








SECTION 3

BI-METAL LUGS AND LINKS

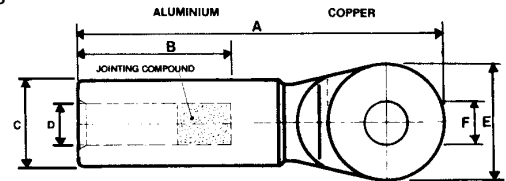
Copper to aluminium terminations can be made with the Utilux range of Bi-Metal products. Under normal conditions, when copper comes into contact with aluminium electrolytic corrosion may result, enhanced by the presence of oxygen. Utilux Bi-metal lugs have the copper friction welded to the aluminium. The friction welding process eliminates the presence of oxygen and therefore eliminates electrolytic corrosion. The welding process also maximises the strength of the joint.

The Bi-metal range includes lugs and links for both round and sector conductor. Included in the range are links for joining different sized aluminium conductor to copper conductor.

LUGS	STYLE	CONDUCTOR AREA	PAGE
	Bi-Metal Crimp Lug	16-800mm ²	24
	3 & 4 Core Sector Bi-Metal Lug	120-300mm ²	26
	Bi-Metal Rotating Lug	185-240mm ²	29
	Bi-Metal Long Palm Lug	240-800mm ²	30
	Bi-Metal Reverse Lug	25-120mm ²	30
STALK LUGS	STYLE	CONDUCTOR AREA	PAGE
	Bi-Metal Crimp Stalk Lug	16-630mm ²	28
	3 & 4 Core Sector Bi-Metal Stalk	70-300mm ²	28
LINKS	STYLE	CONDUCTOR AREA	PAGE
	Bi-Metal Crimp Link	16/10-630/630mm ²	25
	3 & 4 Core Sector Bi-Metal Link	70-300mm ²	27
	Bi-Metal Rotating Link	185-240mm ²	29

BI-METAL CRIMP LUG

- For aluminium to copper terminations • Friction welded
- Manufactured from high purity copper and aluminium rod
- Stepped barrel OD sizes across all bi-metal allows rationalisation of die inventory
- Pre-filled with jointing compound • Individually packed in sealed plastic bags
 - Reverse bi-metal (aluminium palm, copper barrel) lugs are manufactured to approved order quantities
 - Alternative sizes can be made to order for approved order quantities



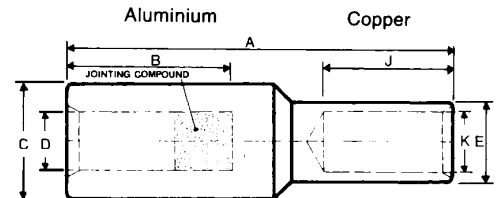
DESCRPT.	CAT NO.	CONDUCTOR AREA mm ²	STRANDING METRIC	DIMENSIONS mm					STUD SIZE F	PALM THICK	CRIMPING DIE
				A	B	C	D	E			
BG16MB BG16M10	H15304 H15305	16	7/1.70	75.0	32.0	12.0	5.5	22.0	MB M10	4.5	38-90AL
BG25MB BG25M10	H15306 H15307	25	19/1.35	75.0	32.0	12.0	7.0	22.0	MB M10	4.5	
BG35MB BG35M10 BG35M12	H15308 H15309 H15310	35	19/1.53	75.0	32.0	12.0	8.5	22.0	MB M10 M12	4.5	
BG50MB BG50M10 BG50M12	H15311 H15312 H15313	50	19/1.78	75.0	32.0	16.0	9.5	22.0	MB M10 M12	4.5	38-132AL
BG70MB BG70M10 BG70M12	H15314 H15315 H15316	70	19/2.14	75.0	32.0	16.0	11.0	22.0	MB M10 M12	4.5	
BG95MB BG95M10 BG95M12	H15317 H15318 H15319	95	37/1.78	115.0	60.0	21.5	13.0	32.0	MB M10 M12	6.0	38-173AL 40-172AL
BG120MB BG120M12 BG120M16	H15320 H15321 H15322	120	37/2.03	115.0	60.0	21.5	15.0	32.0	MB M12 M16	6.0	
BG150MB BG150M12 BG150M16	H15323 H15324 H15325	150	37/2.25	120.0	60.0	27.0	16.5	36.0	MB M12 M16	7.0	38-220AL 40-220AL
BG185MB BG185M12 BG185M16	H15326 H15327 H15328	185	37/2.52	120.0	60.0	27.0	18.5	36.0	MB M12 M16	7.0	
BG240MB BG240M12 BG240M16	H15329 H15330 H15331	240	61/2.25	130.0	60.0	35.0	21.0	42.0	MB M12 M16	7.0	38-284AL 40-283AL
BG300MB BG300M12	H15332 H15333	300	61/2.52	130.0	60.0	35.0	23.5	42.0	MB M12	7.0	
BG400MB	*H15334	400	61/2.85	160.0	70.0	47.0	26.5	50.0	MB	10.0	40-390AL
BG500MB	*H15335	500	61/3.20	160.0	70.0	47.0	29.5	50.0	MB	10.0	
BG630MB	*H15336	630	127/2.52	175.0	70.0	54.0	33.5	60.0	MB	10.0	40-432AL
BG800MB	*H15337	800	127/2.85	221.0	115.0	54.0	39.0	60.0	MB	10.0	

*Square palms

BI-METAL CRIMP LINK

Suitable for aluminium to copper in line terminations

- Friction welded
- Manufactured for high purity copper and aluminium rod
- Prefilled with joint compound
- Individually packed in sealed plastic bags

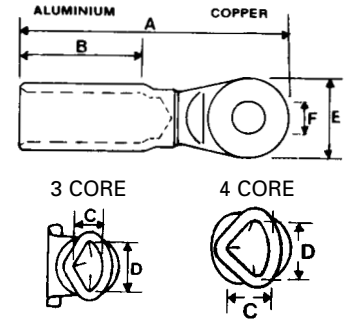


DESCRIPT.	CAT NO.	CONDUCTOR AREA mm ²	STRANDING METRIC	ALUMINIUM				CRIMPING DIE	COPPER			CRIMPING DIE
				A	B	C	D		E	J	K	
BK16/10	H15404	16/10	7/1.70-7/1.35	70.0	32.0	12.0	5.5	38-90AL	11.5	21.5	4.5	38-92CU
BK16/16	H15405	16/16	7/1.70-7/1.70								5.5	
BK25/16	H15406	25/16	19/1.35-7/1.70	70.0	32.0	12.0	7.0	38-90AL	11.5	21.5	5.5	
BK25/25	H15407	25/25	19/1.35-19/1.35								7.0	
BK35/25	H15408	35/25	19/1.53-19/1.35	70.0	32.0	12.0	8.5	38-90AL	11.5	21.5	7.0	
BK35/35	H15409	35/35	19/1.35-19/1.53								8.5	
BK50/35	H15410	50/35	19/1.78-19/1.53	70.0	32.0	16.0	9.5	38-132AL	11.5	21.5	8.5	38-92CU
BK50/50	H15411	50/50	19/1.78-19/1.78								9.5	
BK70/50	H15412	70/50	19/2.14-19/1.78	70.0	32.0	16.0	11.0	38-132AL	14.5	21.5	9.5	38-115CU
BK70/70	H15413	70/70	19/2.14-19/2.14								11.0	
BK95/70	H15414	95/70	37/1.78-19/2.14	110.0	60.0	21.5	13.0	38-173AL	14.5	32.0	11.0	38-115CU
BK95/95	H15415	95/95	37/1.78-37/1.78								13.0	
BK120/95	H15416	120/95	37/2.03-37/1.78	120.0	60.0	21.5	15.0	38-173AL	20.5	40.0	13.0	38-165CU
BK120/120	H15417	120/120	37/2.03-37/2.03								15.0	
BK150/120	H15418	150/120	37/2.25-37/2.03	120.0	60.0	27.0	16.5	38/40-220AL	20.5	40.0	15.0	38-165CU
BK150/150	H15419	150/150	37/2.25-37/2.25								16.5	
BK185/150	H15420	185/150	37/2.52-37/2.25	120.0	60.0	27.0	18.5	38/40-220AL	24.5	40.0	16.5	38-200CU
BK185/185	H15421	185/185	37/2.52-37/2.52								18.5	
BK240/185	H15422	240/185	61/2.25-37/2.52	122.0	60.0	35.0	21.0	38-284AL	24.5	40.0	18.5	38-200CU
BK240/240	H15423	240/240	61/2.25-61/2.25								21.0	
BK300/240	H15424	300/240	61/2.52-61/2.25	125.0	60.0	35.0	23.5	38-284AL	32.0	40.0	21.0	38-260CU
BK300/300	H15425	300/300	61/2.52-61/2.52								23.5	
BK400/300	H15426	400/300	61/2.85-61/2.52	153.0	70.0	47.0	26.5	40-390AL	32.0	55.0	23.5	40-260CU
BK400/400	H15427	400/400	61/2.85-61/2.85								26.5	
BK500/400	H15428	500/400	61/3.20-61/2.85	155.0	70.0	47.0	29.5	40-390AL	38.5	58.0	26.5	40-310CU
BK500/500	H15429	500/500	61/3.20-61/3.20								29.5	
BK630/500	H15430	630/500	127/2.52-61/3.20	160.0	70.0	54.0	33.5	40-432AL	38.5	58.0	29.5	40-310CU
BK630/630	H15431	630/630	127/2.52-127/3.20								33.5	

3 & 4 CORE SECTOR BI-METAL LUG - (solid only)



- Suitable for 3 or 4 core solid sector cable
- Clear markings on the barrel indicate the crimping sequence
 - Pre-filled with jointing compound
- Individually packed in sealed plastic bags
 - Friction welded
- For aluminium to copper termination and manufactured from high purity copper and aluminium rod

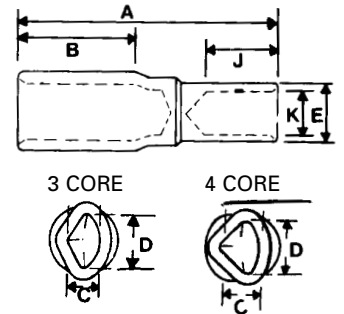


DESCRIPT.	CAT NO.	CONDUCTOR AREA mm ²	DIMENSIONS mm					STUD F	PALM THICK	38A DIES	
			A	B	C	D	E			NEST	INDENT
3 CORE											
BGS120MB	H15610	120	111	49	10.6	18.1	32	MB	6.0	12	16
BGS120M12	H15611										
BGS150MB	H15612	150	116	49	11.8	20.1	36	MB	7.0	12	17
BGS150M12	H15613										
BGS185MB	H15614	185	126	57	13.2	22.5	36	MB	7.0	12	18
BGS185M12	H15615										
BGS240MB	H15616	240	138	61	15.2	25.8	42	MB	7.0	12	19
BGS240M12	H15619							M12			
BGS240M16	H15617							M16			
BGS300MB	H15618	300	147	61	19.4	27.2	42	MB	7.0	12	21
4 CORE											
BGI120MB	H15660	120	111	49	12.1	17.1	32	MB	6.0	14	16
BGI120M12	H15661										
BGI185MB	H15664	185	126	57	15.1	21.2	36	MB	7.0	14	18
BGI185M12	H15665										
BGI240MB	H15666	240	136	61	17.5	24.6	42	MB	7.0	14	19
BGI240M16	H15667										
BGI300MB	H15668	300	147	61	19.4	27.2	42	MB	7.0	15	21
BGI300M16	H15669										

3 & 4 CORE SECTOR BI-METAL LINK - (solid only)



- Suitable for 3 or 4 core solid sector cable
- Clear markings on the barrel indicate the crimping sequence
 - Pre-filled with jointing compound
 - Individually packed in sealed plastic bags
 - Friction welded
 - For aluminium to copper termination
- Manufactured from high purity copper and aluminium rod

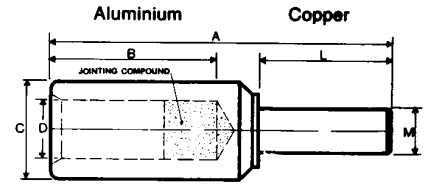


DESCRIPT.	CAT. NO.	ALUMINIUM				DIMENSIONS							COPPER	CRIMPING DIE
		CONDUCTOR AREA mm ² AL	38 DIES NEST	INDENT	STRANDING METRIC	A	B	C	D	E	J	K	CONDUCTOR AREA mm ² CU	
3 CORE														
BKS120/70	H15710	120	12	16	19/2.14	106.0	49.0	10.6	18.1	14.5	32.0	11.0	70	38-115CU
BKS120/120	H15711	120	12	16	37/2.03	116.0	49.0	10.6	18.1	20.5	40.0	15.0	120	38-165CU
BKS150/95	H15712	150	12	17	37/1.78	116.0	49.0	11.8	20.1	20.5	40.0	13.0	95	38-165CU
BKS150/150	H15713	150	12	17	37/2.25	116.0	49.0	11.8	20.1	24.5	40.0	16.5	150	38-200CU
BKS185/120	H15714	185	12	18	37/2.03	126.0	57.0	13.2	22.5	20.5	40.0	15.0	120	38-165CU
BKS185/185	H15715	185	12	18	37/2.52	126.0	57.0	13.2	22.5	24.5	40.0	18.5	185	38-200CU
BKS240/150	H15716	240	12	19	37/2.25	131.0	61.0	15.2	25.8	24.5	40.0	16.5	150	38-200CU
BKS240/240	H15717	240	12	19	61/2.25	134.0	61.0	15.2	25.8	32.0	40.0	21.0	240	38-260CU
4 CORE														
BKI70/50	H15756	70	14	14	19/1.78	88	43	9.0	13.5	14.5	22	9.5	50	38-115CU
BKI70/70	H15757	70	14	14	19/2.14	88	43	9.0	13.5	14.5	22	11.0	70	38-115CU
BKI95/70	H15758	95	14	15	19/2.14	106	49	10.5	14.8	14.5	32	11.0	70	38-115CU
BKI95/95	H15759	95	14	15	37/1.78	116	49	10.5	14.8	20.5	40	13.0	95	38-165CU
BKI120/70	H15760	120	14	16	19/2.14	106	49	12.1	17.1	14.5	32	11.0	70	38-115CU
BKI120/120	H15761	120	14	16	37/2.03	116	49	12.1	17.1	20.5	40	15.0	120	38-165CU
BKI150/95	H15762	150	14	17	37/1.78	116	49	13.6	19.1	20.5	40	13.0	95	38-165CU
BKI150/150	H15763	150	14	17	37/2.25	116	49	13.6	19.1	24.5	40	16.5	150	38-200CU
BKI185/120	H15764	185	14	18	37/2.03	126	57	15.1	21.2	20.5	40	15.0	120	38-165CU
BKI185/185	H15765	185	14	18	37/2.52	126	57	15.1	21.2	24.5	40	18.5	185	38-200CU
BKI240/150	H15766	240	14	19	37/2.25	131	61	17.5	24.6	24.5	40	16.5	150	38-200CU
BKI240/240	H15767	240	14	19	61/2.25	134	61	17.5	24.6	32.0	40	21.0	240	38-260CU
BKI300/185	H15768	300	14	21	37/2.52	140	61	19.4	27.2	24.5	40	18.5	185	38-200CU
BKI300/300	H15769	300	14	21	61/2.52	143	61	19.4	27.2	32.0	40	23.5	300	38-260CU



BI-METAL CRIMP STALK LUG

- Suitable for aluminium to copper terminations
 - Friction welded
- Manufactured from high purity copper and aluminium
- Prefilled with jointing compound
- Individually packed in sealed plastic bags



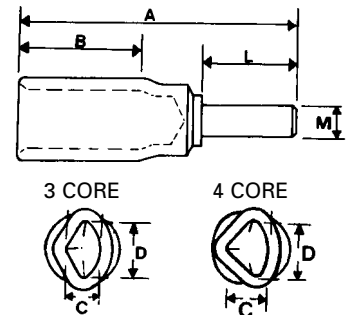
DESCRIPT.	CAT. NO.	CONDUCTOR AREA mm ²	STRANDING METRIC	A	B	C	D	L	M	CRIMPING DIE
BS16/12	H15502	16	7/1.70	70	32	12	5.5	30	12	38-90AL
BS25/12	H15503	25	19/1.35	70	32	12	7.0	30	12	
BS35/12	H15504	35	19/1.53	70	32	12	8.5	30	12	
BS50/12	H15505	50	19/1.78	70	32	16	9.5	30	12	38-132AL
BS70/12	H15506	70	19/2.14	70	32	16	11.0	30	12	
BS95/12	H15507	95	37/1.78	110	60	21.5	13.0	38	12	38-173AL 40-172AL
BS120/12	H15508	120	37/2.03	110	60	21.5	15.0	38	12	
BS120/14	H15509								14	
BS150/12	H15510	150	37/2.25	120	60	27	16.5	48	12	38-220AL 40-220AL
BS150/14	H15511								14	
BS185/16	H15512	185	37/2.25	120	60	27	18.5	48	16	38-284AL 40-283AL
BS185/18	H15513								18	
BS240/16	H15514	240	61/2.25	122	60	35	21.0	48	16	38-284AL 40-283AL
BS240/18	H15515								18	
BS300/16	H15516	300	61/2.52	122	60	35	23.5	48	16	38-284AL 40-283AL
BS300/18	H15517								18	
BS400/18	H15518	400	61/2.85	153	70	47	26.5	65	18	40-390AL
BS400/20	H15519								20	
BS500/18	H15520	500	61/3.20	153	70	47	29.5	65	18	40-390AL
BS500/20	H15521								20	
BS630/20	H15522	630	127/2.52	160	70	54	33.5	70	20	40-432AL

Alternative stalk sizes can be manufactured to approved minimum order quantities



3 & 4 CORE SECTOR BI-METAL STALK - (solid only)

- Suitable for 3 or 4 core solid sector cable
- Clear markings on the barrel indicate the crimping sequence
 - Prefilled with jointing compound
- Individually packed in sealed plastic bags
 - Friction welded
- For aluminium to copper terminations
- Manufactured from high purity copper and aluminium rod



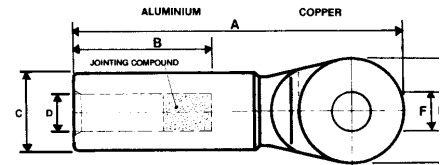
DESCRIPT.	CAT NO.	CONDUCTOR AREA mm ²	A	B	C	D	L	M	38A DIES NEST	INDENT
3 CORE										
BSS240/16	H15816	240	134	61	15.2	25.8	48.0	16.0	12	19
4 CORE										
BSI70/12	H15856	70	88	43	9.0	12.5	30	12	14	14
BSI95/12	H15858	95	108	49	10.5	14.8	38	12	14	15
BSI120/12	H15860	120	118	49	12.1	17.1	48	12	14	16
BSI150/12	H15862	150	119	49	13.6	19.1	48	12	14	17
BSI185/16	H15864	185	129	57	15.1	21.2	48	16	14	18
BSI240/16	H15866	240	134	61	17.5	24.6	48	16	14	19
BSI300/16	H15868	300	143	61	19.4	27.2	48	16	14	21

ROTATING BI-METAL LUGS & LINK

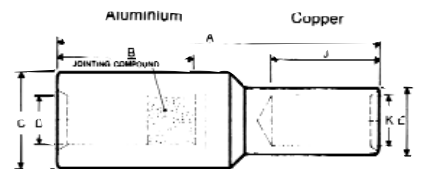
This new range of connectors for aluminium 4 core sector cable features a unique concept enabling the lug to be rotated to any desired position on the conductor, without the need to round the conductor first. The design embodies the tried and proven round barrel/hex compression die combination, giving superior connection reliability.

BENEFITS:

- The lug can be rotated to any desired position
 - No voids when crimped
- No need to twist conductor to correct orientation
- Takes two crimps on the barrel without overlapping
- Minimum effort required to correctly orientate lug
- Palm will fit into most receptacles found in URD system
 - Reduces total connection time
- Supplied pre-packed with jointing compound, in sealed plastic bags
 - Suits solid and standard conductor types
- The lug barrel has markings showing the length of insulation to be stripped
 - Uses standard size hexagonal dies
- Made from high conductivity, high strength, solid forged aluminium
 - No need to round the sector cable first
 - Tested to BS4579



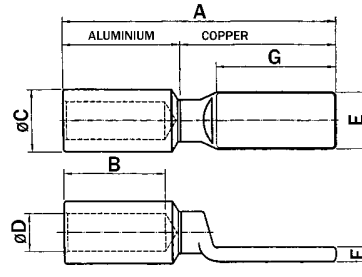
DESCRIPT.	CAT NO.	CONDUCTOR AREA mm ²	DIMENSIONS mm			PALM THICK	STUD F	CRIMPING DIE
			A	B	E			
BG4HR240MB	H15365	240	126	50	42	7.0	MB	38-284AL
BG4HR240M12	H15366	240	126	50	42	7.0	M12	38-284AL
BG4HR240M16	H15367	240	126	50	42	7.0	M16	38-284AL



DESCRIPT.	CONDUCTOR AREA mm ²		ALUMINIUM		CRIMPING DIE	COPPER			CRIMPING DIE
			DIMENSIONS mm			DIMENSIONS mm			
			A	B		E	J	K	
BK4HR240150	240	150	110	50	38-284AL	24.5	40	16.5	38-200CU
	4 core sector								

BI-METAL LONG PALM LUGS

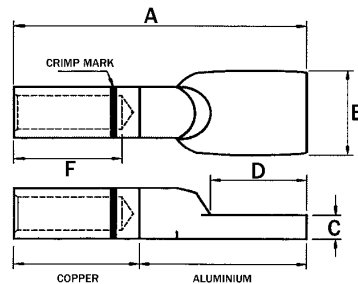
- For two bolt termination applications • Blank palm, 105mm long x 50mm wide
- Friction welded high purity aluminium and copper rod • Eliminates electrolytic corrosion
- Clearly marked with cable size, die recommendation and crimping position • Pre-filled with jointing compound
- Individually packed in plastic bags • Palms can be drilled to customers bolt hole specification



DESCRIPT.	CONDUCTOR AREA mm ²	DIMENSIONS mm							CRIMPING DIE
		A	B	C	D	E	F	G	
BG240LPMB	240	209	60	35	21	50	13	105	38-284AL
BG300LPMB	300	209	60	35	23.5	50	13	105	
BG400LPMB	400	221	70	47	26.5	50	13	105	40-390AL
BG500LPMB	500	221	70	47	29.5	50	13	105	
BG630LPMB	630	221	70	54	33.5	50	13	105	40-432AL
BG800LPMB	800	266	105	54	39	50	13	105	

BI-METAL REVERSE LUGS

- Used for connection of copper conductor to aluminium terminal • Blank aluminium palm and copper barrel
- Friction welded high purity aluminium and copper rod • Eliminates electrolytic corrosion
- Clearly marked with crimping position



DESCRIPT.	CONDUCTOR AREA mm ²	DIMENSIONS mm					CRIMPING DIE
		A	B	C	D	F	
BGRV25MB	25	70	23	4.5	24	22	38-92CU
BGRV35MB	35	70	23	4.5	24	22	38-92CU
BGRV50MB	50	78	27	6.0	28	22	38-115CU
BGRV70MB	70	78	27	6.0	28	22	38-115CU
BGRV95MB	95	103	34	9.8	34	38	38-165CU
BGRV120MB	120	103	34	9.8	34	38	38-165CU