

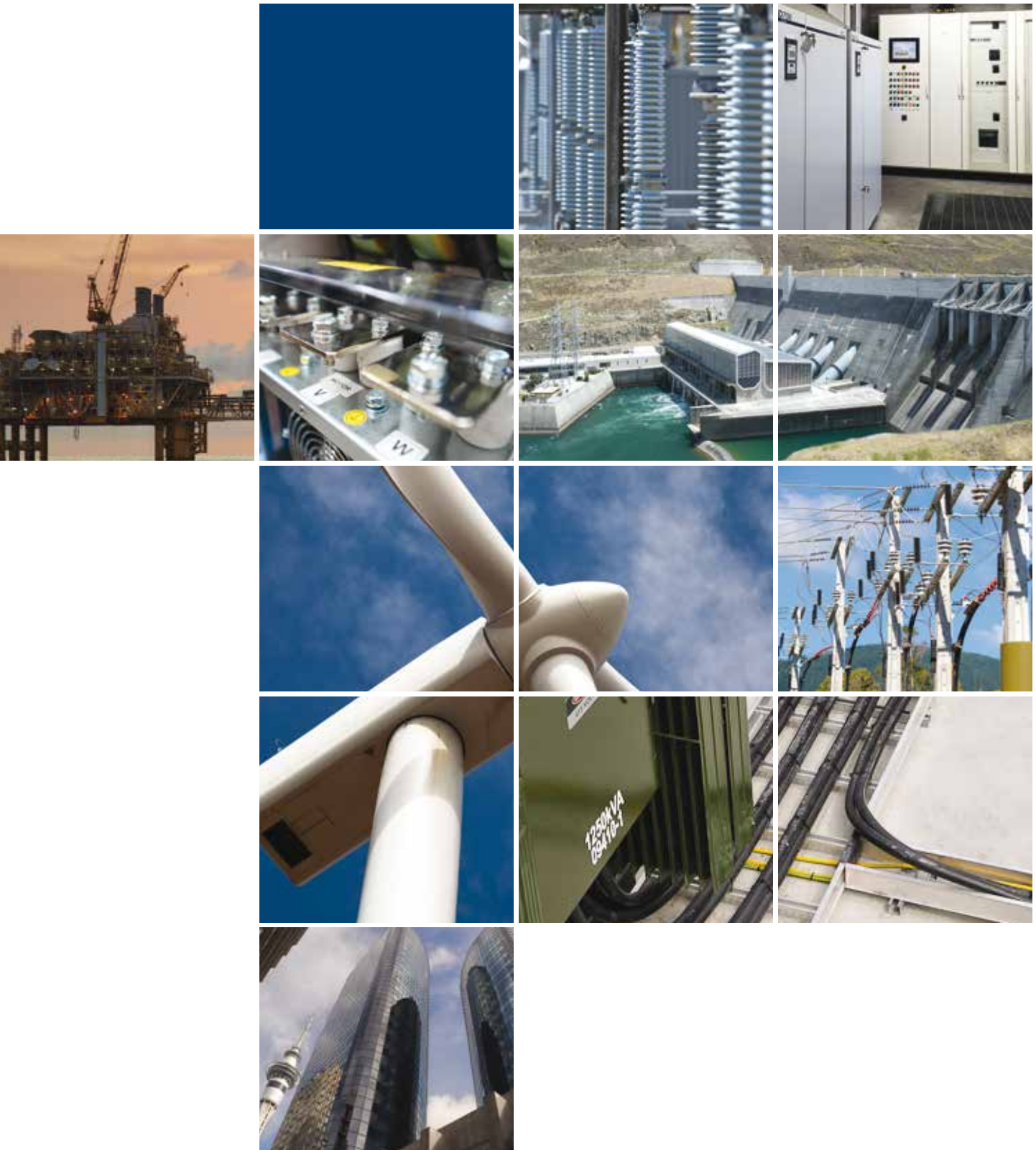


Product Catalogue

Cable Accessories • Connector Products
Specialist Electrical Tooling



Business Activity – Industry Segments



The Advantage

First in
Customer Service



Custom Design and
Manufacture



Global Sourcing &
Supply

Innovative
Connection Solutions



Delivery on time



Technical Support



Customer
Satisfaction



Connection products for:

Switchgear



Transmission & Distribution



Control & Automation



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Copper Lugs & Links





Copper Crimp Lugs

Glowbal NZ copper lugs are manufactured from 99.9% oxygen-free high conductivity copper and are electro tinned. Glowbal NZ brand of lugs have been used for many years in all sectors of the electrical industry and are known for their reliability. Glowbal NZ Copper Lugs are crimped using standard tools and dies. A palm drilling service is available for the larger sized lugs.

Part No. (mm)	Cable Size	Stud Size (mm)	Dimensions (mm)					A/F Hex Die (mm)	Unit	Pack Qty
			A	B	C	D	E			
ECL1.5-4	1.5mm ²	4	18.5	8	1	9	7.5	-	pkt	100
ECL1.5-5	1.5mm ²	5	18.5	8	1	9	7.5	-	pkt	100
ECL1.5-6	1.5mm ²	6	19.5	10	0.8	10	7.5	-	pkt	100
ECL2.5-4	2.5mm ²	4	19	8	1	9	8	-	pkt	100
ECL2.5-5	2.5mm ²	5	20	10	0.8	11	8	-	pkt	100
ECL2.5-6	2.5mm ²	6	20	10	0.8	11	8	-	pkt	100
ECL2.5-8	2.5mm ²	8	26	11	0.7	15	8	-	pkt	100
ECL4-5	4mm ²	5	22	10	1	11	9	-	pkt	100
ECL4-6	4mm ²	6	22	10	1	11	9	-	pkt	100
ECL4-8	4mm ²	8	26	12	0.8	15	9	-	pkt	100
ECL4-10	4mm ²	10	32	15	0.8	19	9	-	pkt	100
ECL6-5	6mm ²	5	23	10	1.2	11	10	4.4	pkt	100
ECL6-6	6mm ²	6	27	12	1	15	10	4.4	pkt	100
ECL6-8	6mm ²	8	27	12	1	15	10	4.4	pkt	100
ECL6-10	6mm ²	10	32	15	0.8	19	10	4.4	pkt	100
ECL10-5	10mm ²	5	27	12	1.8	13	10	5.7	each	50
ECL10-6	10mm ²	6	27	12	1.8	13	10	5.7	each	50
ECL10-8	10mm ²	8	29	14	1.6	15	10	5.7	each	50
ECL10-10	10mm ²	10	32	15	1.5	18	10	5.7	each	50
ECL10-12	10mm ²	12	38	18	1	22	10	5.7	each	50
ECL16-6	16mm ²	6	39	11	2.4	16	19	6.3	each	50
ECL16-8	16mm ²	8	39	14	1.7	16	19	6.3	each	50
ECL16-10	16mm ²	10	41	16	1.5	18	19	6.3	each	50
ECL16-12	16mm ²	12	46	18	1.2	23	19	6.3	each	50
ECL20-8	19/044	8	42	14	1.8	16	20	-	each	50
ECL20-10	19/044	10	42	14	1.8	16	20	-	each	50
ECL25-6	25mm ²	6	41	13.5	2.4	16	21	7.7	each	50
ECL25-8	25mm ²	8	41	13.5	2.4	16	21	7.7	each	50
ECL25-10	25mm ²	10	44	16	1.9	19	21	7.7	each	50
ECL25-12	25mm ²	12	48	18	1.6	23	21	7.7	each	50
ECL35-6	35mm ²	6	45	16	3	19	21	9.2	each	50
ECL35-8	35mm ²	8	45	16	3	19	21	9.2	each	50
ECL35-10	35mm ²	10	45	18	2.6	19	21	9.2	each	50
ECL35-12	35mm ²	12	51	20	2.2	24	22	9.2	each	50
ECL35-16	35mm ²	16	61	22	2.2	32	23	9.2	each	25
ECL50-6	50mm ²	6	46	18	3.3	18	22	10.4	each	50
ECL50-8	50mm ²	8	46	18	3.3	18	22	10.4	each	50
ECL50-10	50mm ²	10	46	18	3.3	18	22	10.4	each	50
ECL50-12	50mm ²	12	52	21	2.7	24	22	10.4	each	50
ECL50-16	50mm ²	16	58	23	2.7	30	22	10.4	each	25
ECL70-6	70mm ²	6	54	21	3.5	24	24	11.5	each	25
ECL70-8	70mm ²	8	54	21	3.5	24	24	11.5	each	25
ECL70-10	70mm ²	10	54	21	3.5	24	24	11.5	each	25
ECL70-12	70mm ²	12	54	21	3.5	24	24	11.5	each	25
ECL70-16	70mm ²	16	61	26	3	30	24	11.5	each	25
ECL95-6	95mm ²	6	60	25	4	26	27	14.2	each	1
ECL95-8	95mm ²	8	60	25	4	26	27	14.2	each	1
ECL95-10	95mm ²	10	60	25	4	26	27	14.2	each	1
ECL95-12	95mm ²	12	60	25	4	26	27	14.2	each	1
ECL95-16	95mm ²	16	61	28	3.5	30	27	14.2	each	1
ECL120-8	120mm ²	8	64	30	5	26	30	16.5	each	1
ECL120-10	120mm ²	10	64	30	5	26	30	16.5	each	1
ECL120-12	120mm ²	12	64	30	5	26	30	16.5	each	1
ECL120-16	120mm ²	16	72	30	5	32	30	16.5	each	1

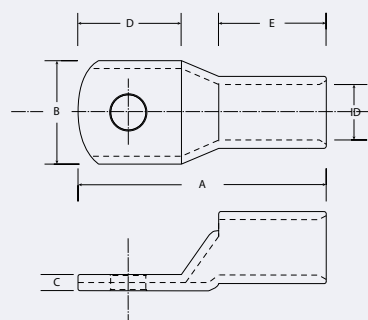
Copper Crimp Lugs

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Part No. (mm)	Cable Size	Stud Size (mm)	Dimensions (mm)					A/F Hex Die (mm)	Unit	Pack Qty
			A	B	C	D	E			
ECL150-6	150mm ²	6	71	32	5.8	32	30	18.3	each	1
ECL150-8	150mm ²	8	71	32	5.8	32	30	18.3	each	1
ECL150-10	150mm ²	10	71	32	5.8	32	30	18.3	each	1
ECL150-12	150mm ²	12	75	32	5.8	36	30	18.3	each	1
ECL150-16	150mm ²	16	75	32	5.8	36	30	18.3	each	1
ECL150B	150mm ²	blank	75	32	5.8	36	30	18.3	each	1
ECL185-8	185mm ²	8	74	36	5.8	32	32	20.0	each	1
ECL185-10	185mm ²	10	74	36	5.8	32	32	20.0	each	1
ECL185-12	185mm ²	12	79	36	5.8	36	32	20.0	each	1
ECL185-16	185mm ²	16	79	36	5.8	36	32	20.0	each	1
ECL185B	185mm ²	blank	79	38	5.8	41	32	20.0	each	1
ECL240-10	240mm ²	10	92	41	7	42	38	23.1	each	1
ECL240-12	240mm ²	12	92	41	7	42	38	23.1	each	1
ECL240-16	240mm ²	16	92	41	7	42	38	23.1	each	1
ECL240B	240mm ²	blank	92	41	7	42	38	23.1	each	1
ECL300-10	300mm ²	10	101	46	7.8	46	42	26.0	each	1
ECL300-12	300mm ²	12	101	46	7.8	46	42	26.0	each	1
ECL300-16	300mm ²	16	101	46	7.8	46	42	26.0	each	1
ECL300-20	300mm ²	20	101	46	7.8	46	42	26.0	each	1
ECL300B	300mm ²	blank	101	46	7.8	46	42	26.0	each	1
ECL400-10	400mm ²	10	107	50	8	48	44	28.1	each	1
ECL400-12	400mm ²	12	107	50	8	48	44	28.1	each	1
ECL400-16	400mm ²	16	107	50	8	48	44	28.1	each	1
ECL400-20	400mm ²	20	107	50	8	48	44	28.1	each	1
ECL400B	400mm ²	blank	107	50	8	48	44	28.1	each	1
ECL500-10	500mm ²	10	119	56	9	55	50	31.0	each	1
ECL500-12	500mm ²	12	119	56	9	55	50	31.0	each	1
ECL500-16	500mm ²	16	119	56	9	55	50	31.0	each	1
ECL500-20	500mm ²	20	119	56	9	55	50	31.0	each	1
ECL500B	500mm ²	blank	119	56	9	55	50	31.0	each	1
ECL630-12	630mm ²	12	139	64.4	11	64	58	37.0	each	1
ECL630-16	630mm ²	16	139	64.4	11	64	58	37.0	each	1
ECL630-20	630mm ²	20	139	64.4	11	64	58	37.0	each	1
ECL630B	630mm ²	blank	139	64.4	11	64	58	37.0	each	1

- Dimensions may vary slightly
- For special lugs or other imperial sizes please contact our sales department.



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Copper Bell Mouth Lugs

for fine stranded cables

Bell mouth lugs are specifically designed for ease of termination of fine stranded flexible cables. Because flexible cables tend to “splay” when the cable insulation has been removed, the enlarged cable entry provided by the bell mouth will accommodate the strand spread. Bell mouth lugs are crimped using standard tools and dies. Special bell mouth lugs are available on request.

Part No.	Cable Size (mm ²)	Stud Size (mm)	A/F Hex Die	Pack Qty
ECL6-6BM	6mm ²	6	-	100
ECL6-8BM	6mm ²	8	-	100
ECL10-6BM	10mm ²	6	-	100
ECL10-8BM	10mm ²	8	-	100
ECL16-6BM	16mm ²	6	6.3	50
ECL16-8BM	16mm ²	8	6.3	50
ECL16-10BM	16mm ²	10	6.3	50
ECL25-6BM	25mm ²	6	7.7	50
ECL25-8BM	25mm ²	8	7.7	50
ECL25-10BM	25mm ²	10	7.7	50
ECL25-12BM	25mm ²	12	7.7	50
ECL35-6BM	35mm ²	6	9.2	50
ECL35-8BM	35mm ²	8	9.2	50
ECL35-10BM	35mm ²	10	9.2	50
ECL35-12BM	35mm ²	12	9.2	50
ECL50-6BM	50mm ²	6	10.4	50
ECL50-8BM	50mm ²	8	10.4	50
ECL50-10BM	50mm ²	10	10.4	50
ECL50-12BM	50mm ²	12	10.4	50
ECL70-6BM	70mm ²	6	11.5	25
ECL70-8BM	70mm ²	8	11.5	25
ECL70-10BM	70mm ²	10	11.5	25
ECL70-12BM	70mm ²	12	11.5	25
ECL95-6BM	95mm ²	6	14.2	1
ECL95-8BM	95mm ²	8	14.2	1
ECL95-10BM	95mm ²	10	14.2	1
ECL95-12BM	95mm ²	12	14.2	1
ECL120B-BM	120mm ²	blank	16.5	1
ECL120-8BM	120mm ²	8	16.5	1
ECL120-10BM	120mm ²	10	16.5	1
ECL120-12BM	120mm ²	12	16.5	1
ECL150B-BM	150mm ²	blank	18.3	1
ECL150-8BM	150mm ²	8	18.3	1
ECL150-10BM	150mm ²	10	18.3	1
ECL150-12BM	150mm ²	12	18.3	1
ECL185B-BM	185mm ²	blank	20.0	1
ECL185-10BM	185mm ²	10	20.0	1
ECL185-12BM	185mm ²	12	20.0	1
ECL240B-BM	240mm ²	blank	23.1	1
ECL240-10BM	240mm ²	10	23.1	1
ECL240-12BM	240mm ²	12	23.1	1
ECL300B-BM	300mm ²	blank	26.0	1
ECL400B-BM	400mm ²	blank	28.1	1
ECL500B-BM	500mm ²	blank	31.0	1
ECL630B-BM	630mm ²	blank	37.0	1

- Bell Mouth Lug dimensions are identical to our standard Glowbal NZ Copper Lugs.
- Palm hole punching service can be provided on request, please specify the hole size required.
- When using hex dies on larger size cables, please ensure a continuous crimp along the barrel.

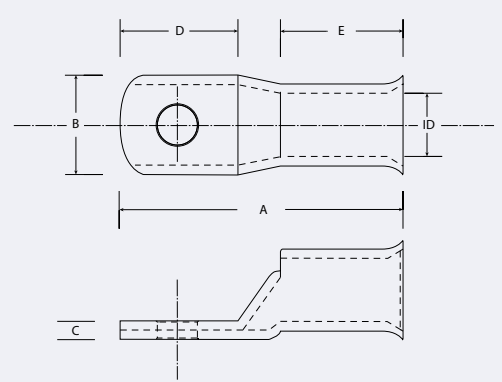
Circuit Breaker Lugs

Narrow Palm

Glowbal NZ circuit breaker lugs have narrow connection palms and are specifically designed for use on devices such as moulded case circuit breakers with reduced size connecting tunnels. Circuit breaker lugs can be crimped with standard hexagonal dies and have the added feature of a bell mouth cable entry for use with fine stranded flexible cables.



Part No. (mm)	Cable Size	Stud Size (mm)	Dimensions (mm)					A/F Hex Die (mm)
			A	B	C	D	E	
ECL25-8CB	25mm ²	8						
ECL35-8CB	35mm ²	8	41	15	3	15	21	9.2
ECL50-6CB	50mm ²	6	43	15	3.2	15	22	10.4
ECL50-8CB	50mm ²	8	43	15	3.2	15	22	10.4
ECL50-10CB	50mm ²	10	49	19	3.2	21	22	10.4
ECL70-6CB	70mm ²	6	45	17	3.3	15	24	11.5
ECL70-8CB	70mm ²	8	45	17	3.3	15	24	11.5
ECL70-10CB	70mm ²	10	51	19	3.3	21	24	11.5
ECL95-8CB	95mm ²	8	51	19	3.9	17	27	14.2
ECL95-10CB	95mm ²	10	55	19	3.9	21	27	14.2
ECL120-8CB	120mm ²	8	61	19	5	23	30	16.5
ECL120-10CB	120mm ²	10	61	19	5	23	30	16.5
ECL120-12CB	120mm ²	12	61	19	5	23	30	16.5
ECL150-8CB	150mm ²	8	66	19	5.5	27	30	18.3
ECL150-10CB	150mm ²	10	66	19	5.5	27	30	18.3
ECL185-10CB	185mm ²	10	74	31	5.7	32	32	20.0
ECL185-12CB	185mm ²	12	74	31	5.7	32	32	20.0
ECL240-10CB	240mm ²	10	82	31	7.1	32	38	23.1
ECL240-12CB	240mm ²	12	82	31	7.1	32	38	23.1
ECL240-16CB	240mm ²	16	82	31	7.1	32	38	23.1
ECL300-10CB	300mm ²	10	87	31	7.8	32	42	26.0
ECL300-12CB	300mm ²	12	87	31	7.8	32	42	26.0
ECL400B-CB	400mm ²	blank	105	35	8	40	48	28.1
ECL400-10CB	400mm ²	10	105	35	8	40	48	28.1
ECL400-12CB	400mm ²	12	105	35	8	40	48	28.1
ECL500-CB	special manufacture							
ECL630-CB	special manufacture							





Long Barrel Lugs

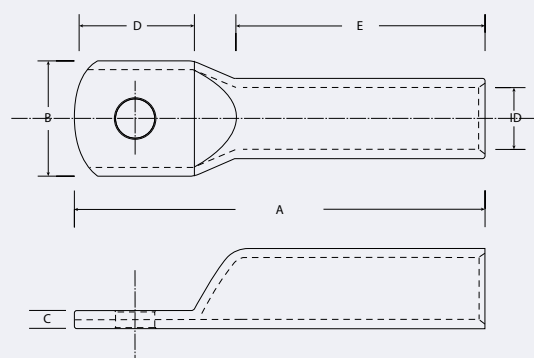
Long Barrel Sealed Lugs

Long barrel sealed copper lugs are designed for outdoor applications. Manufactured from high conductivity copper, the palms are internally solder sealed and there is no inspection window. These lugs are designed to be crimped with standard crimp tooling. The longer barrel allows for more crimps and a greater heatshrink area.

Part No. (mm)	Cable Size	Stud Size (mm)	Dimensions (mm)					A/F Hex Die (mm)
			A	B	C	D	E	
ECL16-12LBS	16mm ²	12	54	16	1.55	21	28	6.3
ECL25-10LBS	25mm ²	10	56	16	2.0	22	29	7.7
ECL25-12LBS	25mm ²	12	58	17	2.0	22	29	7.7
ECL35-10LBS	35mm ²	10	65	18	2.6	25	35	9.2
ECL35-12LBS	35mm ²	12	65	20	2.3	25	35	9.2
ECL50-10LBS	50mm ²	10	77	18	3.2	27	44	10.4
ECL50-12LBS	50mm ²	12	77	21	2.7	27	44	10.4
ECL70-10LBS	70mm ²	10	81	21	3.3	27	48	11.5
ECL70-12LBS	70mm ²	12	81	21	3.3	27	48	11.5
ECL95-10LBS	95mm ²	10	88	25	3.9	27	54	14.2
ECL95-12LBS	95mm ²	12	88	25	3.9	27	54	14.2
ECL120-10LBS	120mm ²	10	98	29	5.0	30	60	16.5
ECL120-12LBS	120mm ²	12	98	29	5.0	30	60	16.5
ECL150-12LBS	150mm ²	12	110	32	5.5	41	60	18.3
ECL185-12LBS	185mm ²	12	115	32	5.5	41	64	20.0
ECL185-16LBS	185mm ²	16	115	32	5.5	41	64	20.0
ECL240-12LBS	240mm ²	12	142	41	5.5	41	60	23.1
ECL240-LBS	240mm ²	blank	142	41	5.5	41	60	23.1
ECL300-12LBS	300mm ²	12	153	45	7.8	50	90	26.0
ECL300-LBS	300mm ²	blank	153	45	7.8	50	90	26.0
ECL400-12LBS	400mm ²	12	170	50	7.7	52	100	28.1
ECL400-LBS	400mm ²	blank	170	50	7.7	52	100	28.1
ECL500-LBS	500mm ²	blank	181	56	8.5	56	105	31.0
ECL630-LBS	630mm ²	blank	193	65	10.9	56	115	37.0

BL = blank – for specially drilled palms please contact our sales dept.

• See pages 80–87 for crimp tooling.



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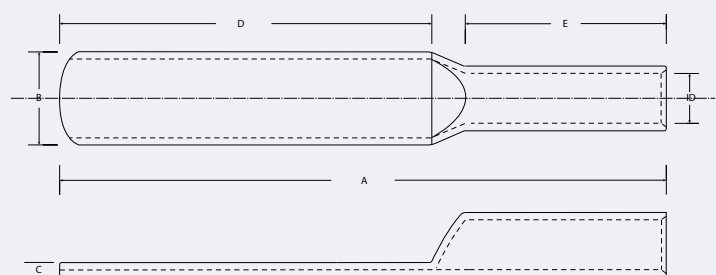
Long Barrel, Long Palm Lugs

Long barrel, long palm copper lugs are designed for outdoor situations, have no viewing window and have a silver solder sealed palm junction. Lugs are supplied blank as standard and can be easily accommodate two bolts in the palm. Long barrel, long palm lugs are crimped with standard NZ/ Australian hexagonal crimp dies.



Part No. (mm)	Cable Size	Stud Size (mm)	Dimensions (mm)					A/F Hex Die (mm)
			A	B	C	D	E	
ECL16BLP	16mm ²	blank	85	16	1.5	61	21	6.3
ECL25BLP	25mm ²	blank	95	16	1.9	61	29	7.7
ECL35BLP	35mm ²	blank	112	18	2.6	72	35	9.2
ECL50BLP	50mm ²	blank	130	18.2	3.3	80	44	10.4
ECL70BLP	70mm ²	blank	154	21.1	3.5	100	48	11.5
ECL95BLP	95mm ²	blank	161	25	3.9	100	54	14.2
ECL120BLP	120mm ²	blank	168	28.5	5.0	100	60	16.5
ECL150BLP	150mm ²	blank	169	32	5.8	100	60	18.3
ECL185BLP	185mm ²	blank	174	35	5.8	100	64	20.0
ECL240BLP	240mm ²	blank	192	40	7.1	100	80	23.1
ECL300BLP	300mm ²	blank	208	45	7.8	105	90	26.0
ECL400BLP	400mm ²	blank	228	50	7.7	110	100	28.1
ECL500BLP	500mm ²	blank	235	56	8.5	110	105	31.0
ECL630BLP	630mm ²	blank	247	65	10.9	110	115	37.0

- For specials lugs with angled or bent palms please call our sales department.
- Hole punching can be provided to customer's requirements.
- See pages 80–87 for crimp tooling.





Right Angle Lugs

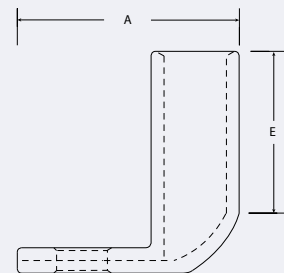
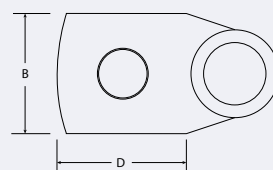
Glowbal NZ right angle copper lugs are designed for applications where connection space is minimal. Manufactured from high conductivity copper tube, the right angle lugs are electroplated and crimped using standard tooling.

Part No.	Cable Size	Stud Size (mm)	Dimensions (mm)		D	E	A/F Hex Die (mm)
			A	B			
ECL16-6RA	16mm ²	6	30	13	22	20	6.3
ECL16-8RA	16mm ²	8	30	13	22	20	6.3
ECL25-6RA	25mm ²	6	30	16	22	20	7.7
ECL25-8RA	25mm ²	8	30	16	22	20	7.7
ECL35-8RA	35mm ²	8	34.5	17	23	20	9.2
ECL35-10RA	35mm ²	10	34.5	17	23	20	9.2
ECL50-8RA	50mm ²	8	37	20	23	28	10.4
ECL50-10RA	50mm ²	10	37	20	24	28	10.4
ECL70-8RA	70mm ²	8	38	23.5	23	28	11.5
ECL70-10RA	70mm ²	10	38	23.5	24	28	11.5
ECL95-8RA	95mm ²	8	47	26	30	35	14.2
ECL95-10RA	95mm ²	10	47	26	30	35	14.2
ECL95-12RA	95mm ²	12	47	26	30	35	14.2
ECL120-10RA	120mm ²	10	50	28	30	35	16.5
ECL120-12RA	120mm ²	12	50	28	31	35	16.5

• larger sizes available on request.



• 45° angle lugs are also available, please enquire.



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Project



COPPER LUGS & LINKS



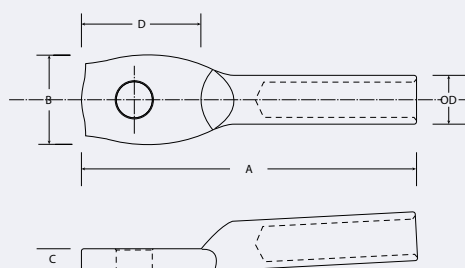


Solid Forged Copper Lugs

ECLF copper lugs are forged from solid copper rod and are the preferred lug for low and medium voltage high current situations because of their mechanical strength and waterblock construction. ECLF lugs can be crimped with conventional copper hex dies and can also be manufactured specially for imperial and SWG cable sizes.

Part No. (mm)	Cable Size (mm)	Dimensions (mm)		O/D	D	A/F Hex Die (mm)
		A	B			
ECLF16	16mm ²	80	22	11.5	32	9.2
ECLF25	25mm ²	80	22	11.5	32	9.2
ECLF35	35mm ²	80	22	11.5	32	9.2
ECLF50	50mm ²	80	25	12.7	32	10.4
ECLF70	70mm ²	90	27	14.5	38	11.5
ECLF95	95mm ²	100	36	17.3	42	14.2
ECLF120	120mm ²	100	36	20.0	42	16.5
ECLF150	150mm ²	100	36	22.5	42	18.3
ECLF185	185mm ²	100	36	24.2	42	20.0

- Available in bell mouth and double bolt option.
- When ordering, please specify the hole size required in the palm, e.g. ECLF35-8 (M8 hole).
- Larger sizes available on request.



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Special Lugs and Connectors available on request

- Imperial sized lugs
- High temperature lugs
- Transformer winding connectors
- Stainless steel lugs



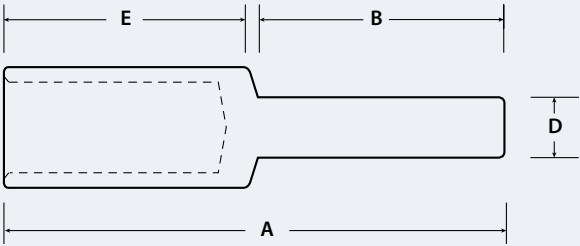
Copper Stalk Lugs

Glowbal NZ manufacture a full range of copper stalk lugs for use with specialist switchgear. Copper Stalk lugs are manufactured to order from 99.9% pure high conductivity copper and are crimped using standard hexagonal dies. For special requests, please contact our sales team.



Glowbal NZ ORDER FORM – COPPER STALK LUGS Company			
Contact		Date	
Phone		Fax	
Email			
Delivery address			
Qty required		Order No.	
Required by			
Conductor Size		mm ²	
Dimensions			
Stalk Length B			
Stalk Diameter D			

Stalk lugs are specially manufactured and are not returnable for credit.



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Copper Reducing Links

Glowbal NZ manufactures copper reducing links at short notice to your requirements. Machined from high conductivity copper billet, ECSR copper reducing links have an internal centre barrier and can be made to most configurations. Copper reducing links for imperial cables can be manufactured also. Copper reducing links can be crimped with standard NZ tooling dies. These items are specially manufactured so are not returnable.

Part No.	Cable Size		Dimensions (mm)					A/F Hex Die (mm)	
	Large End	Small End	A	C	B2	d	E2	Large End	Small End
ECSR10-6	10mm ²	6mm ²	30	10	10	4.5	3.8	5.7	4.6
ECSR16-6	16mm ²	6mm ²	40	19	10	5.5	3.8	7.7	4.6
ECSR16-10	16mm ²	10mm ²	40	19	12	5.5	4.7	7.7	5.7
ECSR25-6	25mm ²	6mm ²	40	21	10	7.1	3.8	7.7	4.6
ECSR25-10	25mm ²	10mm ²	40	21	12	7.1	4.7	7.7	5.7
ECSR25-16	25mm ²	16mm ²	45	21	19	7.1	5.5	7.7	7.7
ECSR35-10	35mm ²	10mm ²	55	21	12	8.5	4.7	9.2	5.7
ECSR35-16	35mm ²	16mm ²	55	21	19	8.5	5.5	9.2	7.7
ECSR35-25	35mm ²	25mm ²	60	21	21	8.5	7.1	9.2	7.7
ECSR50-10	50mm ²	10mm ²	50	22	12	9.5	4.7	10.4	5.7
ECSR50-16	50mm ²	16mm ²	55	22	19	9.5	5.5	10.4	7.7
ECSR50-25	50mm ²	25mm ²	55	22	21	9.5	7.1	10.4	7.7
ECSR50-35	50mm ²	35mm ²	60	22	21	9.5	8.3	10.4	9.2
ECSR70-16	70mm ²	16mm ²	60	24	19	11.3	5.5	11.5	7.7
ECSR70-25	70mm ²	25mm ²	60	24	21	11.3	7.1	11.5	7.7
ECSR70-35	70mm ²	35mm ²	60	24	21	11.3	8.3	11.5	9.2
ECSR70-50	70mm ²	50mm ²	60	24	22	11.3	9.5	11.5	10.4
ECSR95-16	95mm ²	16mm ²	65	27	19	13.5	5.5	14.2	7.7
ECSR95-25	95mm ²	25mm ²	65	27	21	13.5	7.1	14.2	7.7
ECSR95-35	95mm ²	35mm ²	65	27	21	13.5	8.3	14.2	9.2
ECSR95-50	95mm ²	50mm ²	70	27	22	13.5	9.5	14.2	10.4
ECSR95-70	95mm ²	70mm ²	70	27	24	13.5	11.2	14.2	11.5
ECSR120-16	120mm ²	16mm ²	70	30	21	15	7.1	16.5	7.7
ECSR120-25	120mm ²	25mm ²	70	30	21	15	7.1	16.5	7.7
ECSR120-35	120mm ²	35mm ²	70	30	21	15	8.3	16.5	9.2
ECSR120-50	120mm ²	50mm ²	70	30	22	15	9.5	16.5	10.4
ECSR120-70	120mm ²	70mm ²	75	30	24	15	11.2	16.5	11.5
ECSR120-95	120mm ²	95mm ²	75	30	27	15	13.4	16.5	14.2
ECSR150-16	150mm ²	16mm ²	70	30	21	16.5	8.3	18.3	9.2
ECSR150-25	150mm ²	25mm ²	70	30	21	16.5	8.3	18.3	9.2
ECSR150-35	150mm ²	35mm ²	70	30	21	16.5	8.3	18.3	9.2
ECSR150-50	150mm ²	50mm ²	70	30	22	16.5	9.5	18.3	10.4
ECSR150-70	150mm ²	70mm ²	75	30	24	16.5	11.2	18.3	11.5
ECSR150-95	150mm ²	95mm ²	80	30	27	16.5	13.4	18.3	14.2
ECSR150-120	150mm ²	120mm ²	80	30	30	16.5	15.0	18.3	16.5
ECSR185-25	185mm ²	25mm ²	75	32	22	18.5	8.3	20.0	9.2
ECSR185-35	185mm ²	35mm ²	75	32	22	18.5	8.3	20.0	9.2
ECSR185-50	185mm ²	50mm ²	75	32	22	18.5	9.5	20.0	10.4
ECSR185-70	185mm ²	70mm ²	75	32	24	18.5	11.2	20.0	11.5
ECSR185-95	185mm ²	95mm ²	80	32	27	18.5	13.4	20.0	14.2
ECSR185-120	185mm ²	120mm ²	85	32	30	18.5	15.0	20.0	16.5
ECSR185-150	185mm ²	150mm ²	85	32	30	18.5	16.7	20.0	18.3
ECSR240-50	240mm ²	50mm ²	85	38	22	21.5	9.5	23.1	10.4
ECSR240-70	240mm ²	70mm ²	85	38	24	21.5	11.2	23.1	11.5
ECSR240-95	240mm ²	95mm ²	85	38	27	21.5	13.4	23.1	14.2
ECSR240-120	240mm ²	120mm ²	90	38	30	21.5	15.0	23.1	16.5

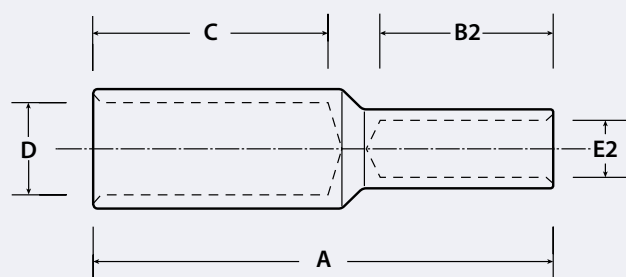
Copper Reducing Links

...continued.



Part No.	Cable Size		Dimensions (mm)					A/F Hex Die (mm)	
	Large End	Small End	A	C	B2	D	E2	Large End	Small End
ECSR240-150	240mm ²	150mm ²	90	38	30	21.5	16.7	23.1	18.3
ECSR240-185	240mm ²	185mm ²	95	38	32	21.5	18.4	23.1	20.0
ECSR300-95	300mm ²	95mm ²	95	42	27	23.5	13.4	26.0	14.2
ECSR300-120	300mm ²	120mm ²	95	42	30	23.5	15.0	26.0	16.5
ECSR300-150	300mm ²	150mm ²	95	42	30	23.5	16.7	26.0	18.3
ECSR300-185	300mm ²	185mm ²	100	42	32	23.5	18.4	26.0	20.0
ECSR300-240	300mm ²	240mm ²	105	42	38	23.5	21.2	26.0	23.1
ECSR400-95	400mm ²	95mm ²	105	55	27	26.5	13.4	28.1	14.2
ECSR400-120	400mm ²	120mm ²	105	55	30	26.5	15.0	28.1	16.5
ECSR400-150	400mm ²	150mm ²	110	55	30	26.5	16.7	28.1	18.3
ECSR400-185	400mm ²	185mm ²	110	55	32	26.5	18.4	28.1	20.0
ECSR400-240	400mm ²	240mm ²	125	55	38	26.5	21.2	28.1	23.1
ECSR400-300	400mm ²	300mm ²	125	55	42	26.5	23.5	28.1	26.0
ECSR500-120	500mm ²	120mm ²	110	55	30	29.5	15.0	31.0	16.5
ECSR500-150	500mm ²	150mm ²	110	55	30	29.5	16.7	31.0	18.3
ECSR500-185	500mm ²	185mm ²	115	55	32	29.5	18.4	31.0	20.0
ECSR500-240	500mm ²	240mm ²	120	55	38	29.5	21.2	31.0	23.1
ECSR500-300	500mm ²	300mm ²	125	55	42	29.5	23.5	31.0	26.0
ECSR500-400	500mm ²	400mm ²	140	55	55	29.5	26.8	31.0	28.1
ECSR630-150	630mm ²	150mm ²	115	56	30	33.5	16.7	37.0	18.3
ECSR630-185	630mm ²	185mm ²	115	56	32	33.5	18.4	37.0	20.0
ECSR630-240	630mm ²	240mm ²	120	56	38	33.5	21.2	37.0	23.1
ECSR630-300	630mm ²	300mm ²	125	56	42	33.5	23.5	37.0	26.0
ECSR630-400	630mm ²	400mm ²	140	56	55	33.5	26.8	37.0	28.1
ECSR630-500	630mm ²	500mm ²	140	56	55	33.5	30.0	37.0	31.0

- Dimensions may vary slightly
- For bellmouth copper reducing links, please contact our sales department.
- See pages 80–87 for crimp tooling.





Copper Crimp Links

Manufactured from 99.95% pure copper tube for the best electrical performance, Glowbal NZ ECS links are designed for jointing of identical sized copper conductors. ECS links are crimped using standard indent or hex die tooling.

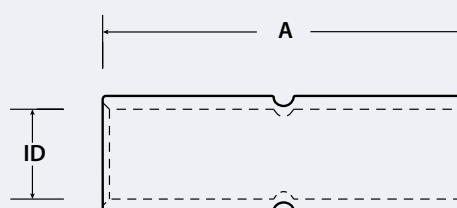
Part No.	Cable Size	Dimensions (mm)		A/F Hex Die (mm)	Pack Size
		A	I.D.		
ECS1.5	1.5mm ²	22.0	2.0	-	100
ECS2.5	2.5mm ²	22.0	2.5	-	100
ECS4	4mm ²	22.0	3.3	-	100
ECS6	6mm ²	22.0	3.8	4.4	100
ECS10	10mm ²	22.0	4.7	5.7	100
ECS16	16mm ²	44.0	5.5	6.3	100
ECS25	25mm ²	48.0	7.1	7.7	50
ECS35	35mm ²	48.0	8.4	9.2	50
ECS50	50mm ²	48.0	9.5	10.4	50
ECS70	70mm ²	52.0	11.3	11.5	25
ECS95	95mm ²	54.0	13.4	14.2	1
ECS120	120mm ²	66.0	15.6	16.5	1
ECS150	150mm ²	66.0	16.7	18.3	1
ECS185	185mm ²	66.0	18.4	20.0	1
ECS240	240mm ²	91.0	21.2	23.1	1
ECS300	300mm ²	91.0	23.8	26.0	1
ECS400	400mm ²	91.0	26.8	28.1	1
ECS500	500mm ²	114	30.0	31.0	1
ECS630	630mm ²	114	34.0	37.0	1

- For special links e.g. imperial cables please contact our sales department.
- See page 80–87 for crimp tools.

Bell Mouth Links



- Bell Mouth Links for flexible cables are available on request.



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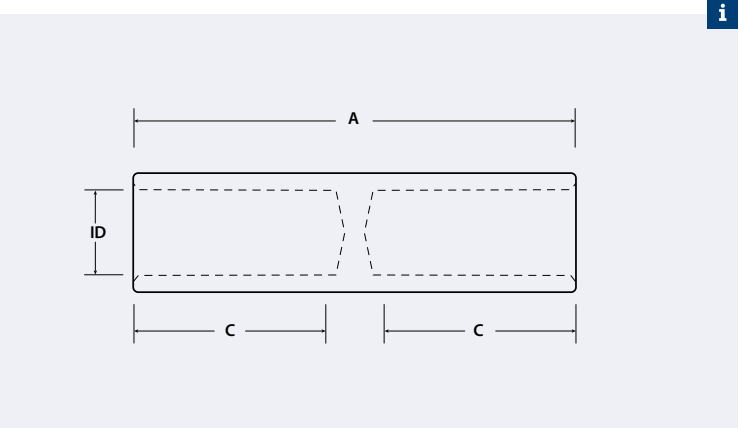
Copper Barrier Links

Manufactured to order from high conductivity copper these links are designed to be used where a solid moisture block barrier is required in the joint between two identical cables. Barrier links can be crimped with standard NZ/Australian crimp tooling. Hex die information for the larger sizes is shown.



Part No.	Cable Size	Dimensions (mm)			A/F Hex Die (mm)
		A	E	ID	
ECSB1.5	1.5mm ²	23.5	-	1.8	-
ECSB2.5	2.5mm ²	23.5	-	2.4	-
ECSB4.0	4.0mm ²	23.5	-	3.1	-
ECSB6.0	6.0mm ²	23.5	-	3.8	-
ECSB10	10mm ²	50	17	4.7	-
ECSB16	16mm ²	55	19	5.5	6.3
ECSB25	25mm ²	60	21	7.1	7.7
ECSB35	35mm ²	60	21	8.3	9.2
ECSB50	50mm ²	65	22	9.5	10.4
ECSB70	70mm ²	70	24	11.2	11.5
ECSB95	95mm ²	80	27	13.4	14.2
ECSB120	120mm ²	85	30	15.0	16.5
ECSB150	150mm ²	85	30	16.7	18.3
ECSB185	185mm ²	90	32	18.4	20.0
ECSB240	240mm ²	105	38	21.2	23.1
ECSB300	300mm ²	115	42	23.5	26.0
ECSB400	400mm ²	145	55	26.8	28.1
ECSB500	500mm ²	150	55	30.0	31.0
ECSB630	630mm ²	150	56	33.5	37.0

• For special links e.g. imperial cables please contact our sales department.





Full Tension Copper Sleeves

Glowbal NZ full tension copper sleeves are designed for joining hard drawn overhead conductors. These copper sleeves can be crimped using traditional 'Y' or 'R' type groove crimpers or hex dies. Manufactured from 99.9% high conductivity copper.

Metric

Part No.	Nominal Conductor		Stranding	Sleeve O/D (mm)	Length (mm)	A/F Hex Die (mm)	Tool Groove Type
	Area	Dia					
EC-FTS7/1.04	6.0mm ²	3.12mm	7/1.04	6.35	38	4.4	Y-6.35
EC-FTS7/1.35	10.0mm ²	4.05mm	7/1.35	7.94	64	6.3	Y-7.94
EC-FTS7/1.70	16.0mm ²	5.1mm	7/1.70	7.94	64	6.3	Y-7.94
EC-FTS7/2.14	25.0mm ²	6.42mm	7/2.14	9.52	76	7.7	R-9.52
EC-FTS19/1.53	35.0mm ²	7.65mm	19/1.53	12.70	89	10.4	R-12.70
EC-FTS19/1.83	50.0mm ²	9.15mm	19/1.83	15.88	127	13.0	R-15.88
EC-FTS19/2.14	70.0mm ²	10.7mm	19/2.14	15.88	127	13.0	R-15.88

Imperial

Part No.	Nominal Conductor		Stranding	Sleeve O/D (mm)	Length (mm)	A/F Hex Die (mm)	Tool Groove Type
	Area	Dia					
EC-FTS7/044	6.75mm ²	3.35mm	7/044	6.35	38	4.4	Y-6.35
EC-FTS7/052	9.43mm ²	3.96mm	7/052	7.94	64	6.3	Y-7.94
EC-FTS7/064	14.28mm ²	4.88mm	7/064	7.94	64	6.3	Y-7.94
EC-FTS19/052	25.5mm ²	6.6mm	19/052	9.52	76	7.7	R-9.52
EC-FTS19/064	39.65mm ²	8.13mm	19/64	12.70	89	10.4	R-12.70
EC-FTS19/083	65.1mm ²	10.3mm	19/083	15.88	127	13.0	R-15.88



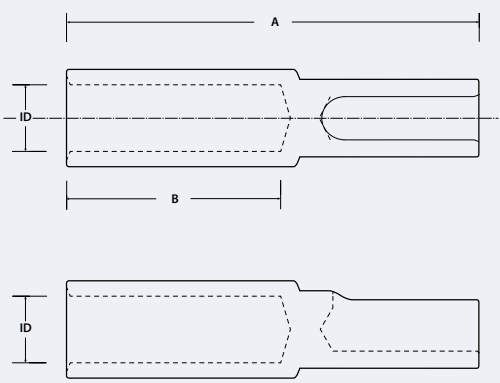
CU Switchgear Connectors

Copper switchgear connectors, are designed for termination of copper cables to a 12mm switchgear stem common to some brands of medium voltage switchgear. Manufactured from high purity copper, and machined with a slot to insert the 12mm stem, the fittings come complete with a stainless steel locking collar. Once crimped to the cable the connector is fastened to the switchgear stem by a means of a grub screw in the collar.



Part No.	Cable Size	Switchgear Stem dia (mm)	Dimensions (mm)		A/F Hex Die (mm)
			A	B	
ECSRSC16	16	12	70	19	7.7
ECSRSC25	25	12	72	21	7.7
ECSRSC35	35	12	72	27	9.2
ECSRSC50	50	12	74	22	10.4
ECSRSC70	70	12	77	24	11.5
ECSRSC95	95	12	80	27	14.2
ECSRSC120	120	12	82	30	16.5
ECSRSC150	150	12	87	30	18.3
ECSRSC185	185	12	87	32	20.0
ECSRSC240	240	12	90	38	23.1
ECSRSC300	300	12	95	43	26.0

• Cu switchgear connectors are manufactured to order, and are supplied in a sealed plastic bag with the applicable compression die information.

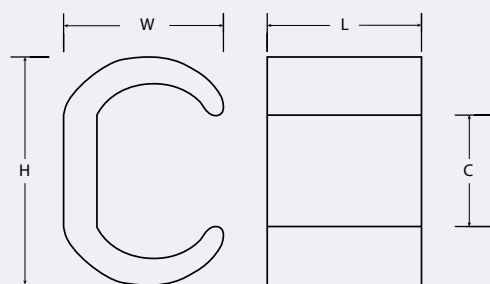




Copper C Connectors

Copper C connectors are manufactured from C form copper section, and are commonly used for interconnection of distribution earthing grids. Manufactured from high conductivity copper and supplied as tin plated, they are crimped using the designated compression dies shown. Please use the chart below to determine the applicable C crimp required.

Part No.	Conductor Range (mm ²)	Dimensions (mm)				Compression Die
		H	W	L	C	
CC16	14.5-16	11.8	7.8	13	5.0	DCC16
CC20	16.5-20	12.8	9.7	13	5.4	DCC20
CC26	21-26	14.7	10	16	6.5	DCC26
CC44	27-44	19.0	14.4	20	8.5	DCC44
CC60	45-60	21.0	15.4	22	9.7	DCC60
CC76	61-76	24.4	17.6	22	10.8	DCC76
CC98	77-98	27.8	18.8	25	12.8	DCC98
CC122	99-122	29.8	21.2	26	13.5	DCC122
CC154	123-154	34.0	24.4	28	17.0	DCC154
CC190	155-190	37.0	25.4	35	17.4	DCC190
CC240	191-240	40.0	28.5	40	19.0	DCC240
CC288	241-288	44.5	31.1	45	22.3	DCC288
CC365	289-365	47.5	34	50	24.8	DCC365



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Bimetal Products





Bimetal Lugs – BL

Glowbal NZ has a full range of bimetal lugs for both standard metric conductors and named conductors. Our bimetal lugs are manufactured using electrical grade aluminium and copper and feature a very strong fusion welded AL/Cu joint. Bimetal Lugs are supplied with jointing compound in the barrels and are sealed with an end cap. Crimp Die information is supplied with each bimetal lug.

Part No.	Cable Size	Stud Size (mm)	Dimensions (mm)						A/F Hex Die (mm)
			A	B	D	E	G	H	
BL23B	23mm ²	blank	75	30	7.5	22	21	4.5	9.0
BL23-8	23mm ²	8	75	30	7.5	22	21	4.5	9.0
BL23-10	23mm ²	10	75	32	7.5	22	21	4.5	9.0
BL23-12	23mm ²	12	75	32	7.5	22	21	4.5	9.0
BL35B	35mm ²	blank	80	32	8.5	22	21	4.5	9.0
BL35-8	35mm ²	8	80	32	8.5	22	23	4.5	9.0
BL35-10	35mm ²	10	80	32	8.5	22	23	4.5	9.0
BL35-12	35mm ²	12	80	32	8.5	22	23	4.5	9.0
BL50B	50mm ²	blank	80	32	9.5	22	23	4.5	13.2
BL50-8	50mm ²	8	80	32	9.5	22	23	4.5	13.2
BL50-10	50mm ²	10	80	32	9.5	22	23	4.5	13.2
BL50-12	50mm ²	12	80	32	9.5	22	23	4.5	13.2
BL70B	70mm ²	blank	80	32	11.2	22	23	4.5	13.2
BL70-8	70mm ²	8	80	32	11.2	22	23	4.5	13.2
BL70-10	70mm ²	10	80	32	11.2	22	23	4.5	13.2
BL70-12	70mm ²	12	80	32	11.2	22	23	4.5	13.2
BL70-16	70mm ²	16	80	32	11.2	22	23	4.5	13.2
BL95B	95mm ²	blank	115	60	13.5	30	35	6	17.3
BL95-8	95mm ²	8	115	60	13.5	30	35	6	17.3
BL95-10	95mm ²	10	115	60	13.5	30	35	6	17.3
BL95-12	95mm ²	12	115	60	13.5	30	35	6	17.3
BL95-16	95mm ²	16	115	60	13.5	30	35	6	17.3
BL120B	120mm ²	blank	115	60	15	30	35	6	17.3
BL120-8	120mm ²	8	115	60	15	30	35	6	17.3
BL120-10	120mm ²	10	115	60	15	30	35	6	17.3
BL120-12	120mm ²	12	115	60	15	30	35	6	17.3
BL120-16	120mm ²	16	115	60	15	30	35	6	17.3
BL150B	150mm ²	blank	123	60	16.5	35	39	7	22.0
BL150-8	150mm ²	8	123	60	16.5	35	39	7	22.0
BL150-10	150mm ²	10	123	60	16.5	35	39	7	22.0
BL150-12	150mm ²	12	123	60	16.5	35	39	7	22.0
BL150-16	150mm ²	16	123	60	16.5	35	39	7	22.0
BL185B	185mm ²	blank	123	60	18.5	35	39	7	22.0
BL185-8	185mm ²	8	123	60	18.5	35	39	7	22.0
BL185-10	185mm ²	10	123	60	18.5	35	39	7	22.0
BL185-12	185mm ²	12	123	60	18.5	35	39	7	22.0
BL185-16	185mm ²	16	123	60	18.5	35	39	7	22.0
BL240B	240mm ²	blank	135	60	21.5	35	45	7	28.4
BL240-10	240mm ²	10	135	60	21.5	35	45	7	28.4
BL240-12	240mm ²	12	135	60	21.5	35	45	7	28.4
BL240-16	240mm ²	16	135	60	21.5	35	45	7	28.4
BL300B	300mm ²	blank	135	60	23.5	35	45	7	28.4
BL300-10	300mm ²	10	135	60	23.5	35	45	7	28.4
BL300-12	300mm ²	12	135	60	23.5	35	45	7	28.4
BL300-16	300mm ²	16	135	60	23.5	35	45	7	28.4
BL300-20	300mm ²	20	135	60	23.5	35	45	7	28.4

Bimetal Lugs – BL

...continued.



Part No.	Cable Size	Stud Size (mm)	Dimensions (mm)						A/F Hex Die (mm)
			A	B	D	E	G	H	
BL400B	400mm ²	blank	165	70	26.5	50	50	10	39.0
BL400-10	400mm ²	10	165	70	26.5	50	50	10	39.0
BL400-12	400mm ²	12	165	70	26.5	50	50	10	39.0
BL400-16	400mm ²	16	165	70	26.5	50	50	10	39.0
BL400-20	400mm ²	20	165	70	26.5	50	50	10	39.0
BL500B	500mm ²	blank	165	70	29.5	50	50	10	39.0
BL500-10	500mm ²	10	165	70	29.5	50	50	10	39.0
BL500-12	500mm ²	12	165	70	29.5	50	50	10	39.0
BL500-16	500mm ²	16	165	70	29.5	50	50	10	39.0
BL500-20	500mm ²	20	165	70	29.5	50	50	10	39.0
BL630B	630mm ²	blank	185	70	33.5	50	50	10	43.2
BL630-10	630mm ²	10	185	70	33.5	50	50	10	43.2
BL630-12	630mm ²	12	185	70	33.5	50	50	10	43.2
BL630-16	630mm ²	16	185	70	33.5	50	50	10	43.2
BL630-20	630mm ²	20	185	70	33.5	50	50	10	43.2
BL800-B	800mm ²	blank							

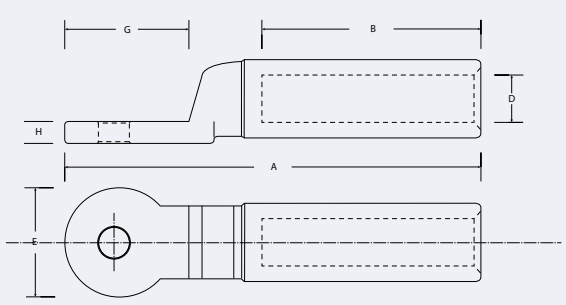
Bimetal Lugs – Special Manufacture

Named Conductors

Bimetal Lugs are available for many conductors such as Namu, Kutu, Rango, Beetle etc.

Narrow Palm Bimetal Lugs

Glowbal NZ manufacture narrow palm bimetal lugs for applications such as moulded case circuit breakers. Please contact our sales department with your request.



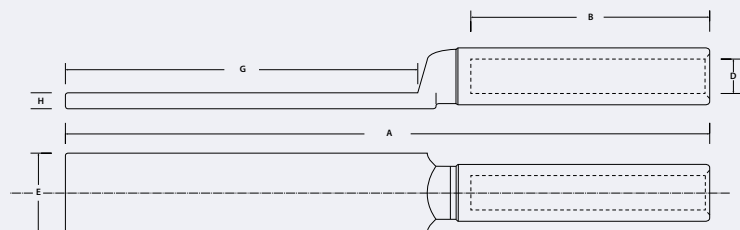


Bimetal Long Palm Lugs

Long palm bimetal lugs are manufactured from friction welded high purity aluminium and copper rod and are used for double bolt applications. The barrels are prefilled with joint compound and secured with an end cap.

All palms lugs can hole punched to the customer's requirements.

Part No.	Cable Size	Dimensions (mm)			D	E	G	H	A/F Hex Die (mm)
		A	B						
BL95LP	95mm ²	240	80		13.0	29	140	6	17.3
BL120LP	120mm ²	240	80		15	29	140	6	17.3
BL150LP	150mm ²	240	80		16.5	35	140	7	22.0
BL185LP	185mm ²	240	80		18.5	35	140	7	22.0
BL240LP	240mm ²	240	80		21.5	35	140	7	28.4
BL300LP	300mm ²	240	80		23.5	35	140	7	28.4
BL400LP	400mm ²	245	85		26.5	50	140	13	39.0
BL500LP	500mm ²	245	85		19.5	50	140	13	39.0
BL630LP	630mm ²	245	85		33.5	50	140	13	43.2
BL800LP	800mm ²	260	105		39.0	50	140	13	-



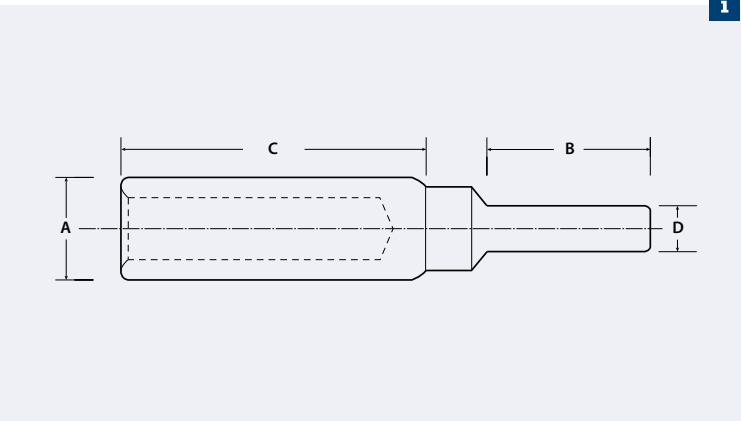
Bimetal Stalk Lugs

Our comprehensive range of bimetal stalk lugs are designed for use with switchgear devices requiring connection via a copper stalk or pin. Manufactured to order, our bimetal stalk lugs fit standard sized aluminium cables and require standard hex dies for crimping. Stalk lugs have a friction welded AL/Cu joint and are manufactured from high conductivity aluminium and copper. The aluminium barrel is supplied complete with jointing paste and a sealed end cap.



Glowbal NZ ORDER FORM – BIMETAL STALK LUGS Company			
Contact		Date	
Phone		Fax	
Email			
Delivery address			
Qty required		Order No.	
Required by			
Conductor Size		mm ²	
Dimensions			
Stalk Length B			
Stalk Dimensions D			

These items are specially manufactured and are not returnable for credit.





Bimetal Links – BLK

Glowbal NZ offer a comprehensive range of fusion welded bimetal links from 25mm to 630mm. Our bimetal links provide a quality termination point for the transition between aluminium and copper cables. Manufactured from high conductivity aluminium and copper the aluminium barrels are supplied with jointing compound and seal cap. Compression information is provided with each bimetal link.

Part No.	Nominal Cable Size		Dimensions AL (mm)			Dimensions Cu (mm)		A/F Hex Die (mm)	
	AL	Cu	A	C	D	B2	E1	AL	Cu
BLK25-16	25mm ²	16mm ²	73	32	12	26	9.5	9.0	7.7
BLK25-25	25mm ²	25mm ²	73	32	12	26	9.5	9.0	7.7
BLK35-16	35mm ²	16mm ²	73	32	12	26	9.5	9.0	7.7
BLK35-25	35mm ²	25mm ²	73	32	12	26	9.5	9.0	7.7
BLK35-35	35mm ²	35mm ²	73	32	12	26	11.5	9.0	9.2
BLK50-16	50mm ²	16mm ²	95	43	16	33	9.5	13.2	7.7
BLK50-25	50mm ²	25mm ²	95	43	16	33	9.5	13.2	7.7
BLK50-35	50mm ²	35mm ²	95	43	16	33	11.5	13.2	9.2
BLK70-16	70mm ²	16mm ²	110	50	16	33	9.5	13.2	7.7
BLK70-25	70mm ²	25mm ²	110	50	16	33	9.5	13.2	7.7
BLK70-35	70mm ²	35mm ²	110	50	16	35	11.5	13.2	9.2
BLK70-50	70mm ²	50mm ²	110	50	16	35	12.8	13.2	10.4
BLK70-70	70mm ²	70mm ²	110	50	16	35	14.7	13.2	11.5
BLK95-16	95mm ²	16mm ²	110	50	21.5	30	9.5	17.3	7.7
BLK95-25	95mm ²	25mm ²	110	50	21.5	30	9.5	17.3	7.7
BLK95-35	95mm ²	35mm ²	110	50	21.5	35	9.5	17.3	9.2
BLK95-50	95mm ²	50mm ²	110	50	21.5	35	12.0	17.3	10.4
BLK95-70	95mm ²	70mm ²	110	50	21.5	35	14.7	17.3	11.5
BLK120-16	120mm ²	16mm ²	110	50	21.5	30	9.5	17.3	7.7
BLK120-25	120mm ²	25mm ²	110	50	21.5	30	9.5	17.3	7.7
BLK120-35	120mm ²	35mm ²	110	50	21.5	35	11.5	17.3	9.2
BLK120-50	120mm ²	50mm ²	110	50	21.5	35	12.8	17.3	10.4
BLK120-70	120mm ²	70mm ²	110	50	21.5	35	14.7	17.3	11.5
BLK120-95	120mm ²	95mm ²	110	50	21.5	37	17.4	17.3	14.2
BLK150-16	150mm ²	16mm ²	120	60	27	33	9.5	22.0	7.7
BLK150-25	150mm ²	25mm ²	120	60	27	33	9.5	22.0	7.7
BLK150-35	150mm ²	35mm ²	120	60	27	35	11.5	22.0	9.2
BLK150-50	150mm ²	50mm ²	120	60	27	35	12.8	22.0	10.4
BLK150-70	150mm ²	70mm ²	120	60	27	35	14.7	22.0	11.5
BLK150-95	150mm ²	95mm ²	120	60	27	35	17.4	22.0	14.2
BLK150-120	150mm ²	120mm ²	120	60	27	35	20.0	22.0	16.5
BLK185-16	185mm ²	16mm ²	120	60	27	33	9.5	22.0	7.7
BLK185-25	185mm ²	25mm ²	120	60	27	33	9.5	22.0	7.7
BLK185-35	185mm ²	35mm ²	120	60	27	33	11.5	22.0	9.2
BLK185-50	185mm ²	50mm ²	120	60	27	35	12.8	22.0	10.4
BLK185-70	185mm ²	70mm ²	120	60	27	35	14.7	22.0	11.5
BLK185-95	185mm ²	95mm ²	120	60	27	35	17.4	22.0	14.2
BLK185-120	185mm ²	120mm ²	120	60	27	40	20.0	22.0	16.5
BLK185-150	185mm ²	150mm ²	120	60	27	40	22.5	22.0	18.3
BLK240-16	240mm ²	16mm ²	130	60	35	35	9.5	28.4	7.7
BLK240-25	240mm ²	25mm ²	130	60	35	35	9.5	28.4	7.7
BLK240-35	240mm ²	35mm ²	130	60	35	35	11.5	28.4	9.2
BLK240-50	240mm ²	50mm ²	130	60	35	35	12.8	28.4	10.4
BLK240-70	240mm ²	70mm ²	130	60	35	35	14.7	28.4	11.5
BLK240-95	240mm ²	95mm ²	130	60	35	35	17.4	28.4	14.2
BLK240-120	240mm ²	120mm ²	130	60	35	40	20.0	28.4	16.5
BLK240-150	240mm ²	150mm ²	130	60	35	40	22.5	28.4	18.3
BLK240-185	240mm ²	185mm ²	130	60	35	40	24.2	28.4	20.0
BLK300-16	300mm ²	16mm ²	130	60	35	40	9.5	28.4	7.7
BLK300-25	300mm ²	25mm ²	130	60	35	40	9.5	28.4	7.7

- For prices and availability, please call 0800 352 666.
- Many Bimetal Links are of special manufacture and are not returnable for credit..

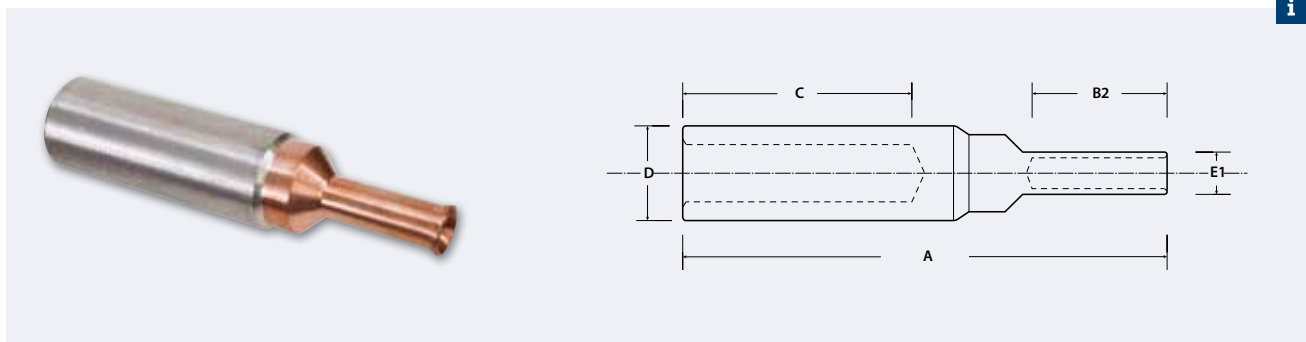
Bimetal Links – BLK

Our manufacturing department offers a fast turnaround for all bimetal link orders and can manufacture specifically for use with copper flexible cables.

For any sizes not shown please call and discuss your requirements. Bimetal Links are crimped using standard hexagonal dies as shown.



Part No.	Nominal Cable Size		Dimensions AL (mm)			Dimensions Cu (mm)		A/F Hex Die (mm)	
	AL	Cu	A	C	D	B2	E1	AL	Cu
BLK300-35	300mm ²	35mm ²	130	60	35	40	11.5	28.4	9.2
BLK300-50	300mm ²	50mm ²	130	60	35	40	12.8	28.4	10.4
BLK300-70	300mm ²	70mm ²	130	60	35	40	14.7	28.4	11.5
BLK300-95	300mm ²	95mm ²	130	60	35	40	17.4	28.4	14.2
BLK300-120	300mm ²	120mm ²	130	60	35	40	20.0	28.4	16.5
BLK300-150	300mm ²	150mm ²	130	60	35	40	22.5	28.4	18.3
BLK300-185	300mm ²	185mm ²	130	60	35	40	24.2	28.4	20.0
BLK300-240	300mm ²	240mm ²	130	60	35	40	27.8	28.4	23.1
BLK400-25	400mm ²	25mm ²	155	70	47	45	9.5	39.0	7.7
BLK400-35	400mm ²	35mm ²	155	70	47	45	11.5	39.0	9.2
BLK400-50	400mm ²	50mm ²	155	70	47	45	12.8	39.0	10.4
BLK400-70	400mm ²	70mm ²	155	70	47	45	14.7	39.0	11.5
BLK400-95	400mm ²	95mm ²	155	70	47	45	17.4	39.0	14.2
BLK400-120	400mm ²	120mm ²	155	70	47	45	20.0	39.0	16.5
BLK400-150	400mm ²	150mm ²	155	70	47	45	22.5	39.0	18.3
BLK400-185	400mm ²	185mm ²	155	70	47	50	24.2	39.0	20.0
BLK400-240	400mm ²	240mm ²	155	70	47	50	27.8	39.0	23.1
BLK400-300	400mm ²	300mm ²	155	70	47	50	31.3	39.0	26.0
BLK500-50	500mm ²	50mm ²	155	70	47	45	12.8	39.0	10.4
BLK500-70	500mm ²	70mm ²	155	70	47	45	14.7	39.0	11.5
BLK500-95	500mm ²	95mm ²	155	70	47	45	17.4	39.0	14.2
BLK500-120	500mm ²	120mm ²	155	70	47	45	20.0	39.0	16.5
BLK500-150	500mm ²	150mm ²	155	70	47	50	22.5	39.0	18.3
BLK500-185	500mm ²	185mm ²	155	70	47	50	24.2	39.0	20.0
BLK500-240	500mm ²	240mm ²	155	70	47	50	27.8	39.0	23.1
BLK500-300	500mm ²	300mm ²	155	70	47	50	31.3	39.0	26.0
BLK500-400	500mm ²	400mm ²	155	70	47	50	34.8	39.0	28.1
BLK500-500	500mm ²	500mm ²	155	70	47	55	39.0	39.0	31.0
BLK630-50	630mm ²	50mm ²	160	70	54	40	12.8	43.2	10.4
BLK630-70	630mm ²	70mm ²	160	70	54	40	14.7	43.2	11.5
BLK630-95	630mm ²	95mm ²	160	70	54	45	17.4	43.2	14.2
BLK630-120	630mm ²	120mm ²	160	70	54	45	20.0	43.2	16.5
BLK630-150	630mm ²	150mm ²	160	70	54	50	22.5	43.2	18.3
BLK630-185	630mm ²	185mm ²	160	70	54	50	24.2	43.2	20.0
BLK630-240	630mm ²	240mm ²	160	70	54	55	27.8	43.2	23.1
BLK630-300	630mm ²	300mm ²	160	70	54	55	31.3	43.2	26.0
BLK630-400	630mm ²	400mm ²	160	70	54	55	34.8	43.2	28.1
BLK630-500	630mm ²	500mm ²	160	70	54	60	39.0	43.2	31.0

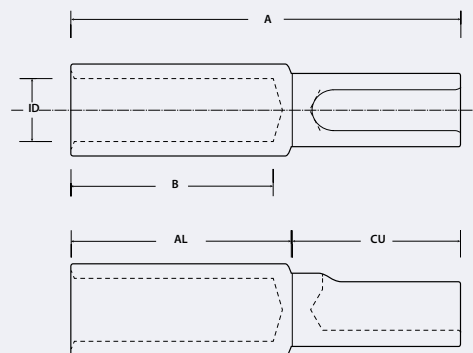




Bimetal Switchgear Connectors

Bimetal switchgear connectors, are designed for termination of copper cables to a 12mm switchgear stem common to some brands of medium voltage switchgear. Manufactured from high purity Cu/AL, and machined with a slot to insert the 12mm stem, the fittings come complete with a stainless steel locking collar. Once crimped to the cable the connector is fastened to the switchgear stem by a means of a grub screw in the collar.

Part No.	Cable Size	Switchgear Stem dia (mm)	Dimensions (mm)		A/F Hex Die (mm)
			A	B	
BLKSC16	16	12	85	32	7.7
BLKSC25	25	12	85	32	7.7
BLKSC35	35	12	85	32	9.2
BLKSC50	50	12	85	32	10.4
BLKSC70	70	12	85	32	11.5
BLKSC95	95	12	110	60	14.2
BLKSC120	120	12	110	60	16.5
BLKSC150	150	12	120	60	18.3
BLKSC185	185	12	120	60	20.0
BLKSC240	240	12	120	60	23.1
BLKSC300	300	12	120	60	26.0



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• Bimetal switchgear connectors are manufactured to order, and are supplied in a sealed plastic bag with the applicable compression die information.



Reverse Bimetal Lugs

Glowbal NZ manufacture a range of reverse bimetal lugs. Reverse bimetal lugs, have a aluminium palm and a copper barrel, and are generally used when a bolted connection is required between a copper cable and an aluminium busbar or terminal.

Manufactured from high quality aluminium and with a friction welded joint, they provide a electrically sound joint. Reverse bimetals are crimped using standard hexagonal crimp dies.

• Reverse bimetals are manufactured to order as there are many varied requirements for palm and barrel lengths. Please ask for specific details and sizes.

Aluminium & Transmission Products





Aluminium Links

Non Tension Transition Type (ALKR)

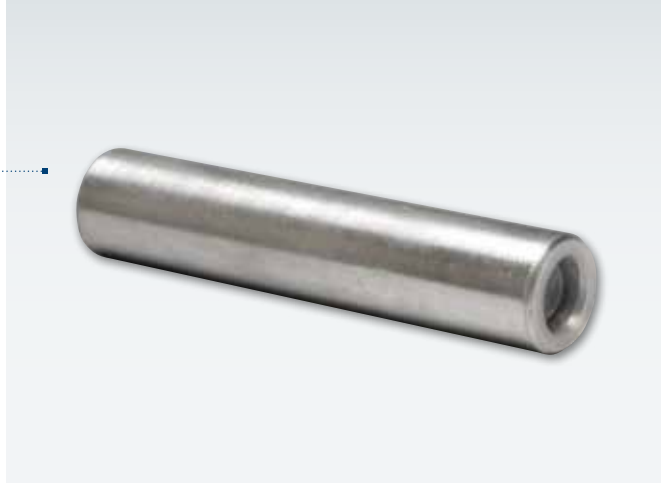
ECLs ALKR links are made from high purity aluminium rod. These links are used for the joining of dissimilar sized aluminium and copper conductors and feature a centre barrier. Commonly used on URD-sector and single XLPE cables for service main and network type applications, ALKR links provide a cost effective transition termination solution. Links come complete with jointing compound capped ends and compression die information.

Part No.	Cable Size AL-Cu (mm ²)	Dimensions (mm)		A/F Hex Die (mm)
		A	D	
ALKR25-16	25mm ² -16mm ²	70	12	9.0
ALKR35-16	35mm ² -16mm ²	70	16	13.2
ALKR35-25	35mm ² -25mm ²	70	16	13.2
ALKR50-16	50mm ² -16mm ²	70	16	13.2
ALKR50-25	50mm ² -25mm ²	70	16	13.2
ALKR70-16	70mm ² -16mm ²	80	16	13.2
ALKR70-25	70mm ² -25mm ²	80	16	13.2
ALKR70-35	70mm ² -35mm ²	80	16	13.2
ALKR95-16	95mm ² -16mm ²	110	21.5	17.3
ALKR95-25	95mm ² -25mm ²	110	21.5	17.3
ALKR95-35	95mm ² -35mm ²	110	21.5	17.3
ALKR95-50	95mm ² -50mm ²	110	21.5	17.3
ALKR95-70	95mm ² -70mm ²	110	21.5	17.3
ALKR120-16	120mm ² -16mm ²	110	21.5	17.3
ALKR120-25	120mm ² -25mm ²	110	21.5	17.3
ALKR120-35	120mm ² -35mm ²	110	21.5	17.3
ALKR120-50	120mm ² -50mm ²	110	21.5	17.3
ALKR120-70	120mm ² -70mm ²	110	21.5	17.3
ALKR150-16	150mm ² -16mm ²	120	27	22.0
ALKR150-25	150mm ² -25mm ²	120	27	22.0
ALKR150-35	150mm ² -35mm ²	120	27	22.0
ALKR150-50	150mm ² -50mm ²	120	27	22.0
ALKR150-70	150mm ² -70mm ²	120	27	22.0
ALKR185-16	185mm ² -16mm ²	120	27	22.0
ALKR185-25	185mm ² -25mm ²	120	27	22.0
ALKR185-35	185mm ² -35mm ²	120	27	22.0
ALKR185-50	185mm ² -50mm ²	120	27	22.0
ALKR185-70	185mm ² -70mm ²	120	27	22.0
ALKR185-95	185mm ² -95mm ²	120	27	22.0
ALKR240-16	240mm ² -16mm ²	130	35	28.4
ALKR240-25	240mm ² -25mm ²	130	35	28.4
ALKR240-35	240mm ² -35mm ²	130	35	28.4
ALKR240-50	240mm ² -50mm ²	130	35	28.4
ALKR240-70	240mm ² -70mm ²	130	35	28.4
ALKR240-95	240mm ² -95mm ²	130	35	28.4
ALKR240-120	240mm ² -120mm ²	130	35	28.4
ALKR240-150	240mm ² -150mm ²	130	35	28.4
ALKR240-185	240mm ² -185mm ²	130	35	28.4
ALKR300-16	300mm ² -16mm ²	130	35	28.4
ALKR300-25	300mm ² -25mm ²	130	35	28.4
ALKR300-35	300mm ² -35mm ²	130	35	28.4
ALKR300-50	300mm ² -50mm ²	130	35	28.4
ALKR300-70	300mm ² -70mm ²	130	35	28.4
ALKR300-95	300mm ² -95mm ²	130	35	28.4

Aluminium Links

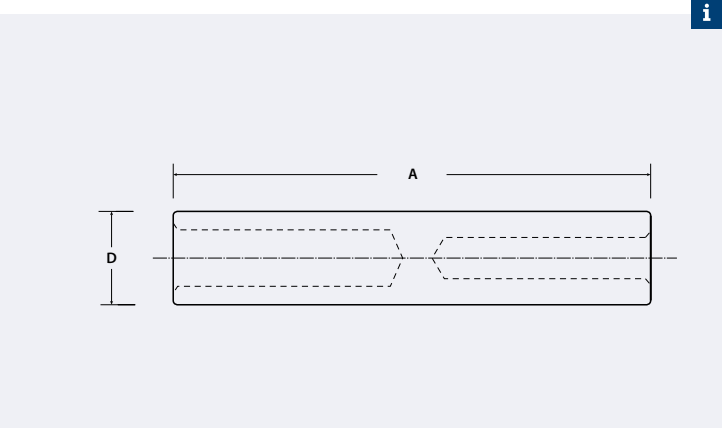
Non Tension Transition Type (ALKR)

...continued.



Part No.	Cable Size AL-Cu	Dimensions (mm)		A/F Hex Die (mm)
		A	D	
ALKR300-120	300mm ² -120mm ²	130	35	28.4
ALKR300-150	300mm ² -150mm ²	130	35	28.4
ALKR300-185	300mm ² -185mm ²	130	35	28.4
ALKR300-240	300mm ² -240mm ²	130	35	28.4
ALKR400-50	400mm ² -50mm ²	160	47	39.0
ALKR400-70	400mm ² -70mm ²	160	47	39.0
ALKR400-95	400mm ² -95mm ²	160	47	39.0
ALKR400-120	400mm ² -120mm ²	160	47	39.0
ALKR400-150	400mm ² -150mm ²	160	47	39.0
ALKR400-185	400mm ² -185mm ²	160	47	39.0
ALKR400-240	400mm ² -240mm ²	160	47	39.0
ALKR500-50	500mm ² -50mm ²	160	47	39.0
ALKR500-70	500mm ² -70mm ²	160	47	39.0
ALKR500-95	500mm ² -95mm ²	160	47	39.0
ALKR500-120	500mm ² -120mm ²	160	47	39.0
ALKR500-150	500mm ² -150mm ²	160	47	39.0
ALKR500-185	500mm ² -185mm ²	160	47	39.0
ALKR500-240	500mm ² -240mm ²	160	47	39.0
ALKR500-300	500mm ² -300mm ²	160	47	39.0
ALKR500-400	500mm ² -400mm ²	160	47	39.0
ALKR630-50	630mm ² -50mm ²	210	54	43.2
ALKR630-70	630mm ² -70mm ²	210	54	43.2
ALKR630-95	630mm ² -95mm ²	210	54	43.2
ALKR630-120	630mm ² -120mm ²	210	54	43.2

- Links are supplied with crimp die information.
- For named conductors please specify e.g. ALK Beetle-25mmCu.
- For any reducing links not specified please call our sales department.
- Many of these items are of special manufacture and are not returnable for credit.



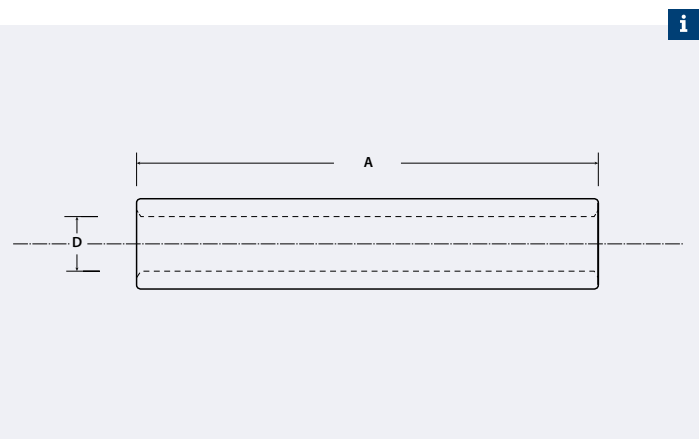


Aluminium Links (ALK)

Manufactured from electrical grade aluminium tube, ALK non tension links are designed for jointing same size aluminium stranded sector and stranded circular conductors. They come pre-filled with joint compound and with the ends capped. Compression die information is supplied with each link, normal aluminium cable preparation applies prior to crimping. Standard range is shown below.

Part No.	Cable Size	Dimensions (mm)		A/F Hex Die (mm)
		A	D	
ALK16	16mm ²	80	12	9.0
ALK25	25mm ²	80	12	9.0
ALK35	35mm ²	80	16	13.2
ALK50	50mm ²	80	16	13.2
ALK70	70mm ²	80	16	13.2
ALK95	95mm ²	110	21.5	17.3
ALK120	120mm ²	110	21.5	17.3
ALK150	150mm ²	130	27	22.0
ALK185	185mm ²	130	27	22.0
ALK240	240mm ²	130	35	28.4
ALK300	300mm ²	130	35	28.4
ALK400	400mm ²	130	47	39.0
ALK500	500mm ²	160	47	39.0
ALK630	630mm ²	180	54	43.2

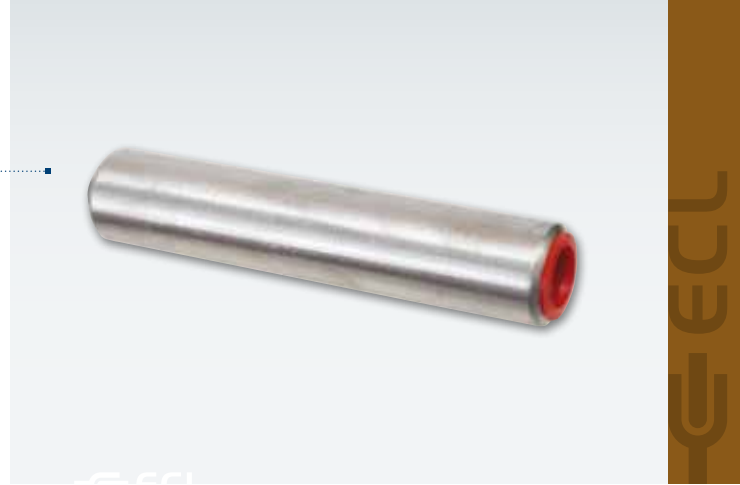
- Note: For named conductors please specify requirements e.g. ALK Namu-Namu.
- Our manufacturing department can also make special sizes at short notice.



Aluminium Links

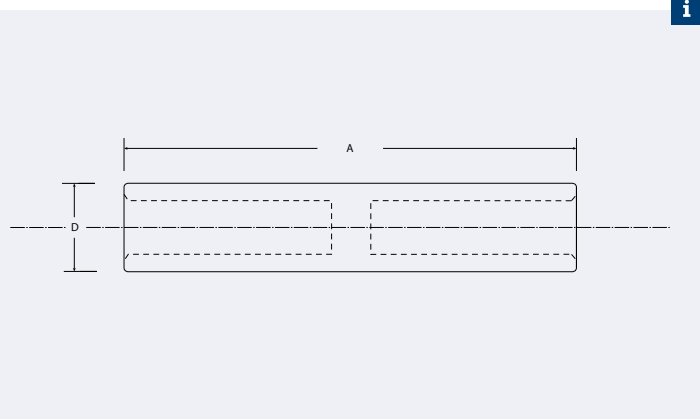
Barrier Type (ALKB Non Tension)

Manufactured from electrical grade aluminium rod, ALKB links are designed for jointing same size aluminium conductors. ALKB links feature a centre barrier and are available for most sizes of aluminium conductors including named conductors. They come pre-filled with joint compound and with the ends capped. Compression die information is supplied with each link. Normal aluminium cable preparation applies prior to crimping.



Part No.	Cable Size	Dimensions (mm)		A/F Hex Die (mm)
		A	D	
ALKB16	16mm ²	80	12	9.0
ALKB25	25mm ²	80	12	9.0
ALKB35	35mm ²	80	16	13.2
ALKB50	50mm ²	80	16	13.2
ALKB70	70mm ²	80	16	13.2
ALKB95	95mm ²	110	21.5	17.3
ALKB120	120mm ²	110	21.5	17.3
ALKB150	150mm ²	130	27	22.0
ALKB185	185mm ²	130	27	22.0
ALKB240	240mm ²	130	35	28.4
ALKB300	300mm ²	130	35	28.4
ALKB400	400mm ²	130	47	39.0
ALKB500	500mm ²	160	47	39.0
ALKB630	630mm ²	210	54	43.2

- Note: For named conductors please specify requirements e.g. ALK Namu-Namu.
- Our manufacturing department can also make special sizes at short notice.





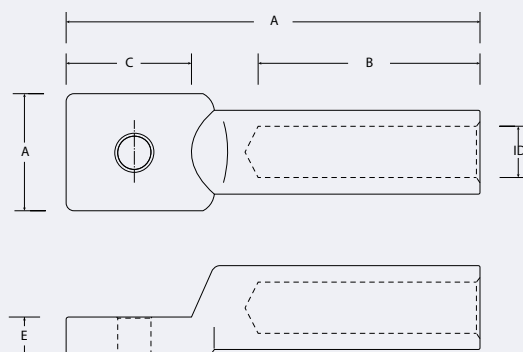
Aluminium Lugs

ECLs aluminium lugs are manufactured from solid aluminium rod using high conductivity (99.6%pure) aluminium. These lugs are forged from solid material, they are suitable for outdoor use as the palm ends are sealed. Aluminium Lugs are supplied with jointing compound in the barrels and are sealed with an end cap. Standard sizes are listed, but other sizes can be punched to the customer's requirements. Crimping is carried out with standard hex dies and normal aluminium cable preparation.

Part No.	Cable Size	Dimensions (mm)		L1	L2	W	A/F Hex Die (mm)
		I.D	L				
AL25-8	25mm ²	7	65	20	32	22	9.0
AL25-10	25mm ²	7	65	20	32	22	9.0
AL35-10	35mm ²	8.5	65	20	32	22	9.0
AL35-12	35mm ²	8.5	65	20	32	22	9.0
AL50-8	50mm ²	9.5	73	27	32	26	13.2
AL50-10	50mm ²	9.5	73	27	32	26	13.2
AL50-12	50mm ²	9.5	73	27	32	26	13.2
AL70-8	70mm ²	11	73	27	32	26	13.2
AL70-10	70mm ²	11	73	27	32	26	13.2
AL70-12	70mm ²	11	73	27	32	26	13.2
AL95-8	95mm ²	13	80	32	32	30	17.3
AL95-10	95mm ²	13	80	32	32	30	17.3
AL95-12	95mm ²	13	80	32	32	30	17.3
AL120-8	120mm ²	15	80	32	32	30	17.3
AL120-10	120mm ²	15	80	32	32	30	17.3
AL120-12	120mm ²	15	80	32	32	30	17.3
AL150-10	150mm ²	16.5	90	36	34	36	22.0
AL150-12	150mm ²	16.5	90	36	34	36	22.0
AL185-10	185mm ²	18.5	90	36	34	36	22.0
AL185-12	185mm ²	18.5	90	36	34	36	22.0
AL240-10	240mm ²	21.5	115	50	41	40	28.4
AL240-12	240mm ²	21.5	115	50	41	40	28.4
AL300 B	300mm ²	23.5	115	50	41	40	28.4
AL300-10	300mm ²	23.5	115	50	41	40	28.4
AL300-12	300mm ²	23.5	115	50	41	40	28.4
AL400 B	400mm ²	26.5	150	54	70	54	39.0
AL500 B	500mm ²	29.5	150	54	70	54	39.0
AL630 B	630mm ²	33.5	160	60	70	60	43.2

Aluminium Lugs - Named Conductors

Glowbal NZ can also supply one bolt compression terminals for AAC, ACSR and AAAC named conductors. Manufactured from high conductivity aluminium rod or tube. Please specify the particular conductor you require.



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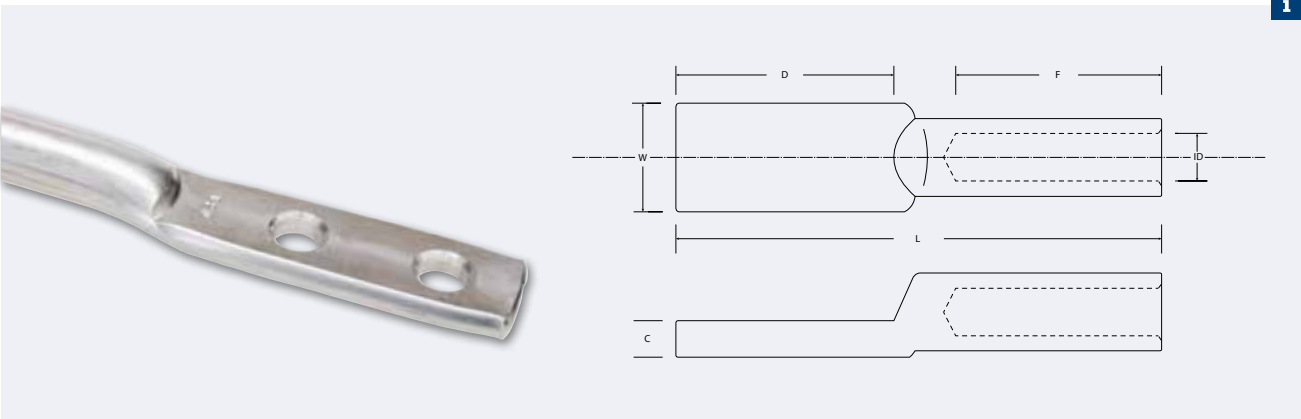
Aluminium Long Palm Lugs

Aluminium Long Palm Lugs are forged from electrical grade solid aluminium rod. The lengthened palm allows for a 'two bolt' connection. It is recommended that belville washers are used when bolting aluminium lugs. Aluminium long palm lugs are supplied complete with joint compound in the barrel and are sealed with a plastic cap. Standard hex dies can be used for crimping and normal aluminium cable preparation requirements apply. Holes in the palm can be drilled to suit the customer's requirements.



Part No.	Cable Size	Dimensions (mm)						A/F Hex Die (mm)
		I.D	L	D	F	W	C	
AL50LP	50mm ²	9.5	104	60	32	25	8	13.2
AL70LP	70mm ²	11.2	104	60	32	25	8	13.2
AL95LP	95mm ²	13.5	112	60	32	29	10	17.3
AL120LP	120mm ²	15	112	60	32	29	10	17.3
AL150LP	150mm ²	16.5	180	90	34	36	11	22.0
AL185LP	185mm ²	18.5	180	90	34	36	11	22.0
AL240LP	240mm ²	21.5	205	90	41	40	12	28.4
AL300LP	300mm ²	23.5	205	90	41	40	12	28.4

• Long Palm Lugs for named conductors are also available – please ask for details.





Parallel Groove Clamps

At Glowbal NZ we stock a wide range of parallel groove clamps. Our parallel groove clamps are manufactured from high strength corrosion resistant alloy and copper. Used extensively for aerial tap-offs, Glowbal NZ PG clamps are engineered to last.



Aluminium Parallel Groove Clamps

For tap-off connection of AL-alloy conductors.

Material:

Body: High strength corrosion resistant AL-Alloy.

Bolts: Steel 8.8, hot-dip galvanized.

Part No.	Conductor Cross Section (mm ²)		Conductor Diameter (mm)	Bolts
	AL	ACSR		
EC330672	25–150	25/4–120/20	6.3–15.7	2 x M10
EC330674	35–185	35/6–150/25	7.5–17.5	2 x M10
EC330680	35–300	35/6–265/35	7.5–21.6	3 x M10



Bimetallic Parallel Groove Clamps

For connection of AL conductors, ACSR conductors with copper tap-off conductors.

Material: High strength corrosion resistant AL-alloy with hot forged bimetallic sheet, for copper tap-off.

Bolts: Steel, 8.8, hot-dip galvanized.

Nuts: Steel, 8, hot-dip galvanized.

Part No.	Conductor Cross Section (mm ²)			Conductor Diameter (mm)		Bolts
	AL	ACSR	Cu	AL	Cu	
EC330707	35–120	35/6–95/15	10–50	7.7–14.0	3.5–9.0	1xM8
EC330710	16–70	16/2.5–70/12	6–50	5.1–11.7	2.7–9.0	2xM8
EC330712	25–150	25/4–120/20	10–95	6.3–15.7	3.5–12.5	2xM8
EC330716	35–185	35/6–150/25	35–185	7.5–17.5	7.5–17.5	3xM10
EC330717	50–300	35/6–265/35	35–240	9.0–23.0	7.5–20.3	3xM10



Bimetallic Cover Type Tap Connectors

For AL, ACSR conductors and copper tap-off conductors.

Cover Part: High strength corrosion resistant aluminium alloy.

Middle Part: AL-alloy with hot-forged bimetallic sheet.

Lower Part: High strength copper alloy

Bolt: Steel, 8.8 hot-dip galvanised.

Conical Washers: Steel, corrosion-protected.

Part No.	Conductor Cross Section (mm ²)			Bolts
	AL	ACSR	Cu	
EC330714	25–70	25/4–70/12	10–70	2 x M8 x45
EC330715	50–150	50/8–120/20	25–120	2 x M8 x 55

Parallel Groove Clamps

...continued.



Universal Overhead Line Clamp

For clamping of dead ends. Tap off conductors, auxiliary conductors Al and ACSR

Materials:

Body: High strength aluminium alloy, drop forged.

Bolts: Class 8.8 hot dip galvanized

Part No.	Conductor Cross Section (mm ²)		Conductor Diameter (mm)	Bolts
	AL	ACSR	Al-ACSR	
EC332695	16-70	25/4-70/12	5.1-11.7	2 x M8
EC332699	50-150	50/8- 120/20	9.0-16	2 x M10



Copper Parallel Grove Clamp

For tap off connection at copper conductors

Materials:

Body: High strength copper alloy.

Bolts: Stainless steel

Part No.	Conductor Cross Section (mm ²)		Conductor Diameter (mm)	Bolts
	AL	ACSR	Al-ACSR	
EC330571	6-70	2.7-10.5	5.1-11.7	2 x M8
EC330572	10-95	3.5-12.5	9.0-16	2 x M10



• Other types of parallel groove clamps are also available – please ask for details.



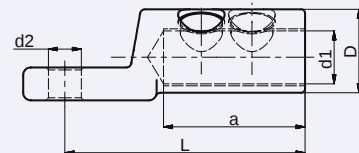
Shearhead Connectors

Glowbal NZ shearbolt connectors are a reliable and cost effective way of connecting different conductor sizes and types. Manufactured and certified in Europe from high strength aluminium alloy and using shearbolt technology, they are available as both a lug and a link in 1KV and up to 36KV options. Shearbolt connectors minimize inventory and can save downtime in the event of cable outages. They are quick and easy to use, provide optimal cable clamping and can be used on both copper and aluminium conductors.

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**Shearhead Connector Lugs
ECKN Type – Up to 6KV**

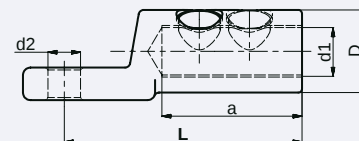


Part No.	Nominal Cable Size (mm ²)	Stud Size	Dimensions (mm)					Palm Width (mm)
			d2	d1	D	L	a	
ECKN8-1625	16-35	M8	8.4	9	18	40	18	25
ECKN10-1625	16-35	M10	10.5	9	18	40	18	25
ECKN12-1625	16-35	M12	13	9	18	40	18	25
ECKN8-2595	25-95	M8	8.4	14	28	60	32.5	28.4
ECKN10-2595	25-95	M10	10.5	14	28	60	32.5	28.4
ECKN12-2595	25-95	M12	13	14	28	60	32.5	28.4
ECKN8-25185	25-185	M8	8.4	21	33	95	56	33.5
ECKN10-25185	25-185	M10	10.5	21	33	95	56	33.5
ECKN12-25185	25-185	M12	13	21	33	95	56	33.5
ECKN8-120240	120-240	M8	8.4	23	38	100	63	38
ECKN10-120240	120-240	M10	10.5	23	38	100	63	38
ECKN12-120240	120-240	M12	13	23	38	100	63	38
ECKN16-120240	120-240	M16	17	23	38	100	63	38

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**Shearhead Connector Lugs
ECKS Type – Up to 36KV**



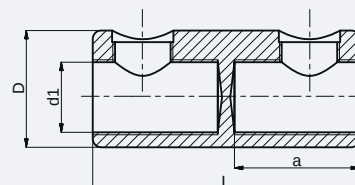
Part No.	Nominal Cable Size (mm ²)	Stud Size	Dimensions (mm)					Palm Width (mm)
			d2	d1	D	L	a	
ECKS12-1695	16-95	M12	13	12.5	24	60	32	30
ECKS12-50150	50-150	M12	13	15.5	30	79	35	30
ECKS16-50150	50-150	M16	17	15.5	30	79	35	30
ECKS12-95240	95-240	M12	13	20	33	95	56	33.5
ECKS16-95240	95-240	M16	17	20	33	95	56	33.5
ECKS12-120300	120-300	M12	13	25	38	100	67	37.5
ECKS16-120300	120-300	M16	17	25	38	100	67	37.5
ECKS12-185400	185-400	M12	13	25.5	42	137	80	40.2
ECKS16-185400	185-400	M16	17	25.5	42	137	80	40.2
ECKS12-500630	500-630	M12	13			150	95	50.3
ECKS16-500630	500-630	M16	17			150	95	50.3

Shearhead Connectors

...continued.



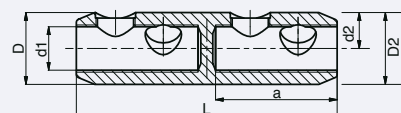
**Shearhead Connector Links
ECZN Type – Up to 1KV**



Part No.	Nominal Cable Size (mm ²)	Dimensions (mm)			
		d1	D	L	a
ECZN1625	16-35	9	18	40	18
ECZN1650	16-50	11	21	55	25
ECZN2595	25-95	14	25	55	25
ECZN25150	25-150	17.5	28	70	32.5
ECZN25185	25-185	21	35	80	37.5
ECZN120240	120-240	23	38	128	60



**Shearhead Connector Links
ECZS Type – Up to 36KV**



Part No.	Nominal Cable Size (mm ²)	Dimensions (mm)						
		d1	d2	D1	D2	L	a	a1
ECZS1695	16-95	12.5	12.5	24	24	70	32	32
ECZS50150	50-150	15.5	15.5	30	30	85	35	35
ECZS95240	95-240	20	20	33	33	120	56	56
ECZS120300	120-300	25	25	38	38	142	67	67
ECZS120/300-16/95	120/300-16/95	25	12.5	38	38	142	67	32
ECZS185/400-95/240	185/400-95/240	25.5	20	42	33	170	80	80
ECZS185400	185/400	25.5	25.5	42	42	170	80	80
ECZS500-185/400	500-185/400	30	25.5	46	42	190	90	90
ECZS630-185/400	630-185/400	33	25.5	50	42	200	95	95
ECZS500-500	500	30	30	46	46	190	90	90
ECZS630-630	630	33	33	50	50	200	95	95

- Note: All shearbolt connectors are bimetal – either Al or Cu can be used.
- Some sector cables may require the larger sized connector, please ask for details.

Shearhead Connectors

...continued.

Shearhead Holding Tool

Holder for shear off screw terminals and connectors during mounting and tightening screws.

Length: 265mm **Weight:** 650g

Part No.	Description
ECUZZ	Shearhead Holding Tool



Split Bolt Connectors

Line Taps

Manufactured from Brass, with a tin plated finish, Glowbal NZ range of split bolt connectors feature a captive saddle for the best clamping performance. Ideal for jointing or tapping off of conductors, they are supplied as standard with a hex head for ease of use. SBC copper plated split bolt connectors are also available on request.



Part No.	Cable Size (mm ²)	Dimension A (mm)	Pack Size
SBC10	10	4.5	100
SBC16	16	6	75
SBC25	25	6.9	50
SBC35	35	8.1	30
SBC50	50	9.7	20
SBC70	70	11.2	15
SBC95	95	13.6	15
SBC120	120	15	10
SBC150	150	16.6	10
SBC185	185	18.2	10

CABLE GLANDS





Nylon Cable Glands

Glowbal NZ cable glands are unique. Finished in black nylon and originally marketed as the 'Ultimate' gland, these glands have been the preferred choice by end users for many years. Special features: Rated to I.P.68 • Additional neoprene seal washer supplied as standard • Large size range • Continuous operating withstand temperature -40°to 100°C • Short term withstand temperature rating 200°C • Superior cable retention due to locking mechanism. Ideal in vibration prone environments such as the marine industry. Grey is available in some sizes.

Metric Series

Part No.	Thread Size	Size	Colour	Cable Dia min-max (mm)	Pack Size
G12	M12	12mm	Black	3-6mm	100
G12G	M12	12mm	Grey	3-6mm	100
G16	M16	16mm	Black	4-10mm	50
G16G	M16	16mm	Grey	4-10mm	50
G20	M20	20mm	Black	7-13mm	40
G20G	M20	20mm	Grey	7-13mm	40
G25	M25	25mm	Black	11-18mm	20
G25G	M25	25mm	Grey	11-18mm	20
G32	M32	32mm	Black	15-24mm	15
G40	M40	40mm	Black	19-31mm	6
G50	M50	50mm	Black	27-38mm	3
G63	M63	63mm	Black	34-43mm	2

P.G Series

Part No.	Thread Size	Size (mm)	Cable Dia min-max (mm)	Pack Size
GPG9	PG9	15.2	4-8mm	1
GPG11	PG11	18.6	6-10mm	1
GPG13.5	PG13.5	20.4	7-12.5mm	1
GPG16	PG16	22.5	8.5-14mm	1
GPG21	PG21	28.3	12.5-18mm	1
GPG29	PG29	30.7	18-25mm	1

Nylon Gland Selection Chart

Cable Size (mm ²)	Cu Circular 2c+E	Cu Circular 3c+ E	Cu Circular 4c+ E	Cu N/Screen 1 Core	Cu N/Screen 3 Core	Cu N/Screen 4 Core	Cu Single Core Flexible	AL 1 Core XLPE	Cu 1 Core XLPE
1.5	G16	G16	G16						
2.5	G20	G20	G20		G20	G25			
4	G20	G20	G20		G25	G25			
6	G20	G25	G25	G20	G25	G25	G16		
10	G25	G32	G32	G25	G32	G32	G16		
16		G32	G32	G25	G32	G32	G16		G16
25		G32	G32	G32	G40	G40	G20	G20	G20
35		G32	G40	G32	G40	G40	G20	G20	G20
50		G40	G40	G32	G40	G50	G25	G20	G20
70		G50	G50		G50	G50	G25	G25	G25
95		G50	G63		G50	G63	G32	G25	G25
120							G32	G32	G32
150							G32	G32	G32
185							G40	G32	G32
240							G40	G40	G40
300							G50	G40	G40
400							G50	G50	G50
500								G50	

• Gland sizing is a guide only and will need to be verified against manufacturers cable dimensions.

Metal Glands Unarmoured

A2 Type

Designed for general purpose use with XLPE and PVC cables Glowbal NZ A2 glands offer effective cable retention for cable diameters up to 78mm. Manufactured in nickel plated brass they are suitable for arduous environments where corrosion protection is required. The large cable range covered by each gland size reduces inventory and simplifies gland selection. Glands are supplied complete with locknut and are IP rated if fitted with a gasket. Glands conform to BS6121 PTI-1989.



Part No.	Thread Size	Thread Length (mm)	Cable Dia min-max (mm)	Dia across Corners (mm)	Pack Size
GA220SS	M20	15	3.5-8.5	24.4	25
GA220S	M20	15	8.0-11.5	26.5	25
GA220L	M20	15	11.0-13.5	26.5	25
GA225	M25	15	13.0-19.5	39.9	20
GA232	M32	15	19.0-25.5	45.5	15
GA240	M40	15	25.5-32.0	55.4	10
GA250S	M50	15	31.5-37.0	61.0	5
GA250L	M50	15	36.5-43.0	65.5	5
GA263S	M63	15	42.5-50.0	77.6	4
GA263L	M63	15	49.5-55.0	83.2	4
GA275S	M75	15	54.5-61.0	88.7	2
GA275L	M75	15	60.5-67.0	94.2	2
GA290	M90	20	65.0-78.0	120.7	1

A2 Gland Selection Chart

Cable Size (mm)	Cu Circular 2c+E	Cu Circular 3c+ E	Cu Circular 4c+ E	Cu N/Screen 1 Core	Cu N/Screen 3 Core	Cu N/Screen 4 Core	3 Core AL, N/Screen	Cu Single Core Flexible	AL 1 Core XLPE	Cu 1 Core XLPE
1.5	GA220	GA220S	GA220S							
2.5	GA220	GA220S	GA220L		GA220L	GA225				
4	GA220	GA220L	GA225	GA220S	GA220L	GA225				
6	GA220	GA225	GA225	GA220S	GA225	GA225		GA220SS		
10	GA225	GA225	GA225	GA225	GA232	GA232		GA220S		
16		GA232	GA232	GA225	GA232	GA232		GA220S		GA220S
25		GA232	GA232	GA225	GA232	GA240		GA220S		GA220S
35		GA232	GA240	GA225	GA240	GA240		GA220L	GA220L	GA220L
50		GA240	GA240	GA232	GA240	GA250S	GA240	GA225	GA220L	GA220L
70		GA240	GA250S		GA250S	GA250L	GA240	GA225	GA225	GA225
95		GA250			GA250L	GA250L	GA250S	GA225	GA225	GA225
120							GA250L	GA232	GA225	GA225
150							GA263S	GA232	GA232	GA232
185							GA263S	GA232	GA232	GA232
240								GA240	GA240	GA240
300								GA240	GA240	GA240
400								GA250S	GA240	GA240
500								GA250L	GA250S	GA250S
630								GA250L	GA250L	GA250L

• Gland selection chart is a guide only as specifications may vary between cable manufacturers. Please confirm before ordering.



Metal Cable Glands

IP68

Glowbal NZ nickel plated brass cable glands are tested to IP68 and are designed to protect your electrical installation against the ingress of dust and moisture. Offering a superior cable grip and enhanced strain relief, this "BG" series of cable gland speeds up installation and reduces inventory through its extended cable diameter range. With a temperature rating of -20-120°C, these are perfect for PVC, XLPE, and flexible cables. Supplied complete with locknuts.

Metric Series

Part No.	Thread Size	Cable Dia min-max (mm)	Dimensions (mm)			Pack Size
			A	B	A/F	
BG12	M12	3-6.5mm	12	10	14	1
BG16	M16	4-8mm	16	10	18	1
BG20	M20	6-12mm	20	10	22	1
BG25	M25	13-18mm	25	11	31	1
BG32	M32	18-25mm	32	13	40	1
BG40	M40	25-32mm	40	13	50	1
BG50	M50	32-38mm	50	13	55	1
BG63	M63	37-44mm	63	14	65	1

P.G Series

Part No.	Thread Size	Size (mm)	Cable Dia min-max (mm)	A/F	Pack Size
BGPG11	PG11	18.6	5-10mm	22mm	1
BGPG13.5	PG13.5	20.4	6-12mm	24mm	1
BGPG16	PG16	22.5	10-14mm	26mm	1
BGPG21	PG21	28.3	13-18mm	32mm	1
BGPG26	PG29	37.0	18-25mm	41mm	1

IP68 Gland Selection Chart

Cable Size (mm)	Cu Circular 2c+E	Cu Circular 3c+ E	Cu Circular 4c+ E	Cu N/Screen 1 Core	Cu N/Screen 3 Core	Cu N/Screen 4 Core	Cu Single Core Flexible	AL 1 Core XLPE	Cu 1 Core XLPE
1.5	BG20	BG20	BG20						
2.5	BG20	BG20	BG20		BG25	BG25			
4	BG20	BG20	BG25		BG25	BG25			
6	BG25	BG25	BG25	BG20	BG25	BG25	BG16		
10		BG32	BG32	BG25	BG32	BG32	BG20		
16		BG32	BG32	BG25	BG32	BG32	BG20		BG20
25		BG32	BG32	BG32	BG40	BG40	BG20	BG25	BG20
35		BG40	BG40	BG32	BG40	BG40	BG25	BG25	BG25
50		BG40	BG40	BG32	BG40	BG50	BG25	BG25	BG25
70		BG50	BG50	BG32	BG50	BG50	BG25	BG25	BG25
95		BG50	BG63	BG32	BG50	BG63	BG32	BG25	BG25
120				BG40			BG32	BG32	BG32
150							BG32	BG32	BG32
185							BG40	BG32	BG32
240							BG40	BG40	BG40
300							BG40	BG40	BG40
400							BG50	BG40	BG40
500							BG63	BG50	BG50
630								BG63	BG63

• Gland sizing is a guide only and will need to be verified against manufacturers cable dimensions.

CW Armoured Glands

Glowbal NZ CW range of glands are designed for use with steel wire armoured cable. Manufactured from nickel plated brass they are suitable for both indoor and outdoor applications. Select the appropriate gland using from the gland sizing information below. Glands are supplied complete with locknut.



Part No.	Shroud Part No.	Thread Size	Thread Length (mm)	Cable Dimensions (mm)			Dia across cnrs (mm)	Dia across fl ts	Pack Size
				Max Under Armour Dia	Overall Dia Min	Overall Dia Max			
GCW20S	GSH1S	M20	10	11.5	9.8	15.5	24.0	22.3	1
GCW20	GSH1	M20	10	14.0	12.7	20.5	26.0	23.3	1
GCW25	GSH2	M25	10	18.5	18.5	27.2	37.0	34.0	1
GCW32	GSH3	M32	10	22.0	22.0	33.5	45.6	40.5	1
GCW40	GSH4	M40	13	28.0	28.0	39.5	51.0	46.0	1
GCW50S	GSH5S	M50	13	34.0	34.0	46.3	64.0	57.0	1
GCW50L	GSH5	M50	13	41.0	41.0	52.6	69.6	62.0	1
GCW63S	GSH6S	M63S	14	48.0	48.0	59.0	77.6	69.0	1
GCW63L	GSH6	M63L	14	50.0	50.0	65.3	87.0	77.0	1
GCW75	GSH7	M75	15	60.0	60.0	71.6	96.0	85.0	1



Metric Thread Locknuts

Manufactured from nickel plated brass, these locknuts are suited to the CW, A2, and IP68 cable glands.

Part No.	Thread Size
GML12	M12
GML16	M16
GML20	M20
GML25	M25
GML32	M32

Part No.	Thread Size
GML40	M40
GML50	M50
GML63	M63
GML75	M75



Earth Tags

Part No.	Thread Size
EET20	M20
EET25	M25
EET32	M32
EET40	M40
EET50	M50
EET63	M63

Gland Slection Chart – Armoured Cables*

Cable Size (mm)	2 core + E	3 core + E	7 core	12 core	19 core	27 core	32 core
1.5mm	CW20SS	CW20SS	CW20SS	CW20S	CW25		CW32
2.5mm	CW20S	CW20S	CW20S	CW25	CW20S	CW32	CW40
4mm	CW20S	CW20S					
6mm	CW20S	CW25					
10mm		CW25					
16mm		CW25					
25mm		CW32					
35mm		CW32					
50mm		CW32					
70mm		CW40					
95mm		CW50S					
120mm		CW50L					
150mm		CW50L					
185mm		CW63S					
240mm		CW63L					

*Cable diameters may vary between manufacturers, please double check the cable specifications before ordering



Stainless Steel Glands

Designed for use in the dairy, wine, chemical industries and also for arduous marine environments. Manufactured from 303/304 or 316 Stainless Steel, these glands have an environmental protection rating to IP68. Locknuts sold separately.

303/304 Stainless Steel Glands

Part No.	Thread Size	Thread Length (mm)	Clamping Range min-max (mm)	Locknut Part No
GSS12	M12	6.0mm	3.0-6.5mm	GSSL12
GSS16	M16	7.0mm	4.0-8.0mm	GSSL16
GSS20	M20	8.0mm	6.0-12.0mm	GSSL20
GSS25	M25	8.0mm	10.0-14.0mm	GSSL25
GSS32	M32	9.0mm	13.0-18.0mm	GSSL32
GSS40	M40	9.0mm	18.0-25.0mm	GSSL40
GSS50	M50	9.0mm	22.0-32.0mm	GSSL50
GSS63	M63	9.0mm	34.0-44.0mm	GSSL63

316 Stainless Steel Glands

Part No.	Thread Size	Thread Length (mm)	Clamping Range min-max (mm)	Locknut Part No
GSS12316	M12	6.0mm	3.0-6.5mm	GSSL12316
GSS16316	M16	7.0mm	4.0-8.0mm	GSSL16316
GSS20316	M20	8.0mm	6.0-12.0mm	GSSL20316
GSS25316	M25	8.0mm	10.0-14.0mm	GSSL25316
GSS32316	M32	9.0mm	13.0-18.0mm	GSSL32316
GSS40316	M40	9.0mm	18.0-25.0mm	GSSL40316
GSS50316	M50	9.0mm	22.0-32.0mm	GSSL50316
GSS63316	M63	9.0mm	34.0-44.0mm	GSSL63316



Hygienic Cable Glands

GSSH Hygiene glands are designed specifically for use in areas where cleanliness is a high priority. Manufactured from 303 stainless steel, they have no exposed threads and have a smooth body finish preventing buildup of harmful micro-organisms. Cleaning of the gland is easier and faster, and their IP68 rating makes them suitable for high pressure steam cleaning. Specific tightening tool is required for the gland installation.

Standard Hygiene Glands

Part No.	Thread Size	Thread Length (mm)	Clamping Range min-max (mm)	Locknut Part No.	Tightening Tool Part No.
GSSH12	M12	6.0	3.0-6.5	GSSH12L	GSSHT12
GSSH16	M16	7.0	5.0-10.0	GSSH16L	GSSHT16
GSSH20	M20	10.0	6.0-12.0	GSSH20L	GSSHT20
GSSH25	M25	14.0	12.0-17.0	GSSH25L	GSSHT25

EMC Hygiene Glands

Part No.	Thread Size	Thread Length (mm)	Clamping Range min-max (mm)	Locknut Part No	Tightening Tool Part No.
GSSHE16	M16	7.0	5.0-10.0	GSSHE16L	GSSHT16
GSSHE20	M20	10.0	6.0-12.0	GSSHE20L	GSSHT20
GSSHE25	M25	14.0	12.0-17.0	GSSHE25L	GSSHT25

EMC (VSD) Glands

Glowbal NZ G4 EMC cable glands for variable speed drives offer significant advantages over other EMC cable glands. The patented 360 degree contact system inside the gland allows all degrees of freedom necessary to install a cable easily: the cable can be pulled backward, forward and rotated inside the gland without damaging the cable shield. In addition to this the G4 gland offers exceptional shielding and derivation test values.



Specifications:

EMC (VSD) Glands are certified to IP68 environmental protection and manufactured from nickel plated brass. Glands are suited for a temperature rating of -40°C to 100°C.

Part No.	Thread Size	Thread Length (mm)	Cable Outside Dia min-max (mm)	Shield Dia Range (mm)	Pack Size
G416	M16	12	5-10	3.5-8	1
G420	M20	12	6-12	5.5-11.5	1
G425	M25	12	10-18	7-14	1
G432	M32	14.5	16-25	12-20	1
G440	M40	14.5	22-32	18-27	1
G450	M50	14.5	30-38	26-34	1
G463S	M63	14.5	34-44	30-40	1
G463L	M63L	14.5	37-53	33-49	1
G475S	M75S	20	53-64	45-60	1
G475L	M75L	20	60-67	45-60	1

EMC Glands 304 Stainless Steel

Part No.	Thread Size	Thread Length (mm)	Cable Outside Dia min-max (mm)	Shield Dia Range (mm)	Pack Size
G420SS	M20	12	6-12	5.5-11.5	1
G425SS	M25	12	10-18	7-14	1
G432SS	M32	14.5	16-25	12-20	1
G440SS	M40	14.5	22-32	18-27	1

• EMC Glands are also available in flameproof versions on request.



EMC (VSD) Locknuts

These locknuts have 'machined' barbs to allow an earthing track to be cut in the metallic enclosure during installation of the EMC gland.

Part No.	To fit gland	Thread Size
G4L16	G416	M16
G4L20	G420	M20
G4L25	G425	M25
G4L32	G432	M32
G4L40	G440	M40
G4L50	G450	M50
G4L63	G463 & G463L	M63
G4L75	G475L	M75





Flameproof Cable Glands

FGE Series

Glowbal NZ FG series armoured cable glands are designed for use in Zone 1 and Zone 2 areas. Manufactured from nickle plated brass they are designed for industrial applications. Glands are supplied complete with locknut. See the table below for gland sizing.



General Specification and Area Classification:

- 1 Group -II, Category -2 (zone 1) gas group IIC, conform to IEC 60079-0:2011, EN60079-1:2007 & EN60079-7:2007
- 2 Electrical apparatus for dust for Zone 21 & 22 as per EN 60079-31:2009
- 3 Environmental: IP67 as per IEC60529
- 4 Certification No: ITS12ATEX17637X
- 5 Equipment Marking: II 2 GD Ex d IIC Gb /Ex e IIC Gb -20°C ≤ Ta ≤ 100°C Ex tb IIC -20°C ≤ Ta ≤ 100°C Db IP67, ITS12ATEX17637X

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Part No	Shroud Part No.	Thread Size	Thread Length	Cable Dimensions (mm)		Hex Dimensions (mm)		Pack Size
			(mm)	Overall Dia	Max under armour Dia	Across Flats	Across Cnrs	
FGE1FW20S	FGES20S	M20	15	9.5-15.9	6.1-11.6	25	28	1
FGE1FW20	FGES20	M20	15	12.5-20.9	6.5-13.9	27	30	1
FGE1FW25	FGES25	M25	15	17-26.2	11.1-19.9	36	40	1
FGE1FW32	FGES32	M32	15	22.9-33.9	17-26.2	45	50	1
FGE1FW40	FGES40	M40	15	26-40.4	22-32.1	53	59	1
FGE1FW50S	FGES50S	M50	20	35-46.7	29.5-38.1	60	66	1
FGE1FW50	FGES50	M50	20	38-53.1	35.6-44	68	75	1
FGE1FW63S	FGES63S	M63	20	45.6-59.4	40.1-49.9	75	81	1
FGE1FW63	FGES63	M63	20	54.6-65.9	47.2-55.9	81	89	1
FGE1FW75S	FGES75S	M75	20	57-72.1	52.8-61.9	90	99	1
FGE1FW75	FGES75	M75	20	60.4-78.5	59.1-67.9	96.5	107	1
FGE1FW90	FGES90	M90	20	69.2-90.4	66.6-79.3	111	121	1



Flameproof Cable Glands

Dorado 4 Function FGD Ex d/e Armoured Series

Glowbal NZ Dorado series cable gland are a high end four function flameproof cable gland designed for the most arduous situations.

General Specification:

- 1 Large cable size acceptance with each gland due to the design of the seals.
- 2 No need to remove or adjust any internal components as long as the cable is within the clamping range.
- 3 Swivel shield cone is affixed to the upper and lower body by "O" rings preventing the loss of parts during cable installation.
- 4 Ease of inspection of the gland condition.
- 5 High strain relief IP rating and Ex protection is obtained through the special shaped seal.
- 6 Deluge proof design with double "O" ring seal, preventing water intrusion to the armour.



Area Classification:

Certification: IMQ 11 ATEX 036

Test Report: 43AL00050

Safety Requirements: EN60079-0; EN60079-1; EN60079-7; prEN 60079-11; EN60529; EN60079-31

Equipment Marking: Flameproof Ex-d, and increased safety EX-e EX II M2/2GD Exd Mb; Ex-d lic Gb/ Ex e I Mb; Exe IIC Gb

Suitable for Use in: Equipment Zone 1, Zone 2, Zone 21, Zone22, gas Groups IIA, IIB, IIC

Environmental: IP66-IP68 (EN 60529)

Material: Nickel Plated Brass

Part No	Shroud Part No	Thread Size	Thread Length (mm)	Cable Dimensions (mm)		Hex Dimensions (mm)		Pack Size
				Overall Dia	Max under armour Dia	Across Flats	Across Cnrs	
FGDR16	FGDRS16	M16	16	9.0-18.0	4.0-12.0	24	27	1
FGDR20	FGDRS20	M20	16	9.0-18.0	4.0-12.0	24	27	1
FGDR25	FGDRS25	M25	18	14.0-26.0	9.0-20.0	36	40	1
FGDR32	FGDRS32	M32	18	20.0-33.0	15.0-26.0	48	51	1
FGDR40	FGDRS40	M40	18	29.0-41.0	20.0-32.0	55	60	1
FGDR50	FGDRS50	M50	20	36.0-52.0	22.0-35.0	60	67	1
FGDR63	FGDRS63	M63	20	42.0-62.0	35.0-45.0	74	83	1
FGDR75	FGDRS75	M75	20	54.0-78.0	45.0-60.0	90	103	1
FGDR90	FGDRS90	M90	20	63.0-88.0	60.0-72.0	110	128	1



FGD Flameproof glands are available in 304 and 316 stainless steel as special manufacture on request.



Coated Cable Glands

Glowbal NZ GEN series coated glands are manufactured from high tensile brass components and then coated with a tough plastic exterior. They provide the ultimate resistance to corrosive environments, and are an alternative to stainless steel. GEN glands are also dual certified for use in hazardous areas, have an environmental rating of IP68, and are certified for marine use.



Compression Gland – non armoured Ex e/d



Part No.	Thread Size	Thread length (mm)	Cable Dia min-max (mm)	Across Flat (mm)	Across Corner (mm)	Pack Size
GEN32108	M20	16	4.0-8.0	27.7	32.0	1
GEN32100	M20	16	8.0-12.6	27.7	32.0	1
GEN32101	M20	16	12.6-15.7	31.5	36.4	1
GEN32012	M25	16	15.7-20.4	40.0	46.2	1
GEN32103	M32	16.5	20.4-26.3	48.5	56.0	1
GEN32104	M40	21	26.3-34.7	57.3	66.2	1
GEN32105	M50	22	34.7-43.3	74.4	86.0	1
GEN32106	M63	27	43.3-55.8	88.0	101.6	1
GEN32107	M75	27	55.8-67.5	96.0	110.9	1



Compression Gland – armoured Ex e



Part No.	Thread Size	Thread Length (mm)	Cable Dimensions Max Under Armour dia (mm)	Overall Dia (mm)		Gland Dimensions (mm)		Pack Size
						Across Flat	Across Corner	
GEN31999	M20	16	6.0-8.5	10	16	27.5	31.8	1
GEN32000	M20	16	8.5-12.6	12.6	18.6	27.5	31.8	1
GEN32001	M20	16	12.6-15.7	15.4	22	31.6	36.5	1
GEN32002	M25	16	15.7-20.4	22	27.3	40	46.2	1
GEN32003	M32	16.5	20.4-26.3	24.3	33.5	49	56.6	1
GEN32004	M40	21	26.3-34.7	33.5	43.2	58	67	1
GEN32005	M50	22	34.7-43.3	43.2	53.5	74.5	77.3	1
GEN32006	M63	27	43.3-55.8	53.5	67.2	88	101.6	1
GEN32007	M75	27	55.8-67.5	67.2	79	100	115.5	1

Heat Shrink Cable Glands

GHSC Cable series of heat shrinkable cable glands were developed to provide a cost effective method of providing a weatherproof seal on a variety of cables. The glands are manufactured in accordance with MIL specifications and provide a flame retarded adhesive lined body along with a male threaded entry part to enable fixture to the gland plate.



Part No.	Cable O/D Min	Cable O/D Max	Gland Plate Thickness Max	Overall Length (Recovered)	Entry Hole Size	Qty
GHSC1	4mm	12mm	6mm	95mm	26mm	1
GHSC2	7mm	17mm	6mm	95mm	26mm	1
GHSC3	13mm	26mm	6mm	100mm	35mm	1
GHSC4	19mm	38mm	6mm	130mm	51mm	1
GHSC4s	19mm	53mm	10mm	170mm	60mm	1
GHSC5	36mm	70mm	6mm	200mm	88mm	1



Stop Plugs

Threaded stop plugs are designed to close unused cable entries on apparatus such as electric motors, junction boxes, etc. TSP stop plugs are available in both standard and flameproof options and are suitable for use in arduous industrial applications.



Part No.	Thread Size	Type	Overall Length (mm)	Thread Length (mm)	Pack Size
TSP16NEX	M16	NPB Exd	21.0	14	1
TSP16	M16	NPB	16.0	12	1
TSP20NEX	M20	NPB Exd	21.0	14	1
TSP20	M20	NPB	16.0	12	1
TSP25NEX	M25	NPB Exd	21.0	14	1
TSP25	M25	NPB	16.0	12	1
TSP32NEX	M32	NPB Exd	21.0	14	1
TSP32	M32	NPB	16.0	12	1
TSP40NEX	M40	NPB Exd	23.0	16	1
TSP40	M40	NPB	16.0	12	1
TSP50NEX	M50	NPB Exd	23.0	16	1
TSP50	M50	NPB	18.0	14	1
TSP63NEX	M63	NPB Exd	23.0	18	1
TSP63	M63	NPB	18.0	14	1
TSP12NNEX	1/2NPT	NPB Exd	23	16	1
TSP34NNEX	3/4NPT	NPB Exd	23	16	1
TSP1NNEX	1 NPT	NPB Exd	27	20	1
TSPPG11NEX	PG11	NPB Exd	22	15	1
TSPPG16NEX	PG16	NPB Exd	22	15	1
TSPPG21NEX	PG21	NPB Exd	22	15	1

NPB = Nickel Plated Brass

Exd = Flameproof Exd rating, ATEX Certified


ATEX

Reducers and Adapters

Glowbal NZ TR/TA series thread reducers and adapters are designed to be used in industrial and marine situations. They are ideal for construction projects, where large quantities of cables of different sizes and types are being used, and where the thread entries are often unclear. Glowbal NZ threaded adapters and reducers offer a quick and simple fix to match gland thread to cable entry. Flameproof options are also available.

Threaded Reducers

Part No.	Thread Size	Type	Overall Length (mm)	Thread Length (mm)	Pack Size
TR2016N	M20-M16	NPB	26	15	1
TR2520NEX	M25-M20	NPB Exd	19	15	1
TR2520N	M25-M20	NPB	26	15	1
TR3220NEX	M32-M20	NPB Exd	19	15	1
TR3220N	M32-M20	NPB	26	15	1
TR3225NEX	M32-M25	NPB Exd	19	15	1
TR3225N	M32-M25	NPB	26	15	1
TR4020N	M40-M20	NPB	26	15	1
TR4025NEX	M40-M25	NPB Exd	22	18	1
TR4025N	M40-M25	NPB	26	15	1
TR4032NEX	M40-M32	NPB Exd	22	18	1
TR4032N	M40-M32	NPB	26	15	1
TR5020NEX	M50-M20	NPB Exd	23	18	1
TR5025NEX	M50-M25	NPB Exd	23	18	1
TR5025N	M50-M25	NPB	29	15	1
TR5032N	M50-M32	NPB	29	15	1
TR5040NEX	M50-M40	NPB Exd	23	18	1
TR5040N	M50-M40	NPB	29	15	1
TR6325NEX	M63-M25	NPB Exd	23	18	1
TR6340N	M63-M40	NPB	26	15	1
TR6350NEX	M63-M50	NPB Exd	23	18	1
TR6350N	M63-M50	NPB	26	15	1
TR7563N	M75-M63	NPB	30	20	1

Threaded Adapters

Part No.	Thread Size	Type	Overall Length (mm)	Pack Size
TA1620N	M16-M20	NPB	33	1
TA2025N	M20-M25	NPB	33	1
TA2532N	M25-M32	NPB	33	1
TA3240N	M32-M40	NPB	33	1
TA4050N	M40-M50	NPB	33	1
TA5063N	M50-M63	NPB	33	1
TA12NM20EX	1/2NPT-M20	NPB Exd	34	1
TA34NM20EX	3/4NPT-M20	NPB Exd	34	1
TA34NM25EX	3/4NPT-M25	NPB Exd	34	1
TA1NM20EX	1"NPT-M20	NPB Exd	34	1
TA1NM25EX	1"NPT-M25	NPB Exd	34	1

NPB = Nickel Plated Brass

Exd = Flameproof Exd rating, ATEX Certified





Ultimate Terminals

Pre & Uninsulated

Glowbal NZ' original "Ultimate" ranges of preinsulated and uninsulated terminals are comprehensive and are designed for long term electrical integrity. Certified to relevant international standards, these terminals are offered in both small and large packs, bulk packs are also available on request.



Ring Terminals

Part No.	Conductor Size	Ring Size	Colour	Pack Size
ERT153/25	0.5-1.5mm ²	3mm	red	25
ERT153/100	0.5-1.5mm ²	3mm	red	100
ERT154/25	0.5-1.5mm ²	4mm	red	25
ERT154/100	0.5-1.5mm ²	4mm	red	100
ERT155/25	0.5-1.5mm ²	5mm	red	25
ERT155/100	0.5-1.5mm ²	5mm	red	100
ERT156/20	0.5-1.5mm ²	6mm	red	20
ERT156/100	0.5-1.5mm ²	6mm	red	100
ERT158/15	0.5-1.5mm ²	8mm	red	15
ERT158/100	0.5-1.5mm ²	8mm	red	100
ERT1510/15	0.5-1.5mm ²	10mm	red	15
ERT1510/100	0.5-1.5mm ²	10mm	red	100
ERT253/25	1.5-2.5mm ²	3mm	blue	25
ERT253/100	1.5-2.5mm ²	3mm	blue	100
ERT254/25	1.5-2.5mm ²	4mm	blue	25
ERT254/100	1.5-2.5mm ²	4mm	blue	100
ERT255/25	1.5-2.5mm ²	5mm	blue	25
ERT255/100	1.5-2.5mm ²	5mm	blue	100
ERT256/20	1.5-2.5mm ²	6mm	blue	20
ERT256/100	1.5-2.5mm ²	6mm	blue	100
ERT258/15	1.5-2.5mm ²	8mm	blue	15
ERT258/100	1.5-2.5mm ²	8mm	blue	100
ERT2510/10	1.5-2.5mm ²	10mm	blue	10
ERT2510/100	1.5-2.5mm ²	10mm	blue	100
ERT63/15	2.5-6.0mm ²	3mm	yellow	15
ERT63/50	2.5-6.0mm ²	3mm	yellow	50
ERT64/15	2.5-6.0mm ²	4mm	yellow	15
ERT64/50	2.5-6.0mm ²	4mm	yellow	50
ERT65/15	2.5-6.0mm ²	5mm	yellow	15
ERT65/50	2.5-6.0mm ²	5mm	yellow	50
ERT66/10	2.5-6.0mm ²	6mm	yellow	10
ERT66/50	2.5-6.0mm ²	6mm	yellow	50
ERT68/10	2.5-6.0mm ²	8mm	yellow	10
ERT68/50	2.5-6.0mm ²	8mm	yellow	50
ERT610/10	2.5-6.0mm ²	10mm	yellow	10
ERT610/50	2.5-6.0mm ²	10mm	yellow	50



Fork Terminals

Part No.	Conductor Size	Ring Size	Colour	Pack Size
EFT153/25	0.5 ² -1.5mm ²	3mm	red	25
EFT153/100	0.5 ² -1.5mm ²	3mm	red	100
EFT154/25	0.5 ² -1.5mm ²	4mm	red	25
EFT154/100	0.5 ² -1.5mm ²	4mm	red	100
EFT155/25	0.5 ² -1.5mm ²	5mm	red	25
EFT155/100	0.5 ² -1.5mm ²	5mm	red	100
EFT156/15	0.5 ² -1.5mm ²	6mm	red	15
EFT156/100	0.5 ² -1.5mm ²	6mm	red	100
EFT253/25	1.5 ² -2.5mm ²	3mm	blue	25
EFT253/100	1.5 ² -2.5mm ²	3mm	blue	100
EFT254/25	1.5 ² -2.5mm ²	4mm	blue	25
EFT254/100	1.5 ² -2.5mm ²	4mm	blue	100
EFT255/20	1.5 ² -2.5mm ²	5mm	blue	20
EFT255/100	1.5 ² -2.5mm ²	5mm	blue	100
EFT256/15	1.5 ² -2.5mm ²	6mm	blue	15
EFT256/100	1.5 ² -2.5mm ²	6mm	blue	100
EFT63/15	2.5 ² -6.0mm ²	3mm	yellow	15
EFT63/50	2.5 ² -6.0mm ²	3mm	yellow	50
EFT64/15	2.5 ² -6.0mm ²	4mm	yellow	15
EFT64/50	2.5 ² -6.0mm ²	4mm	yellow	50
EFT65/15	2.5 ² -6.0mm ²	5mm	yellow	15
EFT65/50	2.5 ² -6.0mm ²	5mm	yellow	50
EFT66/10	2.5 ² -6.0mm ²	6mm	yellow	10
EFT66/50	2.5 ² -6.0mm ²	6mm	yellow	50



Quick Connect – female

Part No.	Conductor Size	Tab Size	Colour	Pack Size
EQC15/15	1.5mm ²	6.4mm	red	15
EQC15/100	1.5mm ²	6.4mm	red	100
EQC1548/20	1.5mm ²	4.8mm	red	20
EQC1548/100	1.5mm ²	4.8mm	red	100
EQC1528/20	1.5mm ²	2.8mm	red	20
EQC1528/100	1.5mm ²	2.8mm	red	100
EQC25/15	2.5mm ²	6.4mm	blue	15
EQC25/100	2.5mm ²	6.4mm	blue	100
EQC2548/15	2.5mm ²	4.8mm	blue	15
EQC2548/100	2.5mm ²	4.8mm	blue	100
EQC6/10	6mm ²	6.4mm	yellow	10
EQC6/50	6mm ²	6.4mm	yellow	50



Fully insulated, Quick Connect – female

Part No.	Conductor Size	Tab Size	Colour	Pack Size
EFIQ15/15	1.5mm ²	6.4mm	red	15
EFIQ15/50	1.5mm ²	6.4mm	red	50
EFIQ1548/15	1.5mm ²	4.8mm	red	15
EFIQ1548/50	1.5mm ²	4.8mm	red	50
EFIQ25/15	2.5mm ²	6.4mm	blue	15
EFIQ25/50	2.5mm ²	6.4mm	blue	50
EFIQ2548/15	2.5mm ²	4.8mm	blue	15
EFIQ2548/50	2.5mm ²	4.8mm	blue	50
EFIQ6/10	6mm ²	6.4mm	yellow	10
EFIQ6/50	6mm ²	6.4mm	yellow	50



Male Tab

Part No.	Conductor Size	Tab Size	Colour	Pack Size
EMT15/15	1.5mm ²	6.4mm	red	15
EMT15/100	1.5mm ²	6.4mm	red	100
EMT25/15	2.5mm ²	6.4mm	blue	15
EMT25/100	2.5mm ²	6.4mm	blue	100
EMT6/10	6mm ²	6.4mm	yellow	10
EMT6/50	6mm ²	6.4mm	yellow	50



Pin Connector

Part No.	Conductor Size	Colour	Pack Size
EPC15/25	1.5mm ²	red	25
EPC15/100	1.5mm ²	red	100
EPC25/20	2.5mm ²	blue	20
EPC25/100	2.5mm ²	blue	100
EPC6/15	6mm ²	yellow	15
EPC6/50	6mm ²	yellow	50



**Piggy back,
quick connect**

Part No.	Conductor Size	Tab Size	Colour	Pack Size
EPB15/10	1.5mm ²	6.4mm	red	10
EPB15/100	1.5mm ²	6.4mm	red	100
EPB25/10	2.5mm ²	6.4mm	blue	10
EPB25/100	2.5mm ²	6.4mm	blue	100



Lip Blade Terminal

Part No.	Conductor Size	Tab Size	Colour	Pack Size
EMT15/15	1.5mm ²	6.4mm	red	15
EMT15/100	1.5mm ²	6.4mm	red	100
EMT25/15	2.5mm ²	6.4mm	blue	15
EMT25/100	2.5mm ²	6.4mm	blue	100



**Bullet Connector
– Female**

Part No.	Conductor Size	Colour	Pack Size
EFBC15/15	1.5mm ²	red	15
EFBC15/100	1.5mm ²	red	100
EFBC25/15	2.5mm ²	blue	15
EFBC25/50	2.5mm ²	blue	50



**Bullet Connector
– Male**

Part No.	Conductor Size	Colour	Pack Size
EMBC15/15	1.5mm ²	red	15
EMBC15/100	1.5mm ²	red	100
EMBC25/15	2.5mm ²	blue	15
EMBC25/50	2.5mm ²	blue	50



In-Line Splice

Part No.	Conductor Size	Colour	Pack Size
EILS15/20	1.5mm ²	red	20
EILS15/100	1.5mm ²	red	100
EILS25/20	2.5mm ²	blue	20
EILS25/100	2.5mm ²	blue	100
EILS6/15	6.0mm ²	yellow	15
EILS6/50	6.0mm ²	yellow	50



Lipless Terminal

Part No.	Conductor Size	Colour	Pack Size
ELL15/15	1.5mm ²	red	15
ELL15/100	1.5mm ²	red	100
ELL25/15	2.5mm ²	blue	15
ELL25/100	2.5mm ²	blue	100
ELL6/15	6.0mm ²	yellow	15
ELL6/100	6.0mm ²	yellow	100



Wire Nut

Part No.	Conductor Size	Colour	Pack Size
EWN15/25	1.5mm ²	grey	25
EWN15/50	1.5mm ²	grey	50
EWN25/25	2.5mm ²	blue	25
EWN25/50	2.5mm ²	blue	50
EWN6/15	6.0mm ²	orange	15
EWN6/25	6.0mm ²	orange	25



End Connector

Part No.	Conductor Size	Colour	Pack Size
EEC15/25	1.5mm ²	clear	25
EEC15/100	1.5mm ²	clear	100
EEC25/20	2.5mm ²	clear	20
EEC25/100	2.5mm ²	clear	100
EEC6/10	6.0mm ²	clear	10
EEC6/50	6.0mm ²	clear	50



Ring Terminals – Uninsulated

Part No.	Conductor Size	Ring Size	Pack Size
ERTU1254	0.5 ² -1.6mm ²	4mm	100
ERTU1255	0.5 ² -1.6mm ²	5mm	100
ERTU1256	0.5 ² -1.6mm ²	6mm	100
ERTU24	1.0 ² -2.6mm ²	4mm	100
ERTU25	1.0 ² -2.6mm ²	5mm	100
ERTU26	1.0 ² -2.6mm ²	6mm	100
ERTU28	1.0 ² -2.6mm ²	8mm	100
ERTU210	1.0 ² -2.6mm ²	10mm	100
ERTU55	2.5 ² -6.0mm ²	5mm	100
ERTU56	2.5 ² -6.0mm ²	6mm	50
ERTU58	2.5 ² -6.0mm ²	8mm	50
ERTU510	2.5 ² -6.0mm ²	10mm	50
ERTU512	2.5 ² -6.0mm ²	12mm	50
ERTU1012	10mm ²	12mm	1
ERTU1016	10mm ²	16mm	1
ERTU1616	16mm ²	16mm	1



Fork Terminals – Uninsulated

Part No.	Conductor Size	Fork Size	Pack Size
EFSU1253	0.5 ² -1.6mm ²	3mm	100
EFSU1254	0.5 ² -1.6mm ²	4mm	100
EFSU1255	0.5 ² -1.6mm ²	5mm	100
EFSU24	1.0 ² -2.6mm ²	4mm	100
EFSU25	1.0 ² -2.6mm ²	5mm	100
EFSU26	1.0 ² -2.6mm ²	6mm	100
EFSU54	2.5 ² -6.0mm ²	4mm	100
EFSU55	2.5 ² -6.0mm ²	5mm	100
EFSU56	2.5 ² -6.0mm ²	6mm	100



Copper Pin Connector – Uninsulated

Part No.	Conductor Size	Pin Length	Pack Size
EPCU10	10mm ²	12mm	1
EPCU16	16mm ²	13mm	1
EPCU25	25mm ²	15mm	1
EPCU35	35mm ²	15mm	1



Heat Shrinkable Splice Connectors

Part No.	Conductor Size	Pack Size
HSJ15/50	0.5 ² -1.5mm ²	50
HSJ25/50	1.5 ² -2.5mm ²	50
HSJ6/25	2.5 ² -6.0mm ²	25

• See page 80 & 81 for tooling.





End Sleeves (Ferrules)

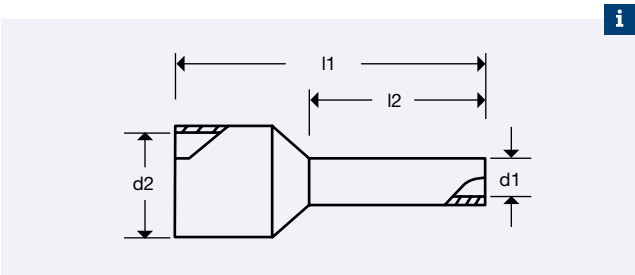
Insulated, Loose

For use on fine stranded cables to encapsulate the strands and provide a tidy termination for the cable end. Ideal for control wiring applications for the best termination.



Part No.	Nominal Conductor	Colour	Pack Size	Dimensions (mm)			
				d1	d2	l1	l2
ESI058D	0.5mm ²	White	100	1	2.6	13.5	8
ESI0758D	0.75mm ²	Grey	100	1.2	2.8	14	8
ESI108D	1.0mm ²	Red	100	1.4	3	14.5	8
ESI158D	1.5mm ²	Black	100	1.7	3.5	14.5	8
ESI1512D	1.5mm ²	Black	100	1.7	3.5	18.5	12
ESI0258D	2.5mm ²	Blue	100	2.2	4.2	15	8
ESI02512D	2.5mm ²	Blue	100	2.2	4.2	19	12
ESI2518D	2.5mm ²	Blue	100	2.2	4.2	18	18
ESI4010D	4.0mm ²	Grey	100	2.8	4.8	18	10
ESI6012D	6.0mm ²	Yellow	50	3.5	6.3	20	12
ESI6018D	6.0mm ²	Yellow	50	3.5	6.3	26	18
ESI1012D	10.0mm ²	Red	25	4.5	7.6	21	12
ESI1018D	10.0mm ²	Red	25	4.5	7.6	27	18
ESI1612D	16.0mm ²	Blue	25	5.8	8.8	23	12
ESI2516D	25.0mm ²	Yellow	25	7.3	11.2	29	16
ESI2518D	25.0mm ²	Yellow	25	7.3	11.2	31	18
ESI3516D	35.0mm ²	Red	25	8.3	12.7	30	16
ESI5020D	50.0mm ²	Blue	25	10.3	15	36	20

• Special colours to French (T) or German (W) standards available on request.



Slide Boxes

Glowbal NZ has two slide boxes for assorted ferrule sizes. Handy, convenient and smart, this box offers a range of sizes for day to day use.

ESSB1 – Assorted sizes 0.5-2.5mm ²		ESSB2 – Assorted sizes 4.0-16.0mm	
Contents	Qty	Contents	Qty
0.5mm	50	4.0mm	50
0.75mm	100	6.0mm	20
1.0mm	100	10.0mm	20
1.5mm	100	16.0mm	10
2.5mm	50		

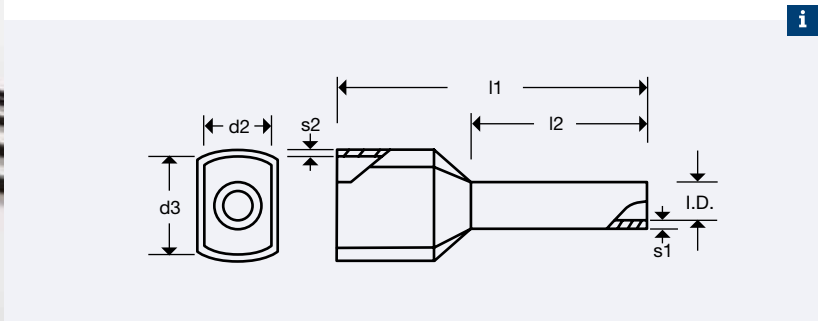
Twin End Sleeves

Insulated, Loose

Designed to take two cables at once in the same terminal. Ideal for “neutral” loop between devices



Part No.	Nominal Conductor	Colour	Pack Size	Dimensions (mm)				
				d1	d2	d3	L1	L2
EST2058D	2 x 0.5mm ²	White	100	1.5	2.3	4.7	15	8
EST2758D	2 x 0.75mm ²	Grey	100	1.8	2.6	5	15	8
EST2108D	2 x 1.0mm ²	Red	100	2.05	3	5.4	15	8
EST2158D	2 x 1.5mm ²	Black	100	2.3	3.5	6.6	16	8
EST21512D	2 x 1.5mm ²	Black	100	2.3	3.5	6.6	20	12
EST202510D	2 x 2.5mm ²	Blue	100	2.8	4	7.8	18.5	10
EST202518D	2 x 2.5mm ²	Blue	100	2.8	4	7.8	28.5	18
EST24012D	2 x 4.0mm ²	Grey	50	3.7	4.9	8.8	23	12
EST26014D	2 x 6.0mm ²	Yellow	50	4.8	5.8	10	26	14





End Sleeves

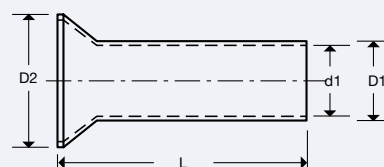
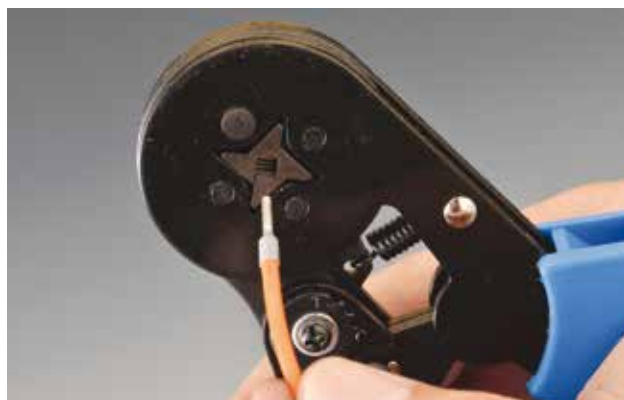
Uninsulated, Loose

Designed as a termination for fine stranded cable these tin plated copper sleeves provide encapsulation for the stranding and a secure clamping point for modern device terminals.



Glowbal NZ Code	Nominal Conductor	Pack Size	Dimensions (mm)			
			L	d1	D1	D2
ESU056	0.5mm ²	1000	6	1	1	2
ESU0756	0.75mm ²	1000	6	1.2	1.5	2.3
ESU106	1.0mm ²	1000	6	1.4	1.7	2.5
ESU157	1.5mm ²	1000	7	1.7	2	2.8
ESU1510	1.5mm ²	1000	10	1.7	2	2.8
ESU02512	2.5mm ²	1000	12	2.2	2.5	3.4
ESU02520	2.5mm ²	1000	20	2.2	2.5	3.4
ESU4012	4.0mm ²	500	12	2.8	3.2	4
ESU6012	6.0mm ²	500	12	3.5	3.7	4.7
ESU1012	10.0mm ²	500	12	4.5	4.9	5.8
ESU1015	10.0mm ²	500	15	4.5	4.9	5.8
ESU1018	10.0mm ²	500	18	4.5	4.9	5.8
ESU1612	16.0mm ²	100	12	5.8	6.2	7.5
ESU1615	16.0mm ²	100	15	5.8	6.2	7.5
ESU1618	16.0mm ²	100	18	5.8	6.2	7.5
ESU2518	25.0mm ²	100	18	7.3	7.7	9.5
ESU3518	35.0mm ²	50	18	8.3	8.7	11
ESU5025	50.0mm ²	50	25	10.3	10.9	13
ESU5032	50.0mm ²	50	32	10.3	10.9	13
ESU7025	70.0mm ²	50	25	13.5	14.3	15.3
ESU9532	95.0mm ²	50	32	14.7	15.5	16.5
ESU12032	120.0mm ²	25	32	16.7	17.6	18.6
ESU15032	150.0mm ²	25	32	19.5	20.5	21.5
ESU18532	185.0mm ²	25	32	19.5	20.5	21.5

• Special lengths available on request



End Sleeves Insulated

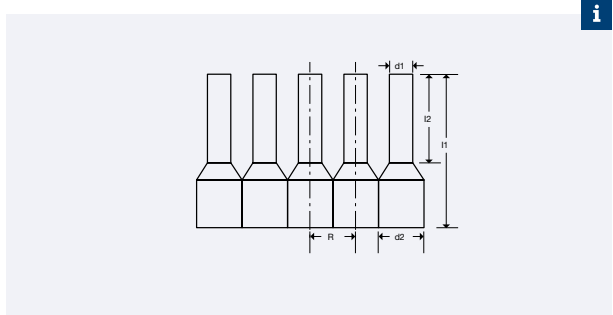
Strip Form

Ideal for panel/switchboard builders regularly using ferrules.



Part No.	Nominal Conductor	Colour	Pack Size	Dimensions (mm)				
				D1	D2	D3	L1	L2
ESS0550D	0.5mm ²	White	10 x 50	14.5	8	1.1	2.6	3.5
ESS07550D	0.75mm ²	Grey	10 x 50	14.5	8	1.3	2.8	3.6
ESS1050D	1.0mm ²	Red	10 x 50	14.5	8	1.5	3.0	3.9
ESS1550D	1.5mm ²	Black	10 x 50	14.5	8	1.8	3.4	4.2
ESS02550D	2.5mm ²	Blue	10 x 50	14.5	8	2.3	4.2	5.0

• Special colours to French (T) and German (W) standards available on request.

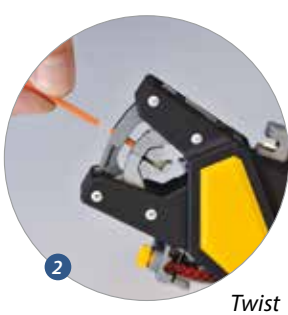


End Sleeve Strip & Crimp Tool

HCESQ - See page 82



Strip



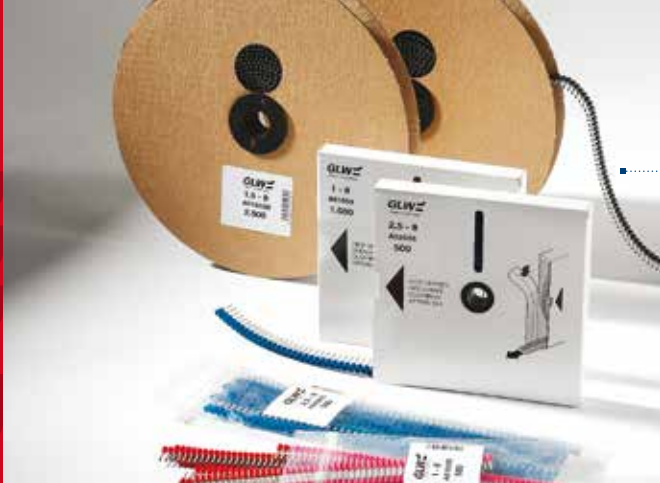
Twist



Crimp



Connect



End Sleeves Insulated

Roll Form

For high use applications such as OEMs and large panel builders.
Designed to be used with GLW stripping and crimping machines.
Dispenser size 150 x 150 x 18mm



Part No.	Nominal Conductor	Colour	Pack Size	Dimensions (mm)				
				D1	D2	D3	L1	L2
ESR055D	0.5mm ²	White	1000	14.5	8	1.1	2.6	3.5
ESR075D	0.75mm ²	Grey	1000	14.5	8	1.3	2.8	3.6
ESR10D	1.0mm ²	Red	1000	14.5	8	1.5	3.0	3.9
ESR15D	1.5mm ²	Black	1000	14.5	8	1.8	3.4	4.2
ESR25D	2.5mm ²	Blue	500	14.5	8	2.3	4.2	5.0

Specialist Terminal Tooling

Crimping and Cross Cutting Machines



End Sleeve Stripping & Crimping



Appliance Wire Cross Cutting



End Sleeve Crimping for loose ferrules



CABLE ACCESSORIES





Cable Clamps

by Dutchclamp

Glowbal NZ European sourced DCL series cable clamps are manufactured from fibreglass reinforced Polyamide, and are unique in their additives, which results in a longer life span. Designed to provide superior mechanical strength, these clamps meet the most stringent requirements for short circuit protection of low, medium and high voltage cables. Designed for quick and secure mounting, these clamps can be used both indoor and outdoor, and are resistant against corrosion, ozone, frost, oil, acids, salts, and UV. DCL Clamps are used extensively in many countries around the globe.

i



DCL clamps have been exhaustively tested by:

- Underwriters Laboratories USA (UL)
- Damstra Laboratorium – Eaton Electric (Certified by Kema)
- Centrilab – Belgium



DCLSE Cable Clamps

- For the mounting of single and multi-conductor composite cables, 26 – 135mm cable diameter.
- Temperature Range without reduction in strength -40°- 120°C
- Mechanical Strength 20000 up to 30000Nm

Part No.	Cable Diameter		Pack Size
DCLSE1526	1 x Ø	15-26mm	1
DCLSE2638	1 x Ø	26-38mm	1
DCLSE3652	1 x Ø	36-52mm	1
DCLSE5075	1 x Ø	50-75mm	1
DCLSE75100	1 x Ø	75-100mm	1
DCLSE100135	1 x Ø	100-135mm	1
DCLSE135170	1 x Ø	153-170mm	1



Cable Clamps

by Dutchclamp

...continued.



DCLTR Cable Clamps

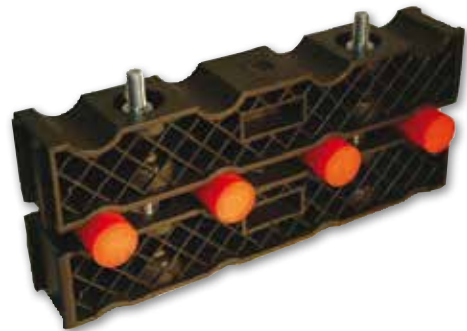
- For the mounting of single and multi-conductor low and high voltage cables in a triangular configuration.
- Wide clamping range providing controlled pressure on the cables.
- Stackable and therefore offers a space saving.
- Temperature Range without reduction in strength -40°- 120°C
- High mechanical strength of more than 30000 Nm



Part No.	Cable Diameter		Pack Size
DCLTR2738	3 x Ø	27-38mm	1
DCLTR3851	3 x Ø	38-51mm	1
DCLTR5169	3 x Ø	51-69mm	1
DCLTR6990	3 x Ø	69-90mm	1
DCLTR90118	3 x Ø	90-118mm	1
DCLTR118150	3 x Ø	118-150mm	1

DCLFX Cable Clamps

- For the clamping and support of four or more cables.
- Stackable and capable of being added end to end.
- Secure clamping allows protection for high fault currents
- Temperature Range without reduction in strength -40°- 120°C
- High mechanical strength of more than 30000 Nm



Part No.	Cable Diameter		Pack Size
DCLFX1232	4 x Ø	27-38mm	1
DCLFX3248	4 x Ø	32-48mm	1



Heatshrink

Thin Wall Tubing Heatshrink – General Purpose

Glowbal NZ thin wall tubing is a high quality, heatshrinkable product for a variety of uses and general purpose. Made from flame retardant material, it has excellent physical, chemical and electrical properties.



Technical Data

- Rated Voltage: 600V
- Dielectric Strength: 15kV/mm
- Tensile Strength: 10.4Mpa
- Shrink Ratio 2:1
- Flame retardant
- Zero halogen
- RoHS compliant

Operational Parameters

- Shrink Temperature: 120C
- Longitudinal shrinkage: less than 8%
- UL recognised to standard 224

Colour Codes (to be added to Glowbal NZ Product Code)



BLACK (Code BLK)



RED (Code R)



WHITE (Code WH)



GREEN/YELLOW (Code GN)



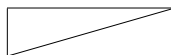
BLUE (Code BL)



GREY (Code GY)*



BROWN (Code BR)*



CLEAR (Code CL)*



GREEN (Code GR)*

* available in some sizes only.

Product Code	Size (mm)	Internal Diameter (mm)	Internal Diameter (mm)	Wall Thickness (mm)	Standard Length (mm)
		As Supplied	After Recovery		
TWHS1.5	1.5	1.5	0.85	0.32	1200
TWHS2.5	2.5	2.5	1.3	0.38	1200
TWHS3.5	3.5	3.5	1.8	0.42	1200
TWHS5	5	5.0	2.5	0.55	1200
TWHS7	7	7.0	3.5	0.55	1200
TWHS10	10	10.5	5.0	0.6	1200
TWHS13	13	13.0	6.5	0.65	1200
TWHS20	20	20.0	10.0	0.8	1200
TWHS25	25	25.0	12.5	0.9	1200
TWHS40	40	40.0	20.0	1.0	1200
TWHS50	50	50.0	25.0	1.0	1200
TWHS80	80	80.0	41.0	1.2	1200
TWHS100	100	100.0	51.0	1.3	1200
TWHS125	125	125.0	62.5	1.3	1200
TWHS150	150	150.0	75.0	1.3	1200

Heatshrink

Thin Wall Tubing Heatshrink – Reel form

Glowbal NZ TWHS range of heatshrink is available on reel form. With high use applications in mind the reels offer the following advantages:

- space saving
- maximise product use, no short length
- flexibility of length
- keeps the product clean



Product Code	Size (mm)	Internal Diameter (mm)	Internal Diameter (mm)	Wall Thickness (mm)	Reel/Spool Length (m)
		As Supplied	After Recovery		
TWHS1.5	1.5	1.5	0.85	0.32	200
TWHS2.5	2.5	2.5	1.3	0.38	200
TWHS3.5	3.5	3.5	1.8	0.42	200
TWHS5	5	5.0	2.5	0.55	100
TWHS7	7	7.0	3.5	0.55	100
TWHS10	10	10.5	5.0	0.6	100
TWHS13	13	13.0	6.5	0.65	100
TWHS20	20	20.0	10.0	0.80	100
TWHS25	25	25.0	12.5	0.9	50
TWHS40	40	40.0	20.0	1.0	50
TWHS50	50	50.0	25.0	1.0	25
TWHS80	80	80.0	41.0	1.2	25
TWHS100	100	100.0	51.0	1.3	25

• Please add colour code to Part No. above. See page 72 for all colour codes.




GEN20

Heatshrink

Dual Wall Adhesive Lined

DWHS is a cross linked polyolefin tubing with an adhesive lining. It is typically used in electrical, automotive and marine applications for wiring harnesses, insulation repair, cable splices and mechanical applications such as fuel pipe protection.

- 3:1 Shrink Ratio; • Flame retardant outer jacket;
- Operating Temp -55°C-125°C; • Shrink Temp 120°C;
- RoHS Compliant; • Excellent sealing and insulation properties

Product Code	Size (mm)	Internal Diameter (mm) As Supplied	Internal Diameter (mm) After Recovery	Wall Thickness as recovered (mm)	Colour	Length
DWHS3/1	3	3	1	1	Black	1.2m
DWHS4.8/1.5	4.8	4.8	1.5	1	Black	1.2m
DWHS6/2	6	6	2	1	Black	1.2m
DWHS9/3	9	9	3	1.4	Black	1.2m
DWHS12/4	12	12	4	1.6	Black	1.2m
DWHS19/6	19	19	6	2.15	Black	1.2m
DWHS24/8	24	24	8	2.2	Black	1.2m
DWHS30/10	30	30	10	2.4	Black	1.2m
DWHS40/13	40	40	13	2.4	Black	1.2m
DWHS50/19	50	50	19	2.5	Black	1.2m

• special colours available on request.


GEN20

Heatshrink

Heavy Wall Adhesive Lined

HWHS Heavy wall heatshrink tubing provides maximum reliability for insulation of cable joints. Manufactured with adhesive lining, HWHS has outstanding sealing and shrinking properties, and excellent mechanical performance. Applications include underground joints, low voltage terminations, gland and lug sealing.

- 3:1 Shrink Ratio; • UV resistant; • Operating Temp -55-110°C;
- Shrink Temp 120°C; • RoHS Compliant; • Excellent Sealing and insulation properties; • Superior Mechanical Properties

Product Code	Internal Diameter (mm) As Supplied	Internal Diameter (mm) After Recovery	Wall Thickness as recovered (mm)	Colour	Length (mm)
HWHS9	9	3	2.0	Black	1.2m
HWHS15	15	4	2.4	Black	1.2m
HWHS24	24	6	2.5	Black	1.2m
HWHS33	33	8	3.2	Black	1.2m
HWHS48	48	12	4.3	Black	1.2m
HWHS56	56	16	4.3	Black	1.2m
HWHS75	75	20	4.2	Black	1.2m
HWHS95	95	25	4.2	Black	1.2m
HWHS130	130	36	4.2	Black	1.2m

• special colours available on request.

Heatshrink

Low Voltage Breakout Boots

- cross linked polyolefin; • UV and weather resistant; • available for 2-5 cores; • excellent sealing properties; • adhesive lined;
- operating temp -55°C-110°C; • RoHS Compliant; • standard colour black



Product Code	Fingers	Body dia expanded (mm)	Body dia recovered (mm)	Core dia expanded (mm)	Core dia recovered (mm)	Length (mm)	Suggested Cable Size
2 Way							
HSBB23310	2	30	12	9	3.5	93	4-35mm ²
HSBB26022	2	60	23	25	7.5	118	35-150mm ²
3 Way							
HSBB33814	3	38	17	14	4.5	98	4-35mm ²
HSBB36022	3	60	25	25	8	165	50-150mm ²
HSBB38033	3	80	38	35	11	185	185-300mm ²
4 Way							
HSBB43814	4	42	15	14	3.5	105	6-35mm ²
HSBB45525	4	55	21	20	5	130	50-95mm ²
HSBB47222	4	75	26	28	7	175	95-185mm ²
HSBB410033	4	102	47	38	12	198	185-300mm ²
HSBB412552	4	125	52	52	15	240	240-300mm ²
5 Way							
HSBB54019	5	40	19	13	4	98	10-25mm ²
HSBB55524	5	55	24	18	5	155	25-95mm ²

Heatshrink

End Caps

- cross linked polyolefin; • UV and weather resistant;
- excellent sealing properties; • adhesive lined;
- operating temp -55°C-110°C; • RoHS Compliant; • standard colour black
- Pressure Relief End Caps have an inbuilt relief/degassing valve that vents gas buildup above 3-5PSI



Product Code	Min expanded dia. (mm)	Recovered dia. (mm)	Standard length (mm)
HSC1204	12	4	55
HSC2509	25	8.5	68
HSC4015	40	15	90
HSC5526	55	26	103
HSC7838	75	36	130
HSC10057	100	57	155
HSC12057	120	57	155

Pressure Relief/Degassing End Caps

Product Code	Min expanded dia. (mm)	Recovered dia. (mm)	Standard length (mm)
HSC4015PR	40	15	90
HSC5526PR	55	26	120
HSC7535PR	75	35	130
HSC10045PR	100	45	160

Cable Ties



Glowbal NZ ICT range of cable ties are designed and manufactured for industry. Injection moulded single piece construction. Manufactured from UL approved, Nylon 6/6, the cable ties are available in both natural and black (UV stabilised). ICT cable ties have advantageous features such as bent tips, easy access ends for fast and secure installation, and a working temp of -40°C - 85°C. ICT cable ties are made to comply with MIL-Spec M-20693B, and the tensile strengths meet or exceed MIL-S 23190.

Light Duty

Part No	Colour	Tensile strength (kg)	Max diameter (mm)	Length (mm)	Width (mm)	Pack Size
ICT10025NC	Natural	8kg	21	100	2.5	100
ICT10025NK	Natural	8kg	21	100	2.5	1000
ICT10025BC	Black	8kg	21	100	2.5	100
ICT10025BK	Black	8kg	21	100	2.5	1000
ICT16025NC	Natural	8kg	40	160	2.5	100
ICT16025NK	Natural	8kg	40	160	2.5	1000
ICT16025BC	Black	8kg	40	160	2.5	100
ICT16025BK	Black	8kg	40	160	2.5	1000
ICT20025NC	Natural	8kg	50	200	2.5	100
ICT20025NK	Natural	8kg	50	200	2.5	1000
ICT20025BC	Black	8kg	50	200	2.5	100
ICT20025BK	Black	8kg	50	200	2.5	1000

Standard Duty

Part No	Colour	Tensile strength (kg)	Max diameter (mm)	Length (mm)	Width (mm)	Pack Size
ICT15033NC	Natural	18	38	150	3.3	100
ICT15033NK	Natural	18	38	150	3.3	1000
ICT15033BC	Black	18	38	150	3.3	100
ICT15033BK	Black	18	38	150	3.3	1000
ICT20036NC	Natural	18	54	200	3.6	100
ICT20036NK	Natural	18	54	200	3.6	1000
ICT20036BC	Black	18	54	200	3.6	100
ICT20036BK	Black	18	54	200	3.6	1000
ICT30036NC	Natural	18	82	290	3.6	100
ICT30036NK	Natural	18	82	290	3.6	1000
ICT30036BC	Black	18	82	290	3.6	100
ICT30036BK	Black	18	82	290	3.6	1000
ICT20048NC	Natural	22	54	200	4.8	100
ICT20048NK	Natural	22	54	200	4.8	1000
ICT20048BC	Black	22	54	200	4.8	100
ICT20048BK	Black	22	54	200	4.8	1000
ICT29048NC	Natural	22	81	288	4.8	100
ICT29048NK	Natural	22	81	288	4.8	1000
ICT29048BC	Black	22	81	288	4.8	100
ICT29048BK	Black	22	81	288	4.8	1000
ICT37048NI	Natural	22	106	370	4.8	50
ICT37048BI	Black	22	106	370	4.8	50
ICT43048NI	Natural	22	115	430	4.8	50
ICT43048BI	Black	22	115	430	4.8	50

• Cable ties for exterior use should be black (UV stabilised).

...continued.



Heavy Duty

Part No	Colour	Tensile strength (kg)	Max diameter (mm)	Length (mm)	Width (mm)	Pack Size
ICT29076NI	Natural	54	82	290	7.6	50
ICT29076BI	Black	54	82	290	7.6	50
ICT37076NI	Natural	54	106	370	7.6	50
ICT37076BI	Black	54	106	370	7.6	50
ICT54076BD	Black	54	160	540	7.6	25
ICT43090ND	Natural	79	115	430	8.8	25
ICT43090BD	Black	79	115	430	8.8	25
ICT77090ND	Natural	79	220	770	8.8	25
ICT77090BD	Black	79	220	770	8.8	25
ICT120090ND	Natural	79	367	1200	8.8	25
ICT120090BD	Black	79	367	1200	8.8	25
ICT153090BD	Black	79	460	1530	8.8	25

Extra Heavy Duty

Part No	Colour	Tensile strength (kg)	Max diameter (mm)	Length (mm)	Width (mm)	Pack Size
ICT30012ND	Natural	114	81	293	12.4	25
ICT30012BD	Black	114	81	293	12.4	25
ICT60012ND	Natural	114	181	618	12.4	25
ICT60012BD	Black	114	181	618	12.4	25
ICT103012ND	Natural	114	312	1030	12.4	25
ICT103012BD	Black	114	312	1030	12.4	25

• Cable ties for exterior use should be black (UV stabilised).



Nylon Cable Tie Mounts

- Material – Nylon 66
- Temperature Range - 40°C to + 80°C
- Flammability – UL 94V-2

Part No	Description	Length (mm)	Width (mm)	Pack Size
CTM19	Adhesive Mount 19x19	19	19	100
CTM28	Adhesive Mount 28x28	28	28	100



Braided Sleeving

Manufactured from woven polyester ECBS braided sleeving is designed for wiring loom use within switchboards and control panels. The sleeving is expandable, provides a tidy finish and offers time savings over conventional cable tied looms.

Product Code	Nominal ID (mm)	Min. ID (mm)	Max ID (mm)	Reel Length (m)
ECBS6	6	5	10	100
ECBS10	10	8	16	100
ECBS15	15	12	22	100
ECBS20	20	15	27	100
ECBS25	25	20	35	100
ECBS40	40	35	60	100



Tinned Copper Braid

Used for cable jointing and earthing purposes CUBR copper braid is a fine wire woven product with a tinned finish

Product Code	Nominal Area (mm ²)	Width (mm)	Unit
CUBR10	10	16	m
CUBR16	16	20	m
CUBR25	25	26	m
CUBR35	35	30	m

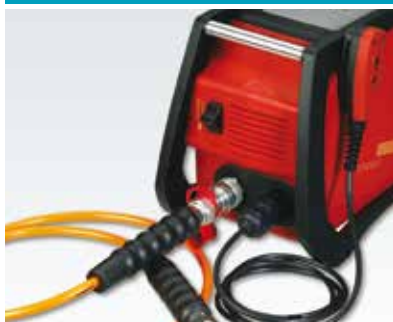


Coil Spring/Contant Force Spring

For use in low and medium voltage cable joints, and also as a copper braid earth clamp,

Product Code	Internal Diameter (mm)	Application range (mm)	Width (mm)	Unit
CS12-21	11	12-21	16	ea
CS17-22	14	17-22	19	ea
CS19-29	16	19-29	19	ea
CS25-37	22	25-37	19	ea
CS31-50	23	31-50	19	ea
CS34-70	32	34-70	19	ea

SPECIALISED TOOLING PRODUCTS



Crimp Tooling



HCPIT Ratchet Crimper – for pre-insulated terminals and connectors



Designed with the professional in mind, this crimp tool features ergonomic handles and a positive ratchet operation to ensure the perfect crimp.

Red 0.5-1.5mm² **Blue** 1.0-2.6mm² **Yellow** 2.6-6.0mm²

Applicable range: 0.5-6mm² **Length:** 230mm

Part No: HCPIT

HCESS Crimp Tool – For bootlace ferrules 0.5-6mm²



With a large crimp range this ratchet crimper is designed for both insulated and uninsulated ferrules.

Applicable range: 0.5-6mm² **Length:** 230mm

Part No: HCESS

HCESD Crimp Tool – For twin insulated ferrules 0.5-6.0mm²



With a large crimp range this ratchet crimper is designed for both insulated and uninsulated twin ferrules.

Applicable range: 0.5-6mm² **Length:** 230mm

Part No: HCESD

HCESSM Crimp Tool – For bootlace ferrules 6-16mm²

The mid range ferrule crimper, featuring stylish design and adjustable crimp settings for the perfect crimp.

Applicable range: 6-16mm² **Length:** 230mm

Part No: HCESSM



HCESSL Crimp Tool Self Adjusting – For bootlace ferrules 10-35mm²

This crimper handles the larger sizes of insulated and uninsulated ferrules. With an adjustable crimp setting the crimp jaws provide a serrated finish to the ferrule for the best connection.

Applicable range: 10-35mm² **Length:** 240mm

Part No: HCESSL



HCDL-6 Crimp Tool Self Adjusting – For bootlace ferrules 0.5-6mm²

The HCDL-6 features a unique self adjusting crimp action. Ranging from 0.5-6mm² ferrules, simply insert the wire and ferrule and the tool will self adjust and crimp. An enhanced grip is created by the serrated effect of the crimp.

Applicable range: 0.5-6mm² **Length:** 170mm

Part No: HCDL-6



HCDL-10 Crimp Tool Self Adjusting – For bootlace ferrules 0.75-10mm²

Featuring a unique self adjusting crimp action, the HCDL-10 crimps ferrules ranging from 0.75-10mm². A easy operation, simply insert the wire and ferrule and the tool will self adjust and crimp.

Applicable range: 0.75-10mm² **Length:** 170mm

Part No: HCDL-10



HCES95 End Sleeve Crimp Tool – For bootlace ferrules 50-95mm²



Designed with the professional in mind, this crimp tool features ergonomic handles and a positive ratchet operation to ensure the perfect crimp.

Applicable range: 50-95mm² **Length:** 330mm

Part No: HCES95



HCES150 End Sleeve Crimp Tool – For bootlace ferrules 120-150mm²



This crimper handles the larger sizes of insulated and uninsulated ferrules. With an adjustable crimp setting the crimp jaws provide a serrated finish to the ferrule for the best connection.

Applicable range: 120-150mm² **Length:** 380mm

Part No: HCES150



CLCIS Crimp Tool – For standard copper crimp lugs 1.5-16mm²



A ratchet type indent crimper for standard copper lugs from 1.5-16mm².

Applicable range: 1.5-16mm² Cu **Length:** 270mm

Part No: CLCIS

HCESQ Quadro Crimp Tool – For strip form insulated end sleeves



Combining four functions, the Quadro ferrule crimper cuts, strips, twists and crimps insulated end sleeves. Supplied complete with quick change connector magazines, this unit is designed with termination speed in mind.

Working range: 0.5mm–2.5mm² **Length:** 175mm

Part No: HCESQ

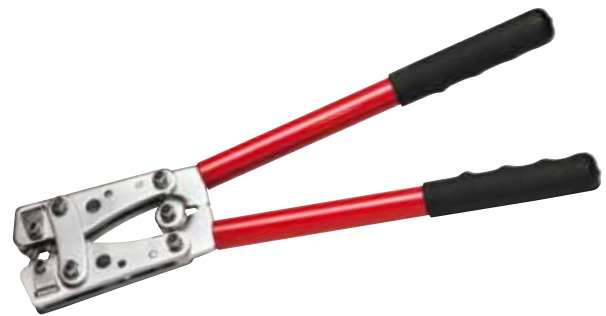


CLCHM Crimp Tool – Hex crimper 6-50mm²

With rotating self contained dies, this tool offers a true hexagonal crimp to AF measurements.

Applicable range: 6-50mm² Cu **Length:** 390mm **Weight:** 1.3kg

Part No: CLCHM

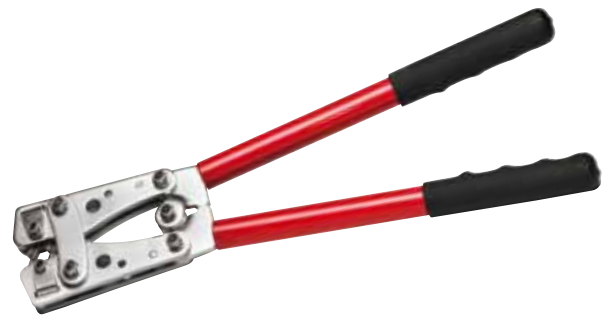


CLCHL Crimp Tool – Hex crimper 10-120mm²

Featuring an over centre crimp action and rotating self-contained hexagonal dies, this crimper is ideal for the contractor or OEM requiring a consistent hex crimp.

Applicable range: 10-120mm² Cu **Length:** 620mm **Weight:** 4kg

Part No: CLCHL



CLCHL120NT Crimp Tool – Hex crimper 6-120mm² removable handles

Featuring an over centre crimp action and rotating self-contained hexagonal dies, this crimper is ideal for the contractor or OEM requiring a consistent hex crimp. Available with removable handles and a carry case.

Applicable range: 6-120mm² Cu **Length:** 620mm **Weight:** 4kg

Part No: CLCHL120NT



HC12T25 Hydraulic Crimp Tool – 12 Tonne hydraulic hand crimp tool 25mm jaw

Featuring a two stage pumping action the HC12T25 will accommodate compression of copper and aluminium connectors up to 300mm². The crimp head accepts standard 12 tonne hexagonal dies. Tool is supplied in its own carry case.

Crimping Force: 130KN **Jaw Opening:** 25mm

Length: 582mm **Weight:** 6.3kg

Part No: HC12T25



HC12T38 Hydraulic Crimp Tool – 12 Tonne hydraulic hand crimp tool



Featuring a two stage pumping action the HC12T38 will accommodate compression of copper and aluminium connectors up to 300mm². The crimp head accepts standard 12 tonne hexagonal dies. Tool is supplied in its own carry case.

Crimping Force: 130KN **Jaw Opening:** 38mm

Length: 636mm **Weight:** 7.7kg

Part No: HC12T38

HC12TR25 Hydraulic Crimp Head 25mm jaw opening



Designed for best use with pumps HPSEP-12 or HP35RH, this 12 tonne remote head crimper is ideal for the tighter crimping situations where the standard tool may not fit. Comes complete with carry case.

Crimping Range: 16-400mm² Cu, 25-300mm² Al

Length: 210mm **Weight:** 3.6kg

Part No: HC12TR25

HC12TR38 Hydraulic Crimp Head 38mm jaw opening



Designed for best use with pumps HPSEP-12 or HP35RH, this 12 tonne remote head crimper features a larger jaw opening for ease of use with larger connectors. Comes complete with a carry case.

Crimping Range: 16-400mm² Cu, 25-300mm² Al

Length: 245mm **Weight:** 4.8kg

Part No: HC12TR38

HCTP-630H Hydraulic Crimp Head 18 tonne



Heavy duty crimping tool for best use with pumps HPSEP-12 or HP35RH. Crimp head comes complete with a die adapter to accept smaller 12/13 ton standard compression dies.

Crimping Range: 16-630mm² Cu, 25-500mm² Al

Length: 240mm **Weight:** 4.8kg

Part No: HCTP-630H

HC630A 630mm² Hydraulic Crimping Head

For distribution and transmission applications the HC630A will handle up to 800mm² aluminium and 630mm² copper. With a 30 tonne crimping force at the die faces the crimper features a flip top opening to allow insertion of the conductor and ease of die replacement. Designed for use with hydraulic pumps HP700, HP35RH and HP45 the crimp head comes with its own case.

Crimping force: 30 Tonne

Crimp Type: Hex Crimper

Weight: 25 kg **Height:** 370mm

Part No: HC630A

Compression dies are sold separately – see page 87.



HC60HT Portable 60 Ton Crimp Tool Head

The HC60HT accepts standard 60 ton dies. Designed for the larger fittings this unit has its own carry handle and a twist release head to allow ease of cable access, and is supplied with an alloy ground stand. HC60HT is designed to be used with the HP45 hydraulic pump.

Ram Stroke: 38.5mm

Max Connector Dia: Approx 60mm

Oil Volume: 303cc

Dimensions: 450mm high x 146mm dia **Weight:** 27.5kg

Pump Required: Single Acting 10000psi (700bar)

Part No: HC60HT

Compression dies supplied separately, please specify the cable size.



HC100HT Hydraulic Crimping Head – 100 ton

Designed for the larger transmission connectors in mind this crimp head will accommodate connectors up to 75mm diameter. Tool comes complete with its own carry handle, and a quick release head for easy cable entry. Requires double acting pump for operation eg HP45DA.

Ram Stroke: 22mm

Max Connector Dia: Approx 75mm

Oil Volume: 314cc

Dimensions: 350mm high x 200mm dia **Weight:** 32.0kg

Pump Required: Double Acting 10000psi (700bar)

Part No: HC100HT

Compression Dies supplied separately, please specify the cable size.



BCJ13-30 Battery Powered Crimp Tool

NEW PRODUCT



Designed for high use specialised applications, the BCJ-13 offers the unique feature of electronic control and monitoring of the crimp operation via mini USB interface. Featuring a two stage pump, and "C" form 360° rotating head the BCJ crimp tool uses standard 12/13 ton hex compression dies and comes complete with a steel carry case and crimp analysis software.

Crimping force: 130kN **Jaw Opening:** 30mm

Crimp Time: 7-13sec (depending on the dimension)

Battery: 14.4V **Charge Time:** 45min **Battery Charger:** 230V

Weight: 6.9kg **Operational Temp:** -20 - +40°C

Part No	Description
BCJ13-30	Battery Powered Crimp Tool - 30mm jaw opening

BCJ13-42 Battery Powered Crimp Tool

NEW PRODUCT



Specifications same as BCJ13-30 but with a jaw opening of 42mm.

Part No	Description
BCJ13-42	Battery Powered Crimp Tool - 42mm jaw opening

BCL12 Series Battery Powered Crimper



The BCL-12 hydraulic crimping tool is a lightweight, well balanced powered tool designed with the contractor in mind. Featuring a pistol grip design, the BCL-12 crimp head can swivel 180 degrees, so is ideal for use in confined spaces. Powered by a 14.4V battery, the crimper comes complete with a battery charger and plastic moulded carry case.

Crimping force: 12 Tonne **Crimp Type:** Hex Crimper

Weight: 8kg

Crimping Capacity: 16-300mm² Cu 25-300mm² Al

Operating Pressure: 700 bar

Available in either a 25mm, 30mm or 38mm jaw opening.

Part No	Description
BCL12/25	Battery Powered Crimper - 25mm jaw opening
BCL12/30	Battery Powered Crimper - 30mm jaw opening
BCL12/38	Battery Powered Crimper - 38mm jaw opening

Compression Dies

For 12/13 ton Crimp Tools

Glowbal NZ range of 12/13 ton compression dies are to standard NZ/AUS dimensions and will fit standard 12/13 tonne tools. Manufactured from hardened steel, each die is marked with its applicable cable sizing or across flat measurement.



Copper Dies

Part No	Cu Cable Size	A/F (Across fl t) size, mm	Utilux Equivalent Die
D16CU	16mm	6.3	38-63
D25CU	25mm	7.7	38-77
D35CU	35mm	9.2	38-92
D50CU	50mm	10.4	38-104
D70CU	70mm	11.5	38-115
D95CU	95mm	14.2	38-142
D120CU	120mm	16.5	38-165
D150CU	150mm	18.3	38-183
D185CU	185mm	20.0	38-200
D240CU	240mm	23.1	38-231
D300CU	300mm	26.0	40-260

Aluminium Dies

Part No	Al Cable Size	A/F (Across fl t) size, mm
DA25/35	25/35mm	9.0
DA50/70	50/70mm	13.2
DA95/120	95/120mm	17.3
DA150/185	150/185mm	22.0
DA240/300	240/300mm	28.4

Aluminium Dies – EP-CDA Type

Part No	Die Size	A/F (Across fl t) size, mm
ECDA3	3	12.4
ECDA4	4	13.7
ECDA5	5	17.9
ECDA6	6	22.0
ECDA7	7	25.4
ECDA8	8	28.1
ECDA9	9	32.3

Compression Dies

For 18 and 30 ton Crimp Heads

Aluminium Dies

Part No	Al Cable Size	A/F Hex (mm)	Crimp Head	Size
DALTP400/500	400/500mm ²	39.0	HCTP630H	18T
DAL240/300	240/300mm ²	28.4	HC630A	30T
DAL400/500	400/500mm ²	39.0	HC630A	30T
DAL630/800	630/800mm ²	43.2	HC630A	30T

Copper Dies

Part No	Cu Cable Size	A/F Hex (mm)	Crimp Head	Size
DCLTP400	400mm ²	28.1	HCTP630H	18T
DCLTP500	500mm ²	31.0	HCTP630H	18T
DCLTP630	630mm ²	37.0	HCTP630H	18T
DCL400	400mm ²	28.1	HC630A	30T
DCL500	500mm ²	31.0	HC630A	30T
DCL630	630mm ²	37.0	HC630A	30T



• Compression dies for 60 and 100 ton crimp head are also available on request.



Cable Cutting Tools

BCC936 Fine Wire Cable Cutter



Small light duty cutter for up to 10mm².
Applicable range: 0.5-10mm² Cu
Length: 165mm **Weight:** 120g
Part No: BCC936

BCC22B Cable Cutter – Compact Cable Cutter up to 25mm²



Compact cable cutter for copper and aluminium cable up to 25mm².
Length: 160mm **Weight:** 200g
Part No: BCC22B

BCC70 Cable Cutter – Cable Cutter for Cu and AL up to 70mm²



With heavy duty forged steel handles, this cutter is compact enough for the tool box. Ideal for flexible cables.
Length: 235mm **Weight:** 500g
Part No: BCC70

BCC95 / BCC150 Cable Cutter for Cu and AL up to 95mm² / 150mm²



Compact cable cutter with alloy handle and parrot beak cutting action for cables up to 95mm² AL or Cu. Ideal for connectors.
Length: 310mm **Weight:** 730g
 For cables up to 150mm² AL or Cu.
Length: 460mm **Weight:** 1220g

Part No	Description
BCC95	Cable Cutter up to 95mm ²
BCC150	Cable Cutter up to 150mm ²

BCC150FH / BCC516FH Cable Cutter

Heavy duty cable cutter with insulated fibreglass handles.
For cables up to 150mm².

Length: 444mm **Weight:** 1.3kg

For cables up to 240mm²Cu and 500mm²AL.

Length: 648mm **Weight:** 2.5kg

Part No	Description
BCC150FH	Cable Cutter up to 150mm ²
BCC516FH	Cable Cutter up to 240mm ² Cu and 500mm ² AL



BCCFH Cable Cutter

Heavy duty cable cutter with insulated fibreglass handle.
For cables up to 400mm² Cu and 500mm²AL.

Length: 800mm **Weight:** 2.8kgs

Part No: BCCFH



BCCD38 Telescopic Cable Cutter

NEW PRODUCT

Manufactured in Germany these innovative cable cutters have telescopic handles and a unique jointed ratchet arm. The arm allows optimum force transfer so the cutter can be used in confined spaces such as cable trenches. Made with aluminium handle, soft grip and burnished steel blades this cutter is designed for use on copper and aluminium cables up to 38mm dia.

Not for use on steel or ACSR conductors.

Length: 570–770mm

Weight: 2.0kgs

Part No: BCCD38



Part No	Description
BCCD38	Telescopic Cable Cutter
BCCD38CH	Replacement Cutting Head



BCC210AC Cable Cutter ACSR



Heavy duty cutter with hardened jaws and alloy handles. For ACSR conductor up to 15mm diameter.

Length: 600mm **Weight:** 2.1kg

Part No: BCC210AC

RCC240 Ratchet Cable Cutter for Cu and Al up to 240mm²



Compact ratchet cable cutter for Cu and Al cables up to 240mm². Not for use with steel or ACSR conductors.

Length: 250mm **Weight:** 0.7 kg

Part No: RCC240

RCC500S Ratchet Cable Cutter for Cu and Al up to 500mm²



The RCC500S ratchet cable cutter has a compact design but also the ability to cut larger sized XLPE and sector URD cables up to 50mm in diameter. Designed to fit in the toolbox. Not for use with steel or ACSR conductor.

Length: 240mm **Weight:** 960g

Part No: RCC500S

BCC1000A Ratchet Cable Cutter for Cu and Al up to 1000mm²



Designed for use with large single core XLPE and multicore URD cables. This cutter will handle up to 1000mm² single core and 300mm² sector URD cables.

Length: 550mm **Weight:** 3.5kg

Part No: BCC1000A

HCHT85 Hydraulic Cable Cutter Head

For the larger sized cables up to 75mm diameter Cu and Al, the HCHT-85 is specifically designed for annealed aluminium, copper and telephone cables. Designed to be used with the HPSEP-12, HP35RH and the HP45 hydraulic pumps. Supplied with its own carry bag. Not for use with steel rod or ACSR conductor.

Length: 456mm **Weight:** 8.0kg **Part No:** HCHT85



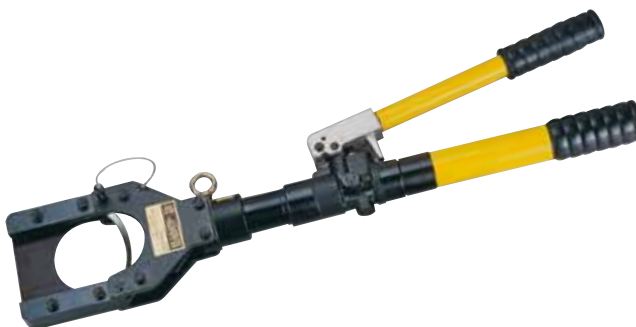
HCC85FR Hydraulic Cable Cutter

A robust cable cutter with swivel head, capability of cutting copper and aluminium cables up to 85mm.

- Fibreglass handle to assist with weight reduction.
- Crimping Force: 3 ton
- Complete with strong carry bag.

Length: 695mm **Weight:** 7kg **Part No:** HCC85FR

Note: Not to be used for ACSR or Wire rope



HCCS40 Hydraulic Cable Cutter – ACSR, Wire Rope and Steel Rod

A powerful two stage hydraulic cable cutter designed for aerial ACSR conductors and guy stay wire rope up to 25mm diameter.

- Fibreglass handle to assist with weight reduction.
- Crimping Force: 6 ton
- Complete with carry bag.

Length: 560mm **Weight:** 6kg **Part No:** HCCS40



HCC54 Hydraulic Cable Cutter

Battery Powered – Compact Style

Powerful high performance battery powered cable cutter designed for copper and aluminium cables up to 52mm diameter. 14.4vdc 3AH Battery, charger and case.

Weight: 2.8kg

Part No: HCC54

Note: Not to be used for ACSR or Wire rope.



HCC40 Hydraulic Cable Cutter

Battery Powered – Wire Rope

Featuring a swivel head and a 6 ton output, the HCC40 is designed for cutting of copper and aluminium cables up to 40mm and wire rope up to 25mm. 14.4vdc 3AH Battery, charger and case.

Weight: 5.6kg

Part No: HCC40





Hydraulic Pumps

HP700 Hydraulic Hand Pump



Two stage hand pump capable of delivering 700bar for hydraulic crimp and cutter heads. Includes 2m of hose.

Capacity: 900cc

Output: 700bar

Length: 510mm **Weight:** 9kg

Part No: HP700

HPFS700 Hydraulic Foot Pump



Two stage foot pump capable of delivering 700bar for hydraulic crimp and cutter heads. Comes complete with 2m hose and coupler.

Capacity: 700cc

Output: 700bar

Length: 474mm **Weight:** 10kg

Part No: HPFS700

HP35RH Compact Light Weight Hydraulic Pump



One of the smallest and lightest hydraulic pumps on the market, the HP35RH is designed for mobile use and features shoulder straps for ease of carrying. The HP35RH delivers the full 700bar pressure and has enough oil capacity to power all of our crimp and cutter heads models. Pump comes complete with push button remote.

Motor: 0.35KW 2000rpm **Weight:** 7.2kg

Power Supply: 230volt **Usable oil capacity:** 0.8 litre

Dimensions: L325 x W140 x H160mm.

Part No: HP35RH

HPCP700 Compact Hydraulic Pump – battery powered

NEW PRODUCT

Latest design in battery powered pumps, this unit is designed as a lightweight hydraulic power pack for portable hydraulic power tools. Small and compact this unit comes complete with a shoulder strap, 2m hydraulic hose and a remote control handpiece.

Operation Pressure: 200-700 bar **Weight:** 3.9kg

Power Supply: 230V and 18V

Dimensions: L283 x W180 x H202mm.

Part No: HPCP700



HPSEP-12 Compact Hydraulic Pump

Compact hydraulic pump providing portability and flexibility for use with numerous hydraulic crimp tools, cutters and busbar processors. Lightweight, the pump comes with a 2m hydraulic hose, coupler and hand remote.

Motor: 0.4KW **Weight:** 7.5kg

Power Supply: 230V **Usable oil capacity:** 1.2 litre

Max working pressure: 700bar

Part No: HPSEP-12



HP45 2-Stage High Flow Hydraulic Pump

Compact 2-stage high flow pump providing portability and flexibility for many varied hydraulic tooling applications. Manufactured with an easy carry handle, the pump comes complete with a remote control pendant.

Motor: 0.45KW **Weight:** 17kg

Power Supply: 230volt **Usable oil capacity:** 2.0 litre

Max working pressure: 1st stage 70 bar, 2nd stage 700bar

Dimensions: L230 x W212 x H341mm.

Part No	Description
HP45	Hydraulic Pump Single Acting
HP45DA	Hydraulic Pump Double Acting





Specialised Tooling

For control cabinet and switchgear engineering and cutting. Glowbal NZ import & supply a range of specialist tooling products for switchboard builders and OEM's. Please ask for a special tooling catalogue.

Hole Punching and Cutting



• Battery Powered Punch



• Tristar Splitter Punch



• Square Punch

• Tungsten Tip Holesaw



• Standard Holesaw



• Multi-Step Drill

Busbar Benders and Cutters

• Busbar Combi Bender/Punch Unit



• Busbar Cutter



• Radial Busbar Bender



• Lateral Busbar Bender

Punches, Rail & Duct Cutters, Work Tables

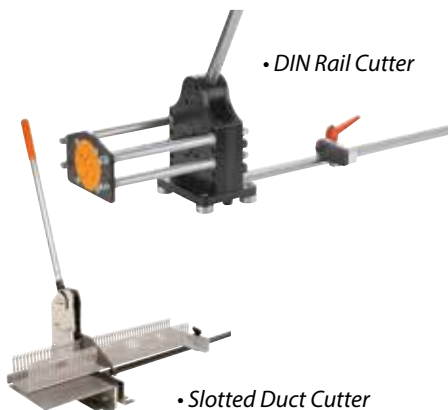
• Panel Punch



• Copper Busbar Punch



• DIN Rail Cutter



• Slotted Duct Cutter

• Tilting Mounting Work Table



Stranded Aluminium & Copper Cable Details

*Compacted

Metric			Imperial				
NOMINAL CROSS SECTIONAL AREA (mm ²)	NO. OF STRANDS/ WIRE DIAMETER (mm)	NOMINAL CONDUCTOR DIA (mm)	NOMINAL CROSS SECTIONAL AREA		NO. OF STRANDS/ WIRE DIAMETER		NOMINAL CONDUCTOR DIA (mm)
			in ²	mm ²	in	mm	
1.0	1/1.13	1.13	0.002	0.97	1/0.044	1/1.12	1.12
			0.002	1.25	3/0.029	3/0.737	1.59
1.5	1/1.38	1.38					
			0.003	1.93	3/0.036	3/0.914	1.97
2.5	7/0.67	2.01					
			0.005	2.93	7/0.029	7/0.737	2.21
4.0	7/0.85	2.55					
			0.007	4.52	7/0.036	7/0.914	2.74
6.0	7/1.04	3.12					
			0.010	6.75	7/0.044	7/1.12	3.35
			0.015	9.43	7/0.052	7/1.32	3.96
10.0	7/1.35	4.05					
			0.023	14.28	7/0.064	7/1.63	4.88
16.0*	7/1.70	4.85					
			0.03	18.29	19/0.044	19/1.12	5.59
			0.035	22.65	7/0.080	7/2.03	6.10
25.0*	7/2.14	6.00	0.04	25.50	19/0.052	19/1.32	6.60
35.0*	7/2.65	6.95					
			0.058	58.06	7/0.103	7/2.64	7.92
			0.061	39.65	19/0.064	19/1.63	8.13
50.0*	19/1.89	8.05					
			0.10	65.10	19/0.083	19/2.11	10.50
70.0*	19/2.24	9.75					
			0.12	75.30	37/0.064	37/1.63	11.40
			0.126	139.70	19/0.092	19/2.34	11.68
95.0*	19/2.65	11.37	0.15	95.30	37/0.072	37/1.83	12.80
			0.152	98.60	19/0.101	19/2.57	12.83
120.0*	19/2.94	12.91	0.20	126.70	37/0.083	37/2.11	14.80
150.0*	19/3.28	14.32					
			0.25	159.10	37/0.093	37/2.36	16.50
185.0*	37/2.65	15.95					
			0.30	195.10	37/0.103	37/2.62	18.30
240.0*	37/2.94	18.38					
			0.40	262.20	61/0.093	61/2.36	21.30
300.0*	37/3.28	20.80					
			0.50	321.60	61/0.103	61/2.62	23.50
			0.60	391.10	91/0.093	91/2.36	26.00
400.0*	60/2.94	23.52					
			0.75	479.70	91/0.103	91/2.62	28.80
500.0*	61/3.28	26.55					
630.0*	61/3.70	29.90					
			1.00	669.40	127/0.103	127/2.62	34.00
800.0*	60/4.21	33.10	1.24	800.0	127/0.112	127/2.84	36.92

Reference Tables

Conversion Tables for Non-Metric Cable Sizes

BRITISH STANDARD	METRIC EQUIVALENT (mm ²)	IMPERIAL INCHES ²	METRIC EQUIVALENT (mm ²)	AMERICAN WIRE GAUGE (AWG)	METRIC EQUIVALENT (mm ²)	AMERICAN WIRE GAUGE (AWG)	METRIC EQUIVALENT (mm ²)
33	0.051	0.001	0.657	30	0.051	250	127
32	0.059	0.002	0.981	29	0.065	300	152
31	0.068	0.002	1.28	28	0.081	350	177
30	0.078	0.003	1.97	27	0.102	400	203
29	0.094	0.003	2.08	26	0.128	450	228
28	0.011	0.005	2.98	25	0.163	500	253
27	0.014	0.007	4.6	24	0.205	550	279
26	0.016	0.01	6.81	23	0.259	600	304
25	0.020	0.015	9.59	22	0.324	650	329
24	0.025	0.023	14.5	21	0.412	700	355
23	0.029	0.03	18.6	20	0.519	750	380
22	0.040	0.04	26	19	0.652	800	405
21	0.052	0.06	39.4	18	0.826	850	431
20	0.066	0.075	49.9	17	1.04	900	456
19	0.81	0.1	66.3	16	1.31	950	481
18	1.17	0.12	76.8	15	1.65	1000	507
17	1.59	0.15	97.2	14	2.08	1100	557
16	2.08	0.2	129	13	2.63	1200	608
15	2.63	0.25	162	12	3.31	1300	659
14	3.24	0.3	199	11	4.17	1400	709
13	4.29	0.4	267	10	5.26	1500	760
12	5.48	0.5	328	9	6.63	1600	811
10	8.30	0.6	399	8	8.37	1700	861
		0.75	489	7	10.6	1800	912
		0.85	557	6	13.3	1900	963
		1.0	683	5	16.8	2000	1010
		1.25	807				
		1.5	1050				

Named Conductors - Quick Reference

CONDUCTOR CODE NAME	CONDUCTOR TYPE	NO. OF STRANDS/ WIRE DIAMETER	OD (mm)
Argon	AAAC	7/1.75	5.25
Bee	AAC	7/4.90	14.70
Beetle	AAC	19/2.66	13.30
Boron	AAAC	7/2.25	6.75
Butterfly	AAC	19/4.64	23.25
Caterpillar	AAC	19/3.50	17.70
Centipede	AAC	37/3.78	26.46
Chafer	AAC	19/3.78	18.90
Chlorine	AAAC	7/2.50	7.50
Chromium	AAAC	7/2.75	8.25
Chukar	ACSR	84/3.69-19/2.21	40.69
Cicada	AAC	37/4.65	32.54
Cockroach	AAC	19/4.21	21.10
Coyote	ACSR	26/2.54-7/1.91	15.89
Cricket	AAC	7/5.35	16.10
Dingo	ACSR	18/3.35-1/3.35	16.75
Dog	ACSR	6/4.72-7/1.57	14.15
Ferret	ACSR	6/3.00-1/3.00	9.00
Flounder	SBC	-	6.70
Flourine	AAAC	7/3.00	9.00
Fly	AAC	7/3.40	10.20
Fox	ACSR	6/2.80-1/2.80	8.37
Gnat	AAC	7/2.05	6.62
Goat	ACSR	30/3.71-7/3.71	25.96
Gopher	ACSR	6/2.36-1/2.36	7.08
Grasshopper	AAC	7/3.91	11.70
Hake	SBC	-	10.41
Hare	ACSR	6/4.72-1/4.72	14.16
Helium	AAAC	7/3.75	11.30
Hornet	AAC	19/3.25	16.25
Huhu	AAC	37/2.52	17.60
Hydrogen	AAAC	7/4.50	13.50
Hyena	ACSR	7/4.39-7/1.93	14.60
Iodine	AAAC	7/4.75	14.30
Jaguar	ACSR	18/3.86-1/3.86	19.30
Krypton	AAAC	19/3.25	16.30

CONDUCTOR CODE NAME	CONDUCTOR TYPE	NO. OF STRANDS/ WIRE DIAMETER	OD (mm)
Kutu	AAC	7/3.00	9.00
Ladybird	AAC	7/2.80	8.40
Lamprey	SBC	-	8.97
Luteliium	AAAC	19/3.50	17.50
Magpie	ACSR	3/2.11-4/2.11	6.33
Mata	AAC	19/3.86	19.30
Mink	ACSR	6/3.66-1/3.66	10.98
Moa	ACSR	76/3.72-7/2.89	38.40
Moka	AAC	7/4.09	12.26
Mullet	SBC	-	4.90
Namu	AAC	7/2.11	6.33
Neon	AAAC	19/3.75	18.80
Nitrogen	AAAC	37/3.00	21.00
Nobelium	AAAC	37/3.25	22.80
Oxygen	AAAC	19/4.75	23.80
Petrel	ACSR	12/2.34-7/2.34	11.70
Phosphorus	AAAC	37/3.75	26.30
Poko	AAC	7/2.36	7.08
Rabbit	ACSR	6/3.35-1/3.35	10.05
Raccoon	ACSR	6/4.09-1/4.09	12.30
Rango	AAC	7/3.66	10.98
Selenium	AAAC	61/3.25	29.30
Silicon	AAAC	61/3.50	31.50
Spider	AAC	19/3.40	19.94
Squirrel	ACSR	6/2.10-1/2.10	6.33
Sulpher	AAAC	61/3.75	33.80
Swan	ACSR	6/2.12-1/2.12	6.36
Tiger	ACSR	30/2.36-7/2.36	16.52
Wasp	AAC	7/4.40	13.20
Weke	AAC	7/4.72	14.16
Weta	AAC	19/3.35	16.75
Waxwing	ACSR	18/3.10-1/3.10	15.47
Wolf	ACSR	30/2.60-7/2.60	18.13
Xenon	AAAC	91/4.50	49.50
Zebra	ACSR	54/3.18-7/3.18	28.62

Steel Cored Aluminium Conductor (ACSR)

CONDUCTOR CODE NAME	CONDUCTOR					EQUIVALENT ELECTRICAL AREAS		CALCULATED MIN BREAKING LOAD
Animals	TOTAL CROSS SECTIONAL AREA (mm ²)	NOM OVERALL DIAMETER	ALUMINIUM		STEEL	ALUMINIUM	COPPER	
			NOMINAL AREA (mm ²)	STRANDING (No./mm)	STRANDING (No./mm)	mm ²	mm ²	kN
Mole	12.4	4.5	10.6	6/1.50	1/1.50	10.6	6.5	4.1
Squirrel	24.5	6.3	21.0	6/2.11	1/2.11	21.0	12.8	7.9
Gopher	30.6	7.1	26.2	6/2.36	1/2.36	26.2	16.0	9.6
Ferret	49.5	9.0	42.4	6/3.0	1/3.0	42.4	25.9	15.2
Rabbit	61.7	10.1	52.9	6/3.35	1/3.35	52.9	32.2	18.4
Mink	73.6	11.0	63.2	6/3.66	1/3.66	63.1	38.5	21.8
Racoon	92.4	12.3	79.1	6/4.10	1/4.10	79.2	48.3	27.2
Dog	118.5	14.2	105.0	6/4.72	7/1.57	105.0	64.5	32.7
Dingo	167.5	16.8	158.7	18/3.35	1/3.35	158.7	97.9	35.7
Wolf	194.9	18.1	158.0	30/2.59	7/2.59	158.0	96.8	69.2
Jaguar	222.3	19.3	210.6	18/3.86	1/3.86	210.6	128.4	47.0
Goat	400.0	26.0	324.3	30/3.71	7/3.71	324.3	197.7	136.0
Zebra	484.5	28.6	428.9	54/3.18	7/3.18	428.9	261.5	132.0

Reference Tables

Common Conductors (AAAC)

CONDUCTOR CODE NAME	CONDUCTOR			EQUIVALENT ELECTRICAL AREAS		CALCULATED MIN BREAKING LOAD
ELEMENTS	ACTUAL AREA	No. OF STRANDS/ WIRE DIAMETER	NOM. OVERALL DIAMETER	ALUMINIUM	COPPER	
	mm ²		mm	mm ²	mm ²	kN
Argon	17	7/1.75	5.3	16.1	10.3	4.0
Boron	28	7/2.25	6.8	26.5	17.0	6.6
Chlorine	34	7/2.50	7.5	32.8	21.0	8.2
Chromium	42	7/2.75	8.3	39.7	25.4	9.9
Fluorine	50	7/3.00	9.0	47.2	30.2	11.8
Helium	77	7/3.75	11.3	73.7	47.1	17.6
Hydrogen	111	7/4.50	13.5	106.0	67.9	24.3
Iodine	124	7/4.75	14.3	118.0	75.6	27.1
Krypton	158	19/3.25	16.3	150.0	94.2	37.4
Lutetium	183	19/3.50	17.5	173.0	109.5	41.7
Neon	210	19/3.75	18.8	199.0	124.8	47.8
Nitrogen	262	37/3.00	21.0	248.0	155.6	62.2
Nobelium	307	37/3.25	22.8	291.0	182.5	72.8
Oxygen	337	19/4.75	23.8	320.0	200.7	73.6
Phosphorus	409	37/3.75	26.3	387.0	242.8	93.1
Selenium	506	61/3.25	29.3	478.0	299.9	114.0
Silicon	587	61/3.50	31.5	555.0	348.2	127.0
Sulphur	673	61/3.75	33.8	636.0	399.0	145.0

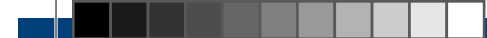
Smooth Body Conductors

CONDUCTOR CODE NAME	CONDUCTOR				EQUIVALENT ELECTRICAL AREAS		CALCULATED MIN BREAKING LOAD
FISH	TOTAL CROSS SECTIONAL AREA (mm ²)	NOM OVERALL DIAMETER	ALUMINIUM		STEEL	ALUMINIUM	COPPER
			NOMINAL AREA (mm ²)	STRANDING (No./mm)	STRANDING (No./mm)	mm ²	mm ²
Hake	78.64	10.4				60	40
Mullet	17.66	4.9				10	8
Pollock	28.23	6.2	20	6/2.59	1/3.00	20	13
Whiting	35.46	6.9	25	6/2.59	1/3.35	25	16
Lamprey	59.51	9	40	6/3.28	1/4.24	40	26
Herring	20.36	5.3				10	8
Flounder	32.38	6.7	20	6/2.31	1/3.78	20	13

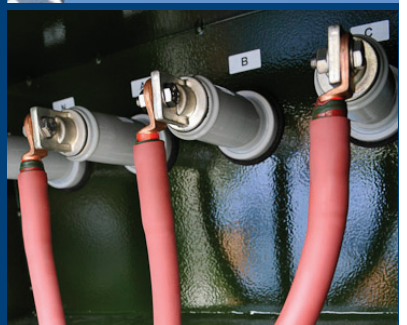
All Aluminium Conductors (AAC)

CONDUCTOR CODE NAME	CONDUCTOR			EQUIVALENT ELECTRICAL AREAS		CALCULATED MIN BREAKING LOAD
Insects	CROSS SECTIONAL AREA (mm ²)	No OF STRANDS/ WIRE DIA	NOMINAL OVERALL DIA(mm)	ALUMINIUM (mm ²)	COPPER (mm ²)	kN
Namu	24.4	7/2.11	6.3	24.4	14.9	4.0
Gnat	26.8	7/2.21	6.6	26.8	16.1	4.6
Poko	30.7	7/2.36	7.1	30.7	18.7	5.1
Ladybird	42.8	7/2.79	8.4	42.8	25.8	6.9
Kutu	49.4	7/3.00	9.0	49.4	30.1	7.9
Rango	73.5	7/3.66	11.0	73.5	44.9	11.3
Grasshopper	84.1	7/3.91	11.7	84.1	51.6	12.8
Wasp	106.0	7/4.39	13.2	106	64.5	16.0
Beetle	108.6	19/2.67	13.4	108.6	64.5	17.4
Weke	122.4	7/4.72	14.2	122.4	75.0	18.5
Cricket	157.9	7/3.56	16.1	157.9	96.8	23.9
Weka	167.7	19/3.35	16.8	167.7	100.0	26.2
Chafer	213.2	19/3.78	18.9	213.20	129.00	32.4
Mata	222.4	19/3.86	19.3	222.40	140.00	33.8
Cockroach	265.7	19/4.22	21.1	265.70	161.00	40.0
Butterfly	322.7	19/4.65	23.3	322.70	194.00	49.0
Centipede	415.2	37/3.78	26.5	415.20	251.00	63.0
Maybug	486.9	37/4.09	28.6	486.90	290.00	74.0
Cicada	628.6	37/4.65	32.6	628.60	387.00	95.0





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