measuring System, voltage tester, cable testers, and cable bending test machine. Our experienced staff members are always available to discuss your requirements and ensure full customer satisfaction.



CERTIFICATIONS

MOCO has passed the National High-Tech Enterprise certification, Specialized-Ratined-Innovative Enterprise certification. And we have obtained 6 invention patents, 26 utility model patents, 9 design patents and 9 trademark certificates. We have passed a number of authoritative certifications, such as UL certification, CE certification, RoHS certification, ISO9001:2015, ISO13485:2016 and IATF16949 automotive quality management system certification.



2023

Passed The IATF16949
Moved to Xinhao Industrial Park
Successfully developed photoelectric hybrid connectors
Developed Xseries and R series military connectors

2022

Molding Department Established
Successfully developed M Series European
Standard Industrial Connector
Won Specialized-Refined-Innovative Enterprise Certification

2021

Passed ISO13485:2016 medical equipment quality
management system certification
Imported 3 more Japanese Star CNC machines

2020

Passed National High-tech Enterprise Recognition
Developed maximal series connectors
Developed high voltage series connectors

2019

Trademark 莫科达 Certified
Y,M,U,W series developed
Passed Intellectual Property Management Certification

2018

Applied National High-tech Enterprise Recognition
Applied 8 Utility Patents

2017

Military Connectors Passed National Lab Test
Connectors and Cables Testing Lab Founded
Applied Trademark 莫科达

2016

11 Design Patents Passed
RoHS-Certified
UL Certified

2015

YLF Military Rayonex Connectors Developed
TJerdan STAR CNC Machines Imported
Trademark MOCO Certified

2014

Factory Expanded and Specialists Increased
ISO9001 Certified

2013

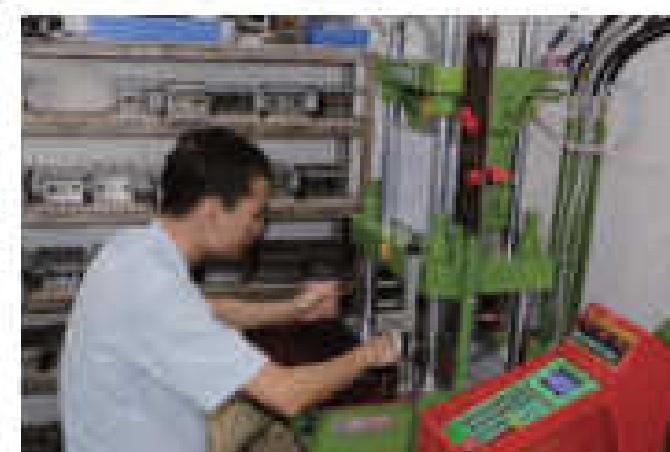
Applied Trademark MOCO
CE Certified

2012

Factory Founded
B,K,S,F,P Push Pull Series Developed

PROCESSING EQUIPMENT

MOCO imported modern high precision and high efficiency professional processing equipment, including Japanese SB-20R CNC machines, contact optical sorting machine, injection machine and grinding machine, and supplemented with professionals and management team. To provide best products with costs-effectiveness for our customer, we are committed to optimize process and improve productivity at the forefront of production line.



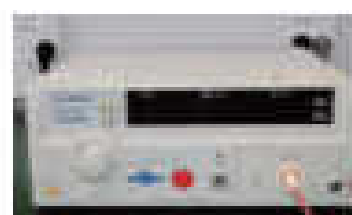
TESTING EQUIPMENT

"Quality first, reputation upmost, quality products and continuous improvement" is our quality policy. Every aspect of production, we are strictly follow the requirements of the quality policy. Each step we are constantly strive for excellence. As we know, for precision machinery, minor errors will cause huge losses.

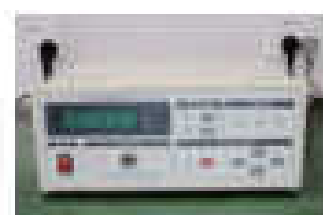
MOCO implement comprehensive quality management, strictly implement the requirements of GB/T 19001 quality management system. Our team upholds "quality first, meets customers requirements, continuous improvement and going concern" quality policy, try our best to provide excellent products and services.



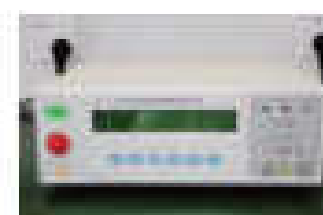
Plugging force tester



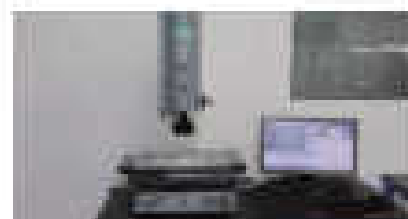
Voltage tester



DC low resistance tester



DC power supply



Vision measuring system(VMS)



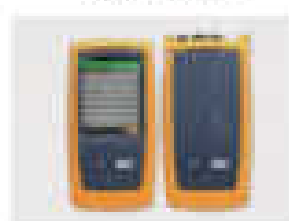
Vacuum tester



Insulation resistance tester



RoHS 2.0 testing machine



Network tester



Cable tester



Salt spray chamber



Wire bonding test machine



Constant temperature test chamber



Servo tensile testing machine

APPLICATION

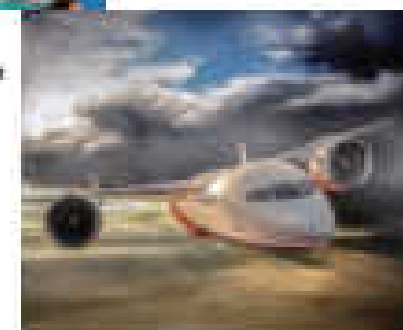
MOCO connectors widely used in the fields of military, medical, measurement, audio-video, automotive, Industrial Electronics and instruments etc. Products with small size and light weight, can be flexible mounted on varieties of portable external interfaces, and have great technical performances to satisfy the requirements of current or signal connection.



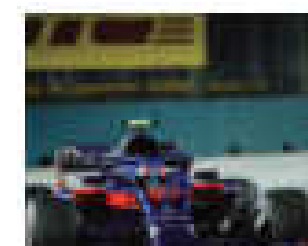
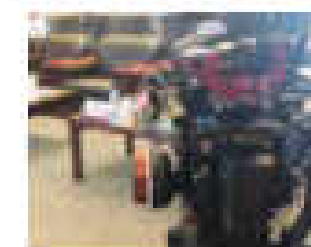
- ⊗ Diagnostic equipment
- ⊗ Surgical instruments
- ⊗ Therapeutic application
- ⊗ Medical imaging
- ⊗ Cardiac aids
- ⊗ Disposable equipment



- ⊗ Studio and outside broadcast
- ⊗ TV and Movie
- ⊗ HD and SD cameras
- ⊗ Remote-camera control
- ⊗ Drone
- ⊗ Communication systems
- ⊗ Monitoring equipment



- ⊗ Avionics
- ⊗ Maritime
- ⊗ Automobile
- ⊗ Railway
- ⊗ Transport
- ⊗ Towing and measurement



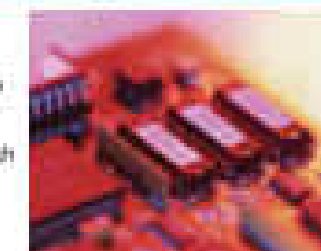
- ⊗ Racing
- ⊗ Submarine industry
- ⊗ Weatherproof application
- ⊗ Robots



- ⊗ Oil and gas
- ⊗ Nuclear
- ⊗ Renewable Energy
- ⊗ Battery
- ⊗ Fuel cell
- ⊗ Energy



- ⊗ Sensor
- ⊗ Data acquisition
- ⊗ Automotive
- ⊗ Science research
- ⊗ Vacuum
- ⊗ Computer



- ⊗ Target acquisition
- ⊗ Military charge
- ⊗ Power module
- ⊗ Acoustic measurement
- ⊗ Infrared thermal imaging
- ⊗ Electronic compass



PUSH-PULL SELF-LATCHING CONNECTION SYSTEM



Mechanical locking performance

	Fv Average locking force	The self-latching system allows the connector to be mated by simply pushing the plug axially into the socket.
	Fd Average pulling force (Axial pull shell)	Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.
	Fa Average pushing force (Axial pull cap)	When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the socket.

Standard series

Force (N)	00	05	15	25
Fv	9	14	15	17
Fd	7	9	10	11
Fa	120	140	200	350

Keyed series

Force (N)	00	05	15	30	35
Fv	9	10	14	15	17
Fd	7	8	11	12	14
Fa	120	200	300	400	500

Waterlight keyed series

Force (N)	00	15	25	35
Fv	14	15	20	32
Fd	9	10	13	15
Fa	250	300	400	500

Note: 1N=0.102kg

Note: The forces mentioned tested with shell only which without contact.

Endurance: 5000 cycles

After rated cycling, locking system is still valid. (5 cycling = 1 push-pull 500 cycles/h)

This value measured by IEC 60512-7 test 13a.

DEFINITION OF INGRESS PROTECTION (IP CODE)

IEC 60529 outlines an international classification system for the sealing effectiveness of enclosures of electrical equipment against the intrusion into the equipment of foreign bodies (i.e. tools, dust, fingers) and moisture. This classification system utilizes the letters "IP" (Ingress Protection) followed by two digits.



Degree of protection - First digit

The first digit of the IP code indicates the degree to which persons are protected against contact with moving parts, and the degree that equipment is protected against solid foreign bodies intruding into an enclosure.

Code	First digit description
0	No special protection
1	Protection from a large part of the body such as hand or from solid objects greater than 50 mm in diameter
2	Protection against objects not greater than 80 mm in length and 12 mm in diameter
3	Protection from entry by tools, wires, etc., with a diameter or thickness greater than 2.5 mm
4	Protection from entry by solid objects with a diameter or thickness greater than 1.0 mm
5	Protection from the amount of dust that would interfere with the operation of the equipment
6	Dust-tight
7	-
8	-

Degree of protection - Second digit

The second digit indicates the degree of protection of the equipment inside the enclosure against the harmful entry of various forms of moisture (e.g. dripping, spraying, submersion, etc.)

Code	Second digit description
0	No special protection
1	Protection from vertically dripping water
2	Protection from dripping water when tilted up to 15°
3	Protection from sprayed water
4	Protection from splashed water
5	Protection from water projected from a nozzle
6	Protection against heavy seas, or powerful jets of water
7	Protection against temporary immersion
8	Protection against complete continuous submersion in water

Definition of connectors

Plug												
Socket												
Series	B	K	M	Y	W	X	R	S	F	C	U	P
Environment	Indoor	Outdoor						Indoor	Outdoor			Indoor
Ingress Protection	IP50	IP65-68 Vacuumtight						IP50	IP65-68 Vacuumtight			IP50-68
Temperature	-50°C~+125°C											-50°C~+125°C
Latching	Push-Pull Self-Latching											Push-Pull Self-Latching
Insulator type	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step	2-Step
Contact type	Solder or PCB pin											
Features	Multiple key options											

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B SERIES

(Indoor Keyed)



MAIN FEATURES:

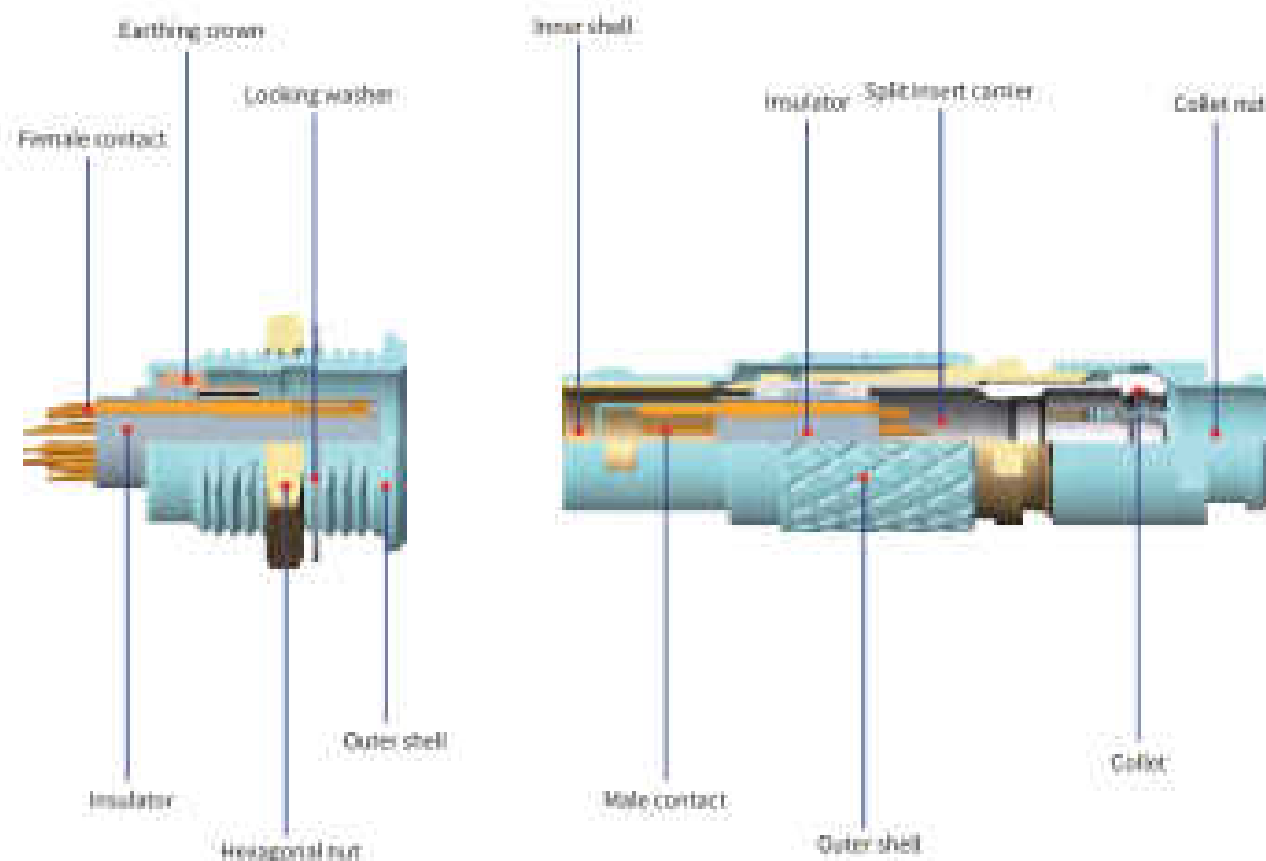
1. Security of the push-pull self-latching system
2. Multipole types 2 to 40 contacts
3. Solder or PCB contacts (straight or elbow)
4. High Packing density for space saving
5. Multiple key options to avoid cross mating of similar connectors
6. Keying system (G key standard) for connector alignment
7. 360° screening for full EMC shielding

PART SECTION SHOWING INTERNAL COMPONENTS

B series

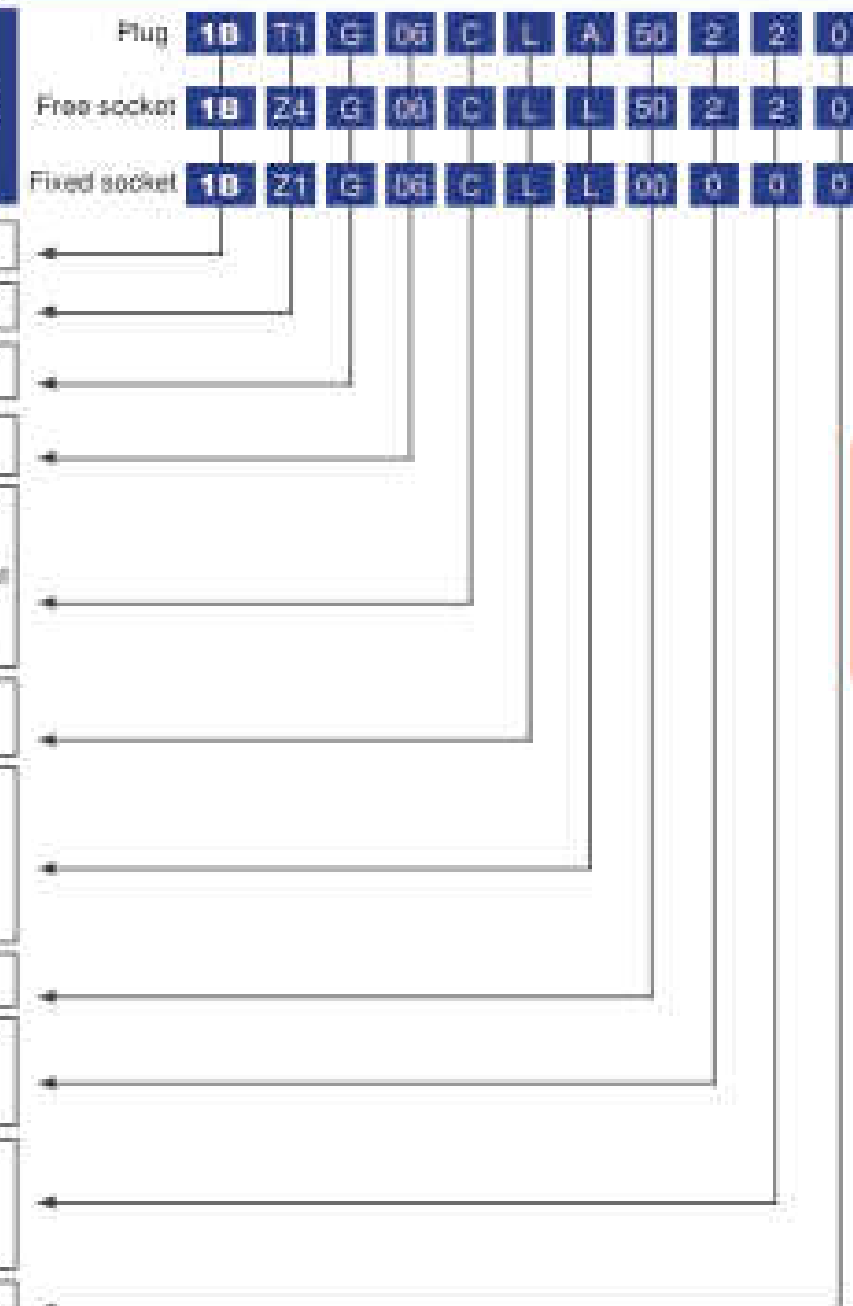
Fixed socket

Straight plug



Part Numbering System

1. Series: (page 10)
2. Housing model: (page 13)
3. Alignment key: (page 26)
4. Insert configuration: (page 52)
5. Housing material:
C= Chrome plated brass T= Stainless steel
N= Nickel plated brass L= Aluminium alloy anodized
K= Black Chrome plated brass
H= PPS (brass only for 211 and 212 elbow sockets)
6. Insulator material:
L= PPS K= PEEK
7. Contact type:
A= Solder male L= Solder female
W= Print male 90° V= Print female 90°
D= Print male N= Print female
C/D/G= Comp male M/P/L= Crimp female
8. Cable OD: (page 57)
9. Outershell pattern:
0= Nut 2= Diamond Pattern 3= Race Pattern
4= Cable Pattern
10. Collet Nut Type:
1= Cone/without band relief
2= Collet nut for band relief
3= Flat/without band relief
11. Earthing Tag:
0= Without earthing tag 1= With earthing tag



PART NUMBER EXAMPLE:

Straight plug with cable collet:

1B1G06CLA50220=1B series straight plug with key(G) and cable collet, multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, diamond outershell pattern, collet nut for band relief, without earthing tag

Free socket:

1B24006CLL50220=1B series free socket with key(G) and cable collet, multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, collet for 5.0mm diameter cable and with a black band relief, diamond outershell pattern, collet nut for band relief, without earthing tag

Fixed socket:

1B21G06CLL00000=1B series fixed socket, nut fixing, with key(G), multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, without earthing tag

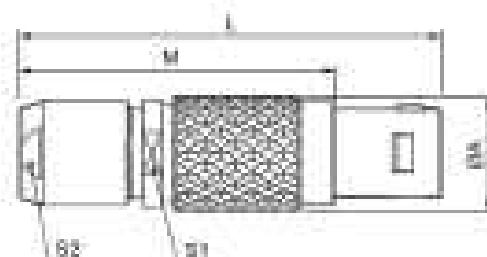
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self-locking type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 40°/140°F
Shielding Efficiency	75dB(10MHz)-40dB(10Hz)
Resistance to vibration	15g(10Hz-1000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g/9ms
Endurance	5000 cycles
Protection index(material)	IP50

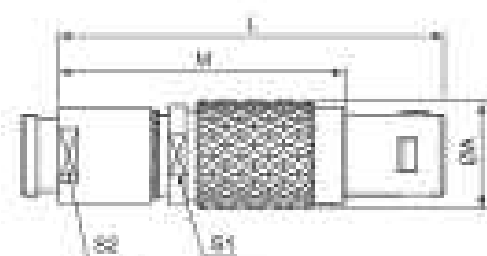
HOUSING MODELS

T1 PLUG Straight plug, key (G) or keys (A...M), cable collet.



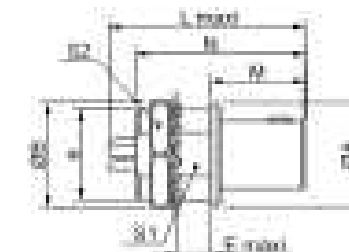
Reference		Dimensions(mm)				
Series	Model	L	A	M	S2	S1
00B	T1	29	6.5	30	9.9	6.5
0B	T1	35	9.5	35	7	8
1B	T1	43	12	32	9	10
2B	T1	68	16	38	12	13
3B	T1	97	18	42	16	18

T1 PLUG Straight plug, key (G) or keys (A...M and R), cable collet and nut for fitting a band relief



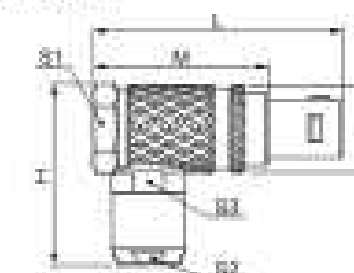
Reference		Dimensions(mm)				
Series	Model	L	A	M	S2	S1
00B	T1	29	6.5	30	9	6.5
0B	T1	35	9.5	35	9	8
1B	T1	43	12	30	9	10
2B	T1	48	16	38	10	12
3B	T1	97	18	42	16	18
4B	T1	75	20	57	21	19

T2 PLUG Fixed plug, non-latching, nut fixing, key (G) or keys (A...L)



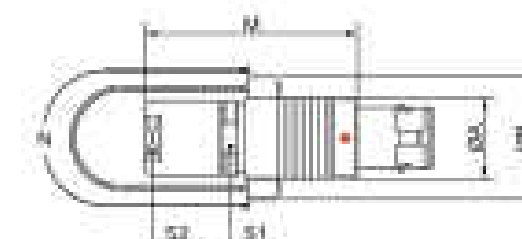
Reference		Dimensions(mm)									Panel cut-out(mm)		
Series	Model	A	B	L	N	M	E	S1	S2	e	Wa	Ø	Type
00B	T2	8	13.2	18.1	15	9	2.8	6.2	9	M7*1.5	9.4	7.1	A
0B	T2	12	12.5	20.8	18.4	15.2	4.2	8.2	11	M8*1.5	9.9	8.1	A
1B	T2	14	16	25.2	22.6	12.5	5.4	10.5	14	M10*1.0	10.6	12.1	A
2B	T2	18	19.2	24.7	22.5	13.6	6.2	13.5	17	M10*1.0	13.6	15.1	A
3B	T2	21	23.4	32.1	29.1	17.0	6.8	16.5	20	M10*1.0	16.6	18.1	A

T3 PLUG Elbow (90°) plug, key (G) or keys (A...M and R), cable collet.



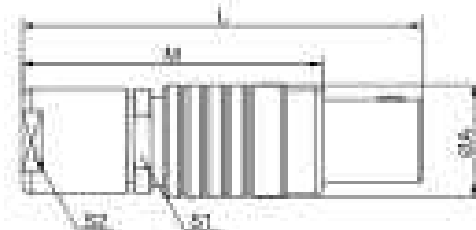
Reference		Dimensions(mm)						
Series	Model	A	L	M	S1	S2	S3	H
00B	T3	7.7	25.3	17.1	7	5	4	18.5
0B	T3	11	38	28	9	7	8	23
1B	T3	13.8	27	26	12	9	10	25.5
2B	T3	16.8	41.3	23.1	16	12	12	29
3B	T3	19	55	35	18	15	15	27
4B	T3	28	68	55	22	18	21	50.8

T4 PLUG Straight plug, key (G) or keys (A...M and R), cable collet and lanyard release



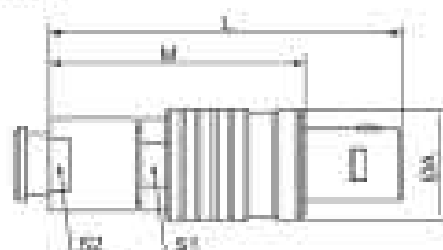
Reference		Dimensions(mm)					
Series	Model	A	B	N	M	S2	S1
0B	T4	9.5	16	148	23.5	8	8
1B	T4	12	16	148	34	9	10
2B	T4	14.8	21	185	42	10	13
3B	T4	18	25	185	42	16	18

T5 PLUG Straight plug, non-latching, key (G) or keys (A...M and R), cable collet



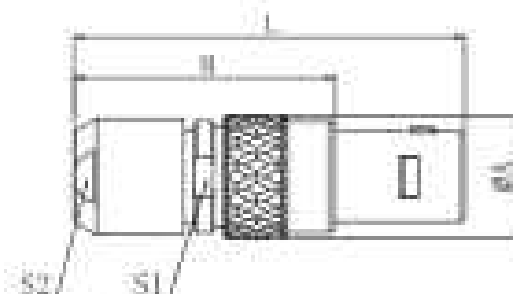
Reference		Dimensions(mm)					
Series	Model	L	A	M	S2	S1	
08	T5	30	8.2	25	8	7	
18	T5	41	12	30	8	10	
28	T5	48	15	30	13	13	
38	T5	57	18	40	15	15	

T6 PLUG Sealed straight plug, key(G) or key (A...M and R), cable collet, front seal and nut for fitting a band relief (Protection degree IP54 when mated)



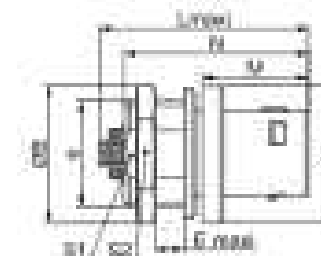
Reference		Dimensions(mm)					
Series	Model	A	L	M	S2	S1	
08	T6	11	25	23	8	8	
18	T6	13.5	42	33	8	10	
28	T6	16.2	48	36	13	13	
38	T6	18	56.5	41.5	15	15	

T7 PLUG Straight plug, short version, key (G and A), cable collet



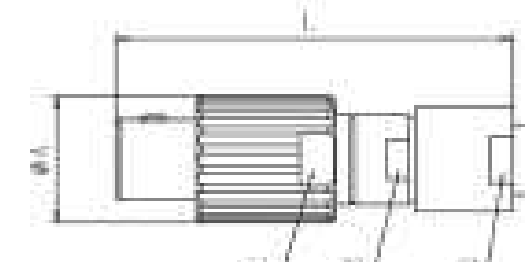
Reference		Dimensions(mm)					
Series	Model	A	L	M	S2	S1	
08	T7	9.8	30.0	24.0	8	8	

T9 PLUG Fixed plug, latching, nut fixing, key (G) or keys (A...L)



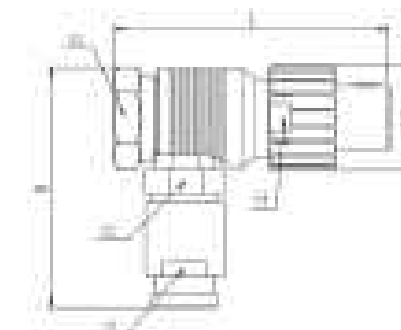
Reference		Dimensions(mm)										Panel cut-out(mm)	
Series	Model	A	B	L	H	M	E	S1	S2	a	Wa	Ø	Type
08	T9	14.1	13.5	20.8	18.4	15.2	4.2	8.2	11	M70.0	8.3	9.1	A
18	T9	18	18	25.3	22.5	12.5	5.4	10.5	14	M72.0	15.6	12.1	A
28	T9	19.5	19.2	28.7	25.1	15	6.8	12.5	17	M75.0	13.6	15.1	A

T10 PLUG Straight thread locking (enhanced shock resistance) plug, cable collet and nut for fitting a band relief



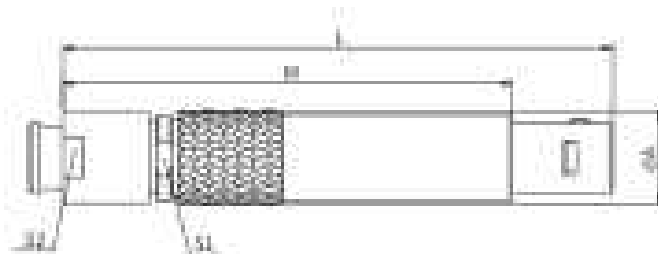
Reference		Dimensions(mm)					
Series	Model	L	A	S1	S2	S3	
08	T10	34	11	10	7	8	
18	T10	42	14.5	10	9	9	
28	T10	49.2	18	16	12	13	
38	T10	60.8	22	20	16	15	

T11 PLUG Elbow (90°) thread locking plug, key (G) or keys (A...M and R), cable collet and nut for fitting a band relief



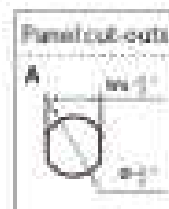
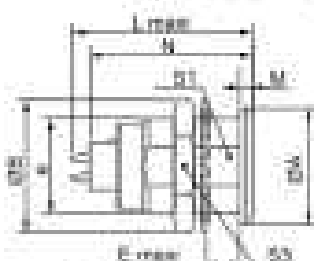
Reference		Dimensions(mm)							
Series	Model	L	A	H	S1	S2	S3	S4	
18	T11	37.8	14.5	32.8	9	10	12	13	
28	T11	52.4	18.3	44.2	11	15	16	20	

T12 PLUG Straight plug, lengthened version, key (G) or keys (A...M and R); cable collet



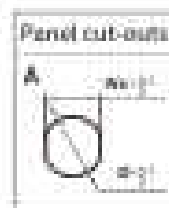
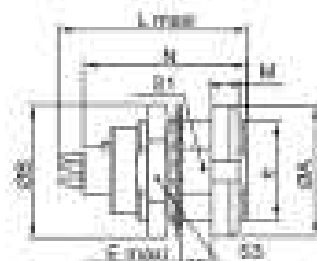
Reference		Dimensions(mm)					
Series	Model	L	A	M	S1	S2	
1B	T12	47.8	11.8	38.0	10	8	

Z1 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A...M and R)



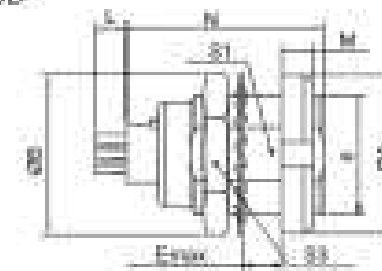
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	L	N	M	E	S1	S2	e	Ws	Ø	Type
00B	Z1	8	13.2	13.9	13.7	1.0	8.0	8.3	8	M70.8	6.4	7.1	A
0B	Z1	10	12.5	24.3	16.8	1.25	7.0	8.3	11	M70.8	8.3	9.1	A
1B	Z1	14	16	23.2	16.7	1.5	7.5	10.5	14	M821.8	16.6	12.1	A
2B	Z1	18	19.2	24.8	20	2	8.0	13.8	17	M821.8	13.8	15.1	A
3B	Z1	21	23.4	28.7	25	1.85	11	16.5	22	M821.8	16.6	16.1	A
4B	Z1	28	34	37	28	3.5	19	25.8	30	M821.8	25.6	25.2	A

Z2 SOCKET Fixed socket with two nuts, front or back panel mount, key (G) or keys (A...M and R)



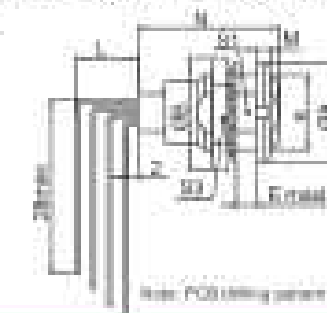
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	L	N	M	E	S1	S2	e	Ws	Ø	Type
00B	Z2	19	10.9	15.9	13.7	2.5	4.3	6.3	9	M70.8	6.4	7.1	A
0B	Z2	12	12.5	21.3	16.8	2.5	5.5	8.2	11	M70.8	8.3	9.1	A
1B	Z2	18	16.8	23.2	16.7	3.2	6.0	11.8	14	M121.8	13.8	12.1	A
2B	Z2	25	19.2	24.8	20	3.5	6.5	13.8	17	M121.8	13.8	15.1	A
3B	Z2	28	23.4	30.7	25	4.0	9.0	16.5	22	M181.8	16.6	16.1	A
4B	Z2	36	34	37	28	4.5	11	23.8	28	M221.8	23.8	25.2	A

Z2 SOCKET Fixed socket with two nuts, front or back panel mount, key (G) or keys (A...M and R) and straight contact for PCB



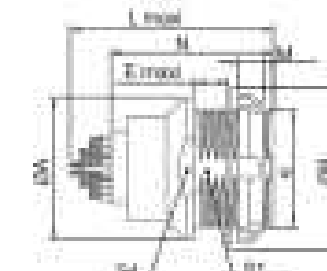
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	L	N	M	E	S1	S2	e	Ws	Ø	Type
0B	Z2	12	12.5	4	16.8	2.5	8.2	8.3	11	M70.8	8.3	9.1	A
1B	Z2	18	16.8	4	16.7	3.2	6.0	10.8	14	M121.8	13.8	12.1	A
2B	Z2	20	19.2	4	20	3.5	6.5	13.8	17	M121.8	13.8	15.1	A
3B	Z2	23	23.4	4.5	25	4.0	9.0	16.5	22	M181.8	16.6	16.1	A

Z2 SOCKET Fixed socket with two nuts, front or back panel mount, key (G) or keys (A...M and R) and elbow (90°) contact for PCB



Reference		Dimensions(mm)								Panel cut-outs		
Series	Model	A	B	N	M	E	S1	S2	e	Ws	Ø	Type
0B	Z2	12	12.5	16.8	2.5	5.5	8.2	11	M70.8	8.3	9.1	A
1B	Z2	18	16.0	16.7	3.2	6.0	10.5	14	M121.8	10.4	12.1	A
2B	Z2	20	19.2	20	3.5	6.5	13.5	17	M121.8	13.5	15.1	A
3B	Z2	23	23.4	25	4.0	9.0	16.5	22	M181.8	16.6	18.1	A

Z3 SOCKET Fixed socket, back panel mount, key (G) or keys (A...M and R)



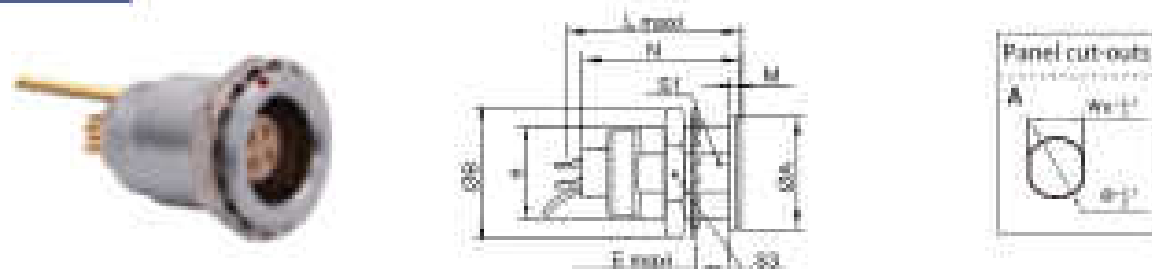
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	L	N	M	E	S1	S2	e	Ws	Ø	Type
00B	Z3	8.5	10	15.9	13.7	2.5	4.0	6.3	7.5	M70.8	6.4	7.1	A
0B	Z3	11	12	20	16.8	2.5	2.5	8.2	9	M70.8	8.3	9.1	A
1B	Z3	14	16	24	16.7	3.2	5.0	10.8	12	M821.8	13.8	12.1	A
2B	Z3	18	20	27.5	20	3.5	4.5	13.8	15	M821.8	13.8	15.1	A
3B	Z3	21.8	23	31	25	4.0	9.0	16.5	20	M821.8	16.6	16.1	A
4B	Z3	28	30	37	28	4.5	9.5	23.8	26	M821.8	23.8	25.2	A

Z4 SOCKET Free socket, for cable connecting, cable mount, key (G) or keys (A...M and R) and nut for fitting a bend relief



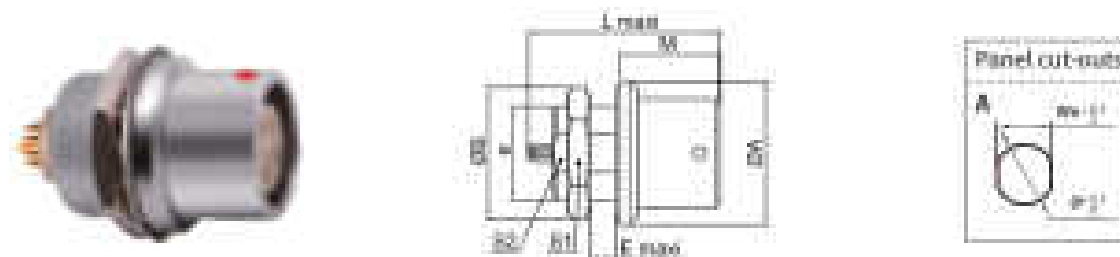
Reference		Dimensions (mm)				
Series	Model	A	L	S1	S2	
00B	24	6.0	28.5	5.0	8	
0B	24	6.0	34.5	5.0	8	
1B	24	12.0	40.0	10.0	8	
2B	24	16.0	46.0	13.0	12	
3B	24	19.0	52.0	16.0	16	

Z5 SOCKET Fixed socket with earthing tag, front panel mount, nut fixing, key (G) or keys (A...M)



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	N	M	E	S1	S2	e	Wa	Ø	Type
00B	25	8	60.2	15.0	13.7	1.0	6	8.3	8	M0*0.3	6.4	7.1	A
0B	25	10	62.5	21.3	16.9	1.25	7	8.3	11	M0*0.3	8.3	9.1	A
1B	25	14	66	23.8	18.7	1.5	7.5	10.5	14	M0.2*1.0	10.6	12.1	A
2B	25	18	62.2	24.8	20	2	8	13.5	17	M0.2*1.0	13.6	15.1	A
3B	25	21	65.4	30.7	25	2	11	16.5	20	M0.2*1.0	16.6	18.1	A

Z6 SOCKET Fixed socket, front panel mount nut fixing, key (G) or keys (A...M and R), and protruding shell



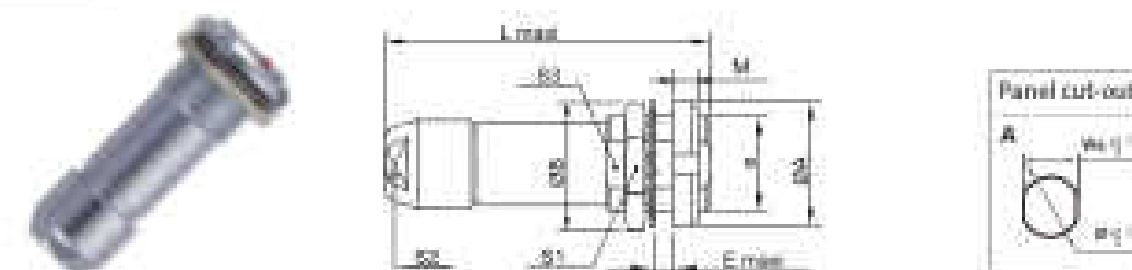
Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	E	S1	S2	e	Wa	Ø	Type	
0B	26	10	12.8	22	9.0	3.5	8.2	11	M0*0.3	8.3	9.1	A	
1B	26	14	11.8	19.5	11	4	10.0	14	M0.2*1.0	10.6	12.1	A	
2B	26	18	19.2	24	12	5.1	13.0	17	M0.2*1.0	13.6	15.1	A	

Z9 SOCKET Fixed socket, key (G) or keys (A...M and R), front panel mount with cable collet



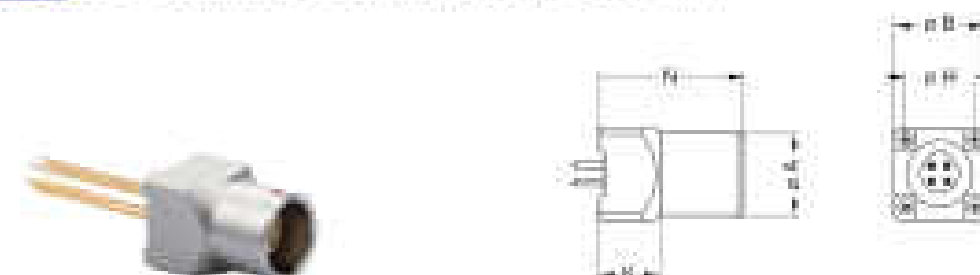
Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	L	E	M	S1	S2	S3	e	Wa	Ø	Type	
0B	29	10	12.3	30.3	7	1.3	11	8	8.2	M0*0.3	8.3	9.1	A	
1B	29	14	16	40.8	7.8	1.5	14	8	10.5	M0.2*1.0	10.6	12.1	A	
2B	29	18	19.2	47	8.5	2	17	10	13.0	M0.2*1.0	13.6	15.1	A	
3B	29	21	25	56	11.5	2	22	15	15.5	M0.2*1.0	15.6	18.1	A	

Z10 SOCKET Fixed socket, with two nuts, key (G) or keys (A...M and R), panel mount with cable collet



Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	L	E	M	S1	S2	S3	e	Wa	Ø	Type	
0B	210	12	12.3	35.5	5	2.5	11	8	8.2	M0*0.3	8.3	9.1	A	
1B	210	16	16	46.8	5	3.2	14	8	10.5	M0.2*1.0	10.6	12.1	A	
2B	210	20	19.2	47	6.5	3.8	17	10	13.0	M0.2*1.0	13.6	15.1	A	
3B	210	24	25	56	9	4.5	22	15	15.5	M0.2*1.0	15.6	18.1	A	

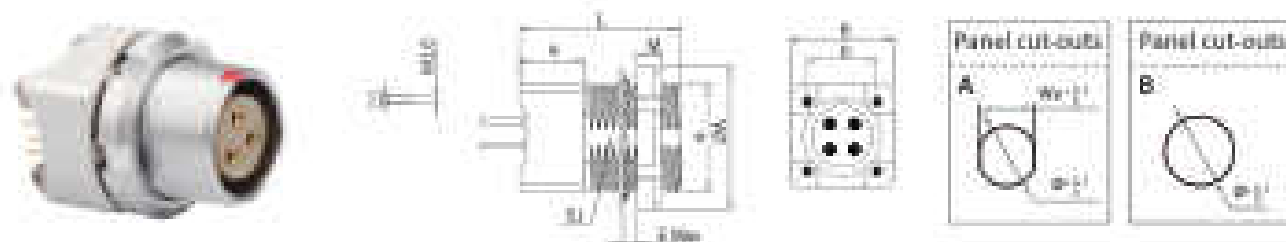
Z14 SOCKET Straight socket for printed circuit, key (G) or keys (A...F)



Reference		Dimensions (mm)				
Series	Model	A	K	N	B	H
0B	214	8	8	15	18	7.62

Z15 SOCKET

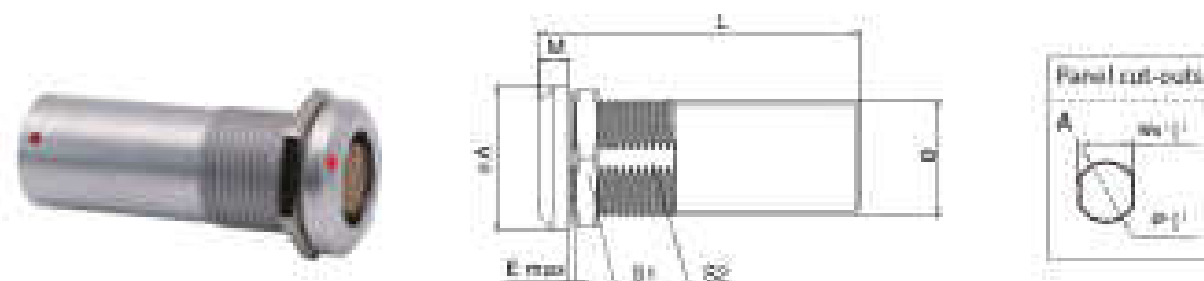
Straight socket for printed circuit, with one nut, key (G) or keys (A...M and R)



Reference		Dimensions (mm)								Panel cut-outs (mm)		
Series	Model	A	B	L	M	D	E	S1	e	Wg	Ø	Type
00	210	13	10	10	15	7.62	2.5	8.2	M2.5	8.3	5.1	A
10	210	14	12	10	15	7.62	5	-	M2.5	-	11.1	A
20	210	20	15	22.5	15	10.16	7.5	13.0	M2.5	13.6	15.1	A

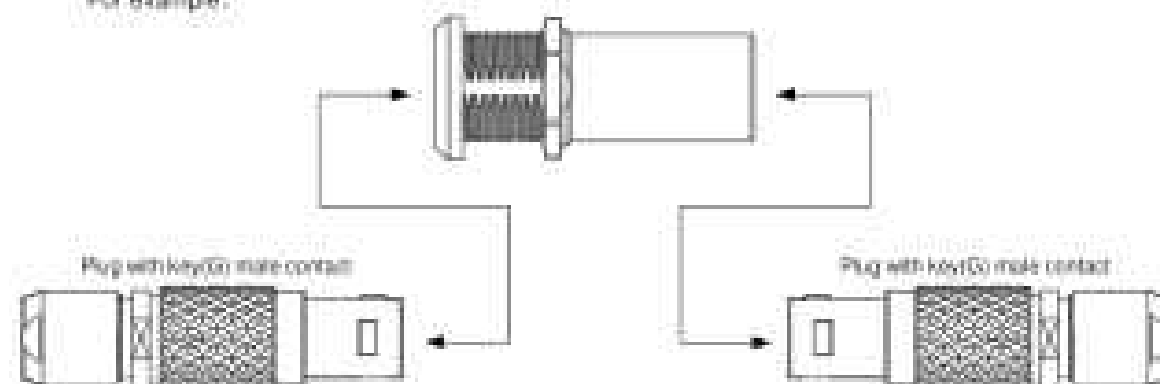
Z19 SOCKET

Fixed coupler, nut fixing, key (G) at both ends



Reference		Contacts	Dimensions (mm)								Panel cut-outs (mm)		
Series	Model	Type	A	L	M	E	S1	S2	e	Wg	Ø	Type	
10	219	female - female	17	30	2.5	20	14	10.5	M2.5	18.8	12.1	A	
20	219	female - female	18.8	44.5	4	9	18	25	M2.5	15.1	25.2	A	
30	219	female - female	20	50	4	32	24	18.5	M2.5	18.8	25.1	A	

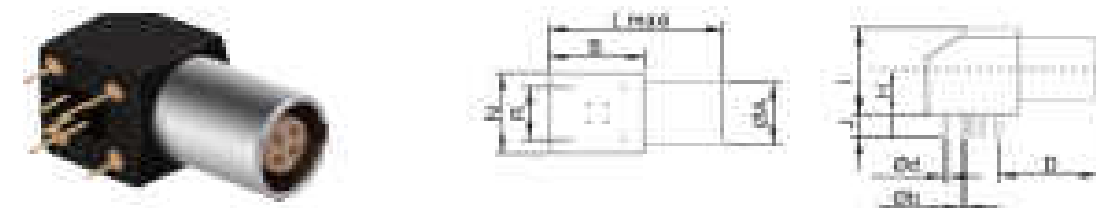
For example:



ELBOW SOCKET MODELS

Z11 SOCKET

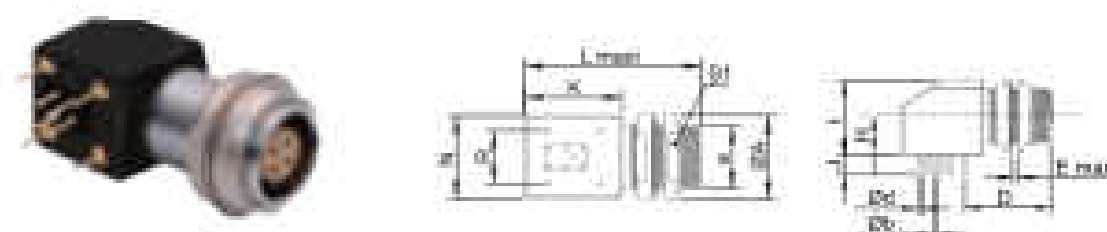
Elbow (90°) socket for printed circuit, ground solder fixed, key (G) or keys (A...M), dimensions for solder side and contact side as below



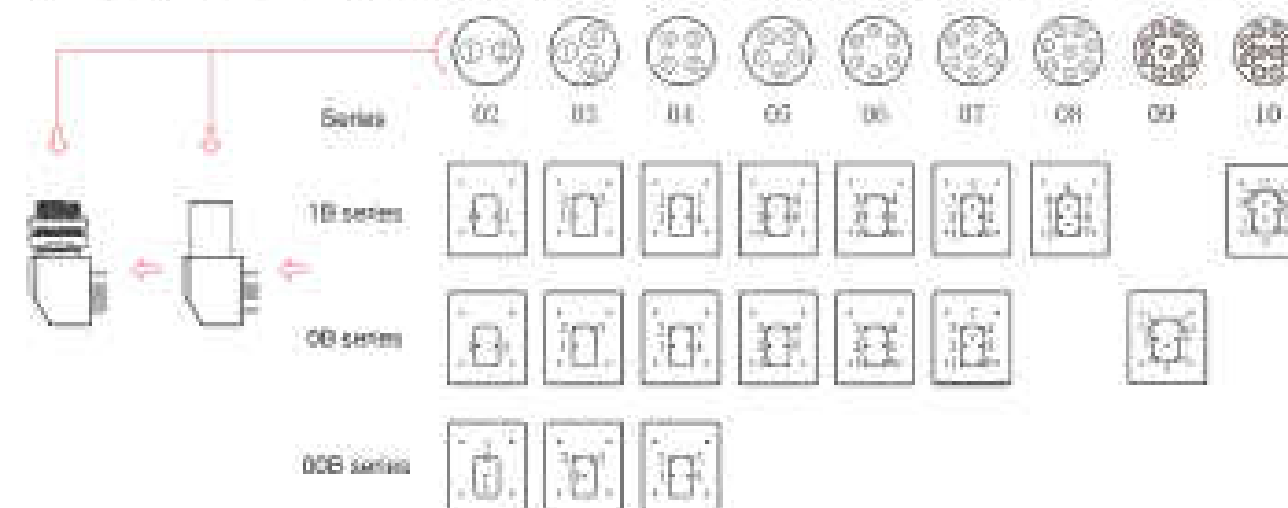
Reference		Dimensions (mm)										
Series	Model	L	B	N	I	H	A	D	d	R	J	b
000	211	18.0	8.8	7.5	7.8	3.6	6.8	11.5	0.7	1.08	5	4.5
00	211	28.8	13.3	11.7	12.7	6.7	9	14.0	0.7	1.62	3	9.8
10	211	28.8	13.3	12.6	14	7.5	11	16.07	0.7	1.62	3	9.8

Z12 SOCKET

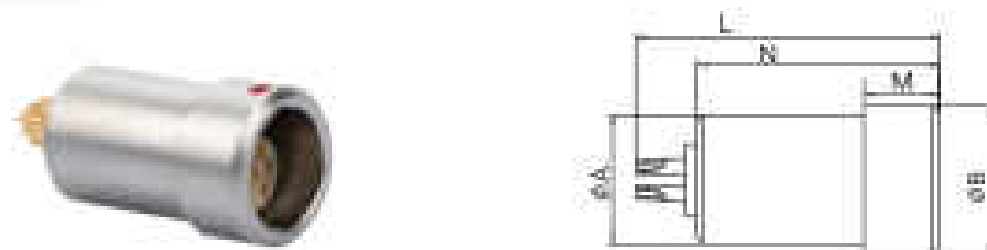
Elbow (90°) socket for printed circuit, with two nuts, key (G) or keys (A...M), dimensions for solder side and contact side as below



Reference		Dimensions (mm)													
Series	Model	L	K	A	N	R	S1	e	I	H	E	J	D	d	b
000	212	18.8	9	10	7.6	6.08	9	M2.5	7	2.5	3	5	11.5	0.7	0.5
00	212	28	13.3	12	11.7	7.62	10	M2.5	12.7	6.7	2.5	3	14.0	0.7	0.8
10	212	27	13.3	14	12.6	7.62	10	M2.5	14	7.5	3.0	3	16.8	0.7	0.8



ZX SOCKET Free socket, without cable collar



Reference		Dimensions (mm)				
Series	Model	A	B	L	M	N
08	Zx	6.5	1.8	20	5	16

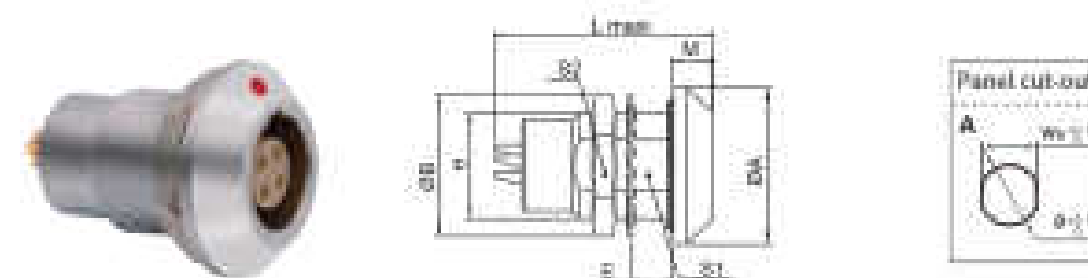
WATERTIGHT OR VACUUMTIGHT MODELS (WATERTIGHT WHEN MATED)

TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self locking type
Working Temperature	-55°C ~ +125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	15dB (10MHz-40GHz) 10GHz
Resistance to Vibration	15g (10Hz-2000Hz)

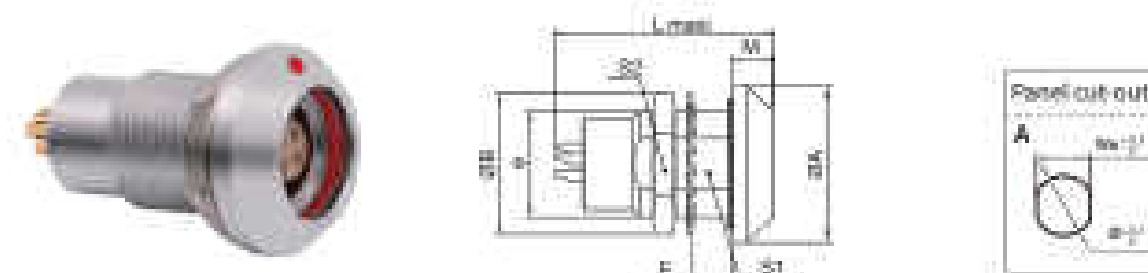
Characteristics	Parameter
salt spray corrosion test	96hr
Shock resistance	100g, 6ms
Endurance	1000 cycles
Protection (indicated)	IP68

Z7 SOCKET Fixed socket, nut fixing, front panel mount, key (G) or keys (A...M and R)



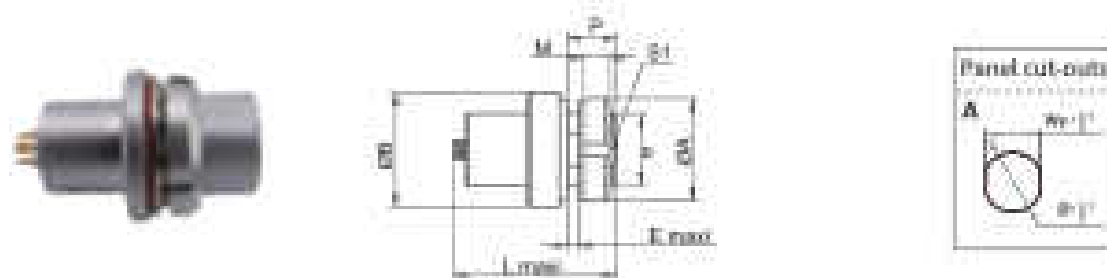
Reference		Dimensions (mm)								Panel cut-outs (mm)		
Series	Model	A	B	L	M	E	S1	S2	a	Ws	Ø	Type
008	Z7	11	16	16	1.2	3.5	6.3	8	M7x0.5	6.4	7.1	A
08	Z7	12	16.5	20.2	3	5.5	6.2	11	M7x0.8	6.2	9.1	A
18	Z7	18	16.8	23.2	4.8	8	10.8	14	M12x1.0	10.6	12.1	A
28	Z7	28	19.2	27.2	6	8	13.8	17	M16x1.0	13.6	16.1	A

Z8 SOCKET Fixed socket, nut fixing, front panel mount, key (G) or keys (A...M and R)



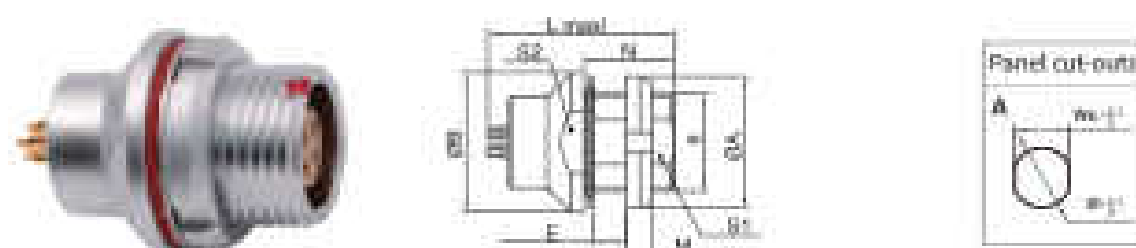
Reference		Dimensions (mm)								Panel cut-outs (mm)		
Series	Model	A	B	L	M	E	S1	S2	a	Ws	Ø	Type
18	Z8	18	16	30.3	5.3	8	10.3	14	M12x1.0	10.6	12.1	A
28	Z8	22	19.2	29.8	6	8	13.5	17	M16x1.0	13.6	16.1	A
38	Z8	27	25.4	34	6	12	18	22	M21x1.0	18.1	21.1	A

Z13 SOCKET Fixed socket, nut fixing, back panel mount, key (G) or keys (A...M and R)



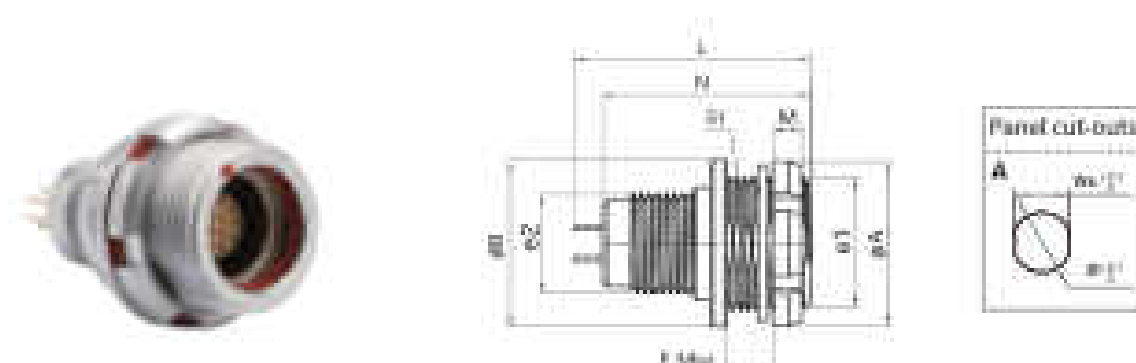
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	M	E	S1	P	e	Wa	G	Type	
00B	Z13	10	11	16.7	2.6	2.8	8.3	6.8	M7x0.5	6.4	7.1	A	
0B	Z13	12	13	21.7	2.6	5.5	8.3	8.3	M8x0.6	8.3	9.1	A	
2B	Z13	20	20	24.8	3.8	1.8	13.8	9.8	M8x1.8	13.8	19.7	A	

Z13 SOCKET Fixed socket, nut fixing, back panel mount, key (G) or keys (A...M and R)



Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	E	M	S1	S2	N	e	Wa	G	Type
1B	Z13	16	17	24.5	4.5	3.2	10.5	10	11	M8x1.0	10.8	12.1	A

Z20 SOCKET Fixed socket, nut fixing, back panel mount, key (G) or keys (A...M and R)



Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	N	M	E	S1	e1	e2	Wa	G	Type
1B	Z20	20	20	25.8	26	3.8	4.8	14.8	M8x1.0	M12x1.3	14.8	16.1	A

B series Alignment Key and Polarized Keying System

Front view of a socket	Ref.	No. of keys	Angles	Series			Ref.	No. of keys	Angles	Series			Contact type		Ref.	
				00	0B	1B				2B	3B	4B	Plug	Socket		
	Q	1	A	0°	0°	0°	Q	1	A	0°	0°	0°	male	female	•	
	A	2		30°	30°	30°	A	2		30°	30°	30°	male	female	•	
	B	2		45°	45°	45°	B	2		45°	45°	45°	male	female	•	
	C	2	B	-	60°	60°	C	2	B	60°	60°	60°	male	female	•	
	D	2		-	120°	120°	D	2		Y	80°	80°	80°	male	female	•
	E	2		-	145°	145°	E	2		β	120°	120°	120°	male	female	•
	F	2	C	-	150°	150°	F	2	C	145°	-	145°	male	female	•	
	J	2		45°	45°	45°	J	2		37.5°	37.5°	37.5°	female	male	•	
	K	2		-	70°	70°	K	2		62.5°	62.5°	62.5°	female	male	•	
	L	2	D	-	80°	80°	L	2	γ	70°	70°	70°	female	male	•	
	M	2		β	-	110°	-	M	2	-	-	-	female	male	•	
	Y	3		-	-	-	-	Y	3	δ	112.5°	120°	112.5°	male	female	•
	I	2	E	-	-	-	X	2	δ	-	145°	-	male	female	•	
		-		-	-			γ		100°	100°	147.5°				

Front view of a socket	Ref.	No. of keys	Angles	Series			Ref.	No. of keys	Angles	Series			Contact type		Note
				00	0B	1B				2B	3B	4B	Plug	Socket	
		R	8	A	-	-	-	R	8	A	-	-	-	male	female
B	-			-	-	-	-			-					
-	-			-	-	-	-			-					
-	-			-	-	-	-			-					

K SERIES

(Outdoor Keyed)

K series connectors are designed for outdoor applications. All models of this series are watertight when mated to give a protection degree IP68 when correctly assembled to an appropriate cable (otherwise IP66).



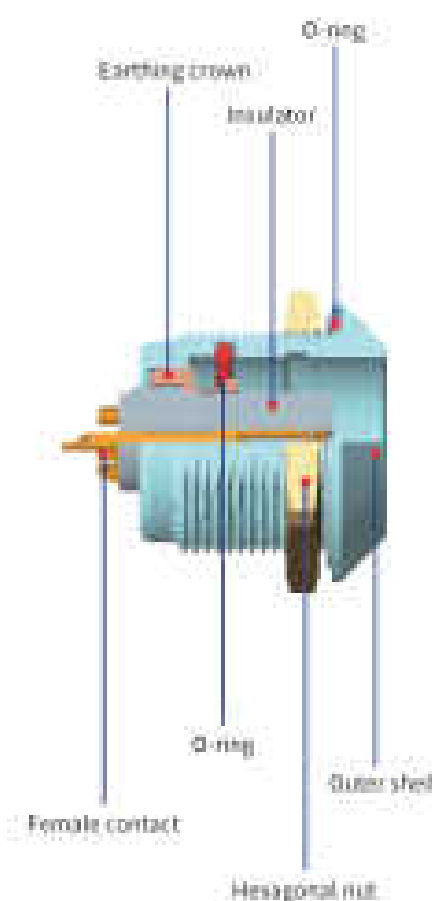
MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 40 contacts
3. IP Rating: IP66-68
4. High Packing density for space saving
5. Solder or PCB contacts (straight or elbow)
6. Multiple key options to avoid cross mating of similar connectors
7. Keying system (G key standard) for connector alignment
8. 360° screening for full EMC shielding
9. Rugged housing for extreme working conditions

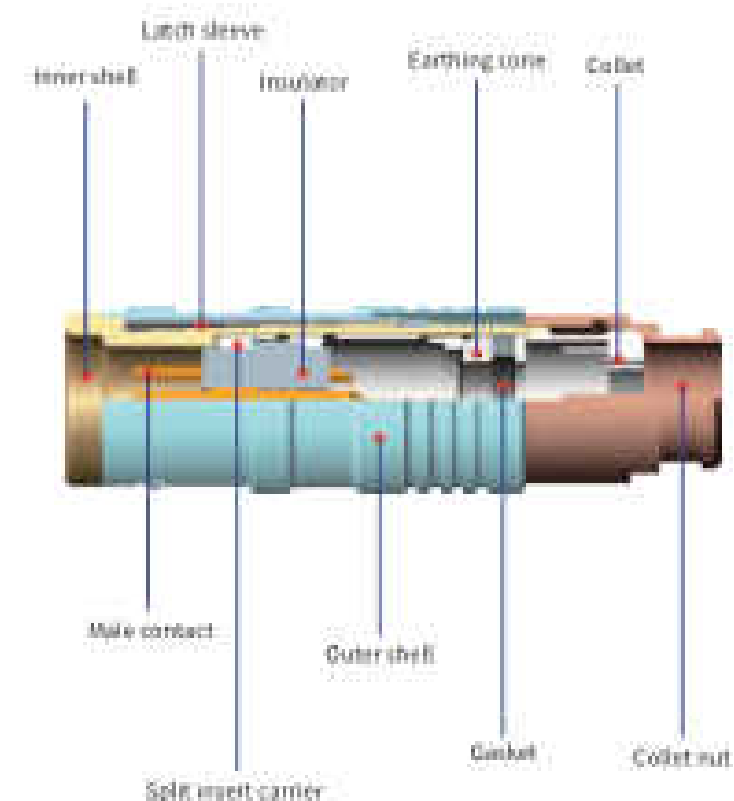
PART SECTION SHOWING INTERNAL COMPONENTS

K series

Fixed socket



Straight plug



Part Numbering System

1. Series: (page 27)

2. Housing model: (page 30)

3. Alignment key: (page 34)

4. Insert configuration: (page 52)

5. Housing material:

C= Chrome plated brass T= Stainless steel
N= Nickel plated brass L= Aluminum alloy anodized
K= Black Chrome plated brass A= Gold plated

6. Insulator material:

L=PPS K=PEEK

7. Contact type:

A= Solder male L= Solder female
W= Pin male 90° V= Pin female 90°
D= Pin male N= Pin female
C/D/C= Crimp male M/F/C= Crimp female

8. Cable OD: (page 57)

9. Outershell pattern:

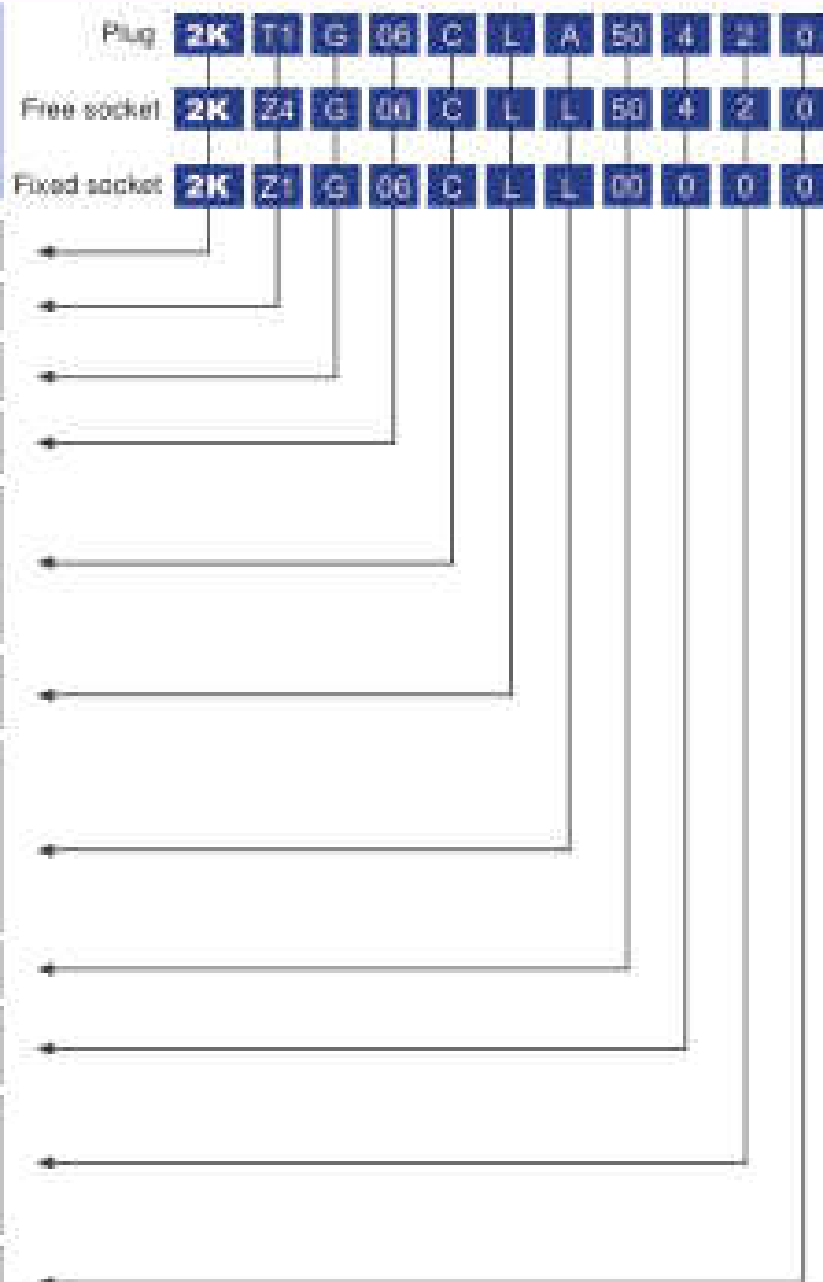
3= Diamond Pattern 4= Circle Pattern

10. Collet Nut Type:

2= Collet nut for bend relief
3= Flat without bend relief
4= Wire glass shape

11. Earthing Tag:

0= Without earthing tag 1= With earthing tag



PART NUMBER EXAMPLE:

Straight plug with cable collet:

2KT1G06CLA50420=2K series straight plug with key(G) and cable collet, multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outershell pattern, collet nut for bend relief, without earthing tag.

Free socket:

2K24G06CLL50420=2K series free socket with key(G) and cable collet, multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, collet for 5.0mm diameter cable, circle outershell pattern, collet nut for bend relief, without earthing tag.

Fixed socket:

2K21G06CLL00000=2K series fixed socket, nut fixing, with key(G), multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, without earthing tag.

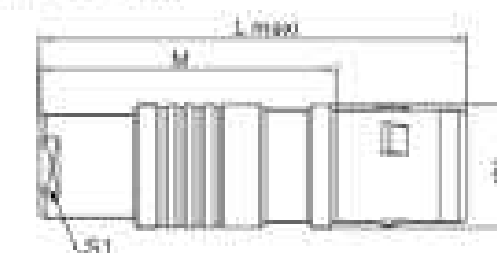
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push/pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	75dB(10MHz) 40dB(1GHz)
Resistance to Vibration	15g(10Hz~2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g, 6ms
Endurance	5000 cycles
Protection index (rated)	IP63

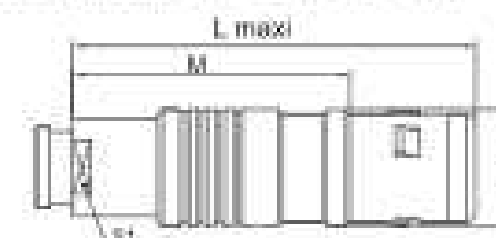
HOUSING MODELS

T1 PLUG Straight plug, watertight, key (G) or keys (A... M and R), cable collet



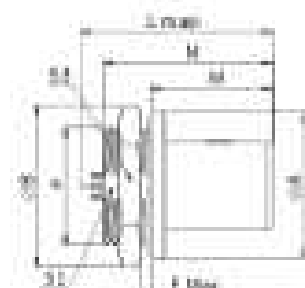
Reference		Dimensions in mm			
Series	Model	A	L	M	S1
0K	T1	11	27.8	28.3	8
1K	T1	13	43	30	8
2K	T1	16	50	34	13
3K	T1	18	60	40	15

T1 PLUG Straight plug, watertight, key (G) or keys (A... M), cable collet and nut for fitting a bend relief



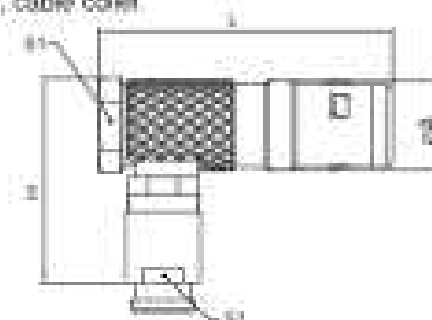
Reference		Dimensions in mm			
Series	Model	A	L	M	S1
0K	T1	11	26.5	28	8
1K	T1	13	40	30	8
2K	T1	16	50	33.8	10
3K	T1	18	60	40	15
4K	T1	24.2	71	50.2	19

T2 PLUG Fixed plug, non-latching, nut fixing, key (G) or keys (A...F, L and R)



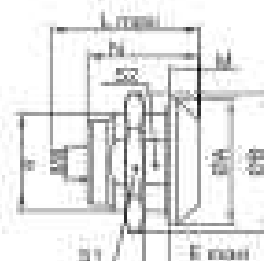
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
1K	T2	20	22	26.5	16.5	33	3.3	14.5	19	M16*1.0	18.8	16.1	A
2K	T2	25	27.2	31	18	30.3	4.5	18.5	24	M20*1.0	18.6	20.1	A
3K	T2	31	34	41	24.4	34.8	4	22.5	38	M24*1.0	22.8	24.1	A

T3 PLUG Elbow (90°) plug, watertight, key (G) or keys (A...F, L and R), cable collet



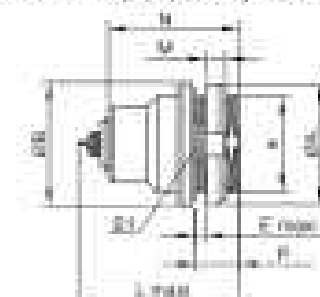
Reference		Dimensions (mm)				
Series	Model	A	L	H	S1	S2
6K	T3	10.8	38	23.9	8	9
1K	T3	13	43	38	9	12
2K	T3	16	51.4	38	10	13
3K	T3	18.9	59.9	37.5	16	15

Z1 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A...F, L and R)



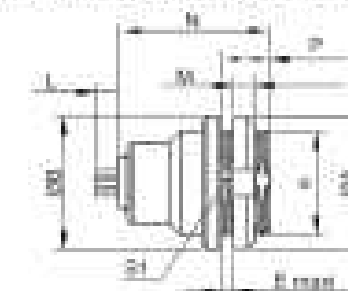
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	N	M	E	S1	S2	e	Ws	Ø	Type
6K	Z1	18	19.2	22.5	16	4	4.5	17	12.5	M16*1.0	12.5	14.1	A
1K	Z1	20	22	30	21.8	4.5	5.5	19	14.5	M18*1.0	14.8	16.1	A
2K	Z1	25	27.2	35	22	5	5.5	24	18.5	M20*1.0	18.6	20.1	A
3K	Z1	31	34	35.2	23.8	6	11	30	22.5	M24*1.0	22.8	24.1	A

Z3 SOCKET Fixed socket, back panel mount, key (G) or keys (A...F, L and R)



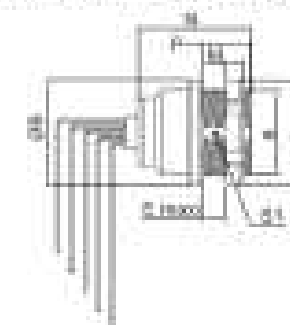
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	E	M	P	N	L	S1	e	Ws	Ø	Type
6K	Z3	18	18	2.5	3.5	7	18.8	22.5	12.5	M16*1.0	12.5	14.1	A
1K	Z3	20	20	5.5	3.0	18	21.5	26.5	14.5	M18*1.0	14.8	16.1	A
2K	Z3	25	25	5.0	3.5	18	22.5	29.5	16.5	M20*1.0	18.6	20.1	A
3K	Z3	30	31	7.0	4.5	12	28.5	37.5	22.5	M24*1.0	22.8	24.1	A
4K	Z3	41.5	36.0	5.0	7	12.8	31.5	41	26.5	M30*1.0	28.8	30.1	A

Z3 SOCKET Fixed socket, back panel mount, key (G) or keys (A...F, L and R) with straight contacts for PCB



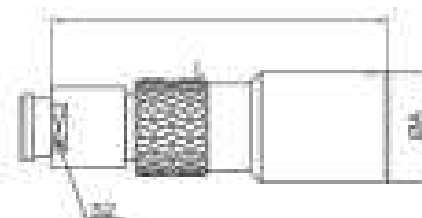
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	E	M	P	N	L	S1	e	Ws	Ø	Type
6K	Z3	18	18	2.5	3.5	7	18.8	4.8	12.5	M16*1.0	12.5	14.1	A
1K	Z3	20	20	5.5	3.0	18	21.5	4.8	14.5	M18*1.0	14.8	16.1	A
2K	Z3	25	25	5.0	3.5	18	22.5	4.8	16.5	M20*1.0	18.6	20.1	A
3K	Z3	30	31	7.0	4.5	12	28.5	4.8	22.5	M24*1.0	22.8	24.1	A

Z3 SOCKET Fixed socket, back panel mount, key (G) or keys (A...F, L and R) with elbow (90°) contacts for PCB



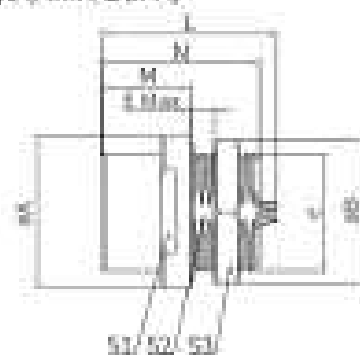
Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	E	M	P	N	L	S1	e	Ws	Ø	Type
6K	Z3	18	18	2.5	3.5	7	18.8	22.5	12.5	M16*1.0	12.5	14.1	A
1K	Z3	20	20	5.5	3.0	18	21.5	26.5	14.5	M18*1.0	14.8	16.1	A
2K	Z3	25	25	5.0	3.5	18	22.5	29.5	16.5	M20*1.0	18.6	20.1	A
3K	Z3	30	31	7.0	4.5	12	28.5	37.5	22.5	M24*1.0	22.8	24.1	A

Z4 SOCKET Free socket, cable mount, key (G) or keys (A...M and R) and nut for fitting a bend relief



Reference		Dimensions (mm)				
Series	Model	A	L	S2		
0K	Z4	13	34	8		
1K	Z4	15	40	9		
2K	Z4	16	53	12		
3K	Z4	23	65	16		

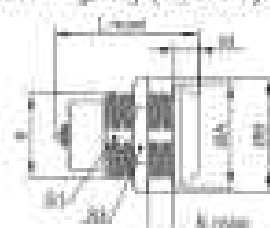
Z6 SOCKET Fixed socket, nut fixing, key (G) or keys (A...F, L or R)



Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	S3	a	Wa	Ø	Type
0K	Z6	18	38	20.8	30.5	18.8	4	16.5	12.5	17	M4*1.0	12.5	14.1	A

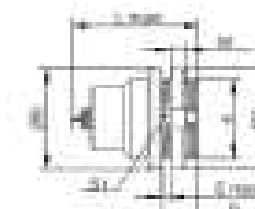
WATERTIGHT OR VACUUMTIGHT MODELS (WATERTIGHT WHEN MATED)

Z7 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A...F, L and R)



Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	E	L	M	S1	S2	S3	a	Wa	Ø	Type	
0K	Z7	18	13.2	45	22.5	4.0	12.5	17	M4*1.0	12.5	14.1	A		
1K	Z7	20	25	50	25.7	4.5	14.5	19	M4*1.0	14.5	16.1	A		
2K	Z7	25	27.7	55	28.8	5.0	16.5	24	M2*1.0	16.5	20.1	A		
3K	Z7	31	34	65	36.5	6.0	20.5	30	M4*1.0	22.5	24.1	A		
4K	Z7	37	41.3	75	43	6.5	26.5	36	M4*1.0	28.5	30.1	A		

Z13 SOCKET Fixed socket, back panel mount, key (G) or keys (A...F, L and R)



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	E	L	M	P	S1	a	Wa	Ø	Type	
0K	Z13	18	38	2.8	22.5	5.5	7	12.5	M4*1.0	12.5	14.1	A	
1K	Z13	20	20	5.5	28.4	3.0	10	14.5	M4*1.0	14.5	16.1	A	
2K	Z13	25	25	9.0	29.0	5.5	10	16.5	M2*1.0	16.5	20.1	A	

K series Alignment Key and Polarized Keying System

Front view of a socket	Key	No. of keys	Angles	Series					Contact type		Note
				0K	1K	2K	3K	4K	Plug	Socket	
				0°	0°	0°	0°	0°	male	female	
	A	2	α	30°	30°	30°	30°	30°	male	female	1
	B	2		45°	45°	45°	45°	45°	male	female	2
	C	2		60°	60°	60°	60°	60°	male	female	3
	D	2		90°	90°	90°	90°	90°	male	female	4
	E	2		120°	120°	120°	120°	120°	male	female	5
	F	2	β	145°	145°	145°	145°	145°	male	female	6
	L	2		75°	75°	75°	75°	75°	female	male	7

Front view of a socket	Key	No. of keys	Angles	Series					Contact type		Note
				0K	1K	2K	3K	4K	Plug	Socket	
				0°	0°	0°	0°	0°	male	female	
	R	2	α	-	-	-	90°	-	male	female	8
			β	-	-	-	115°	-			
				-	-	-	30°	-			
				-	-	-	25°	-			

M SERIES

(Outdoor Keyed)

MOCO M Series waterproof connectors are designed for outdoor applications. With unique and improved structural design, it is a smaller size push-pull self-locking IP68 connector. Available in four sizes: 0M series (M9), 1M series (M12), 2M series (M15) and 3M series (M18). Especially suitable for small size and waterproof needed equipment.



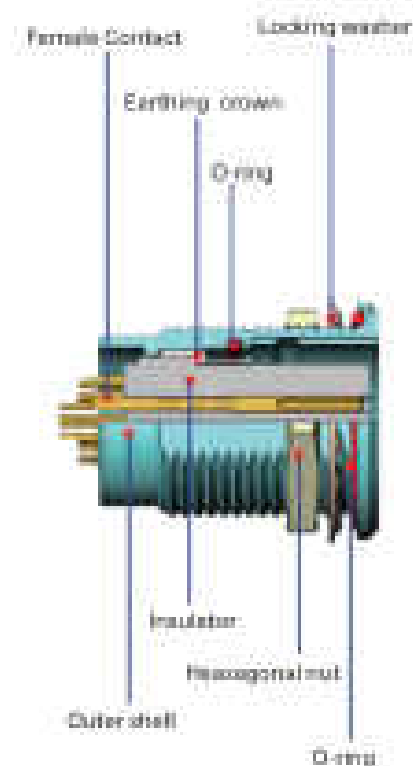
MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 32 contacts
3. IP Rating: IP68
4. High Packing density for space saving
5. Solder or PCB contacts (straight or elbow)
6. Multiple key options to avoid cross mating of similar connectors
7. Keying system (G key standard) for connector alignment
8. 360° screening for full EMC shielding

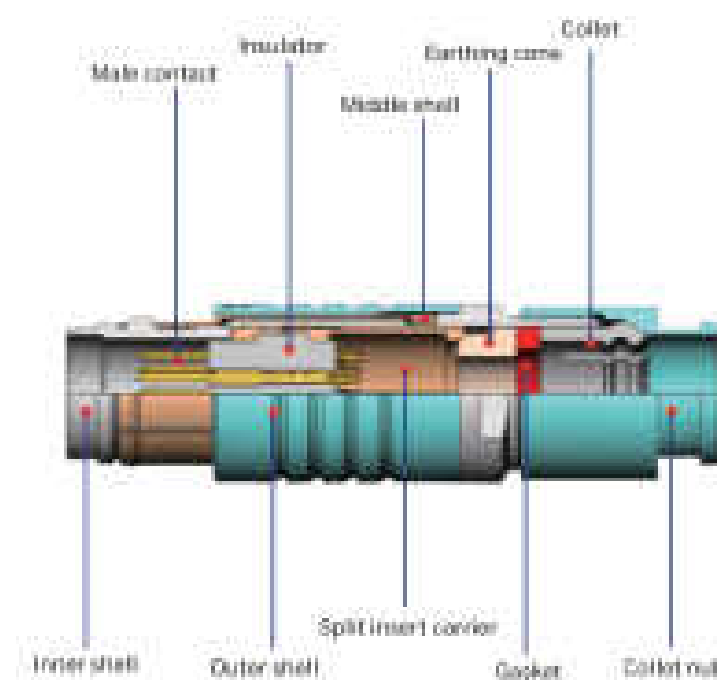
PART SECTION SHOWING INTERNAL COMPONENTS

M series

Fixed socket



Straight plug



Part Numbering System

1. Series: (page 35)

2. Housing model: (page 38)

3. Alignment key: (page 40)

4. Insert configuration: (page 52)

5. Housing material:

C= Chrome plated brass T= Stainless steel
N= Nickel plated brass L= Aluminium alloy
R= Black Chrome plated brass

6. Insulator material:

L= PPS K= PEEK

7. Contact type:

A= Solder male L= Solder female
N= Print female G= Print male
W= Print male 90° V= Print female 90°

8. Cable OD: (page 57)

9. Outershell pattern:

A= Circle Pattern

10. Collet Nut Type:

2= Collet nut for bend relief 3= Flat (without bend relief)

11. Earthing Tag:

0= Without earthing tag 1= With earthing tag

Plug **1M T1 G 04 C L A 50 4 2 0**
Fixed socket **1M Z1 G 04 C L L 00 0 0 0**

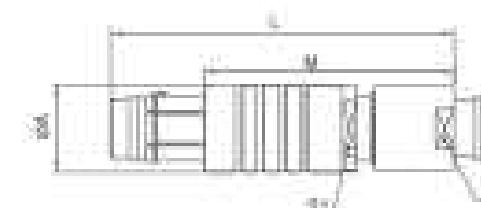
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self locking type
Working Temperature	-55°C ~ +125°C
Maximum Humidity	up to 95% at 90°/140°F
Shielding Efficiency	75dB(10MHz) 40dB(1GHz)
Resistance to Vibration	15g(50Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96h
Shock resistance	100g, 6ms
Endurance	5000 cycles
Protection index (mated)	IP68

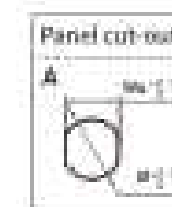
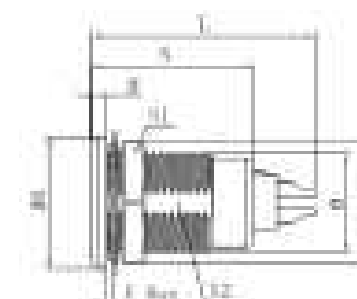
HOUSING MODELS

T1 PLUG Straight plug, watertight, key (G) or keys (A, F, L and R), cable collet and nut for fitting a bend relief



Reference		Dimensions (mm)					
Series	Model	L	M	A	S1	S2	
0M	T1	25.5	25.5	9.4	7.4	8.0	
1M	T1	42.9	30.1	11.8	11.0	9.0	
2M	T1	60.2	37.7	16	13	13	
3M	T1	99.7	44.3	16.7	17	15	

Z1 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A, M and R), watertight or vacuum-tight



Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Wa	Ø	Type	
0M	Z1	12	12.5	19.3	1.5	14.5	5.5	11	8.2	M9*0.6	8.3	9.1	A	
3M	Z1	23	25.4	31	2	22.5	9	22	16.5	M18*1.0	16.6	18.1	A	

PART NUMBER EXAMPLE:

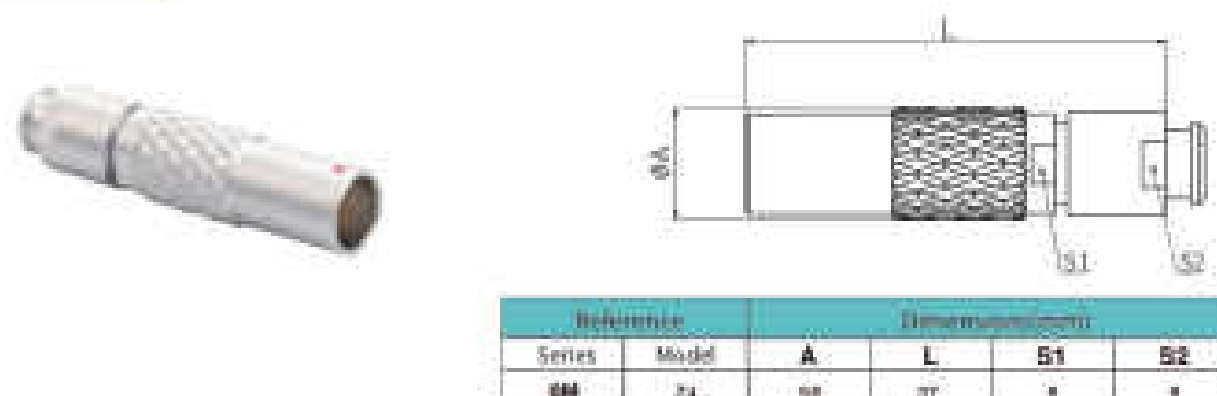
Straight plug with cable collet:

1M1G04CLA50420 = 1M series straight plug with key(G) and cable collet, multipole type with 4 contacts, outer shell in chrome plated brass, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outershell pattern, collet nut for bend relief, without earthing tag.

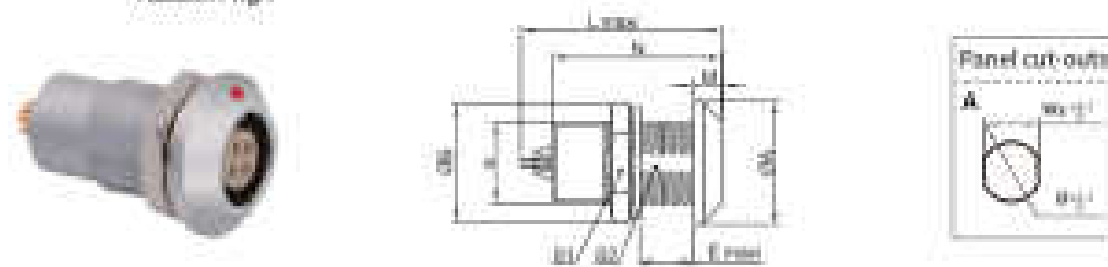
Fixed socket:

1M21G04CLL00000 = 1M series fixed socket, nut fixing, with key(G), multipole type with 4 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, without earthing tag.

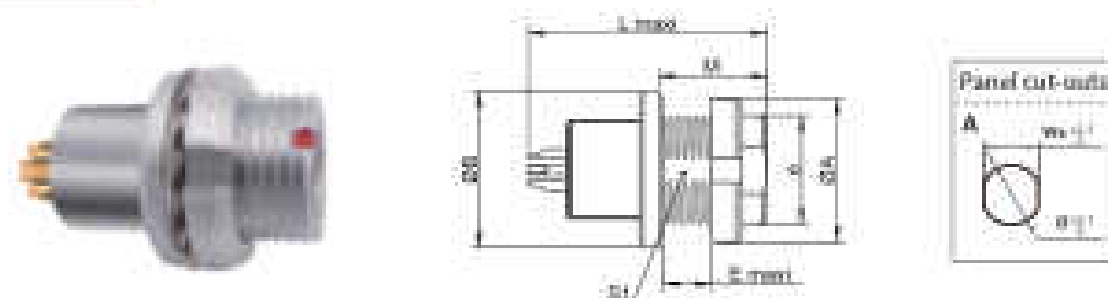
Z4 SOCKET Free socket, cable mount, key (G) or keys (A...M and R), watertight or vacuum-tight



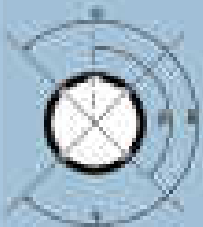
Z7 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A...M and R), watertight or vacuum-tight

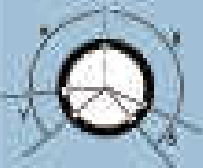


Z13 SOCKET Fixed socket, back panel mount, key (G) or keys (A...M and R), watertight or vacuum-tight



M series Alignment Key and Polarized Keying System

Front view of a socket		Ref.	No. of keys	Angles	Series			Ref.	No. of keys	Angles	Series			Contact type		Male
						00	0M	1M					2M	3M	4M	
		G	1	H	0°	0°	0°	G	1	H	0°	0°	0°	male	female	
		A	2		30°	30°	30°	A	2		30°	30°	30°	male	female	
		B	2		60°	60°	60°	B	2		45°	45°	45°	male	female	
		C	2		—	90°	90°	C	2		60°	60°	60°	male	female	
		D	2	R	—	135°	135°	D	2	R	90°	90°	90°	male	female	
		E	2		—	145°	145°	E	2		120°	120°	120°	male	female	
		F	2		—	155°	155°	F	2		145°	145°	145°	male	female	
		J	2		45°	45°	45°	J	2		37.5°	37.5°	37.5°	female	male	
		H	2	V	—	70°	70°	H	2	V	32.5°	32.5°	32.5°	female	male	
		L	2		—	80°	80°	L	2		70°	70°	70°	female	male	
		M	2	A	—	110°	—	M	2	—	—	—	female	male		
V	3	—	—	—	—	V	3	—	—	—	female	male				
		—	—	—	—			—	—	—	female	male				
		—	—	—	—			—	—	—	female	male				

Front view of a socket		Ref.	No. of keys	Angles	Series			Ref.	No. of keys	Angles	Series			Contact type		Male
						2M	3M	4M					Plug	Socket		
		R	3	W	—	—	—	R	3	W	—	—	—	male	female	
				B	—	—	—			B	—	—	—			
				—	—	—	—			—	—	—	—			
				—	—	—	—			—	—	—	—			

Y SERIES

(Outdoor Keyed)



MORE THAN CONNECTORS

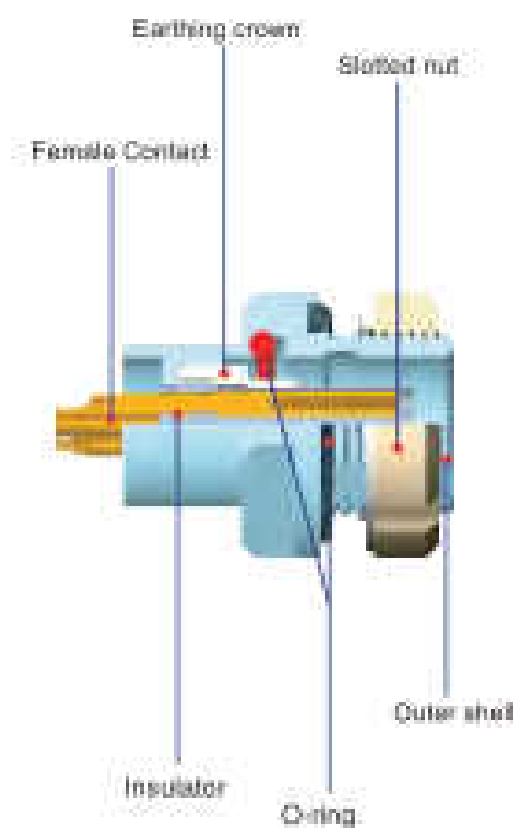
MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 32 contacts
3. Easy to operate with blind insertion
4. High Packing density for space saving
5. Six-flap locking shrapnel
6. 360° screening for full EMC shielding
7. IP Rating: IP68

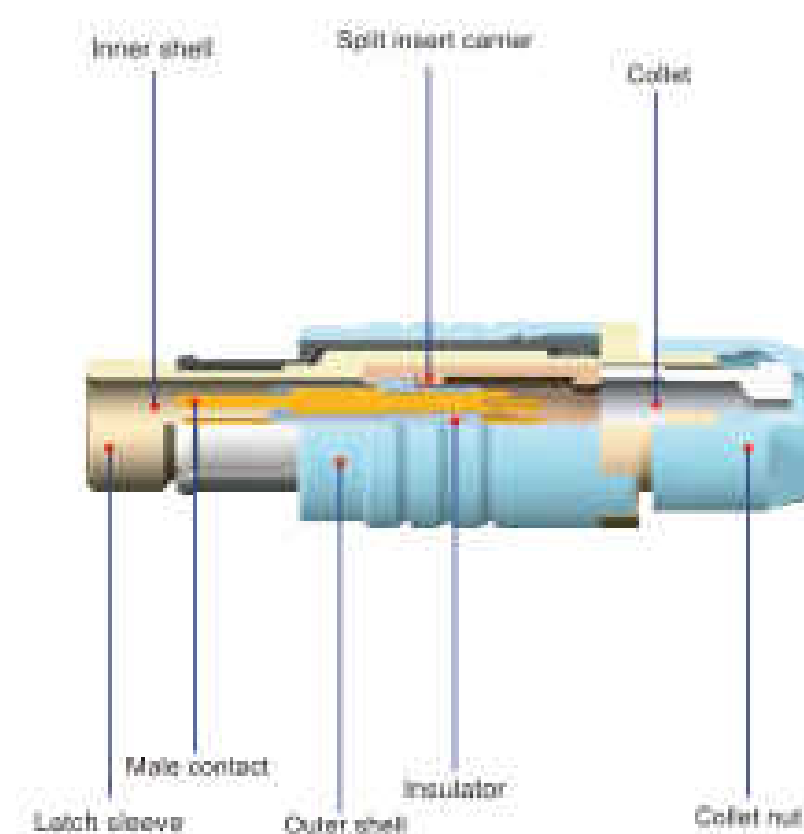
PART SECTION SHOWING INTERNAL COMPONENTS

Y series

Fixed socket

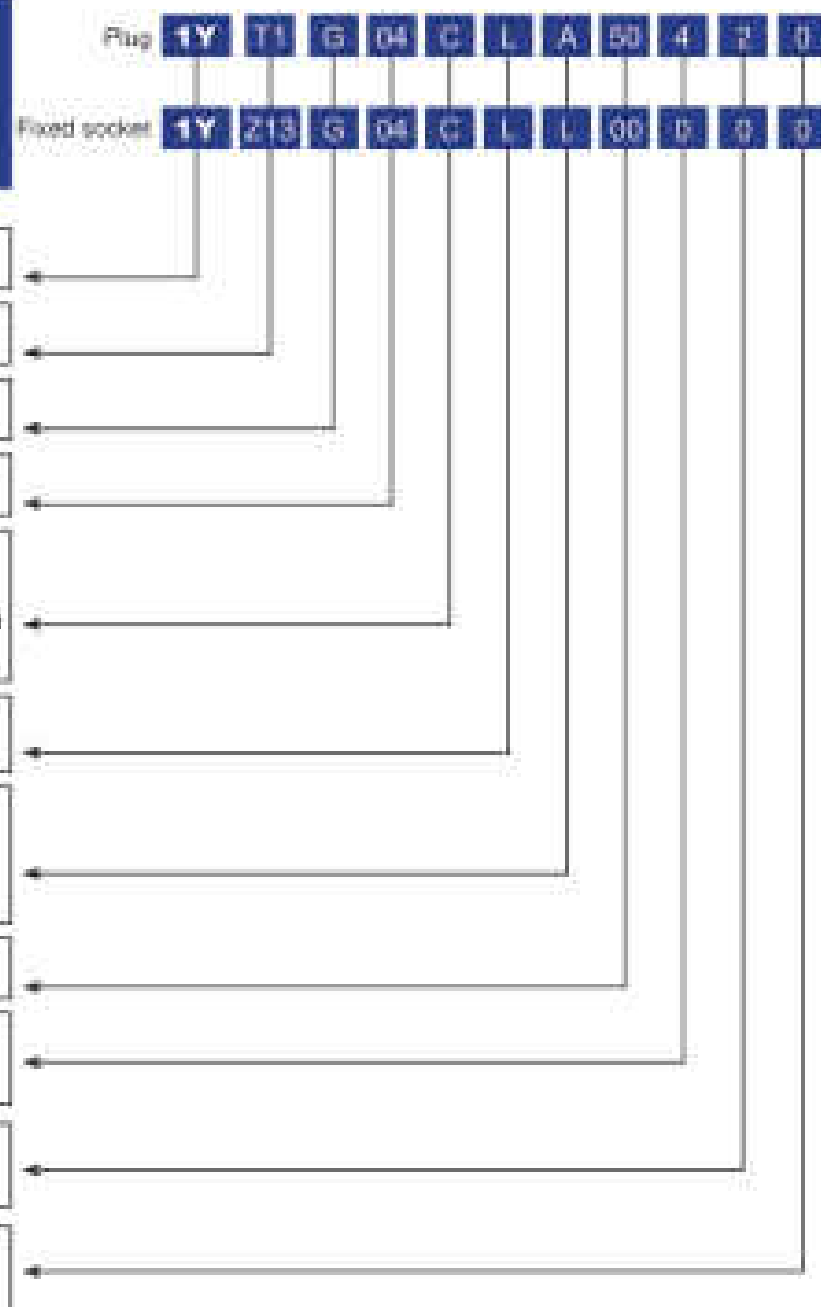


Straight plug



Y SERIES

Part Numbering System



PART NUMBER EXAMPLE:

Straight plug with cable collet:

1YT1G04CLA50420=1Y series straight plug with key(G) and cable collet, multipole type with 4 contacts, outer shell in chrome plated brass, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outer shell pattern, collet nut for bend relief, without earthing tag.

Fixed socket:

1Y2130B4CL00000=1Y series fixed socket, nut lining, with key(G), multipole type with 4 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, without earthing tag.

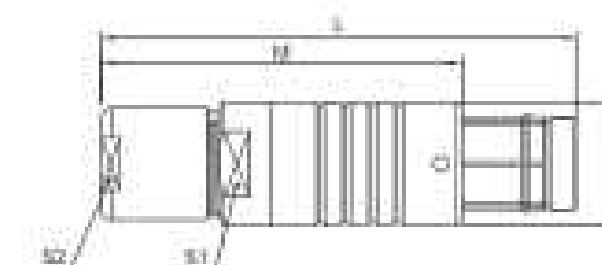
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self locking type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	15dB(10MHz)-45dB(10GHz)
Resistance to Vibration	15g(10Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g, 6ms
Endurance	5000 cycles
Protection index (mated)	IP58

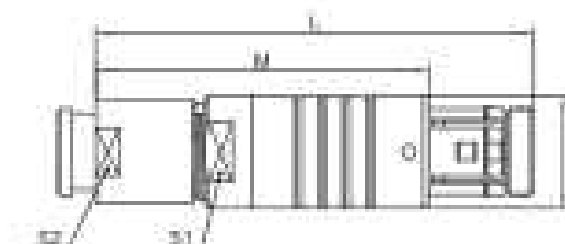
HOUSING MODELS

T1 PLUG Straight plug, key (G) or keys (A, F, L and R), cable collet



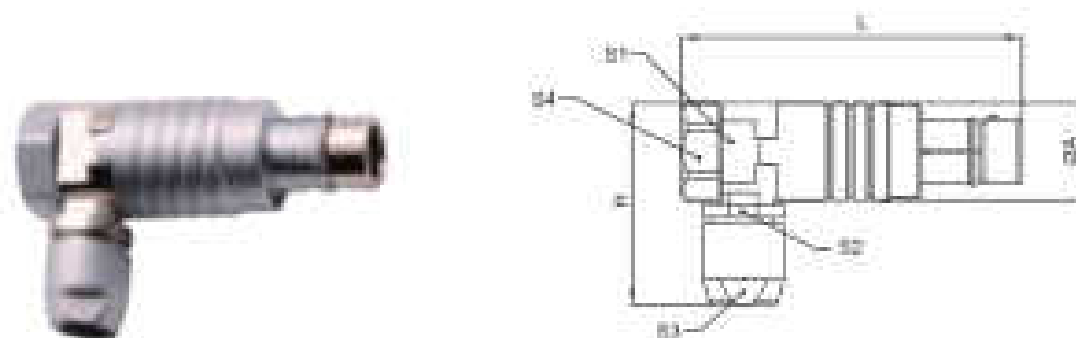
Reference		Dimensions (mm)				
Series	Model	L	M	A	S1	S2
00Y	T1	28	29	7.7	6	5
0Y	T1	38	38	9.4	8	8
1Y	T1	45.8	34.8	11.8	10	9
2Y	T1	50.5	38.5	15	13	13

T1 PLUG Straight plug, key (G) or keys (A, M), cable collet and nut for fitting a bend relief



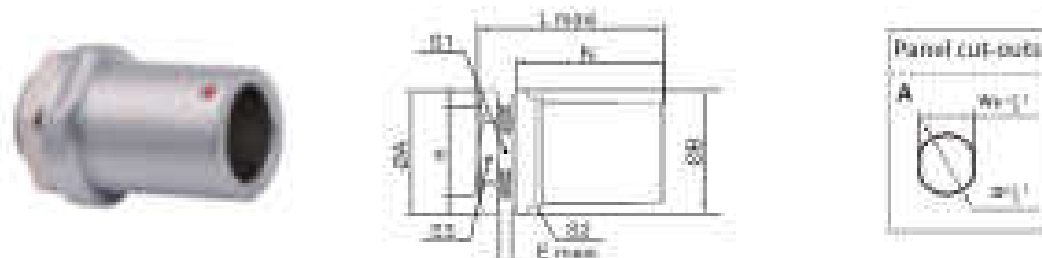
Reference		Dimensions (mm)				
Series	Model	L	M	A	S1	S2
00Y	T1	28	29	7.7	6	5
0Y	T1	37	27	9.4	8	8
1Y	T1	45.8	34.8	11.8	10	9
2Y	T1	50.5	38.5	15	13	13

T3 PLUG Elbow (90°) plug, key (G) or keys (A...M and R), cable coded



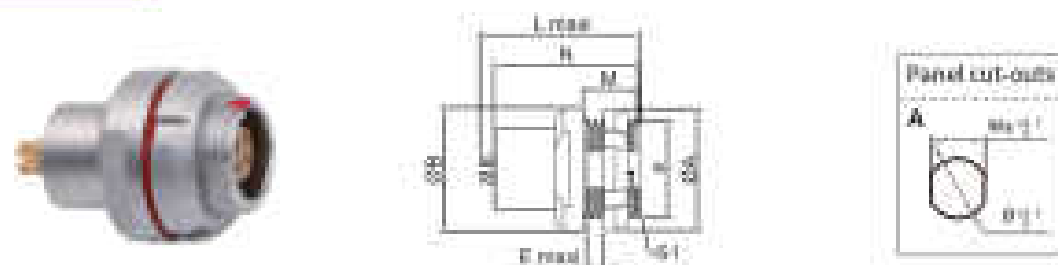
Reference		Dimensions (mm)							
Series	Model	A	L	H	S1	S2	S3	S4	
00Y	T3	7.7	27	16	8	8	5	7	

Z6 SOCKET Fixed socket, front panel mount, nut fixing, key (G) or keys (A...M), watertight or vacuum-tight



Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	N	E	S1	S2	S3	a	Wa	Ø	Type
1Y	Z6	18	16	34.2	18.2	2	10	14	14	M2*1.6	10.1	12.1	A

Z13 SOCKET Fixed socket, back panel mount, nut fixing, key (G) or keys (A...M), watertight or vacuum-tight



Reference		Dimensions (mm)										Panel cut-outs (mm)	
Series	Model	A	B	L	N	M	E	S1	a	Wa	Ø	Type	
00Y	Z13	16	8.8	16.7	14.2	2	2	6.3	M2*1.6	6.4	7.1	A	
0Y	Z13	14.3	14.6	22.5	18.5	6.4	3	8	M2*1.6	9.1	18.1	A	
1Y	Z13	18	17.8	25	21	8	4.5	12	M2*1.6	12.1	14.1	A	
2Y	Z13	26	21	28	26.4	16	5.5	14.5	M2*1.6	14.6	16.1	A	

Y series Alignment Key and Polarized Keying System

Front view of a socket	Ref	No. of keys	Angles	Series			Ref	No. of keys	Angles	Series			Contact type		Note
				00	0Y	1Y				2Y	3Y	4Y	Plug	Socket	
	G	1		0°	0°	0°	G	1		0°	0°	0°	male	female	■
	A	2		30°	30°	30°	A	2		30°	30°	30°	male	female	■
	B	2		60°	60°	60°	B	2		60°	60°	60°	male	female	■
	C	2		-	90°	90°	C	2		90°	90°	90°	male	female	■
	D	2		-	135°	135°	D	2		135°	135°	135°	male	female	■
	E	2		-	145°	145°	E	2		145°	145°	145°	male	female	■
	F	2		-	155°	155°	F	2		155°	155°	155°	male	female	■
	J	2		45°	45°	45°	J	2		37.5°	37.5°	37.5°	female	male	■
	K	2		-	70°	70°	K	2		32.5°	32.5°	32.5°	female	male	■
	L	2		-	80°	80°	L	2		70°	70°	70°	female	male	■
	M	2		-	130°	-	M	2		-	-	-	female	male	■
	Y	3		-	-	-	Y	3		112.5°	126°	112.5°	male	female	■

Front view of a socket	Ref	No. of keys	Angles	Series			Ref	No. of keys	Angles	Series			Contact type		Note
				00	0Y	1Y				2Y	3Y	4Y	Plug	Socket	
	R	3	0°	-	-	-	R	3	0°	-	-	-	male	female	■
			90°	-	-	-			90°	-	-	-			
			180°	-	-	-			180°	-	-	-			
			270°	-	-	-			270°	-	-	-			

W series (Deepwater connector)

(Outdoor Keyed)



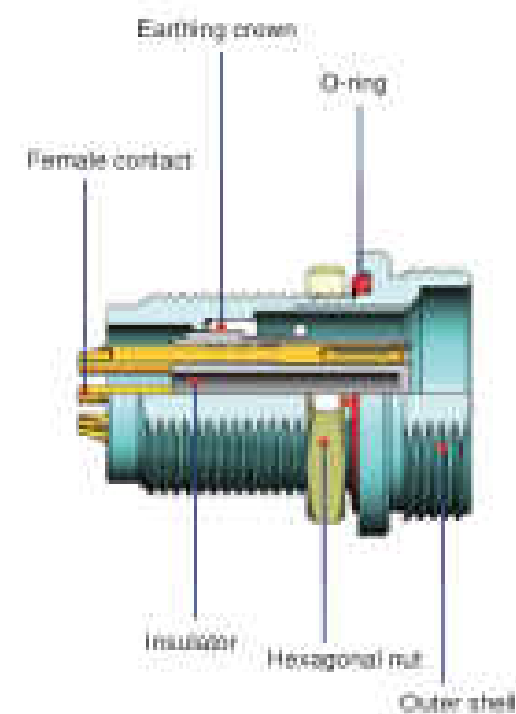
MAIN FEATURES:

1. Screw Locking system
2. Suitable for deep water and high humidity areas
3. Double-gasket protection, perfect waterproof performance
4. Multipole types 2-32 contacts
5. Multiple key options to avoid cross mating of similar connectors
6. Rugged housing design for extreme working environment

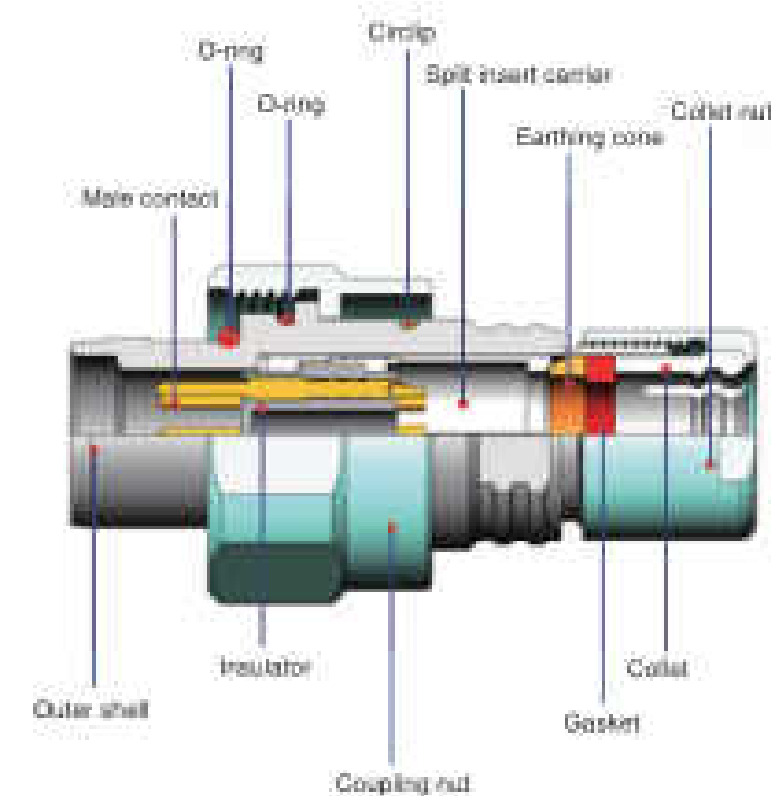
PART SECTION SHOWING INTERNAL COMPONENTS

W series

Fixed socket

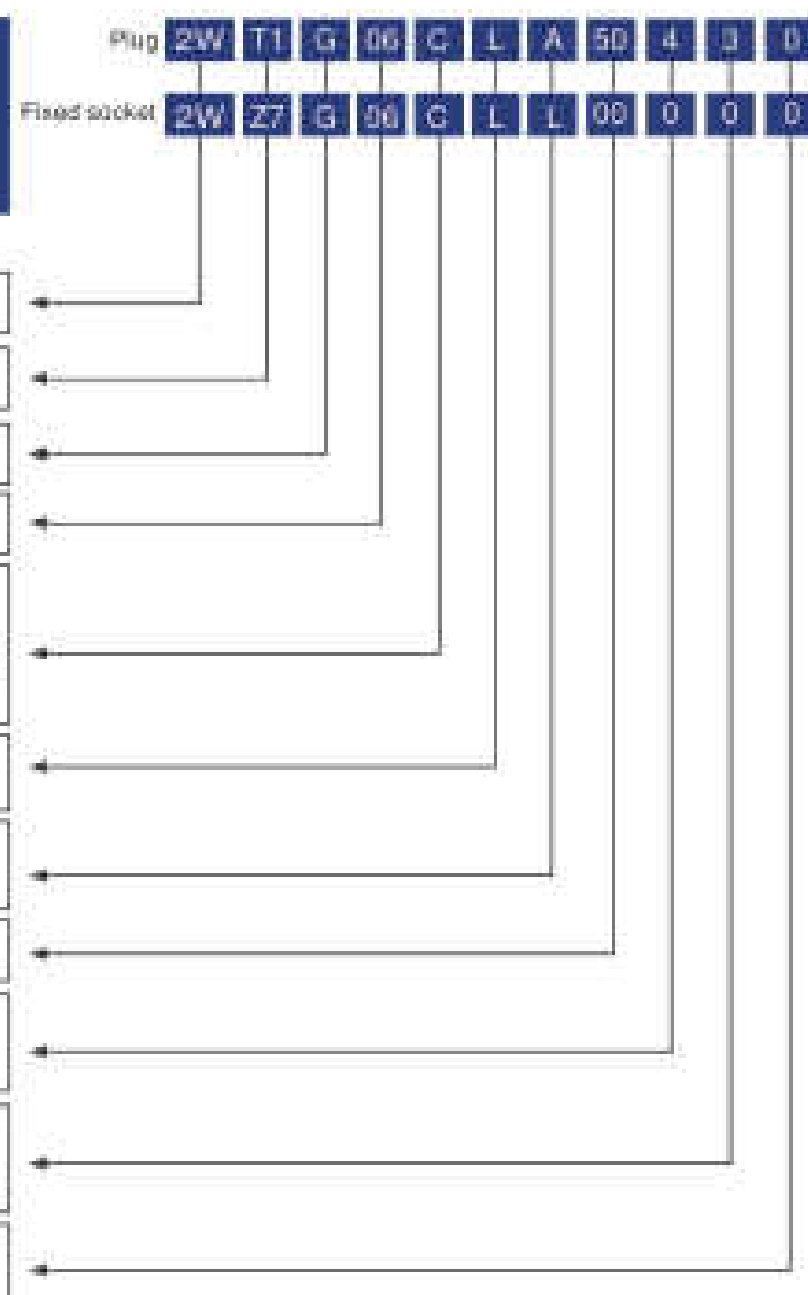


Straight plug



W SERIES

Part Numbering System



PART NUMBER EXAMPLE:

Straight plug with cable collet:

2WT1G06CLA50430=2W series straight plug with key(G) and cable collet, multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outer shell pattern, flat collet nut, without earthing tag.

Fixed socket:

2WZ7G06CLL00000=2W series fixed socket, nut fixing, with key(G), multipole type with 6 contacts, outer shell in chrome plated brass, PPS insulator, solder female contacts, without earthing tag.

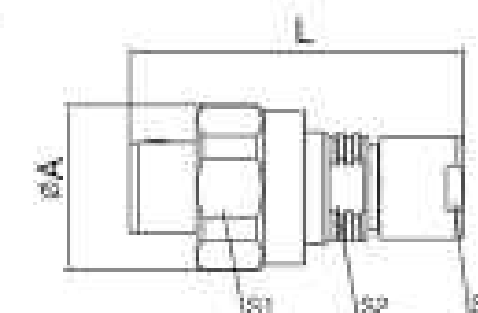
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self locking type
Working Temperature	-55°C~+125°C
Shielding Efficiency	75dB(10MHz)~45dB(1GHz)
Resistance to Vibration	15g(10Hz~2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Storage resistance	300g/4ms
Endurance	5000 cycles
Protection index(material)	IP68

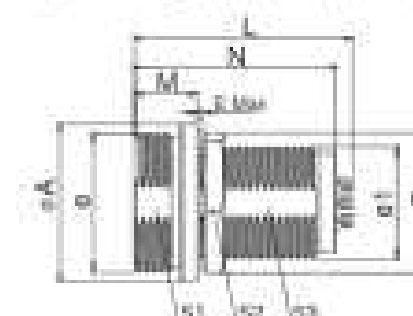
HOUSING MODELS

T1 PLUG Straight plug, screw locking, cable collet



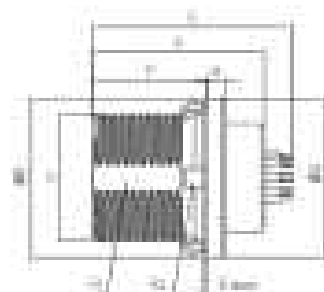
Reference		Dimensions(mm)					
Series	Model	A	L	S1	S2	S3	
0W	T1	17.2	26.0	18	8	8	
1W	T1	18.3	43.5	18	10	8	
2W	T1	22.5	47.5	22	13	13	
3W	T1	27.5	57.4	26	15	15	

Z7 SOCKET Fixed socket, front panel mount, nut fixing, key(G) or key(A...L)



Reference		Dimensions(mm)												Panel cut-outs(mm)		
Series	Model	A	B	L	M	N	E	S1	S2	S3	a	a1	Wa	Ø	Type	
0W	Z7	18.3	16	21.5	8	18.5	8	12.5	14	10.5	M14*1.2	M8*1.0	10.5	12.1	A	
1W	Z7	18.3	19.2	26.4	8	20	11	14.5	17	12.5	M16*1.2	M14*1.0	12.5	14.1	A	
2W	Z7	22.5	21.5	31.3	8	23	12	18.5	19	14.5	M20*1.2	M16*1.0	14.5	16.1	A	
3W	Z7	26.4	21.5	36.0	9.5	26	12	22.5	24	16.5	M24*1.2	M20*1.0	16.5	20.1	A	

213 SOCKET Fixed socket, back panel mount, nut fixing, key(G) or key(A...L)



Reference		Dimensions (mm)										Panel cut-outs (mm)		
Series	Model	A	B	L	P	N	M	E	S1	S2	W	Wa	Ø	Type
0W	213	18.5	19.8	21.8	13	18.9	2	10	12.5	17	M4P1.6	12.5	14.1	A
3W	213	25	25	31.3	18	27	3	8	18.5	22.5	M5P1.6	18.5	20.1	A

W series Alignment Key and Polarized Keying System

Front view of a socket	Ref.	PR of keys	Angles	Series		Connectivity		Note
				0W-3W		Plug	Socket	
	0	1		0°		male	female	
	A	2		30°		male	female	
	B	3		45°		male	female	
	L	2	Y	90°		male	female	

Cable Collet (The material of cable collet is nickel plated brass)

Code	Cable size (mm)	Dimensions (mm)		Series			
		Min.	Max.	0W	1W	2W	3W
30	3.0	2.8	3.0	●	●		
35	3.5	3.1	3.5	●			
40	4.0	3.8	4.0	●	●	●	
50	5.0	4.8	5.0	●	●	●	
55	5.5	5.1	5.5		●		
60	6.0	5.8	6.0		●	●	
70	7.0	6.1	7.0		●	●	●
80	8.0	7.1	8.0			●	●
90	9.0	8.1	9.0			●	●
10	10.0	9.1	10.0				●
11	11.0	10.1	11.0				●

○ Position / dimension: 0W/0M/1W
● Position / dimension: 2W/3W



INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Rated current (A)	Ins. voltage (V)	Working voltage (V)
		Male	Female					
00B 00Y	02			0.5	10	5	1000	330
	03			0.5	10	3	800	280
	04			0.5	10	2	800	280
	05			0.35	15	1.7	700	200
0B 0K 0M 0Y 0W	02			0.8	6	10	1000	500
	03			0.8	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	300
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	300
	08			0.5	10	2	600	200
	10			0.5	10	1.8	600	200
	12			0.35	15	1.5	800	200
	15 1K 1M 1Y 1W			1.3	5	15	1500	500
	03			1.3	5	12	1300	430
	04			0.9	6	10	1300	430

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Terminals (in Ø)	Rated current (A)	Test voltage (V)	Working voltage (V)
		 Male 	Female  					
1B 1K 1M 1Y 1W	05			0.9	6	9	1250	415
	06			0.7	7.5	7	1050	350
	06 (4+2)			0.9*4 0.5*2	6.0	10 2	1050	350
	07			0.7	7.5	7	950	315
	08			0.7	7.5	5	950	315
	10			0.5	10	2.5	900	300
	14			0.5	10	2	800	260
	16			0.5	10	1.5	800	260
P08			0.5	10	5	1000	333	
2B 2K 2M 2Y 2W	02			2.0	3	25	2100	700
	03			1.6	4	17	2400	800
	04			1.3	5	15	1850	510
	05			1.3	5	14	1750	580
	06			1.3	5	12	1350	450
	07			1.3	5	11	1750	580
	08			0.9	6	10	1500	500
	10			0.9	6	8	1450	500
	12			0.7	7.5	7	1250	480

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)
								
2B 2K 2M 2Y 2W	14			0.7	7.5	6.5	1150	380
	16			0.7	7.5	6	950	315
	18			0.7	7.5	5.5	850	280
	19			0.7	7.5	5	875	280
	26			0.5	10	2	950	315
	32			0.5	10	1.5	1200	400
	514			0.7	7.5	10	1600	500
3B 3K 3M 3W	02			3.0	0	35	2100	700
	03			2.0	3	25	1900	650
	04			2.0	3	19	1500	550
	05			1.6	4	19	1900	650
	06			1.6	4	17	1800	533
	07			1.6	4	15	1700	550
	08			1.3	5	13	1650	550
	09 (8+1)			1.3*8 2.0*1	5	5.0 15.0	1350	450
	10			1.3	5	12	1250	415

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact element	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
3B 3K 3M 3W	12			0.9	6	9	1450	450
	14			0.9	6	9	1200	400
	16			0.9	6	8	1200	385
	18			0.9	6	7	1200	385
	20			0.7	7.5	6	1000	385
	22			0.7	7.5	5.5	1000	330
	24			0.7	7.5	4	950	333
	26			0.7	7.5	4	950	315
	30			0.7	7.5	3.5	800	270
	32			0.7	7.5	3	750	250
3B	X112 (11+2)			0.75*11	7.5	6	1500	500
				1.1*2	5	10	4000	1300
4B-4K	04			3.0	1	30	1500	500
	06			2.0	3	24	1750	550
	15			0.9	6	14	1500	500
	24			0.9	6	11	1450	480
	40			0.7	7.5	8	900	300

CALCULATION METHOD: WORKING VOLTAGE= TEST VOLTAGE/3

INSERT CONFIGURATION (Multi fluid and Mixed fluid + LV)

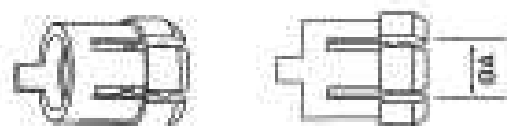
Series	Code	Number of contacts	Solder contacts		Contact element	Crt. v. of type (mV)	Crt. v. of type (V)	Max. working pressure (bar)	Working voltage (V)	Rated current (A)
			Male solder contacts	Female solder contacts						
2B 2K	P13	6			0.7	3.0 4.0	1.8 3.0	1	1800	6.0
		1 Fluidic								
3B 3K	801	8			0.7	3.0 4.0	1.8 3.0	2	800	8.0
		1 Fluidic								

INSERT CONFIGURATION (Coax+LV)

Series	Code	Number of contacts	Solder contacts		Contact element	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)	Resistance (Ω)
			Male	Female						
2B 2K	604	4			0.7	7.5	7	750	250	-
		1 Coax			1.3	5	15	1850	610	50
2B 2K	810	10			0.7	7.5	7	950	300	-
		1 Coax			0.7	7.5	5	950	300	50
3B 3K	813	12			0.7	6	7	900	300	-
		1 Coax			1.3	5	15	1850	610	50

COLLET (B, K, M, Y SERIES) (The material of collet is nickel plated brass)

FOR B SERIES



Code	Collet O.D. (mm)	Cable Dia (mm)		Series					
		min	max	10B	15B	18B	20B	25B	30B
30	3.0	2.8	3.2	●	●	●	●		
35	3.5	3.1	3.9	●	●	●			
40	4.0	3.4	4.2		●	●	●		
45	4.5	4.1	4.3		●				
50	5.0	4.6	5.2		●	●	●	●	
55	5.5	5.1	5.3			●	●	●	
75	7.0	6.1	7.3			●	●	●	
85	8.0	7.1	8.3				●	●	
95	9.0	8.1	9.3				●	●	
10	10.0	9.1	10.0				●	●	●
11	11.0	10.1	11.0					●	●
12	12.0	11.1	12.0					●	●
13	13.0	12.1	13.0						●
14	14.0	13.1	14.0						●
15	15.0	14.1	15.0						●

FOR K, M SERIES



Code	Collet O.D. (mm)	Cable Dia (mm)		Series					
		min	max	10KM	15KM	20KM	25KM	30	35
30	3.0	2.8	3.2	●	●				
35	3.5	3.1	3.9	●					
40	4.0	3.4	4.2	●	●				
50	5.0	4.6	5.2	●	●	●			
55	5.5	5.1	5.3		●				
65	6.0	5.6	6.2		●	●			
75	7.0	6.1	7.3		●	●	●		
85	8.0	7.1	8.3			●	●		
95	9.0	8.1	9.3			●	●		
10	10.0	9.1	10.0				●	●	
11	11.0	10.1	11.0				●	●	
12	12.0	11.1	12.0					●	●
13	13.0	12.1	13.0						●
14	14.0	13.1	14.0						●
15	15.0	14.1	15.0						●

FOR Y SERIES



Code	Collet O.D. (mm)	Cable Dia (mm)		Series			
		min	max	10Y	15Y	20Y	25Y
70	7.0	6.5	7.5	●	●	○	
75	7.5	7.1	7.9	●	●		
80	8.0	7.6	8.0		●	○	●
90	9.0	8.6	9.3		●	○	●
100	10.0	9.6	10.0			○	●
110	11.0	10.1	11.0				●
120	12.0	11.1	12.0				●
130	13.0	12.1	13.0				●
140	14.0	13.1	14.0				●

○ Protection independent (P000000)
● Protection independent (P000000)

PCB Drilling pattern

For B Series and K Series fixed socket with straight pin contacts



Series	Dimension (mm)	
	A	B
60	0.8	1.2
65-66	0.7	2.2
68-69	0.7	2.8
70-71	0.7	4.8



Series	Dimension (mm)		
	A	B	C
80	0.6	1.8	40°
85-86	0.7	2.8	40°
88-89	0.7	3.1	40°
90-91	0.7	3.3	40°
95-96	0.6	4.2	40°



Series	Dimension (mm)		
	A	B	C
100-101	0.7	3.8	60°
105-106	0.7	3.7	60°



Series	Dimension (mm)		
	A	B	C
110-111	0.7	3.8	60°
115-116	0.7	3.7	60°
120-121	0.7	3.8	60°



Series	Dimension (mm)		
	A	B	C
125-126	0.7	4.4	45°
130-131	0.8	7.5	45°



Series	Dimension (mm)				
	A	B	C	D	H
135-136	0.7	3.8	45°	22°30'	1.40
140-141	0.7	6.2	45°	22°30'	2.40
145-146	0.8	7.9	45°	20°30'	3.80



Series	Dimension (mm)				
	A	B	C	H	I
150-151	0.7	4.4	90°	1.58	1.80
155-156	0.7	6.5	90°	3.63	2.80
160-161	0.7	8.2	90°	3.48	3.40



Series	Dimension (mm)		
	A	B	C
00	0.6	1.35	180°
05-06	0.7	2.3	180°
10-11	0.7	3.0	180°
15-16	0.7	4.8	180°
20-21	0.8	9.0	120°



Series	Dimension (mm)		
	A	B	C
05-06	0.7	2.8	72°
10-11	0.7	3.4	72°
15-16	0.7	5.2	72°
20-21	0.8	9.7	72°



Series	Dimension (mm)		
	A	B	C
25-26	0.7	5.8	72°



Series	Dimension (mm)		
	A	B	C
15-16	0.7	3.8	57°20'



Series	Dimension (mm)		
	A	B	C
05-06	0.7	3.2	45°



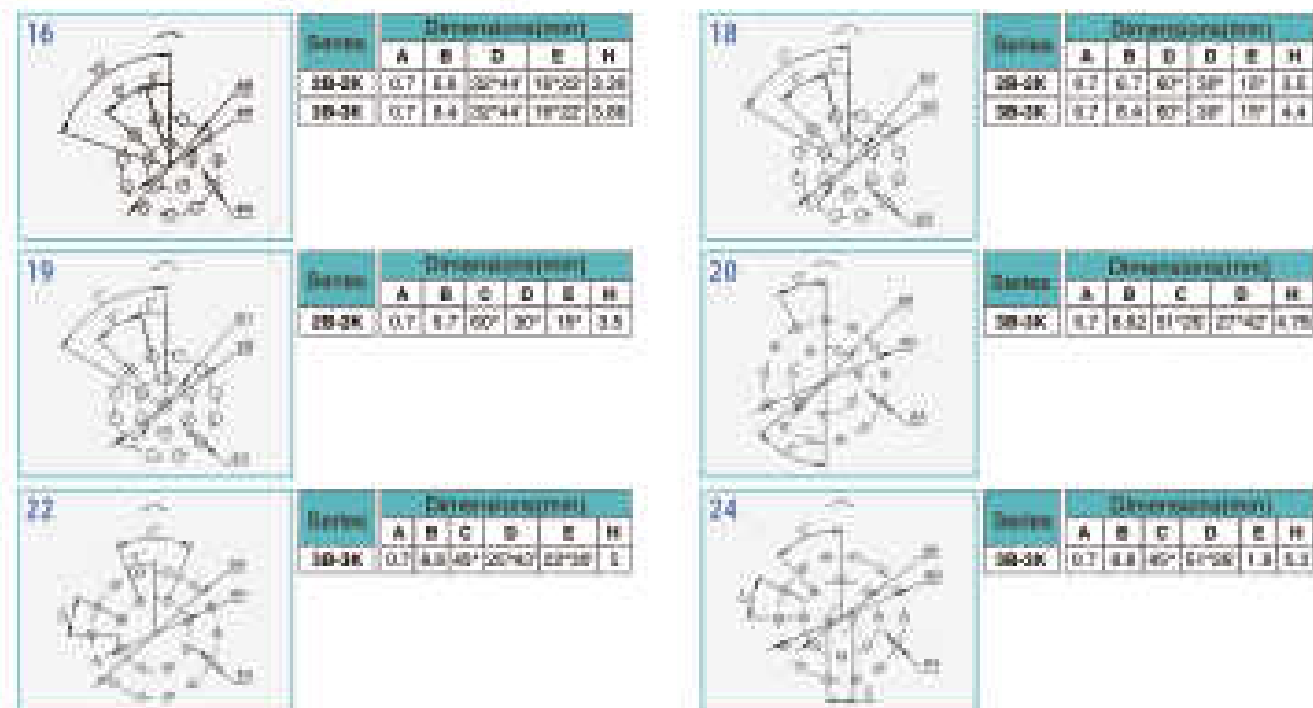
Series	Dimension (mm)				
	A	B	C	D	H
25-26	0.7	6.8	45°	22°30'	2.58
30-31	0.7	8.2	45°	22°30'	3.48



Series	Dimension (mm)				
	A	B	C	D	H
15-16	0.7	4.4	72°	32°44'	2.08

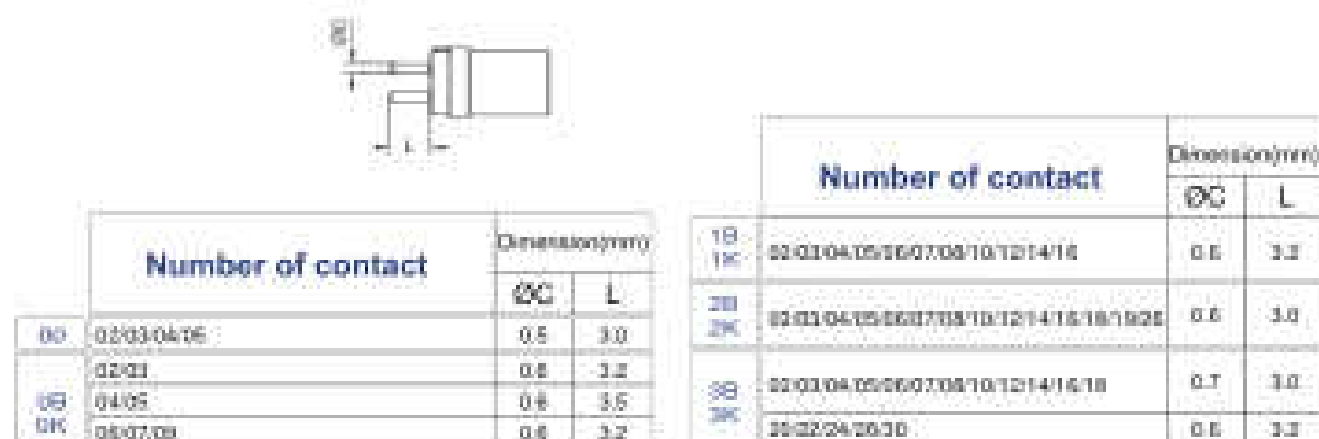
PCB Drilling pattern

For B Series and K Series fixed socket with straight print contacts



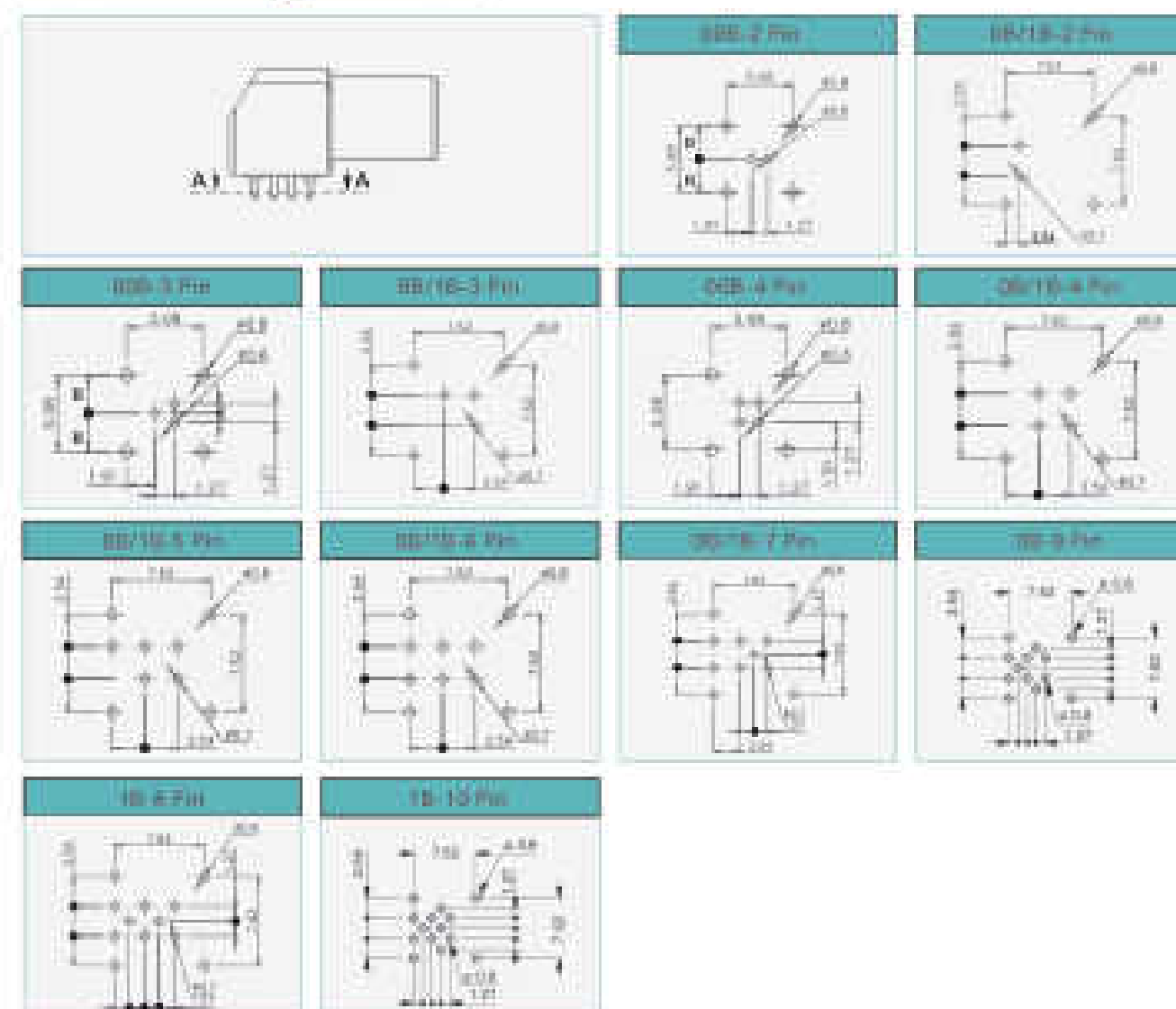
NOTE : ALL VIEWS ARE FROM THE SIDE OF THE SOCKET.

Straight print contacts length (Z1/Z2/Z3/Z5/Z13 models)



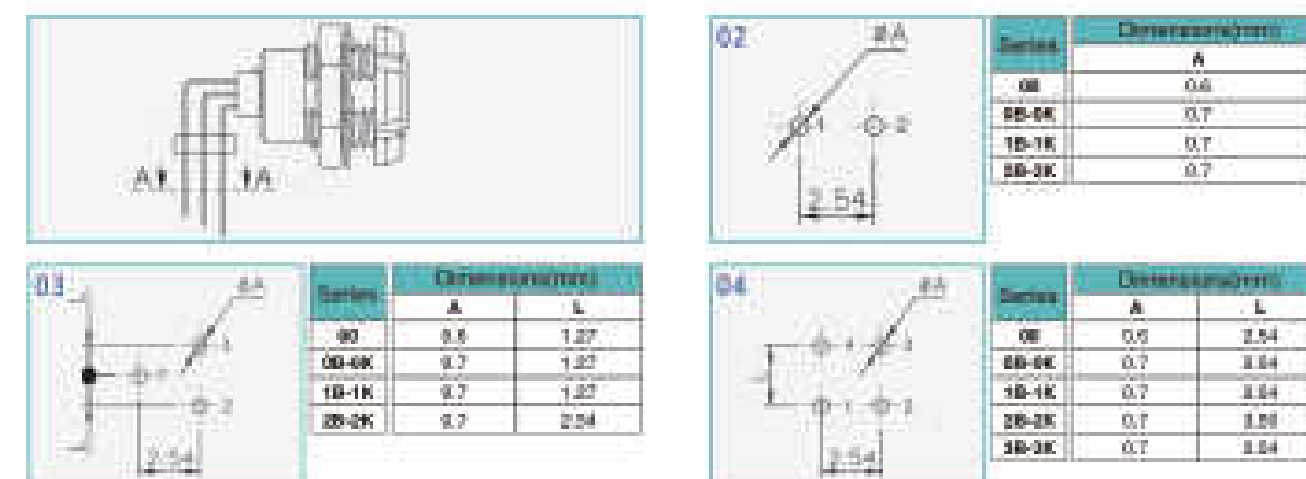
PCB Drilling pattern

For B Series Z1/Z2 socket with 90° print contacts



PCB Drilling pattern

For B Series and K Series fixed socket with 90° print contacts



PCB Drilling pattern

For B Series and K Series fixed socket with 90° joint contacts

08-0K.05	10-1K.05	20-2K.05	08-0K / 10-1K.06
20-2K.06	08-0K / 10-1K.07	20-2K.07	10-1K.08
20-2K.08 / 30-3K.08	10-1K / 20-2K.10	20-2K / 30-3K.12	30-1K / 20-2K.14
30-1K.14	20-2K / 10-1K.16	20-2K.18	40-3K.16
20-2K.18	10-1K.20	30-3K.24	20-2K / 30-3K.26
30-3K.30			

X series connectors meet a number of rigorous conditions including ease-of-use and reliability under the most extreme conditions. Usually used in group voice and data radio and vehicle adaption.

X SERIES

(Outdoor Keyed)

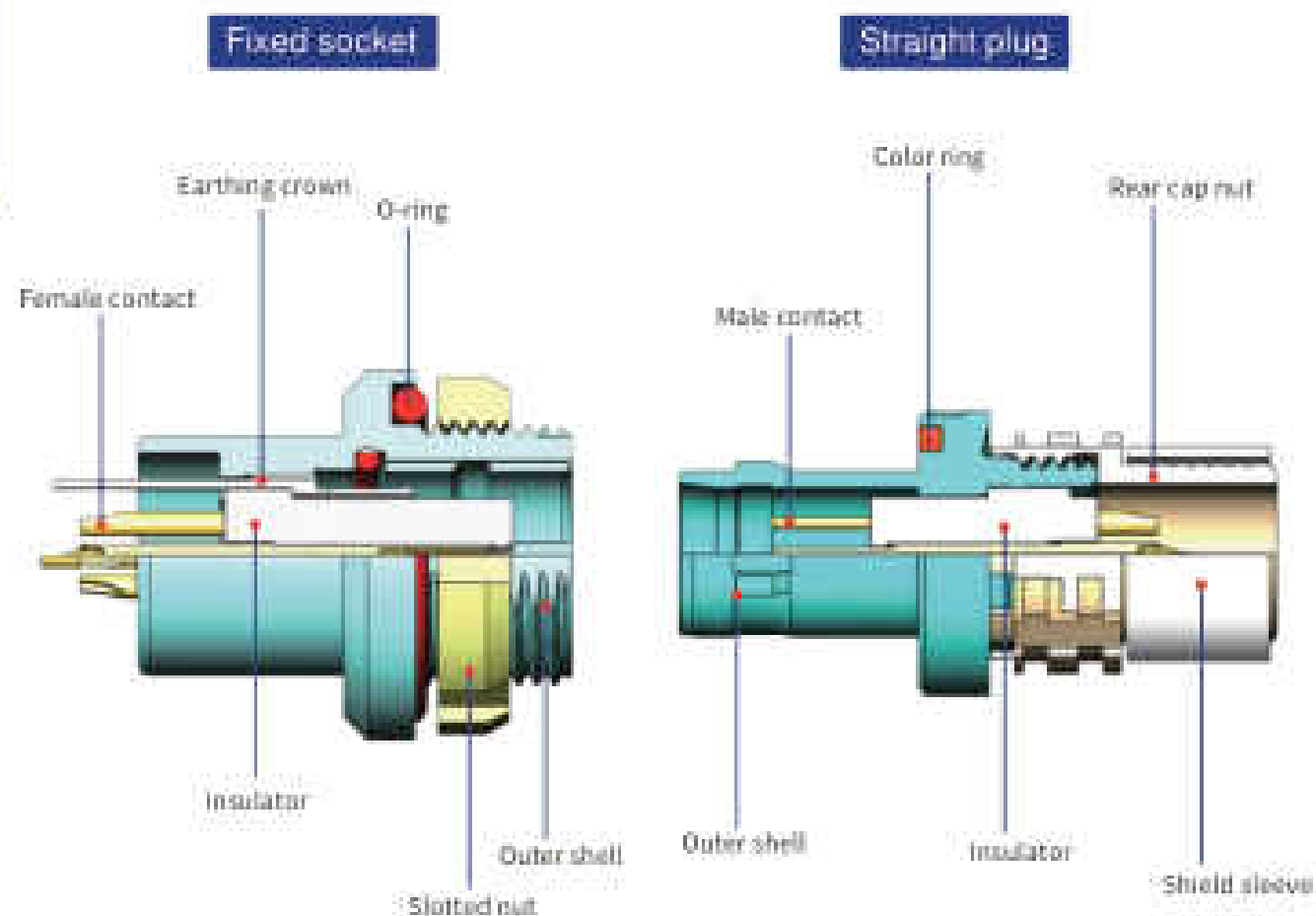


MAIN FEATURES:

1. Suitable for harsh environment;
2. Blind mateable, easy to handle;
3. Good shielding characteristics;
4. IP Rating : IP68;
5. Reliable data transmission;
6. Optimized mechanical and colour keying.

PART SECTION SHOWING INTERNAL COMPONENTS

X series



Part Numbering System

1. Series : (page 62)

2. Housing model : (page 60)

3. Alignment key : (page 68)

4. Insert configuration : (page 67)

5. Housing material :
K- Black Chrome plated brass L- Aluminum alloy
Q- Tarnish plated brass

6. Insulator Material :
L-PPS K-PEEK

7. Contact Type :
A- Solder male L- Solder female
D- Pin male N- Pin female

8. Cable OD : Ø

9. Outer shell Pattern : Ø

10. Collet Nut Type : Ø

11. Earthing tag :
0- Without earthing tag 1- With earthing tag

Plug 1X T7 A 14 K L A 00 0 0 0
Fixed socket 1X Z13 A 14 K L L 00 0 0 1

PART NUMBER EXAMPLE:

Straight plug :

1XT7A14KLA00000-1X series straight plug with key(A), without cable collet, multipole type with 14 contacts, outer shell in black Chrome plated brass, PPS insulator, solder male contacts, without earthing tag.

Fixed socket:

1XZ13A14KLL00001-1X series fixed socket, nut facing, with key(A), multipole type with 14 contacts, outer shell in black Chrome plated brass, PPS insulator, solder female contacts, with earthing tag.

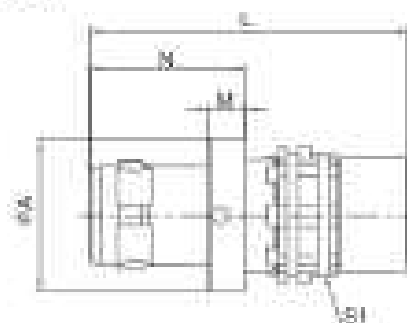
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Latching Type	push pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 40°/140°F
Shielding Efficiency	>40dB(10MHz)
Resistance to Vibration	15g(10Hz~2000Hz)

Characteristics	Parameter
Salt spray corrosion test	36hr
Shock resistance	100g,6ms
Endurance	3000 cycles
Protection index (rated)	IP13

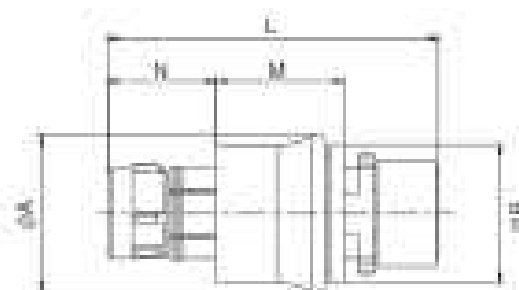
HOUSING MODELS

T5 PLUG Straight plug, NON-LATCHING, without cable coil



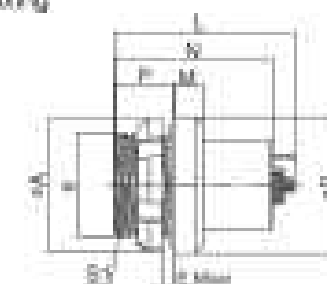
Reference		Dimensions (mm)				
Series	Model	L	A	N	M	S1
0X	T5	26	11.3	63	3	9
1X	T5	29.2	13.3	64.3	3.5	11
2X	T5	31	17.3	66	4	14

T7 PLUG Straight plug, without cable coil



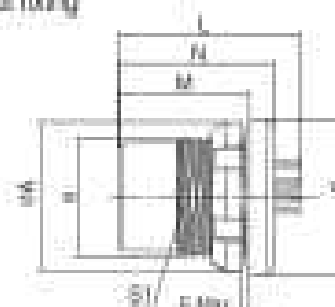
Reference		Dimensions (mm)				
Series	Model	A	B	L	N	M
0X	T7	13.9	11.3	31.2	10.1	11.7
1X	T7	15.9	13.3	33.2	10.9	12.8
2X	T7	18.7	17.3	35.2	12	13.8

Z13 SOCKET Fixed socket, back panel mount, nut fixing



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	N	M	P	E	e	S1	Wg	Ø	Type
0X	Z13	14.9	13.4	22.3	18	3	4.8	3	M11.8/8	10	19.1	11.1	A
1X	Z13	17.3	16.3	24.3	20.5	4	8	3.5	M14/1	13	13.1	14.1	A
2X	Z13	21.8	20.8	26.8	21	4	8	3	M16/1	15	15.1	16.1	A

ZX SOCKET Fixed socket, back panel mount, nut fixing



Reference		Dimensions(mm)									Panel cut-outs(mm)		
Series	Model	A	B	L	N	M	E	e	S1	Wg	Ø	Type	
0X	ZX	14.9	13.4	19	15.5	13	4	M11.8/8	10	19.1	11.1	A	
1X	ZX	17.3	16.3	21.5	16.5	15.5	4	M14/1	13	13.1	14.1	A	
2X	ZX	21.8	20.7	24.4	20.7	17.7	3.5	M16/1	15	15.1	16.1	A	

ALIGNMENT KEY

Key code	A (Standard)	B	C	D
Socket End Diagram				
Color	Light brown	Red	Blue	Green

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact strain	Maximum force	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
0X	02			0.9	6	10	1000	500
	03			0.9	6	10	1200	400
	04			0.7	7.5	7	900	300
	05			0.7	7.5	6.5	750	300
	07			0.5	10	3	750	300
	09			0.5	10	2	600	200
	10			0.5	10	1.8	600	200
1X	PD8			0.5	10	5	1000	333
	05			0.9	6	9	1250	415
	08			0.7	7.5	7	1000	300
	14			0.5	10	5	900	300
	16			0.5	10	1.5	800	260
2X	PD8			0.9	6	10	1500	500
	06			1.3	5	12	1350	450
	19			0.7	7.5	5	875	280
	26			0.5	10	2	950	315

R series is Easy-Clean version – fast and easy cleaning of the connection in the field. The contacts within the R series are spring loaded contacts. Usually used in navigation module.

R SERIES

(Outdoor Keyed)

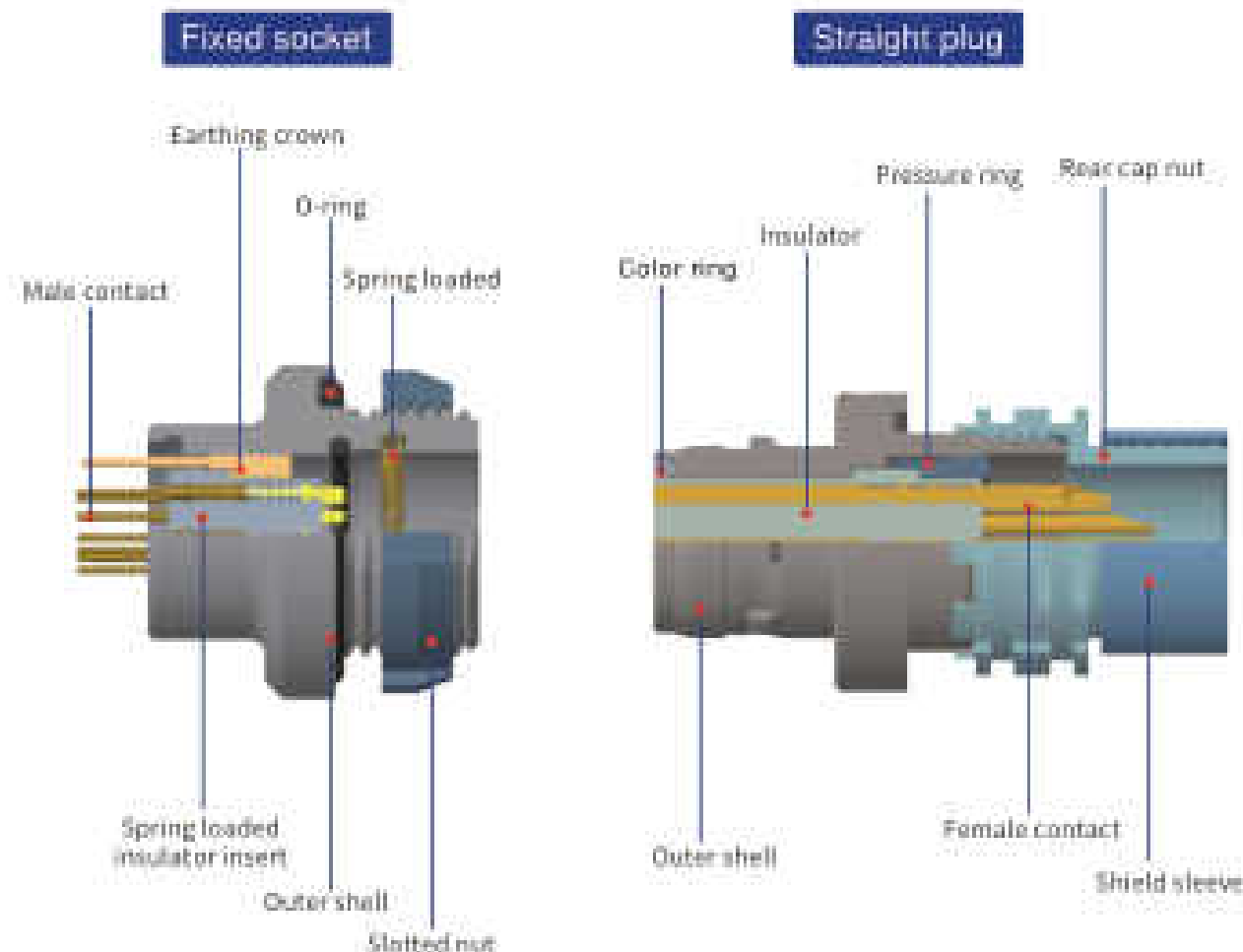


MAIN FEATURES:

1. Suitable for harsh environment;
2. Blind mateable, easy to handle;
3. 360° screening for full EMC shielding;
4. IP-Rating: IP68;
5. Reliable data transmission;
6. Mechanical and colored position to avoid cross-mating.

PART SECTION SHOWING INTERNAL COMPONENTS

R series



Part Numbering System

1. Series: (page 68)

2. Housing model: (page 71)

3. Alignment key: (page 72)

4. Insert configuration: (page 73)

5. Housing material:
K= Black Chrome plated brass L= Aluminium alloy
Q= Tarnish plated brass

6. Insulator Material:
L=PPS K=PEEK

7. Contact type:
W= Solder spring loaded female contact
X= Solder spring loaded male contact
U= Print spring loaded female contact
V= Print spring loaded male contact

8. Cable OD: 00

9. Outshell Pattern: 0

10. Collar Nut Type: 0

11. Earthing tag:
0= Without earthing tag 1= With earthing tag

Plug	1R	T5	A	16	Q	L	W	00	0	0	0
Free socket	1R	24	A	10	Q	L	X	00	0	0	0
Fixed socket	1R	Z13	A	16	Q	L	V	00	0	0	1

PART NUMBER EXAMPLE:

Straight plug:

1RT5A16QLW00000=1R series straight plug with key(A), without cable collar, multipole type with 16 contacts, outer shell in tarnish plated brass, PPS insulator, solder spring loaded female contacts, without earthing tag.

Free socket:

1R24A10QLX00000=1R series free socket, with key(A), multipole type with 10 contacts, outer shell in tarnish plated brass, PPS insulator, solder spring loaded male contacts, without earthing tag.

Fixed socket:

1RZ13A16QLV00001=1R series fixed socket, nut fixing, with key(A), multipole type with 16 contacts, outer shell in tarnish plated brass, PPS insulator, print spring loaded male contacts, with earthing tag.

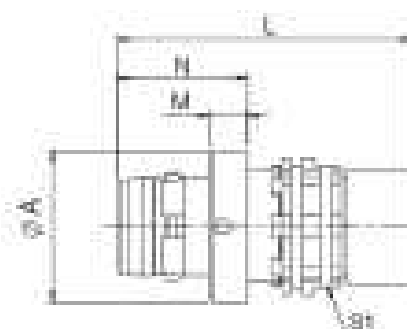
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push-pull self-locking type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	>65dB(10MHz)
Resistance to Vibration	15g(10Hz~2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g,5ms
Endurance	5000 cycles
Protection index (mated)	IP68

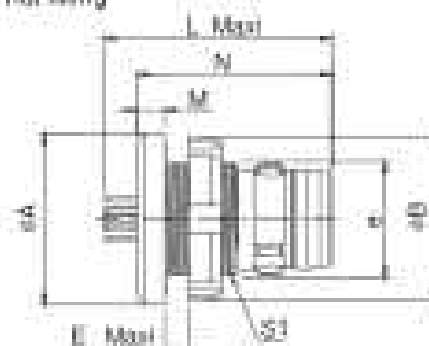
HOUSING MODELS

T5 PLUG Straight plug, without cable collet



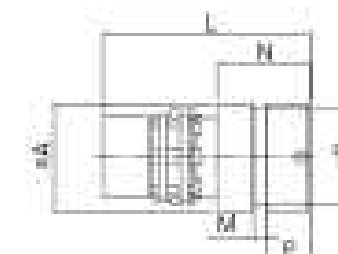
Reference		Dimension(mm)					
Series	Model	L	A	N	M	B1	
1R	T5	27	12.9	12	3.8	11	

TX PLUG Fixed plug, back panel mount, nut fixing



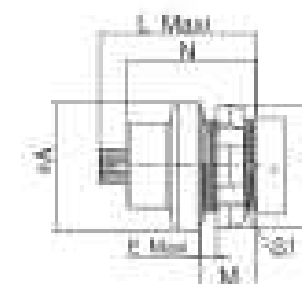
Reference		Dimension(mm)									Panel cut-outs(mm)		
Series	Model	A	B	L	N	M	E	B1	e	Ws	Ø	Type	
1R	T8	15.5	14.8	28.5	17.8	2.5	9.5	19	M12x1.5	10.1	15.1	A	

24 SOCKET Free socket, without cable collet



Reference		Dimension(mm)						
Series	Model	A	B	L	N	M	P	
1R	24	17.8	12.9	27	12.1	1.8	9.8	

213 SOCKET Fixed socket, back panel mount, nut fixing



Reference		Dimension(mm)									Panel cut-outs(mm)		
Series	Model	A	B	L	N	M	E	B1	e	Ws	Ø	Type	
1R	213	18.5	17.9	28.5	18.5	8	12	13	M12x1.5	12.1	14.1	A	

ALIGNMENT KEY

Key code	A (Standard)	B	C	D
Socket front Diagram				
Color	Light brown	Red	Blue	Green

INSERT CONFIGURATION (Multipole)

Series	Cable	Solder contacts		Contact pitch	Shield diam (mm)	Shield length (mm)	Test voltage (V)	Working voltage (V)
		Male	Female					
1R	10			0.6	14	2	600	200
	16			0.6	14	2	600	200

R SERIES

S SERIES

(Indoor stepped insert keyed)

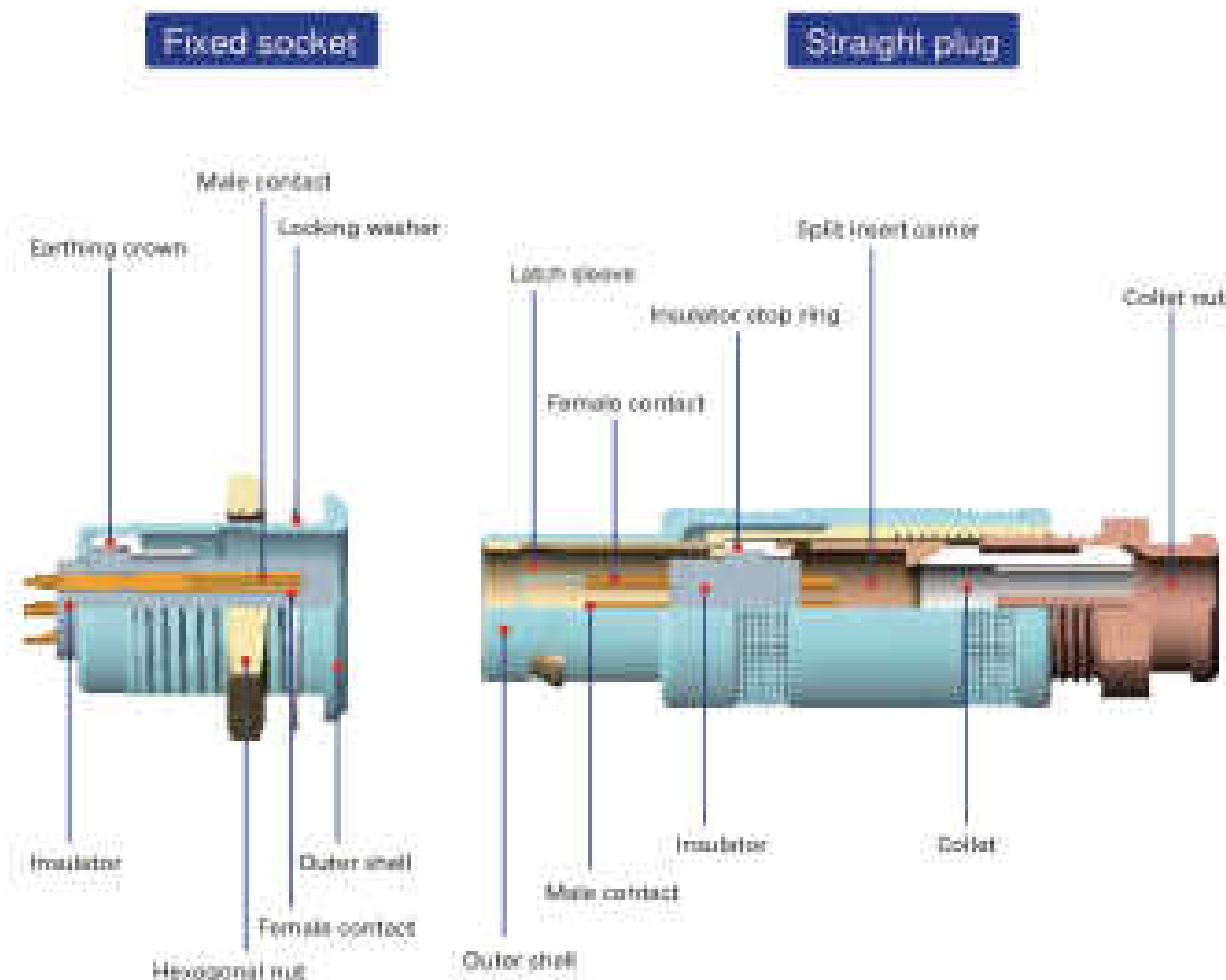


MAIN FEATURES:

1. Security of the push-pull self-latching system;
2. Solder or PCB contacts (straight or elbow);
3. High-Packing density for space saving;
4. Stepped insert keyed to avoid cross mating of similar connectors;
5. Polarization by stepped insert fitted with male and female contacts;
6. 360° screening for full EMC shielding.

PART SECTION SHOWING INTERNAL COMPONENTS

S series



Part Numbering System

1. Series: (page 74)

2. Housing model: (page 77)

3. Alignment key: (page 81)

4. Housing material:

C= Chrome plated brass T= Stainless steel
K= Black Chrome plated brass
N= Nickel plated brass
A= Gold plated brass
L= Aluminum alloy anodized
H= PPS/brass (only for Z11 and Z12 elbow sockets)

5. Insulator Material:

T= PTFE L= PPS K= PEEK

6. Contact type:

A= Solder male L= Solder female
N= Print female V= Print female 90°
W= Print male 90° D= Print male

7. Cable OD: (page 101)

8. Outer shell Pattern:

S= Knurl Pattern

9. Collet Nut Type:

1= Cone without bend relief
2= Collet nut for bend relief

10. Earthing tag:

0= Without earthing tag 1= With earthing tag

Plug	1S	T1	04	C	L	A	50	5	2	0
Free socket	1S	Z4	04	C	L	L	50	5	2	0
Fixed socket	1S	Z1	04	C	L	L	00	0	0	0

PART NUMBER EXAMPLE:

Straight plug with cable collet:

1ST104CL650520=1S series straight plug with cable collet, multipole type with 4 contacts, chrome plated brass outer shell, PPS insulator, 2 male and 2 female contacts, solder contact, collet for 5.0mm diameter cable, knurl outer shell pattern, collet nut for bend relief, without earthing tag.

Free socket:

1SZ404CL50520=1S series free socket with cable collet, multipole type with 4 contacts, chrome plated brass outer shell, PPS insulator, 2 male and 2 female contacts, solder contact, collet for 5.0mm diameter cable, knurl outer shell pattern, collet nut for bend relief, without earthing tag.

Fixed socket:

1SZ104CL00000=1S series fixed socket, nut fixing, multipole type with 4 contacts, chrome plated brass outer shell, PPS insulator, 2 male and 2 female contacts, solder contact, without earthing tag.

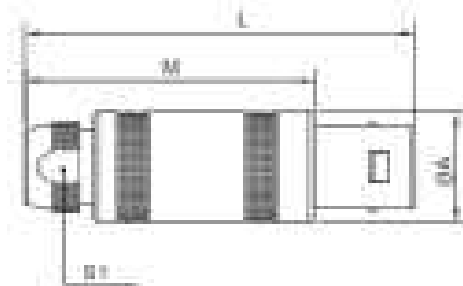
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Latching Type	push/pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	75dB(10MHz) 40dB(1GHz)
Resistance to Vibration	15g(10Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	100h
Shock resistance	100g, free
Endurance	5000 cycles
Protection index(material)	IP50

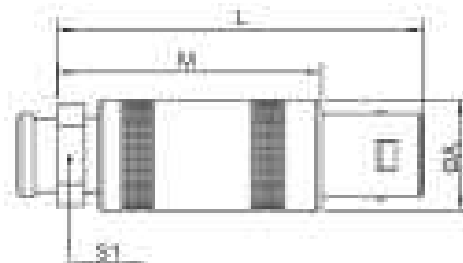
HOUSING MODELS

T1 PLUG Straight plug, with cable collet



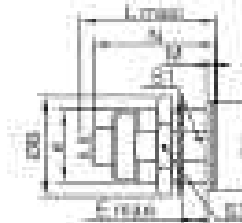
Reference		Dimensions(mm)			
Series	Model	A	L	M	S1
05	T1	8.8	34.5	24.5	6.5
15	T1	11.8	42.5	31.5	6.5

T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



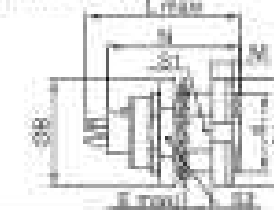
Reference		Dimensions(mm)			
Series	Model	A	L	M	S1
05	T1	8.8	34.5	24.5	7.3
15	T1	11.8	42.5	31.5	9

Z1 SOCKET Fixed socket, front panel mount, nut fixing



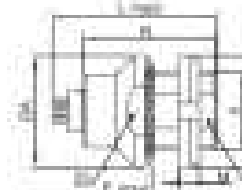
Reference		Dimensions(mm)									Panel cut-out(mm)		
Series	Model	A	B	E	L	M	N	S1	S2	e	Wa	Ø	Type
05	Z1	10	12.5	7	18	1.2	16	8.2	11	M3x0.5	8.2	9.1	A
15	Z1	14	16	7.5	22	1.5	19.4	10.5	14	M3.2x0.5	10.5	12.1	A

Z2 SOCKET Fixed socket with two nuts, front or back panel mount



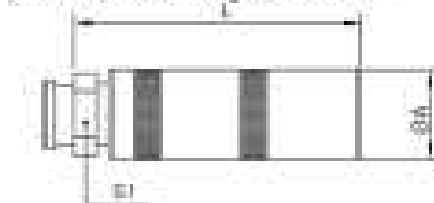
Reference		Dimensions(mm)									Panel cut-out(mm)		
Series	Model	A	B	E	L	M	N	S1	S2	e	Wa	Ø	Type
05	Z2	10	10.5	4.2	18	2.5	11	8.2	9	M2x0.5	8.4	7.1	A
05	Z2	12	12.5	5.5	18	2.5	16.8	8.2	11	M3x0.5	9.2	9.1	A
15	Z2	15	16	6.0	22	3.2	19.4	10.5	14	M3.2x0.5	10.5	12.1	A

Z3 SOCKET Fixed socket, back panel mount, nut fixing



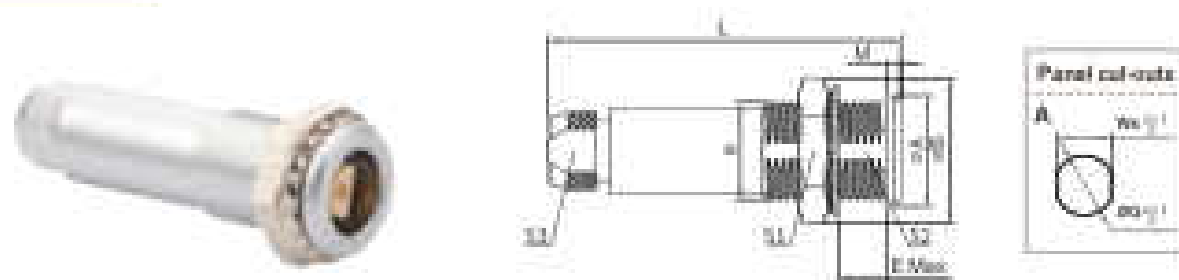
Reference		Dimensions(mm)									Panel cut-out(mm)		
Series	Model	A	B	E	L	M	N	S1	S2	e	Wa	Ø	Type
05	Z3	12	12	5.5	18	2.0	16.8	8.2	11	M3x0.5	8.2	9.1	A
15	Z3	15	16	6.0	22	3.2	19.4	10.5	14	M3.2x0.5	10.5	12.1	A

Z4 SOCKET Fixed socket, for cable connecting, cable mount, and nut for fitting a bend relief



Reference		Dimensions(mm)		
Series	Model	L	A	S1
005	Z4	28.3	6.3	8
05	Z4	34	1.5	7.2
15	Z4	40	1.2	9

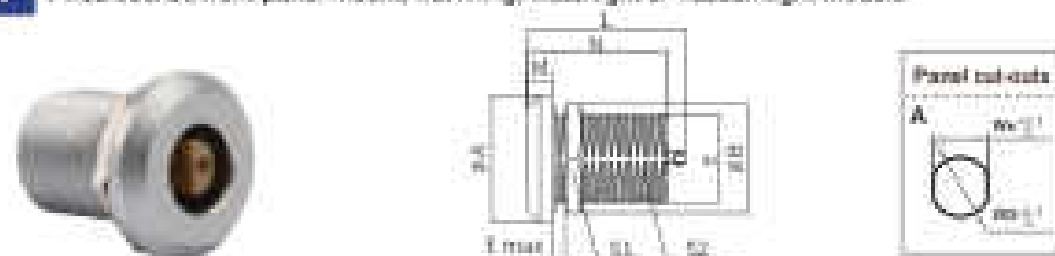
Z9 SOCKET Fixed socket, nut fixing, with cable collet



Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	L	E	M	S1	S2	S3	e	Wa	Ø	Type
06	Z9	30	12.5	33.8	7	1.2	11	8.2	8.8	M8*0.8	8.3	9.1	A

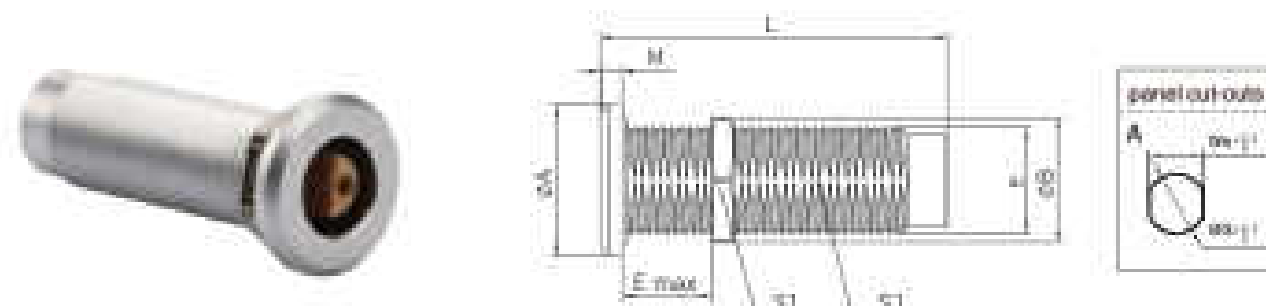
WATERTIGHT OR VACUUMTIGHT MODELS (watertight when mated)

Z7 SOCKET Fixed socket, front panel mount, nut fixing, watertight or vacuumtight models



Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	E	L	M	N	S1	S2	e	Wa	Ø	Type
18	Z7	19.3	18.8	18	24.0	4	22	17	12.5	M14*1.5	12.8	14.1	A

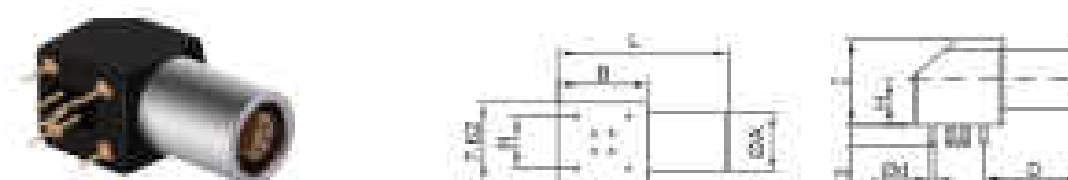
Z19 SOCKET Fixed coupler, nut fixing, watertight or vacuumtight



Reference		Dimensions(mm)									Panel cut-outs(mm)		
Series	Model	A	B	E	L	M	S1	S3	e	W ₀	Ø	Type	
18	Z19	17	16	28	38	2.5	14	10.8	M12*1.0	10.0	12.1	A	

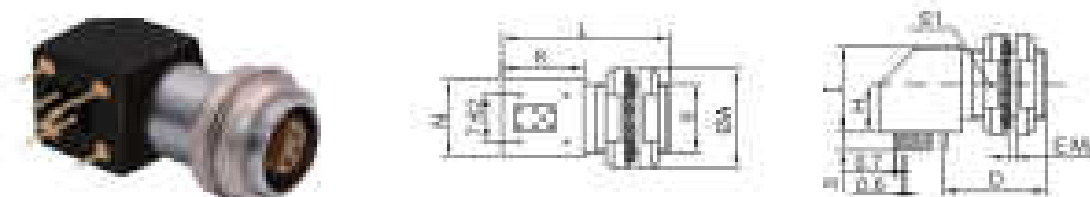
ELBOW SOCKET MODELS

Z11 SOCKET Elbow(90°) socket for printed circuit, dimensions for solder side and contact side as below

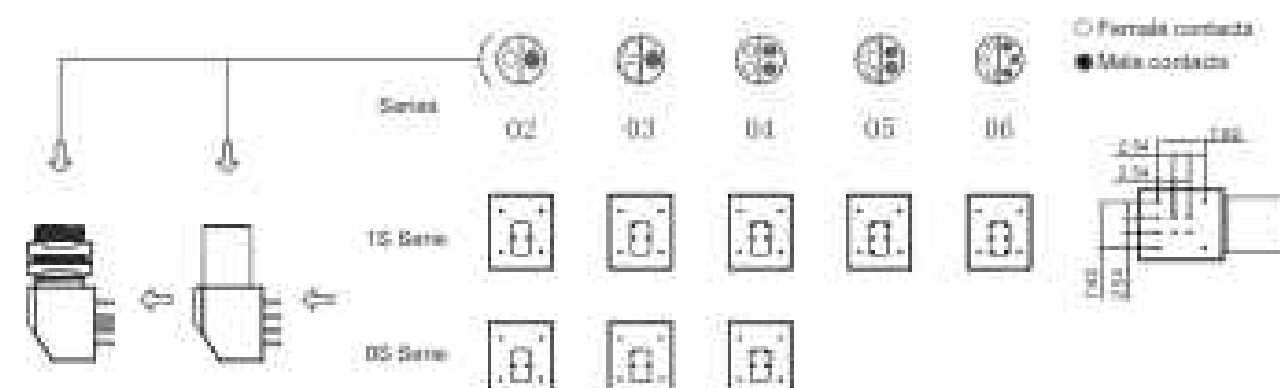


Reference		Dimensions(mm)							
Series	Model	A	B	H	I	H	Ø	d	L
06	Z11	8	14.2	10	12.7	8.7	14.8	9.7	25
18	Z11	11	13.3	10	14.2	7.5	16.8	9.7	27

Z12 SOCKET Elbow(90°) socket for printed circuit, with two nuts, dimensions for solder side and contact side as below



Reference		Dimensions(mm)									
Series	Model	A	B	H	I	H	A	L	D	S1	e
06	Z12	12	14.2	10	12.7	8.7	18	25	14.8	10	M10*0.8
18	Z12	14	13.3	10	14.2	7.5	18	27	16.8	10	M10*0.8



INSERT CONFIGURATION

Series	Code	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
00S	113			1.3	-	8	800	250
05	02			0.9	5	10	1500	500
	03			0.7	7.5	7	1000	330
	04			0.7	7.5	7	1000	330
16	120			2.0	5	18	1700	2400
	130			3.0	-	25	1500	500
	02			1.3	5	15	1250	450
	03			0.9	6	10	1200	450
	04			0.9	6	10	1200	400
	05			0.9	7.5	10	1500	500
				0.7	7.5	7	1500	500
	06			0.7	7.5	7	1500	500

Calculation method: working voltage= Test voltage/3

COAXIAL CONNECTORS

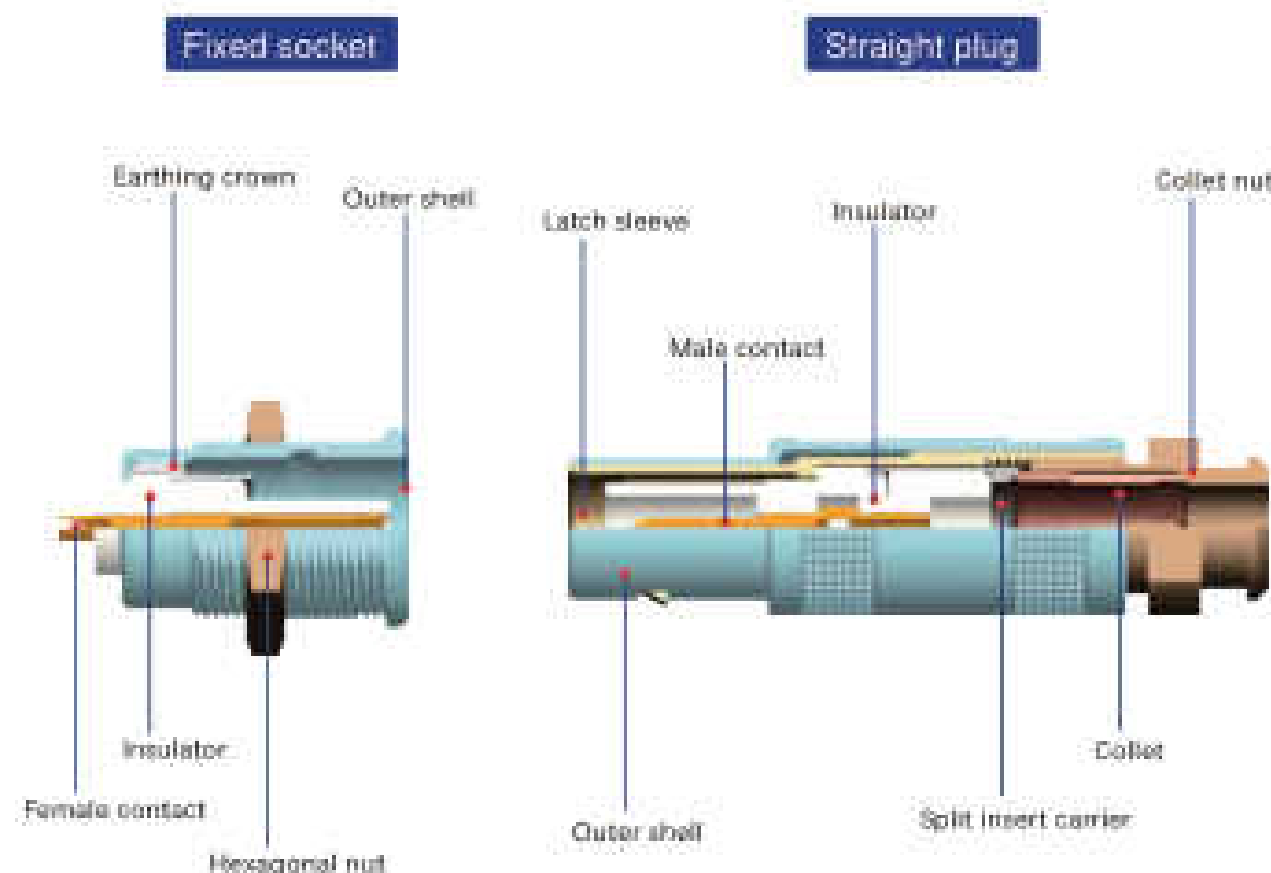


MAIN FEATURES:

1. Security of the push-pull self-latching system;
2. Solder or PCB contacts (straight or elbow);
3. High Packing density for space saving;
4. Impedance 50Ω or 75Ω;
5. 360° screening for full EMC shielding.

PART SECTION SHOWING INTERNAL COMPONENTS

Coaxial series



Part Numbering System

1. Series: (page 82)

2. Housing model: (page 85)

3. Alignment key: (page 94)

4. Housing material:

C= Chrome plated brass T= Stainless steel
K= Black Chrome plated brass L= Aluminium alloy
N= Nickel plated brass A= Gold plated brass

5. Insulator material:

T= PTFE K= PEEK

6. Contact type:

A= Solder male L= Solder female C= Crimp male

7. Cable OD: (page 101)

8. Outer shell Pattern:

2= Diamond Pattern 4= Circle Pattern
5= Knurl Pattern

9. Collet Nut Type:

1= Cone (without bend relief)
2= Collet nut for bend relief
3= Flat (without bend relief)
7= Crimp collet nut

10. Earthing tag:

0= Without earthing tag 1= With earthing tag

Plug	1S	T1	250	C	T	A	60	5	2	0
Free socket	1S	Z4	250	C	T	L	50	5	2	0
Fixed socket	1S	Z1	260	C	T	L	00	0	0	0

PART NUMBER EXAMPLE:

Straight plug with cable collet:

1S1250CT60520=1S series straight plug, 50Ω impedance, cable collet, chrome plated brass outer shell, PTFE insulator, solder contacts, collet for 6.0mm diameter cable, knurl outer shell pattern, collet nut for bend relief, without earthing tag.

Free socket:

1S24250CTL50520=1S series free socket, 50Ω impedance, cable collet, chrome plated brass outer shell, PTFE insulator, solder contact, collet for 5.0mm diameter cable, knurl outer shell pattern, collet nut for bend relief, without earthing tag.

Fixed socket:

1S21250CTL00000=1S series coaxial fixed socket, 50Ω impedance, nut fixing, chrome plated brass outer shell, PTFE insulator, solder contacts, without earthing tag.

TECHNICAL CHARACTERISTICS:

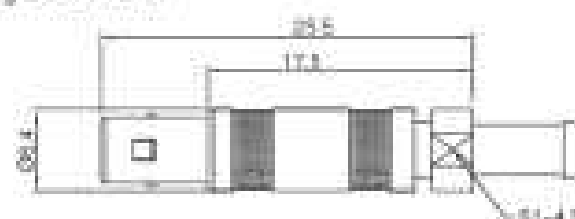
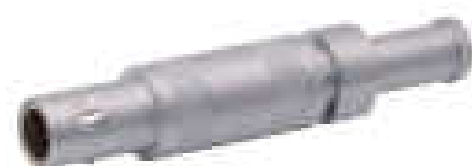
Characteristics	Parameter
Locking Type	push/pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 50°/340°F
Shielding Efficiency	75dB(10MHz)-80dB(1GHz)
Resistance to Vibration	15g(10Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g 2ms
Endurance	5000 cycles
Protection Index (mated)	IP55

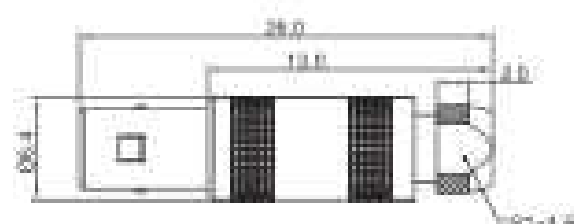
HOUSING MODELS

00S series

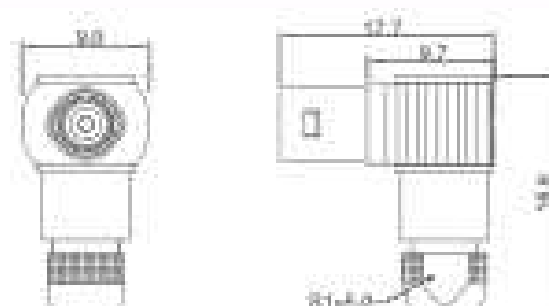
T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



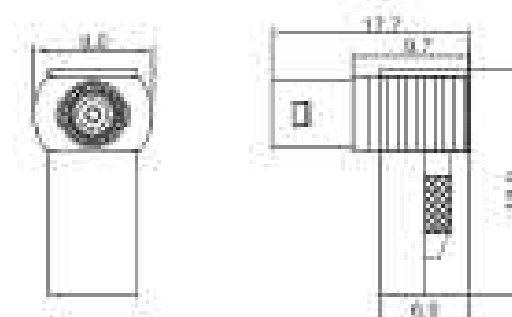
T1 PLUG Straight plug, with cable collet



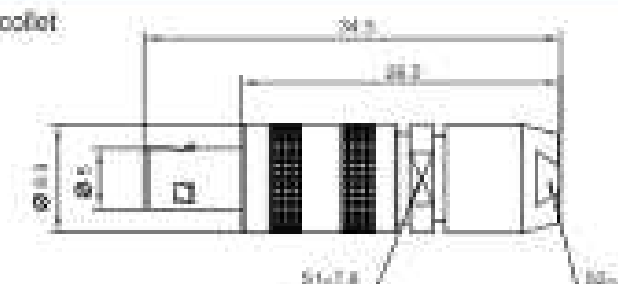
T3 PLUG Elbow(90°) plug



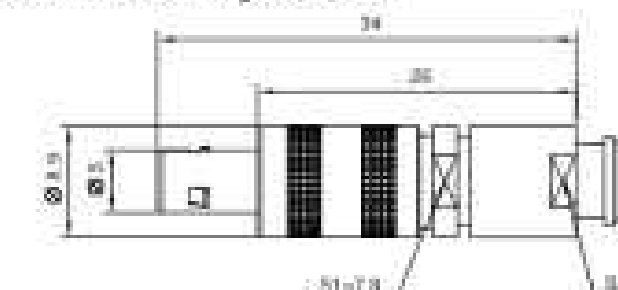
T3 PLUG Elbow(90°) plug, with crimp collet nut



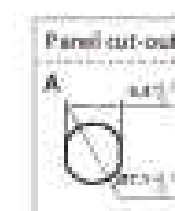
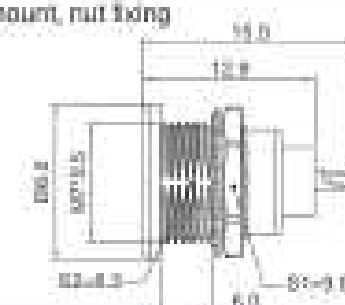
TY PLUG Straight plug, extra large size, with cable collet



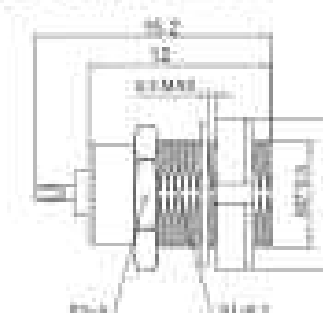
TY PLUG Straight plug, extra large size, with cable collet and nut for fitting a bend relief



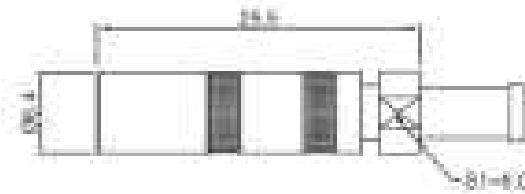
Z1 SOCKET Fixed socket, front panel mount, nut fixing



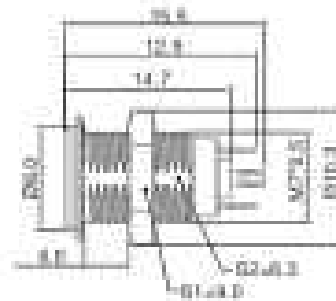
Z2 SOCKET Fixed socket with two nuts, front or back panel mount



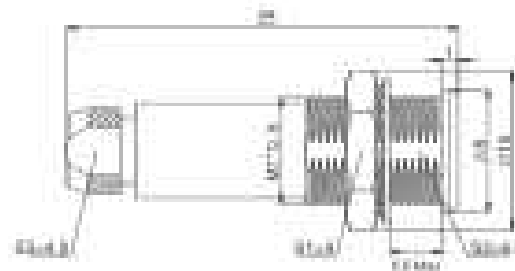
24 SOCKET Free socket, for cable connecting, cable mount, and nut for fitting a bend relief



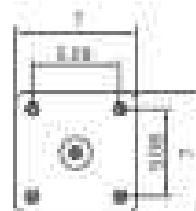
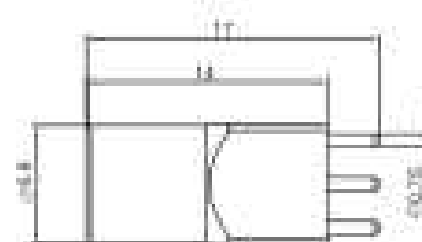
25 SOCKET Fixed socket, front panel mount, nut fixing, with two earthing lugs



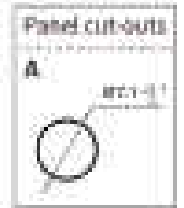
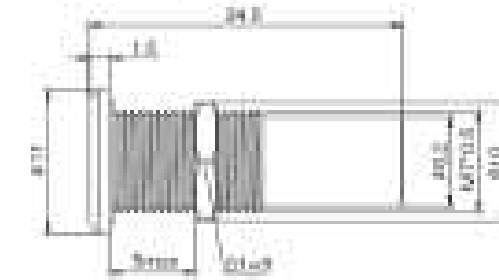
29 SOCKET Fixed socket, nut fixing, with cable collet



Z14 SOCKET Straight socket, suitable for printed circuit boards

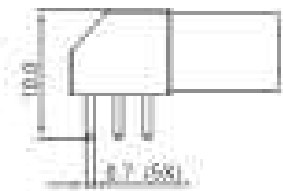
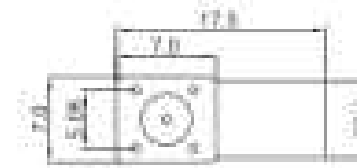


Z19 SOCKET Fixed coupler, nut fixing, watertight or vacuumtight

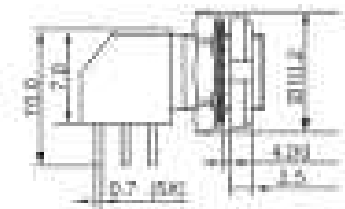
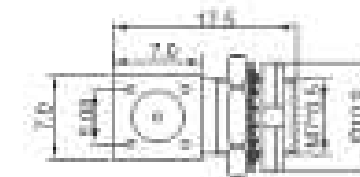


ELBOW SOCKET MODELS

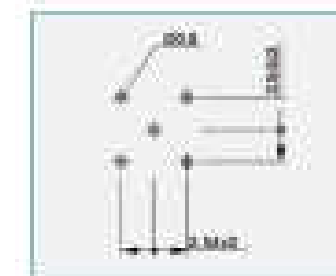
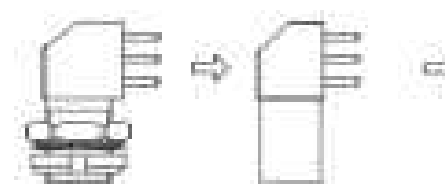
Z11 SOCKET Elbow(90°) socket for printed circuit, dimensions for solder side and contact side as below



Z12 SOCKET Elbow(90°) socket for printed circuit, with two nuts, dimensions for solder side and contact side as below



PCB DRILLING PATTERN



0S series

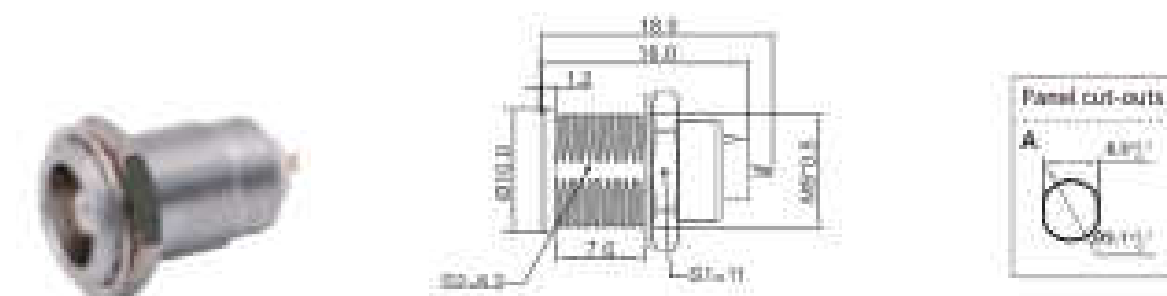
T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



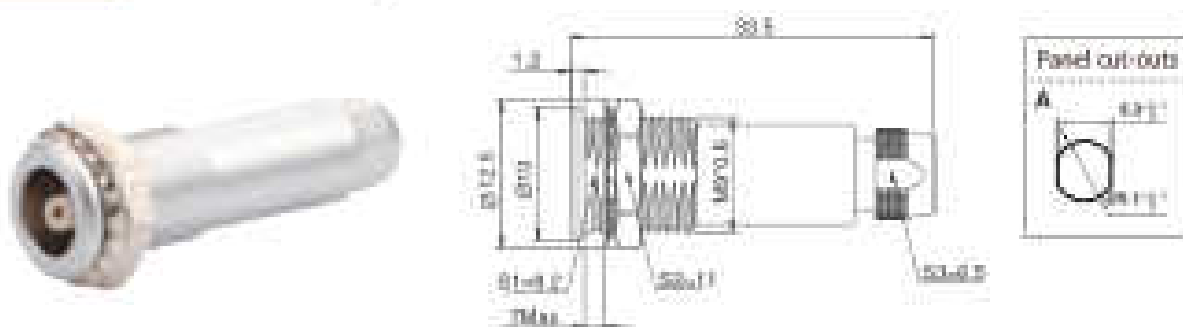
T1 PLUG Straight plug, with cable collet



Z1 SOCKET Fixed socket, front panel mount, nut fixing

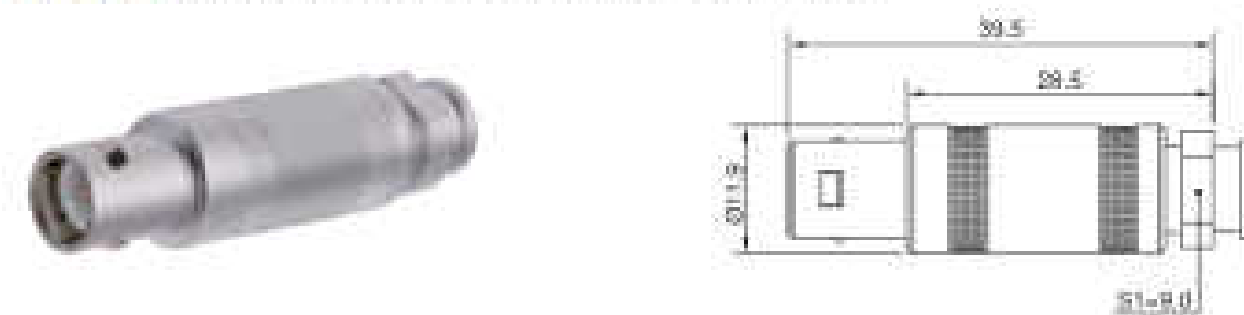


Z9 SOCKET Fixed socket, nut fixing, with cable collet

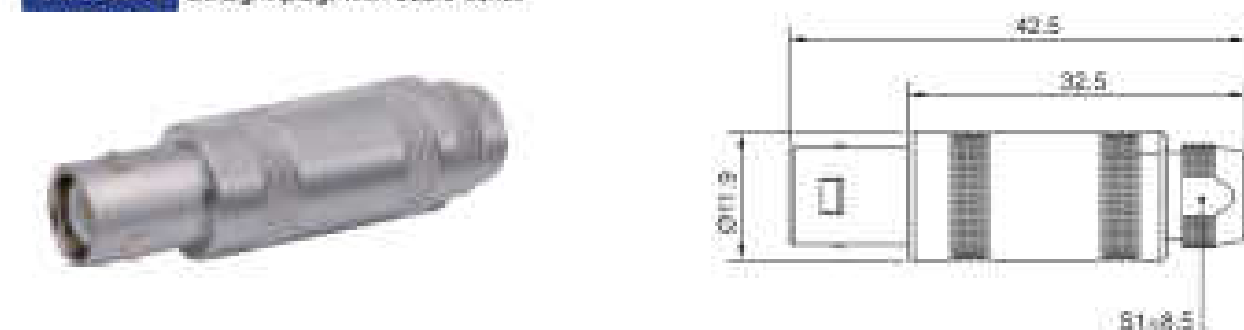


1S series

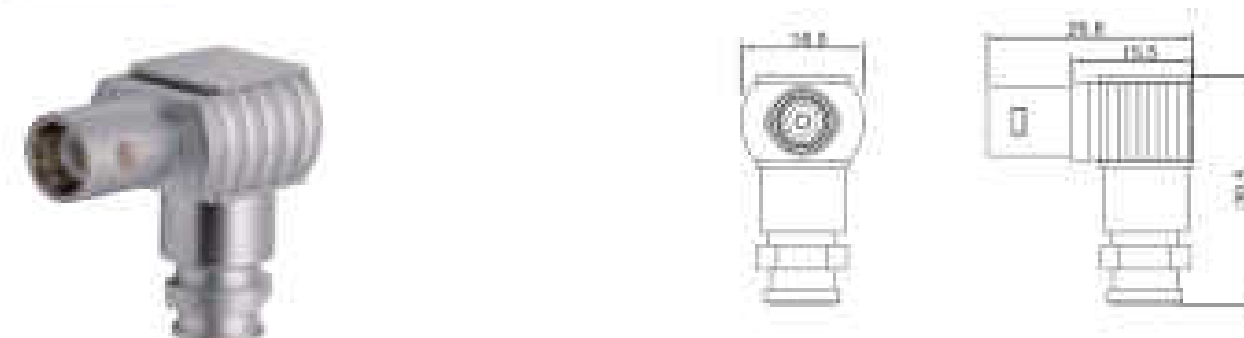
T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



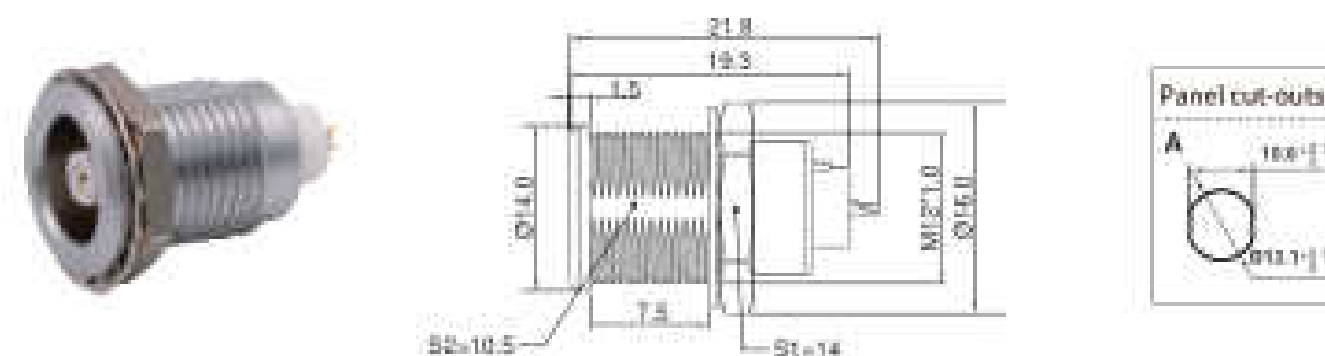
T1 PLUG Straight plug, with cable collet



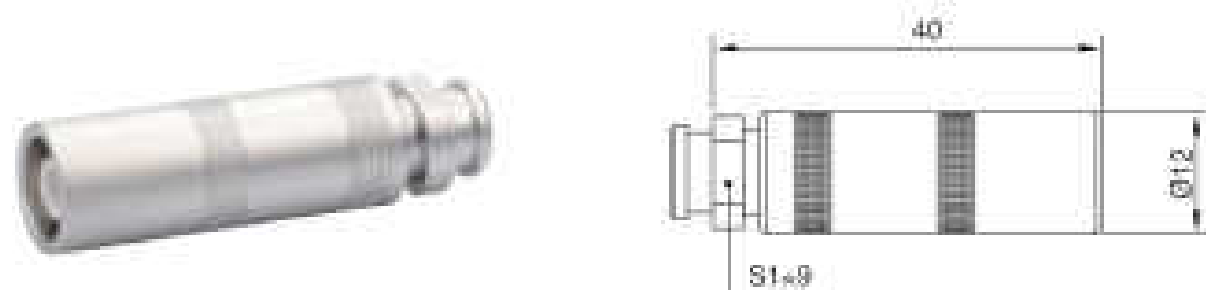
T3 PLUG Elbow(90°) plug, with cable collet and nut for fitting a bend relief



Z1 SOCKET Fixed socket, front panel mount, nut fixing



Z4 SOCKET Free socket, for cable connecting, cable mount, and nut for fitting a bend relief

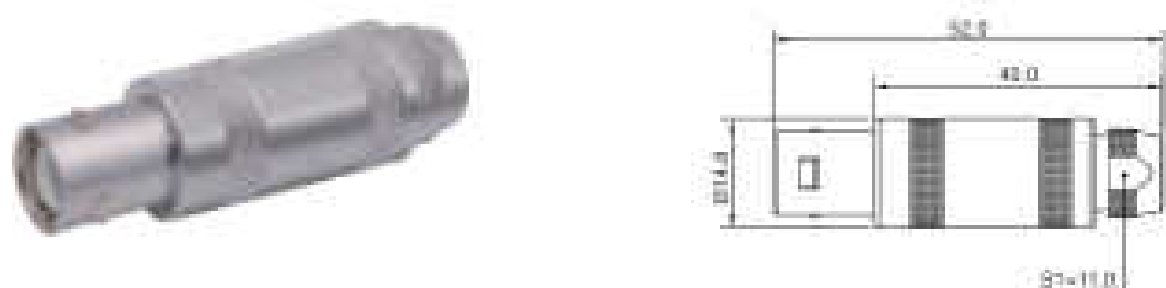


2S series

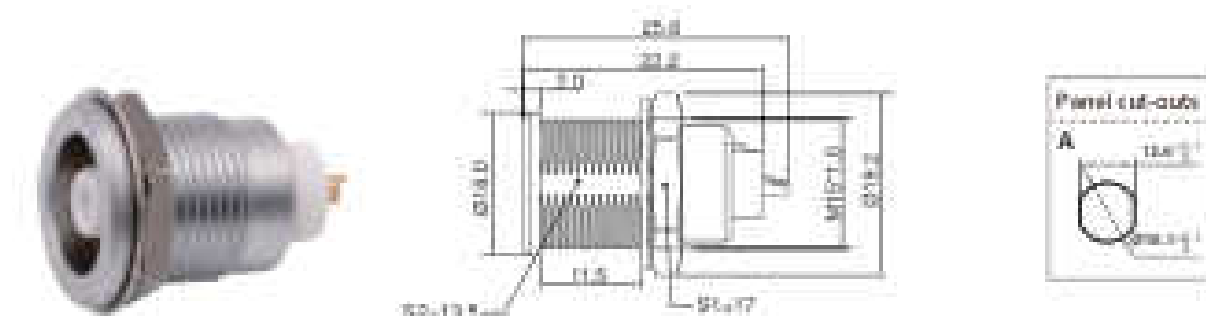
T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



T1 PLUG Straight plug, with cable collet

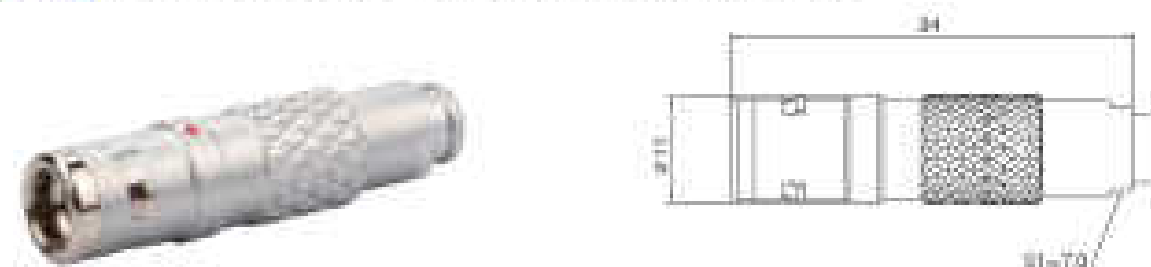


Z1 SOCKET Fixed socket, front panel mount, nut fixing

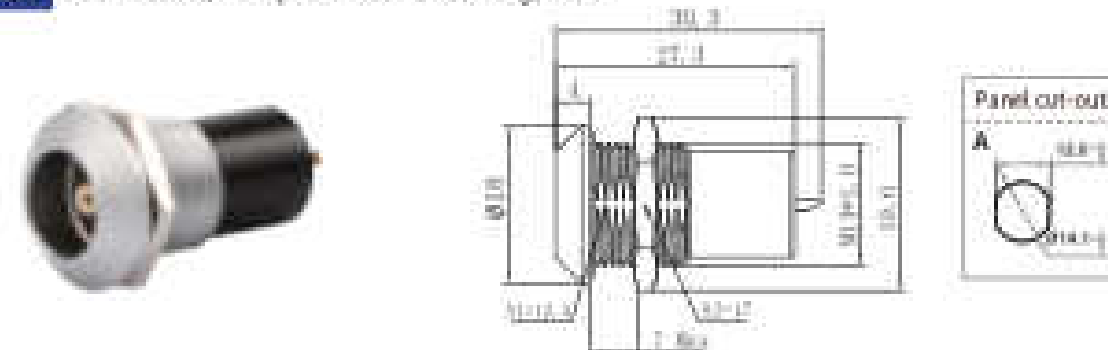


0E series

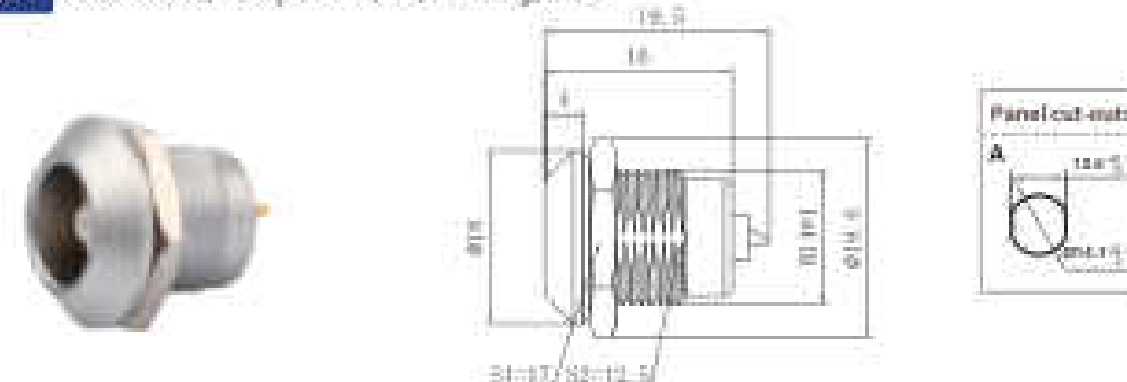
T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief, IP68



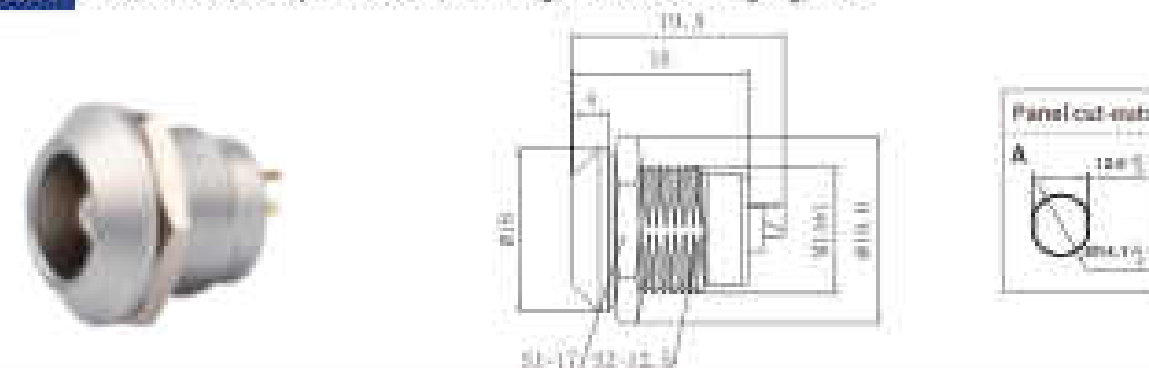
Z7 SOCKET Fixed socket, front panel mount, nut fixing, IP68



Z1 SOCKET Fixed socket, front panel mount, nut fixing, IP68

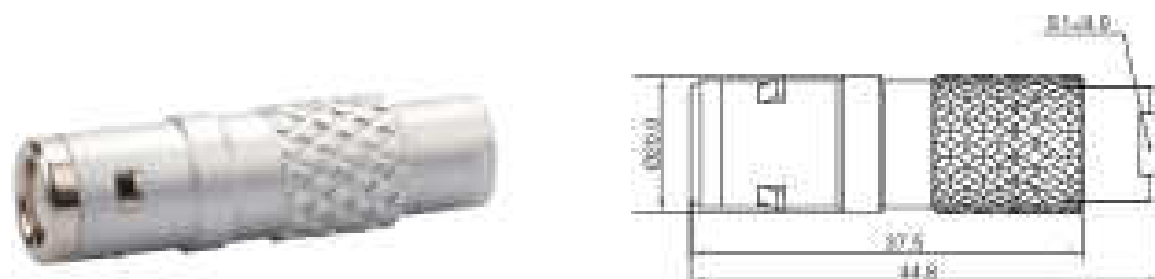


Z5 SOCKET Fixed socket, front panel mount, nut fixing, with two earthing tag, IP68

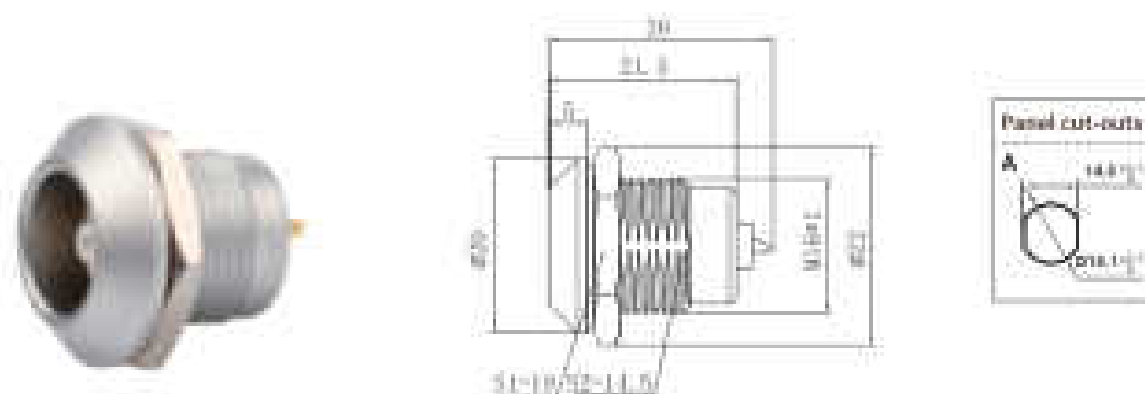


1E series

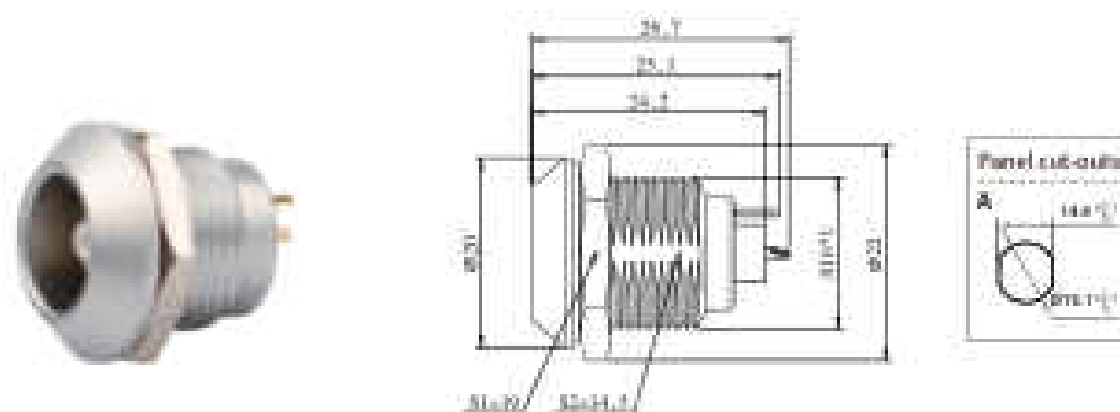
T1 PLUG Straight plug, with cable collet and nut for fitting a braid relief, IP68



Z1 SOCKET Fixed socket, front panel mount, nut fixing, IP68



Z5 SOCKET Fixed socket, front panel mount, nut fixing, with two earthing tag, IP68



INSERT CONFIGURATION

Series	Code	Solder contacts		Contact length (mm)	Impedance (Ω)	Panel layout (mm)	Test voltage (V)	Working voltage (V)
		Male	Female					
00S	250			0.7	50	4	2100	700
0S 0E	250			0.9	50	6	3000	1000
1S 1E	250			1.6	50	12	3000	1000
	275			1.3	75	10	2400	800
2S	250			2.0	50	15	3000	1000

Calculation method: working voltage= Test voltage÷3

TRIAXIAL CONNECTORS



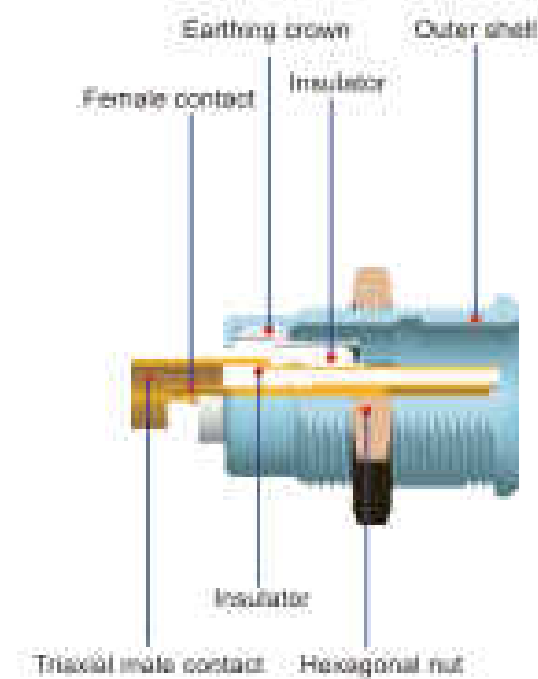
MAIN FEATURES:

1. Security of the push-pull self-latching system;
2. Solder or PCB contacts (straight or elbow);
3. High Packing density for space saving;
4. Impedance 50Ω or 75Ω;
5. 360° screening for full EMC shielding

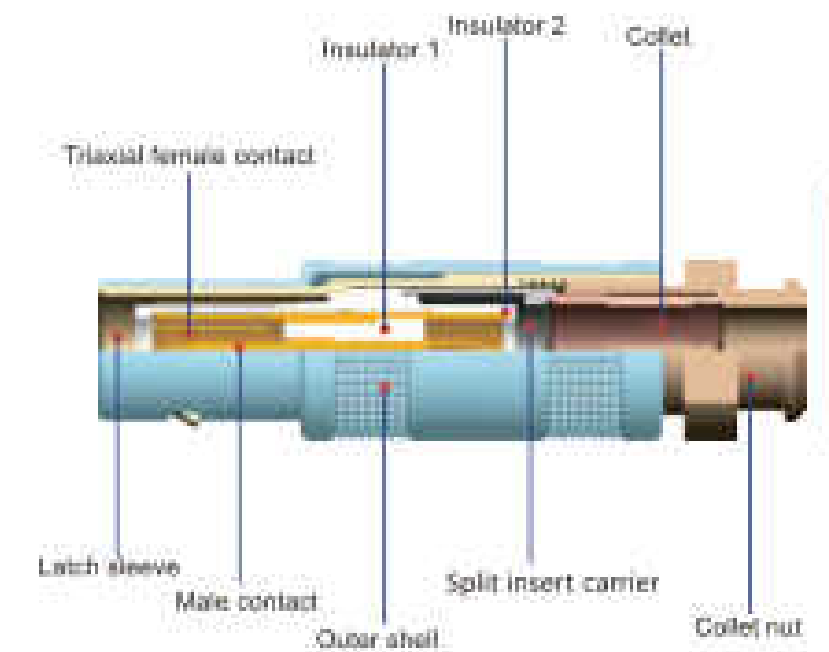
PART SECTION SHOWING INTERNAL COMPONENTS

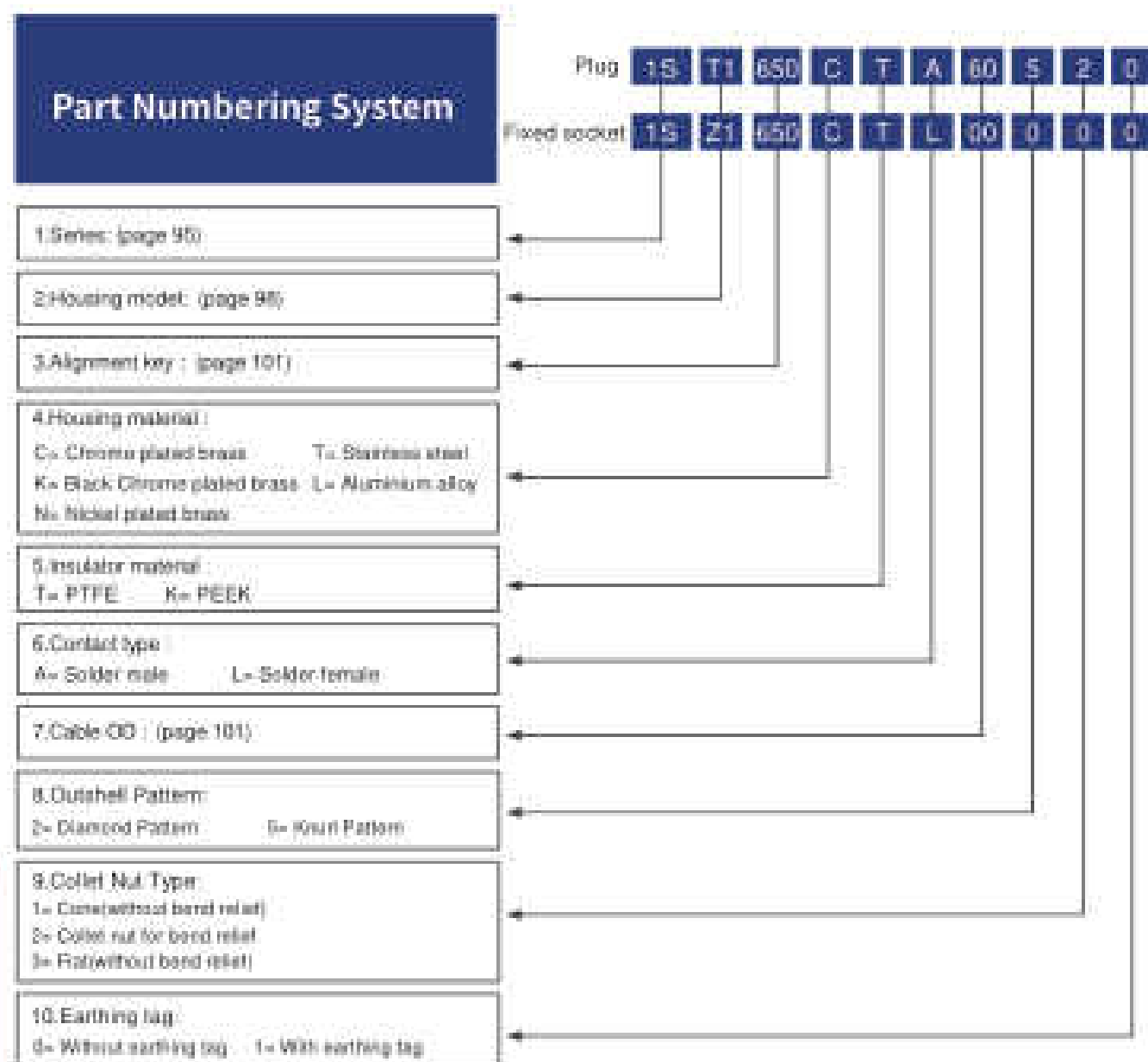
Triaxial series

Fixed socket



Straight plug





PART NUMBER EXAMPLE:

Straight plug with cable collet:

1ST1600CTA60S20 = 1S series coaxial straight plug with cable collet, 50Ω impedance, outer shell in chrome plated brass, PTFE insulator, collet for 6.0mm diameter cable and with a black bend relief, knurl Pattern, without earthing tag.

Fixed socket:

1S21600CTL0000 = 1S series coaxial fixed socket, 50Ω impedance, nut fixing, outer shell in chrome plated brass, PTFE insulator, solder contacts, without earthing tag.

TECHNICAL CHARACTERISTICS:

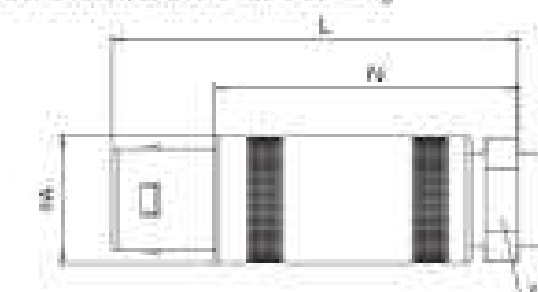
Characteristics	Parameter
Locking Type	push pull self-latching type
Working Temperature	55°C~+125°C
Maximum Humidity	up to 95% at 80°/140°F
Shielding Efficiency	15dB(10MHz) 40dB(1GHz)
Resistance to Vibration	25g(10Hz~2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g/8ms
Endurance	3000 cycles
Protection index (rated)	S series: IP50 E series: IP68

HOUSING MODELS

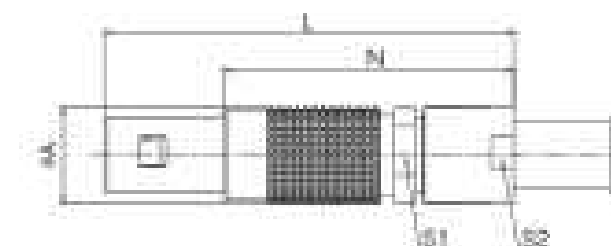
S series

T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief, to avoid cable bending



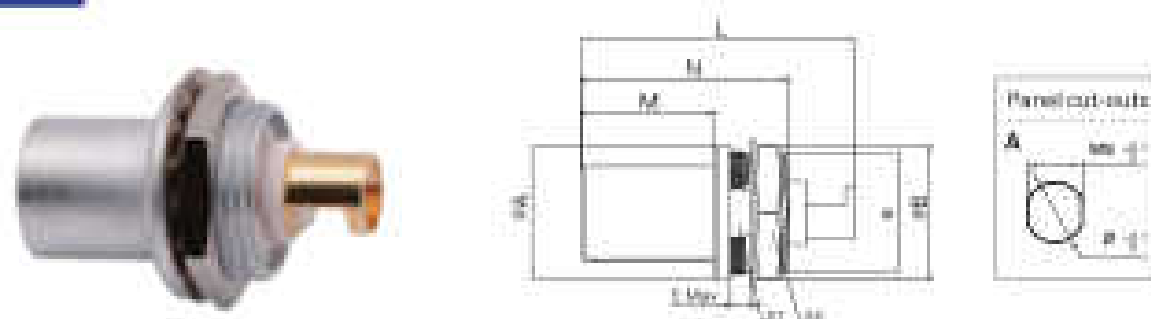
Reference		Dimensions(mm)				
Series	Model	A	L	N	S1	
08	T1	8.8	26.7	16.7	7.2	
16	T1	11.8	29.8	18.8	9	

T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief, to avoid cable bending



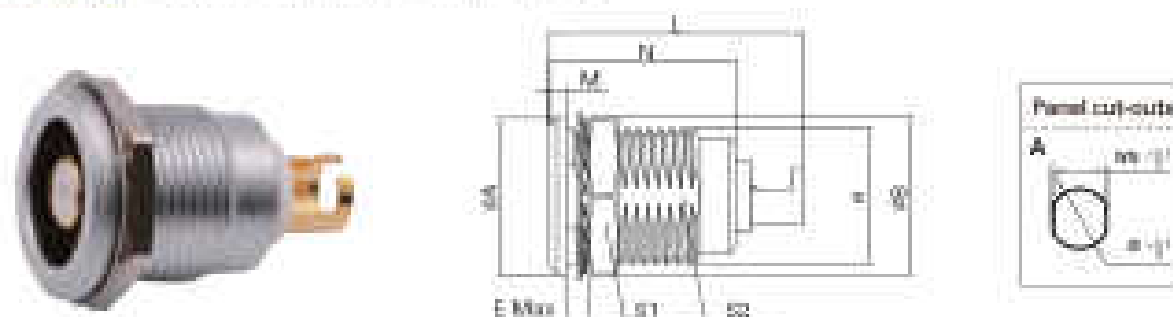
Reference		Dimensions(mm)				
Series	Model	A	L	N	S1	S2
08S	650	6.4	27.8	16.8	5.5	6

T2 PLUG Straight plug, with cable collet



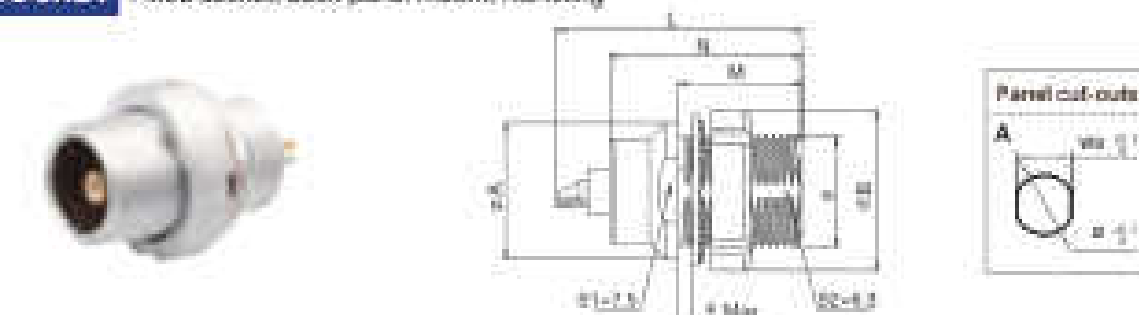
Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
06	T2	10	12.5	20.5	16	15.5	1	8.2	11	M9*0.5	8.3	9.1	A
28	T2	18	19.2	28.7	12	20.5	3	13.5	17	M15*1.0	13.6	15.1	A

Z1 SOCKET Fixed socket, front panel mount, nut fixing



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
09	Z1	10	12.5	19	1.5	14.5	7	11	8.2	M9*0.5	8.3	9.1	A
15	Z1	17	16	28	2	18.2	8	14	13.5	M12*1.0	13.6	12.1	A
28	Z1	18	19.2	24.7	2	21	8	17	13.5	M15*1.0	13.6	15.1	A

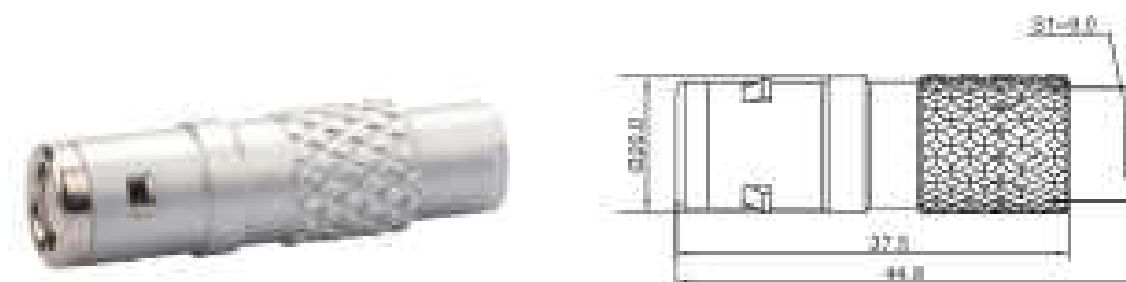
Z3 SOCKET Fixed socket, back panel mount, nut fixing



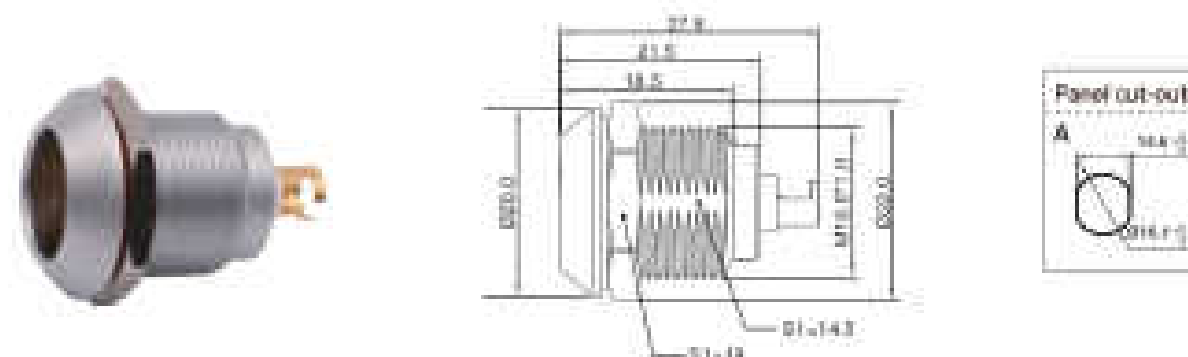
Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
005	Z3	8.5	10	15.4	7.7	12	3.5	7.5	6.3	M7*0.5	6.4	7.3	A

1E series

T1 PLUG Straight plug, with cable collet, watertight, IP68



Z1 SOCKET Fixed socket, front panel mount, nut fixing, watertight, IP68



INSERT CONFIGURATION

Series	Cable	Solder contacts		Contact diameter (mm)	Impedance (Ω)	Shield diameter (mm)	Test voltage (kV)	Working voltage (kV)
		Male	Female					
00S	650			0.5	50	4	600	200
0S	650			0.9	50	6	1000	400
1S 1E	650			0.9	50	6	1000	330
2S	675			0.9	75	6	1500	500

Calculation method: working voltage= Test voltage/3

COLLET S, Coaxial, Triaxial, High Voltage Series (The material of collet is nickel plated brass)



Cable	Collet SW (mm)	Cable Dielectric		Series			
		mm	mm	00S	0S	1S	2S
20	2.0	1.2	2.0	●			
27	2.7	2.2	2.7			●	
30	3.2	2.7	3.2	●	●		
35	3.5	3.1	3.5			●	
40	4.0	3.8	4.0			●	●
45	4.5	4.1	4.5		●		
50	5.0	4.8	5.0	●		●	●
60	6.0	5.1	6.0				●
62	6.2	5.8	6.2			●	
65	6.5	5.7	6.5			●	
70	7.0	6.8	7.0				●
80	8.0	7.5	8.0				●



HIGH VOLTAGE SERIES

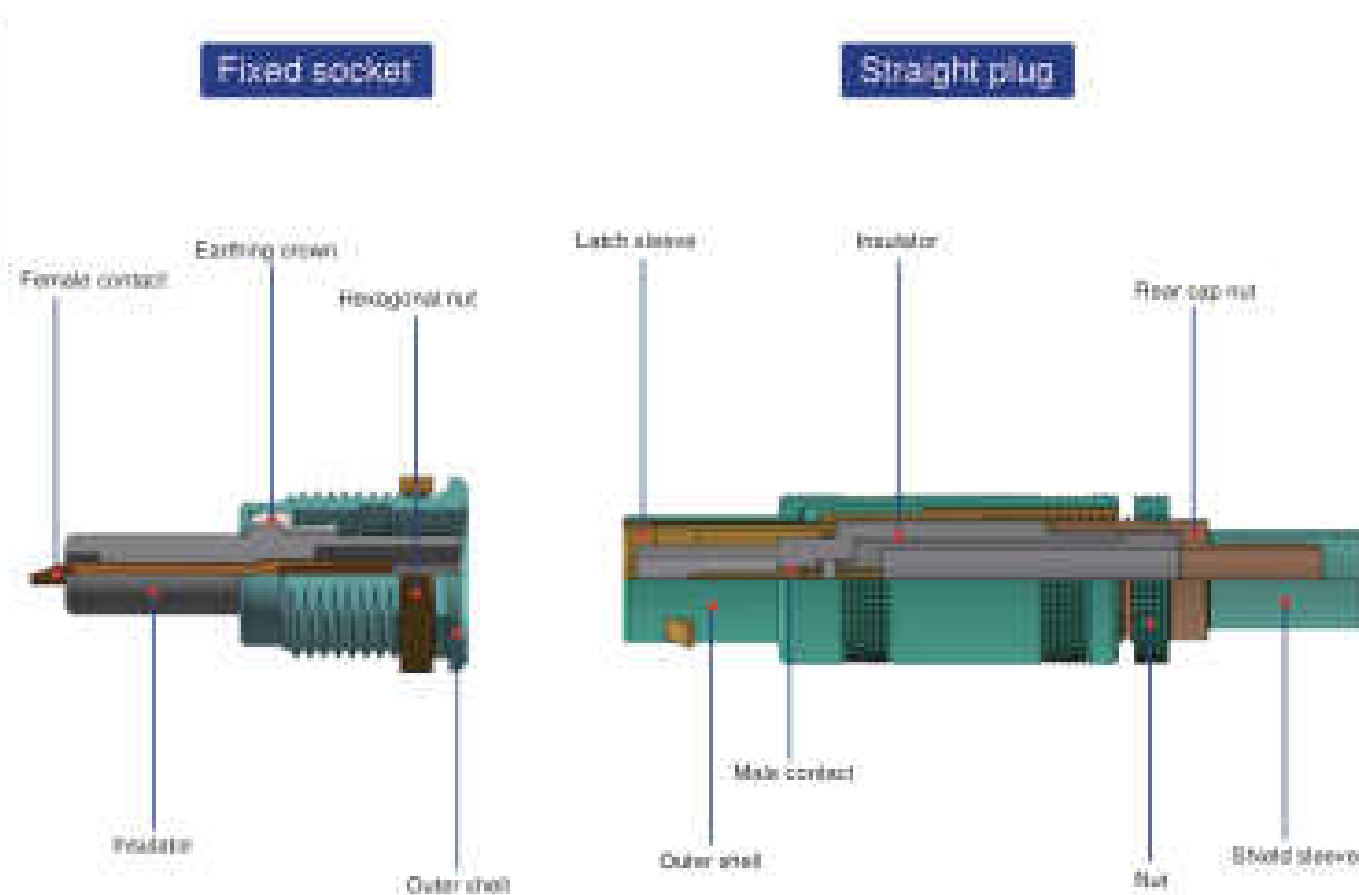


MAIN FEATURES:

1. Security of the push-pull self-latching system;
2. Suitable for high voltage equipment;
3. High packing density for space saving;
4. 360° screening for full EMC shielding.

PART SECTION SHOWING INTERNAL COMPONENTS

High Voltage Series



Part Numbering System

1. Series: (page 102)

2. Housing model: (page 105)

3. Alignment key: (page 106)

4. Housing material:

C= Chrome plated brass T= Stainless steel
K= Black Chrome plated brass L= Aluminium alloy
N= Nickel plated brass

5. Insulator material:

T= PTFE K= PEEK

6. Contact type:

A= Solder male L= Solder female

7. Cable OD: (page 101)

8. Outer shell Pattern:

5= Knurl Pattern

9. Collet Nut Type:

1= Cone (without band relief)
2= Collet nut for band relief
7= Crimp collet nut

10. Earthing tag:

0= Without earthing tag 1= With earthing tag

Plug	1S	T1	405	C	T	A	50	5	2	0
Fixed socket	1S	Z1	405	C	T	L	00	0	0	0

PART NUMBER EXAMPLE:

Straight plug with cable collet:

1ST1405CTA50520=1S series (405) straight plug, with cable collet, outer shell in chrome plated brass, PTFE insulator, solder male contact, collet for 5.0mm diameter cable, knurl outer shell pattern, collet nut for band relief, without earthing tag.

Fixed socket:

1SZ1405CTL00000=1S series (405) high voltage fixed socket, nut fixing, chrome plated brass outer shell, PTFE insulator, solder female contact, without earthing tag.

TECHNICAL CHARACTERISTICS:

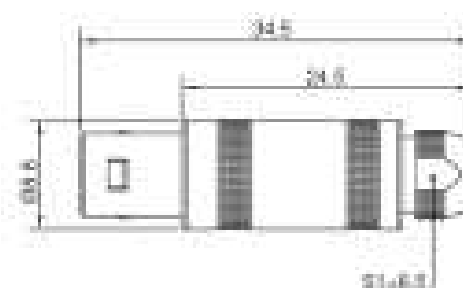
Characteristics	Parameter
Locking Type	push pull self locking type
Working Temperature	-55°C ~ +125°C
Maximum Humidity	up to 95% at 60"/140°F
Shielding Efficiency	75dB(10MHz)-40dB(1GHz)
Resistance to Vibration	15g(10Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g, 6ms
Endurance	5000 cycles
Protection Index(mated)	IP50

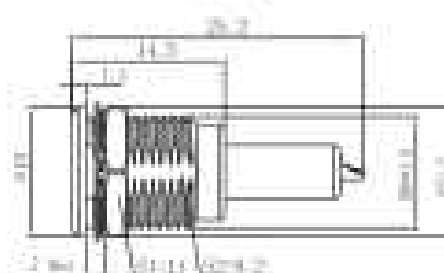
HOUSING MODELS

0S series

T1 403 PLUG Straight plug, with cable collet

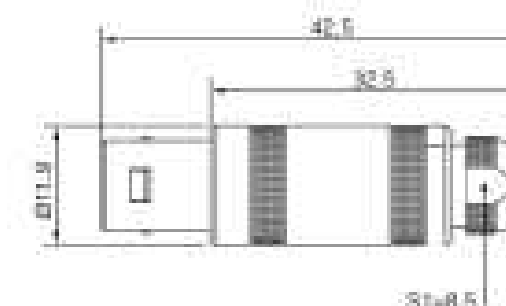


Z1 403 SOCKET Fixed socket, front panel mount, nut fixing

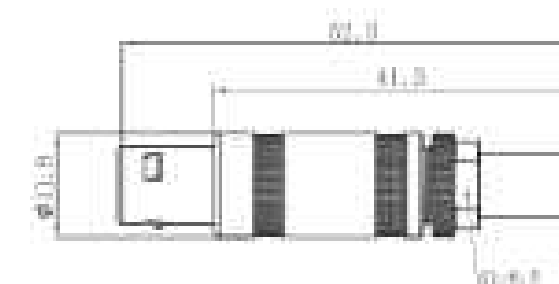


1S series

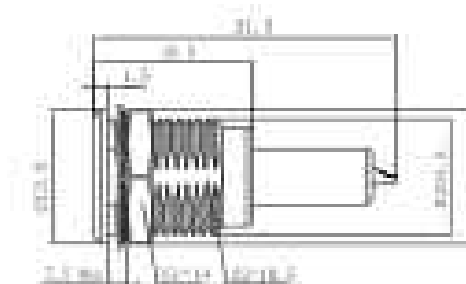
T1 405 PLUG Straight plug, with cable collet



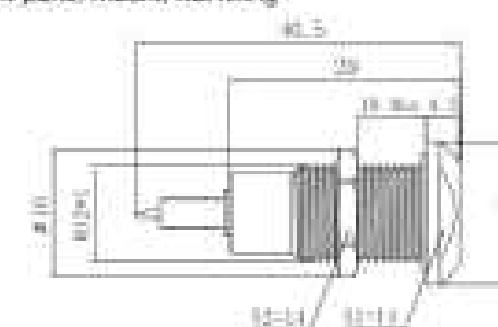
T1 408 PLUG Straight plug, without cable collet; crimp collet nut



Z1 405 SOCKET Fixed socket, front panel mount, nut fixing

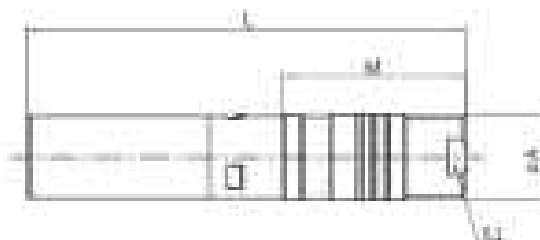


Z16 408 SOCKET Fixed socket, front panel mount, nut fixing



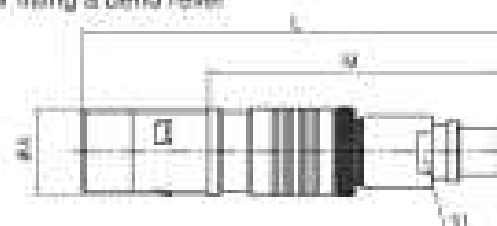
H series

T1 PLUG Straight plug, with cable collet



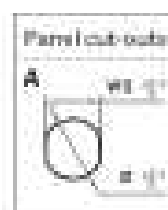
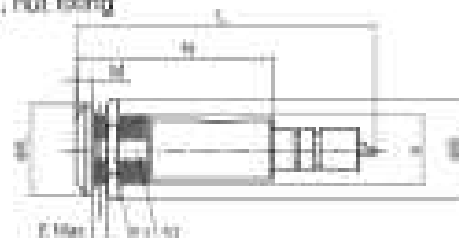
Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	
3HT1	415	18.0	90	29.2	15	
3HT1	428	18.0	113	29.2	15	

T1 PLUG Straight plug, with cable collet and nut for fitting a bend relief



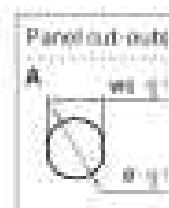
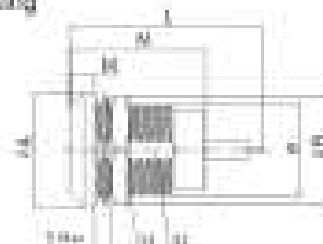
Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	
1HT1	418	13	62.5	43.3	9	

Z1 SOCKET Fixed socket, front panel mount, nut fixing



Reference		Dimensions(mm)										Panel cut-outs(mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type	
3HZ1	415	31	34	103.5	8	68	13	30	22	M24*1.0	22.1	24.1	A	
3HZ1	430	21	24	153.5	8	35	53	30	22	M24*1.0	22.1	24.1	A	

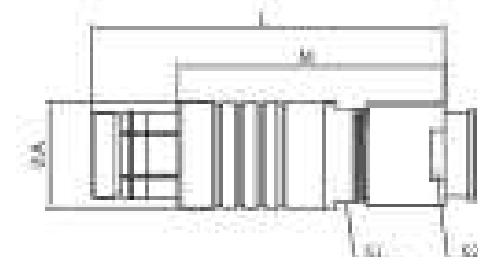
Z7 SOCKET Fixed socket, front panel mount, nut fixing



Reference		Dimensions(mm)										Panel cut-outs(mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type	
1HZ7	416	20	22	34	4.5	24	9	19	14.5	M18*1.0	14.6	16.1	A	

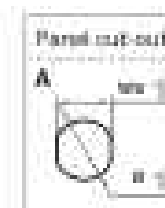
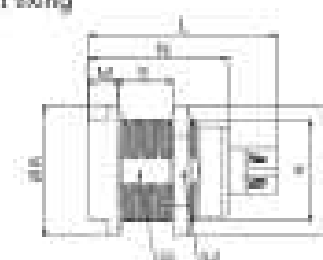
F series

T1 062 PLUG Straight plug, with cable collet



Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	S2
2FT1	062	15	58.3	28.1	10	13

Z16 062 SOCKET Fixed socket, front panel mount, nut fixing



Reference		Dimensions(mm)										Panel cut-outs(mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type	
2FZ16	062	21	21.9	28.3	4	22.5	19	14.5	19	M16*1.0	14.6	16.1	A	

INSERT CONFIGURATION

Series	Code	Solder contacts		Contact spacing	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
05	403			0.9	—	6	4200	1400
05	408			0.5	—	2	8000	5000
15	405			1.3	—	8	7500	2500
15	408			0.9	—	6	12700	4260

Series	Code	Solder contacts		Contact spacing	Resistance (mΩ)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
2F	062			0.9	—	8	4500	1500

Calculation method: working voltage= Test voltage/3

F SERIES

(Outdoor half-shell)



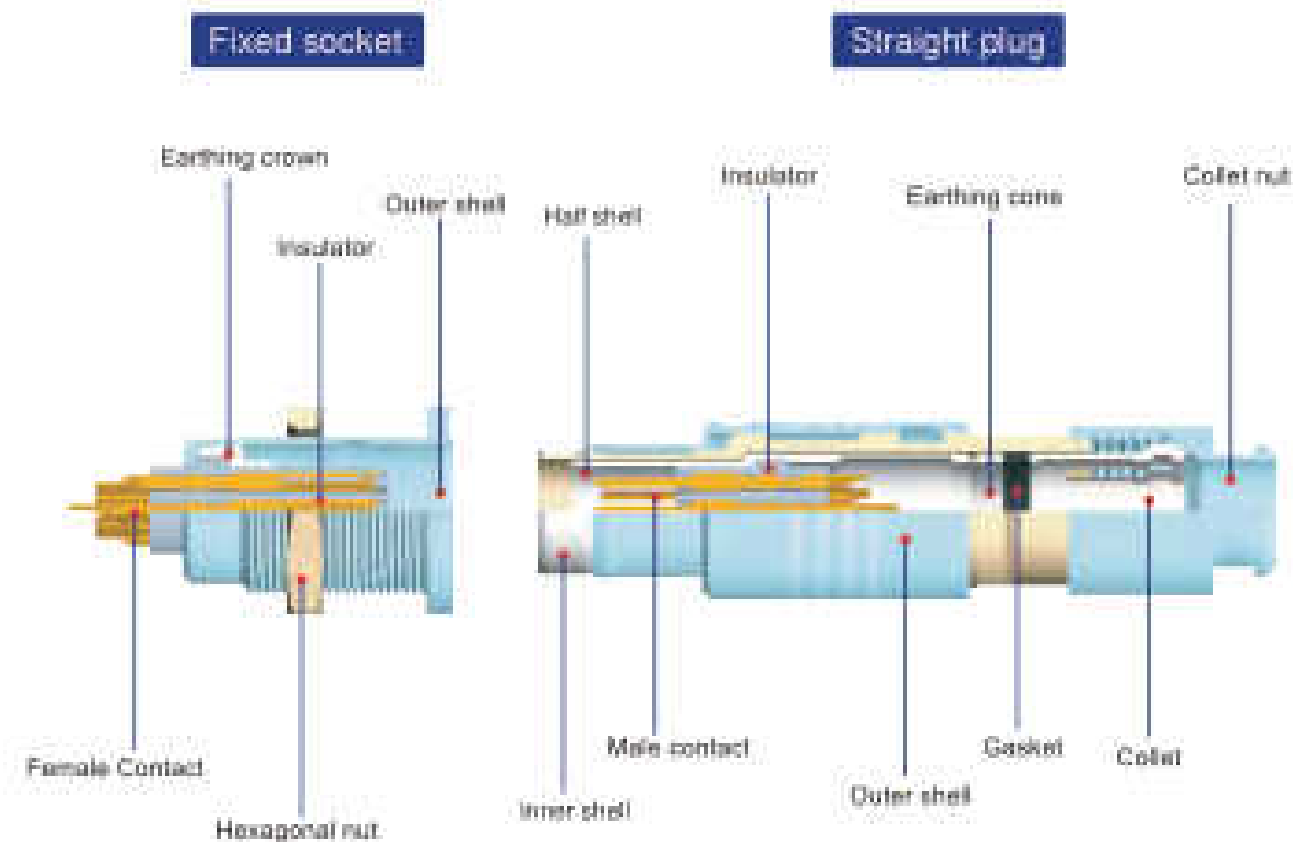
MORE THAN CONNECTORS

MAIN FEATURES:

1. Security of the push-pull self-locking system;
2. Multipole types 2 to 27 contacts;
3. High packing density for space saving;
4. Solder or PCB contacts (straight or elbow);
5. Half-shell key to avoid cross mating;
6. 360° screening for full EMC shielding;
7. Vacuum-tight socket suitable for vacuum equipment.

PART SECTION SHOWING INTERNAL COMPONENTS

F Series



F SERIES

Part Numbering System

1.Series: (page 109)

2.Housing model: (page 112)

3.Alignment key: (page 121)

4.Insert configuration: (page 118)

5.Housing material:

C= Chrome-plated brass
K= Black Chrome-plated brass
N= Nickel-plated brass
T= Stainless steel

6.Insulator Material:

L=PPS T=PTFE K=PEEK

7.Contact type:

A= Solder male L= Solder female
N= Pin female V= Pin female 90°
W= Pin male 90° B= Pin male

8.Cable OD: (page 121)

9.Outshell Pattern:

4= Circle pattern

10. Collet Nut Type:

2= Collet nut for bend relief
3= Flange (without bend relief)
8= Short collet nut for overmolding for T7 plug

10. Earthing tag:

0= Without earthing tag 1= With earthing tag

Plug 1F T1 G 06 C L A 50 4 2 0

Free socket 1F 24 G 06 C L L 50 4 2 0

Fixed socket 1F Z13 G 06 C L L 00 0 0 0

PART NUMBER EXAMPLE:

Straight plug with cable collet:

1FT1G06CLA50420=1F series straight plug with single half-shell key(G) and cable collet, multipole type with 6 contacts, chrome-plated brass outer shell, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outer shell pattern, collet nut for bend relief, without earthing tag.

Free socket

1F24G06CLL50420=1F series free socket with single half-shell key(G) and cable collet, multipole type with 6 contacts, chrome-plated brass outer shell, PPS insulator, solder female contacts, collet for 5.0mm diameter cable, circle outer shell pattern, collet nut for bend relief, without earthing tag.

Fixed socket:

1F21300CLL00000=1F series fixed socket with single half-shell key(G), multipole type with 6 contacts, chrome-plated brass outer shell, PPS insulator, solder female contact, without earthing tag.

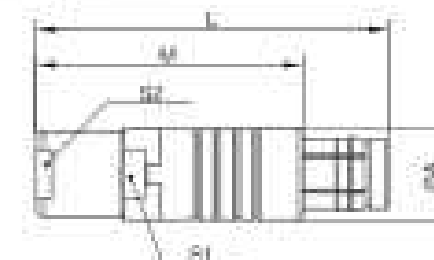
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 40°/140°F
Shielding Efficiency	75dB(10MHz)-49dB(1GHz)
Resistance to Vibration	15g(10Hz-2000Hz)

Characteristics	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g 3ms
Endurance	5000 cycles
Protection index(mated)	IP68

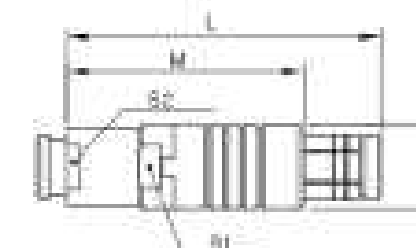
HOUSING MODELS

T1 PLUG Standard straight plug, with half-shell key (G or A), cable collet



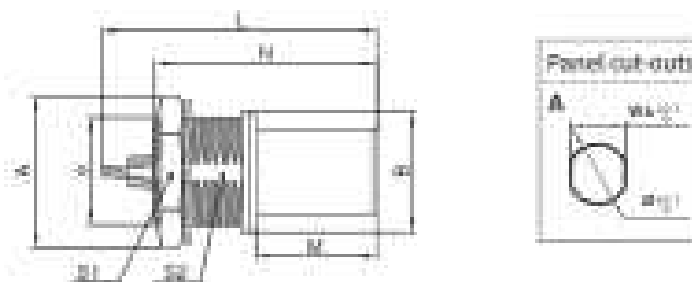
Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	S2
6P	T1	9.5	38	28	8	8
1F	T1	12	46.6	29.8	9	9
3P	T1	16	53.3	38	13	13
3P	T1	16.7	59	43.4	16	17
4P	T1	25.6	64	58.8	20	20

T1 PLUG Standard straight plug, with half-shell key (G or A), cable collet and nut for fitting a bend relief



Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	S2
6P	T1	9.5	38	28	8	8
1P	T1	12	46	24	9	9
13P	T1	13.9	47.3	37	11	13
3P	T1	16	59	37.5	13	13
3P	T1	16.7	58	44.3	16	17

T2 PLUG Fixed plug, non-latching, nut fixing, half-shell key (G or A)



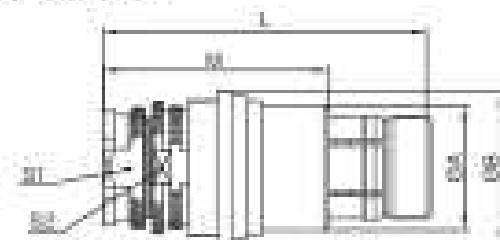
Reference		Dimensions (mm)								Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	S1	S2	e	Ws	Ø	Type
0F	T2	12.5	10.0	20.0	18.0	18.4	11.0	9.2	M3x0.5	9.5	9.1	A
1F	T2	16.0	17.0	25.0	17.0	22.0	14.0	10.0	M3x1.0	10.0	12.1	A
10F	T2	16.0	18.0	30.0	19.0	28.0	17.0	13.0	M3x1.0	12.1	14.1	A

T3 PLUG 90° degree plug, with half-shell key (G or A), cable collet



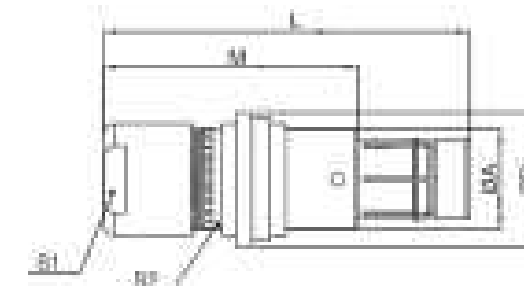
Reference		Dimensions (mm)							
Series	Model	A	H	M	L	S1	S2	S3	S4
0F	T3	14.5	27.1	20	30	9	9	9	9
1F	T3	11.8	30.4	31.3	42.1	11	10	15	8
2F	T3	16	36	34	45.3	15	14	13	13
3F	T3	18	41	44.3	52.7	18	17	15	15

T7 PLUG Short type Straight plug, with half-shell key (G or A), cable collet



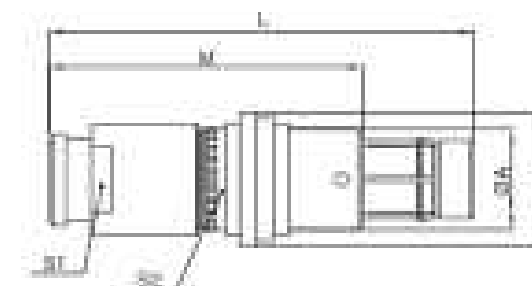
Reference		Dimensions (mm)					
Series	Model	L	A	M	B	S1	S2
1F	T7	32.8	11.8	32	10	10	11
10F	T7	33.2	12.5	33.2	15.0	10	11
2F	T7	38	15	35.7	17.0	12	12.8
3F	T7	44	18	38	21.2	15	16

TX PLUG Short type Straight plug, with half-shell key (G or A), cable collet



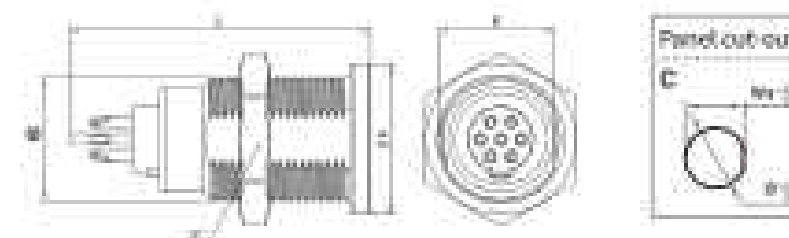
Reference		Dimensions (mm)					
Series	Model	A	B	M	L	S1	S2
0F	TX	9	12	20.0	33.0	9	9

TX PLUG Short type Straight plug, with half-shell key (G or A), cable collet nut for fitting a bend relief



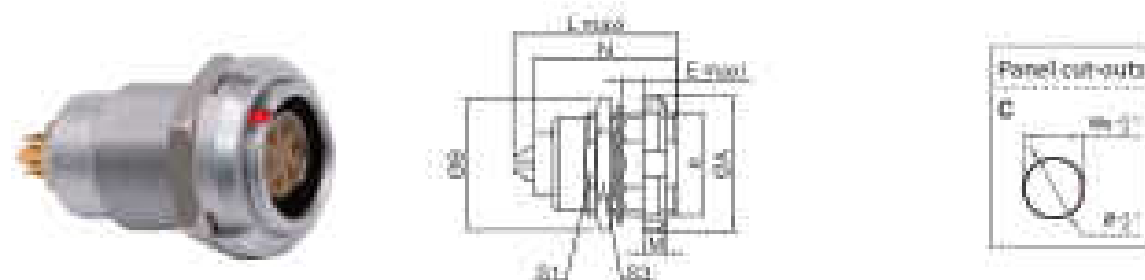
Reference		Dimensions (mm)					
Series	Model	A	B	M	L	S1	S2
0F	TX	9	12	20.0	33.0	9	9

Z1 SOCKET Fixed socket, panel mount, nut fixing, with half-shell key (G or A)



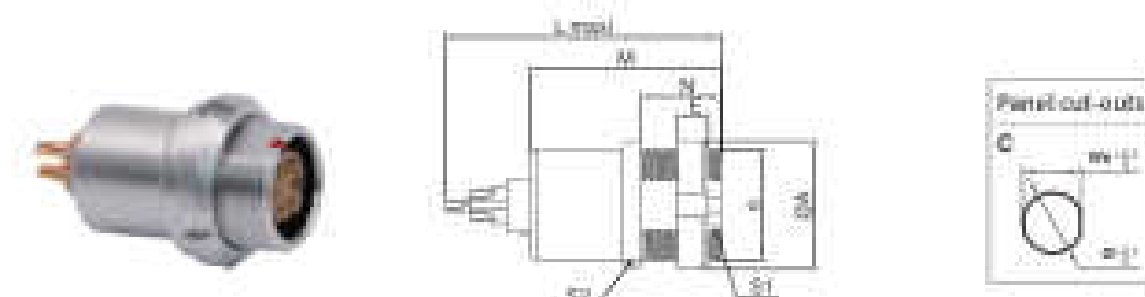
Reference		Dimensions (mm)					Panel cut-outs (mm)		
Series	Model	L	A	K	S	e	Ws	Ø	Type
0F	Z1	25	11	6.4	11	M3x0.5	9.5	9.1	C
1F	Z1	23.8	14	11.1	14	M3x1.0	11.0	12.1	C

Z2 SOCKET Two nuts fixed socket, with half-shell key (G or A)



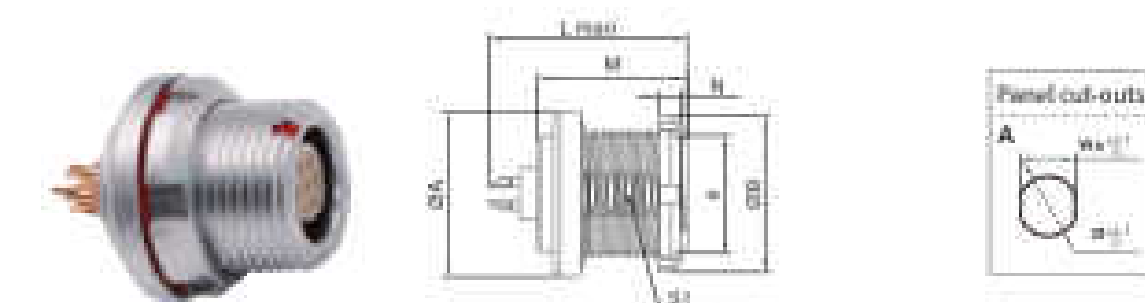
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	A	B	E	M	P	N	L	S1	e	Ws	Ø	Type
6P	Z2	12	22	2,3	2,5	7	18,8	22,5	8,4	M20,5	6,5	8,1	A
1P	Z2	18	27,7	5,5	3,5	10	21,8	28,8	11	M12*1,9	11,2	12,1	A

Z3 SOCKET Fixed socket, back panel mount, nut fixing, with half-shell key (G or A)



Reference		Dimensions(mm)									Panel cut-outs(mm)		
Series	Model	A	E	L	M	N	S1	S2	e	Ws	Ø	Type	
6P	Z3	12	2,3	21	18,8	8,8	8,4	10	M20,5	6,5	8,1	G	
12P	Z3	17,0	3,5	21,7	18	7	12	-	M14*1,6	12,1	14,1	G	

Z3 SOCKET Fixed socket, back panel mount, nut fixing, with half-shell key (G or A)



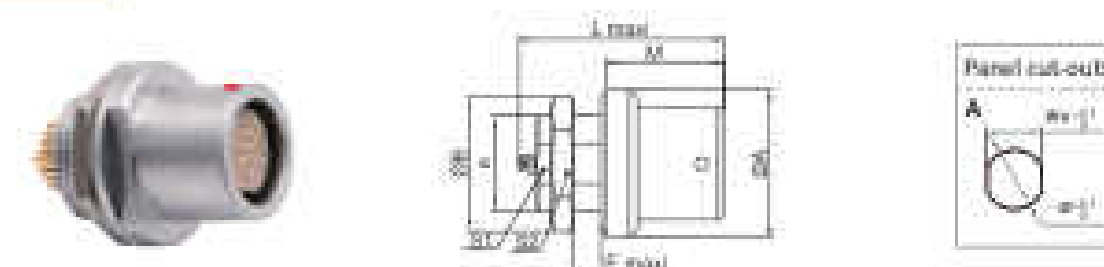
Reference		Dimensions(mm)							Panel cut-outs		
Series	Model	A	B	L	M	N	S1	e	Ws	Ø	Type
1P	Z3	18,5	18	28,5	18,8	3,5	12,5	M14*1,6	12,1	14,1	A

Z4 SOCKET Free socket, cable mount, key (G or A), cable collet and nut for fitting a bend relief



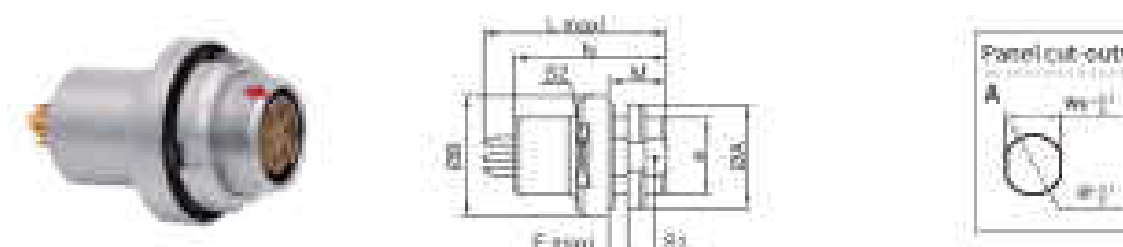
Reference		Dimensions(mm)			
Series	Model	A	L	S1	S2
6P	Z4	18	34	8	8
1P	Z4	12,8	43	18	8

Z6 SOCKET Fixed socket, vacuum-tight, panel mount, with half-shell key (G or A)



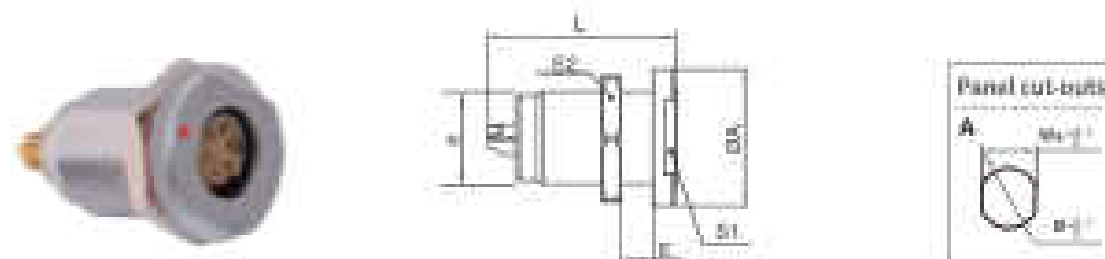
Reference		Dimensions (mm)								Panel cut-outs			
Series	Model	A	B	E	M	L	S1	S2	e	Ws	Ø	Type	
6P	Z6	13,9	12,5	5,0	19,2	20	8	11	M20,5	6,5	8,1	A	
1P	Z6	18,8	13,2	4,0	13,2	23,8	12	17	M14*1,0	12,1	14,1	A	
2P	Z6	21,8	22	3,5	16	25,5	14,8	19	M16*1,0	14,8	16,1	A	
4P	Z6	28,8	28	8	25,5	38,5	20,8	23	M20*1,0	20,8	22,1	A	

Z13 SOCKET Fixed socket, vacuum-tight, back panel mount, with half-shell key (G or A)



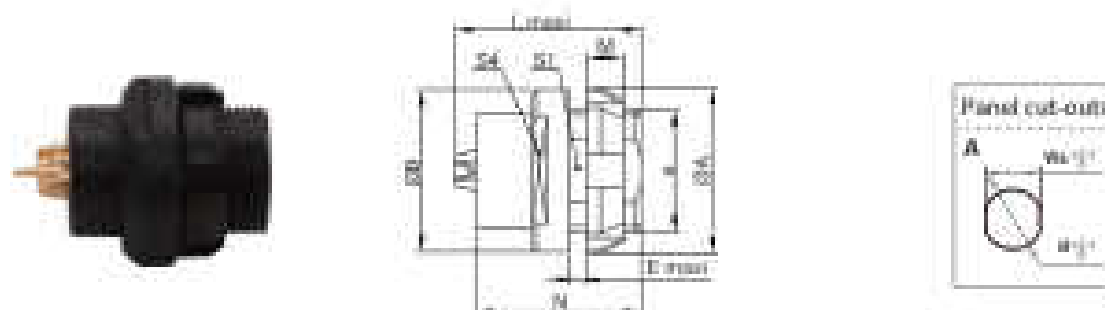
Reference		Dimensions(mm)										Panel cut-outs(mm)	
Series	Model	L	A	B	N	E	M	S1	S2	e	Ws	Ø	Type
1P	Z13	24,7	18	19	21	2,5	6	12,3	18	M14*1,0	12,4	14,1	A
12P	Z13	24,5	17,9	18,8	22,5	3,5	7	12	18	M14*1,0	12,1	14,1	A
2P	Z13	25,1	20	22	21,5	4	8	14,5	17	M16*1,0	14,8	16,1	A
3P	Z13	30	25	27	26	5	18	19,5	20	M20*1,0	19,8	20,1	A

Z16 SOCKET Fixed socket, vacuum-tight, panel-mount, nut fixing, with half-shell key (G or A)



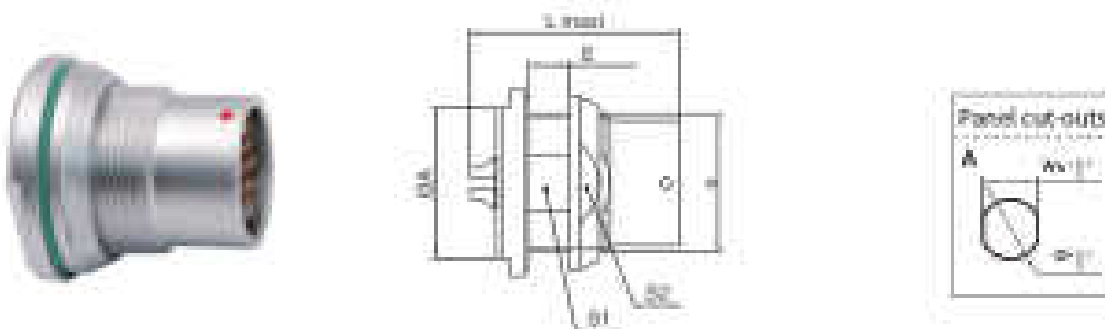
Reference		Dimensions (mm)							Panel cut-outs (mm)		
Series	Model	A	L	E	S1	S2	e	Ws	Ø	Type	
0F	216	14	17.6	6.8	9	12	M0.9x0.5	9.1	10.1	A	
1F	216	16.5	24.7	12	14	17	M0.9x1.0	12.6	16.1	A	
15F	216	19	35.5	22	18	17	M0.9x1.0	13.1	24.1	A	
2F	216	21.6	35.5	22	14.6	18	M0.9x1.0	14.6	16.1	A	

Z20 SOCKET Fixed socket, vacuum-tight, back panel mount, with half-shell key (G or A)



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	E	L	M	N	S1	S2	e	Ws	Ø	Type
0F	230	12	12	3.6	17	2.2	12.6	6.8	11	M0.8x1	6.2	9.1	A

ZX SOCKET Fixed socket, vacuum-tight, back panel mount, with half-shell key (G or A)



Reference		Dimensions (mm)							Panel cut-outs (mm)		
Series	Model	A	L	E	S1	S2	e	Ws	Ø	Type	
0F	24	22	30	7	14.3	22	M0.9x1.0	16.4	20.1	A	

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Number of contacts (n)	Panel opening (mm)	Test voltage (V)	Working voltage (V)
		Male	Female					
0F	02			0.9	6	10	1000	500
	03			0.9	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	300
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	300
	09			0.5	10	2	600	200
1F	02			1.3	5	15	1600	500
	03			1.3	5	12	1300	430
	04			0.9	6	10	1300	430
	05			0.9	6	9	1250	415
	06			0.7	7.5	7	1050	350
	07			0.7	7.5	7	950	315
	08			0.7	7.5	6	950	315
	10			0.5	1.0	2.5	900	300
	12			0.5	10	2	800	260
	14			0.5	10	2	800	260

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Insert length (mm)	Test voltage (V)	Working voltage (V)
		Male	Female					
15F	10			0.7	7.5	4.5	1500	500
	12			0.7	7.5	4.2	1500	500
	19			0.5	10	2.5	900	300
2F	02			1.6	4	16	2100	700
	03			1.6	4	17	2400	800
	04			1.3	5	15	1850	610
	05			1.3	5	14	1750	580
	06			0.9	6	10	1500	500
	09 (6+1)			1.3*1	5	12	2200	730
				0.9*8	6	6	1500	500
	11			0.9	6	10	1250	450
	16			0.7	7.5	6	960	315
	19			0.7	7.5	3.5	1200	200
3F	02			3.0	6	35	2100	700
	04			2.0	3	20	1800	320
	07 (6+1)			2.0*1	5	12	2200	730
				1.3*6	6	6	1500	500
	15			0.9	6	5.3	1600	250
	110			0.7	7.5	3.5	1000	300
				1.6	4	14	1600	500

INSERT CONFIGURATION (Multipole)

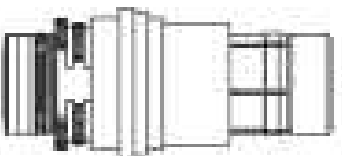
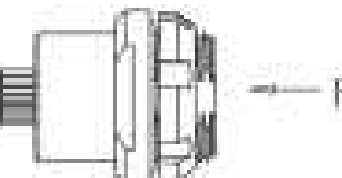
Series	Code	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Insert length (mm)	Test voltage (V)	Working voltage (V)
		Male	Female					
3F	24			0.7	7.5	4	900	300
	27			0.7	7.5	4	900	300
4F	12			2.0	3	16	2200	500

INSERT CONFIGURATION (MIXED: COAX+LV)

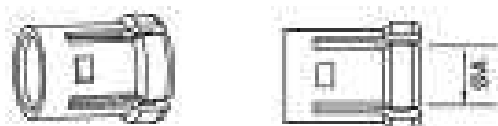
Series	Code	Number of contacts	Solder contacts		Contact pitch (mm)	Resistance (mΩ)	Insert length (mm)	Test voltage (V)	Working voltage (V)	Version (V)
			Male	Female						
2F	804	4			0.7	6	7	900	400	-
		1coaxial			0.7	6	7	1850	610	-

Calculation method: working voltage= Test voltage/3

ALIGNMENT KEY

	Diagram	Key code	Series					
			0F	1F	1SF	2F	3F	4F
Plug		G	●	●	●	●	●	●
		A	●	●		●	●	
		B			●			
Socket		G	●	●	●	●	●	●
		A	●	●		●	●	
		B			●			

COLLET (The material of collet is nickel plated brass)



Code	Outer Dia (mm)	Inner Dia (mm)	Pin Dia (mm)	Series				
				0F	1F	1SF	2F	3F
20	2.5	2.1	2.3	●	●			
25	3.0	2.6	3.0	●	●			
30	3.5	3.1	3.5	●	○			
40	4.0	3.6	4.0	●	○	●	●	
45	4.5	4.1	4.5		○			
50	5.0	4.6	5.0	●	○	○	●	●
55	5.5	5.1	5.5		●			
60	6.0	5.6	6.0		○	○	●	●
65	6.5	6.1	6.5		○			
70	7.0	6.6	7.0				●	●
80	8.0	7.6	8.0				●	●
90	9.0	8.6	9.0				●	●

○ Protection Interlocked (IP52&IP68)

● Protection Interlocked (IP68)

C SERIES

(Outdoor, double keying system (notch and half-shell keying))

MOCO C series is the second generation of push-pull self-latching connector. The unique design of the double keying system (notch and half-shell keying) enable this series connectors to have a better performance in avoiding cross-mating. Beyond that, C series connectors equip shorter insulators, which will save more installation space for customers. After the cable being soldered onto the connector, we usually overmold it (see below picture), this would make the cable elegant and firm and achieve IP68 easily.



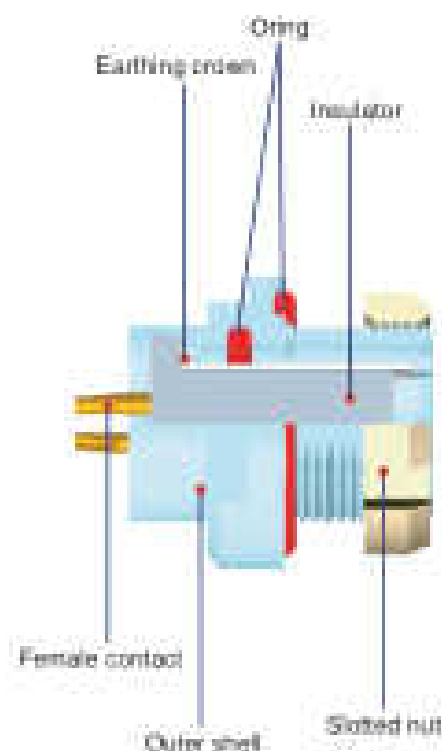
MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 9 contacts
3. IP Rate: IP68
4. Double keying system to avoid cross mating
5. Vacuum-tight socket suitable for vacuum equipment
6. 360° screening for full EMC shielding

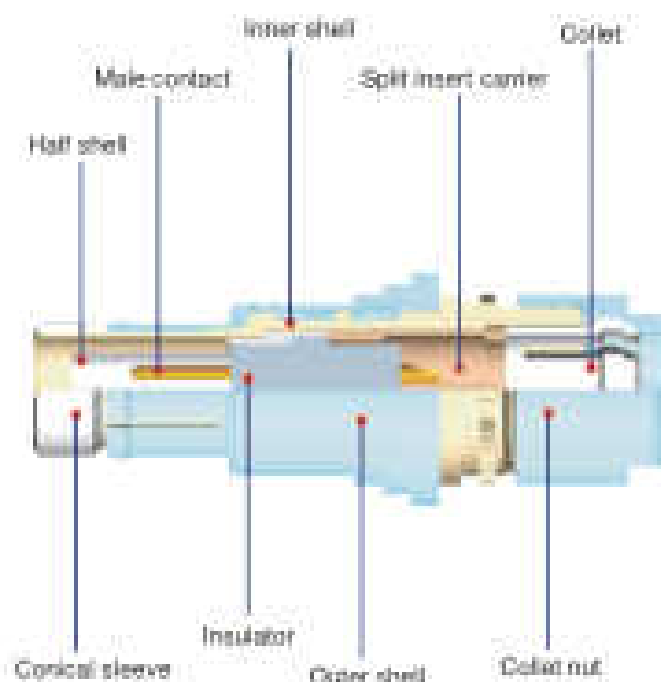
PART SECTION SHOWING INTERNAL COMPONENTS

C series

Fixed socket

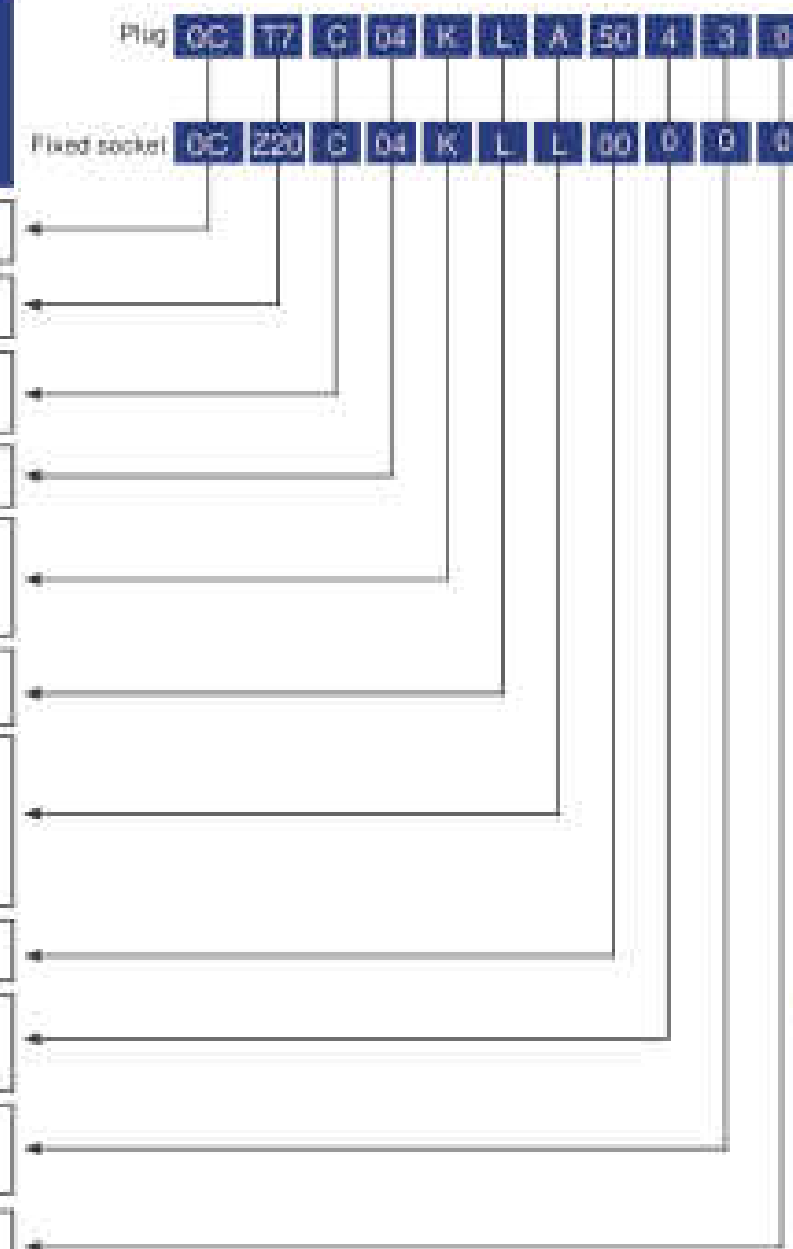


Straight plug



Part Numbering System

1. Series: (page 122)
2. Housing model: (page 125)
3. Alignment key: (page 126)
0C = BC6F
4. Insert configuration: (page 127)
5. Housing material:
C= Chrome plated brass
K= Black Chrome plated brass
6. Insulator material:
L=PPS K=PEEK
7. Contact type:
A= Solder male L= Solder female
W= Pin female V= Pin female 90°
W= Pin male 90° D= Pin male
8. Cable OD: (page 134)
9. Outer shell pattern:
4= Circle Pattern
10. Collet Nut Type:
3= Flat without bead relief
11. Earthing Tag:
0= Without earthing tag 1= With earthing tag



PART NUMBER EXAMPLE:

Straight plug with cable collet:

0CT7C04KLA50430=0C series straight plug, key(C) with cable collet, multipole type with 4 contacts, black chrome plated brass outer shell, PPS insulator, solder male contact, collet for 5.0mm diameter cable, circle outer shell pattern, flat collet nut, without earthing tag.

Fixed socket:

0C220C04KLL00000=0C series fixed socket, key(C) back panel mount, nut flang, multipole type with 4 contacts, black chrome plated brass outer shell, PPS insulator, solder female contact, without earthing tag.

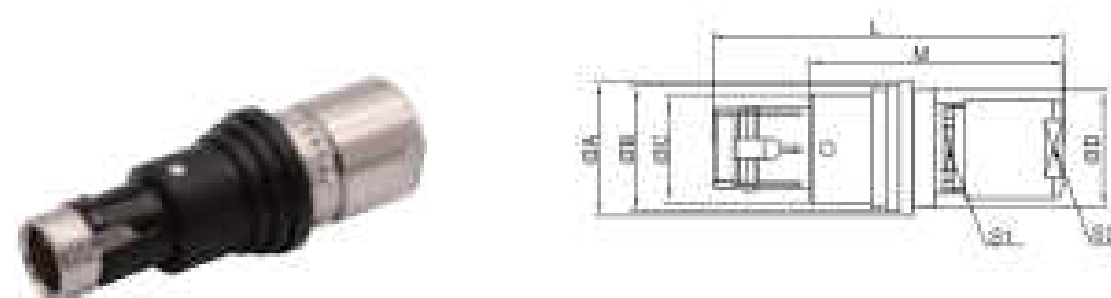
TECHNICAL CHARACTERISTICS:

Characteristic	Parameter
Locking Type	push-pull self locking type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 95% at 60°/140°F
Shielding Efficiency	75dB(10MHz) 40dB(1GHz)
Resistance to Vibration	11g(10Hz~2000Hz)

Characteristic	Parameter
Salt spray corrosion test	96hr
Shock resistance	100g@ms
Endurance	5000 cycles
Protection index(rated)	IP68

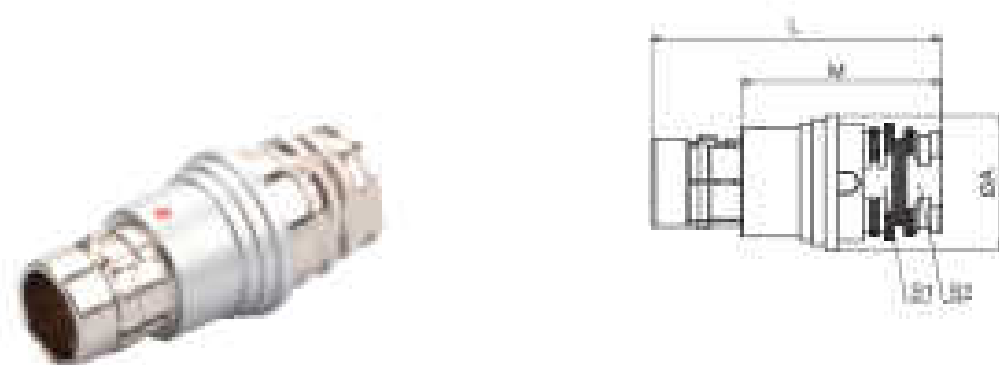
HOUSING MODELS

T7 PLUG Short type straight plug, with double half-shell keyed, cable collet



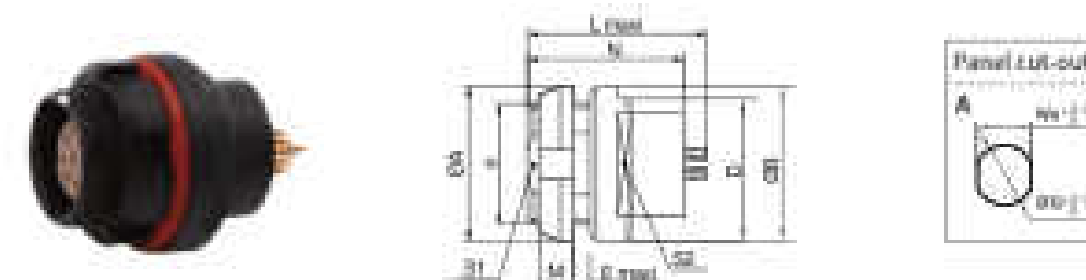
Reference		Dimensions(mm)							
Series	Model	L	M	A	B	C	D	S1	S2
0C	T7	32.4	22.4	12	11	10	9	3	8

T7 PLUG Short type straight plug, cable collet



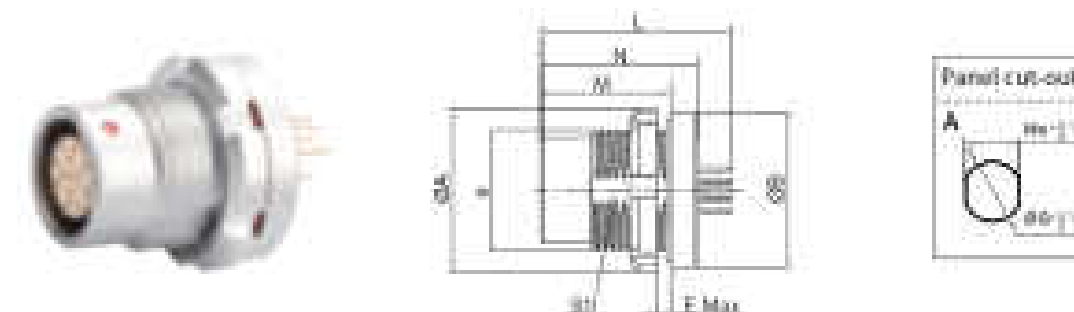
Reference		Dimensions(mm)				
Series	Model	A	L	M	S1	S2
16C	T7	16.8	30.3	23	11	10

Z20 SOCKET Fixed socket, vacuum-tight, back panel mount, with double half-shell key



Reference		Dimensions(mm)											Panel cut-outs (mm)		
Series	Model	L	M	B	A	N	S1	S2	E	D	e	Wb	Ø	Type	
0C	Z20	17.3	3	13	12	13.3	6.2	11	1.3	12	MINUS	6.3	6.1	A	

ZX SOCKET Fixed socket, vacuum-tight, back panel mount, with half-shell key



Reference		Dimensions(mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	e	Wb	Ø	Type	
16C	ZX	20	19	23.8	16	19.5	3	13.8	MINUS	12.8	16.1	A	

Alignment key

Diagram	Key of plug			
	0C 90°	0C 90°	0C 120°	0C 150°
Key code	B	C	E	F

INSERT CONFIGURATION (Multipole)

Series	Code	Socket contacts		Contact pitch (mm)	Positions (POS)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
0C	02			0.9	6	10	1000	500
	03			0.9	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	300
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	300
	09			0.5	10	2	600	200
15C	04			1.3	5	10	875	300
	13			0.5	10	1.8	875	300

C SERIES

U SERIES

(Outdoor- Keyed)



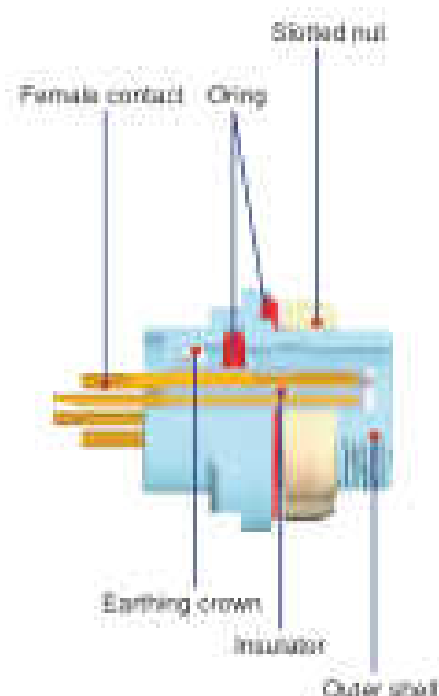
MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 18 contacts
3. IP-Rate: IP68
4. High Packing density for space saving
5. Solder or PCB contacts (straight or elbow)
6. 360° screening for full EMC shielding
7. Multiple key choices, easy handling and blind mating

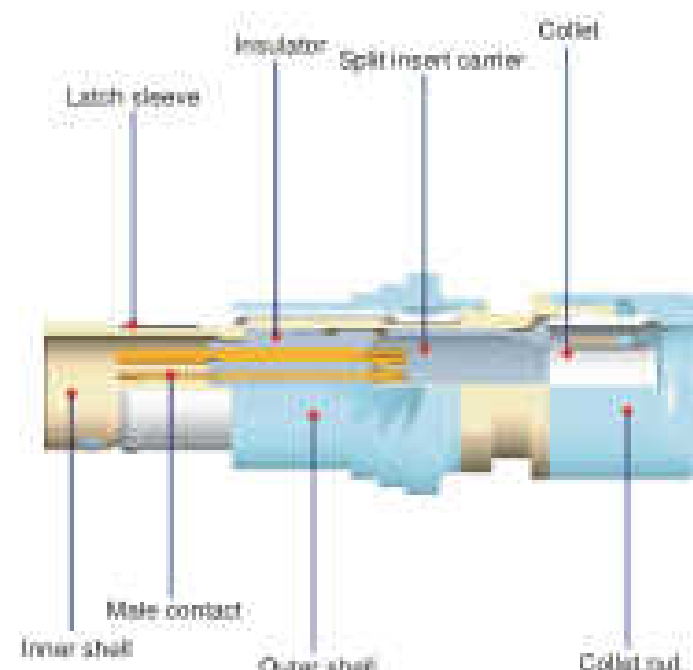
PART SECTION SHOWING INTERNAL COMPONENTS

U series

Fixed socket



Straight plug



Part Numbering System

1. Series: (page 128)

2. Housing model: (page 131)

3. Alignment key: (page 134)

4. Insert configuration: (page 133)

5. Housing material:
K=Black Chrome plated brass

6. Insulator material:
L=PPS K=PEEK

7. Contact type:
A= Solder male L= Solder female
H= Print female V= Print female 90°
W= Print male 90° D= Print male

8. Cable OD: (page 134)

9. Outershell pattern:
4= Circle Pattern

10. Collet Nut Type:
3= Flat without bend relief

11. Earthing Tag:
0= Without earthing tag 1= With earthing tag

Plug	0U	T7	A	09	K	L	A	50	4	3	0
Free Socket	0U	Z4	A	09	K	L	L	50	4	3	0
Fixed Socket	0U	Z20	A	09	K	L	L	00	0	0	0

PART NUMBER EXAMPLE:

Straight plug with cable collet:

0UT7A09KLA50430=0U series straight plug, key(A), cable collet, multipole type with 9 contacts, black chrome plated brass out shell, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, circle outshell pattern, flat collet nut, without earthing tag.

Free Socket:

0UZ4A09KLL50430=0U series free socket, key(A), cable collet, multipole type with 9 contacts, black plated brass out shell, PPS insulator, solder female contacts, collet for 5.0mm diameter cable, circle outshell pattern, flat collet nut, without earthing tag.

Fixed socket:

0UZ20A09KLL00000=0U series fixed socket, key(A), nut fixing, multipole type with 9 contacts, black chrome plated brass out shell, PPS insulator, solder female contacts, without earthing tag.

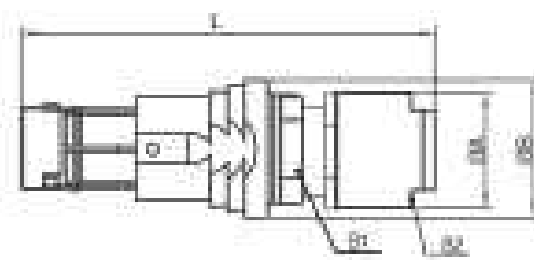
TECHNICAL CHARACTERISTICS:

Characteristics	Parameter
Locking Type	push/pull self-latching type
Working Temperature	-55°C~+125°C
Maximum Humidity	up to 98% at 90°/140°F
Shielding Efficiency	15dB(10MHz) 40dB(1GHz)
Resistance to Vibration	15g(10Hz~3000Hz)

Characteristics	Parameter
Salt spray corrosion test	167h
Shock resistance	100g 6ms
Endurance	5000 cycles
Protection index (mated)	IP68

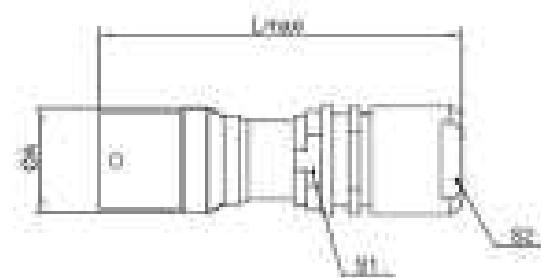
HOUSING MODELS

T7 PLUG Waterproof straight plug, with multiple key, cable collet



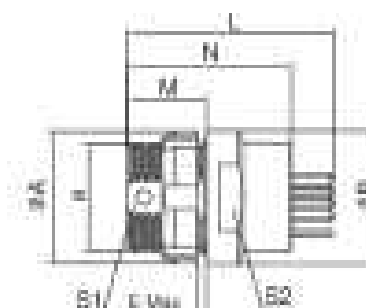
Reference		Dimensions (mm)				
Series	Model	L	A	B	S1	S2
00U	T7	31.0	10.0	10.5	4.5	7.0
0U	T7	36.0	10.0	12.0	4.0	7.0

Z4 SOCKET Free socket, cable mount, cable collet



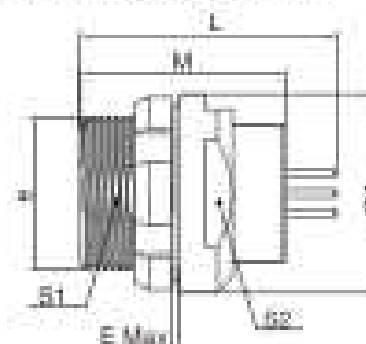
Reference		Dimensions (mm)				
Series	Model	L	A	B	S1	S2
0U	Z4	23.0	4.8	8	8	7

Z13 SOCKET Fixed socket, vacuum-tight, back panel mount



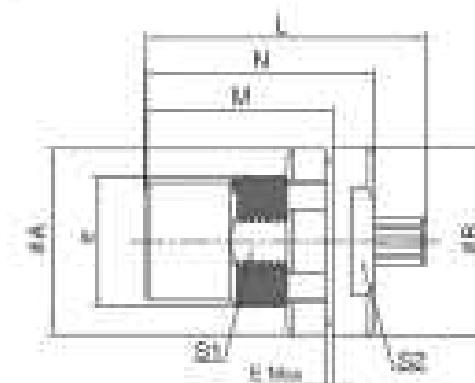
Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
0U	Z13	18.0	11	16.0	6.0	13.1	3	7.0	9.8	M0.5	8.0	9.1	A

Z20 SOCKET Fixed socket, watertight/vacuum-tight, back panel mount



Reference		Dimensions (mm)								Panel cut-outs (mm)			
Series	Model	L	A	M	E	S1	S2	e	Ws	Ø	Type		
00U	Z20	15.0	10.0	12.1	2.3	4.3	8.1	M0.5	6.4	7.1	A		
0U	Z20	16.4	12.0	13.1	3.8	7.3	11.2	M0.5	8.2	9.1	A		

ZX SOCKET Fixed socket, vacuum-tight, back panel mount



Reference		Dimensions (mm)									Panel cut-outs (mm)		
Series	Model	A	B	L	M	N	E	S1	S2	e	Ws	Ø	Type
0U	Zx	14.5	14.5	21.0	14.2	17.5	4	9	12	M0.5	8.1	10.1	A

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact spacing	Pitch (mm)	Rated current (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
00U	02			0.5	10	5	1000	330
	03			0.5	10	3	800	260
	04			0.5	10	2	800	260
	05			0.35	10	1.7	700	200
0U	02			0.9	6	10	1000	500
	03			0.9	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	300
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	300
	09			0.5	10	2	600	200
	13			0.4	10	2	600	200

CALCULATION METHOD: WORKING VOLTAGE= TEST VOLTAGE/3

COLLET (C,U SERIES) (The material of collet is nickel-plated brass)

FOR C SERIES



Code	Collet ØA (mm)	Collet Dia (mm)		Series		
		min	max	0C	1C	3C
32	3.2	2.7	3.3	●	●	
42	4.2	3.7	4.2		●	
48	4.8	4.0	4.5	●		
62	6.2	4.7	6.2	●	●	
68	6.8	5.1	6.8	●		
62	6.2	5.7	6.2		●	
68	6.8	6.0	6.8	●		●
72	7.2	6.8	7.2			●

FOR U SERIES



Code	Collet ØA (mm)	Collet Dia (mm)		Series	
		min	max	00U	0U
32	3.2	2.7	3.2	●	
42	4.2	4.0	4.3	●	●
48	5.0	4.8	5.0	●	●
58	5.5	5.0	5.5	●	●
60	6.0	5.6	6.0	●	●

ALIGNMENT KEY

Front of socket	A	B	C
	D	E	F

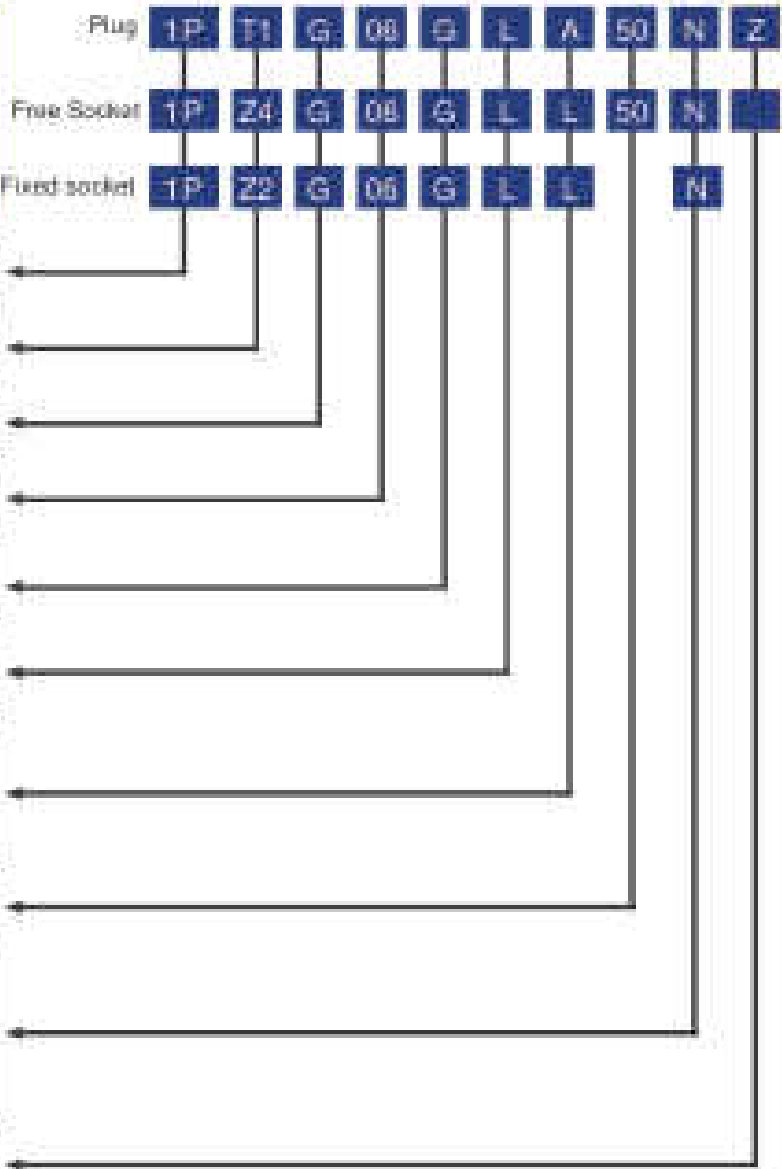
P SERIES

(Indoor keyed)
MOCO P series connectors have passed UL certification. Now three sizes are available: 0P series (M10), 1P series (M14) and 2P series (M17). They are widely used in electronic equipment, instrument & meters, LED display screen, and especially in medical devices, such as patient monitor, ventilator, anesthetic machine, color Doppler ultrasound, BP monitor, infrared therapeutic instrument, electrophysiology TCO, electric knife, endoscopy, defibrillator, dental equipment, electric shock generator, MRI, etc.



Part Numbering System

- 1.Series : (page 135)
- 2.Housing model : (page 137)
- 3.Alignment key : (page 138)
- 4.Insert configuration : (page 138)
- 5.Housing material:
G=Grey(PC) M=Black(PC) B=White(PC)
- 6. Insulator material :
L=PPS
- 7.Contact type :
A= Solder male L= Solder female
N= Print female U= Print female 90°
W= Print male 90° D= Print male
- 8.Cable OD : (page 138)
- 9.Cable nut color or band relief color if with band relief :
N=Black G=Grey A=Blue
R=Red J=Yellow V=Green B=White
- 10.Z indicates with band relief
blank if without band relief



PART NUMBER EXAMPLE:

- Straight plug with cable collet:**
1PT1G06GLA50NZ = 1P series straight plug with key(G) and cable collet, multipole type with 6 contacts, grey outer shell, PPS insulator, solder male contacts, collet for 5.0mm diameter cable, with a black band relief.
- Free socket:**
1P24G06GLL50N = 1P series free socket with key(G) and cable collet, multipole type with 6 contacts, grey outer shell, PPS insulator, solder female contacts, collet for 5.0mm.
- Fixed socket:**
1P22G06GLLN = 1P series fixed socket, with two nut and key(G), multipole type with 6 contacts, grey outer shell, PPS insulator, solder female contacts, and black plastic front nut.

MAIN FEATURES:

1. Security of the push-pull self-latching system
2. Multipole types 2 to 26 contacts
3. Light weight and small volume. The newly developed OP series (M10) is smaller than the standard IP series.
4. Solder or PCB contacts (straight or elbow)
5. High Packing density for space saving
6. The back nut and socket round nut are distinguished by color to prevent misinsertion
7. Multiple key positions are selected to avoid mixed insertion between similar connectors
8. UL Listed (E468230)

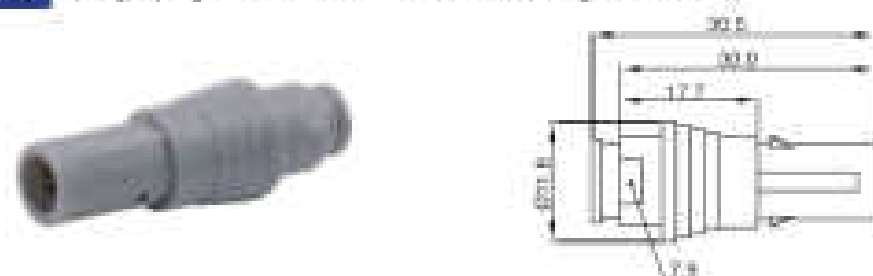
TECHNICAL CHARACTERISTICS:

Locking Type	push pull self-latching type
Working Temperature	-50°C ~ +120°C
Maximum Humidity	up to 95% at 50°/140°F
Shielding Efficiency	75dB(10MHz) 40dB(1GHz)
Resistance to Vibration	15g(10Hz-2000Hz)
salt spray corrosion test	96hr
Shock resistance	100g,6ms
Endurance	1000cycles
Protection Index(rated)	IP60-64

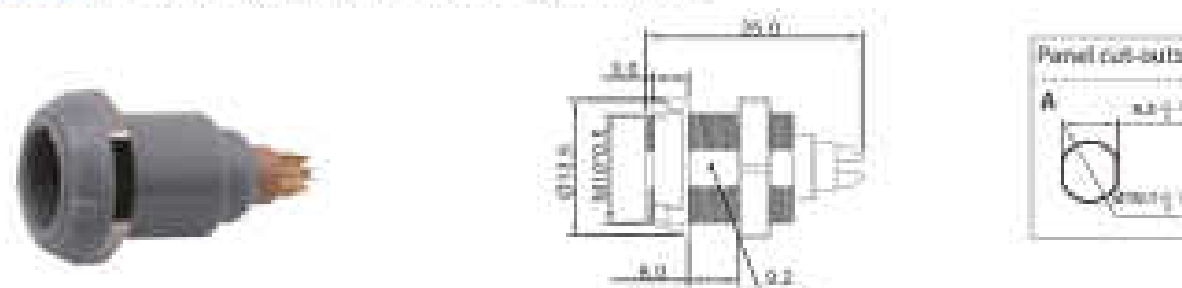
HOUSING MODELS

OP series

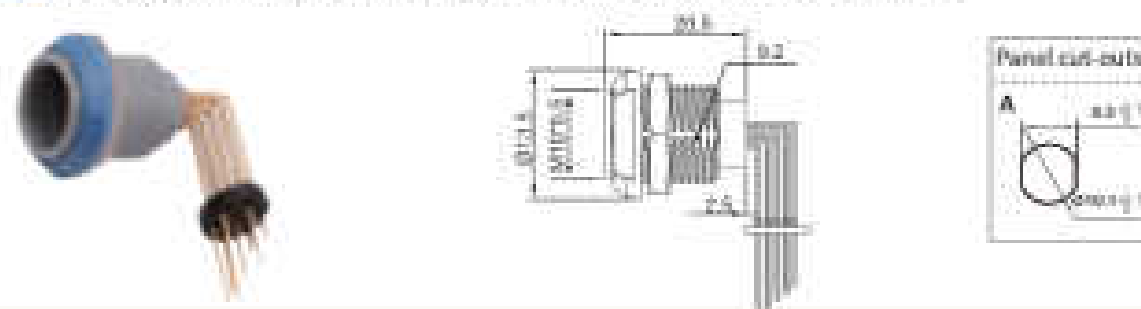
T1 PLUG Straight plug, with cable collet and nut for fitting a bend roller



Z2 SOCKET Fixed socket with two nuts, front or back panel mount



Z2 SOCKET Fixed socket with two nuts, front or back panel mount, elbow(90°) contact for pcb



OP series Accessories

NUT COLOR:

Nut	Code	G	A
	Color	Grey	Blue
			

CABLE COLLET:

	Code	-40
	Cable diameter	2.7-4.0mm

ALIGNMENT KEY:

Key of plug	Diagram
	
Key code	G

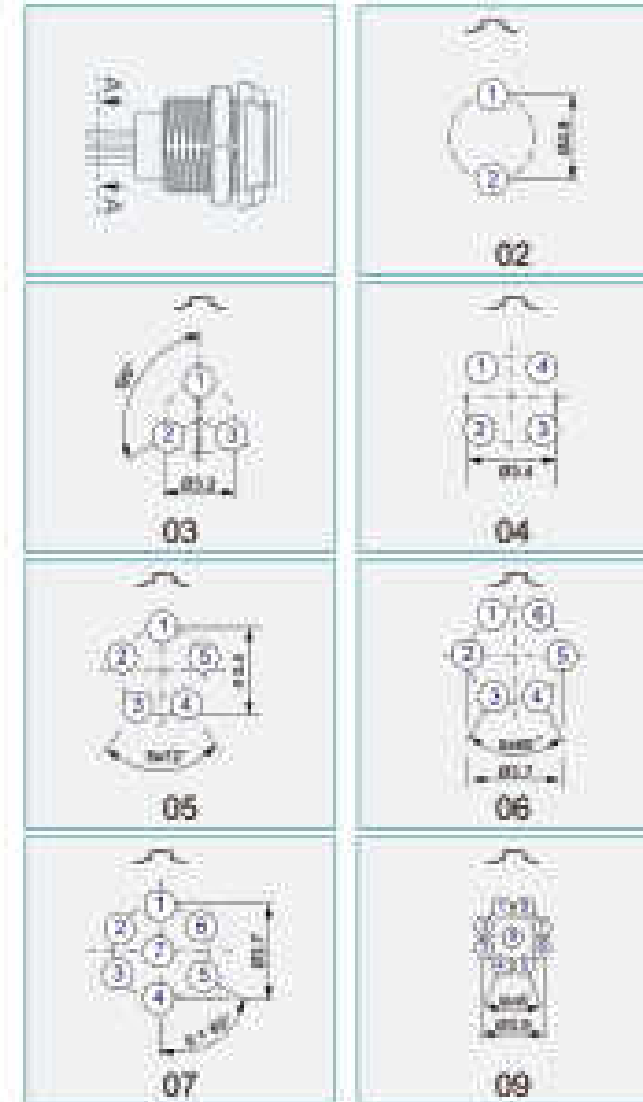
INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact width (mm)	Pitch (mm)	Solder contact (mm)	Test voltage (kV)	Working voltage (kV)
		Male	Female					
OP	02			0.9	6	10	1000	450
	03			0.9	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	350
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	250
	09			0.5	10	2	600	200

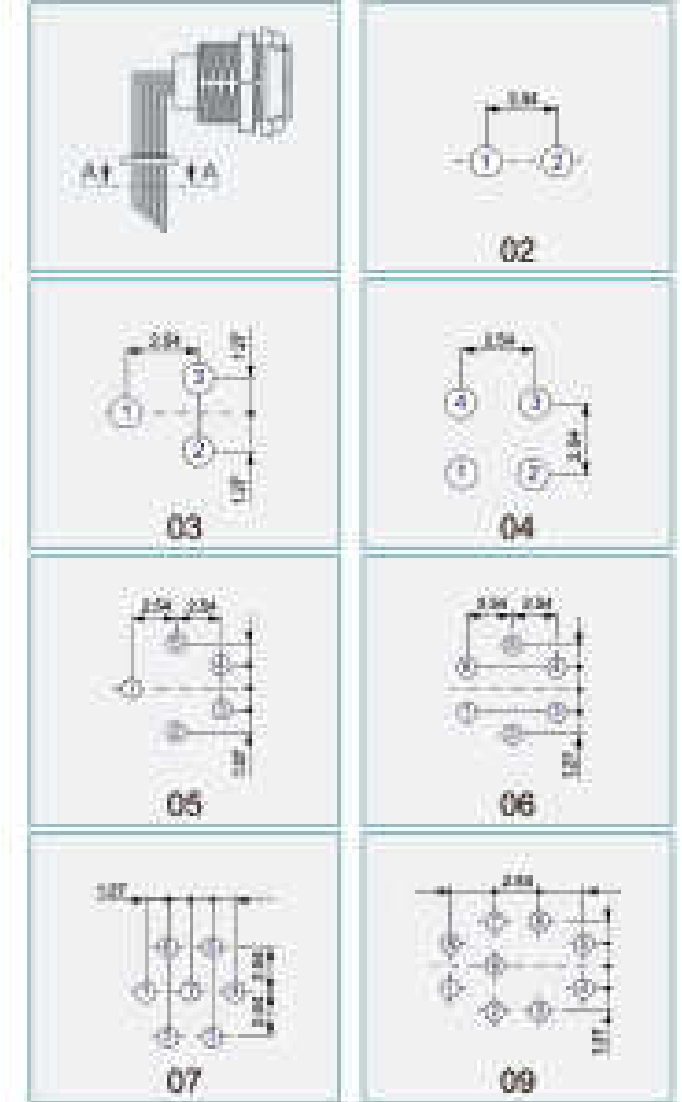
CALCULATION METHOD: WORKING VOLTAGE= TEST VOLTAGE/3

0P SERIES PCB DRILLING PATTERN

For fixed socket with straight print contacts



For fixed socket with 90° print contacts



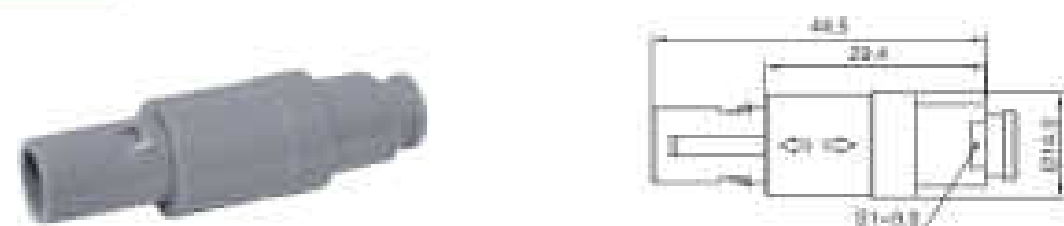
NOTE : ALL VIEWS ARE FROM THE SIDE OF THE SOCKET

1P series

T1 PLUG Straight plug, with cable collet



T1 PLUG Straight plug, with cable collet and nut for fitting a band relief



T2 PLUG Disposable short type plug, overmolding version



T4 PLUG Straight plug, with cable collet and nut for fitting a band relief, watertight IP64



Z1 SOCKET Fixed socket, front panel mount, nut fixing



Note: The Z1 socket round nut is integrated into the housing, so the nut color can only be the same as the housing color.

1P series

Z2 SOCKET Fixed socket with two nuts



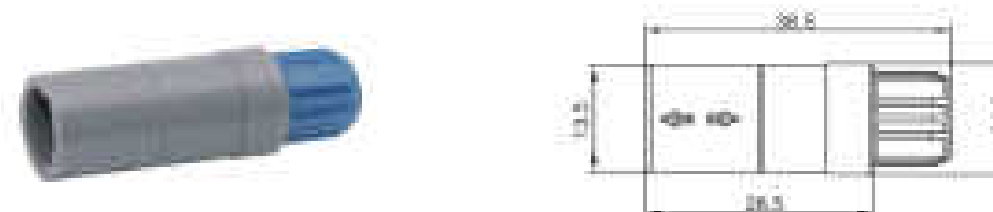
Z2 SOCKET Fixed socket with two nuts, with 90° contacts for PCB



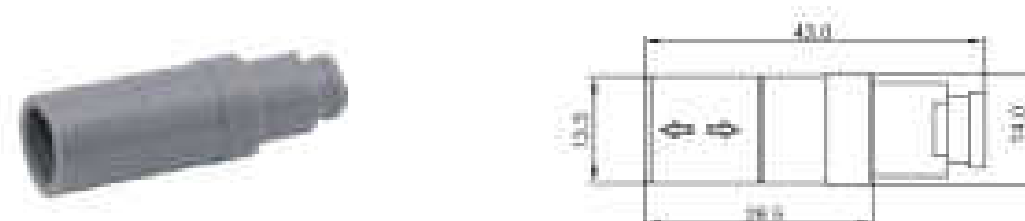
Z3 SOCKET Fixed socket, back panel mount, nut fixing



Z4 SOCKET Free socket, cable mount, with cable collet

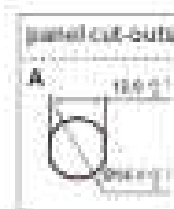
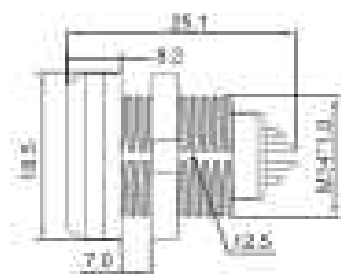


Z4 SOCKET Free socket, cable mount, with cable collet and nut for fitting a band relief



1P series

Z8 SOCKET Fixed socket, front panel mount, nut fixing, watertight IP64



1P series Accessories

COLLET/NUT COLOR:

Code		n	Q	A	D	J	V	B
Color		Black	Grey	Blue	Red	Yellow	Green	White
								

CABLE COLLET:

Code	40	50	60
Cable diameter	2.7-4.0mm	4.3-5.0mm	5.3-6.0mm

ALIGNMENT KEY

Key of plug	Diagram				
Key code	G	A	B	C	H

INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact density	Number of pins	Total contacts (A)	Test voltage (V)	Working voltage (V)
		Male	Female					
1P	02			1.3	5	10	1200	500
	03			1.3	5	9	1200	500
	04			0.9	6	8	1200	500
	05			0.9	6	7	1050	500
	06			0.7	7.5	6	1050	450
	07			0.7	7.5	5	1050	450
	08			0.7	7.5	5	1050	400
	09			0.5	10	3	850	333
	10			0.5	10	3	850	333
	12			0.5	10	2.2	750	333
	14			0.5	10	2	600	550

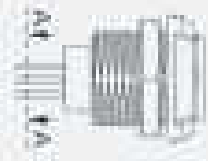
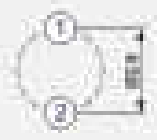
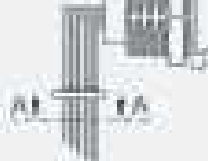
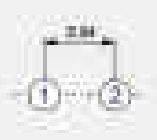
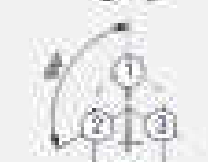
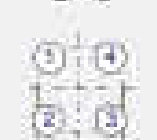
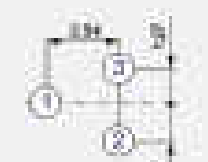
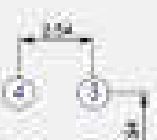
CALCULATION METHOD: WORKING VOLTAGE = TEST VOLTAGE/3

Series	Code	Number of contacts	Solder contacts		Dia. of hole (mm)	Dia. of hole (mm)	Contact length diameter (mm)	Min. working (mm)
			Male	Female				
1P	01	1 Flange			6.0	4.0	2.5	2

1P SERIES PCB DRILLING PATTERN

For fixed socket with straight print contacts

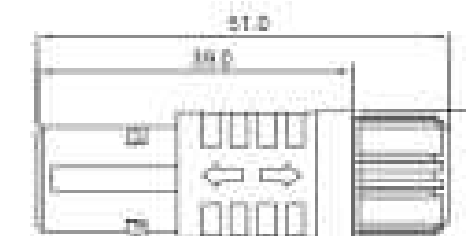
For fixed socket with 90° print contacts

			
02	02	02	02
			
03	04	03	04
			
05	06	05	06
			
07	08	07	08
			
09	10	09	10
			
12	14	12	14

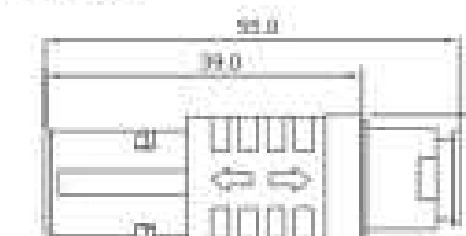
NOTE : ALL VIEWS ARE FROM THE SIDE OF THE SOCKET.

2P series

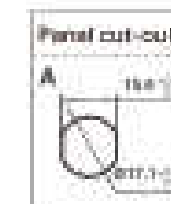
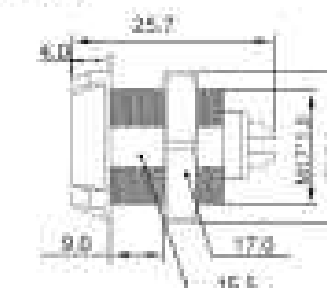
T1 PLUG Straight plug, with cable collet



T1 PLUG Straight plug, with cable collet and nut for fitting a band relief

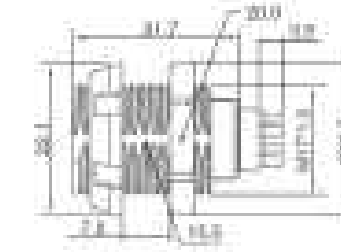


Z1 SOCKET Fixed socket, front panel mount, nut fixing

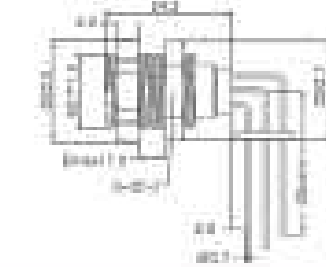


Note: The Z1 socket round nut is integrated into the housing, so the nut color can only be the same as the housing color.

Z2 SOCKET Fixed socket, with two nuts

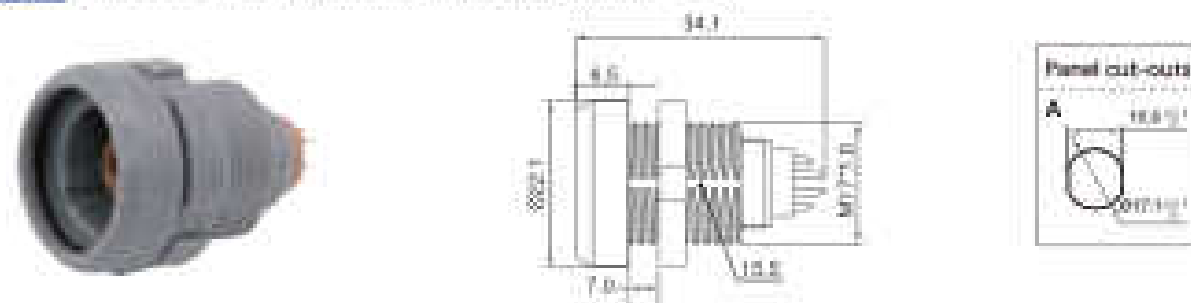


Z3 SOCKET Fixed socket with two nuts, front or back panel mount, elbow(90°)contact for PCB



2P series

28 SOCKET Fixed socket, front panel mount, nut fixing, watertight (IP64)



2P series Accessories

COLLET/NUT COLOR:

Collet/Nut	Code	H	G	A	J	V
	Color	Black	Grey	Blue	Yellow	Green

CABLE COLLET:

	Code	60	70	80
	Cable diameter	5.0-6.0mm	6.0-7.0mm	7.1-8.0mm

ALIGNMENT KEY

Key of plug	Diagram
Key code	G

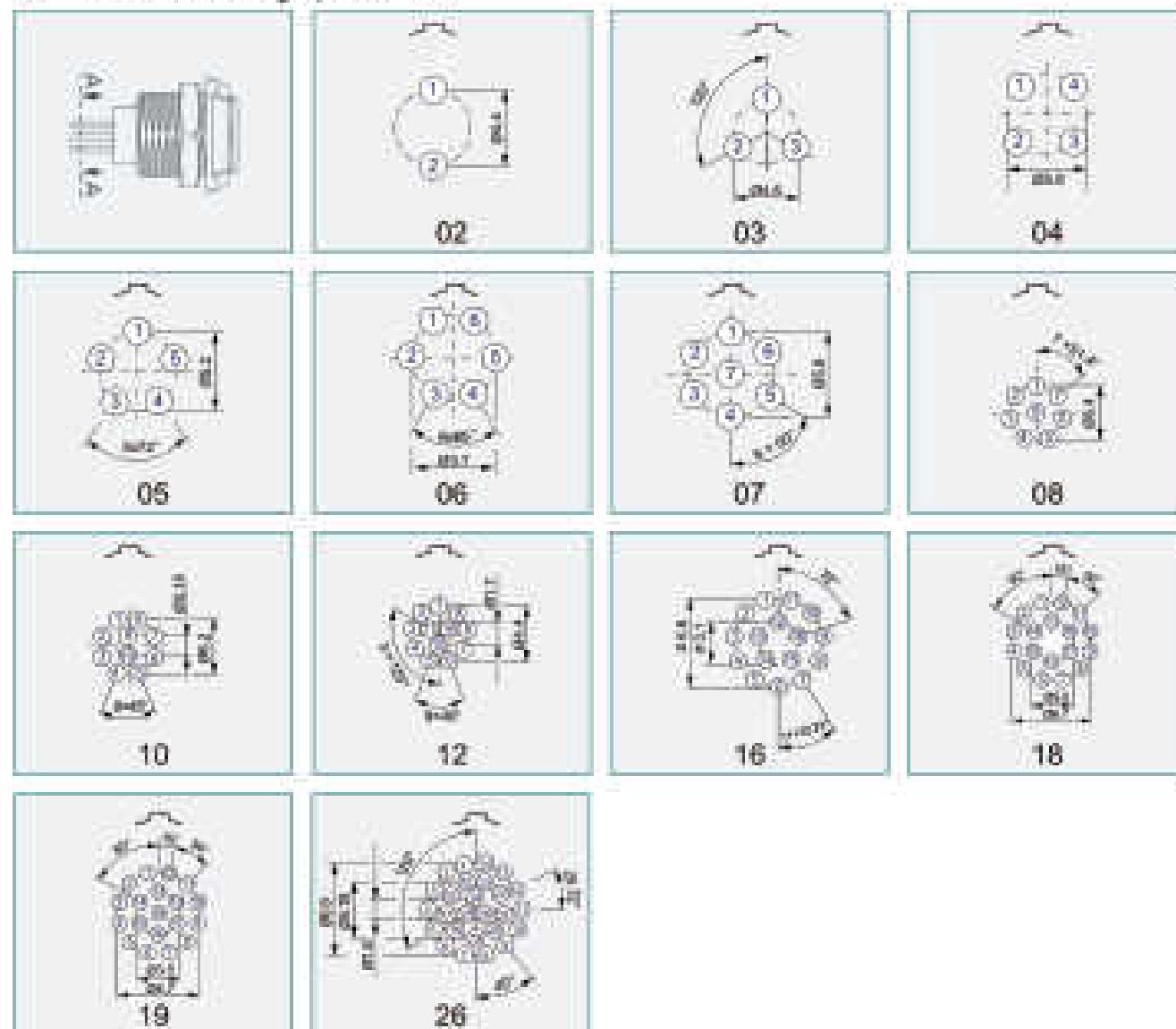
INSERT CONFIGURATION (Multipole)

Series	Code	Solder contacts		Contact pitch (mm)	Maximum I (mA)	Power (W)	Test voltage (V)	Working voltage (V)
		Male	Female					
2P	02			2.0	3	30	1650	600
	03			1.6	4	17	1800	600
	04			1.3	5	15	1800	600
	05			1.3	5	14	1500	500
	06			1.3	5	12	1500	550
	07			1.3	6	11	1680	400
	08			0.9	6	10	1200	400
	10			0.9	7.5	8	1200	450
	12			0.7	7.5	7	1350	400
	16			0.7	7.5	6	1200	400
	18			0.7	7.5	6	1200	400
	19			0.7	7.5	6	1200	400
	26			0.5	8	5.5	1200	400

CALCULATION METHOD: WORKING VOLTAGE= TEST VOLTAGE/3

2P SERIES PCB DRILLING PATTERN

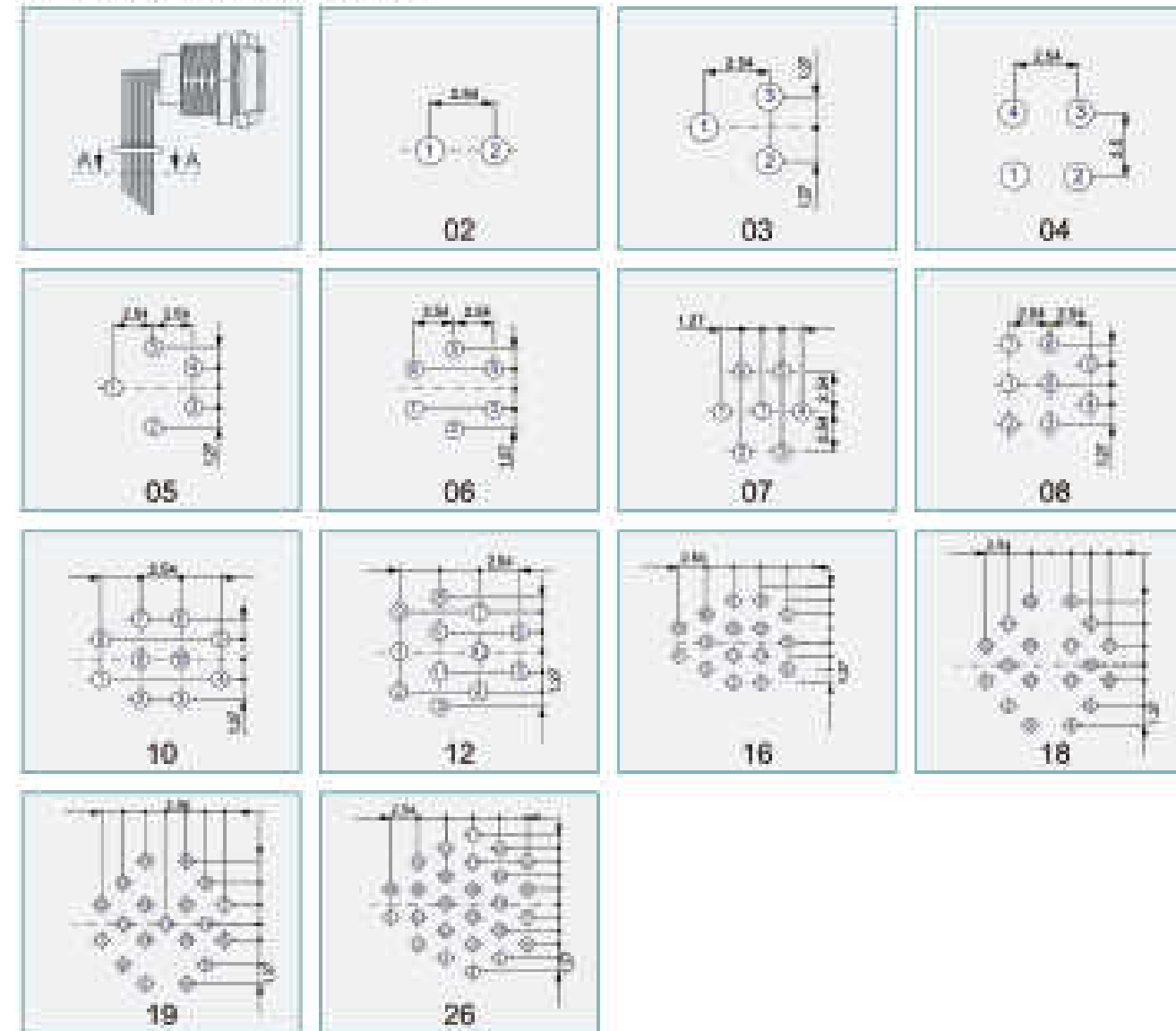
For fixed socket with straight print contacts



NOTE : ALL VIEWS ARE FROM THE SIDE OF THE SOCKET.

2P SERIES PCB DRILLING PATTERN

For fixed socket with 90° print contacts



NOTE : ALL VIEWS ARE FROM THE SIDE OF THE SOCKET.

METAL NIBP CONNECTORS

MAIN FEATURES:

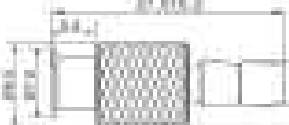
With great sealing and quick push-pull system, NIBP connectors are suitable for gas and water connecting in medical devices and industry, widely used in medical cables, patient monitor, blood oxygen probe and cables, oxygen meter, etc.

Technical Characteristics:

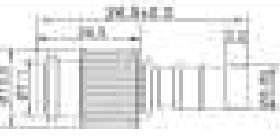
Characteristics	Parameter	Characteristics	Parameter
Material	Brass	Pressure resistance	0.5(Mpa)
Surface treatment	Polishing nickel plating	Endurance	>2000 cycles (connection and separation)
Working Temperature	-30°C~+60°C	Applicable environment	Except for acid gas and liquid
Leakage rate	No more than 2mmHg/ (0.4Kpa/min) when pressure difference is 400mmHg	Applicable tube	Silicone tube, Po tube, etc.

Item	MOCO P/N	Picture	Dimensions(mm)
1	(MC03-T) SP15		
2	MC03-T1		
3	MC03-T2		
4	MC03-T3		
5	MC03-T4		
6	(MC03-J01) SP12		
7	MC03-J02		

METAL NIBP CONNECTORS

Item	MOCO P/N	Picture	Dimensions(mm)
8	MC03-J03		
9	MC03-J04		
10	MC03-J05		
11	MC03-J06		
12	MC03-J07		
13	MC03-J08		
14	MC03-J09		
15	MC03-J11		
16	MC03-J12		
17	MC03-J13		

METAL NIBP CONNECTORS

Item	MOCO P/N	Picture	Dimensions(mm)
18	MC03-J15		
19	MC03-J16		
20	MC03-J17		
21	MC03-J18		
22	MC03-J19		
23	MC03-J28		
24	MC03-J29		
25	MC03-J201		
26	MC03-J202		
27	MC03-J205		

ACCESSORIES

Bend relief



Caps



Assembly Instructions



Cable Assemblies



Bend relief

Part Numbering System

1. Series

2. Model

3. Cable OD

1B

BR

4B

S

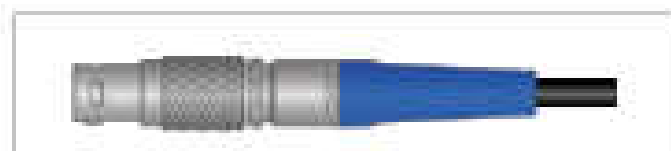
N

4. Color

5. Material
S-Silicone T-TPU

Material: Silicone

Temperature range in dry air environment: -50°C ~ +200°C



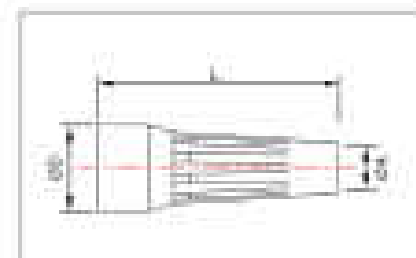
Series	OD	L	1	2	3	4
L	20	24	30	37	42.2	20
OD	8	8	10.5	14	17	
OD	See below table					

Color	N	O	A	V	B
Color	Black	Grey	Blue	Green	White

Code	OD	Cable OD (mm)	00S 00S-00Y	00-0K-0S 0F-0P-0M-0Y	1B-1K-1S 1F-1P-1M-1Y	2B-2K-2S 2F-2P-2Y	3B-3K-3S 3F-3P-3Y	4B-4K-4F
20	2.0	1.8-2.5	●					
25	2.5	2.3-3.3			●			
30	3.0	2.8-3.8	●	●				
35	3.5	3.3-4.3			●			
40	4.0	3.8-4.8		●				
45	4.5	4.3-5.3		●		●	●	
48	4.8	4.3-5.3		●	●			
55	5.5	5.0-6.0				●	●	
60	6.0	5.3-6.3			●			
65	6.5	6.0-7.0				●	●	
67	6.7	6.2-7.2			●			
75	7.5	7.0-8.0				●	●	
80	8.0	8.0-9.0				●	●	●
90	9.0	9.0-10.0				●	●	●
100	10.0	10.0-11.0					●	●
105	10.5	10.0-11.0						●
110	11.0	11.0-12.0						●
120	12.0	12.0-13.0						●
135	13.5	13.1-14.4						●
145	14.5	14.0-15.5						●

Material: TPU

Temperature range in dry air environment: -40°C ~ +120°C

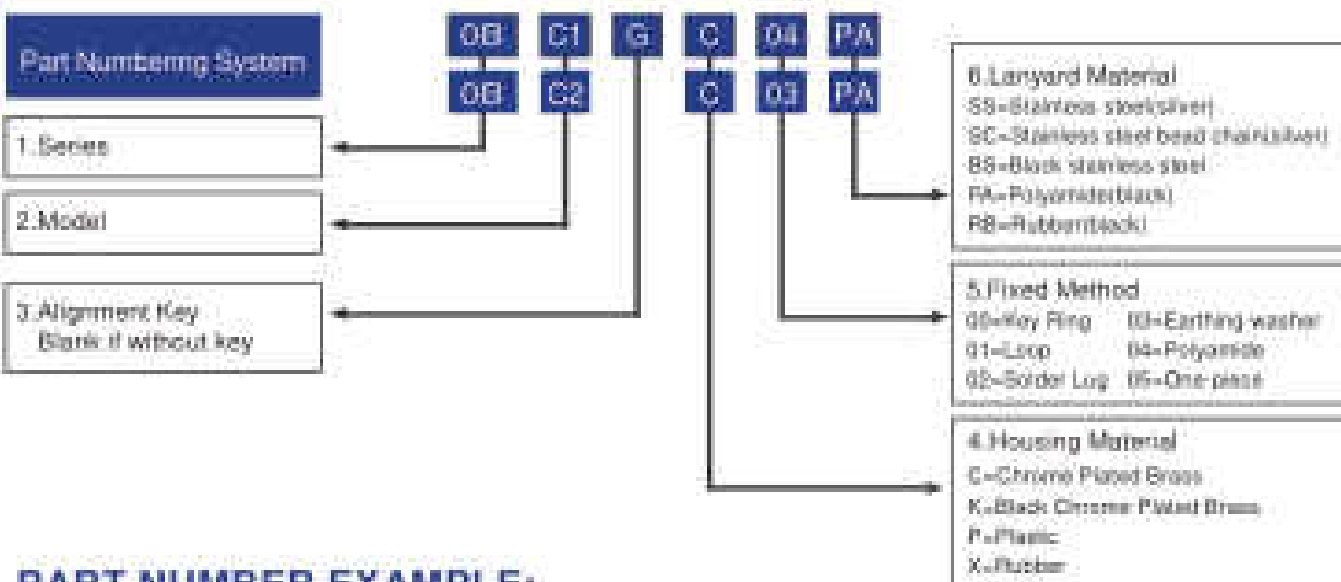


Series	OD	L	1	2	3
L	20	24	30	35	42
OD	8.8	10.8	14.2	18.8	
OD	See table at right				

Code	OD	Cable OD (mm)	00-0K-0S-0P 0F-0M-0Y	1B-1K-1S-1P 1F-1M-1Y	2B-2K-2S 2F-2P-2Y	3B-3K 3S-3P
30	3.0	2.8-3.2		●		
35	3.5	3.1-3.7	●			
40	4.0	3.8-4.2	●	●		
45	4.5	4.3-5.3	●	●	●	●
50	5.0	5.0-6.0		●	●	●
55	5.5	5.1-6.7		●		
70	7.0	6.8-7.7		●	●	●
80	8.0	7.8-9.0			●	●
90	9.0	8.1-9.2			●	●
95	9.5	9.1-9.7			●	
10	10.0	9.5-10.2				●
11	11.0	10.1-11.2				●



Code	N	O	A	R	J	V
Color	Black	Grey	Blue	Red	Yellow	Green



PART NUMBER EXAMPLE:

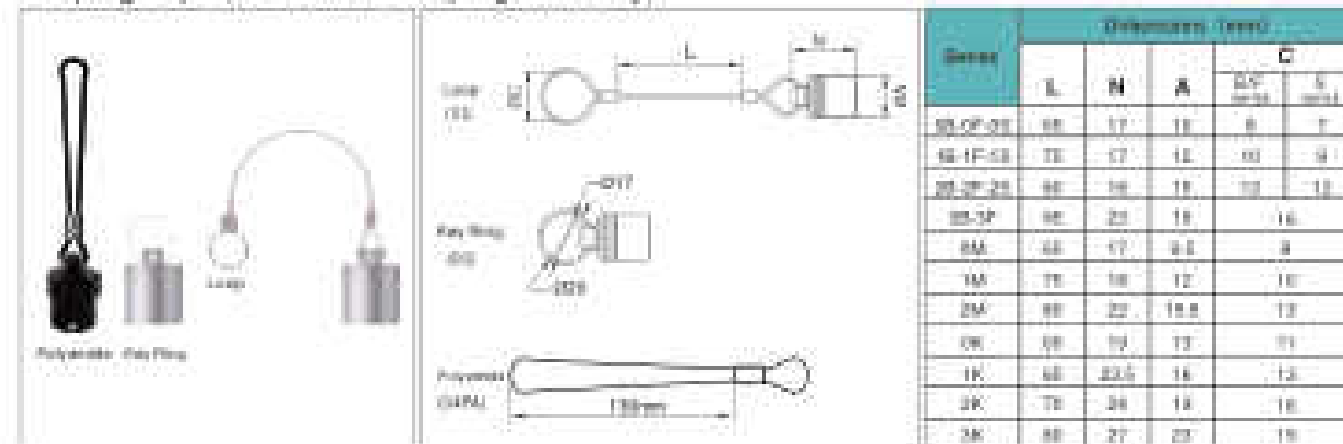
Plug cap:

1BC1GC00= 1B plug cap with key(G), shell in chrome plated brass, with key ring.

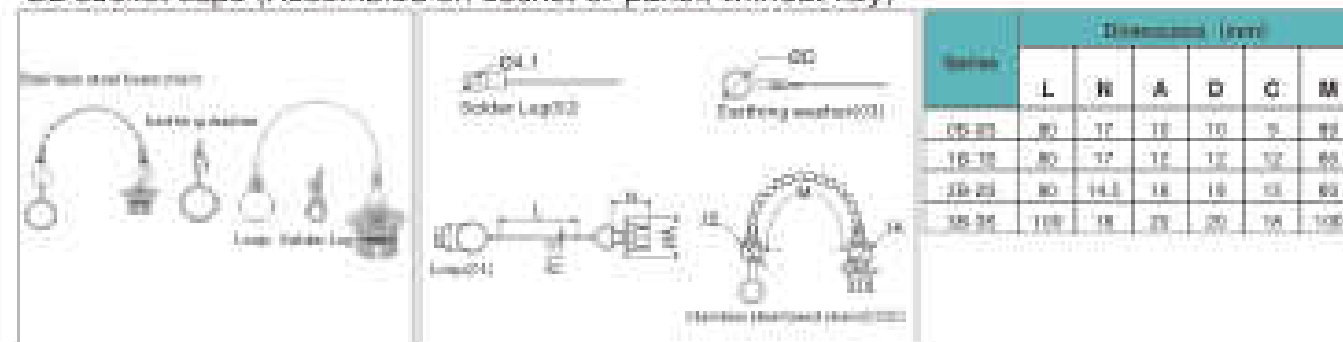
Socket cap:

2KC2C01SS=2K socket cap without key, shell in chrome plated brass, stainless steel lanyard.

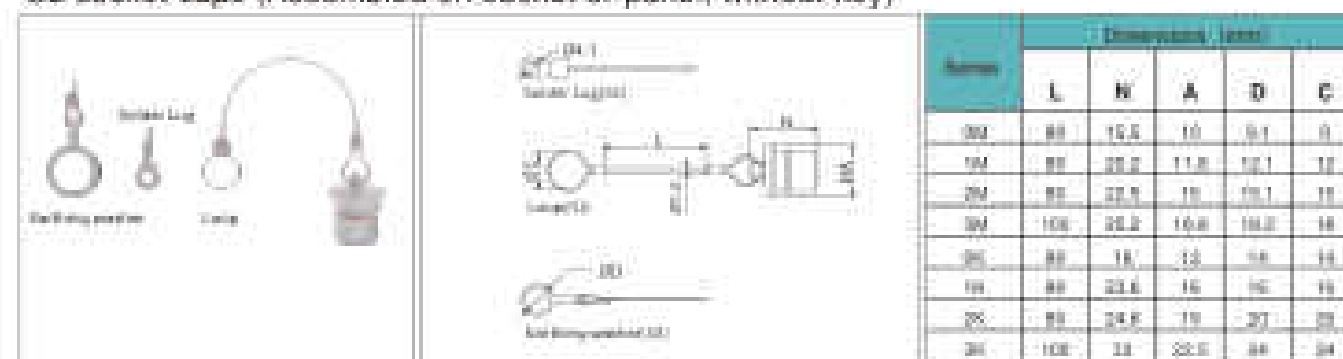
C1 plug caps (Assembled on plug, with key)



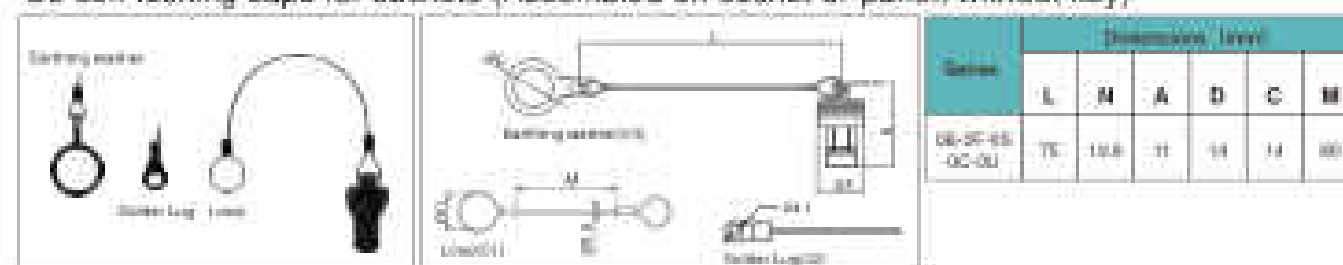
C2 socket caps (Assembled on socket or panel, without key)



C2 socket caps (Assembled on socket or panel, without key)



C3 self-locking caps for sockets (Assembled on socket or panel, without key)



Caps Model

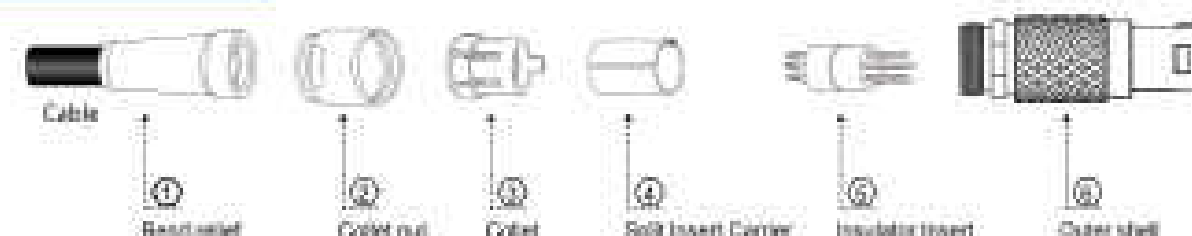
J2 rubber caps for sockets(Assembled on socket)

Series	(Dimensions: mm)					
	L	W	A	D	C	H
10-00/10	18.8	9.5	12.8	10.5	7	8
10-10/10	21	12.8	14	10	8	10
20	25	13.8	15.5	15.5	10	10



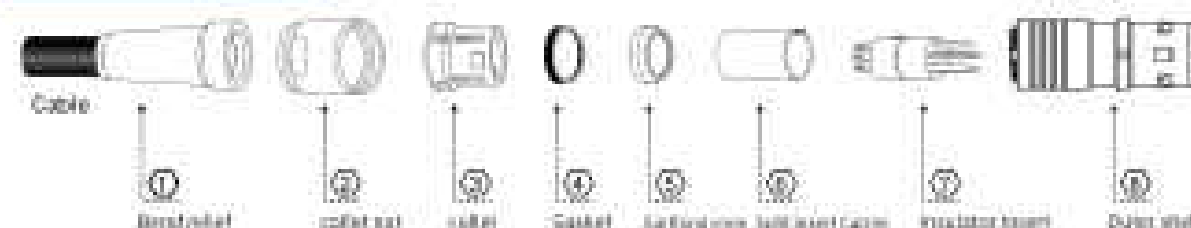
ASSEMBLY INSTRUCTIONS

B series Straight Plug



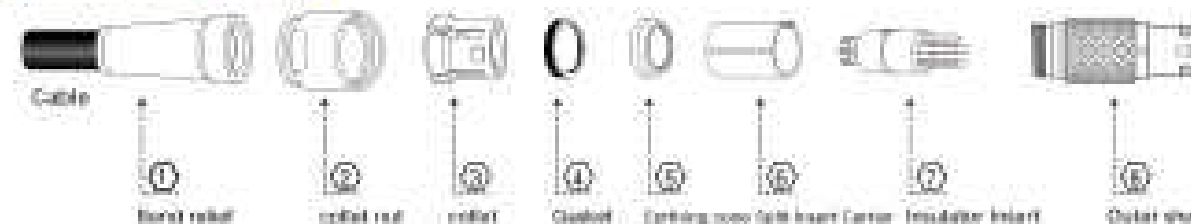
1. Get the cable through band relief ①, collet nut ② and collet ③ in order, then solder it onto the insulator insert ⑤ orderly.
2. Put the split insert carrier ④ onto the soldered insulator insert ⑤, assure that the slot of split insert carrier ④ mount on the lug of insulator insert ⑤.
3. Put the collet ③ on the right position of cable, make sure the lug of collet ③ mount on the slot of split insert carrier ④.
4. Push the insulator insert ⑤ split insert carrier ④ and collet ③ into the outer shell ⑥ in order, make sure the slot of split insert carrier ④ mount on the slot of outer shell ⑥.
5. Screw the collet nut ② onto the outer shell ⑥ tightly.
6. Slide the band relief ① onto the corresponding step of collet nut ②.

K series Straight Plug



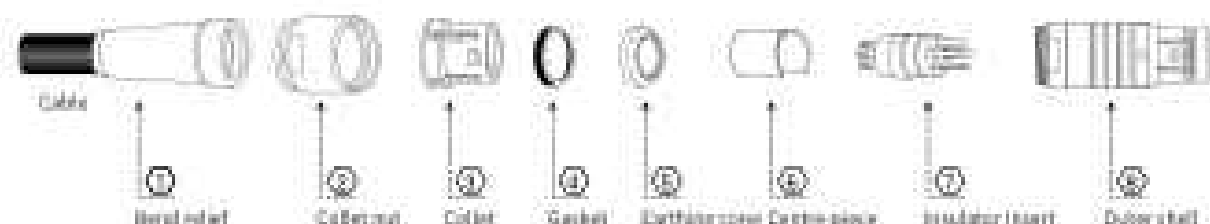
1. Get the cable through band relief ①, collet nut ②, collet ③, gasket ④, and earthing cone ⑤, in order, then solder it to the insulator insert ⑦ orderly.
2. Put the split insert carrier ⑥ onto the insulator insert ⑦, make sure the slot of split insert carrier ⑥ mount on the slot of insulator insert ⑦, then push the earthing cone ⑤, gasket ④ and collet ③ to the right position, assure the cable sheath insert to the earthing cone ⑤.
3. Slide the assembled insulator insert ⑦ into the outer shell ⑧, make sure the slot of split insert carrier ⑥ mount on the slot of outer shell ⑧.
4. Screw the collet nut ② onto the outer shell ⑧ tightly.
5. Slide the band relief ① to the collet nut ②.

M series Straight Plug



1. Get the cable through band relief ①, collet nut ②, collet ③, gasket ④, and earthing cone ⑤, in order, then solder it to the insulator insert ⑦ orderly.
2. Put the split insert carrier ⑥ onto the insulator insert ⑦, make sure the slot of split insert carrier ⑥ mount on the slot of insulator insert ⑦, then push the earthing cone ⑤, gasket ④ and collet ③ to the right position, assure the cable sheath insert to the earthing cone ⑤.
3. Slide the assembled insulator insert ⑦ into the outer shell ⑧, make sure the slot of split insert carrier ⑥ mount on the slot of outer shell ⑧.
4. Screw the collet nut ② onto the outer shell ⑧ tightly.
5. Slide the band relief ① to the collet nut ②.

Y series Straight Plug



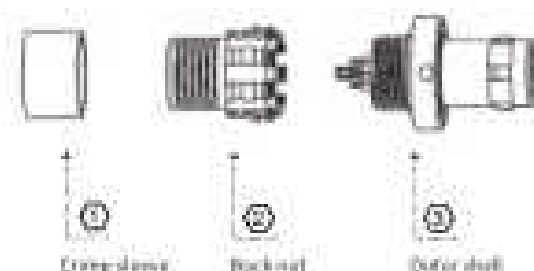
1. Get the cable through band relief ①, collet nut ②, collet ③, gasket ④, and earthing cone ⑤, in order, then solder it to the insulator insert ⑥ orderly.
2. Put the Centre piece ⑦ into the insulator insert ⑥, make sure the slot of Centre piece ⑦ mount on the slot of insulator insert ⑥, then push the earthing cone ⑤, gasket ④ and collet ③ to the right position, assure the cable sheath insert to the earthing cone ⑤.
3. Slide the assembled insulator insert ⑥ into the outer shell ⑧, make sure the slot of Centre piece ⑦ mount on the slot of outer shell ⑧.
4. Screw the collet nut ② onto the outer shell ⑧ tightly.
5. Slide the band relief ① to the collet nut ②.

W series Straight Plug



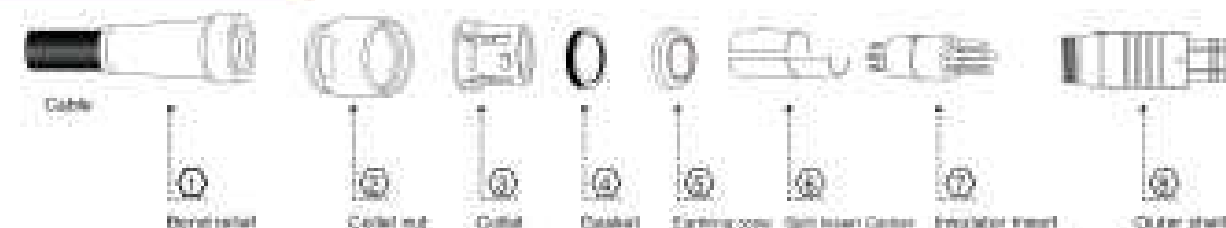
1. Get the cable through collet nut ①, collet ②, gasket ③, earthing cone ④ in order, then solder it to the insulator insert ⑤ orderly.
2. Put the Insert carrier ⑥ to the insulator insert ⑤, push earthing cone ④, gasket ③, collet ② to the right position of the cable. Ensure that the cable is fully inserted into earthing cone ④.
3. Put the assembled insulator insert ⑤ into the outer shell ⑦. Please note that the bulge on Insert carrier ⑥ corresponds to the groove of outer shell ⑦.
4. Screw the collet nut ① to the outer shell ⑦ tightly.

X/R series Straight Plug



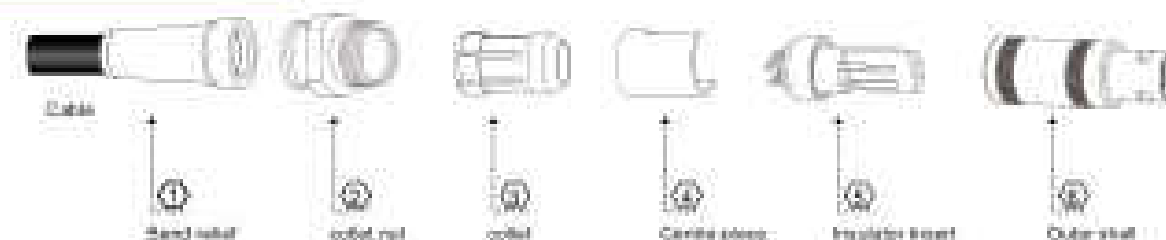
1. Pass the cable through the crimp sleeve ①, back nut ② in order, and weld the core of the cable to the corresponding pins of the outer shell ③ in order.
2. After welding the cables, screw the back nut ② to the outer shell ③.
3. Set the shielding net to the end of the back nut ②, and use the crimp sleeve ① to press the shielding net tightly.

F series Straight Plug



1. Get the cable through band relief ①, collet nut ②, collet ③, gasket ④, and earthing cone ⑤, in order, then solder it to the insulator insert ⑥ orderly.
2. Put the split insert carrier ⑦ onto the insulator insert ⑥, make sure the slot of split insert carrier ⑦ mount on the slot of insulator insert ⑥, then push the earthing cone ⑤, gasket ④ and collet ③ to the right position, assure the cable sheath insert to the earthing cone ⑤.
3. Slide the assembled insulator insert ⑥ into the outer shell ⑧, make sure the slot of split insert carrier ⑦ mount on the slot of outer shell ⑧.
4. Screw the collet nut ② onto the outer shell ⑧ tightly.
5. Slide the band relief ① to the collet nut ②.

S series Straight Plug



1. Get the cable through Band relief ①, collet nut ②, collet ③, and centre piece ④ in order, then solder it to the insulator insert ⑤ orderly.
2. Slide the centre-piece ④ to the insulator insert ⑤, make sure the slot of centre-piece ④ mount on the lug of insulator insert ⑤, then push collet ③ to the right position of cable.
3. Push the assembled collet ③, centre piece ④ and insulator insert ⑤ into the outer shell ⑥.
4. Screw the collet nut ② onto the outer shell ⑥ tightly.
5. Slide the band relief ① to the collet nut ②.

Coaxial & High Voltage Series Straight Plug



1. Get the cable through Band relief ①, collet nut ② and collet ③ in order, then solder it to the contact insert ④ orderly.
2. Put the soldered contact insert ④ into insulator insert ⑤, put the collet ③ on the right position.
3. Put the assembled insulator insert ⑤ insert on the slot of outer shell ⑥.
4. Screw the collet nut ② onto the outer shell ⑥ tightly.
5. Slide the band relief ① onto the collet nut ②.

C/U-series Straight Plug



1. Get the cable through collet nut (1) and collet (2) in order, then solder it to the contact insert (3) firstly.
2. Put the split insert carrier (3) onto the soldered insulator insert (4) - assure that the slot of split insert carrier (3) mount on the lug of insulator insert (4) - put the collet (2) on the right position.
3. Fit the fitted insulator insert (4) into the Outer shell (5), taking care that the protrusions on the collet (2) are fitted in correspondence with the grooves in the Outer shell (5).
4. Screw the collet (1) onto the outer shell (5) lightly.

P series Straight Plug



1. Get the cable through collet nut (1) and collet (2), then solder it to the insulator insert (3).
2. Put the collet (2) onto the soldered insulator insert (3), make sure the lug of collet (2) mount on the slot of insulator insert (3).
3. Slide the insulator insert (3) into the outer shell (4), make sure the lug of collet (2) mount on the slot of outer shell (4).
4. Screw the collet nut (1) onto the outer shell (4) lightly.

CABLE ASSEMBLIES



In order to provide one-stop service, we proudly make cable assemblies according to customers' requirements. Every cable assembly is fully inspected to ensure that it meets the requirements specified. MOCO has its own fully trained technicians to make it happen.

APPLICATION FIELDS

1. Military individual combat equipment cable assembly
2. Police communication system cable assembly
3. Testing and measurement cable assembly
4. Audio-video cable assembly
5. Power cable assembly
6. Medical devices cable assembly
7. Robot cable assembly
8. Automotive instruments cable assembly

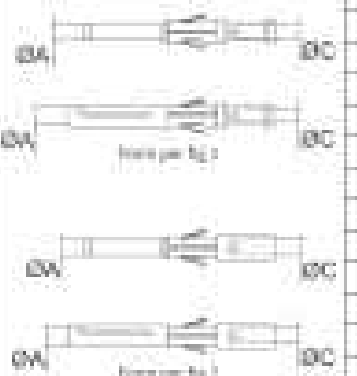
CABLE TYPE

- Coaxial cable
- Video cable
- Audio cable
- Multipole cable
- PTFE cable
- PUR cable
- Silicon cable
- Computer cable
- High voltage cable
- Special composite cable
- Hybrid cable
- Coiled cable
- CAT 5/6/7 Ethernet cable
- Flat cable
- Cable assembly
- Gas-electric hybrid composite cable
- Hydroelectric hybrid composite cable
- Optical hybrid composite cable

Verify the fitting to your wire

Verify if the selected contact diameter (φA) of the MOCO connector fits to your cable wire diameter (AWG number or max. available section) Conductor:

Contact type	Contact			Conductor						φA (mm)	Notes
	φA (mm)	φC (mm)	Pins per kg	Solid		Stranded					
				AWG Max	Section (mm²)	AWG	Min	Max	Section (mm²)		
Solder 	0.5	0.58	-	18	0.08	-	30	-	0.08	-	
	0.5	0.58	-	18	0.08	-	28	-	0.08	-	
	0.7	0.80	-	14	0.15	-	26	-	0.14	-	
	-	-	-	11	0.14	-	22	-	0.14	-	
	0.9	0.93	-	11	0.14	-	22	-	0.14	-	
	1.5	1.15	-	10	0.50	-	20	-	0.50	-	
	1.6	1.30	-	10	1.00	-	18	-	1.00	-	
	2.0	1.80	-	14	1.50	-	16	-	1.50	-	
	3.0	2.70	-	10	4.00	-	12	-	4.00	-	
	4.0	3.90	-	10	6.00	-	10	-	6.00	-	
	5.0	5.10	-	-	-	-	8	-	10.00	-	
	6.0	5.20	-	-	-	-	8	-	10.00	-	
	8.0	7.00	-	-	-	-	4	-	16.00	-	
	12.0	11.50	-	-	-	-	0	-	50.00	-	

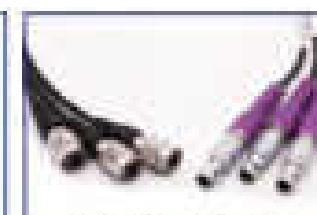
Contact type	Code		Contact			Conductor						φA (mm)	Notes
	Male	Female	BA (mm)	BC (mm)	Pins per kg	Solid		Stranded		Section (mm²)	Section (mm²)		
						AWG Max	Section (mm²)	Min	Max				
 Crimp	C	M	0.5	0.45	1	—	—	12	28	0.035	0.04	—	●
	C	M	0.7	0.60	1	—	—	18	22	0.140	0.14	—	●
	B	F	0.7	0.45	1	—	—	12	28	0.035	0.04	—	□
	C	M	0.9	1.10	1	—	—	14	20	0.250	0.50	—	●
	B	F	0.9	0.80	1	—	—	16	22	0.140	0.14	—	□
	G	U	0.9	0.45	1	—	—	12	28	0.035	0.04	—	□
	C	M	1.3	1.40	1	—	—	10	18	0.500	1.00	—	●
	B	F	1.3	1.10	1	—	—	14	20	0.250	0.50	—	□
	G	U	1.3	0.80	1	—	—	16	22	0.140	0.14	—	□
	C	M	1.6	1.80	1	—	—	10	14	1.000	1.50	—	●
	B	F	1.6	1.40	1	—	—	12	18	0.500	1.00	—	□
	C	M	2.0	2.40	1	—	—	16	12	1.500	1.50	—	●
	B	F	2.0	1.80	1	—	—	18	14	1.000	1.50	—	□
	C	M	3.0	3.30	1	—	—	14	10	2.500	4.00	—	●
	C	M	4.0	4.00	1	—	—	12	10	4.000	6.00	—	●

● Regular model, first consideration □ Special model, choose when special needs

Case presentation



Camera power supply cable



Audio-video cable



DBD cable



DBD cable



Industrial Ethernet cable



Industrial control



Medical cable



Medical cable



BNC cable



Power cable



JST wire harness



Coaxial cable



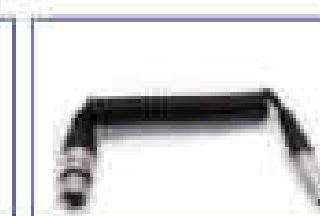
USB data cable



DC cable



TNC UT cable



Industrial cable



Military earphone cable



Military cable



Military power cord



Military ethernet cable



Y cable (split cable)



DB9 RS-232 cable (split cable)



Testing cable (split cable)



Audio cable (split cable)