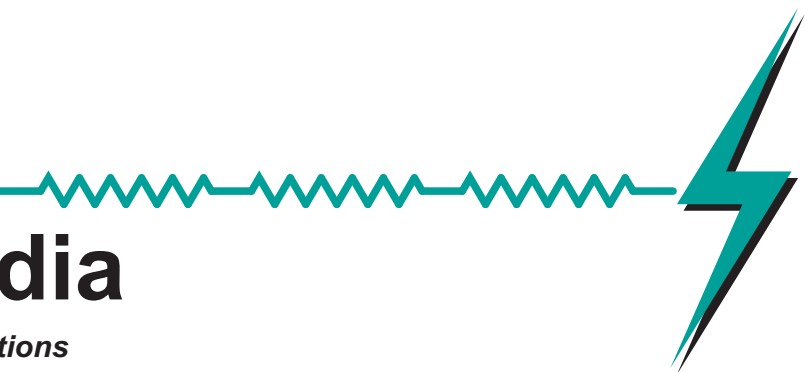


Jetronics
India

Circular Connector Solutions



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COMPANY PROFILE

Established in 1985, Jetronics India is one of the leading manufacturers of circular connectors and its related accessories. With more than 500 satisfied customers across several countries around the world, we continually cater to the various interconnect needs of the industry.

Our in-depth knowledge of the products enables us to provide innovative and customized solutions to the various requirements of the customer. We focus on developing different ranges of connectors.

Our quality system approvals include ISO 9001 along with product approvals to IEC and ROHS. As a result of these certifications, we have been awarded several customer approvals and accreditations.

Jetronics India's continual mission is to focus on superior quality connectors, high level of services, cost effectiveness, and innovative solutions that satisfy interconnect needs of customers while exceeding their expectations.

INTRODUCTION TO CONNECTORS

Jetronics India, is one of the leading manufacturers of Circular Threaded Coupling Connectors and Reverse Bayonet Coupling Connectors in India.

CIRCULAR THREADED COUPLING CONNECTORS

Circular Threaded Coupling Connectors use a threaded arrangement for the mating of the connectors. These are made in accordance with Indian Defence Standard, JSS 50812, which is a derivation of the MIL-C-5015 Specifications. Initially designed for military applications, these connectors are now used in electrical equipment in various industries.



REVERSE BAYONET COUPLING CONNECTORS



Reverse Bayonet Coupling Connectors, are an improvement on the standard MIL-C-5015 connectors. The bayonet arrangement provide for easy coupling and decoupling of the connectors, requiring only a 120° rotation. This arrangement also provides for an excellent vibration proof connection. Positive coupling is indicated by an audible snap. These connectors are intermateable with VG95234 and 121B Series connectors.

CONNECTOR DESIGN & FEATURES

- The body of the connectors is made up of an aluminium alloy resulting in a rugged shell with minimal weight.
- The Olive Drab Chromate coating offers a highly corrosion-resistant surface finish. These connectors are also available in ROHS compliant surface finishes.
- The insulators are made of high quality polychloroprene and can withstand temperatures from -55°C to $+125^{\circ}\text{C}$. This material has low flammability, good chemical resistance, and moderate oil and fuel resistance. Insulators capable of withstanding temperatures as high as 200°C are also available.
- Pins for the connectors are made of a copper alloy and are available in different sizes. As a result, the current-carrying capacity ranges from 10A to 150A.
- A wide variety of insert arrangements are available to cater to the various needs of the industry resulting in a broad spectrum of application.
- Availability of various backshells extends the usage of these connectors to harsher environments than those stated in the military specification.

APPLICATIONS

Military	Lighting Industry	Hydraulic Systems
Medical	Engine Manufacturing	Welding Machines
Aerospace	Machine Manufacturing	Motion Control Systems
Telecommunications	Radar	Landing Gear Systems
Transportation	Sensors	Test Equipment
Network Communications	Transducers	Power Generators
Process Control	Fuelling Systems	Earth Moving Equipment
Heavy Equipment	Fire Detection Systems	Scientific Applications

TECHNICAL SPECIFICATIONS

MATERIAL & FINISH SPECIFICATIONS

Shell Material	Aluminium Alloy
Insulator & Grommet	Polychloroprene
Contacts	Copper Alloy
Plating - Shells	Cadmium Plated With Olive Chromate Finish ¹
Plating - Contacts	Sliver ²

¹Contact Factory for other finishes

²Gold & Nickel Plated Contacts also available

PERFORMANCE SPECIFICATIONS

Insulation Resistace	> 5000 MΩ
Temperature Range	-55°C to +125°C
Environmental Protection	Upto IP68
Mating Cycles	Min. 500 Cycles

CONTACT RATING

Contact Size	Max Current (A)	Rated Current (A)	Max Contact Resistance (mΩ)	Max Conductor Cross Section (mm ²)
16	22	13	6.00	1.25
12	41	23	3.00	3.50
8	73	46	1.00	8.00
4	135	80	0.50	22.00
0	245	150	0.30	50.00

SERVICE RATING

Service Rating	Operating DC Voltage at Sea Level (V)	Operating AC Voltage at Sea Level (V)	Air Spacing Nominal (in)	Creepage Distance Nominal (in)
Inst.	250	200	-	1/16
A	700	500	1/16	1/8
D	1250	900	1/8	3/16
E	1750	1250	3/16	1/4
B	2450	1750	1/4	5/16
C	4200	3000	5/16	1

DIELECTRIC STRENGTH

Service Rating	Min. Flash Over AC Voltage (V rms)	Test AC Voltage (V rms)
Inst.	1400	1000
A	2800	2000
D	3600	2800
E	4500	3500
B	5700	4500
C	8500	7000

COUPLING TORQUE FOR BAYONET CONNECTORS

Shell Size	Max Closing Torque (Nm)	Min Opening Torque (Nm)
10SL	1.70	0.15
14S	3.60	0.35
16S/16	5.50	0.46
18	8.00	0.58
20	9.00	0.70
22	11.00	0.80
24	14.00	0.80
28	17.00	0.92

INSERT ARRANGEMENTS

Given below are various insert arrangements which are available. Each arrangement represents the front view of Pin Insert or the rear view of the Socket Insert.

Contact Legend					
	16	12	8	4	0

1 Pin			2 Pin		
Insert Arrangement	10S-2	22-7	Insert Arrangement	10SL-4	14S-9
No. of Contacts	1	1	No. of Contacts	2	2
Contact Size	16	0	Contact Size	16	16
Service Rating	A	E	Service Rating	A	A

2 Pin					
Insert Arrangement	16S-4	16-11	18-3	20-23	24-9
No. of Contacts	2	2	2	2	2
Contact Size	16	12	12	8	4
Service Rating	D	A	D	A	A

3 Pin					
Insert Arrangement	10SL-3	14S-7	16S-5	16-10	22-2
No. of Contacts	3	3	3	3	3
Contact Size	16	16	16	12	8
Service Rating	A	A	A	A	D

3 Pin	4 Pin				
Insert Arrangement	28-3	Insert Arrangement	14S-2	18-4	18-10
No. of Contacts	3	No. of Contacts	4	4	4
Contact Size	8	Contact Size	16	16	12
Service Rating	E	Service Rating	INST.	D	A

4 Pin					
Insert Arrangement	20-4	22-22	24-22	32-17	
No. of Contacts	4	4	4	4	
Contact Size	12	8	8	4	
Service Rating	D	A	D	D	

4 Pin	5 Pin				
Insert Arrangement	36-5		Insert Arrangement	14S-5	16S-8
No. of Contacts	4		No. of Contacts	5	5
Contact Size	0		Contact Size	16	16
Service Rating	A		Service Rating	INST	A

5 Pin				6 Pin	
Insert Arrangement	20-14	22-34	24-12	Insert Arrangement	14S-6
No. of Contacts	5	5	5	No. of Contacts	6
Contact Size	3#12 2#8	2#16 3#12	3#12 2#4	Contact Size	16
Service Rating	D	D	A	Service Rating	INST.

INSERT ARRANGEMENT

6 Pin				
Insert Arrangement	18-12	20-8	28-22	28J-6
No. of Contacts	6	6	6	6
Contact Size	16	4#16 2#8	3#16 3#4	8
Service Rating	A	INST.	D	A

7 Pin					
Insert Arrangement	14SJ-61	16S-1	20-15	24-2	24-10
No. of Contacts	7	7	7	7	7
Contact Size	16	16	12	12	8
Service Rating	INST.	A	A	D	A

7 Pin		8 Pin			
Insert Arrangement	28-10	Insert Arrangement	18-8	20-7	22-23
No. of Contacts	7	No. of Contacts	8	8	8
Contact Size	3#12 2#8 2#4	Contact Size	7#16 1#12	8#16	12
Service Rating	G=D BAL.=A	Service Rating	A	ABGH=D CDEF=A	H=D BAL.=A

9 Pin					
Insert Arrangement	20-16	20-18	20-21	22-20	24-11
No. of Contacts	9	9	9	9	9
Contact Size	7#16 2#12	6#16 3#12	8#16 1#12	16	6#12 3#8
Service Rating	A	A	A	A	A

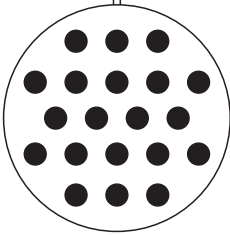
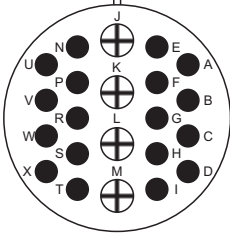
10 Pin				11 Pin	
Insert Arrangement	18-1	18-19	36J-10	Insert Arrangement	20-33
No. of Contacts	10	10	10	No. of Contacts	11
Contact Size	16	16	8	Contact Size	16
Service Rating	BCFG=A BAL.=INST.	A	A	Service Rating	A

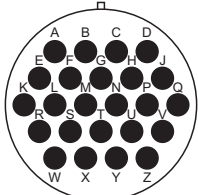
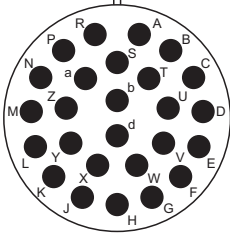
12 Pin			14 Pin		
Insert Arrangement	28-18		Insert Arrangement	20-27	22-19
No. of Contacts	12		No. of Contacts	14	14
Contact Size	16		Contact Size	16	16
Service Rating	M=C GHJKL=D AB=A BAL.=INST.		Service Rating	A	A
					28-20
					14
					4#16 10#12
					A

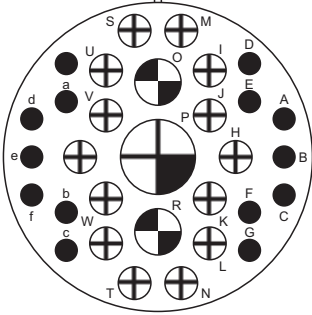
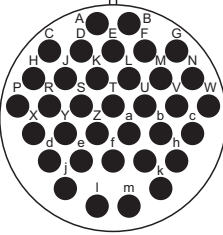
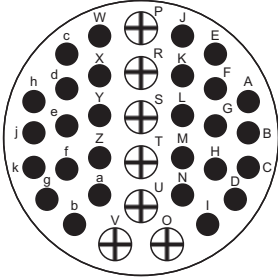
14 Pin			16 Pin	
Insert Arrangement	32-4	32-9	Insert Arrangement	24-5
No. of Contacts	14	14	No. of Contacts	16
Contact Size	12#16 2#12	12#16 2#4	Contact Size	16
Service Rating	FJKN=A BAL.=D	D	Service Rating	A

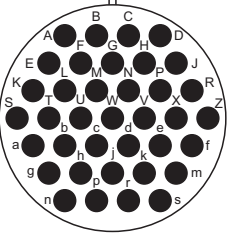
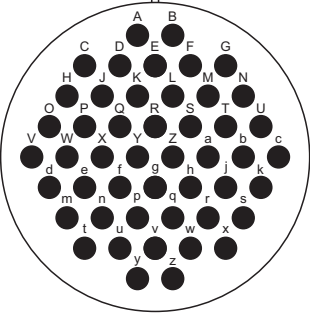
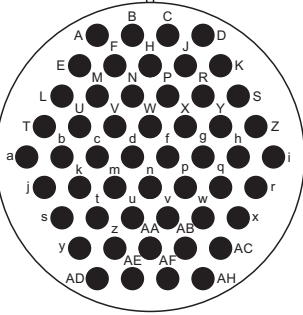
16 Pin			17 Pin			19 Pin	
Insert Arrangement	24-7		Insert Arrangement	20-29		Insert Arrangement	22-14
No. of Contacts	16		No. of Contacts	17		No. of Contacts	19
Contact Size	12#16 2#12		Contact Size	16		Contact Size	16
Service Rating	A		Service Rating	A		Service Rating	A

INSERT ARRANGEMENT

20 Pin	22 Pin
	
Insert Arrangement No. of Contacts Contact Size Service Rating	Insert Arrangement No. of Contacts Contact Size Service Rating
28-16 20 16 A	28-11 22 18#16 4#12 A

24 Pin	26 Pin
	
Insert Arrangement No. of Contacts Contact Size Service Rating	Insert Arrangement No. of Contacts Contact Size Service Rating
24-28 24 16 INST.	28-12 26 16 A

31 Pin	35 Pin
	
Insert Arrangement No. of Contacts Contact Size Service Rating	Insert Arrangement No. of Contacts Contact Size Service Rating
36-9 31 14#16 14#12 2#8 1#4 A	28-15 35 16 A
	
	32-7 35 28#16 7#12 ABhj=INST. BAL.=A

37 Pin	48 & 52 Pin
	
Insert Arrangement No. of Contacts Contact Size Service Rating	Insert Arrangement No. of Contacts Contact Size Service Rating
28-21 37 16 A	36-10 48 16 A
	
	36-52 52 16 A

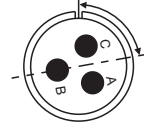
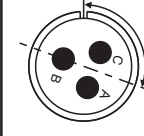
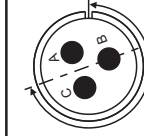
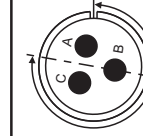
SELECTION CHART

Insert Arrangement	Shell Size	Total No. of Contacts	Contact Size with Current Rating					Voltage Rating (AC)
			16	12	8	4	0	
10S-2	10SL	1	1#13A	-	-	-	-	500V
10SL-4	10SL	2	2#13A	-	-	-	-	500V
10SL-3	10SL	3	3#13A	-	-	-	-	500V
14S-9	14S	2	2#13A	-	-	-	-	500V
14S-7	14S	3	3#13A	-	-	-	-	500V
14S-2	14S	4	4#13A	-	-	-	-	200V
14S-5	14S	5	5#13A	-	-	-	-	200V
14S-6	14S	6	6#13A	-	-	-	-	200V
14SJ-61	14S	7	7#13A	-	-	-	-	200V
16S-4	16S	2	2#13A	-	-	-	-	900V
16S-5	16S	3	3#13A	-	-	-	-	500V
16S-8	16S	5	5#13A	-	-	-	-	500V
16S-1	16S	7	7#13A	-	-	-	-	500V
16-11	16	2	-	2#23A	-	-	-	500V
16-10	16	3	-	3#23A	-	-	-	500V
18-3	18	2	-	2#23A	-	-	-	900V
18-4	18	4	4#13A	-	-	-	-	900V
18-10	18	4	-	4#23A	-	-	-	500V
18-11	18	5	-	5#23A	-	-	-	500V
18-12	18	6	6#13A	-	-	-	-	500V
18-8	18	8	7#13A	1#23A	-	-	-	500V
18-1	18	10	10#13A	-	-	-	-	6#200V 4#500V
18-19	18	10	10#13A	-	-	-	-	500V
20-23	20	2	-	-	2#46A	-	-	500V
20-4	20	4	-	4#23A	-	-	-	900V
20-14	20	5	-	3#23A	2#46A	-	-	500V
20-8	20	6	4#13A	-	2#46A	-	-	200V
20-15	20	7	-	7#23A	-	-	-	500V
20-7	20	8	8#13A	-	-	-	-	4#500V 4#900V
20-16	20	9	7#13A	2#23A	-	-	-	500V
20-18	20	9	6#13A	3#23A	-	-	-	500V
20-21	20	9	8#13A	1#23A	-	-	-	500V
20-33	20	11	11#13A	-	-	-	-	500V
20-27	20	14	14#13A	-	-	-	-	500V
20-29	20	17	17#13A	-	-	-	-	500V
22-7	22	1	-	-	-	-	1#150A	1250V
22-2	22	3	-	-	4#46A	-	-	900V
22-22	22	4	-	-	4#46A	-	-	500V
22-34	22	5	2#13A	3#23A	-	-	-	900V
22-23	22	8	-	8#23A	-	-	-	7#500V 1#900V
22-20	22	9	9#13A	-	-	-	-	500V
22-19	22	14	14#13A	-	-	-	-	500V

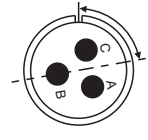
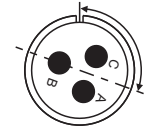
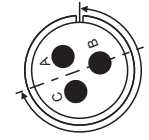
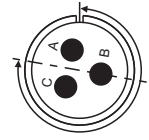
SELECTION CHART

Insert Arrangement	Shell Size	Total No. of Contacts	Contact Size with Current Rating					Voltage Rating (AC)
			16	12	8	4	0	
22-14	22	19	19#13A	-	-	-	-	500V
24-9	24	2	-	-	-	2#80A	-	500V
24-22	24	4	-	-	4#46A	-	-	900V
24-12	24	5	-	3#23A	-	2#80A	-	500V
24-2	24	7	-	7#23A	-	-	-	900V
24-10	24	7	-	-	7#46A	-	-	500V
24-11	24	9	-	6#23A	3#46A	-	-	500V
24-5	24	16	16#13A	-	-	-	-	500V
24-7	24	16	14#13A	2#13A	-	-	-	500V
24-28	24	24	24#13A	-	-	-	-	200V
28-3	28	3	-	-	3#46A	-	-	1250V
28-22	28	6	3#13A	-	-	3#80A	-	900V
28J-6	28	6	-	-	6#46A	-	-	500V
28-10	28	7	-	3#23A	2#46A	2#80A	-	6#500V 1#900V
28-18	28	12	12#13A	-	-	-	-	4#200V 2#500V 5#900V 1#3000V
28-20	28	14	4#13A	10#23A	-	-	-	500V
28-16	28	20	20#13A	-	-	-	-	500V
28-11	28	22	18#13A	4#23A	-	-	-	500V
28-12	28	26	26#13A	-	-	-	-	500V
28-15	28	35	35#13A	-	-	-	-	500V
28-21	28	37	37#13A	-	-	-	-	500V
32-17	32	4	-	-	-	4#80A	-	900V
32-4	32	14	12#13A	2#23A	-	-	-	4#500V 10#900V
32-9	32	14	12#13A	-	-	2#80A	-	900V
32-7	32	35	28#13A	7#23A	-	-	-	4#200V 31#500V
36-5	36	4	-	-	-	-	4#150A	500V
36J-10	36	10	-	-	10#46A	-	-	500V
36J-15	36	27	-	27#23A	-	-	-	500V
36-9	36	31	14#13A	14#23A	2#46A	1#80A	-	500V
36-10	36	48	48#13A	-	-	-	-	500V
36-52	36	52	52#13A	-	-	-	-	500V

ALTERNATE INSERT ORIENTATIONS

Insert Arrangement	Shell Size	Alternate Insert Orientations			
					
		W	X	Y	Z
10S-2	10SL	-	-	-	-
10SL-3	10SL	-	-	-	-
10SL-4	10SL	-	-	-	-
14S-2	14S	-	120	240	-
14S-5	14S	-	110	-	-
14S-6	14S	-	-	-	-
14S-7	14S	90	180	270	-
14S-9	14S	70	145	215	290
14SJ-61	14S	-	-	-	-
16S-1	16S	80	-	-	280
16S-4	16S	35	110	250	325
16S-5	16S	70	145	215	290
16S-8	16S	-	170	265	-
16-10	16	90	180	270	-
16-11	16	35	110	250	325
18-1	18	70	145	215	290
18-3	18	35	110	250	325
18-4	18	35	110	250	325
18-8	18	70	-	-	290
18-10	18	-	120	240	-
18-11	18	-	170	265	-
18-12	18	80	-	-	280
18-19	18	-	-	-	-
20-4	20	45	110	250	-
20-7	20	80	110	250	280
20-8	20	80	110	250	280
20-14	20	80	110	250	280
20-15	20	80	-	-	280
20-16	20	80	110	250	280
20-18	20	35	110	250	325
20-21	20	35	110	250	325
20-23	20	35	110	250	325
20-27	20	35	110	250	325
20-29	20	80	-	-	280
20-33	20	-	-	-	-
22-2	22	70	145	215	290
22-7	22	-	-	-	-
22-14	22	80	110	250	280
22-19	22	80	110	250	280
22-20	22	35	110	250	325

ALTERNATE INSERT ORIENTATIONS

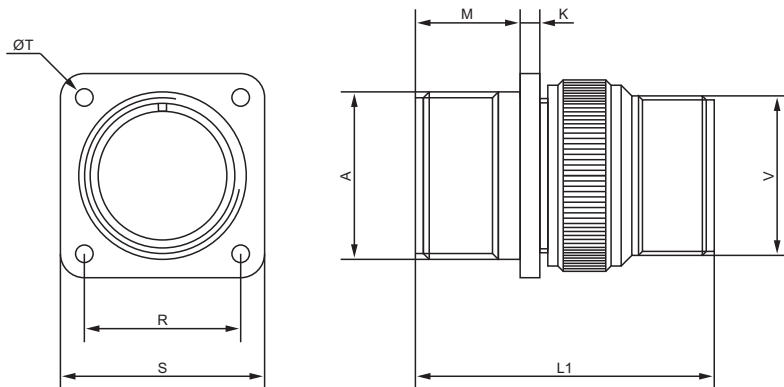
Insert Arrangement	Shell Size	Alternate Insert Orientations			
					
		W	X	Y	Z
22-22	22	-	110	250	-
22-23	22	35	-	250	-
22-34	22	80	110	250	280
24-2	24	80	-	-	280
24-5	24	80	110	250	280
24-7	24	80	110	250	280
24-9	24	35	110	250	325
24-10	24	80	-	-	280
24-11	24	35	110	250	325
24-12	24	80	110	250	280
24-22	24	45	110	250	-
24-28	24	80	110	250	280
28-3	28	70	145	215	290
28-10	28	80	110	250	280
28-11	28	80	110	250	280
28-12	28	90	180	270	-
28-15	28	80	110	250	280
28-16	28	80	110	250	280
28-18	28	70	145	215	290
28-20	28	80	110	250	280
28-21	28	80	110	250	280
28-22	28	70	145	215	290
28J-6	28	-	-	-	-
32-4	32	80	110	250	280
32-7	32	80	125	235	280
32-9	32	80	110	250	280
32-17	32	45	110	250	-
36-9	36	80	125	235	280
36-10	36	80	125	235	280
36-52	36	72	144	216	288
36J-10	36	-	-	-	-

DIMENSIONAL DETAILS (THREADED CONNECTORS)

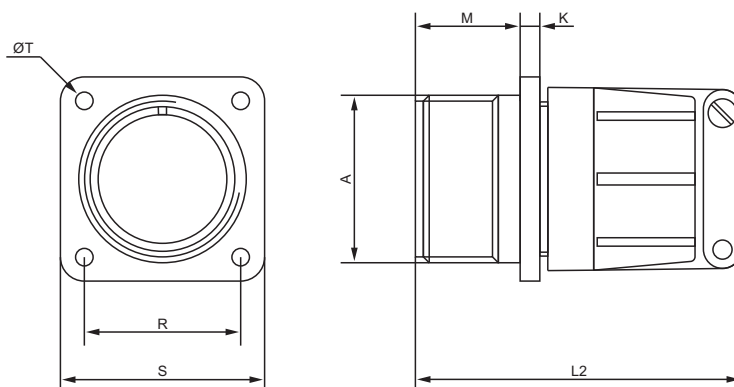
WALL MOUNTING RECEPTACLE

The Wall Mounting Receptacle has a flange mounting arrangement and accessory threads which can be used with various backshells.

3100A



3100F



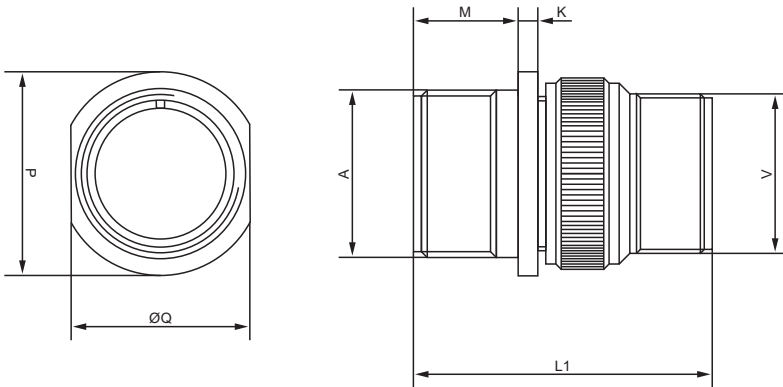
All dimensions are in mm

Shell Size	Thread A	K ±0.20	L1 Max	L2 Max	M +0.20 -0.00	R ±0.10	S ±0.20	ØT +0.20 -0.10	Thread V
10SL	5/8-24 UNEF	2.70	45.00	54.00	14.40	18.26	25.70	3.30	5/8-24 UNEF
14S	7/8-20 UNEF	2.60	48.00	54.00	14.80	23.01	30.50	3.30	3/4-20 UNEF
16S	1-20 UNEF	2.60	48.00	54.00	14.80	24.62	32.80	3.30	7/8-20 UNEF
16	1-20 UNEF	3.70	58.00	70.00	19.10	24.62	32.80	3.30	7/8-20 UNEF
18	1 1/8-18 UNEF	3.70	58.00	70.00	19.10	27.00	35.20	3.30	1-20 UNEF
20	1 1/4-18 UNEF	3.70	60.00	70.00	19.10	29.40	38.40	3.30	1 3/16-18 UNEF
22	1 3/8-18 UNEF	3.70	60.00	70.00	19.10	31.75	41.50	3.30	1 3/16-18 UNEF
24	1 1/2-18 UNEF	3.70	62.00	70.00	19.30	35.00	44.80	4.50	1 7/16-18 UNEF
28	1 3/4-18 UNS	3.70	68.00	70.00	19.30	39.67	51.00	4.50	1 7/16-18 UNEF
32	2-18 UNS	4.00	72.00	76.00	21.30	44.45	57.15	4.50	1 3/4-18 UNS
36	2 1/4-18 UN	4.20	76.00	80.00	21.30	49.23	63.70	4.50	2-18 UNS

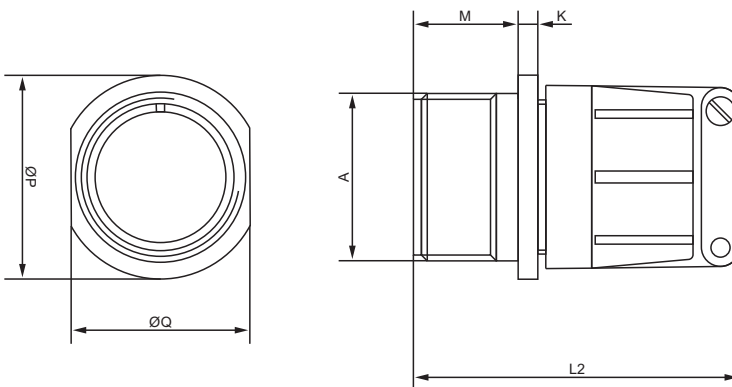
CABLE CONNECTING RECEPTACLE

A Cable Connecting Receptacle is used for cable to cable connections. Therefore, it also known as a hanging connector. Accessory threads are present for use with various backshells.

3101A



3101F



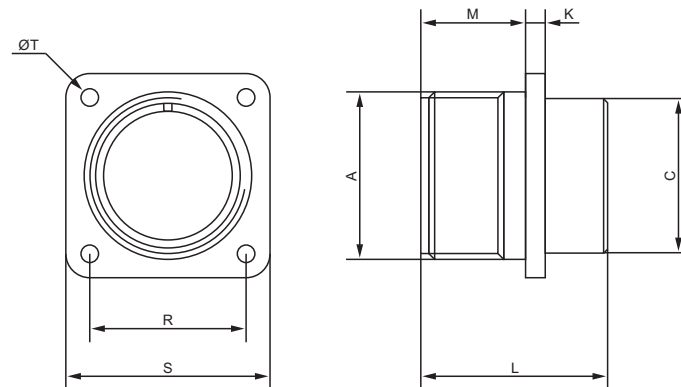
All dimensions are in mm

Shell Size	Thread A	K ±0.20	L1 Max	L2 Max	M +0.20 -0.00	ØP ±0.10	Q ±0.20	Thread V
10SL	5/8-24 UNEF	2.70	45.00	54.00	14.40	22.00	16.20	5/8-24 UNEF
14S	7/8-20 UNEF	2.60	48.00	54.00	14.80	29.00	22.50	3/4-20 UNEF
16S	1-20 UNEF	2.60	48.00	54.00	14.80	31.10	25.70	7/8-20 UNEF
16	1-20 UNEF	3.70	58.00	70.00	19.10	31.10	25.70	7/8-20 UNEF
18	1 1/8-18 UNEF	3.70	58.00	70.00	19.10	34.50	28.90	1-20 UNEF
20	1 1/4-18 UNEF	3.70	60.00	70.00	19.10	37.70	32.10	1 3/16-18 UNEF
22	1 3/8-18 UNEF	3.70	60.00	70.00	19.10	40.90	35.20	1 3/16-18 UNEF
24	1 1/2-18 UNEF	3.70	62.00	70.00	19.30	43.80	38.40	1 7/16-18 UNEF
28	1 3/4-18 UNS	3.70	68.00	70.00	19.30	50.40	44.80	1 7/16-18 UNEF
32	2-18 UNS	4.00	72.00	76.00	21.30	56.80	51.10	1 3/4-18 UNS
36	2 1/4-18 UN	4.20	76.00	80.00	21.30	63.10	57.50	2-18 UNS

BOX MOUNTING RECEPTACLE

A Box Mounting Receptacle, as the name suggests, is to be mounted on a panel and does not have any accessory threads.

3102R



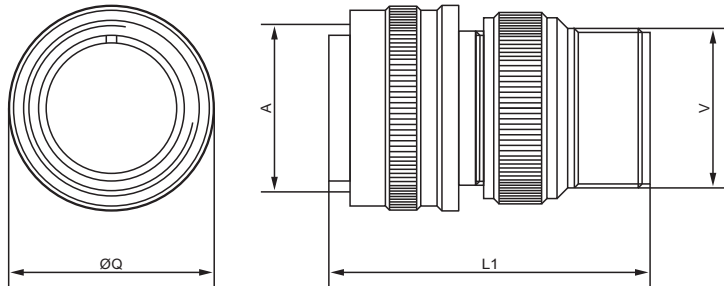
All dimensions are in mm

Shell Size	Thread A	K ±0.20	C +0.25 -0.00	L Max	M +0.20 -0.00	R ±0.10	S ±0.20	ØT +0.20 -0.10
10SL	5/8-24 UNEF	2.70	16.35	54.00	14.40	18.26	25.70	3.30
14S	7/8-20 UNEF	2.60	19.50	54.00	14.80	23.01	30.50	3.30
16S	1-20 UNEF	2.60	22.75	54.00	14.80	24.62	32.80	3.30
16	1-20 UNEF	3.70	22.75	70.00	19.10	24.62	32.80	3.30
18	1 1/8-18 UNEF	3.70	26.10	70.00	19.10	27.00	35.20	3.30
20	1 1/4-18 UNEF	3.70	29.20	70.00	19.10	29.40	38.40	3.30
22	1 3/8-18 UNEF	3.70	32.40	70.00	19.10	31.75	41.50	3.30
24	1 1/2-18 UNEF	3.70	35.40	70.00	19.30	35.00	44.80	4.50
28	1 3/4-18 UNS	3.70	41.90	70.00	19.30	39.67	51.00	4.50
32	2-18 UNS	4.00	49.00	76.00	21.30	44.45	57.15	4.50
36	2 1/4-18 UN	4.20	54.60	80.00	21.30	49.23	63.70	4.50

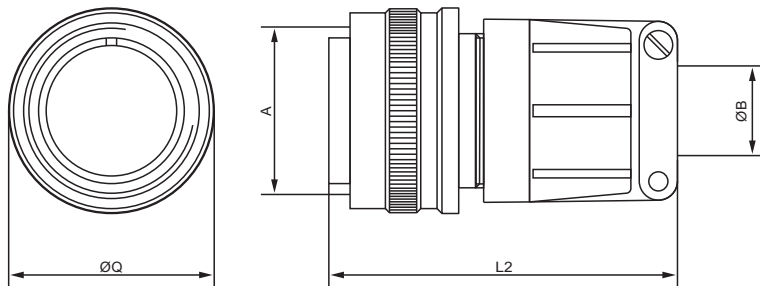
STRAIGHT PLUG

The Straight Plug mates with the receptacle through a coupling nut.

3106A



3106F



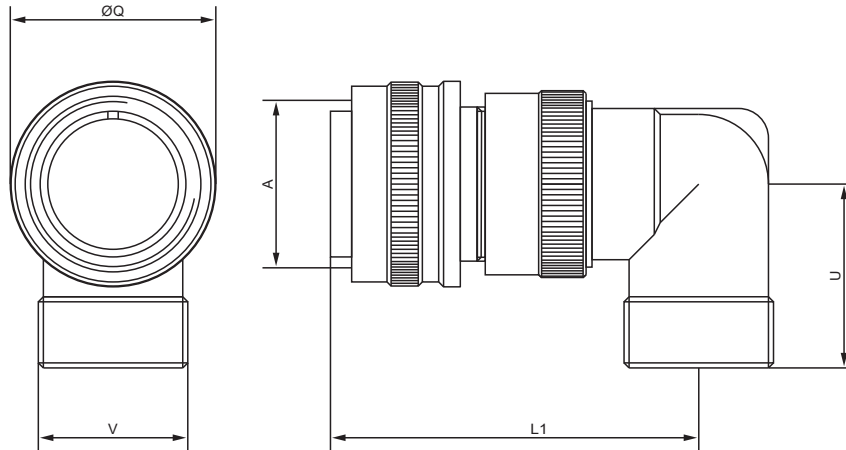
All dimensions are in mm

Shell Size	Thread A	B Max	L1 Max	L2 Max	Q Max	Thread V
10SL	5/8-24 UNEF	7.50	45.00	54.00	21.80	5/8-24 UNEF
14S	7/8-20 UNEF	10.50	48.00	54.00	27.70	3/4-20 UNEF
16S	1-20 UNEF	12.70	48.00	54.00	31.50	7/8-20 UNEF
16	1-20 UNEF	12.70	58.00	70.00	31.50	7/8-20 UNEF
18	1 1/8-18 UNEF	13.50	58.00	70.00	34.00	1-20 UNEF
20	1 1/4-18 UNEF	16.70	60.00	70.00	37.80	1 3/16-18 UNEF
22	1 3/8-18 UNEF	19.10	60.00	70.00	40.00	1 3/16-18 UNEF
24	1 1/2-18 UNEF	19.90	62.00	70.00	43.50	1 7/16-18 UNEF
28	1 3/4-18 UNS	23.40	68.00	70.00	50.00	1 7/16-18 UNEF
32	2-18 UNS	29.40	72.00	76.00	57.00	1 3/4-18 UNS
36	2 1/4-18 UN	31.80	76.00	80.00	62.60	2-18 UNS

RIGHT ANGLED PLUG

A Right Angled Plug is used in place of a straight plug when there are space constraints for the cable.

3108E



All dimensions are in mm

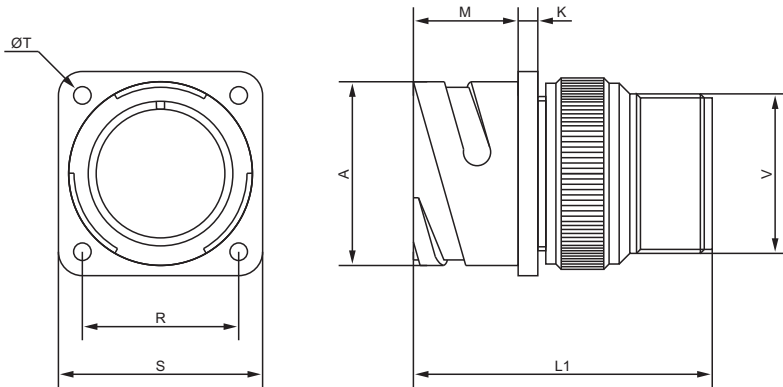
Shell Size	Thread A	B Max	L Max	Q Max	U Max	Thread V
10SL	5/8-24 UNEF	7.50	40.00	21.80	25.00	5/8-24 UNEF
14S	7/8-20 UNEF	10.50	42.00	27.70	27.00	3/4-20 UNEF
16S	1-20 UNEF	12.70	46.00	31.50	28.00	7/8-20 UNEF
16	1-20 UNEF	12.70	55.00	31.50	28.00	7/8-20 UNEF
18	1 1/8-18 UNEF	13.50	55.00	34.00	31.00	1-20 UNEF
20	1 1/4-18 UNEF	16.70	57.00	37.80	34.00	1 3/16-18 UNEF
22	1 3/8-18 UNEF	19.10	57.00	40.00	34.00	1 3/16-18 UNEF
24	1 1/2-18 UNEF	19.90	60.00	43.50	39.00	1 7/16-18 UNEF
28	1 3/4-18 UNS	23.40	60.00	50.00	39.00	1 7/16-18 UNEF
32	2-18 UNS	29.40	72.00	57.00	45.00	1 3/4-18 UNS
36	2 1/4-18 UN	31.80	76.00	62.60	48.00	2-18 UNS

DIMENSIONAL DETAILS (BAYONET CONNECTORS)

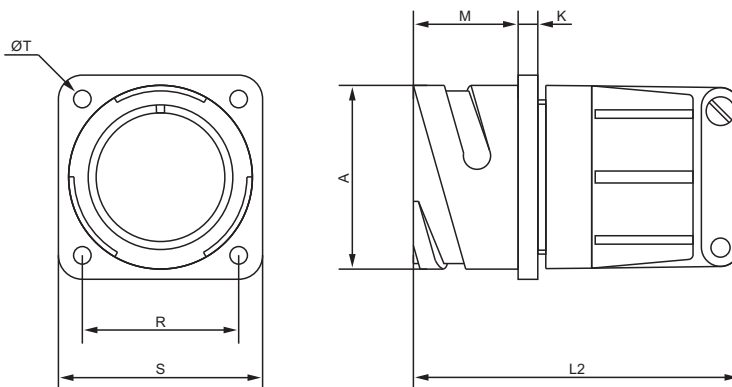
WALL MOUNTING RECEPTACLE

This Wall Mounting Receptacle with bayonet grooves has a flange mounting arrangement and accessory threads which can be used with various backshells.

RB 3100A



RB 3100F



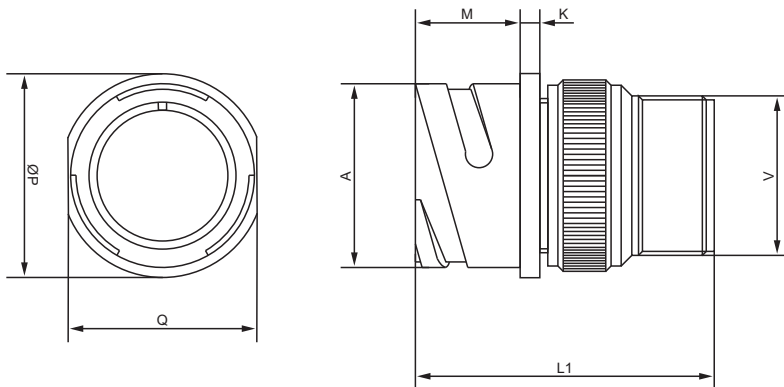
All dimensions are in mm

Shell Size	A +0.00 -0.15	K ±0.20	L1 Max	L2 Max	M +0.20 -0.00	R ±0.10	S ±0.20	ØT +0.20 -0.10	Thread V
10SL	18.20	2.70	45.00	54.00	14.40	18.26	25.70	3.30	5/8-24 UNEF
14S	24.60	2.60	48.00	54.00	14.80	23.01	30.50	3.30	3/4-20 UNEF
16S	27.40	2.60	48.00	54.00	14.80	24.62	32.80	3.30	7/8-20 UNEF
16	27.40	3.70	58.00	70.00	19.10	24.62	32.80	3.30	7/8-20 UNEF
18	30.80	3.70	58.00	70.00	19.10	27.00	35.20	3.30	1-20 UNEF
20	34.20	3.70	60.00	70.00	19.10	29.40	38.40	3.30	1 1/16-18 UNEF
22	37.40	3.70	60.00	70.00	19.10	31.75	41.50	3.30	1 3/16-18 UNEF
24	40.90	3.70	62.00	70.00	19.30	35.00	44.80	4.50	1 7/16-18 UNEF
28	46.70	3.70	68.00	70.00	19.30	39.67	51.00	4.50	1 7/16-18 UNEF
32	53.40	4.00	72.00	76.00	21.30	44.45	57.15	4.50	1 3/4-18 UNS
36	59.60	4.20	76.00	80.00	21.30	49.23	63.70	4.50	2-18 UNS

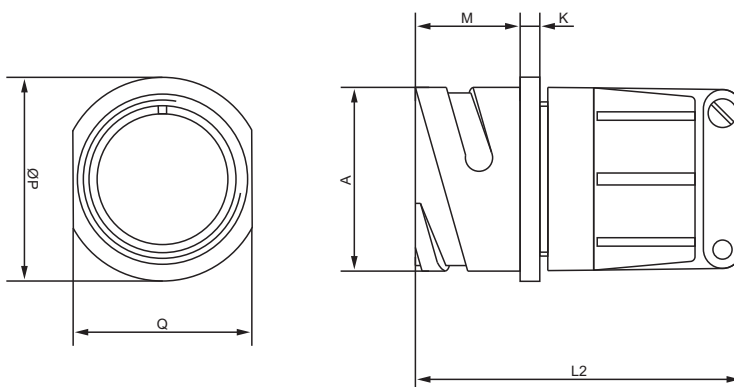
CABLE CONNECTING RECEPTACLE

This Cable Connecting Receptacle has bayonet grooves. Accessory threads are present for use with various backshells.

RB 3101A



RB 3101F



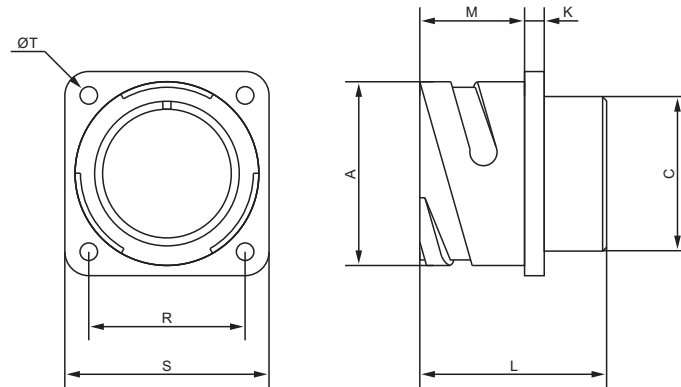
All dimensions are in mm

Shell Size	A +0.00 -0.15	K ±0.20	L1 Max	L2 Max	M +0.20 -0.00	ØP ±0.10	Q ±0.20	Thread V
10SL	18.20	2.70	45.00	54.00	14.40	25.20	20.60	5/8-24 UNEF
14S	24.60	2.60	48.00	54.00	14.80	29.30	25.40	3/4-20 UNEF
16S	27.40	2.60	48.00	54.00	14.80	32.30	28.60	7/8-20 UNEF
16	27.40	3.70	58.00	70.00	19.10	32.30	28.60	7/8-20 UNEF
18	30.80	3.70	58.00	70.00	19.10	34.80	31.70	1-20 UNEF
20	34.20	3.70	60.00	70.00	19.10	37.80	34.90	1 3/16-18 UNEF
22	37.40	3.70	60.00	70.00	19.10	41.10	38.10	1 3/16-18 UNEF
24	40.90	3.70	62.00	70.00	19.30	44.60	41.30	1 7/16-18 UNEF
28	46.70	3.70	68.00	70.00	19.30	50.90	47.60	1 7/16-18 UNEF
32	53.40	4.00	72.00	76.00	21.30	57.10	54.00	1 3/4-18 UNS
36	59.60	4.20	76.00	80.00	21.30	63.60	60.60	2-18 UNS

BOX MOUNTING RECEPTACLE

This Box Mounting Receptacle has bayonet grooves for locking and does not have any accessory threads.

RB 3102R



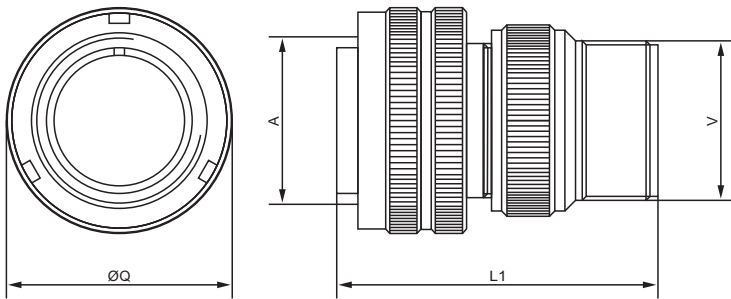
All dimensions are in mm

Shell Size	A +0.00 -0.15	K ±0.20	C +0.25 -0.00	L Max	M +0.20 -0.00	R ±0.10	S ±0.20	ØT +0.20 -0.10
10SL	18.20	2.70	16.35	54.00	14.40	18.26	25.70	3.30
14S	24.60	2.60	19.50	54.00	14.80	23.01	30.50	3.30
16S	27.40	2.60	22.75	54.00	14.80	24.62	32.80	3.30
16	27.40	3.70	22.75	70.00	19.10	24.62	32.80	3.30
18	30.80	3.70	26.10	70.00	19.10	27.00	35.20	3.30
20	34.20	3.70	29.20	70.00	19.10	29.40	38.40	3.30
22	37.40	3.70	32.40	70.00	19.10	31.75	41.50	3.30
24	40.90	3.70	35.40	70.00	19.30	35.00	44.80	4.50
28	46.70	3.70	41.90	70.00	19.30	39.67	51.00	4.50
32	53.40	4.00	49.00	76.00	21.30	44.45	57.15	4.50
36	59.60	4.20	54.60	80.00	21.30	49.23	63.70	4.50

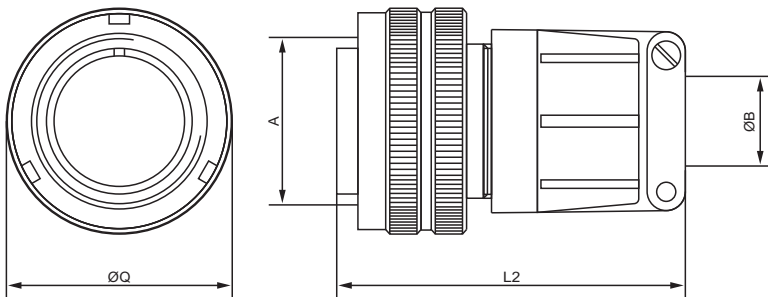
STRAIGHT PLUG

The Straight Plug mates with the bayonet receptacle through a coupling nut.

RB 3106A



RB 3106F



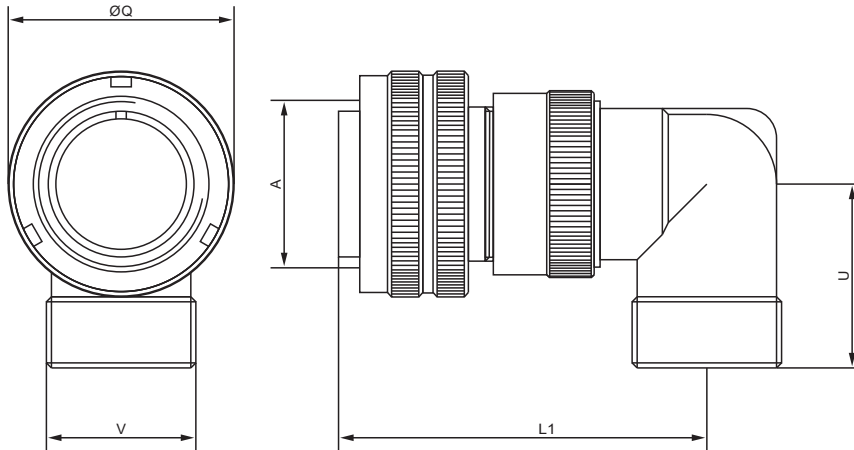
All dimensions are in mm

Shell Size	Thread A	B Max	L1 Max	L2 Max	Q Max	Thread V
10SL	5/8-24 UNEF	7.50	45.00	54.00	24.10	5/8-24 UNEF
14S	7/8-20 UNEF	10.50	48.00	54.00	28.50	3/4-20 UNEF
16S	1-20 UNEF	12.70	48.00	54.00	31.75	7/8-20 UNEF
16	1-20 UNEF	12.70	58.00	70.00	31.75	7/8-20 UNEF
18	1 1/8-18 UNEF	13.50	58.00	70.00	34.10	1-20 UNEF
20	1 1/4-18 UNEF	16.70	60.00	70.00	37.80	1 3/16-18 UNEF
22	1 3/8-18 UNEF	19.10	60.00	70.00	40.50	1 3/16-18 UNEF
24	1 1/2-18 UNEF	19.90	62.00	70.00	43.80	1 7/16-18 UNEF
28	1 3/4-18 UNS	23.40	68.00	70.00	50.00	1 7/16-18 UNEF
32	2-18 UNS	29.40	72.00	76.00	57.00	1 3/4-18 UNS
36	2 1/4-18 UN	31.80	76.00	80.00	62.60	2-18 UNS

RIGHT ANGLED PLUG

A Right Angled Plug is used in place of straight plug where there are space constraints for the cable.

3108E



All dimensions are in mm

Shell Size	Thread A	B Max	L Max	Q Max	U Max	Thread V
10SL	5/8-24 UNEF	7.50	40.00	24.10	25.00	5/8-24 UNEF
14S	7/8-20 UNEF	10.50	42.00	28.50	27.00	3/4-20 UNEF
16S	1-20 UNEF	12.70	46.00	31.75	28.00	7/8-20 UNEF
16	1-20 UNEF	12.70	55.00	31.75	28.00	7/8-20 UNEF
18	1 1/8-18 UNEF	13.50	55.00	34.10	31.00	1-20 UNEF
20	1 1/4-18 UNEF	16.70	57.00	37.80	34.00	1 3/16-18 UNEF
22	1 3/8-18 UNEF	19.10	57.00	40.50	34.00	1 3/16-18 UNEF
24	1 1/2-18 UNEF	19.90	60.00	43.80	39.00	1 7/16-18 UNEF
28	1 3/4-18 UNS	23.40	60.00	50.00	39.00	1 7/16-18 UNEF
32	2-18 UNS	29.40	72.00	57.00	45.00	1 3/4-18 UNS
36	2 1/4-18 UN	31.80	76.00	62.60	48.00	2-18 UNS

BACKSHELLS

ADAPTOR FOR CABLE GLANDS



These adaptors can be used to attach cable glands to the connector. The adaptors can be provided with either PG threads or Metric threads to suit the cable glands. Cable glands can be used to increase the protection level of the connector to IP69k.

ADAPTOR FOR HEAT SHRINK BOOTS



We can provide adaptors which have an arrangement to attach heat shrink boots to the connectors. Using heat shrink boots increases the environmental protection level of the connector.

90° BACKSHELL



These backsHELLS can be used where there are space constraints for cables attached to the connector. They can be used with Plugs and Receptacle Shells.

EXTENDER BACKSHELL



These backsHELLS are useful in providing extra working room for wire termination and wire service-loops. They can be coupled with MS 3057 cable clamps.

ACCESSORIES

PROTECTIVE CAPS



Caps can be used to protect the connector when it is not being used. Protective caps are available for Receptacles and Plugs.

SQUARE GASKETS



Square gaskets, made of Neoprene, are used with flange mounted receptacles. They provide sealing within the panel.

TELESCOPING BUSHING



Telescoping Bushing keeps dirt, oil, and dust out of the backshell and provides protection to unjacketed cables. Combination of bushings can be used for smaller cables.

CABLE CLAMP



Cable Clamps are used to provide strain relief to the cables. Along with bushings, they can also provide support to unjacketed cables. They can be used with the standard and extender backshells.

CUSTOMIZATIONS

In addition to our regular range of products, we offer various customizations to cater to the diverse needs of the industry. Some examples are shown below.



Rear Mounting Receptacles which can be mounted behind the panel



Receptacles with pins having terminations to be directly soldered to a PCB



Thru Bulkheads to eliminate the need to permanently fix cable harnesses to panels



Front Panel Mounting Plug



Jam Nuts



Pins having crimp as well as screw terminations



Connectors with harnessed wires (per customer requirement)

ORDERING INFORMATION

JI 3102 R 22 - 19 P W XXX XXX XXX
 1 2 3 4 5 6 7 8 9 10

1. Prefix

- JI** - Threaded Type
- JI-R** - Threaded Type-ROHS Compliant
- RB** - Bayonet Type
- RB-R** - Bayonet Type-ROHS Compliant

2. Shell Style

- 3100** - Wall Mounting Receptacle
- 3101** - Cable Connecting Receptacle
- 3102** - Box Mounting Receptacle
- 3106** - Straight Plug
- 3108** - Right Angled Plug

3. Connector Class

- A/R** - Non-Environmental
- E** - Environmental (includes Wire Sealing Grommet)
- F** - Environmental (includes Wire Sealing Grommet and Compression Ring)

4. Shell Size

The various shell sizes are 10SL, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, and 36

5. Insert Arrangement

Please refer pages 7-11 for the different insert arrangements

6. Contact Type

- P** - Plug Pin
- S** - Socket Pin

7. Alternate Insert Orientations

Please refer page 14-15 for alternate insert orientations

8. Backshell

- Omit for standard backshell
- N0** - No Backshell
- PGXX** - Adaptor for PG Cable Gland
- MXX** - Adaptor for Metric Cable Gland
- HSB** - Heat Shrink Tube
- EB** - Extender Backshell

9. Plating Modifications

- Omit for standard Olive Drab over Cadmium Finish
- S.10** - Electrolytic Nickel Plating (ROHS compliant)
- S.15** - Black Anodizing (ROHS compliant)
- S.20** - Zinc with Olive Drab Chromate Finish(ROHS Compliant)
- S.25** - Zinc with Black Finish

10. Contact Modifications

- Omit for standard silver plated contacts with solder terminations
- C.10** - Silver Plated Crimp Pins
- C.15** - Gold Plated Solder Pins
- C.20** - Gold Plated Crimp Pins
- C.25** - Nickel Plated Pins with Screw Terminations
- C.30** - Silver Plated Pins with PCB Terminations
- C.35** - Gold Plated Pins with PCB Terminations

NOTES

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