

Bi-Metal Lugs

For Stranded Sector and Circular Stranded Aluminium Conductor

CABAC has a full range of Bi-Metal Lugs for most applications. We are able to produce special bi-metals including reverse bi-metals, should you require.

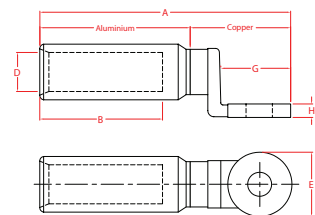
They are made from the highest quality aluminium (99.6%) and copper (99.9%) which are joined using a friction welding process, which produces a very strong electrically sound joint, which will not be subject to electrolysis.

The barrels are chemically treated to reduce contact resistance and corrosion. The barrels are filled with a jointing compound, which breaks the oxide layers on the aluminium. When crimping they should be crimped from the palm end first, to force the joint compound into conductor strands.

They are designed to be crimped using standard Australian tooling, using normal aluminium hexagonal dies.



Catalogue No.	Nominal Conductor (mm ²)	Stud Size	Dimensions (mm)						Crimp Die	Tooling	A/F Hex Die (mm)	No. of Crimps
			A	B	D	E	G	H				
BL16	16		75	32	5.5	20	24	4.5	HT-6/35AL		9.0	1
BL25-10	25	10	75	32	7.5	20	24	4.5	HT-6/35AL	HT131-C	9.0	1
BL25-12	25	12	75	32	7.5	20	24	4.5	HT-6/35AL		9.0	1
BL35-10	35	10	75	32	8.5	20	24	4.5	HT-6/35AL		9.0	1
BL35-12	35	12	75	32	8.5	20	24	4.5	HT-6/35AL		9.0	1
BL50-10	50	10	75	32	9.5	24	24	4.5	HT-50/70AL		13.2	1
BL50-12	50	12	75	32	9.5	24	24	4.5	HT-50/70AL	RH131-C	13.2	1
BL70-10	70	10	75	32	11.5	24	24	4.5	HT-50/70AL	RH131-C	13.2	1
BL70-12	70	12	75	32	11.5	24	24	4.5	HT-50/70AL		13.2	1
BL95-10	95	10	115	60	13.5	24	34	6	HT-95/120AL		17.3	2
BL95-12	95	12	115	60	13.5	24	34	6	HT-95/120AL	ECW-H30	17.3	2
BL120-10	120	10	115	60	15.5	30	34	6	HT-95/120AL	RH131-C	17.3	2
BL120-12	120	12	115	60	15.5	30	34	6	HT-95/120AL		17.3	2
BL150-10	150	10	120	60	16.5	30	38	7	HT-150/185AL		22.0	2
BL150-12	150	12	120	60	16.5	30	38	7	HT-150/185AL		22.0	2
BL185-10	185	10	120	60	18.5	35	38	7	HT-150/185AL		22.0	2
BL185-12	185	12	120	60	18.5	35	38	7	HT-150/185AL		22.0	2
BL240-10	240	10	135	60	22.0	35	44	7	HT-240/300AL		28.4	2
BL240-12	240	12	135	60	22.0	35	44	7	HT-240/300AL		28.4	2
BL300-10	300	10	135	60	23.5	36	44	7	HT-240/300AL		28.4	2
BL300-12	300	12	135	60	23.5	36	44	7	HT-240/300AL		28.4	2
BL300	300		135	60	23.5	36	44	7	HT-240/300AL		28.4	2
BL400	400		165	70	26.5	50	52	10	ECW-3D4/500AL		39.0	2
BL500	500		165	70	30.0	50	52	10	ECW-3D4/500AL		39.0	2
BL630	630		175	70	34.0	50	62	10	RHU520-800		43.2	2
BL800	800		220	115	39.0	50	62	10	RHU520-800		43.2	4
BL1000	1000		250	115	44.0	58	90	16	RHU520-1000AL		52.5	4



Technical Data

Conductive Material

Aluminium Sleeve 99.6% pure

Copper Palm 99.9% pure

Tensile Strength 110 MPa

Ductile Rating 28%

Final Metal State Fully Annealed inc. joint

Joining Method Friction Welding (IEC std)

Electrical Properties

Resistivity 2.6 micro-ohm cm (max): aluminium

1.738 micro-ohm cm: copper

Conductivity 61.8% IACS (min): aluminium

99.7% IACS: copper

Conformant Standards

AS/NZS4325 Part 1; IEC France;

DIN/VDE Germany; JIS Japan; BS United Kingdom

Torque Recommendations

For hardware being metric 8.8 tensile grade

Thread dia.(mm) Torque (Nm)

5 5

6 9

8 22

10 44

12 77

16 190

Operating Temperature

-40°C to 100°C