

JOINTWEL



ASSOCIATED ENGINEERS

ISO 9001:2008 CERTIFIED COMPANY



V. R. SHETH
MANAGING DIRECTOR

COMPANY PROFILE

Mr. V. R. Sheth, The Managing Director of Associated Engineers, Having Passed B.E. Mechanical from University of Bombay in 1971, took Experience in an Electrical Components manufacturing company, for a period of four years. In 1975 he joined as a Technical Director in a Pvt. Ltd Company and then founded Associated Engineers in 1980.

Now with the total experience of about 35 years, we at Associated Engineers are manufacturing all varieties and sizes of Tinned Copper cable Lugs, Lugs and Links, Aluminum Lugs and Links, Insulated / Non-Insulated Terminal Lugs, DIN/MCB-Rails, Earth Rod and Earthing Accessories and Allied Electrical Products. We manufacture large variety of components to customer Drawings and Specifications.

Our Trade name is "**JOINTWELL**".

Since 1995 first time in India we started manufacturing Copper Aluminum **Bi-Metal** Lugs and Connectors (links). Bi-Metal Lugs are Manufactured by Process known as **Friction Welding**. Also we are the first manufacturer who had introduced concept of Reverse Bi-Metallic Lugs. From India first time such Reverse Bi-Metal lugs was manufactured and exported by us. To manufacture Bi-Metal Lugs and Links we have in house facility.

Our products are being exported to many countries, through Indian Merchant exporters, Export Houses and Exported directly by Associated Engineers. Our products have found acceptance in Dubai, Kuwait, Oman, Doha Qatar, Jeddah, Saudi Arabia, Bahrain, Jordan, Singapore, Malaysia, Brunei, Hong Kong, Mexico, Venezuela, Rio Haina, Brazil, Sri Lanka, Bangladesh, UK, Romania, New York, New Zealand, Dominican Republic, South Africa, Kenya, Bulgaria, Peru, Mombassa, Guatemala, Al-Salvador and many more countries.

At home we have large number of OEMs who are our satisfied customers. We have a pleasure to inform that till today we have retained our first customers who used to buy material since 1980. It spells about our quality. However now we have put our quality system on records by way of ISO 9001-2000 certification.

BI METAL TERMINAL LUGS AND BI METAL CONNECTORS

Whenever aluminium cable is to be terminated on copper bus bar or copper contact, if aluminium lug is used then contact between terminal lug and copper bus bar being of dissimilar metals, galvanic action takes place. Also if copper lug is used then contact between aluminium cable and barrel of copper terminal lug is of dissimilar metal and hence the galvanic action takes place. In order to prevent dissimilar contact and to avoid galvanic action it is always advisable to use copper aluminium Bi-Metal lugs. In Bi-Metal lugs barrel of the lug is of aluminium and the head or palm of the lug is of copper. This ensures contact between aluminium cable to terminal lug is of aluminium and contact between terminal lug to copper bus bar or contact is of copper. Thus contact between dissimilar metal is avoided and contact between similar metal is established. Thus Bi-Metallic or galvanic action is completely eliminated and hence technically sound and durable joint is achieved.

Electrolytic copper head / palm is friction welded to electrolytic aluminium barrel. At the interface, copper molecules and aluminium molecules intermingles with each other and form durable bond.

Similarly if aluminium cable is to be joined with copper cable then Bi-Metal in line connectors are to be used. Here for aluminium cable aluminium barrel is provided and for copper cable copper barrel is provided. Copper and aluminium barrels are friction welded.

Depending upon application Bi-Metal terminals, in line connectors, pin type connectors etc are manufactured.

Note : In case if copper cable is to be terminated on aluminium bus bar / aluminium contact, then reverse Bi-Metalic lugs can also be manufactured against specific order. In reverse Bi-Metal lugs barrel is of copper and head is of aluminium.

WRONG METHOD OF TERMINATION



TERMINATION WITH DISSIMILAR CONTACT



TERMINATION WITH DISSIMILAR CONTACT



CONTACT BETWEEN DISSIMILAR METALS, HENCE GALVANIC ACTION AND POOR JOINT

CORRECT METHOD OF TERMINATION



TERMINATION WITH SIMILAR CONTACT

USE OF COPPER / ALUMINIUM BI-METAL TERMINAL LUGS



USE OF COPPER / ALUMINIUM REVERSE BI-METAL TERMINAL LUGS

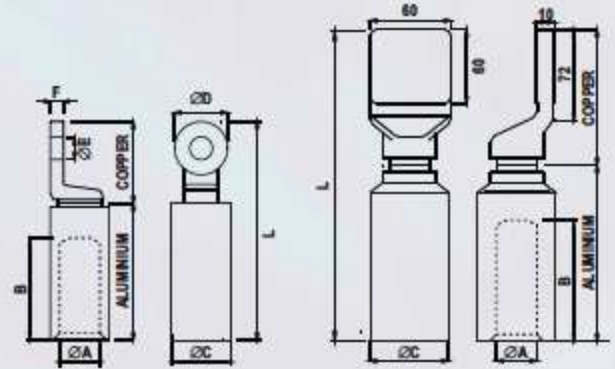


WITH BI-METAL LUGS, CONTACT BETWEEN SIMILAR METALS, NO GALVANIC ACTION HENCE SOUND AND DURABLE JOINT



JOINTWELL

COPPER - ALUMINIUM BI-METAL LUGS



RING TYPE - I

SQUARE TYPE - II

MM ²	A	B	C	D	E	F	L	JOINTWELL CAT NO.
25	7.5	30	12	20	10.5	5	70	JBM-25M10
35	8.5	30	12	20	10.5	5	75	JBM-35M10
50	10.2	32	16	20	10.5	5	80	JBM-50M10
50	10.2	32	16	25	13	5	85	JBM-50M12
70	11.5	45	20	25	13	5	90	JBM-70M12
95	13.5	50	22	25	13	5	95	JBM-95M12
120	15.5	55	22	25	13	5	100	JBM-120M12
150	16.5	60	25	25	13	5	105	JBM-150M12
185	18	60	30	36	13	7	130	JBM-185M12
185	18	60	30	30	13	6	130	JBM-185M12
240	22	65	32	36	13	7	135	JBM-240M12
240	22	65	32	30	13	6	135	JBM-240M12
240	22	65	32	50 X 50	10.5 X 4	7.5	160	JBM-240X4
300	23.5	70	35	36	13	7	140	JBM-300M12
300	23.5	70	35	36	17	7	140	JBM-300M16
400	26.5	75	35	36	13	7	145	JBM-400M12
400	26.5	75	35	36	17	7	145	JBM-400M16
500	30	95	47	60 x 60	-	10	200	JBM-500B
630	34	95	54	60 x 60	-	10	200	JBM-630B
800	39	115	54	60 X 60	-	10	220	JBM-800B
1000	42	126	60	80 X 80	-	10	256	JBM-1000B
1300	46.5	136	65	80 X 80	-	10	267	JBM-1300B

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

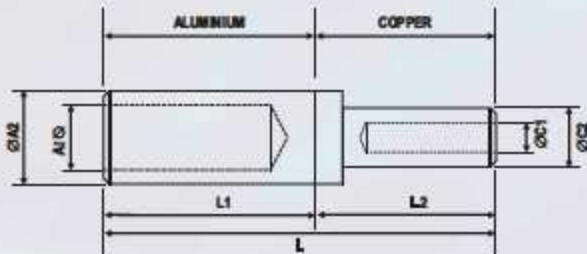
ALUMINIUM BARREL ARE CHEMICALLY TREATED TO REDUCE CONTACT RESISTANCE AND CORROSION AND ARE FILLED ELECTRICALLY CONDUCTIVE CORROSION INHIBITANT WITH A JOINTING COMPOUND AND CAPPED.

NOTE:

- 1) COMBINATIONS OF BI-METALLIC COMPRESSION JOINTS ARE DESIGNED ON THE BASIS OF CURRENT CARRYING CAPACITY OF INDIVIDUAL CABLES.
- 2) IN CASE ADDITIONAL COMBINATIONS ARE REQUIRED SAME MAY WILL BE PROVIDED AGAINST SPECIFIC REQUEST.

JOINTWELL

NON-TENSION BI-METALLIC COMPRESSION JOINTS



AL-MM ²	A1	A2	L1	CU-MM ²	C1	C2	L2	L	JOINTWELL CAT NO.
16	6.0	12	33	10	4.5	6	22	55	JBML - 16 / 10
25	6.8	12	37	16	5.5	8	24	61	JBML - 25 / 16
35	8.0	14	43	25	7.0	10	28	71	JBML - 35 / 25
50	10.0	16	43	35	8.2	12	28	71	JBML - 50 / 35
70	11.5	18	52	50	10.0	14	34	86	JBML - 70 / 50
95	13.5	22	52	70	11.5	16	34	86	JBML - 95 / 70
120	15.0	22	59	95	13.5	18	38	97	JBML - 120 / 95
150	16.5	25	65	95	13.5	18	43	108	JBML - 150 / 95
185	18.5	28	65	120	15.5	20	43	108	JBML - 185 / 120
240	21.5	32	75	150	17.0	22	49	124	JBML - 240 / 150
300	23.5	34	77	240	21.5	28	51	128	JBML - 300 / 240

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

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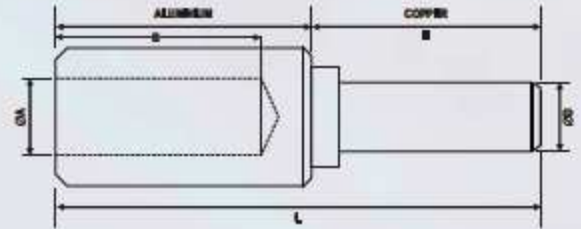
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JOINTWELL

BI-METALLIC PIN CONNECTORS



MM ² ALUMINIUM	A	B	D	E	L	JOINTWELL CAT NO.
6	3.5	32	12	28	70	JBMP - 6
10	4.5	32	12	28	70	JBMP - 10
16	5.5	32	12	28	70	JBMP - 16
25	7.0	32	12	28	70	JBMP - 25
35	8.5	32	12	28	70	JBMP - 35
50	9.5	32	12	28	70	JBMP - 50
70	11.5	32	12	28	70	JBMP - 70
95	13.5	60	12	37	110	JBMP - 95
120	15.5	60	12	37	110	JBMP - 120A
120	15.5	60	14	37	110	JBMP - 120B
150	16.5	60	12	45	120	JBMP - 150A
150	16.5	60	14	45	120	JBMP - 150B
185	18.5	60	16	45	120	JBMP - 185A
185	18.5	60	18	45	120	JBMP - 185B
240	22.0	60	16	45	120	JBMP - 240A
240	22.0	60	18	45	120	JBMP - 240B
300	23.5	60	16	45	120	JBMP - 300A
300	23.5	60	18	45	120	JBMP - 300B
400	26.5	70	18	65	155	JBMP - 400A
400	26.5	70	20	65	155	JBMP - 400B
500	30.0	70	18	65	155	JBMP - 500A
500	30.0	70	20	65	155	JBMP - 500B
630	34.0	70	20	65	160	JBMP - 630

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

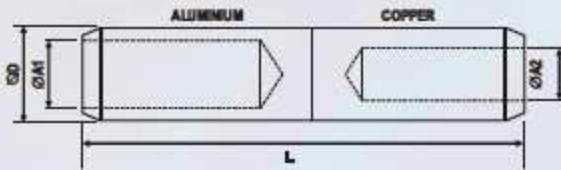
ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

ALUMINIUM BARREL ARE CHEMICALLY TREATED TO REDUCE CONTACT RESISTANCE AND CORROSION AND ARE FILLED ELECTRICALLY CONDUCTIVE CORROSION INHIBITANT WITH A JOINTING COMPOUND AND CAPPED.

NOTE:

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BIMETALLIC COMPRESSION REDUCERS



MM ² ALUMINIUM	MM ² COPPER	D	A1	A2	L	JOINTWELL CAT NO.
50	16	20	9	5.5	107	JBMC - 50/16
50	25	20	9	6.5	107	JBMC - 50/25
50	35	20	9	8	107	JBMC - 50/35
50	50	20	9	9.5	107	JBMC - 50/50
70	35	20	11	8	107	JBMC - 70/35
70	50	20	11	9.5	107	JBMC - 70/50
70	70	20	11	11	107	JBMC - 70/75
95	35	20	12.5	8	107	JBMC - 95/35
95	50	20	12.5	9.5	107	JBMC - 95/50
95	70	20	12.5	11	107	JBMC - 95/70
95	95	20	12.5	13	107	JBMC - 95/95
120	50	25	13.7	9.5	133.5	JBMC - 120/50
120	70	25	13.7	11	133.5	JBMC - 120/70
120	95	25	13.7	13	133.5	JBMC - 120/95
120	120	25	13.7	14.2	133.5	JBMC - 120/120
150	70	25	15.5	11	133.5	JBMC - 150/70
150	95	25	15.5	13	133.5	JBMC - 150/95
150	120	25	15.5	14.2	133.5	JBMC - 150/120
150	150	25	15.5	16	133.5	JBMC - 150/150
150	185	25	15.5	18	133.5	JBMC - 150/185
185	95	32	17	13	144	JBMC - 185/95
185	120	32	17	14.2	144	JBMC - 185/120
185	150	32	17	16	144	JBMC - 185/150
185	185	32	17	18	144	JBMC - 185/185
240	95	32	19.5	13	144	JBMC - 240/95
240	120	32	19.5	14.2	144	JBMC - 240/120
240	150	32	19.5	16	144	JBMC - 240/150
240	185	32	19.5	18	144	JBMC - 240/185
240	240	32	19.5	20	144	JBMC - 240/240

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

ALUMINIUM BARRELS ARE CHEMICALLY TREATED TO REDUCE CONTACT RESISTANCE AND CORROSION AND ARE FILLED ELECTRICALLY CONDUCTIVE CORROSION INHIBITANT WITH A JOINTING COMPOUND AND CAPPED.

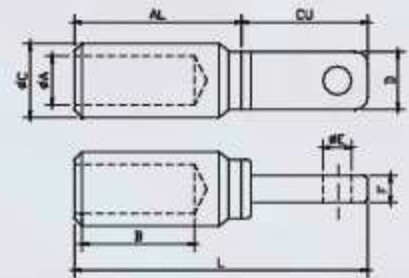
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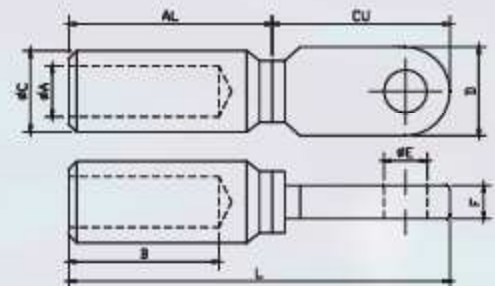


JOINTWELL

BI-METALLIC LUGS WITH CENTRE PALM



SIZE mm	ØA	B	ØC	D	ØE	F	L	JOINTWELL CAT NO.
70	10	54	16	26	11	11	111	JBMCP - 70/M10
120	12	54	20	27	11	11	110	JBMCP - 120/M10
185	16	55	27	27	11	11	111	JBMCP - 185/M10
300	20	53	32	27	11	11	110	JBMCP - 300/M0



SIZE mm ²	ØA	B	ØC	D	ØE	F	L	JOINTWELL CAT NO.
240	21	65	32	35	17	13	131	JBMCP -240/M16

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

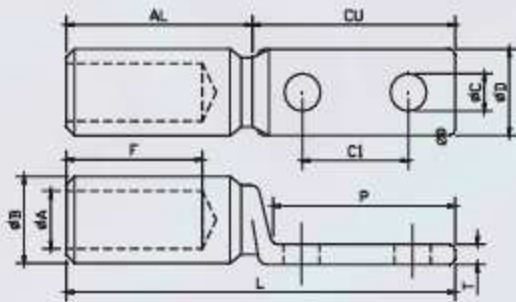
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 COPPER 99.7% IACS

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NOTE:

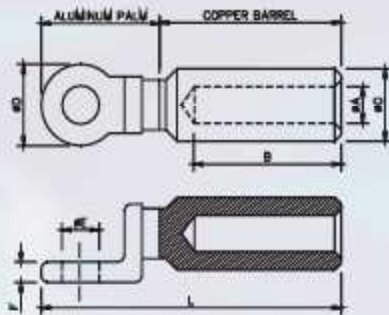
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BI-METALLIC LUGS WITH EXTENDED PALM



SIZE mm ²	ØA	ØB	ØC	C1	D	F	T	AL	CU	P	L	JOINTWEL CAT NO.
70	25	12,5	13	45	25	58	6	63	77	67	140	JBM-70-2xM12
95	25	14,5	13	45	25	58	6	63	77	67	140	JBM 95 2xM12
120	25	17	13	45	25	58	6	63	77	67	140	JBM-120-2xM12
150	30,2	18,5	13	45	30	58	7	63	77	67	140	JBM-150-2xM12
185	30,2	20	13	45	30	58	7	63	77	67	140	JBM-185-2xM12

REVERSE BI-METALLIC LUGS



All dimensions are in mm.

SIZE mm ²	ØA	B	ØC	D	ØE	F	L	JOINTWEL CAT NO.
120	15.5	45	25	37	13.0	10	115	JREBM -120
150	16.5	45	25	37	13.0	10	120	JREBM -150
185	18	50	28	37	13.0/17.0	10	127	JREBM -185
240	21	55	32	37	17.0	10	132	JREBM -240
300	23.5	55	32	37	17.0	10	132	JREBM -300

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
 FINISH NATURAL.

CONDUCTIVITY :

ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

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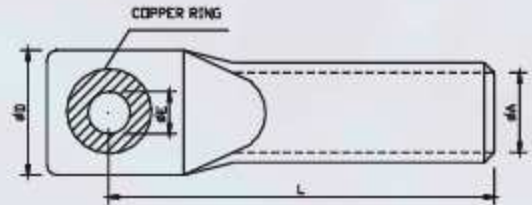
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RING TYPE BI-METALLIC LUGS



mm ²	ØE	ØA	ØD	L	JOINTWELL CAT.NO
16	8.5	6	25	63	JRBM - 16/M8
	10.5	6	27	63	JRBM - 16/M10
25	8.5	7	25	63	JRBM - 25/M8
	10.5	7	25	63	JRBM - 25/M10
	13	7	32	65	JRBM - 25/M12
35	8.5	8.3	28	70	JRBM - 35/M8
	10.5	8.3	29	70	JRBM - 35/M10
	13	8.3	32	70	JRBM - 35/M12
50	8.5	10	28	75	JRBM - 50/M8
	10.5	10	30	75	JRBM - 50/M10
	13	10	32	75	JRBM - 50/M12
70	10.5	11.5	32	85	JRBM - 70/M10
	13	11.5	32	85	JRBM - 70/M12
	17	11.5	32	85	JRBM - 70/M16
95	10.5	13.5	34	93	JRBM - 095/M1
	13	13.5	34	90	JRBM - 95/M12
	17	13.5	34	90	JRBM - 95/M16
120	13	14.8	34	90	JRBM - 120/M12
	17	14.8	34	90	JRBM - 120/M16
150	13	16.5	38	100	JRBM - 150/M12
	17	16.5	38	100	JRBM - 150/M16
185	13	18.3	41	105	JRBM - 185/M12
	17	18.3	41	105	JRBM - 185/M16
	21	18.3	48	105	JRBM - 185/M20
240	17	21	48	121	JRBM - 240/M16
	21	21	48	121	JRBM - 240/M20
300	17	23.4	50	124	JRBM - 300/M16
	21	23.4	50	124	JRBM - 300/M20

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
 COPPER PALM 99.95%
 FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
 JOINING METHOD MECHANICALLY FITTED COPPER RING ON ALUMINIUM PALM.
 FINISH NATURAL.

CONDUCTIVITY :

ALUMINIUM 61.8% IACS (MIN)
 COPPER 99.7% IACS

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BIMETALLIC CONNECTOR



BI-METALLIC CONNECTOR FOR 25mm X 3mm ALUMINIUM TAPE TO 25mm X 3mm COPPER TAPE CONNECTOR



BI-METALLIC CONNECTOR FOR 8mm DIAMETER ALUMINIUM CONDUCTOR TO 25mm X 3mm COPPER TAP CONNECTOR.

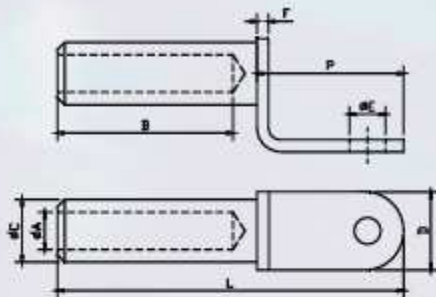


BI-METALLIC CONNECTOR FOR 8mm DIAMETER ALUMINIUM CONDUCTOR TO 8mm DIAMETER COPPER CONNECTOR.



BI-METALLIC CONNECTOR - FLAT TYPE FOR 25mm X 3mm ALUMINIUM TAPE TO 25mm X 3mm COPPER TAPE CONNECTOR

SPECIAL BI-METALLIC LUGS



SIZE mm ²	ØA	B	ØC	D	ØE	F	P	L	JOINTWELL CAT NO.
50	13.5	70	26	31	14	4.8	60	143	JBMS-50/M13
120	15.5	70	26	31	14	4.8	60	143	JBMS-120/M13

CONDUCTIVE MATERIAL :

ALUMINIUM BARREL 99.6%
COPPER PALM 99.95%
FINAL METAL STATE FULLY ANNEALED, INCLUDING JOINT.
JOINING METHOD FRICTION WELDING, WELDING AREA MORE THAN NOMINAL CONDUCTOR AREA.
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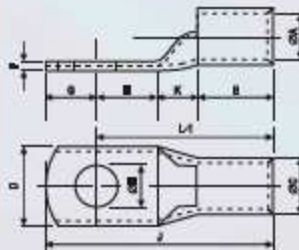
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JOINTWEL

TINNED COPPER HEAVY DUTY CABLE TERMINAL ENDS WITH INSPECTION SLOT

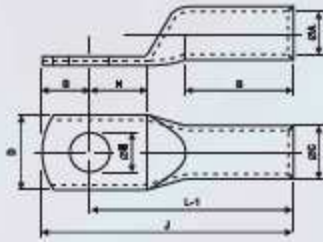


MATERIAL :
COPPER TUBE TO BS 1977/ISI191 (PART V)
E. C. GRADE 99.25% IACS

FINISH :
ELECTRO TINNED TO BS 1872 (1984)

MM ²	øE	øA	øC	D	F	G	H	K	B	L-1	J	CAT NO
1.5	5.2	1.8	3.7	8.0	1.0	4	5	2	5	12	16	JCUS-538
1.5	6.5	1.8	3.7	10.0	0.8	4	5	2	5	13	18	JCUS-539
2.5	4.2	2.4	4.0	8.0	1.0	5	6	2	7	14	18	JCUS-388
2.5	5.2	2.4	4.0	10.0	0.8	5	6	2	7	15	20	JCUS-540
2.5	6.5	2.4	4.0	10.0	0.8	5	6	2	7	15	20	JCUS-541
4.0	5.2	3.1	4.8	10.0	1.0	5	6	2	7	15	20	JCUS-389
4.0	6.5	3.1	4.8	10.0	1.0	5	6	2	7	15	20	JCUS-543
6.0	5.2	3.8	5.5	10.0	1.2	5	6	3	9	18	23	JCUS-390
6.0	6.5	3.8	5.5	12.0	1.0	6	9	3	9	21	27	JCUS-544
6.0	8.4	3.8	5.5	12.0	1.0	6	9	3	9	21	27	JCUS-545
10.0	6.5	4.5	6.2	12.0	1.2	6	7	3	9	19	25	JCUS-353
10.0	8.4	4.5	6.2	12.0	1.2	6	9	3	9	21	27	JCUS-547
16	6.5	5.4	7.1	12.0	1.4	7	7	4	12	23	30	JCUS-354
16	8.4	5.4	7.1	12.0	1.4	7	7	4	12	25	32	JCUS-549
25	6.5	6.8	8.8	13.0	2.0	7	7	4	12	23	30	JCUS-355
25	8.4	6.8	8.8	16.0	2.0	7	7	4	12	27	37	JCUS-551
25	10.5	6.8	8.8	16.0	1.4	10	11	4	12	27	37	JCUS-552
35	6.5	8.2	10.6	15.3	2.4	9	9	5	12	26	35	JCUS-542
35	8.4	8.2	10.6	15.3	2.4	9	9	5	12	26	35	JCUS-356
35	10.5	8.2	10.6	18.0	2.0	10	11	5	12	28	38	JCUS-554
50	8.4	9.5	12.4	17.8	2.9	10	11	6	16	33	43	JCUS-357
50	10.5	9.5	12.4	17.8	2.9	10	11	6	16	33	43	JCUS-556
70	8.4	11.2	14.7	21.0	3.5	12	13	7	18	38	50	JCUS-557
70	10.5	11.2	14.7	21.0	3.5	12	13	7	18	38	50	JCUS-358
70	13.0	11.2	14.7	21.0	3.5	12	13	7	18	38	50	JCUS-559
95	10.5	13.5	17.4	25	3.9	13	13	9	20	42	55	JCUS-359
95	13.0	13.5	17.4	25	3.9	13	13	9	20	42	55	JCUS-561
120	13.0	15.0	19.4	28	4.4	14	14	10	22	46	60	JCUS-241
120	17.0	15.0	19.4	28	4.4	16	16	10	22	48	64	JCUS-546
150	13.0	16.5	21.2	30	4.7	16	16	11	26	53	69	JCUS-242
150	17.0	16.5	21.2	30	4.7	16	16	11	26	53	69	JCUS-564
185	17.0	18.5	23.5	34	5.0	17	17	12	32	61	78	JCUS-243
240	17.0	21.0	26.5	38	5.5	20	20	14	38	72	92	JCUS-244
240	21.0	21.0	26.5	38	5.5	20	20	14	38	72	92	JCUS-567
300	17.0	23.5	30.0	43	6.5	22	22	15	42	79	101	JCUS-245
300	21.0	23.5	30.0	43	6.5	22	22	15	42	79	101	JCUS-569
400	17.0	28.5	36.5	50.1	8.0	26	26	18	44	88	114	JCUS-246
400	21.0	28.5	36.5	50.1	8.0	26	26	18	44	88	114	JCUS-571
500	21.0	30.0	39.0	56.0	9.0	28	28	20	48	96	124	JCUS-247
500	17.0	30.0	39.0	56.0	9.0	28	28	20	48	96	124	JCUS-573
630	-	35.0	45.0	65.0	9	-	-	20	48	-	124	JCUS-248-S
630	21.0	35.0	45.0	65.0	10	33	33	22	56	111	144	JCUS-248
800	-	39.0	50.6	73.5	11.6	-	-	17	78	-	170	JCUS-589
1000	-	43.0	56.2	81.0	13.2	-	-	20	90	-	200	JCUS-590

TUBULAR COMPRESSION CABLE LUGS (AS PER DIN 46235)

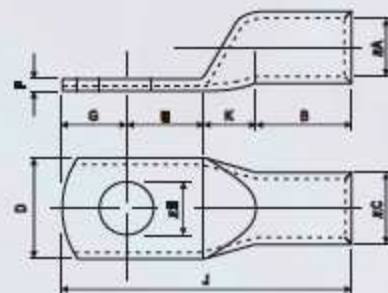


MM ²	øE	D	øA	B	øC	G	H	L-1	J	CAT NO
6.0	5.3	8.5	3.8	10	5.5	6.5	7.5	24	30.50	JD6-5
10.0	6.5	8.5	4.5	10	6.0	7.0	8.5	27.5	34.5	JD10-6
16.0	6.5	12	5.5	20	8.5	7.5	8	35	42.5	JD16-6
16.0	8.4	12	5.5	20	8.5	10	10	35	45	JD16-8
16.0	10.5	17	5.5	20	8.5	12	12	37	49	JD16-10
16.0	13	19	5.5	20	8.5	13	13	37	50	JD16-12
25	6.5	15	7	20	10	7.5	8	39	46.5	JD25-6
25	8.4	15	7	20	10	10	10	39	49	JD25-8
25	10.5	17	7	20	10	12	12	39	51	JD25-10
25	13	19	7	20	10	13	13	39	52	JD25-12
35	8.4	17	8.2	20	12.5	7.5	8	42	49.5	JD35-8
35	10.5	19	8.2	20	12.5	10	10	42	52	JD35-10
35	13	21	8.2	20	12.5	12	12	42	54	JD35-12
50	8.4	22	10	28	14.5	10	10	51	61	JD50-8
50	10.5	22	10	28	14.5	12	12	51	63	JD50-10
50	13	23	10	28	14.5	13	13	51	64	JD50-12
50	17	28	10	28	14.5	14.5	14.5	51	65.5	JD-50-16
70	10.5	24	11.5	28	16.5	10	10	54	64	JD70-10
70	13	24	11.5	28	16.5	12	12	54	66	JD70-12
70	17	32	11.5	28	16.5	13	13	54	67	JD70-16
70	21	32	11.5	28	16.5	14.5	14.5	54	68.5	JD70-20
95	10.5	28	13.5	35	19	12	12	64	76	JD95-10
95	13	28	13.5	35	19	12	12	64	76	JD95-12
95	17	32	13.5	35	19	13	13	67	80	JD95-16
95	21	34	13.5	35	19	14.5	14.5	67	81.5	JD95-20
120	10.5	32	15.5	35	21	15	16	68	83	JD120-10
120	13	32	15.5	35	21	16	17	68	84	JD120-12
120	17	32	15.5	35	21	18	19	69	87	JD120-16
120	21	38	15.5	35	21	19	20	69	88	JD120-20
150	10.5	34	17	35	23.5	15	16	77	92	JD150-10
150	13	34	17	35	23.5	16	17	77	93	JD150-12
150	17	34	17	35	23.5	19	20	77	96	JD150-16
150	21	40	17	35	23.5	19	20	77	96	JD150-20
185	10.5	37	19	40	25.5	15	16	81	96	JD185-10
185	13	37	19	40	25.5	16	17	81	97	JD185-12
185	17	37	19	40	25.5	19	20	81	100	JD185-16
185	21	40	19	40	25.5	19	20	81	100	JD185-20
240	10.5	42	21.5	40	29	16	17	91	107	JD240-10
240	13	42	21.5	40	29	19	20	91	110	JD240-12
240	17	42	21.5	40	29	19	20	91	110	JD240-16
240	21	46	21.5	40	29	21	22	91	112	JD240-20
300	13	48	24	50	32	19	22	100	119	JD300-12
300	17	48	24	50	32	19	22	100	119	JD300-16
300	21	48	24	50	32	22	22	100	122	JD300-20
400	17	55	27.5	70	38.5	25	25	115	140	JD400-16
400	21	55	27.5	70	38.5	25	25	115	140	JD400-20
500	21	60	31	70	42	25	25	127	152	JD500-20
630	21	60	34.5	80	44	25	25	135	160	JD630-20
800	21	70	40	100	52	30	30	165	195	JD800-20
1000	21	80	44	100	58	30	30	165	195	JD1000-20



JOINTWEL

COPPER TUBE TERMINAL LIGHT DUTY



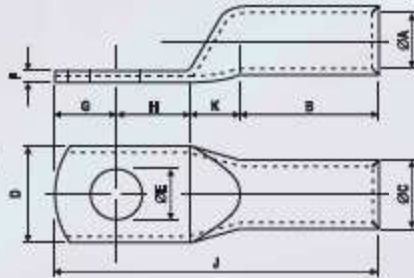
MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

MM ²	ØE BOLT MM	ØA	ØC	D	F	B	K	H	G	J	CAT NO.
2.5	M5	2.0	3.7	9	1.0	7	3	5	5	20	JCUS-05
4.0	M6	3.1	4.8	11	1.0	7	3	6	6	22	JCUS-06
6.0	M6	3.8	5.5	11	1.0	9	3	6	6	24	JCUS-07
10	M6	4.0	6.2	11	1.3	9	3	6	6	24	JCUS-08
16	M6	5.3	7.1	11	1.6	12	4	8	6	30	JCUS-09
25	M6	7.0	9.0	13	2.0	12	5	12	8	37	JCUS-10
35	M6	8.0	10.0	15	2.0	12	5	12	8	37	JCUS-11
35	M8	8.0	10.0	15	2.0	12	5	12	8	37	JCUS-12
50	M6	9.2	11.2	16	2.0	16	8	11	10	45	JCUS-13
50	M8	9.2	11.2	16	2.0	16	8	11	10	45	JCUS-14
50	M10	9.2	11.2	16	2.0	16	8	11	10	45	JCUS-15
70	M8	11.6	13.8	20	2.2	18	10	15	13	56	JCUS-16
70	M10	11.6	13.8	20	2.2	18	10	15	13	56	JCUS-17
70	M12	11.6	13.8	20	2.2	18	10	15	13	56	JCUS-18
95	M10	12.8	15.6	23	2.8	20	10	15	13	58	JCUS-19
95	M12	12.8	15.6	23	2.8	20	10	15	13	58	JCUS-20
120	M10	14.8	17.8	26	3.0	22	10	16	14	62	JCUS-21
120	M12	14.8	17.8	26	3.0	22	10	16	14	62	JCUS-22
120	M16	14.8	17.8	25	3.0	22	10	16	14	62	JCUS-23
150	M10	16.0	19.6	28	3.6	26	11	18	15	70	JCUS-24
150	M12	16.0	19.6	28	3.6	26	11	18	15	70	JCUS-25
150	M16	16.0	19.6	28	3.6	26	11	18	15	70	JCUS-26
185	M12	18.0	22.0	32	4.0	30	11	21	21	83	JCUS-27
185	M16	18.0	22.0	32	4.0	30	11	21	21	83	JCUS-28
225	M16	20.0	24.0	35	4.0	34	13	24	24	95	JCUS-231
240	M16	22.0	26.0	38	4.0	36	13	24	24	97	JCUS-29
240	M20	22.0	26.0	38	4.0	36	13	24	24	97	JCUS-30
300	M16	24.0	28.7	42	4.7	39	13	26	25	103	JCUS-31
300	M20	24.0	28.7	42	4.7	39	13	26	25	103	JCUS-32
400	M20	28.0	33.2	49	5.2	44	18	27	27	116	JCUS-33
500	M20	30.0	36.0	53	6.0	48	18	27	27	120	JCUS-34
630	M20	35.0	41.5	61	6.5	55	18	33	31	137	JCUS-35
800		39.0	46.3	67	7.3	65	25	38	37	165	JCUS-062
1000		43.0	53.8	76	10.8	90	30	45	45	210	JCUS-076

COPPER TUBE TERMINAL HEAVY DUTY LONG BARREL

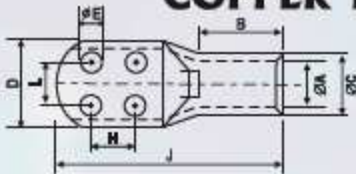
MATERIAL :
COPPER TUBE TO BS 1977/SH191 (PART V)
E. C. GRADE 99.25% IACS

FINISH :
ELECTRO TINNED TO BS 1872 (1984)



MM ²	ØE BOLT	ØA	ØC	D	F	B	K	H	G	J	CAT NO
25	M8	7.0	9.0	13	2.0	16	5	12	8	41	JCUS-282
35	M8	8.0	10.6	15	2.6	20	5	14	9	48	JCUS-283
50	M8	9.2	12.2	17	3.0	26	7	16	10	59	JCUS-284
70	M10	11.5	15.0	20	3.5	28	7	19	12	66	JCUS-285
95	M12	12.8	17.0	24	4.2	32	10	20	12	74	JCUS-286
120	M12	14.8	19.6	28	4.8	35	10	23	14	82	JCUS-287
150	M12	16.0	21.2	30	5.2	38	10	24	14	86	JCUS-288
185	M12	18.0	24.0	34	6.0	43	12	23	17	95	JCUS-289
240	M16	22.0	28.0	40	6.0	50	12	30	20	112	JCUS-290
300	M20	23.5	30.0	43	6.5	55	12	31	22	120	JCUS-291
400	M20	26.8	34.8	50	8.0	58	12	40	25	135	JCUS-292

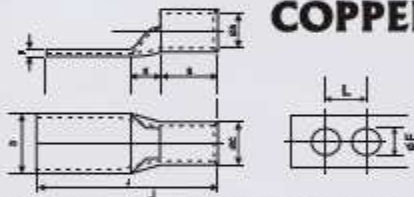
CRIMPING TYPE TINNED COPPER TRANSFORMER TERMINAL ENDS



MATERIAL : ELECTROLYTIC COPPER **FINISH :** ELECTRO TINNED

MM ²	ØE	ØA	ØC	D	B	L	H	J	CAT NO	
500	8.5	30	39	56	48	30	25	124	JCUS-500	4-M8
500	10.5	30	39	56	48	30	25	124	JCUS-500	4-M10
630	8.5	35	45	65	56	34	35	144	JCUS-630	4-M8
630	10.5	35	45	65	56	34	35	144	JCUS-630	4-M10

CRIMPING TYPE TINNED COPPER EXTENDED PALM / 2 HOLE LUGS



CENTRE DISTANCE 'L' AND HOLE SIZE 'E'
AS PER CUSTOMERS REQUIREMENT



MATERIAL : ELECTROLYTIC COPPER **FINISH :** ELECTRO TINNED

MM ²	ØA	ØC	D	F	B	K	G+H	J	CAT NO
50	9.5	12.4	18	2.9	16	6	42	64	JCUS-466
70	11.2	14.7	21	3.5	18	7	50	75	JCUS-467
95	13.5	17.4	25	3.9	20	9	52	81	JCUS-468
120	15.0	19.4	28	4.4	22	10	56	88	JCUS-469
150	16.5	21.2	30	4.7	26	11	64	101	JCUS-470
185	18.5	23.5	34	5.0	32	12	68	112	JCUS-471
240	21.0	26.5	38	5.5	38	14	80	132	JCUS-472
300	23.5	30.0	43	6.5	42	15	88	145	JCUS-473
400	28.5	36.5	53	8.0	44	18	104	166	JCUS-474
500	30.0	39.0	56	9.0	48	20	112	180	JCUS-475
625	35.0	45.0	65	10.0	56	22	132	210	JCUS-476



JOINTWEL

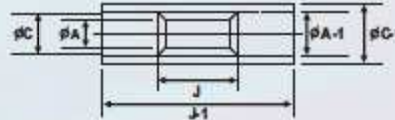
COPPER TUBE IN-LINE CONNECTOR



MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

MM ²	φA	φC	J	CAT NO
1.5	1.6	3.2	15	JEH-453
2.5	2.4	4.0	15	JEH-454
4-6	3.5	5.5	15	JEH-455
4.0	3.1	4.8	15	JCB-3
6.0	3.8	5.5	15	JCB-4
10	4.5	6.2	20	JEH-460
16	5.4	7.1	20	JCB-6
25	6.8	8.8	32	JCB-24
35	8.2	10.6	36	JCB-25
50	9.5	12.4	40	JCB-26
70	11.2	14.7	40	JCB-51
95	13.5	17.4	45	JCB-52
120	15.0	19.4	45	JCB-53
150	16.5	21.2	55	JCB-54
185	18.5	23.5	65	JCB-55
240	21.0	26.5	80	JCB-56
300	23.5	30.0	85	JCB-57
400	26.8	34.8	90	JCB-58
500	30.0	39.0	100	JCB-59
630	35.0	45.0	110	JCB-61

COPPER INSULATED IN-LINE CONNECTOR



MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED INSULATION PVC

MM ²	φA	φC	φA-1	φC-1	J-1	J	CAT NO
1.5	1.6	3.2	3.3	4.9	25	15	JEH-463
2.5	2.4	4.0	4.1	5.5	25	15	JEH-464
4-6	3.5	5.5	5.6	7.2	27	15	JEH-465

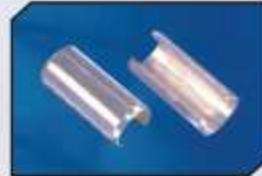
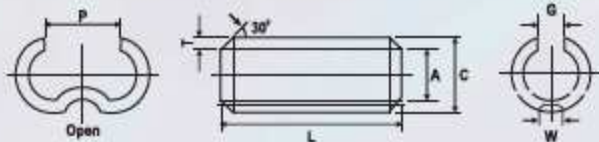
COPPER TUBE IN-LINE CONNECTOR



MATERIAL : ELECTROLYTIC COPPER
FINISH : ELECTRO TINNED

MM ²	φA	φC	J	CAT NO
1.5	1.8	3.7	12	JCB-41
2.5	2.4	4.0	15	JEH-454
4.0	3.1	4.8	15	JCB-3
6.0	3.8	5.5	15	JCB-4
10	4.5	6.2	20	JEH-460
16	5.4	7.1	20	JCB-6
20	6.0	7.7	22	JCB-47
25	6.8	8.8	32	JCB-24
35	8.2	10.6	36	JCB-25
50	9.5	12.4	40	JCB-26
70	11.2	14.7	40	JCB-51
95	13.5	17.4	45	JCB-52
120	15.0	19.4	45	JCB-53
150	16.5	21.2	55	JCB-54
185	18.5	23.5	65	JCB-55
240	21.0	26.5	80	JCB-56
300	23.5	30.0	85	JCB-57
400	26.8	34.8	90	JCB-58
500	30.0	39.0	100	JCB-59
550	31.7	41.4	100	JCB-60
630	35.0	45.0	110	JCB-61
800	39.0	50.6	150	JCB-42
1000	43.0	56.2	170	JCB-43

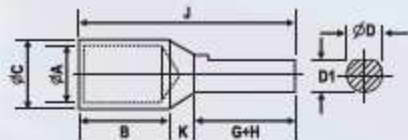
TINNED COPPER WEAK BACK SOLDERING FERRULES FOR ALUMINIUM CONDUCTORS



MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

MM ²	#A	#C	G	L	T	P	W	CAT NO
6	3.0	4.6	2	20	0.8	3	-	JWB-279
10	4.4	6.0	2	25	0.8	4	-	JWB-280
16	5.5	7.5	2	25	1.0	5	1.5	JWB-281
25	7.0	9.0	2	30	1.0	7	1.5	JWB-282
35	8.0	10.4	2	35	1.2	8	1.5	JWB-283
50	9.5	11.9	2	40	1.2	9	1.5	JWB-284
70	12.0	14.8	3	45	1.4	12	3	JWB-285
95	13.5	16.3	3	50	1.4	13	3	JWB-286
120	15.5	18.7	4	55	1.6	15	3	JWB-287
150	17.0	20.6	4	60	1.8	16	3	JWB-288
185	18.5	22.9	4	65	2.2	18	5	JWB-289
225	20.5	24.9	5	75	2.2	20	5	JWB-290
240	22.0	26.4	5	80	2.2	21	5	JWB-291
300	24.0	29.6	5	85	2.8	23	5	JWB-292
400	28.5	34.7	7	95	3.1	27	5	JWB-293
500	30.5	37.5	7	105	3.5	30	5	JWB-294
625	34.5	42.5	8	115	4.0	33	5	JWB-295

COPPER REDUCER TERMINAL



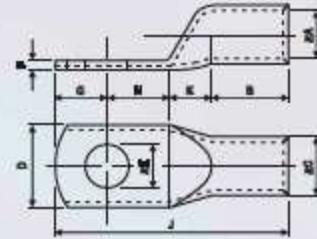
MATERIAL : ELECTROLYTIC COPPER BS 1977 / IS 191 (PART V)
FINISH : ELECTRO TINNED

MM ²	#A	#C	#D	D-1	B	K	G+H	J	CAT NO
2.5	2.5	4.7	3.8	3.3	6	4	10	20	JWPC-7
4	2.8	4.7	3.8	3.3	6	4	10	20	JWPC-16
6	3.1	4.7	3.8	3.3	6	4	10	20	JWPC-18
10	3.8	5.5	3.8	3.3	9	4	10	23	JWPC-20
10	4.4	6.2	3.8	3.3	9	4	10	23	JWPC-22
16	5.3	7.1	3.8	3.3	13	4	13	30	JWPC-2
25	7.0	9.0	6.0	5.5	12	5	15	32	JWPC-25
35	8.0	10.0	7.5	6.5	12	5	20	37	JWPC-4
50	9.2	11.2	7.5	6.5	16	5	20	41	JWPC-26
70	11.3	13.8	7.5	6.5	18	5	20	43	JWPC-27
95	12.8	15.6	11.5	10.5	20	6	25	51	JWPC-29
120	14.8	17.8	11.5	10.5	22	6	32	60	JWPC-35
150	16	19.6	11.5	10.5	26	6	32	64	JWPC-37
185	18.0	22.0	11.5	10.5	32	6	32	70	JWPC-38
225	20.0	26.0	15.6	14.0	38	8	32	78	JWPC-39
240	21.2	26.0	15.6	14.0	38	8	32	78	JWPC-43
300	24.0	28.7	16.0	15.0	42	8	42	92	JWPC-45
400	27.0	33.2	15.6	14.0	46	12	32	90	JWPC-101



JOINTWEL

ALUMINIUM TUBE TERMINALS

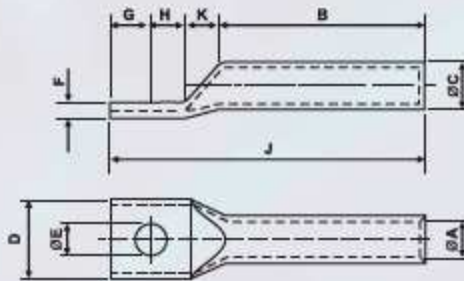


MATERIAL : ELECTROLYTIC ALUMINIUM TO IS 5082 GR TI-E-IS 8309
FINISH : NATURAL

MM ²	øE	øA	øC	D	F	B	K	G+H	J	CAT
2.5	M3	2.0	5.5	7.0	3.5	7	3	8	18	JALS-151
2.5	M3.5	2.6	5.5	7.0	2.9	7	3	8	18	JALS-309
4	M4	2.9	5.5	7.0	2.6	7	3	8	18	JALS-155
4	M5	2.9	5.5	12.0	1.2	7	4	13	24	JALS-317
6	M5	3.5	5.5	8.0	2.0	7	4	13	24	JALS-158
6	M6	3.5	5.5	12.0	1.1	7	4	13	24	JALS-313
10	M6	4.4	7.2	10.0	2.8	9	4	17	30	JALS-214
10	M8	4.4	7.2	15.0	1.8	9	4	17	30	JALS-215
16	M6	5.4	8.3	11.0	2.9	13	4	20	37	JALS-252
16	M8	5.4	8.3	11.0	2.9	13	4	20	37	JALS-216
16	M10	5.4	8.3	18.0	1.8	13	4	20	37	JALS-217
25	M8	7.0	9.7	14.0	3.0	16	7	21	44	JALS-218
25	M10	7.0	9.7	20.0	1.7	16	7	21	44	JALS-219
25	M12	7.0	9.7	20.0	1.7	16	7	21	44	JALS-220
35	M8	8.0	10.8	15.0	2.8	18	7	22	47	JALS-221
35	M10	8.0	10.8	20.0	2.1	18	7	22	47	JALS-222
50	M8	9.3	13.0	18.0	3.7	22	8	24	54	JALS-255
50	M10	9.3	13.0	23.0	2.8	22	8	24	54	JALS-312
50	M12	9.3	13.0	23.0	2.8	22	8	24	54	JALS-224
70	M8	11.5	16.0	22.0	4.4	26	8	26	60	JALS-256
70	M10	11.6	16.0	22.0	4.4	26	8	26	60	JALS-225
70	M12	11.6	16.0	22.0	4.4	26	8	26	60	JALS-226
95	M10	12.9	17.1	25.0	4.2	28	8	28	64	JALS-227
95	M12	12.9	17.1	25.0	4.2	28	8	28	64	JALS-228
95	M16	12.9	17.1	25.0	4.2	28	8	28	64	JALS-229
120	M10	15.0	19.6	28.0	4.8	32	11	30	73	JALS-257
120	M12	15.0	19.6	28.0	4.8	32	11	30	73	JALS-230
120	M16	15.0	19.6	28.0	4.8	32	11	30	73	JALS-231
150	M10	16.5	21.5	31.0	5.1	34	11	34	79	JALS-258
150	M12	16.5	21.5	31.0	5.1	34	11	34	79	JALS-232
150	M16	16.5	21.5	31.0	5.1	34	11	34	79	JALS-233
185	M10	18.5	24.0	34.0	5.7	36	12	36	84	JALS 311
185	M12	18.5	24.0	34.0	5.7	36	12	36	84	JALS-234
185	M16	18.5	24.0	34.0	5.7	36	12	36	84	JALS-235
225	M12	21.0	27.0	39.0	6.4	40	14	40	94	JALS-320
240	M12	22.0	28.6	40.0	6.0	44	14	44	102	JALS-236
240	M16	22.0	28.6	40.0	6.0	44	14	44	102	JALS-237
300	M16	25.0	32.0	45.7	7.0	47	14	54	115	JALS-300
300	M20	25.0	32.0	45.7	7.0	47	14	54	115	JALS-259
400	M20	29.0	37.5	51.0	8.0	56	13	61	130	JALS-260
500	M20	31.0	41.0	58.0	11.0	60	15	65	140	JALS-296
630	M20	36.0	46.0	66.0	11.0	69	16	69	154	JALS-261
800	M20	39.0	51.0	73.0	12.0	77	25	78	180	JALS-318
1000	-	43.5	57.0	81.0	13.5	100	30	90	220	JALS-319



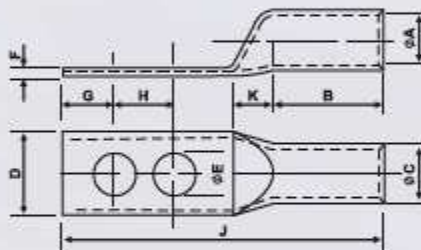
ALUMINIUM TERMINAL ENDS LONG BARREL FOR AL-XLPE CONDUCTORS



MATERIAL : ELECTROLYTIC ALUMINIUM TO IS 5082
FINISH : NATURAL

MM ²	ØE	ØA	ØC	D	F	B	K	H	G	J	CAT NO
25	8.2	7.2	9.6	14.0	2.4	41	7	12	9	69	JALS-XL-17
35	8.2	8.3	11.1	16.0	2.8	50	7	11	11	79	JALS-XL-18
50	10.2	10.1	13.5	19.5	3.4	49	8	13	11	81	JALS-XL-19
70	10.2	10.2	14.5	20.5	4.3	62	8	13	13	96	JALS-XL-20
95	13.0	12.0	16.9	23.5	4.9	73	8	14	14	109	JALS-XL-21
120	13.0	13.7	19.0	26.5	5.3	73	11	15	15	114	JALS-XL-22
150	13.0	15.1	21.1	29.5	6.1	83	11	17	17	128	JALS-XL-23
185	13.0	16.6	23.9	33.0	7.3	83	12	18	18	131	JALS-XL-24
225	13.0	18.6	26.1	36.0	7.5	86	14	20	20	140	JALS-XL-25
240	13.0	19.3	27.2	37.5	7.9	86	14	22	22	144	JALS-XL-26
300	20.3	21.8	30.2	42.0	8.4	89	14	27	27	157	JALS-XL-27
400	20.3	25.0	34.8	48.0	9.8	113	13	30	30	187	JALS-XL-28
500	20.3	28.2	39.1	54.0	11.0	125	15	32	32	205	JALS-XL-29
630	20.3	31.7	44.4	61.0	13.0	140	16	34	34	225	JALS-XL-30
800	20.3	35.7	49.5	68.0	13.8	147	25	39	39	250	JALS-XL-31
1000	20.3	41.0	56.0	77.5	15.0	160	30	45	45	280	JALS-XL-32

ALUMINIUM TUBE TERMINALS - TWO HOLES

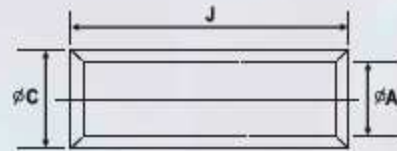
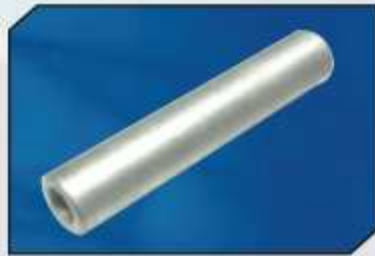


MATERIAL : ELECTROLYTIC ALUMINIUM TO IS 5082
FINISH : NATURAL

MM ²	ØE	ØA	ØC	D	F	B	K	G+H	J	CAT NO
150	M16	16.1	21.2	30.5	5.2	70.5	10.0	55.4	151.5	JALS-701
240	M12	21.5	28.0	41.0	6.0	64.0	14.0	62.3	164.8	JALS-702
300	M16	24.0	31.0	45.0	7.0	99.5	16.2	77.6	211.5	JALS-703
300	M20	24.0	31.0	45.0	7.0	99.5	16.2	77.6	211.5	JALS-704
300	M16	25.0	32.0	46.3	7.0	105	14.0	70.0	218.0	JALS-705
630	M20	36.0	46.0	65.9	10.0	100	16.0	104.0	255.0	JALS-705



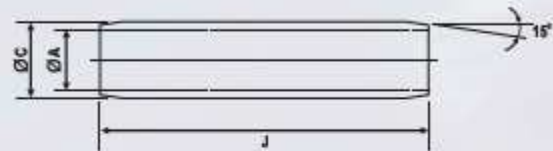
ALUMINIUM IN-LINE CONNECTOR



MATERIAL : ELECTROLYTIC ALUMINIUM TO IS 5082 GR TI-E-IS 8309
FINISH : NATURAL

MM ²	ØA	ØC	J	CAT NO
2.5	2.0	5.5	16	JALS-145
2.5	2.6	5.5	16	JALS-6
4.0	2.9	5.5	16	JALS-5
6.0	3.5	5.5	16	JALS-13
10	3.8	6.2	20	JALS-146
10	4.4	7.4	20	JALS-14
16	5.4	8.3	26	JALS-4
25	7.0	10.0	35	JALS-3
35	8.0	10.8	40	JALS-2
50	9.3	13.0	45	JALS-12
70	11.6	16.0	55	JALS-1
95	12.9	17.1	60	JALS-15
120	14.8	19.6	65	JALS-9
150	16.1	21.2	70	JALS-10
185	18.0	23.7	75	JALS-11
225	20.6	27.0	85	JALS-147
240	22.0	28.0	90	JALS-16
300	24.0	31.0	110	JALS-17
400	28.0	36.0	115	JALS-18
500	30.0	41.0	125	JALS-19
630	35.0	46.0	140	JALS-20
800	39.0	51.0	160	JALS-148
1000	43.5	57.0	210	JALS-149

ALUMINIUM FERRULES FOR ALUMINIUM XLPE CONDUCTORS

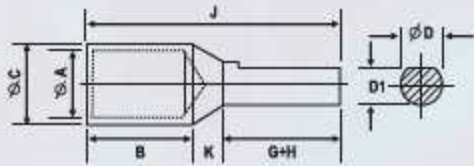


MATERIAL : ELECTROLYTIC ALU TO IS 5082 GR TI-E-IS 8309
FINISH : NATURAL

CONDUCTOR SIZE	ØA	ØC	J	CAT NO
25	7.2	9.6	82	JALS-XL-1
35	8.3	11.1	90	JALS-XL-2
50	10.1	13.5	100	JALS-XL-3
70	10.2	14.5	104	JALS-XL-4
95	12.0	16.9	108	JALS-XL-5
120	13.7	19.0	112	JALS-XL-6
150	15.1	21.2	116	JALS-XL-7
185	16.6	23.9	128	JALS-XL-8
225	18.6	26.1	136	JALS-XL-9
240	19.3	27.2	148	JALS-XL-10
300	21.8	30.2	160	JALS-XL-11
400	25.0	34.8	182	JALS-XL-12
500	28.2	39.1	190	JALS-XL-13
630	31.7	44.4	200	JALS-XL-14
800	35.7	49.5	225	JALS-XL-15
1000	41.0	56.0	250	JALS-XL-16



ALUMINIUM REDUCER TERMINAL



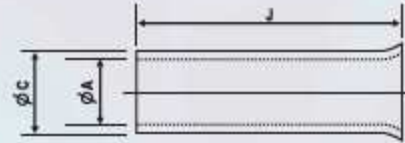
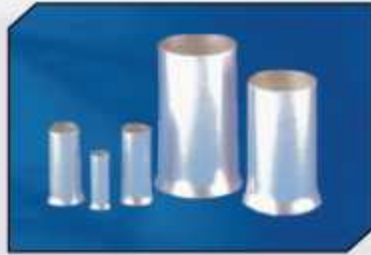
MATERIAL : ELECTROLYTIC ALUMINIUM TO IS 5082 GR T1-E-IS 8309
FINISH : NATURAL

MM ²	ϕA	ϕC	ϕD	D-1	B	K	G+H	J	CAT NO
2.5	2.0	5.5	4.5	4.0	7	4	10	21	JAWP-1
2.5	2.6	5.5	3.8	3.3	7	4	10	21	JAWP-7
4	2.9	5.5	4.5	4.0	7	4	10	21	JAWP-15
4	2.9	5.5	3.8	3.3	7	4	10	21	JAWP-16
6	3.5	5.5	4.5	4.0	7	4	10	21	JAWP-17
6	3.5	5.5	3.8	3.3	7	4	10	21	JAWP-18
10	3.8	7.4	4.5	4.0	9	4	10	23	JAWP-19
10	3.8	7.4	3.8	3.3	9	4	10	23	JAWP-20
10	4.4	7.4	4.5	4.0	9	4	10	23	JAWP-21
10	4.4	7.4	3.8	3.3	9	4	10	23	JAWP-22
16	5.4	8.3	6.0	5.5	13	5	15	33	JAWP-23
16	5.4	8.3	6.0	5.5	13	5	20	38	JAWP-24
16	5.4	8.3	3.8	3.3	13	5	13	31	JAWP-2
25	7.0	10.0	6.0	5.5	16	5	15	36	JAWP-25
25	7.0	10.0	7.5	6.5	16	5	20	41	JAWP-3
35	8.0	10.8	7.5	6.5	18	5	20	43	JAWP-4
50	9.3	13.0	7.5	6.5	22	5	20	47	JAWP-26
50	10.4	14.0	14	13	22	7	24	53	JAWP-5
70	11.6	16.0	7.5	6.5	26	5	20	51	JAWP-27
70	11.6	16.0	11.5	10.5	26	5	25	56	JAWP-6
70	11.6	16.0	11.5	10.5	26	5	32	63	JAWP-28
95	12.9	17.1	11.5	10.5	28	6	25	59	JAWP-29
95	12.9	17.1	15.6	14.0	28	6	27	61	JAWP-8
95	12.9	17.1	7.5	6.5	28	6	22	56	JAWP-31
95	12.9	17.1	12.8	11.8	28	6	32	66	JAWP-32
120	14.8	19.6	11.5	10.5	32	6	25	63	JAWP-33
120	14.8	19.6	7.5	6.5	32	6	22	60	JAWP-34
120	14.8	19.6	11.5	10.5	32	6	32	70	JAWP-35
120	14.8	19.6	15.6	14	32	6	32	70	JAWP-36
150	16.1	21.2	15.6	14	34	6	32	72	JAWP-10
150	16.1	21.2	11.5	10.5	34	6	32	72	JAWP-37
185	18.0	23.7	15.6	14	36	6	32	74	JAWP-30
185	18.0	23.7	11.5	10.5	36	6	32	74	JAWP-38
225	20.6	27.0	15.6	14	40	8	32	80	JAWP-39
225	20.6	27.0	21.0	18	40	8	42	90	JAWP-46
225	20.6	27.0	16.0	15	40	8	42	90	JAWP-42
240	22.0	28.0	16.0	15	44	8	42	94	JAWP-44
240	22.0	28.0	15.6	14	44	8	32	84	JAWP-43
300	24.0	31.0	16.0	15	47	8	42	97	JAWP-45
300	24.0	31.0	15.6	14	47	8	32	87	JAWP-47



JOINTWEL

END SEALING FERRULES



MATERIAL : ELECTROLYTIC COPPER BS 1977 / IS 191 (PART V)
FINISH : ELECTRO TINNED

MM ²	øA	øC	J	CAT NO
0.5	1.0-1.1	1.4-1.5	6	JEH-508
0.75	1.4-1.5	1.8-1.9	6	JEH-509
1.0	1.6-1.7	2.0-2.1	6	JEH-510
1.0	1.6-1.7	2.0-2.1	10	JEH-511
1.5	1.8-1.9	2.2-2.3	7	JEH-512
1.5	1.8-1.9	2.2-2.3	10	JEH-513
2.5	2.3-2.4	2.7-2.8	7	JEH-514
2.5	2.3-2.4	2.7-2.8	12	JEH-515
4.0	2.8-2.9	3.2-3.3	9	JEH-516
4.0	2.8-2.9	3.2-3.3	12	JEH-517
6.0	3.7-3.8	4.1-4.2	10	JEH-518
6.0	3.7-3.8	4.1-4.2	12	JEH-519
6.0	3.7-3.8	4.1-4.2	15	JEH-520
10	4.6-4.7	5.0-5.1	12	JEH-521
10	4.6-4.7	5.0-5.1	15	JEH-522
10	4.6-4.7	5.0-5.1	18	JEH-523
16	5.9-6.0	6.3-6.4	12	JEH-524
16	5.9-6.0	6.3-6.4	15	JEH-525
16	5.9-6.0	6.3-6.4	18	JEH-526
25	7.3	7.7	16	JEH-527
35	8.3	8.7	16	JEH-528

TWIN INSULATED BOOT LESS PIN TERMINALS



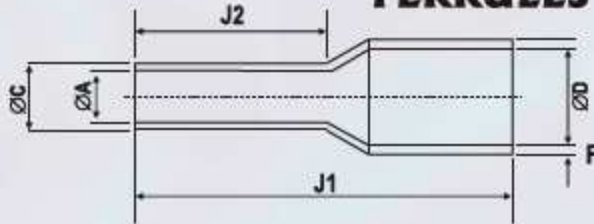
The twin wire Boot Less Pin Terminal range is specially designed to terminate 2 wires in the sameterminal. With the development of smaller switches & devices, housings have become smaller. The twin wire Boot Less Pin Terminal solves these Problems in a quick and easy way.

MATERIAL : ELECTROLYTIC COPPER BS 1977 / IS 191 (PART V)
FINISH : ELECTRO TINNED

Size 0.5 mm² to 6 mm² are available with colour coding

MM ²	0.5	0.75	1.0	1.5	2.5	4.0	6.0	10.0	16.0
FRENCH	White	Blue	Red	Black	Grey	Orange	Green	Brown	White
GERMAN	Orange	White	Yellow	Red	Blue	Grey	Black	Light Green	Green

INSULATED END SEALING FERRULES / BOOTLACE PINS



MATERIAL : ELECTROLYTIC COPPER BS 1977 / IS 191 (PART V)
FINISH : ELECTRO TINNED

MM ²	FRENCH	GERMAN	J 2	ØA	ØC	D	F	J 1	CAT NO.
0.5	White	Orange	6	1.1	1.5	2.6	0.5	12	JEHI-0.5 / 6
0.5	White	Orange	8	1.1	1.5	2.6	0.5	14	JEHI-0.5 / 8
0.5	White	Orange	10	1.1	1.5	2.6	0.5	16	JEHI-0.5 / 10
0.75	Blue	White	6	1.5	1.9	2.8	0.5	12	JEHI-0.75 / 6
0.75	Blue	White	8	1.5	1.9	2.8	0.5	14	JEHI-0.75 / 8
0.75	Blue	White	10	1.5	1.9	2.8	0.5	16	JEHI-0.75 / 10
0.75	Blue	White	12	1.5	1.9	2.8	0.5	18	JEHI-0.75 / 12
1.0	Red	Yellow	6	1.7	2.1	3.3	0.5	12	JEHI-1.0 / 6
1.0	Red	Yellow	8	1.7	2.1	3.3	0.5	14	JEHI-1.0 / 8
1.0	Red	Yellow	10	1.7	2.1	3.3	0.5	16	JEHI-1.0 / 10
1.0	Red	Yellow	12	1.7	2.1	3.3	0.5	18	JEHI-1.0 / 12
1.5	Black	Red	8	1.9	2.3	3.5	0.5	14	JEHI-1.5 / 8
1.5	Black	Red	10	1.9	2.3	3.5	0.5	16	JEHI-1.5 / 10
1.5	Black	Red	18	1.9	2.3	3.5	0.5	24	JEHI-1.5 / 18
2.5	Grey	Blue	8	2.4	2.8	4.2	0.5	14	JEHI-2.5 / 8
2.5	Grey	Blue	12	2.4	2.8	4.2	0.5	18	JEHI-2.5 / 12
2.5	Grey	Blue	18	2.4	2.8	4.2	0.5	24	JEHI-2.5 / 18
4	Orange	Grey	10	2.9	3.3	4.8	0.5	16	JEHI-4 / 10
4	Orange	Grey	12	2.9	3.3	4.8	0.5	18	JEHI-4 / 12
4	Orange	Grey	18	2.9	3.3	4.8	0.5	24	JEHI-4 / 18
6	Green	Black	10	3.8	4.2	6.3	0.5	18	JEHI-6 / 10
6	Green	Black	12	3.8	4.2	6.3	0.5	20	JEHI-6 / 12
6	Green	Black	15	3.8	4.2	6.3	0.5	23	JEHI-6 / 15
6	Green	Black	18	3.8	4.2	6.3	0.5	26	JEHI-6 / 18
10	Brown	Light Green	12	4.7	5.1	7.6	0.7	22	JEHI-10 / 12
10	Brown	Light Green	15	4.7	5.1	7.6	0.7	25	JEHI-10 / 15
10	Brown	Light Green	18	4.7	5.1	7.6	0.7	28	JEHI-10 / 18
16	White	Green	12	6.0	6.4	8.8	0.7	24	JEHI-16 / 12
16	White	Green	15	6.0	6.4	8.8	0.7	27	JEHI-16 / 15
16	White	Green	18	6.0	6.4	8.8	0.7	30	JEHI-16 / 18
25	Black	Orange	16	7.3	7.7		0.7		JEHI-25 / 16
25	Black	Orange	22	7.3	7.7		0.7		JEHI-25 / 22
35	Red	White	16	8.3	8.7		0.7		JEHI-35 / 16
35	Red	White	25	8.3	8.7		0.7		JEHI-35 / 25
50	Blue	Yellow	20	10.3	10.7		0.7		JEHI-50 / 20
50	Blue	Yellow	25	10.3	10.7		0.7		JEHI-50 / 25

INSULATED END SEALING FERRULES / BOOTLACE PINS PROVIDE NEAT END TERMINATION OF MULTI STRANDED WIRES AND REDUCES THE RISK OF WIRE STRAND SHORT CIRCUITING TO THE ADJUSANT TERMINATION. THE END SEALING FERRULES ARE MANUFACTURED FROM HIGH CONDUCTIVITY COPPER TUBES AND INSULATED WITH POLY PROPYLENE SLEEVES. THE INSULATING SLEEVES OVERLAPE THE INSULATION TO COVER EXPOSED AREA OF CONDUCTORS. TABLE SHOWS FERNCH & GERMAN PREFERRED COLOURS.

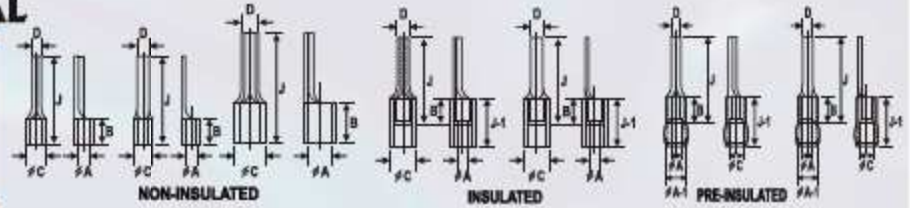
BIGGER SIZE CAN BE MANUFACTURED AGAINST SPECIFIC REQUIRMENT

THE END SEALING FERRULES / BOOTLACE PINE ARE SUITABLE TO USE IN TERMINAL BLOCKS AND CAPTIVE TERMINALS.



JOINTWEIL

PIN TERMINAL

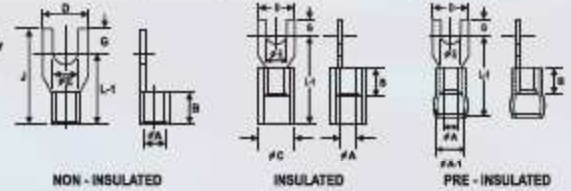


MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

NON-INSULATED									INSULATED		PRE-INSULATED	
MM ²	øA	øC	D	B	F	J	TYPE	CAT NO	J-1	CAT NO.	øA1	CAT NO
0.5	1.0	2.6	1.9	5	0.8	17	I	JCP-60				
1.5	1.6	3.2	1.9	5	0.8	17	I	JCP-9	10	JCPI-9	3.6	MIJCP-9
1.5	1.8	3.4	1.9	5	0.8	17	I	JCP-38	10	JCPI-38	3.6	MIJCP-38
1.5	1.6	3.2	3.1	5	0.8	17	II	JCP-35	10	JCPI-35	3.6	MIJCP-35
2.5	2.3	3.9	1.9	5	0.8	17	I	JCP-1	10	JCPI-1	4.4	MIJCP-1
2.5	2.3	3.9	3.1	5	0.8	17	II	JCP-2	10	JCPI-2	4.4	MIJCP-2
4	2.9	4.9	2.7	6	1.0	20	I	JCP-3	14	JCPI-3	6.4	MIJCP-3
4	3.6	5.6	5.1	6	1.0	20	II	JCP-4	14	JCPI-4	6.4	MIJCP-4
6	3.6	5.6	2.7	6	1.0	20	I	JCP-5	14	JCPI-5	6.4	MIJCP-5
6	4.0	6.0	2.7	6	1.0	20	I	JCP-6	14	JCPI-6	6.4	MIJCP-6
10	4.5	6.7	4.3	8	1.1	22	III	JCP-7	16	JCPI-7		
16	5.8	8.2	5.5	10	1.2	26	III	JCP-8	20	JCPI-8		
25	7.5	11.1	7.0	11	1.8	31	III	JCP-86				
35	9.0	12.6	8.0	12	1.8	37	III	JCP-87				
50	10.5	14.1	9.0	16	1.8	42	III	JCP-88				
70	12.0	16.0	10.0	18	2.0	45	III	JCP-94				



FORK TERMINAL

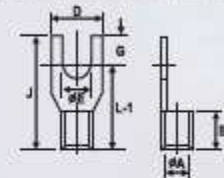


MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

NON-INSULATED								INSULATED			PRE-INSULATED		
MM ²	øE BOLT	øA	D	B	G	L-1	CAT NO	øC	L-1	CAT NO	øA-1	L-1	CAT NO
1.5	M 3.5	1.6	6.8	5	3.4	11.1	JF-7249	3.2	16.1	JFI-7926	3.6	16.1	MIJF-7935
2.5	M 3.5	2.3	6.5	5	3.2	11.8	JF-7251	3.9	21.8	JFI-7928	4.4	16.8	MIJF-7937
4 - 6	M 3	3.5	6.0	6	3.5	11.5	JF-7252	5.5	27.5	JFI-7930	6.4	20.5	MIJF-7939
4 - 6	M 3.5	3.5	6.0	6	4.0	11.0	JF-7253	5.5	27.0	JFI-7931	6.4	20.0	MIJF-7940



FORK TERMINAL

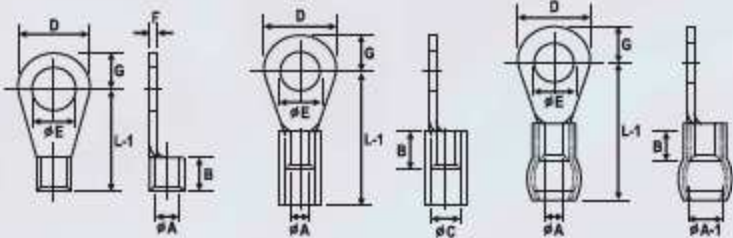


MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

MM ²	øE BOLT	øA	D	B	F	L-1	J	CAT NO
1.5	M3.5	1.6	6.8	5	0.8	8.8	13	JF-7249
1.5	M3.5	1.8	6.5	5	0.8	11.8	15	JF-8558
1.5	M4	1.8	8	5	0.8	13.0	18	JF-8559
2.5	M3.5	2.3	6.3	5	0.8	11.8	15	JF-7251
2.5	M4	2.3	8	5	0.8	13.0	18	JF-8515
2.5	M5	2.6	10.6	5	1.0	12.4	21	JF-7280
4	M4	3.1	8	6	1.0	14	19	JF-8516
4	M5	3.1	10	6	1.0	14.5	20	JF-8517
4 - 6	M3	3.5	6	6	1.0	11.5	15	JF-7252
4 - 6	M3.5	3.5	6	6	1.0	11.0	15	JF-7253
6	M5	3.5	10	6	1.0	14.5	20	JF-8518
6	M6	3.5	14.8	6	1.0	16.0	22	JF-8507
10	M5	4.5	10	8	1.0	18	24	JF-8572
10	M6	4.5	14.8	8	1.0	18	24	JF-8508
10	M6	4.5	16	8	1.2	19	27	JF-7254
10	M8	4.5	16	8	1.2	19	27	JF-7255
16	M4	5.9	8.3	10	1.5	18	23	JF-8673
16	M5	5.3	10	10	1.2	20	26	JF-8672
16	M6	5.9	14.8	10	1.2	20	26	JF-8509

JOINTWEL

RING TERMINAL



NON - INSULATED

INSULATED

PRE - INSULATED



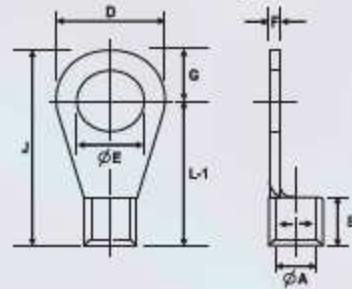
MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED INSULATION : PVC

NON-INSULATED								INSULATED			PRE-INSULATED		
MM ²	E	∅A	D	B	G	L-1	CAT NO	∅C	L-1	CAT NO	A-1	L-1	CAT NO
1.5	M3	1.6	6.0	5	3.0	11	JRS-7001	3.2	16	JRSI-7054	3.6	16	JMI-7437
1.5	M3.5	1.6	6.0	5	3.0	11	JRS-7002	3.2	16	JRSI-7055	3.6	16	JMI-7438
1.5	M4	1.6	6.0	5	3.0	11	JRS-7003	3.2	16	JRSI-7056	3.6	16	JMI-7439
1.5	M3.5	1.6	6.8	5	3.4	9.6	JRS-7048	3.2	14.6	JRSI-7058	3.6	14.6	JMI-7441
1.5	M4	1.6	6.8	5	3.4	9.6	JRS-7049	3.2	14.6	JRSI-7059	3.6	14.6	JMI-7442
1.5	M4	1.6	8.0	5	4.0	12.0	JRS-7004	3.2	17.0	JRSI-7061	3.6	17.0	JMI-7444
1.5	M5	1.6	8.0	5	4.0	12.0	JRS-7005	3.2	17.0	JRSI-7062	3.6	17.0	JMI-7445
1.5	M4	1.6	7.0	5	3.5	11.0	JRS-7154	3.2	16.0	JRSI-7063	3.6	16.0	JMI-7446
1.5	M5	1.6	10	5	5.0	13.0	JRS-7006	3.2	18.0	JRSI-7065	3.6	18.0	JMI-7448
1.5	M6	1.6	10	5	5.0	13.0	JRS-7007	3.2	18.0	JRSI-7066	3.6	18.0	JMI-7449
1.5	M6	1.6	12	5	6.0	12.0	JRS-7106	3.2	17.0	JRSI-7067	3.6	17.0	JMI-7450
2.5	M3	2.3	6.5	5	3.2	9.5	JRS-7107	3.9	14.5	JRSI-7068	4.4	17.7	JMI-7451
2.5	M3.5	2.3	6.5	5	3.2	9.5	JRS-7008	3.9	14.5	JRSI-7069	4.4	17.7	JMI-7452
2.5	M3.5	2.3	8.0	5	4.0	12.0	JRS-7108	3.9	17.0	JRSI-7070	4.4	17.0	JMI-7453
2.5	M4	2.3	8.0	5	4.0	12.0	JRS-7009	3.9	17.0	JRSI-7071	4.4	17.0	JMI-7454
2.5	M5	2.3	8.0	5	4.0	12.0	JRS-7010	3.9	17.0	JRSI-7072	4.4	17.0	JMI-7455
2.5	M5	2.3	10	5	5.0	13.0	JRS-7109	3.9	18.0	JRSI-7073	4.4	18.0	JMI-7456
2.5	M6	2.3	10	5	5.0	13.0	JRS-7011	3.9	18.0	JRSI-7074	4.4	18.0	JMI-7457
2.5	M5	2.3	12	5	6.0	16.0	JRS-7110	3.9	21.0	JRSI-7075	4.4	21.0	JMI-7458
2.5	M6	2.3	12	5	6.0	16.0	JRS-7012	3.9	21.0	JRSI-7076	4.4	21.0	JMI-7459
2.5	M8	2.3	12	5	6.0	16.0	JRS-7013	3.9	21.0	JRSI-7077	4.4	21.0	JMI-7460
2.5	M8	2.3	16	5	8.0	17.0	JRS-7014	3.9	22.0	JRSI-7079	4.4	22.0	JMI-7462
2.5	M10	2.3	16	5	8.0	17.0	JRS-7015	3.9	22.0	JRSI-7080	4.4	22.0	JMI-7463
2.5	M10	2.3	18	5	9.0	20.0	JRS-7151	3.9	25.0	JRSI-7081	4.4	25.0	JMI-7464
2.5	M12	2.3	18	5	9.0	20.0	JRS-7047	3.9	25.0	JRSI-7082	4.4	25.0	JMI-7465
4-6	M4	3.5	8.0	6	4.0	13.0	JRS-7155	5.5	21.0	JRSI-7083	6.4	22.0	JMI-7466
4-6	M5	3.5	8.0	6	4.0	13.0	JRS-7050	5.5	21.0	JRSI-7084	6.4	22.0	JMI-7467
4-6	M4	3.5	10	6	5.0	14.0	JRS-7112	5.5	22.0	JRSI-7085	6.4	23.0	JMI-7468
4-6	M5	3.5	10	6	5.0	14.0	JRS-7016	5.5	22.0	JRSI-7086	6.4	23.0	JMI-7469
4-6	M6	3.5	12	6	6.0	14.0	JRS-7017	5.5	22.0	JRSI-7089	6.4	23.0	JMI-7475
4-6	M8	3.5	12	6	6.0	14.0	JRS-7018	5.5	22.0	JRSI-7090	6.4	23.0	JMI-7473
4-6	M6	3.5	12	6	6.0	16.0	JRS-7019	5.5	24.0	JRSI-7092	6.4	25.0	JMI-7472
4-6	M5	3.5	8	6	4.0	18.8	JRS-7157	5.5	26.8	JRSI-7087	6.4	27.8	JMI-7470
4-6	M6	3.5	14	6	7.0	18.5	JRS-7115	5.5	26.5	JRSI-7093	6.4	27.5	JMI-7476
4-6	M8	3.5	14	6	7.0	18.5	JRS-7020	5.5	26.5	JRSI-7094	6.4	27.5	JMI-7477
4-6	M8	3.5	16	6	8.0	22.0	JRS-7116	5.5	30.0	JRSI-7096	6.4	31.0	JMI-7479
4-6	M10	3.5	16	6	8.0	22.0	JRS-7022	5.5	30.0	JRSI-7097	6.4	31.0	JMI-7480
4-6	M10	3.5	18	6	9.0	21.0	JRS-7023	5.5	29.0	JRSI-7099	6.4	30.0	JMI-7482
4-6	M12	3.5	18	6	9.0	21.0	JRS-7024	5.5	29.0	JRSI-7100	6.4	30.0	JMI-7483



JOINTWEIL

RING TERMINAL (NON-INSULATED)



MATERIAL : ELECTROLYTIC COPPER FINISH : ELECTRO TINNED

MM ²	ØE BOLT MM	SA	D	F	B	L-1	J	CAT NO
10	M 4	4.3	10	1.0	8	17	22	JRS-7118
10	M 5	4.3	10	1.0	8	17	22	JRS-7025
10	M 4	4.3	10	1.0	8	15	20	JRS-7119
10	M 5	4.3	10	1.0	8	15	20	JRS-7028
10	M 6	4.3	12	1.0	8	17	23	JRS-7120
10	M 8	4.3	16	1.0	8	19	27	JRS-7121
10	M 8	4.3	18	1.0	8	21	30	JRS-7122
10	M 10	4.3	18	1.0	8	21	30	JRS-7027
10	M 10	4.3	22	1.0	8	23	34	JRS-7123
10	M 12	4.3	22	1.0	8	23	34	JRS-7028
16	M 5	5.6	10	1.2	10	19	24	JRS-7124
16	M 5	5.6	12	1.2	10	20	26	JRS-7125
16	M 6	5.6	12	1.2	10	20	26	JRS-7029
16	M 6	5.6	16	1.2	10	22	30	JRS-7126
16	M 8	5.6	16	1.2	10	22	30	JRS-7030
16	M 10	5.6	16	1.2	10	22	30	JRS-7031
16	M 8	5.6	18	1.2	10	24	33	JRS-7127
16	M 10	5.6	18	1.2	10	24	33	JRS-7032
16	M 10	5.6	22	1.2	10	24	35	JRS-7128
16	M 12	5.6	22	1.2	10	24	35	JRS-7033
25	M 6	7.5	12	1.8	11	25	31	JRS-7156
25	M 8	7.5	12	1.8	11	25	31	JRS-7051
25	M 6	7.5	16	1.8	11	22	30	JRS-7129
25	M 8	7.5	16	1.8	11	22	30	JRS-7034
25	M 10	7.5	16	1.8	11	22	30	JRS-7035
25	M 6	7.5	16	1.8	11	25	33	JRS-7130
25	M 8	7.5	16	1.8	11	25	33	JRS-7036
25	M 10	7.5	18	1.8	11	25	34	JRS-7131
25	M 10	7.5	22	1.8	11	31	42	JRS-7132
25	M 12	7.5	22	1.8	11	31	42	JRS-7037
35	M 6	9.0	16	1.8	12	23	31	JRS-7133
35	M 8	9.0	16	1.8	12	23	31	JRS-7038
35	M 8	9.0	18	1.8	12	27	36	JRS-7134
35	M 10	9.0	18	1.8	12	27	36	JRS-7039
35	M 10	9.0	22	1.8	12	31	42	JRS-7135
35	M 12	9.0	22	1.8	12	31	42	JRS-7040
50	M 8	10.5	18	1.8	16	34	43	JRS-7136
50	M 10	10.5	18	1.8	16	34	43	JRS-7041
50	M 10	10.5	22	1.8	16	32	43	JRS-7137
50	M 10	10.5	24	1.8	16	36	48	JRS-7138
50	M 12	10.5	24	1.8	16	36	48	JRS-7042
50	M 16	10.5	32	1.8	16	38	54	JRS-7139
70	M 10	12.0	22	2.0	18	36	47	JRS-7140
70	M 12	12.0	22	2.0	18	36	47	JRS-7043
70	M 12	12.0	24	2.0	18	36	48	JRS-7141
70	M 16	12.0	28	2.0	18	40	54	JRS-7142
95	M 10	13.5	22	2.3	20	35	46	JRS-7143
95	M 10	13.5	24	2.3	20	38	50	JRS-7144
95	M 12	13.5	24	2.3	20	38	50	JRS-7044
95	M 16	13.5	28	2.3	20	44	58	JRS-7145
120	M 12	15.0	26	2.6	22	39	52	JRS-7146
120	M 20	15.0	40	2.6	22	52	72	JRS-7148
150	M 12	16.5	34	3.6	24	49	66	JRS-7149
150	M 16	16.5	34	3.6	24	49	66	JRS-7045
150	M 16	16.5	40	3.6	24	54	74	JRS-7150
150	M 20	16.5	40	3.6	24	54	74	JRS-7046



SNAP-ON TERMINAL



<p>J8197</p>	<p>J8245</p>	<p>J8324</p>	<p>J8325</p>	<p>J8331</p>	<p>J8336</p>
<p>J8347</p>	<p>J8348</p>	<p>J8349</p>	<p>J8350</p>	<p>J8351</p>	<p>J8352</p>
<p>J8353</p>	<p>J8354</p>	<p>J8355</p>	<p>J8356</p>	<p>J8357</p>	<p>J8358</p>
<p>J8359</p>	<p>J8362</p>	<p>J8363</p>	<p>J8364</p>	<p>J8365</p>	
<p>J8366</p>	<p>J8473</p>	<p>J8474</p>	<p>J8475</p>	<p>J8476</p>	



Product improvement is a continuous process. Hence, data given in this catalogue is subject to change without intimation. All dimensions in mm.

CABLE GLAND KIT



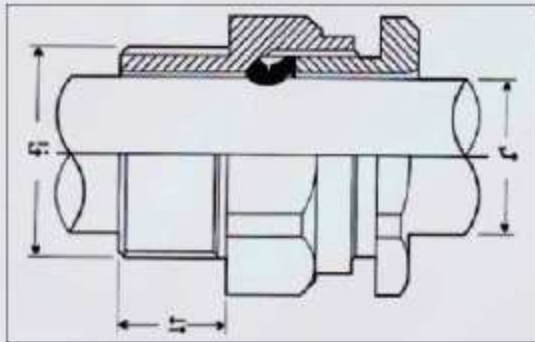
GLAND - SELECTION CHART

Nom. Area Mm ²	No. Of Cores													
	1	2	3	3½	4	5	7	10	12	19	27	37	48	
1.5	-	-	16	16	-	20S	20S	20S	20	20	25S	25	32	32
2.5	-	-	20S	20S	-	20S	20	20	25S	25S	25	32	32	40
4	-	-	20S	20	-	20	20	25S	32	32	32	40	-	-
6	-	-	20	20	-	20								
10	-	-	25S	20S	-	25S								
16	-	-	20	20S	-	25								
25	16	-	25S	25	32	32								
35	16	-	25	32	32	32								
50	25	25S	32	32	40	40								
70	35	25S	32	40	40	40								
95	50	25	40	40	50S	50S								
120	70	32	40	50S	50	50								
150	70	32	50S	50	50	63S								
185	95	32	50	50	63S	63								
240	120	40	50	63S	63	75S								
300	150	40	63S	63	75S	75								
300	185	-	-	-	75	-								
400	185	50S	63	75S	90S	90S								
500	-	50S	-	-	-	-								
630	-	50	-	-	-	-								
800	-	63S	-	-	-	-								
1000	-	63	-	-	-	-								

GLANDS MANUFACTURED TO
BS-6121 : PT.1 : 1989 FOR USE WITH
PVC, SWA, PVC 600/10000V CABLES
TO BS 6346 : 1989

NOTE : THIS CHART IS FOR
GUIDANCE ONLY - ACTUAL CABLE
DIMENSIONS SHOULD BE
CONSIDERED BEFORE MAKING
FINAL SELECTION
AS THESE MAY
VARY DUE TO THE MANUFACTURING
TOLERANCES PERMITTED
IN BS 6346 : 1989

CABLE GLANDS - TYPE A2



APPLICATION :
 IN OUTDOOR OR INDOOR WITH
 UNARMoured LEAD SHEATHED
 UNARMoured OR BRAIDED CABLE.

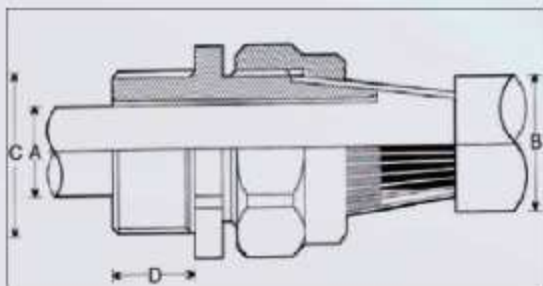
FUNCTION :
 A2 GLANDS OFFER A DUSTPROOF SEAL
 ON TO THE OUTER SHEATH OF
 AN UNARMoured, OR BRAIDED CABLE

STANDARD : BS 6121, PART 1, 1989
MECHANICAL : IMPACT RESISTANT
SIZE : A2 20S - 75L
MATERIAL : BRASS / ALUMINIUM
FINISH : MATT / NICKLE
GASKET : NEOPRENE
SHROUDS : PVC / LSF
KITS : A2 GLAND, SHROUDS, LOCKNUT

SIZE	THREAD SIZE 'C'		MIN. LENGTH OF THREAD 'D'	CABLE RANGE MAX 'A'
	MM	INCH		
A2 20S	20	¾	15	11.5
A2 20L	20	¾	15	15.0
A2 25S	25	1	15	17.0
A2 25L	25	1	15	20.5
A2 32S	32	1 ¼	15	24.0
A2 32L	32	1 ¼	15	26.5
A2 40S	40	1 ½	20	29.5
A2 40L	40	1 ½	20	34.2
A2 50S	50	2	20	41.2
A2 50L	50	2	20	45.2
A2 63S	63	2 ½	20	51.0
A2 63L	63	2 ½	20	56.7
A2 75S	75	3	20	62.5
A2 75L	75	3 ¼	20	68.8
A2 90	90	3 ½	20	84.0



CABLE GLANDS - TYPE BW



APPLICATION :
IN INDOOR AREAS WITH ARMoured
OR BRAIDED CABLE, INCLUDING
LEAD SHEATED.

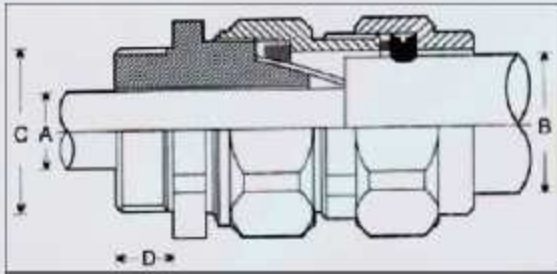
FUNCTION :
ALL GLANDS OFFER CLAMPING OF THE
ARMOUR OR BRAIDED

STANDARD : BS 6121, PART 1, 1989.
MECHANICAL : PROVIDES RETENTION OF
ARMOUR OR BRAID

SIZE : BW 20S - 75L
MATERIAL : BRASS / ALUMINIUM
FINISH : MATT / NICKLE
SHROUDS : PVC / LSF
KITS : BW GLAND, PVC SHROUD
LOCKNUT AND EARTH TAG.

SIZE	THREAD SIZE 'C'		MIN. LENGTH OF THREAD 'D'	CABLE RANGE	
	MM	INCH		MAX 'A'	MAX 'B'
BW 20S	20	¾	10	11.50	16.00
BW 20L	20	¾	10	14.30	20.60
BW 25S	25	1	10	16.20	22.90
BW 25L	25	1	10	21.00	27.70
BW 32S	32	1 ¼	10	25.70	32.00
BW 32L	32	1 ¼	10	25.50	33.90
BW 40S	40	1 ½	15	30.20	39.20
BW 40L	40	1 ½	15	32.20	40.70
BW 50S	50	2	15	39.70	48.60
BW 50L	50	2	15	43.50	53.00
BW 63S	63	2 ¼	15	50.00	59.20
BW 63L	63	2 ¼	15	65.00	65.00
BW 75S	75	3	15	62.00	71.50
BW 75L	75	3	15	67.20	78.00
Bw90	90	3 ½	20	84.00	96.00

CABLE GLANDS - TYPE CW



APPLICATION :
IN OUTDOOR AREAS WITH ARMoured
OR BRAIDED CABLE, INCLUDING LEAD SHEATED.

FUNCTION :
ALL GLANDS OFFER CLAMPING OF THE
ARMOUR OR BRAID AND A WEATHER SEAL TO
THE OUTER SHEATH OF THE CABLE.

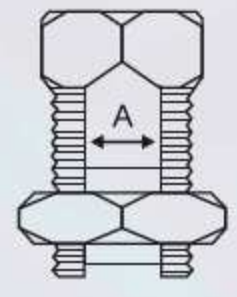
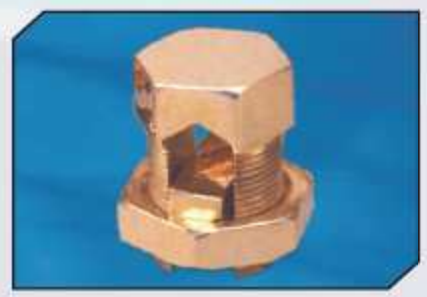
STANDARD : BS 6121, PART 1, 1989.
MECHANICAL : PROVIDES RETENTION OF
ARMOUR OR BRAID
SIZE : CW 20S - 75L
MATERIAL : BRASS / ALUMINIUM
FINISH : MATT / NICKLE
GASKET : NEOPRENE
SHROUDS : PVC / LSF
KITS : CW GLAND, SHROUD
LOCKNUT AND EARTH TAG.

SIZE	THREAD SIZE 'C'		MIN. LENGTH OF THREAD 'D'	CABLE RANGE	
	MM	INCH		MAX 'A'	MAX 'B'
CW 20S	20	¾	10	11.80	17.80
CW 20L	20	¾	10	15.00	20.80
CW 25S	25	1	10	17.60	24.00
CW 25L	25	1	10	20.00	27.40
CW 32S	32	1 ¼	10	25.70	32.20
CW 32L	32	1 ¼	10	26.00	34.20
CW 40S	40	1 ½	15	30.40	38.00
CW 40L	40	1 ½	15	33.20	40.50
CW 50S	50	2	15	39.70	47.00
CW 50L	50	2	15	43.50	54.00
CW 63S	63	2 ½	15	51.50	61.00
CW 63L	63	2 ½	15	55.00	66.00
CW 75S	75	3	15	62.50	74.50
CW 75L	75	3	15	67.80	77.50
CW 90	90	3 ½	20	84.00	96.00





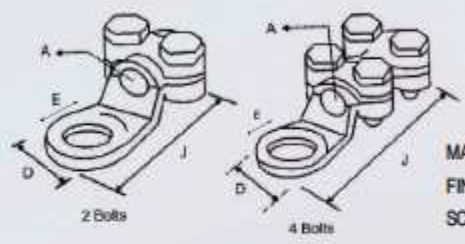
SPLIT BOLT CONNECTORS



MATERIAL : EXTRUDED / FORGED BRASS SECTION BS 2874
 FINISH : ELECTRO-TINNED / UNTINNED

CABLE SIZE MM ²	DIMENSIONS IN MM A	CAT. NO.
10	4.5	JSB - 10
16	6	JSB - 16
25	6.9	JSB - 25
35	8.1	JSB - 35
50	9.7	JSB - 50
70	11.2	JSB - 70
95	13.6	JSB - 95
100	14	JSB - 100
120	15	JSB - 120
150	16.6	JSB - 150
185	18.2	JSB - 185
240	21.4	JSB - 240
300	23.7	JSB - 300
400	26.2	JSB - 400
500	30.1	JSB - 500

MECHANICAL CABLE LUGS



MATERIAL : BRASS
 FINISH : ELECTRO TINNED
 SCREWS : ZINC PLATED STEEL

Size mm ²	DIMENSIONS IN MM				TYPE	SCREW SIZE	CAT. NO.
	A	E	D	J			
10	4.0	06.0	15.0	32.5	2 Bolt	M-5	JM2B-10
16	5.1	08.5	17.0	37.0	2 Bolt	M-5	JM2B-16
25	6.3	08.5	18.75	42.0	2 Bolt	M-5	JM2B-25
35	7.5	10.5	21.5	47.0	2 Bolt	M-5	JM2B-35
50	9.5	10.5	23.0	56.5	4 Bolt	M-6	JM4B-50
75	11.0	13.25	26.0	61.0	4 Bolt	M-6	JM4B-75
100	13.0	14.3	29.0	65.0	4 Bolt	M-6	JM4B-100
120	14.0	14.8	32.0	71.0	4 Bolt	M-6	JM4B-120
170	16.0	16.0	33.0	81.0	4 Bolt	M-8	JM4B-170
200	17.0	17.0	35.0	85.0	4 Bolt	M-8	JM4B-200
250	18.0	17.0	38.0	87.5	4 Bolt	M-8	JM4B-250
300	21.0	19.8	45.0	118.0	4 Bolt	M-10	JM4B-300
400/500	25.5	22.0	53.0	132.0	4 Bolt	M-10	JM4B-400/500
700	34.0	22.0	60.0	150.0	4 Bolt	M-10	JM4B-700

EARTH ROD AND EARTH ROD ACCESSORIES



COPPER BONDED EARTH ROD:

COPPER BONDED EARTH RODS ARE BEST AND MOST ECONOMICAL EARTH RODS. THEY ARE MADE BY MOLECULARLY BONDING 99.9% ELECTROLYTIC COPPER ONTO HIGH TENSILE LOW CARBON STEEL OF BS 4360 GRADE A. THE RODS ARE HIGHLY RESISTANCE TO CORROSSION AND BECAUSE THE STEEL USED HAS VERY HIGH TENSILE STRENGTH, THE RODS CAN BE DRIVEN BY POWER HAMMERS TO GREATER DEAPTHS.THE THREADS ON COPPER BONDED STEEL EARTH RODS ARE FORMED BY ROLL THREADING AND THERE IS 'BUILT-IN' DRIVING TIP. THE ROLL THREADS PROVIDE EXTRA STRENGTH WHEREBY RISK OF CHIPPING WHILE DRIVING RODS IN GROUND IS ELIMINATED

NOMINAL DIAMETER (INCH)	LENGTH (MM)	THREAD DIAMETER (INCH)	SHANK DIAMETER (MM)	CAT NO.
3/8 "	1200	UNTREADED	9.5	JBR - 1
1/2 "	1200	9/16 "	12.7	JBR - 2
1/2 "	1500	9/16 "	12.7	JBR - 3
1/2 "	1800	9/16 "	12.7	JBR - 4
1/2 "	2400	9/16 "	12.7	JBR - 5
5/8 "	1200	5/8 "	14.2	JBR - 6
5/8 "	1500	5/8 "	14.2	JBR - 7
5/8 "	1800	5/8 "	14.2	JBR - 8
5/8 "	2400	5/8 "	14.2	JBR - 9
5/8 "	3000	5/8 "	14.2	JBR - 10
3/4 "	1200	3/4 "	17.2	JBR - 11
3/4 "	1500	3/4 "	17.2	JBR - 12
3/4 "	1800	3/4 "	17.2	JBR - 13
3/4 "	2400	3/4 "	17.2	JBR - 14
3/4 "	3000	3/4 "	17.2	JBR - 15



NOMINAL DIA MM	CAT NO.
1/2" COUPLING	JC - 1
5/8" COUPLING	JC - 2
3/4" COUPLING	JC - 3
1/2" DRIVING STUD	JD - 1
5/8" DRIVING STUD	JD - 2
3/4" DRIVING STUD	JD - 3



SOLID COPPER EARTH ROD:

ROD DIA (mm)	LENGTH (mm)	CAT NO.
15	1200	JCR - 1
15	1500	JCR - 2
20	1200	JCR - 3
20	1500	JCR - 4

SOLID COPPER EARTH RODS ARE MANUFACTURED IN BOTH THE TYPES WITH EXTERNAL THREADS AND INTERNAL THREADS. THE RODS ARE USED WHERE SOIL CONDITIONS ARE VERY AGGRESSIVE AND CORROSION IS VERY HIGH SUCH AS SOILS WITH HIGH SALT CONTENT.COPPER RODS GIVES EXCEPTIONALLY LONG LIFE.THE RODS ARE MANUFACTURED FROM HIGH CONDUCTIVITY HARD DRAWN COPPER TO BS 2874-C101.

FITTINGS :

- 1) DRIVING HEAD & DRIVING SPIKE ARE MADE OUT OF HIGH TENSILE STRENGTH STEEL.
- 2) INTERNAL COUPLING IS MADE FROM PHOSHPER BRONZE OR HIGH TENSILE BRASS DOWEL AND EXTERNALLY THREADED.



FLEXIBLE COPPER BRAID BOND



BRAID SIZE (MM)	MM ²	HOLE SIZE (MM)	HOLE CENTRES (MM)	CAT. NO.
25 X3.5	35	11	200	JFCBB - 1
25 X3.5	35	11	400	JFCBB - 2



EARTH ROD CLAMPS

VARIOUS TYPES OF EARTH CLAMPS ARE MANUFACTURED IN BRASS OR GUNMETAL.



Rod Clamp



**Rod to Cable Clamp
(Type G)**



**Rod to Tape Clamp
(Type A)**



**U-Bolt Rod Clamp
(Type E)**



U-Bolt Rod To Cable Clamp



**Rod to Cable Lug Clamp
(Type B)**

COPPER 'C'-CONNECTORS

MATERIAL : E - COPPER

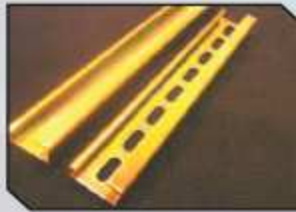
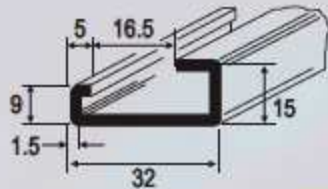
FINISH : ELECTRO TINNED / NATURAL FINISH

CABLE MAIN-TAP Mm ²	CAT. NO.
6-6	JCC 6-6
10-10	JCC 10-10
16-16	JCC 16-16
25-10	JCC 25-10
25-25	JCC 25-25
35-16	JCC 35-16
35-35	JCC 35-35
70-25	JCC 70-25
50-25	JCC 50-25
50-50	JCC 50-50
70-35	JCC 70-35
70-70	JCC 70-70
95-35	JCC 95-35
95-70	JCC 95-70
95-95	JCC 95-95
120-120	JCC 120-120
150-120	JCC 150-120
185-95	JCC 185-95

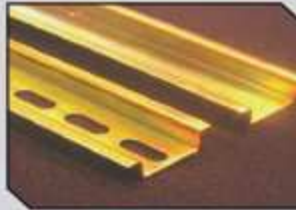
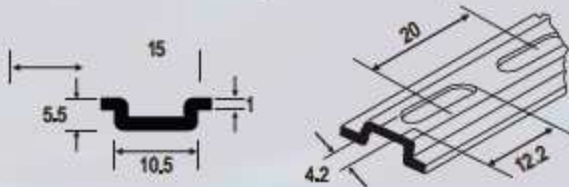


DIN Rail / Mounting Rail

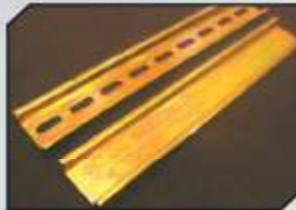
'G' Profile to BS 5825:1980 (EN 50035, DIN 46277-1)



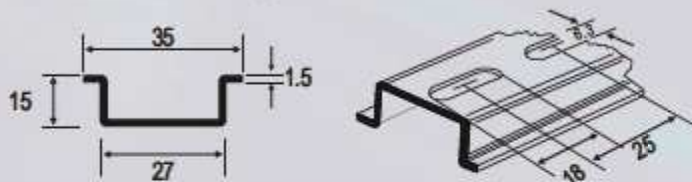
Miniature Type Top Hat Profile to BS 6273:1982 (EN 50045, DIN 46277-2)



DIN Rail / MCB / Mounting Rail
Standard Top Hat Profile to BS 5584:1978 (EN 50022, DIN 46277-3)



Deep Top Hat Profile to BS 5584:1978 (EN 50022, DIN 46277-3)



MATERIAL : COLD ROLLED STEEL

FINISHED : ZINC PLATED & PASSIVATED.

'G' PROFILE, STANDARD DIN / MCB RAIL & DEEP MCB RAILS ARE MANUFACTURED IN 1 M, 2 M & TO CUSTOMERS CUT LENGTH SIZES.

MINIATURE RAILS ARE MANUFACTURED IN 1 M LENGTH.

ALL RAILS ARE MANUFACTURED SLOTTED / UNSLOTTED AS PER CUSTOMER'S REQUIREMENT.

COPPER ALUMINIUM
BIMETAL WASHER



ALUMINIUM DIN RAIL

Size 35mm x 7.5mm



JOINTWELL

ELECTRICAL CONDUCTIVE GREASE



High Temperature, Conductive Anti-Corrosive Electrical Joint Compound For Installation of Aluminium Conductors Using Aluminium Lug or Copper-Aluminium Bimetal Lugs.

This Compound has metallic particles which helps in breaking oxide film at the time of crimping, whereby intimate metal to metal contact between terminal and conductor is established as a result lower contact resistance at the joint and it helps in sealing air and moisture effect to the joint



ISO 9001:2008 CERTIFIED COMPANY

ASSOCIATED ENGINEERS

Manufacturer & Exporter of

JOINTWELL Brand Cable Lugs, Inline Connectors, Pre-Insulated Terminals, Earth Rods, Din Rails, Split Bolt Connectors, Bootlace Pins, Bimetallic Lugs & Bimetallic Inline Connectors

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