CONNECTING YOUR CABLES TO OUR WORLD

INDUSTRIAL CABLE GLANDS

TOOLING & COMPRESSION TERMINALS

CABLE CLEATING & FIXING SYSTEMS

EARTHING AND LIGHTNING PROTECTION SYSTEMS

CABLE MARKING & IDENTIFICATION

دوكاب كونكت

Ducab Connect

MAKING CONNECTIONS

The world’s leading supplier of cable connecting solutions

Ducab connect offers a comprehensive range of cable connecting solutions for the Industrial, Utilities and OGP (onshore and offshore) market sectors, including control, instrumentation and LV & MV power cable applications.

The full technical support and a design service for complete cable systems remove the risk of independently purchasing cables and accessories from different manufacturers and the associated problems of non-compatibility with cable size and design.

All of these products can be dispatched in a speedy response time from our “Center of Logistics Excellence”.

Ducab Connect

INDUSTRIAL CABLE GLANDS | COMPRESSION TOOLS & CONNECTORS | INDUSTRIAL CLEATS AND CABL.. .XING. | EARTHING AND LIGHTNIN..

Ducab Connect
MAKING CONNECTIONS

CONTENTS

The World's Leading Supplier of Cable Connecting Solutions

Ducab Connect offers a comprehensive range of cable connecting solutions for the Industrial, Utilities and OGP (onshore and offshore) market sectors, including control, instrumentation and LV & MV power cable applications. Ducab Connect range of Joints and Terminations are also available for the same applications upon request.

The full technical support and design service for complete cable systems removes the risk of independently purchasing cables and accessories from different manufacturers and the associated problems of non-compatibility with cable size and design.

INDUSTRIAL CABLE GLANDS

Ducab Connect offers cable glands for a wide range of requirements from simple industrial applications to hazardous areas, for both on and offshore application. These glands are designed to meet BS 6121, EN 50262 and IEC 60079. Ex. Hazardous area products are also available upon request.

TOOLING & COMPRESSION TERMINALS

Ducab Connect offers a comprehensive range of connectors for all types of industrial applications, together with a sophisticated tooling system including hydraulic cable cutting tools.

CABLE CLEATING & FIXING SYSTEMS

Ducab Connect offers a complete range of cleats and cable fixings to suit the majority of LV, MV and HV cables, enabling the user to match individual site requirements with the most appropriate product.

EARTHING AND LIGHTNING PROTECTION SYSTEMS

Ducab Connect products are used by specialist Earthing and Lightning protection installers, electrical engineers and Contractors. Our quality range of earthing and lightning protection accessories are suitable for use/specifying to the electricity authorities, oil, gas and petrochemical sector, industrial, commercial and civil construction projects. Cathodic protection and surge products protection are also available upon request.

CABLE MARKING & IDENTIFICATION

Ducab cable identification systems serves the needs of customers in Control panels, Automation, Electrical Wire Harness, Defense, Electronics, Aerospace and a host of other related industries.

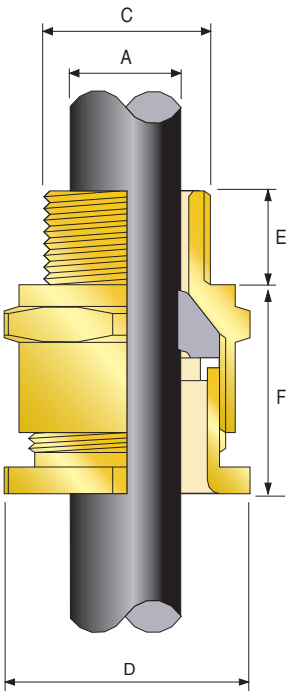
Ducab Connect
MAKING CONNECTIONS

A2 Industrial Cable Gland

Ducab A2 type brass indoor and outdoor cable gland for use with all types of Unarmoured cable, providing mechanical cable retention and an environmental seal on the cable outer sheath. The Ducab A2 range of industrial cable glands is designed and tested to BS 6121:Part 1:1989, meets or surpasses the requirements of EN 50262:1999, and is produced from Brass grade CuZn39Pb3 (CW614N) to EN 12168.

Note: Also available in LSF kit form

Technical Data	
Type	A2
Design Specification	BS 6121:Part 1:1989, EN 50262:1999
EN 50262 Mechanical Classifications	Retention = Class B, Impact=Level 8,
SIRA Certificate Number	SIRA 10Y9149U - BS 6121
SIRA Certificate Number	SIRA 10Y9150U - EN 50262
RoK Permit for Use Number	08-067693
Lloyds Approval Number	01/00171
ABS Approval Number	01-LD234401-PDA
Continuous Operating Temperature	-60°Cto+150°C
Ingress Protection Rating	IP66, IP67, IP68
Ingress Protection Document	5046C549D
Deluge Protection Compliance	DTS01:91
Deluge Protection Document	5046C549-D
Standard Gland Material	Brass
Alternative Gland Material	Electroless Nickel Plated Brass, Stainless Steel, Aluminium
Seal Material	Thermoplastic Elastomer
Cable Type	Unarmoured
Sealing Technique	Displacement Seal
Sealing Area(s)	Cable Outer Sheath
Optional Accessories	Adaptor/Reducer, Earth Tag, Entry Thread Seal, Locknut, Serrated Washer, Shroud

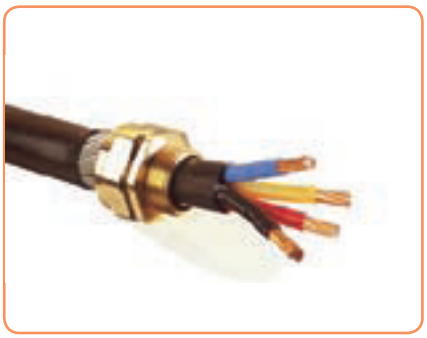


Cable Gland Selection Table

Cable Gland Size	Available Entry Threads 'C'			Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Across Flats 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	PVC Shroud Reference*	Cable Gland Weight (Kgs)
	Standard		Option								
	Metric	NPT 1	NPT 2		Min	Max	Min	Max			
20S/16	M20	1/2"	3/4"	10.0	3.1	8.7	24.0	26.6	21.0	PVC04	0.054
20S	M20	1/2"	3/4"	10.0	6.1	11.7	24.0	26.6	21.0	PVC04	0.054
20	M20	1/2"	3/4"	10.0	6.5	14.0	27.0	30.0	24.0	PVC05	0.059
25	M25	3/4"	1"	10.0	11.1	20.0	36.0	39.9	26.0	PVC09	0.112
32	M32	1"	11/4"	10.0	17.0	26.3	41.0	45.5	27.0	PVC10	0.128
40	M40	11/4"	11/2"	15.0	23.5	32.2	50.0	55.4	28.0	PVC13	0.168
50S	M50	11/2"	2"	15.0	31.0	38.2	55.0	61.0	29.0	PVC14	0.224
50	M50	2"	21/2"	15.0	35.6	44.1	60.0	66.5	30.0	PVC17	0.231
63S	M63	2"	21/2"	15.0	41.5	50.0	70.0	77.6	30.0	PVC20	0.360
63	M63	21/2"	3"	15.0	47.2	56.0	75.0	83.2	30.0	PVC22	0.344
75S	M75	21/2"	3"	15.0	54.0	62.0	80.0	88.7	32.0	PVC24	0.466
75	M75	3"	31/2"	15.0	61.1	68.0	85.0	94.2	32.0	PVC26	0.395
90	M90	3"	31/2"	15.0	66.6	79.4	108.0	120.7	44.0	PVC311	1.346
100	M100	4"	-	15.0	76.0	91.0	123.0	137.8	48.0	50/50HST	1.575
115	M115	-	-	15.0	86.0	98.0	133.4	147.6	55.0	180/60HST	2.322
130	M130	-	-	15.0	97.0	115.0	152.4	164.9	62.0	180/60HST	3.400

All dimensions in millimetres

Ducab Connect
MAKING CONNECTIONS



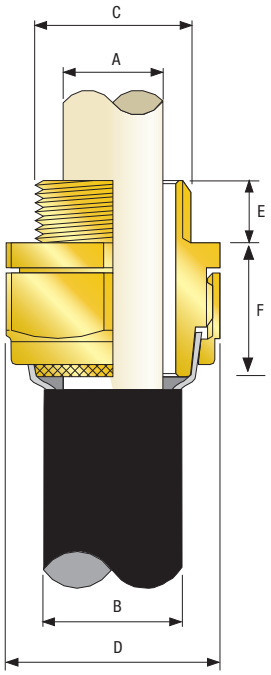
BW Industrial Cable Gland

Ducab BW type brass indoor cable gland for use with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity via armour wire termination. The Ducab BW range of industrial cable glands is designed and tested to BS6121:2005, and is produced from Brass grade CuZn39Pb3 (CW614N) to EN12168.

Note: Also available in LSF kit form

Technical Data

Type	BW
Design Specification	BS6121:Part1:2005
SIRA Certificate Number	10Y9149U - BS 6121
GOST K Certificate Number	KZ7500052.05.01.00063
RoK Permit for Use Number	08-067693
Lloyds Approval Number	01/00171
ABS Approval Number	01-LD234401-PDA
Standard Gland Material	Brass
Alternative Gland Material	Electroless Nickel Plated Brass,Stainless Steel, Aluminium
Cable Type	Single Wire Armour (SWA), Aluminium Wire Armour(AWA)
Armour Clamping	Two Part Armour Lock
Optional Accessories	Adaptor/Reducer, EarthTag, Locknut, Serrated Washer, Shroud
Gland Kits Available	Cable Gland Kit for use with all types of SWA cable, including 2 Brass Glands, 2 Locknuts, 2 Brass Earth Tags and 2 PVC Shrouds for sizes up to and including 32mm. For sizes 40mm and above each kit includes 1 of each component.

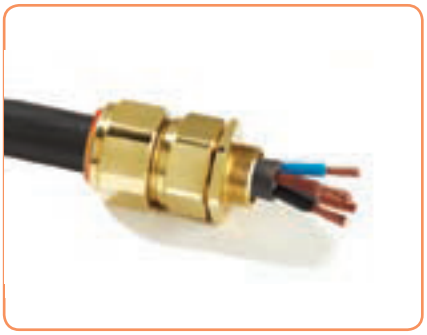


Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'	Armour Range		Across Flats 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	PVC Shroud Reference*	Cable Gland Weight (Kgs)
			Max	Max	Min	Max	Max	Max			
20S	M20	10.0	11.7	16.1	0.9	1.25	22.0	24.0	18.0	PVC02	0.09
20	M20	10.0	14.0	21.1	0.9	1.25	28.0	30.0	22.0	PVC05	0.10
25	M25	10.0	20.0	27.4	1.25	1.60	33.6	36.0	26.0	PVC07	0.15
32	M32	10.0	26.3	34.4	1.6	2.00	41.0	44.5	28.0	PVC10	0.20
40	M40	10.0	32.2	42.4	1.6	2.00	50.0	56.3	30.0	PVC13	0.36
50S	M50	15.0	38.2	50.1	2.0	2.50	57.1	63.4	30.0	PVC16	0.48
50	M50	15.0	44.1	55.7	2.0	2.50	61.0	72.1	32.0	PVC19	0.42
63S	M63	15.0	50.0	62.4	2.5	2.50	75.0	83.0	38.0	PVC22	0.80
63	M63	15.0	56.0	68.2	2.5	2.50	80.0	88.7	38.0	PVC24	0.85
75S	M75	15.0	62.0	76.8	2.5	2.50	90.0	99.8	40.0	PVC27	1.30
75	M75	15.0	75.0	82.9	2.5	3.15	95.0	105.3	40.0	PVC29	1.60

All dimensions in millimetres

Note: *LSF Shrouds also available on request.



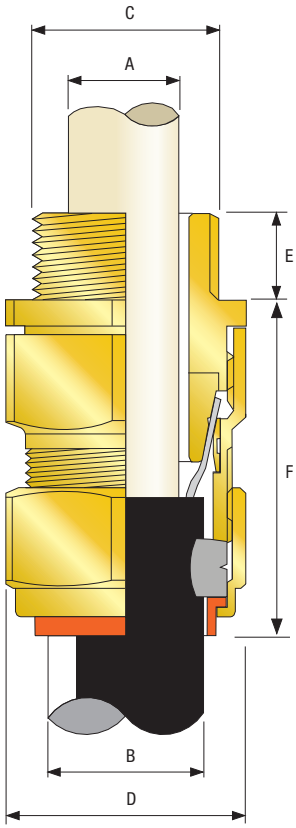
CW Industrial Cable Gland

Ducab CW type brass indoor and outdoor cable gland for use with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity via armour wire termination. The Ducab CW range of industrial cable glands is designed and tested to BS6121:2005, and is produced from Brass grade CuZn39Pb3 (CW614N) to EN12168.

Note: Other materials including Aluminium are also available in this standard design.
Also available in LSF kit form

Technical Data

Type	CW
Design Specification	BS 6121:Part 1:1989, EN 50262:1999
EN 50262 Mechanical Classifications	Retention = Class B, Impact = Level 8,
EN 50262 Electrical Classifications	Category A without use of an Earth Tag and Category B with an Earth Tag.
SIRA Certificate Number	10Y9149U - BS 6121
SIRA Certificate Number	10Y9150U - EN 50262
RoK Permit for Use Number	08-067693
ABS Approval Number	01-LD 234401-PDA
Continuous Operating Temperature	-60°C to +150°C
Ingress Protection Rating	IP66
Standard Gland Material	Brass
Alternative Gland Material	Electroless Nickel Plated Brass, Stainless Steel, Aluminium
Seal Material	Thermoplastic Elastomer
Cable Type	Single Wire Armour (SWA)
Armour Clamping	Detachable Armour Cone & AnyWay Universal Clamping Ring
Sealing Technique	Unique "LRS" ™ Outer Seal (Load Retention Seal)
Sealing Area(s)	Cable Outer Sheath
Optional Accessories	Locknut, Serrated Washer, Shroud, Adaptor/Reducer, Earth Tag, Entry Thread Seal
Cable Gland Kits Available	Cable Gland kit for use with all types of SWA cable including 2 brass glands, 2 locknuts, 2 brass earth tags and 2 PVC shrouds for sizes up to and including 32mm. For sizes 40mm and above each kit includes 1 of each component.



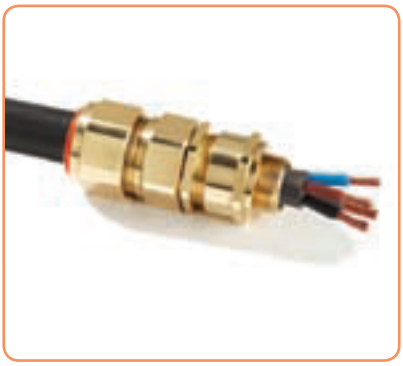
Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'		Armour Range †		Across Flats 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	PVC Shroud Reference*	Cable Gland Weight (Kgs)
						Stepped Cone						
			Max	Min	Max	Min	Max	Max	Max			
20S/16	M20	10.0	8.7	6.1	11.5	0.90	1.00	24.0	26.6	43.0	PVC04	0.118
20S	M20	10.0	11.7	9.5	15.9	0.90	1.25	24.0	26.6	43.0	PVC04	0.118
20	M20	10.0	14.0	12.5	20.9	0.90	1.25	30.5	33.3	50.0	PVC06	0.159
25S	M25	10.0	19.9	14.0	22.0	1.25	1.60	36.0	40.0	55.0	PVC09	0.228
25	M25	10.0	20.0	18.2	26.2	1.25	1.60	36.0	40.0	55.0	PVC09	0.228
32	M32	10.0	26.3	23.7	33.9	1.60	2.00	46.0	51.0	55.0	PVC11	0.362
40	M40	15.0	32.2	27.9	40.4	1.60	2.00	55.0	61.0	55.0	PVC15	0.520
50S	M50	15.0	38.2	35.2	46.7	2.00	2.50	60.0	66.5	56.0	PVC18	0.579
50	M50	15.0	44.1	40.4	53.1	2.00	2.50	70.1	78.6	70.0	PVC21	0.601
63S	M63	15.0	50.0	45.6	59.4	2.00	2.50	75.0	83.2	70.0	PVC23	1.054
63	M63	15.0	56.0	54.6	65.9	2.00	2.50	80.0	89.0	80.0	PVC25	1.200
75S	M75	15.0	62.0	59.0	72.1	2.00	2.50	90.0	101.6	81.0	PVC28	1.779
75	M75	15.0	68.0	66.7	78.5	2.00	2.50	100.0	111.1	96.0	PVC30	2.370
90	M90	15.0	80.0	76.2	90.4	3.15	3.15	114.0	128.6	120.0	PVC32	3.515
100	M100	15.0	91.0	89.1	101.5	3.15	4.00	123.0	136.0	140.0	150/50HST	4.100
115	M115	15.0	98.0	101.3	110.3	3.15	4.00	133.4	147.8	160.0	180/60HST	4.600
130	M130	15.0	115.0	114.0	123.3	3.15	4.00	146.1	152.4	169.0	180/60HST	5.200

All dimensions in millimetres

Note: *LSF Shrouds also available on request. † Alternative armour clamping range available for non-standard armour sizes. Marine approvals including Lloyds, DNV & ABS are also available from Ducab.

Ducab Connect
MAKING CONNECTIONS



E1W Industrial Cable Gland

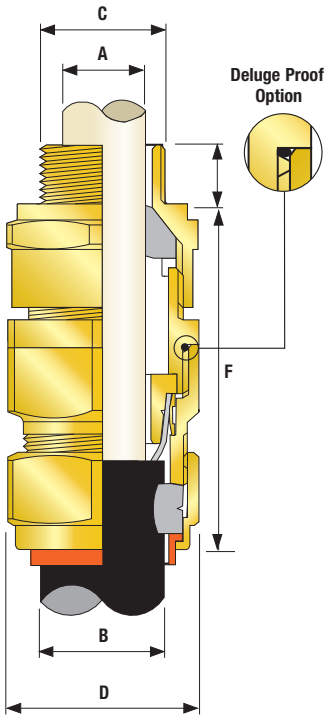
Ducab E1W type brass indoor and outdoor cable gland for use with Single Wire Armour (SWA) cable providing an environmental seal on the cable inner sheath and the cable outer sheath. The cable gland provides mechanical cable retention and electrical continuity via armour wire termination. A detachable armour cone and AnyWay universal clamping ring arrangement allows the cable to be easily disconnected from the equipment, for maintenance and change out etc. This feature also facilitates remote make off procedures when the termination is to be conducted in confined spaces or in areas of restricted access. Separate tightening actions for the inner displacement seal and the armour termination affords maximum control over the pressure applied to the cable inner bedding.

The Ducab E1W range of industrial cable glands is designed and tested to BS 6121:Part 1:1989, meets or surpasses the requirements of EN 50262 :1999, and is produced from Brass grade CuZn39Pb3 (CW614N) to EN12168. Other materials including Aluminium are also available in this standard design.

Note: Also available in LSF kit form

Technical Data

Type	E1W
Design Specification	BS 6121:Part 1:1989, EN 50262:1999
EN 50262 Mechanical Classifications	Retention = Class B, Impact = Level 8,
EN 50262 Electrical Classifications	Category A without use of an Earth Tag and Category B with an Earth Tag.
SIRA Certificate Number	10Y9149U - BS 6121
SIRA Certificate Number	10Y9150U - EN 50262
RoK Permit for Use Number	08-067693
Lloyds Approval Number	01/00171
ABS Approval Number	01-LD 234401-PDA
Continuous Operating Temperature	-60°C to +150°C
Ingress Protection Rating	IP66 (IP67/IP68 also available)
Standard Gland Material	Brass
Alternative Gland Material	Electroless Nickel Plated Brass, Stainless Steel, Aluminium
Seal Material	Thermoplastic Elastomer
Cable Type	Single Wire Armour (SWA)
Armour Clamping	Detachable Armour Cone & AnyWay Universal Clamping Ring
Sealing Technique	Inner Displacement Seal & Unique Ducab"LRS" ™ Outer Seal (Load Retention Seal)
Sealing Area(s)	Cable Inner Bedding & Cable Outer Sheath
Optional Accessories	Adaptor/Reducer, Earth Tag, Entry Thread Seal, Locknut, Serrated Washer, Shroud



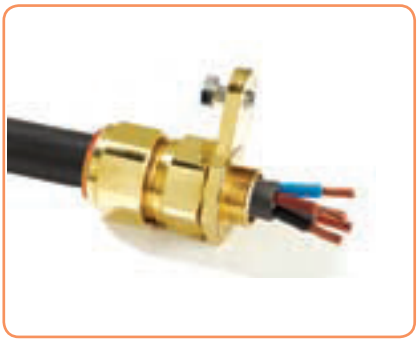
Note: Deluge proof version available

Cable Gland Selection Table

Cable Gland Size	Available Entry Threads 'C'			Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Overall Cable Diameter 'B'		Armour Range †		Across Flats 'D'	Across Corners 'D"	Nominal Protrusion Length 'F'	PVC Shroud Reference*	Cable Gland Weight (Kgs)
	Standard		Option												
	Metric	NPT 1	NPT 2		Min	Max	Min	Max	Min	Max	Max	Max			
20S/16	M20	1/2"	3/4"	10.0	3.1	8.7	6.1	11.5	0.9	1.0	24.0	26.6	63.0	PVC04	0.163
20S	M20	1/2"	3/4"	10.0	6.1	11.7	9.5	15.9	0.9	1.25	24.0	26.6	63.0	PVC04	0.163
20	M20	1/2"	3/4"	10.0	6.5	14.0	12.5	20.9	0.9	1.25	30.5	33.3	67.0	PVC06	0.217
25S	M25	3/4"	1"	10.0	11.1	20.0	14.0	22.0	1.25	1.6	37.5	40.5	78.0	PVC09	0.345
25	M25	3/4"	1"	10.0	11.1	20.0	18.2	26.2	1.25	1.6	37.5	40.5	78.0	PVC09	0.345
32	M32	1"	1-1/4"	15.0	17.0	26.3	23.7	33.9	1.6	2.0	46.0	51.0	78.0	PVC11	0.484
40	M40	1-1/4"	1-1/2"	15.0	22.0	32.2	27.9	40.4	1.6	2.0	55.0	61.0	83.0	PVC15	0.700
50S	M50	1-1/2"	2"	15.0	29.5	38.2	35.2	46.7	2.0	2.5	60.0	66.5	78.0	PVC18	0.800
50	M50	2"	2-1/2"	15.0	35.6	44.1	40.4	53.1	2.0	2.5	70.0	78.6	81.0	PVC21	0.830
63S	M63	2"	2-1/2"	15.0	40.1	50.0	45.6	59.4	2.0	2.5	75.0	83.2	93.0	PVC23	1.415
63	M63	2-1/2"	3"	15.0	47.2	56.0	54.6	65.9	2.0	2.5	80.0	89.0	95.0	PVC25	1.514
75S	M75	2-1/2"	3"	15.0	52.8	62.0	59.0	72.1	2.0	2.5	89.0	101.6	103.0	PVC28	2.199
75	M75	3"	3-1/2"	15.0	59.1	68.0	66.7	78.5	2.0	2.5	99.0	111.1	110.0	PVC30	2.770
90	M90	3"	3-1/2"	15.0	66.6	79.4	76.2	90.4	3.15	3.15	114.0	128.6	136.0	PVC32	4.478
100	M100	4"	-	15.0	76.0	91.0	89.1	101.5	3.15	4.0	123.0	138.0	145.0	150/50HST	4.700
115	M115	-	-	15.0	86.0	98.0	101.3	110.3	3.15	4.0	133.4	147.6	160.0	180/60HST	5.300
130	M130	-	-	15.0	97.0	115.0	114.0	123.3	3.15	4.0	146.1	161.9	185.0	180/60HST	5.900

All dimensions in millimetres

Note: *LSF Shrouds also available on request. † Alternative armour clamping range available for non-standard armour sizes. Marine approvals including Lloyds, DNV & ABS are also available from Ducab. # Other thread forms are available.



CW-CIEL Industrial Cable Gland

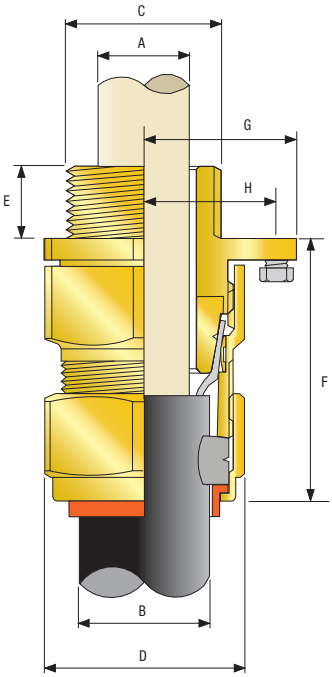
Cable gland for use with all types of SWA cable providing an IP66 environmental seal onto the cable outer sheath. The cable gland being suitable for armoured cables, provides mechanical retention and electrical continuity via armour wire termination. This is particularly suitable for HV systems where a high level of protection against fault currents is required.

Symmetr ca fau t current (kA) for 1 second
260 kA for cable grand sizes upto 40.
430 kA for cable gland sizes upto 50S and above.

Note: Also available in LSF kit form

Technical Data

Type	CW CIEL
Design Specification	BS 6121:Part 1:1989, EN 50262
EN 50262 Mechanical Classifications	Retention = Class B, Impact = Level 8,
EN 50262 Electrical Classifications	Category C
SIRA Certificate Number	10Y9149U - BS 6121
SIRA Certificate Number	10Y9150U - EN 50262
RoK Permit for Use Number	08-067693
Continuous Operating Temperature	-60°C to +150°C
Ingress Protection Rating	IP66
Standard Gland Material	Brass
Alternative Gland Material	Electroless Nickel Plated Brass, Aluminium
Seal Material	Thermoplastic Elastomer
Cable Type	Single Wire Armour (SWA), Aluminium Wire Armour (AWA)
Armour Clamping	Detachable Armour Cone & AnyWay Universal Clamping Ring
Sealing Technique	"LRS" ™ Outer Seal (Load Retention Seal)
Sealing Area(s)	Cable Outer Sheath
Optional Accessories	Adaptor/Reducer, Entry Thread Seal, Locknut, Serrated Washer, Shroud



Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter B'		Armour Range †		Nominal Across Flats 'D'	Nominal Across Corners 'D'	Nominal Protrusion Length 'F'	Nominal Radius Dimension		CIEL Earth Bolt Size	Earth Fault Current Rating (kA)	PVC Shroud Reference*	Cable Gland Weight (Kgs)
			Max	Min	Max	Min	Max	Max	Max		'H'	'G'				
20S	M20	10.0	11.7	9.5	15.9	0.9	1.25	24.0	26.6	58.5	48.0	38.6	M8	26.0	PVC04	0.140
20	M20	10.0	14.0	12.5	20.9	0.9	1.25	30.5	33.3	60.5	55.0	41.8	M8	26.0	PVC06	0.180
25S	M25	10.0	20.0	14.0	22.0	1.25	1.6	37.5	40.5	67.5	60.0	-	M8	26.0	PVC09	0.257
25	M25	10.0	20.0	18.2	26.2	1.25	1.6	37.5	40.5	67.5	60.0	50.8	M8	26.0	PVC09	0.257
32	M32	10.0	26.3	23.7	33.9	1.6	2.0	46.0	51.0	69.5	60.0	54.0	M10	26.0	PVC11	0.376
40	M40	15.0	32.2	27.9	40.4	1.6	2.0	55.0	61.0	78.0	60.0	69.0	M12	26.0	PVC15	0.630
50S	M50	15.0	38.2	35.2	46.7	2.0	2.5	60.0	66.5	75.5	62.0	75.0	M12	43.0	PVC18	0.757
50	M50	15.0	44.1	40.4	53.1	2.0	2.5	70.0	78.6	80.5	76.0	80.0	M12	43.0	PVC21	0.862
63S	M63	15.0	50.0	45.6	59.4	2.0	2.5	75.0	83.2	91.5	76.0	90.0	M12	43.0	PVC23	1.390
63	M63	15.0	56.0	54.6	65.9	2.0	2.5	80.0	89.0	92.0	86.0	90.0	M12	43.0	PVC25	1.360
75S	M75	15.0	62.0	59.0	72.1	2.0	2.5	89.0	101.6	99.0	88.0	97.0	M12	43.0	PVC28	2.307
75	M75	15.0	68.0	66.7	78.5	2.0	2.5	99.0	111.1	102.0	101.0	108.0	M12	43.0	PVC30	2.909
90	M90	15.0	80.0	76.2	90.4	3.15	3.15	114.0	128.6	120.0	126.0	112.0	M12	43.0	PVC32	3.858
100	M100	15.0	91.0	89.1	101.5	3.15	3.15	123.0	136.0	150.0	126.0	112.0	M12	43.0	150/50HST	4.958
115	M115	15.0	98.0	101.3	110.3	3.15	3.15	133.4	147.8	170.0	126.0	112.0	M12	43.0	180/60HST	5.058
130	M130	15.0	115.0	114.0	123.3	3.15	3.15	146.1	146.1	180.0	126.0	112.0	M12	43.0	180/60HST	6.158

All dimensions in millimetres

Note:*LSF Shrouds also available on request. † Alternative armour clamping range available for non-standard armour sizes. Marine approvals including Lloyds, DNV & ABS are also available from Ducab.

TOOLING & COMPRESSION TERMINALS

Ducab Connect
MAKING CONNECTIONS

COMPRESSION TOOLING RANGE (DUCAB VAS SERIES)

ADAPTORS

	CODE	DESCRIPTION	
	2041000	Adaptor (400U) Converts 400U to 400C – Used to hold hexagonal, round and copper punching dies.	
	2042000	Adaptor (400U) Holds punching die for deep stepped punching for Models 400U and 400C.	
	2071000	Adaptor (500CU) Converts 500CU to 400U – Used to hold deep stepped punching dies up to 240 mm^2 and to hold adaptor	
	2071100	Adaptor (500CU) Converts 500CU to 400C – Used to hold hexagonal, round and copper punching dies.	
	2071200	Adaptor (500CU) Only for 500CU – Used to hold deep stepped punching dies from 300mm^2 to 630mm^2. Punching die directly inserted into headstock.	

Note: Please contact Ducab Connect technical department for further information on our complete range of tooling.

DUCAB CABLE CUTTING TOOL (VAS HCC SERIES)

VAS HCC

The Ducab VAS HCC tool is a simple guillotine type tool having a swivel head action enabling the ease of cable cutting. The operating pressure is 700 kg/cm². The tool is supplied with storage case (as shown) for handling.

CODE	MODEL	DESCRIPTION
9785100	VAS HCC-18	Stand alone cable cutter 5 T Up to max 18 mm
9786100	VAS HCC-40	Stand alone cable cutter 14 T Up to max 40 mm
9787100	VAS HCC-75	Stand-alone cable cutter 7 T. Up to max. 75 mm

		WIRE ROPE			CABLE			STEEL ROPE		PRESSURE		
MODEL	CAPACITY	PRESSURE	STEEL	ALUMINIUM	TELEPHONE	LEAD	UNDERGROUND	MAX. STRENGTH 1.800 N/mm²		MAX. STRENGTH 400 N/mm²		
									WIRE	STEEL	COPPER	ALUMINIUM
	KN.	bar.	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm	Ø EXT.mm
HCC-18	54	550	18	18	-	18	18	18	1	12	15	15
HCC-40	140	700	40	40	-	40	40	40	2	20	30	30
HCC-75	70	700	40	-	75	75	75	-	-	-	-	-

MODEL	LENGTH (MM)	WIDTH (MM)	HIGHT (MM)	WEIGHT (KG)	BLADE REF
HCC-18	384	60	19	2,8	CRC18
HCC-40	480	92	36	5,6	CRC40
HCC-75	650	126	77	6,8	CRC75

DUCAB VAS HCC-40B CABLE CUTTING TOOL

VAS HCC-40B

The Ducab VAS HCC – 40B of cable cutting tool is designed to cut all types of cables viz. copper, aluminum, steel etc.

APPL CAT ONS:

- Aluminum conductors Steel Reinforced (ACSR).
- All Aluminum Conductors (AAC).
- All Aluminum Alloy Conductors (AAAC).
- Aluminum Conductors Alloy Reinforced (ACAR).
- Aluminum Conductors Alloy reinforced with steel.
- Copper Conductors (Cu).

CUTTING CAPACITY			
	MATERIAL	Capacity (daN mm²)	Cutting Max. diameter Cable
ARMOURED & UNARMOURED CABLES	Copper	≤ 41	40 mm
	Aluminium	≤ 20	40 mm
	Almelec	≤ 34	40 mm
	Steel Rope	≤ 180	Examples 7 x 3,0 : Ø ext = 9,0 mm 19 x 2,1: Ø ext = 10,5 mm 19 x 2,3 : Ø ext = 11,5 mm
	Flex. Steel (200 hilos/200 fils)	≤ 180	18 mm
	ACSR	≤ 180	40 mm
W RES	Steel	≤ 60	18 mm
		≤ 42	20 mm
	Copper	≤ 30	30 mm
		≤ 25	32 mm
	Aluminum	≤ 16	40 mm

CODE	MODEL	DESCRIPTION
9786111	VAS HCC-40B	BATTERY OPERATED HYDRAULIC CABLE CUTTER

Non Insulated Terminals from 1.5mm² to 1000mm²

Description

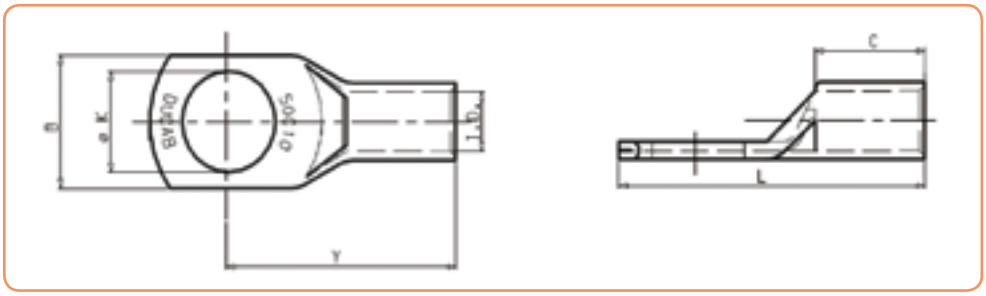
- Our non insulated crimping terminals are designed and manufactured to provide electrical connections utilizing high conductive copper.
- The connectors withstand a wide range of electrical and environmental conditions, including current surges, high temperatures, corrosion resistance and vibrations.
- Connectors are tinplated to provide durable long-lasting corrosion resistance.

Construction

- Made from electrolytic copper tube, electro tinned.
- Range of copper tube formed terminals taking wires from 1.5 – 1000 mm².

Working temperature

- Resistance up to +125 ° C.



Section (mm²)	Stud Hole	Dimensions (mm)						
		Part Number	Ø K	B	Ø I.D	C	Y	L
1.5 - 2.5	4	HBT2C4	4.3	7.5	2.4	9.5	17.9	22.3
	5	HBT2C5	5.2	9.0	2.4	9.5	19.7	25.9
	6	HBT2C6	6.4	9.0	2.4	9.5	19.7	25.9
	8	HBT2C8	8.5	13.0	2.4	6.0	19.8	27.6
4.0 - 6.0	5	HBT6C5	5.2	13.0	3.3	10.5	23.8	31.8
	6	HBT6C6	6.4	13.0	3.3	10.5	23.8	31.8
	8	HBT6C8	8.3	13.0	3.3	10.5	23.8	31.8
	10	HBT6C10	10.5	17.0	3.5	9.0	25.0	32.0
10	5	HBT10C5	5.3	10.3	4.6	12.0	20.9	26.4
	6	HBT10C6	6.4	11.1	4.6	12.0	21.9	27.9
	8	HBT10C8	8.4	14.3	4.6	12.0	23.9	31.9
	10	HBT10C10	10.5	14.3	4.6	12.0	25.9	35.9
	12	HBT10C12	13.2	18.5	4.6	12.0	28.9	40.9
16	5	HBT16C5	5.3	12.7	5.7	14.0	23.9	29.4
	6	HBT16C6	6.4	12.7	5.7	14.0	24.9	30.9
	8	HBT16C8	8.4	15.0	5.7	14.0	26.9	34.9
	10	HBT16C10	10.5	15.0	5.7	14.0	28.9	38.9
	12	HBT16C12	13.2	18.5	5.7	14.0	31.9	43.9
25	5	HBT25C5	5.3	13.9	7.2	15.0	24.7	30.7
	6	HBT25C6	6.4	13.9	7.2	15.0	25.7	32.2
	8	HBT25C8	8.4	15.9	7.2	15.0	27.7	35.7
	10	HBT25C10	10.5	15.9	7.2	15.0	29.7	39.7
	12	HBT25C12	13.2	18.5	7.2	15.0	32.7	44.7
35	6	HBT35C6	6.4	16.4	8.5	17.0	28.4	35.4
	8	HBT35C8	8.4	16.4	8.5	17.0	30.4	38.4
	10	HBT35C10	10.5	16.4	8.5	17.0	32.4	42.4
	12	HBT35C12	13.2	19.8	8.5	17.0	35.4	47.4

Ducab Connect
MAKING CONNECTIONS

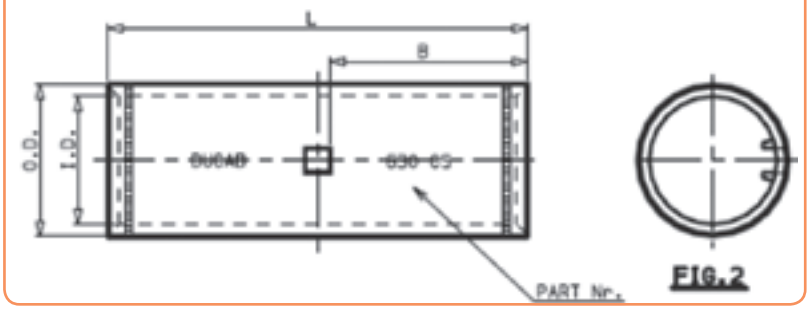
Non Insulated Terminals from 1.5mm² to 1000mm²

Section (mm²)	Stud Hole	Dimensions (mm)						
		Part Number	Ø K	B	Ø I.D	C	Y	L
50	6	HBT50C6	6.4	19.5	10.0	20.0	31.9	39.4
	8	HBT50C8	8.4	19.5	10.0	20.0	33.9	42.9
	10	HBT50C10	10.5	19.5	10.0	20.0	35.9	45.9
	12	HBT50C12	13.2	21.8	10.0	20.0	38.9	50.9
70	6	HBT70C6	6.4	23.8	12.8	25.0	38.4	45.9
	8	HBT70C8	8.4	23.8	12.8	25.0	40.4	49.4
	10	HBT70C10	10.5	23.8	12.8	25.0	42.4	53.4
	12	HBT70C12	13.2	23.8	12.8	25.0	45.4	57.4
	16	HBT70C16	17.0	23.8	12.8	25.0	48.4	62.4
95	8	HBT95C8	8.4	27.0	14.2	25.0	41.4	50.9
	10	HBT95C10	10.5	27.0	14.2	25.0	43.4	54.4
	12	HBT95C12	13.2	27.0	14.2	25.0	46.4	58.4
	16	HBT95C16	17.0	27.0	14.2	25.0	49.4	63.4
12v0	10	HBT120C10	10.5	29.0	15.9	27.0	46.4	57.4
	12	HBT120C12	13.2	29.0	15.9	27.0	49.4	61.4
	16	HBT120C16	17.0	29.0	15.9	27.0	52.4	66.4
	20	HBT120C20	21.0	31.7	15.9	27.0	58.4	74.4
150	10	HBT150C10	10.5	32.8	17.8	28.6	55.9	67.3
	12	HBT150C12	13.2	32.8	17.8	28.6	58.9	72.4
	16	HBT150C16	17.0	32.8	17.8	28.6	61.9	78.6
185	10	HBT185C10	10.5	35.7	19.4	30.2	61.8	73.2
	12	HBT185C12	13.2	35.7	19.4	30.2	64.8	79.2
	16	HBT185C16	17.0	35.7	19.4	30.2	67.8	84.5
	20	HBT185C20	21.0	35.7	19.4	30.2	73.8	94.2
240	10	HBT240C10	10.5	41.0	22.0	36.0	73.4	84.8
	12	HBT240C12	13.2	41.0	22.0	36.0	76.4	90.8
	16	HBT240C16	17.0	41.0	22.0	36.0	79.4	96.1
	20	HBT240C20	21.0	41.0	22.0	36.0	85.4	105.8
300	12	HBT300C12	13.2	45.0	24.2	43.0	81.4	95.8
	16	HBT300C16	17.0	45.0	24.2	43.0	84.4	101.8
	20	HBT300C20	21.0	45.0	24.2	43.0	90.4	112.8
400	16	HBT400C16	17.0	51.0	27.2	44.0	86.6	104.0
	20	HBT400C20	21.0	51.0	27.2	44.0	92.6	115.0
500	16	HBT500C16	17.0	55.1	29.8	47.7	88.8	104.2
	20	HBT500C20	21.0	55.1	29.8	47.7	96.8	119.2
	22	HBT500C22	23.8	55.1	29.8	47.7	100.2	127.2
630	16	HBT630C16	17.0	63.0	34.3	53.0	104.6	127.0
	20	HBT630C20	21.0	63.0	34.3	53.0	104.6	127.0
	22	HBT630C22	23.8	63.0	34.3	53.0	106.6	131.0
800	20	HBT800C20	21.0	67.5	38.2	53.0	113.6	138.0
1000	22	HBT1000C22	23.8	78.7	42.2	55.0	127.2	157.4

Note: Please also refer to BS 7609:1992+A2:2009 code of practice for installation and inspection of compression and mechanical connectors for power cables with copper or aluminium conductors

Ducab Connect
MAKING CONNECTIONS

Non Insulated Splices from 1.5mm² to 1000mm²



		Dimensions (mm)			
Section (mm²)	Part Number	Ø I. D	Ø O. D	L	B
1.5	HBT1CSPAK	1.7	3.3	15.0	6.5
2.5	HBT2CSPAK	2.3	4.0	15.0	6.5
4.0 - 6.0	HBT6CSPAK	3.6	5.5	15.0	6.5
10	HBT10CS	4.6	6.9	26.0	11.7
16	HBT16CS	5.7	7.9	30.0	13.7
25	HBT25CS	7.2	9.5	32.0	14.7
35	HBT35CS	8.5	11.3	36.0	16.7
50	HBT50CS	10.0	13.0	42.0	19.7
70	HBT70CS	12.8	16.1	45.0	20.7
95	HBT95CS	14.2	17.7	53.0	24.7
120	HBT120CS	15.9	19.6	57.0	26.7
150	HBT150CS	17.8	22.2	60.0	27.5
185	HBT185CS	19.4	24.2	64.0	29.5
240	HBT240CS	22.0	28.5	73.0	34.0
300	HBT300CS	24.2	31.0	73.0	34.0
400	HBT400CS	27.2	35.0	98.0	46.5
500	HBT500CS	29.8	38.1	98.0	46.5
630	HBT630CS	34.4	44.0	104.0	49.5
800	HBT800CS	36.6	46.7	114.0	54.5
1000	HBT1000CS	42.2	54.0	117.0	56.0

Ducab Connect
MAKING CONNECTIONS

Non Insulated Undrilled Palms from 150mm² to 1000mm²

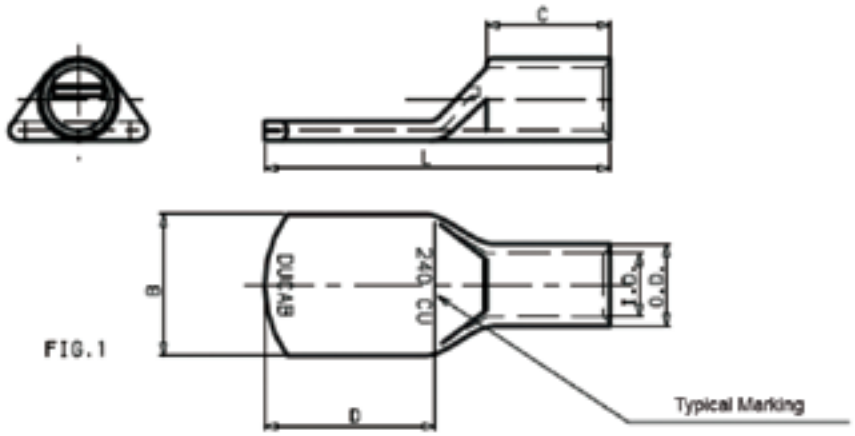


FIG.1

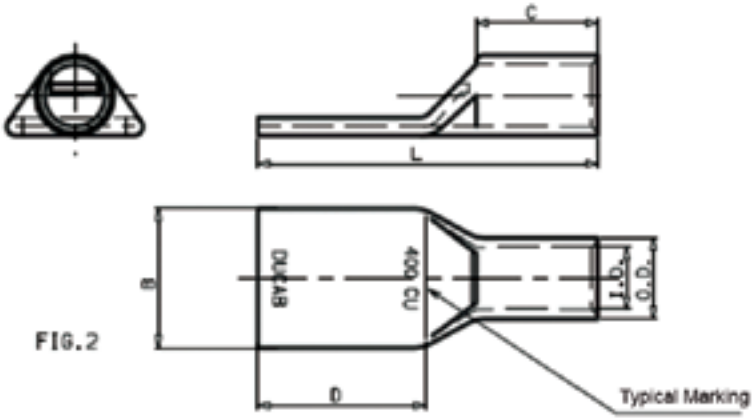


FIG.2

		Dimensions (mm)					
Section (mm²)	Part Number	Fig	B	Ø I. D	Ø O. D	C	L
150	HBT150CU	1	30.4	16.5	20.6	28.6	86.3
185	HBT185CU		35.7	19.4	24.2	30.2	94.2
240	HBT240CU		41.0	22.0	28.5	36.0	105.8
300	HBT300CU	2	45.0	24.2	31.0	43.0	112.8
400	HBT400CU		51.0	27.2	35.0	44.0	115.0
500	HBT500CU		55.1	29.8	38.1	47.7	119.2
630	HBT630CU		63.0	34.3	44.0	53.0	127.0
800	HBT800CU		67.5	38.2	46.7	52.0	138.0
1000	HBT1000CU		78.7	42.2	54.0	55.0	157.4

Preinsulated Fork Terminals

PREINSULATED FORK TERMINALS – (HALOGEN FREE)

Description

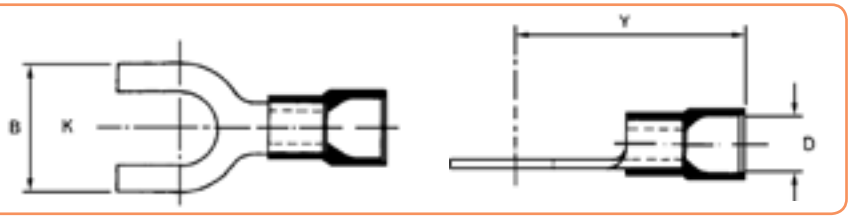
- Insulation Fork terminals with easy entry and colour coded.

Construction

- Brazed seam, Electrolytic tinned Cu strip.
- Polyamide insulation of high resistance

Working temperature

- Resistance up to +105 ° C for polyamide.



Section (mm²)	Part Number	Dimensions (mm)				
		Stud Size	Ø K	B	Ø D	Y
0.5 - 1.5	BE1FM27D	2.5	2.7	6.0	4.2	17.0
	BE1FM32D	3	3.2	6.0	4.2	17.0
	BE1FM37D	3.5	3.7	6.0	4.2	17.0
	BE1FM43	4	4.3	6.4	4.2	16.8
	BE1FM43D		4.3	8.0	4.2	18.0
	BE1FM53	5	5.3	8.0	4.2	17.5
	BE1FM53D		5.3	10.0	4.2	19.0
	BE1FM65D	6	6.5	11.0	4.2	21.0
1.5 - 2.5	BE25FM32D	3	3.2	6.0	4.8	17.0
	BE25FM37D	3.5	3.7	6.0	4.8	17.0
	BE25FM43	4	4.3	6.4	4.8	17.3
	BE25FM43D		4.3	8.0	4.8	18.0
	BE25FM53	5	5.3	8.5	4.8	18.3
	BE25FM53D		5.3	10.0	4.8	20.0
	BE25FM65D	6	6.5	11.0	4.8	22.0
	BE25FM84D	8	8.4	14.0	4.8	23.0
4 - 6	BE6FM37	3.5	3.7	7.2	6.8	21.5
	BE6FM43D	4	4.3	8.0	6.8	21.0
	BE6FM53D	5	5.3	10.0	6.8	22.0
	BE6FM65D	6	6.5	11.0	6.8	23.0
	BE6FM84D	8	8.4	14.0	6.8	26.0
6 - 10	BA510FN	5	5.3	10.5	7.5	17.0
	BA610FN	6	6.6	10.5	7.5	17.0
10 - 16	BA516FN	5	5.3	11.0	8.0	20.0
	BA616FN	6	6.5	11.0	8.0	20.0

Ducab Connect
MAKING CONNECTIONS

Preinsulated Ring Terminals

PREINSULATED RING TERMINALS – (HALOGEN FREE)

Description

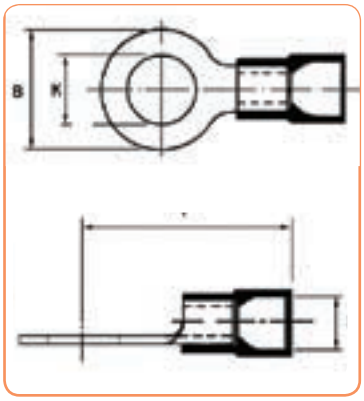
- Insulation Ring terminals with easy entry and colour coded.

Construction

- Brazed seam, Electrolytic tinned Cu strip.
- Polyamide insulation of high resistance

Working temperature

- Resistance up to +105 ° C for polyamide.



Section (mm²)	Part Number	Dimensions				
		Stud Size	Ø K	B	Ø D	Y
0.5 - 1.5	BE1M27D	2.5	2.7	6.0	4.2	17.0
	BE1M32D	3	3.2	6.0	4.2	17.0
	BE1M37D	3.5	3.7	6.6	4.2	17.0
	BE1M43	4	4.3	6.6	4.2	16.8
	BE1M43D		5.3	8.0	4.2	18.0
	BE1M53D	5	5.3	10.0	4.2	19.0
	BE1M65D	6	6.5	11.0	4.2	21.0
	BE1M84	8	8.4	11.6	4.2	21.6
	BE1M105	10	10.5	13.6	4.2	24.9
	BE1M132	12	13.0	19.2	4.2	26.5
1.5 - 2.5	BE25M32D	3	3.2	6.0	4.8	17.0
	BE25M37D	3.5	3.7	6.0	4.8	17.0
	BE25M43	4	4.3	6.6	4.8	17.3
	BE25M43D		4.3	8.0	4.8	18.0
	BE25M53	5	5.3	8.5	4.8	18.8
	BE25M53D		5.3	10.0	4.8	20.0
	BE25M65D	6	6.5	11.0	4.8	22.0
	BE25M84	8	8.4	12.0	4.8	22.0
	BE25M84D		8.4	14.0	4.8	23.0
	BE25M105	10	10.5	13.6	4.8	24.9
	BE25M105D		10.5	18.0	4.8	24.5
	BE25M132	12	13.0	19.2	4.8	27.0
4 - 6	BE6M37	3.5	3.7	9.5	6.8	22.3
	BE6M43D	4	4.3	8.0	6.8	21.0
	BE6M53D	5	4.3	10.0	6.8	22.0
	BE6M65D	6	6.5	11.0	6.8	23.0
	BE6M84D	8	8.4	14.0	6.8	26.0
	BE6M105	10	10.5	15.0	6.8	27.7
	BE6M105D		10.5	18.0	6.8	28.0
	BE6M132	12	13.0	19.2	6.8	30.0
6 - 10	BA510N	5	5.3	10.0	7.5	24.0
	BA610N	6	6.5	11.0	7.5	25.0
10 - 16	BA516N	5	5.3	11.0	8.0	30.0
	BA616N	6	6.5	11.0	8.0	30.0
16 - 25	BA525N	5	5.3	12.0	10.0	30.0
	BA625N	6	6.5	12.0	10.0	30.0
	BA825N	8	8.4	7.5	16.0	36.0

TOOLING & COMPRESSION TERMINALS

Ducab Connect
MAKING CONNECTIONS

			Dimensions (mm)			
Section (mm^2)	Part Number	Stud Size	Ø K	B	Ø D	Y
25 – 35	BA635N	6	6.5	9.0	15.0	38.0
	BA835N	8	8.4	9.0	16.0	38.0
35 – 50	BA850N	8	8.4	11.0	18.0	50.0
	BA1050N	10	10.5	11.0	18.0	50.0
	BA1250N	12	13.0	11.0	22.0	52.0
50 – 70	BA870N	8	8.4	13.0	22.0	54.0
	BA1070N	10	10.5	13.0	22.0	54.0
	BA1270N	12	13.0	13.0	22.0	54.0
70 – 95	BA1095N	10	10.5	15.0	24.0	58.0
	BA1295N	12	13.0	15.0	24.0	58.0
	BA1695N	16	17.0	15.0	28.0	60.0
95 - 120	BA12120N	12	13.0	16.5	24.0	60.0
	BA16120N	16	17.0	16.5	28.0	64.0

Preinsulated Pin Terminals (HALOGEN FREE)

Description

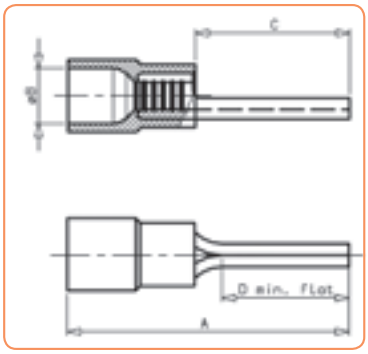
- Insulation pin terminals with easy entry and colour coded.

Construction

- Brazed seam, Electrolytic tinned Cu strip.
- Polyamide insulation of high resistance

Working temperature

- Resistance up to +105 ° C for polyamide.



		Dimensions (mm)			
Section (mm^2)	Part Number	Ø B	C	Ø D	A
0.5 - 1.5	BE1W10	1.9	8.5	4.2	21.5
	BE1W13D	1.9	10.5	4.2	24.5
	BE1W17	1.9	16.5	4.2	29.5
1.5 - 2.5	BE25W10	1.9	8.5	4.8	22.0
	BE25W13D	1.9	10.5	4.8	24.0
	BE25W17	1.9	16.5	4.8	30.0
4 - 6	BE6W13D	2.7	10.5	6.8	25.5
	BE6W17	2.7	16.5	6.8	31.5
6 - 10	BA10W13D	4.3	12.0	7.8	34.0
10 - 16	BA16W17D	5.5	13.0	10.8	40.7
16 - 25	BA25W17D	6.8	15.0	12.4	44.0
25 - 35	BA35W23D	8.0	20.0	14.0	52.5
35 - 50	BA50W23D	9.5	20.0	15.5	59.0
50 - 70	BA70W26D	11.0	31.0	18.0	69.0
70 - 95	BA95W26D	12.5	31.0	20.7	71.0

Preinsulated Splices

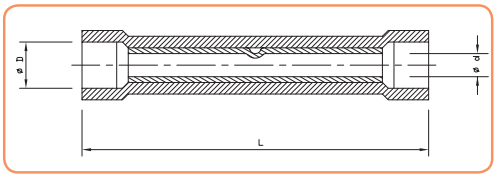
PREINSULATED SPLICES – (HALOGEN FREE)

Description

- Insulation Splices with easy entry and colour coded.

Construction

- Brazed seam, Electrolytic tinned Cu strip.
- Polyamide insulation of high resistance



Working temperature

- Resistance up to +105 ° C for polyamide

		Dimensions (mm)		
Section (mm^2)	Part Number	Ø D	Ø d	L
0.5 – 1.5	BSV1N	4.0	1.7	23.0
1.5 – 2.5	BSV25N	4.5	2.3	23.0
4 - 6	BSV6N	6.8	3.4	27.0

Uninsulated Pin Terminals

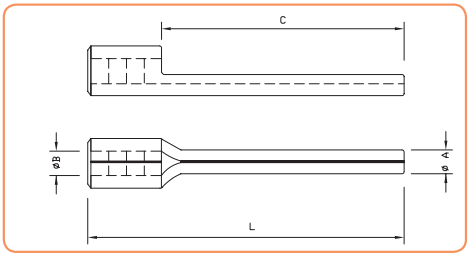
Uninsulated Pin Terminals

Description

- Pin terminals according to DIN 46230
- Brazed seam, Electrolytic tinned Cu strip.

Construction

- Heat resistance up to + 125 ° C

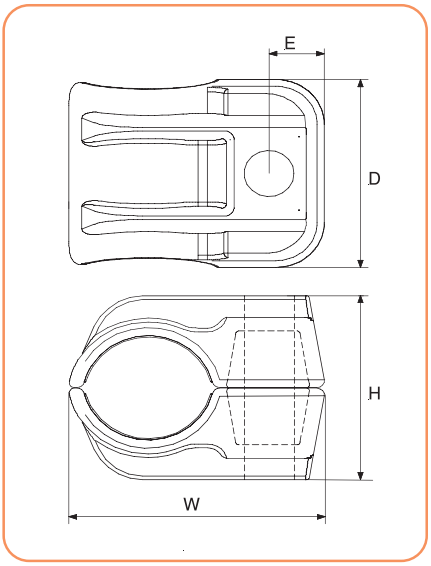


Section (mm^2)	Part Number	Dimensions (mm)			
		Ø B	Ø A	C	L
0.1 - 1.5	BY1W13D	1.6	1.9	13.5	18.3
1.5 - 2.5	BY25W13D	2.3	1.9	13.5	18.3
4 - 6	BY6W13D	3.6	2.7	13.5	19.5
6 - 10	BY10W13D	4.7	4.3	12.0	22.0
10 - 16	BY16W17D	5.8	5.5	13.0	26.0
16 - 25	BY25W17D	7.0	6.8	15.0	33.5
25-35	BY35W23D	8.8	8.0	20.0	40.5
35-50	BY50W23D	10.0	9.5	20.0	45.0
50-70	BY70W26D	11.8	11.0	23.0	55.0
70-95	BY95W26D	13.9	12.5	23.0	55.0

Single Bolt Cable Clamp

- Single Bolt Cable Clamps are available in Black Polypropylene (B) *MDS03 Data Sheet or Black Flame Retardant, Zero Halogen, Phosphorus Free Nylon (LSF) *MDS02 Data sheet.

* MDS02 and MD S03 Data Sheets are available on request.



Selection Table for Single Bolt Cable Clamps

Part No	Material Suffix	Cable Dia. Range mm	Dimensions				Fixing Hole Clearance mm	Pack Qty.	Weight g	
			W mm	H mm	D mm	E mm			B	LSF
1F-1 0	B or LSF	10-13	37.8	27.0	41.4	10. 2	1 0	100	14.6	19. 6
1F-1 1	B or LSF	13-16	41.2	30.0	41.4	10. 4	1 0	100	17.0	23. 0
1F-1 2	B or LSF	16-19	44.3	33.0	41.4	10. 7	1 0	100	19.6	26. 4
1F-1 3	B or LSF	19-23	48.2	36.0	41.4	10. 9	1 0	100	22.4	30. 2
1F-1 4	B or LSF	23-27	52.2	40.0	41.4	11. 3	1 0	100	25.8	34. 6
1F-1 5	B or LSF	27-32	57.1	44.0	41.4	11. 6	1 0	100	29.2	39. 0
1F-1 6	B or LSF	32-38	63.1	49.0	41.4	12. 1	1 0	100	34.2	46. 2
1F-1 7	B or LSF	38-46	71.3	58.0	41.4	12. 9	1 0	5 0	47.8	64. 0
1F-1 8	B or LSF	46-51	77.3	67.0	41.4	13. 5	1 0	5 0	54.0	73. 2
1F-1 9	B or LSF	51-57	83.2	72.0	41.4	13. 9	1 0	5 0	59.0	80. 4

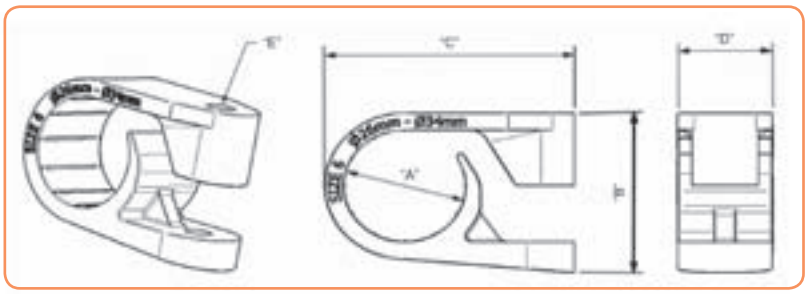
Testing Information

Single Bolt Cable Clamps have been tested in line with the new European Standard of "Cable Cleats for Electrical Installations" BS EN 50368:2003. Typical results below.

Properties	BS EN 50368:2003 Classification Claus e	Units / Classification B	Units / Classification LSF	Test Data B	Test Data LSF
Cleat Type	6.1, 6.1.2	Non Metallic	Non Metallic	-	-
Impact Resistance	6.2, 6.2.5, 9.3	Very Heavy Classification (>6.7kg @ 300mm)	Very Heavy Classification (>6.7kg @ 300mm)	Pass	Pass
Resistance to Electro Mechanical Force	6.3	Refer to Ducab for further details.			
Te mperature for Permanent Application	6.4	˚C	˚C	-40 to 40	-40 to 60
Needle Flame Test	6.5, 10.0	Application Time (seconds)	Application Time (seconds)	>30	>120
Lateral Load Test	9.2	Newtons (N)	Newtons (N)	320	470
Axial Movement Test	9.5	Newtons (N)	Newtons (N)	160	360

Industrial Cable Clamp

- Industrial Cable Clamp is available in Black LLDPE or Black Polymeric LUL material.
- Material data sheets for: Black LLDPE and Black Polymeric LUL are available upon request.



Cable and Cable Clamp Details

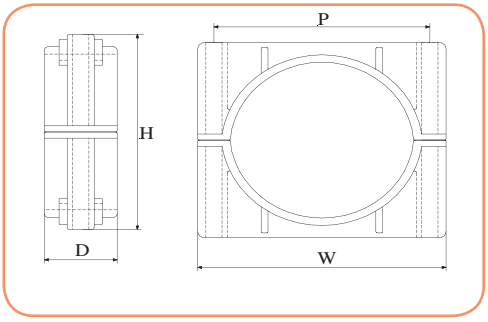
Cable and Cable Clamp Selection					Cable Clamp Details						
Part Number		Cable Diameter		Standard pack quantities	Dimensions (mm)				SWL	Approx. Weight (grams)	
LLDPE	LUL	A (mm)			B	C	D	E	kgf	LLDPE	LUL
		Min	Max								
17-01B	17-01-LUL	10	15	100	17.6	27.8	12	4.3	18	2	3.5
17-02B	17-02-LUL	12	17	100	20.8	32	14	4.3	24	3.3	5.4
17-03B	17-03-LUL	15	20	100	25.3	37.1	16	4.3	32	5.2	8.6
17-04B	17-04-LUL	18	24	100	29.6	41	18	4.3	39	7.3	12.2
17-05B	17-05-LUL	22	29	50	35.4	52.1	20	6.5	52	11.2	18.6
17-06B	17-06-LUL	26	34	50	40.9	58.2	22	6.5	66	16.5	27.9
17-07B	17-07-LUL	32	42	25	49.2	69.3	25	6.5	79	25.6	42.9
17-08B	17-08-LUL	39	51	25	58.5	81.7	26	6.5	93	36.2	60.1

Note: Ducab cable ties also available upon request.

Two Bolt Cable Clamp

Two Bolt Cable Clamp sare available in Black Polypropylene (B)*MDS03 Data Sheet or Black Flame Retardant, Zero Halogen, Phosphorus Free Nylon (LSF) *MDS02 Data Sheet.

*** MDS02 and MDS03 Data Sheets are available on request.**



Selection Table for Two Bolt Cable Clamps

Part No	Material Suffix	Cable Dia. Range mm	Dimensions				Fixing Hole Clearance (mm)	Pack Qty.	Weight (g)	
			W mm	H mm	D mm	P mm			B	LSF
2F-07	B or LSF	38-46	92	60	54	68	10	25	73.0	91.0
2F-08	B or LSF	46-51	103	71	54	79	10	25	80.9	109.9
2F-09	B or LSF	51-57	103	76	54	79	10	25	95.0	119.0
2F-10	B or LSF	57-64	103	82	54	79	10	25	89.1	122.5
2F-11	B or LSF	64-70	130	89	54	106	10	15	116.0	157.3
2F-1200	B or LSF	70-76	130	95	54	106	10	15	124.0	167.3
2F-1201	B or LSF	76-83	130	100	54	106	10	10	126.0	170.0
2F-1202	B or LSF	83-90	130	108	54	106	10	10	128.0	172.0
2F-131	B or LSF	90-97	150	115	54	126	10	5	152.0	208.0
2F-132	B or LSF	97-105	150	122	54	126	10	5	156.0	208.0
2F-141	B or LSF	105-112	161	130	54	135	10	5	179.5	238.8
2F-142	B or LSF	112-120	169	138	54	143	10	5	193.5	261.0
2F-151	B or LSF	120-128	177	148	54	151	10	5	212.2	280.0
2F-152	B or LSF	128-135	185	158	54	158	10	5	228.5	304.4

Testing Information

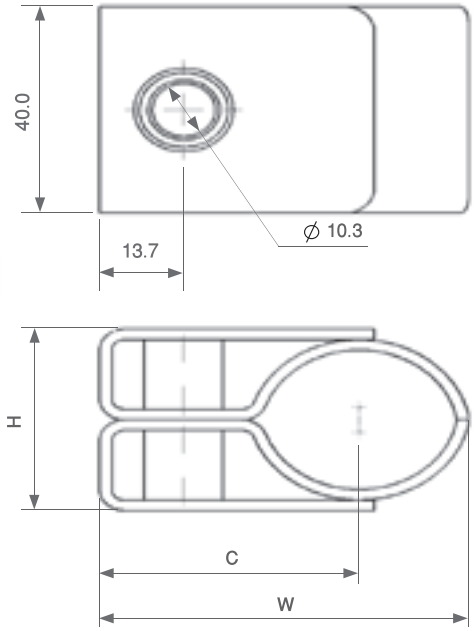
Two Bolt Cable Clamps have been tested in line with the new European Standard of Cable

Properties	BS EN 50368:2003 Classification Claus e	Units / Classification B	Units / Classification LSF	Test Data B	Test Data LSF
Cleat Type	6.1, 6.1.2	Non Metallic	Non Metallic	-	-
Impact Resistance	6.2, 6.2.5, 9.3	Very Heavy Classification (>6.7kg @ 300mm)	Very Heavy Classification (>6.7kg @ 300mm)	Pass	Pass
Resistance to Electro Mechanical Force	6.3	Refer to Ducab	kA @ 600mm Centres. Triplex plus SFT Insert (Category1)	Refer to Ducab	78 Peak 35 RMS
Temperature for Permanent Application	6.4	°C	°C	40 to 40	40 to 60
Needle Flame Test	6.5, 10.0	Application Time (seconds)	Application Time (seconds)	>30	>120
Lateral Load Test	9.2	Newtons (N)	Newtons (N)	7330	18400
Axial Movement Test	9.5	Newtons (N)	Newtons (N)	1220	1200

Fire Resistant Cable Cleats

The Cable clamps have been successfully tested for fire resistance in accordance with BS 8491:2008 and also BS 5839-1: 2002, section 26.2d.

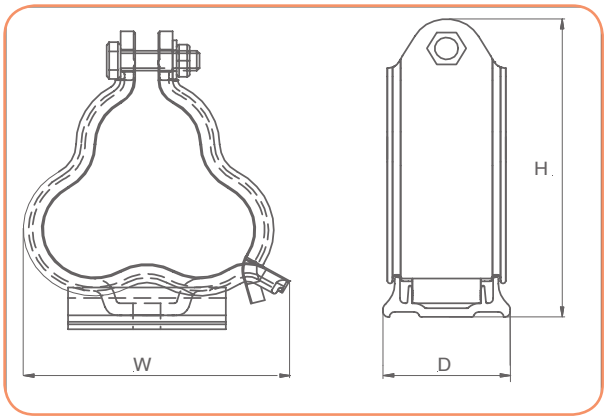
Short Circuit testing in accordance with IEC 61914:2009 has also been completed successfully. Ducab Fire Rated Cable clamps are manufactured from 316L Stainless Steel.



Part Number	Cable Diameter (mm)		Dimensions (mm)				Approx. Weight (grms)
			H		W	C	
	Min	Max	Min	Max			
1FP-10SS	10	13	18.1	21.1	40.3	32	91
1FP-11SS	13	16	21.1	24.1	43.8	34	106
1FP-12SS	16	19	24.1	27.1	46.9	35.5	114
1FP-13SS	19	23	27.1	31.1	50.8	37.5	126
1FP-14SS	23	27	31.1	35.1	55.3	40	140
1FP-15SS	27	32	35.1	40.1	59.8	42	155
1FP-16SS	32	38	40.1	46.1	65.7	45	176
1FP-17SS	38	46	46.1	54.1	73.6	49	202
1FP-18SS	46	51	54.1	59.1	79.4	52	225
1FP-19SS	51	57	59.1	64.1	85.3	55	245
1FP-20SS	57	65	65.1	73.1	93.2	59	265

Alpha Aluminium Trefoil Cable Cleat

Alpha Cable Cleats are available for trefoil cable applications where moderate to low levels of short circuit withstand are required. The unique patented design allows rapid installation. Manufactured from extruded aluminium (6000 series) to BS EN 755, the product is lighter and tougher than the cast product it is designed to replace. The cleats are supplied with zinc plated closing fasteners.



Selection table for Trefoil Cable Application

Aluminum Base	LSF Zero halogen Base	Cable dia. Range	W (mm)	H (mm)	D (mm)	Fixing Hole (mm)	Approx Weight (g)
ALP-01-AN0	ALP-01-AN1	23.2 - 25.1	76	93	48.5	10.4	168
ALP-02-AN0	ALP-02-AN1	25.1 - 27.1	79	96	48.5	10.4	178
ALP-03-AN0	ALP-03-AN1	27.1 - 29.3	82	101	48.5	10.4	185
ALP-04-AN0	ALP-04-AN1	29.3 - 31.7	86	105	48.5	10.4	195
ALP-05-AN0	ALP-05-AN1	31.7 - 34.2	91	110	48.5	10.4	205
ALP-06-AN0	ALP-06-AN1	34.2 - 37.0	96	116	48.5	10.4	217
ALP-07-AN0	ALP-07-AN1	37.0 - 40.0	101	121	48.5	10.4	229
ALP-08-AN0	ALP-08-AN1	40.0 - 43.2	106	127	48.5	10.4	241
ALP-09-AN0	ALP-09-AN1	43.2 - 46.7	113	134	48.5	10.4	255
ALP-10-AN0	ALP-10-AN1	46.7 - 50.5	119	141	48.5	10.4	272
ALP-11-AN0	ALP-11-AN1	50.5 - 54.6	127	148	48.5	10.4	288
ALP-12-AN0	ALP-12-AN1	54.6 - 59.0	135	156	48.5	10.4	307
ALP-13-AN0	ALP-13-AN1	59.0 - 63.8	144	165	48.5	10.4	327
ALP-14-AN0	ALP-14-AN1	63.8 - 69.0	153	175	48.5	10.4	348
ALP-15-AN0	ALP-15-AN1	69.0 - 74.6	163	186	48.5	10.4	372

ProTect Cable Strap

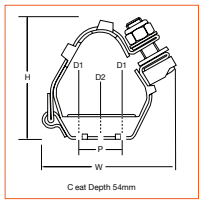
ProTect Cable Straps are available for trefoil cable applications where the highest levels of short circuit withstand are required. The unique registered design allows rapid installation. The frame, manufactured from 316L stainless steel, offers the ultimate protection against the harshest environmental conditions. The frame is tightened and locked using a combination of M10 Set Screw and Flanged Nut in A4 Stainless Steel, Screw head Retainer in 'Zero-Halogen, Low Smoke & Fume' (LSF) Nylon. Available with or without an integral LSF polymeric liner.

Note: Please contact Ducab with your specific cable diameter for further details.

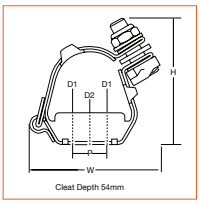
Emperor Single Range-Taking Cleat

Emperor cable cleats are available for trefoil and single cable applications where the highest levels of short circuit withstand are required. The unique design allows rapid installation. Manufactured in type 316 stainless steel the Emperor cleats offer ultimate protection against the harshest environmental conditions. To protect and cushion the cables during short circuit conditions, the cleat is supplied with an integral LSF Zero Halogen Polymeric liner and base pad. Recommended fixing methods include using either two 10mm bolts or a single 12mm bolt (available as extras). A Retention Strap can be fitted between wider spaced cleats for a more economical installation.

Trefo



S ng e



Selection table for Trefoil Cable Application

Cable Range			Dimensions					
Part No.	Min Dia. mm	Max Dia. mm	W mm	H mm	P mm	D1 mm	D2 mm	Weight g
ER23-28	23	28	96	83	25	10.2	12.2	425
ER27-32	27	32	97	88	25	10.2	12.2	440
ER30-35	30	35	99	91	25	10.2	12.2	445
ER33-38	33	38	103	95	25	10.2	12.2	460
ER36-42	36	42	124	100	50	10.2	12.2	600
ER40-46	40	46	125	106	50	10.2	12.2	605
ER44-50	44	50	130	117	50	10.2	12.2	630
ER48-55	48	55	132	121	50	10.2	12.2	640
ER51-58	51	58	136	128	50	10.2	12.2	650
ER55-62	55	62	160	135	75	10.2	12.2	810
ER59-66	59	66	163	143	75	10.2	12.2	825
ER63-70	63	70	166	151	75	10.2	12.2	850
ER67-74	67	74	169	158	75	10.2	12.2	850
ER71-78	71	78	172	165	75	10.2	12.2	890
ER74-82	74	82	177	171	75	10.2	12.2	890
ER77-85	77	85	183	177	75	10.2	12.2	905
ER82-88	82	88	191	187	75	10.2	12.2	805
ER88-96	88	96	207	203	75	10.2	12.2	850
ER96-103	96	103	221	218	75	10.2	12.2	940
ER103-111	103	111	237	235	75	10.2	12.2	950
ER111-119	111	119	253	250	75	10.2	12.2	1010
ER119-128	119	128	265	275	75	10.2	12.2	1220

Selection table for Single Cable Application

Part No.	W mm	H mm	P mm	D1 mm	D2 mm	Weight g
ES32-39	91	89	25	10.2	12.2	450
ES37-45	96	93	25	10.2	12.2	470
ES44-52	99	98	25	10.2	12.2	480
ES51-59	103	102	25	10.2	12.2	490
ES58-66	109	101	25	10.2	12.2	500
ES65-73	111	103	25	10.2	12.2	510
ES73-85	135	112	50	10.2	12.2	640
ES84-94	135	135	50	10.2	12.2	660
ES94-118	160	150	75	10.2	12.2	710
ES118-130	175	160	75	10.2	12.2	900
ES127-150	180	180	75	10.2	12.2	940

Data sheet available on request.

Vulcan+ Range-Taking Cable Cleat

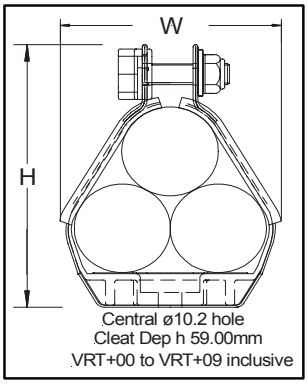
Vulcan+ cable cleats are available for trefoil, single, quad and bundled cable applications where moderate levels of short circuit withstand are required. The unique patented compact design allows easy installation where space is limited. Manufactured in type 316L stainless steel (BS EN 10088:1995), they offer ultimate protection against the harshest environmental conditions. The cleats are supplied with an M10 stainless steel clamping bolt, an M10 stainless steel Flange nut and Low Smoke & Fume Zero Halogen Polymeric Head Retainer (MDS01 Data Sheet).

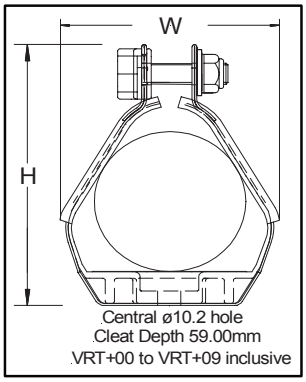
To protect and cushion the cables during short circuit conditions, the cleat comes with an integral Low Smoke & Fume Zero Halogen Polymeric liner and removable base pad (MDS01 Data Sheet).

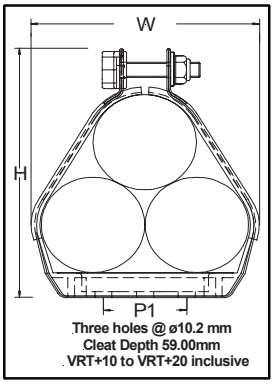
Recommended fixing methods include using either one or two M10 bolts (available as extras). A ProTect Intermediate Strap can be fitted between wider spaced cleats for more economical installation.

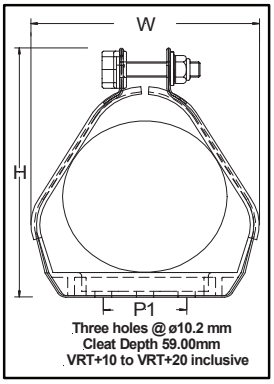
*** Material Data Sheet MDS01 is available upon request.**

Vulcan+ Cable Cleats









Selection Table for Quad Cable Application

Part No	Quad Cable Range		Dimensions					
	Min Dia. mm	Max Dia mm	W (Max) mm	H (max) mm	P mm	D1 mm	D2 mm	Weight g
VRQ+01	23	25	68	110	n/a	10.2	10.2	284
VRQ+02	26	27	70	113	n/a	10.2	10.2	286
VRQ+03	28	32	80	128	n/a	10.2	10.2	318
VRQ+04	33	42	103	148	n/a	10.2	10.2	378
VRQ+05	43	47	120	165	n/a	10.2	10.2	452
VRQ+06	48	50	121	170	n/a	10.2	10.2	467
VRQ+07	51	57	140	190	50	10.2	10.2	486
VRQ+08	58	63	150	200	50	10.2	10.2	499
VRQ+09	64	70	170	218	75	10.2	10.2	581

Selection Table for Trefoil & Single Application

Part No	Trefoil Cable Range		Single Cable Range		Dimensions				
	Min Dia. mm	Max Dia. mm	Min Dia. mm	Max Dia. mm	W (Max) mm	H (max) mm	P mm	Base Holes mm	Weight g
VRT+00	19	24	33	42	60	93	n/a	10.2	251
VRT+01	23	28	38	50	63	98	n/a	10.2	258
VRT+02	27	32	43	58	72	106	n/a	10.2	269
VRT+03	30	35	49	64	79	112	n/a	10.2	279
VRT+04	33	38	55	70	85	118	n/a	10.2	284
VRT+05	36	42	58	75	96	125	n/a	10.2	319
VRT+06	40	46	63	84	105	133	n/a	10.2	331
VRT+07	44	50	73	90	112	140	n/a	10.2	391
VRT+08	48	55	83	100	121	149	n/a	10.2	405
VRT+09	51	58	86	104	126	154	n/a	10.2	411
VRT+10	55	62	88	110	134	162	50	10.2	442
VRT+11	59	66	90	115	143	170	50	10.2	453
VRT+12	63	70	100	125	152	177	50	10.2	460
VRT+13	67	74	107	132	161	185	75	10.2	524
VRT+14	71	78	120	145	169	192	75	10.2	536
VRT+15	74	82	125	150	176	199	75	10.2	542
VRT+16	77	85	132	153	183	205	75	10.2	544
VRT+17	81	89	136	156	190	216	75	10.2	618
VRT+18	85	93	139	159	200	225	75	10.2	628
VRT+19	89	97	142	162	200	235	75	10.2	637
VRT+20	93	101	150	170	215	240	75	10.2	646

EARTHING & LIGHTNING PROTECTION SYSTEMS

Earthing/Grounding Products

Ducab is specified on some of the most celebrated and demanding projects in the world. This range is by no means exclusive in terms of the Ducab scope of provision, however it does include some of the most high performance products available in the global market place.

Ducab Earth/ground Rod Electrodes

Electrodes are installed to improve the performance of the earthing/grounding system; the earth rod is the most widely used electrode. Ducab offers a complete line of rods and accessories to meet the needs of every user. The Ducab range includes solid copper rods, copperbond earth rod, stainless steel earth rods, and a number of other special earth rods.

Copperbond Earth Rod

The reason for the enduring popularity and appeal of this product is that it represents a known technology, the driven earth rod, and combines the conductive properties of copper with the strength of steel. They offer a more economical and stronger alternative to a pure copper rod and a better conductivity than a stainless steel rod, whilst maintaining its corrosion resistant properties. Ducab copperbond electrodes are robust enough to be driven through bricks, and can be installed using power tools. Unlike other brands, Ducab does not produce sheathed rods due to our commitment to quality and our appreciation of the needs of our clients; all rods have pure copper electrolytically bonded to a steel core. Ducab utilises the best materials to ensure that when the two metals are molecularly bonded the product achieves a market-leading specification. This commitment to quality, and our clients, is why Ducab is found in the most demanding projects.

Pointed Copperbonded Ground Rods

- Manufactured of high strength 1035 cold drawn steel
- The Ducab preferred ground rods

Sectional Copperbonded Ground Rods

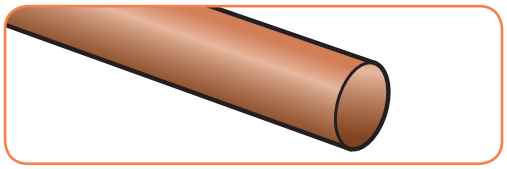
- For use when it is necessary to deep-drive rods
- Cold-rolled threads - stronger than cut threads
- Resist corrosion better than galvanized rods allowing for a 30-year service life in most soils
- State of the art manufacturing process ensures uniform plating thickness
- Average tensile strength of 80,000 psi and straightness tolerance of .010” per linear
- Exceed the requirements of ANSI®/UL® 467-1984, CSA®, and ANSI/NEMA® GR-1

Material: Pure copper molecularly bonded onto a steel core.

Part number	Nominal size	L mm	Thread size (UNC-2A)	Shank D mm	L1 mm	Pack Quantity	Unit Weight kg
CBR1204	1/2”	1200	9/16”	12.7	30	5	1.18
CBR1205	1500						1.55
CBR1206	1800						1.76
CBR1208	2400						2.36
CBR1604	5/8”	1200	5/8”	14.2	30	5	1.53
CBR1605	1500						1.88
CBR1606	1800						2.29
CBR1608	2400						3.00
CBR1610	3000						3.79
CBR2004	3/4”	1200	3/4”	17.2	35	5	2.19
CBR2005	1500						2.73
CBR2006	1800						3.27
CBR2008	2400						4.35
CBR2010	3000						5.44

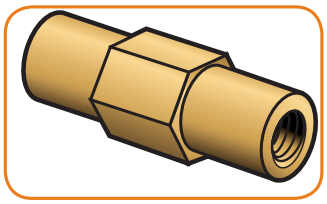
Copperbond Earth Rod - Unthreaded

Material: Pure copper molecularly bonded onto a steel core.



Part number	Nominal size	L mm	Shank D mm	Pack Quantity	Unit Weight kg
CBR1004U	3/8”	1200	9.5	5	0.62

Threaded Couplers for Sectional Rods



- For use when coupling sectional rods to enable deep driving throughout the installation process and the life of the earthing system.
- Manufactured using a high performance alloy which combines excellent conductivity and reliable strength.
- Ducab ensures that through our bespoke thread rolling methodologies that the thread diameter is greater than shank diameter.
- Ducab threads are Unified National Coarse (UNC-2A).

Material: Aluminium bronze

Part number	Nominal size	L mm	D mm	Pack Quantity	Unit Weight kg
CPL12	1/2”	70	20	5	0.07
CPL16	5/8”	70	20	5	0.09
CPL20	3/4”	80	24	5	0.14

Drive Studs for Sectional Rods

Screws into threaded coupler while rod is being driven to protect the integrity of the driven earth rods and can be incorporated into installations using power hammers to drive the rods.

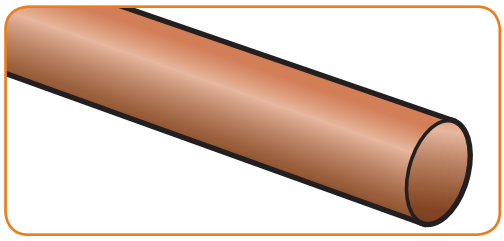
Material: Steel

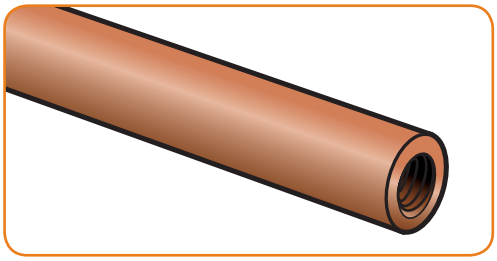
Part number	Nominal size	L mm	D mm	Pack Quantity	Unit Weight kg
DS12	1/2"	50	20	5	0.05
DS16	5/8"	55	22	5	0.09
DS20	3/4"	60	25	5	0.13

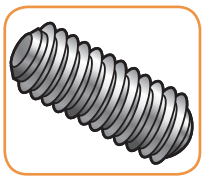
Copper Earth Rod

Copper earth rods offer exceptional current transference performance and can be used in a number of aggressive grounds as their corrosion resistance is impressive. As copper is not as strong as steel, or copperbonded rods, in rocky or densely compressed ground areas installation engineers should not drive the rods, they should first excavate boreholes and install Conducrete® to avoid bending or breaking the earth rods and increase the effectiveness of the earthing application. With a range of standard fittings the Ducab earth rod is recognised for its high performance and long life-span.

Part number	L mm	Thread size	Shank D mm	L1 mm	Pack Quantity	Unit Weight kg
SCR1512	1200	M10	15	20	5	1.88
SCR1615	1500	M10	16	20	5	2.66
SCR1618	1800				5	3.20
SSR1624	2400				5	4.28
SCR1630	3000				5	5.36
SCR2012	1200	M10	20	20	5	3.34
SCR2015	1500				5	4.18
SCR2018	1800				5	5.03
SCR2024	2400				5	6.71
SCR2030	3000				5	8.40
SCR2512	1200	M12	25	25	1	5.23
SCR2515	1500				1	6.54
SCR2518	1800				1	7.86
SCR2524	2400				1	10.5
SCR2530	3000				1	13.1







Coupling Dowels

With impressive durability the phosphor bronze coupling dowel should be utilised when joining solid copper earth rods.

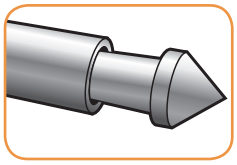
Material: phosphor bronze

Part number	L mm	D mm	Pack Quantity	Unit Weight kg
DOW10-SS	40	M10	25	0.02
DOW12-SS	50	M12	25	0.04

EARTHING & LIGHTNING PROTECTION SYSTEMS

Ducab Connect
MAKING CONNECTIONS

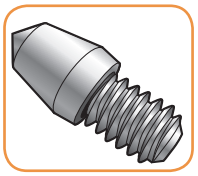
Stainless Steel Earth Rods



Stainless steel earth rods are usually only required when corrosion due to ground conditions is a peak concern. Whilst incredibly strong and highly resistant to corrosion, stainless steel is not as effective a conductor as copper, but if copper is unusable due to ground conditions then the installation team should select stainless steel. As with all things, should ground conditions be so aggressive as to require stainless steel it is advisable to refer to the protection properties of Conducrete®.

Material: stainless steel to BS EN 10088.

Part number	L mm	Thread size	Shank D mm	L1 mm	Pack Quantity	Unit Weight kg
SSR1612	1200	M10	16	20	5	1.87
SSR1615	1500				5	2.35
SSR1618	1800				5	2.83
SSR1624	2400				5	3.79
SSR1630	3000				5	4.75
SSR2012	1200	M10	20	20	5	2.95
SSR2015	1500				5	3.71
SSR2018	1800				5	4.46
SSR2024	2400				5	5.96
SSR2030	3000				5	7.46
SSR2512	1200	M12	25	25	1	4.64
SSR2515	1500				1	5.81
SSR2518	1800				1	6.99
SSR2524	2400				1	9.34
SSR2530	3000				1	11.6

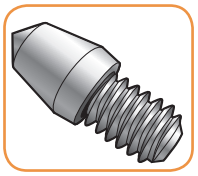


Driving Heads

Driving heads are used to protect earth rods as they are driven into the ground.

Material: steel

Part number	L mm	Thread size	Shank D mm	L1 mm	Pack Quantity	Unit Weight (kg)
CDS16	38	16	M10	20	5	0.03
CDS20	41	20	M10	20	5	0.06
CDS25	45	25	M12	25	5	0.10

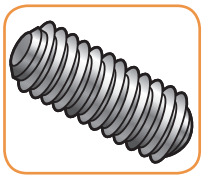


Driving Spikes

An alternative to using the driving head to protect earth rods as they are driven into the ground; the driving spike possesses the advantage of easier installation than a driving head due to its pointed head.

Material: steel

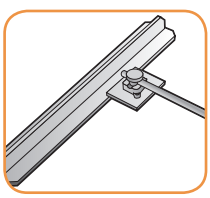
Part number	L mm	Thread size	Shank D mm	L1 mm	Pack Quantity	Unit Weight (kg)
SPK16	42	16	M10	20	5	0.03
SPK20	51	20	M10	20	5	0.06
SPK25	60	25	M12	25	5	0.10



Stainless Steel Coupling Dowels

The stainless steel coupling dowel is used for earth rods together, specifically stainless steel rods.

Part number	L mm	Thread Size	Pack Quantity	Unit Weight (kg)
DOW10-SS	40	M10	25	0.02
DOW12-SS	50	M12	25	0.04



Cross profile galvanised steel earth rods

The galvanised steel earth rod is not often incorporated within permanent earthing systems but may be incorporated, where appropriate, in temporary earthing systems.

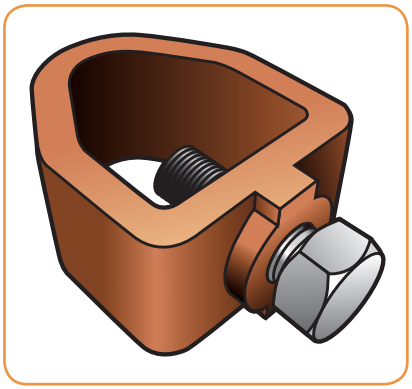
Material: Carbon steel galvanised to BS EN ISO 1461

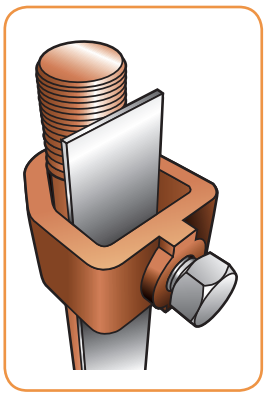
Part number	Section mm	L mm	Splice plate holes No x Ø mm	Pack Quantity	Unit Weight (kg)
GRX50310	50 x 50 x 3	1000	3 x 11	5	2.34
GRX50315		1500			3.51
GRX50320		2000			4.61
GRX50325		2500			5.85
GRX50330		3000			7.03
GRX50510	50 x 50 x 5	1000	3 x 11	5	3.90
GRX50515		1500			5.85
GRX50520		2000			7.80
GRX50525		2500			9.75
GRX50530		3000			11.75

Earth Rod to Tape 'A' Clamps

A popular clamp used for forming a connection between tape and an earth rod.

Material: Aluminium bronze with M10 x 25mm Phosphor bronze set screw.





Part number	Earth Rod shank Ø mm	Max Tape Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
RTC1220	12.7	26 x 15	43	37	17	5	0.15
RTC1630		32 x 15	43	45	18	5	0.20
RTC1640		39 x 15	44	51	22	5	0.25
RTC1220	14.2	26 x 14	43	37	17	5	0.15
RTC1630		32 x 14	43	45	18	5	0.20
RTC1640		39 x 14	44	51	22	5	0.25
RTC1651		51 x 16	47	64	20	5	0.21
RTC1220	15.0	26 x 13	43	37	17	5	0.15
RTC1630		32 x 13	43	45	18	5	0.20
RTC1640		39 x 13	44	51	22	5	0.25
RTC1651		51 x 15	47	64	20	5	0.21
RTC1220	16.0	26 x 12	43	37	17	5	0.15
RTC1630		32 x 12	43	45	18	5	0.20
RTC1640		39 x 12	44	51	22	5	0.25
RTC1651		51 x 14	47	64	20	5	0.21
RTC1220	17.2	26 x 11	43	37	17	5	0.15
RTC1630		32 x 11	43	45	18	5	0.20
RTC1640		39 x 11	44	51	22	5	0.25
RTC1651		51 x 13	47	64	20	5	0.21
RTC2526		26 x 18	55	40	25	5	0.20
RTC1220	20.0	26 x 8	43	37	17	5	0.15
RTC1640		32 x 8	43	51	22	5	0.20
RTC2040		39 x 8	44	51	22	5	0.25
RTC2051		51 x 10	47	64	20	5	0.21
RTC2526		26 x 16	55	40	25	5	0.20
RTC2526	25.0	26 x 11	55	40	25	5	0.23

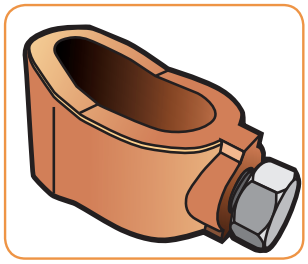
Earth Rod to Tape 'A' Clamps - Alumimium

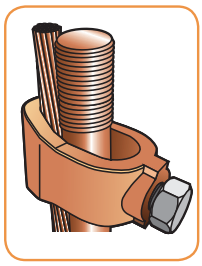
The Aluminium version is often used for connecting aluminium tape to a puddle flange rod as part of a lightning protection system.

Material: aluminium with M10 x 25mm stainless steel set screw.

Part number	Earth Rod shank Ømm	Max Tape Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
ATC1220	16	26 x 12	44	40	19	5	0.60

Earth/Ground Rod Electrodes





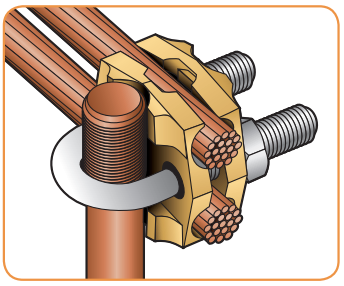
Earth Rod to Cable 'G' Clamps

'G' clamps are used for connecting earth rods to strandard copper conductor. These durable clamps are resistant to corrosion and ensure a lasting connection.

Material: Gunmetal with M10 x 25mm phosphor bronze set screw.
*Suitable for use with 8mm Ø solid circular copper conductor.

Part number	Earth Rod shank Ømm	Conductor Range mm²	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
GC10	9.5	6 - 35	32	20	16	5	0.04
GC12	12.7	16 – 50	34	25	15	5	0.05
		35 - 70	41	25	17	5	0.08
	14.2	6 - 16	34	25	15	5	0.05
GC16		16- 70	41	25	17	5	0.08
		70-185	48	30	19	5	0.10
	15.0	6-16	34	25	15	5	0.05
GC16		16-70	41	25	17	5	0.08
		70-150	48	30	19	5	0.10
GC16	16.0	16-70	41	25	17	5	0.08
		70-120	48	30	19	5	0.10
GC20	17.2	16-95	48	30	19	5	0.10
GC20	20.0	16-70	48	30	19	5	0.10

'U' Bolt Clamps



Ducab provides a comprehensive range of 'U' bolts, and those reflected in the tables should prove indicative, but certainly not exclusive. These have a number of joining functions be it in terms of connecting tape to earth rods, rebar to rebar, cable to earth rods, etc. and consequently the Ducab 'U' bolt is a high demand product.

Single Plate Type for Horizontal Flat Tapes

Used to connect flat tapes in a horizontal position on the rod.

Material: Gunmetal plate with M10 threaded copper 'U' bolt.

Part number	Max Earth Rod Ø (mm)	Hole Centres (mm)	L (mm)	W (mm)	H (mm)	Pack Quantity	Unit Weight kg
UB16	16	30	50	62	33	5	0.20
UB20	20	30	50	62	33	5	0.22
UB25	25	37	70	62	33	5	0.24
UB31	31	41	85	68	33	5	0.28
UB38	38	46	90	75	33	5	0.28
UB50	50	63	100	90	33	5	0.45

Double Plate Type for Vertical Flat Tapes

Used to connect flat tapes in a vertical position on the rod.

Material: Gunmetal plate with M10 threaded Copper 'U' Bolt.

Part number	Max Earth Rod Ø (mm)	Hole Centres (mm)	L	W (mm)	H (mm)	Pack Quantity	Unit Weight kg
UB16PL	16	25	68	62	33	5	0.36
UB20PL	20		68	62	33	5	0.38
UB25PL	25		70	62	33	5	0.40
UB31PL	31		85	68	33	5	0.44
UB38PL	38		90	75	33	5	0.40
UB50PL	50		100	90	33	5	0.80

Double Plate Type for Vertical Stranded Cables

Used to connect standard cables in a vertical and horizontal position on the rod.

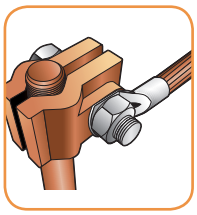
Material: Gunmetal plates with M10 threaded copper 'U' bolt.

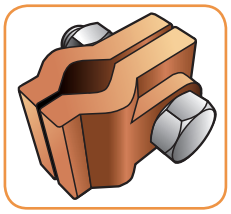
Part number	Max Earth Rod Ø (mm)	Hole Centres (mm)	L	W (mm)	H (mm)	Pack Quantity	Unit Weight kg
GUV16070	16-20	16-70	57	51	40	5	0.39
GUV70185		70-185	73	68		5	0.39
GUV150300		150-300	98	93	40	5	0.45
GUV16070	16-20	16-70	57	51	40	5	0.39
GUV70185		70-185	73	68		5	0.39
GUV150300		150-300	98	93	40	5	0.45

Earth/Ground Rod Electrodes

Split Connector Clamps

Split connector clamps are used to connect cable lugs on to earth rods to incorporate them within an earthing arrangement or to provide a swift and reliable installation for localised equipment earthing.





For use with copperbond earth rods (on rod thread)

Material: Gunmetal or naval brass.

Part number	Nominal Rod Size	Thread Size (UNC-2A)	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
RCC58	5/8"	5/8"	42	26	26	1	0.22
RCC34	¾"	¾"	50	29	29	1	0.31

For use with copperbond earth rods (on rod shank)

Material: Gunmetal or naval brass.

Part number	Rod Shank Ø mm	L	W	H	Pack Quantity	Unit Weight kg
RCC10	9.5	27	18	20	1	0.08
RCC14	14.2	42	25	25	1	0.27

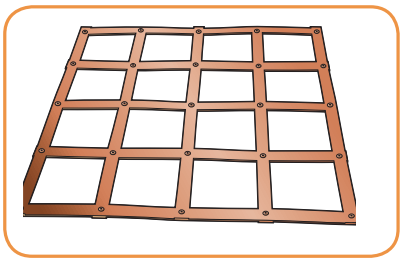
For use with solid copper and stainless steel earth rods (on rod shank)

Material: Gunmetal or naval brass.

Part number	Rod Shank Ø mm	L	W	H	Pack Quantity	Unit Weight kg
RCC15	15	42	26	25	1	0.22
RCC16	16	42	26	25	1	0.21
RCC20	20	50	29	29	1	0.28

Solid Copper Lattice Mats

Based upon the mesh system of lightning protection, solid copper lattice mats provide comparable performance to a solid copper plate, with substantially reduced weight and cost. Perform with substantial improvements when encased within Conducrete®.

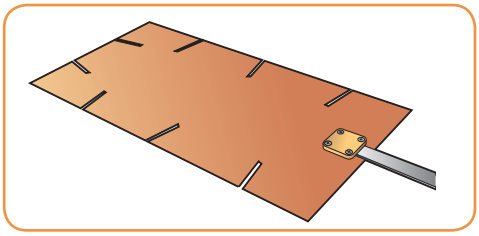


Material: Copper to BS EN 12163 (formerly BS 2874).

Part number	L x W mm	H mm	Surface Area m^2	Grid	Pack Quantity	Unit Weight kg
EML663	600 x 600	3.0	0.31	5 Bar	1	3.98
EML993	900 x 900	3.0	0.55	6 Bar	1	7.30

Solid Copper Earth Plates

Solid copper earth plates are beneficial in areas where the driving of deep earth rods may be unsuitable. This product offers significantly improved performance when encased in Conducrete®.



Material: Copper to BS EN 12163 (formerly BS 2874).

Part number	L x W mm	H mm	Surface Area m^2	Pack Quantity	Unit Weight kg
EMC6615	600 x 600	1.5	0.73	1	5.00
EMC663		3.0		1	9.27
EMC9915	900 x 900	1.5	1.63	1	11.21
EMC993		3.0		1	21.74

Conductive Concrete: Conducrete®

Conducrete® is a conductive concrete, which creates safe zones in areas where traditional methods are unsuitable, components stolen, or enhanced safety is required. Conducrete® helps to create safe systems where before there would be threats to life. The applications of Conducrete® are vast and in a wealth of our projects it has demonstrated astounding theft-resistance of material elements. The versatility of this product makes it difficult to provide an exhaustive list of its capabilities; new applications for Conducrete® are being discovered frequently.

Conducrete® is provided in powder form and is available in 25kg bags (in line with manual handling requirements), or smaller 11.5kg bags. It is easy to install dry directly from the bag, or mixed with water in a slurry format and pumped into the trench or hole.

Conducrete® adds substantial protection to any system where low impedance earthing/grounding is required and it has been successfully utilized to enhance and protect earthing/grounding systems across many industries including the following: Electrical Utilities, Telecommunications, Broadcasting, Wind Farms, Mining, Oil and Gas, Industrial and Manufacturing, Municipal and Institutional and Military.

Part number	Type	Pack quantity	Unit weight kg
DM100	Conducrete® standard sized bag	1 bag	25
DM050	Conducrete® smaller sized bag	1 bag	11.5

Summary of Conducrete®'s Key Features and Benefits

1. Protects earthing/grounding systems from theft and sabotage
2. Environmentally neutral
3. Significantly extends the life of earthing/grounding systems
4. Dramatically enhances the performance of earthing/grounding systems for superior electrical and lightning protection for your assets
5. Excellent overall value
6. The knowledge that your site shares the same standard as an array of prestigious structures around the world.

Theft Resistant and Maintenance Free

- Conducrete® protects the underlying earthing/grounding system from theft and sabotage. Theft is increasingly becoming a pervasive problem world wide, which substantially increases the costs from the loss of material and outages. Because Conducrete® solidifies into a high strength conductive concrete, the likelihood of such issues is substantially reduced.
- Conducrete® electrodes are maintenance-free over their functional lifetime. There are no hydration or salt replacement requirements with Conducrete®.

Environmentally Neutral/pH Neutral

- Conducrete® has no negative impact on the environment. In fact, it has been approved for use by regulatory agencies in many environmentally sensitive areas where aquifer cross-contamination is a concern.
- Conducrete® is water impermeable and pH neutral when set up and will not corrode copper conductors.
- No salts will leach into, or contaminate, the soil. Leachate testing shows that Conducrete® has levels far below acceptable leachate limits.

Long Life Expectancy

- Independent testing indicates that Conducrete® can reduce electrolytic corrosion.
- Conducrete® can extend the life of earthing/grounding systems by a factor of 10. Electrodes protected by Conducrete® will last far in excess of 25 years in many cases.

Compressive Strength and Low Shrinkage

- Conducrete® has a compressive strength of 21MPa (3045 psi) after 28 days. This means that Conducrete® electrodes are permanent, will not wash away and will withstand heavy earth/ground fault currents.
- Conducrete® testing yields shrinkage of 0.015% at 28 days. This means that Conducrete® bonds or knits to the surrounding soil resulting in a superior electrode due to constant contact with the soil.

High Voltage/Current Test Results

Independent testing in a high voltage lab precast Conducrete® electrodes withstood 1682V/688 amp fault for a duration of 500ms. Other earthing/grounding enhancement materials of lower compressive strength have exploded under these test conditions which would render the protection system useless. Conducrete® is the only earthing/grounding backfill that has documented evidence of high fault current withstand.

Water Absorption

Conducrete® is a very hygroscopic material. Lab testing shows that Conducrete® will absorb up to 34% of its weight in water. This quality is especially important in arid environments. Conducrete® is constantly hydrating and therefore continuously absorbing any available moisture from the surrounding soil. The result is an electrode that delivers more stable resistance to ground over time even during dry conditions.

Superior Operating Performance (low impedance, lower resistance, superior conductivity and capacitance)

Low impedance: The ability to provide low impedance is critical to dissipate lightning energy quickly in order to protect assets from damage. Conducrete®'s low impedance is due to the low resistance, high capacitance
and low inductance of the unique blend of materials.

Lower resistance and superior conductivity:

- Lower resistance results in superior conductivity
- Independent lab testing indicates that Conducrete® has a very low resistivity (3.06 ohm-cm)
- Figure 1 illustrates that Conducrete® has a resistivity of less than half of another leading brand of earth/ground enhancing material and approximately 50 times lower than bentonite clay.

Increased capacitance: The conductive and insulating materials used in the formulation of Conducrete® gives it a capacitive nature. Conducrete® has the ability to store and release energy the same way that a capacitor will store energy until it is earthed/ grounded or allowed to release the energy into a circuit. The material quickly absorbs high rise time electrical surges keeping earth/ground potential rise in check and preventing equipment interruption and infrastructure damage.

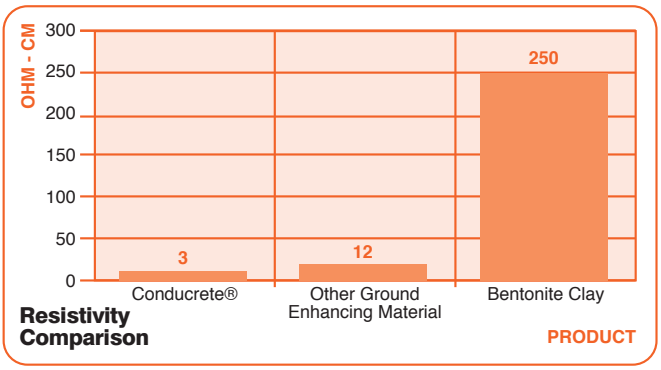


Fig. 1

Technical specifications

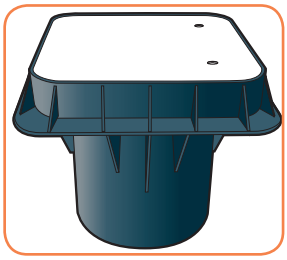
Conductive concrete must be environmentally neutral. It must be set up in situ to form a solid and must not leach, dissolve or migrate into the soil or water. It may be installed dry or mixed with water to form a slurry for horizontal or vertical applications. The material must be maintenance free and not require recharging of any kind i.e. watering, chemicals or salts. The material should have a dry resistivity of less than ohm-cm and an ability to reduce corrosion by at least 80%. The complete technical specifications are contained in the tables below.

EICAP	Conducrete®	Acceptable limit
Arsenic	<0.05	2.5
Barium	0.850	100.0
Boron	0.005	500.0
Cadmium	<0.005	0.5
Chromium	<0.005	5.0
Lead	<0.02	5.0
Mercury	<0.01	1.0
Selenium	<0.1	1.0
Silver	<0.005	5.0
Uranium	<0.2	10.0

Parameter	Conducrete®	Acceptable limit
Fluoride	0.126	150
Nitrate (NO3-N)	<0.100	1000 (Nitrate + Nitrate)
Nitrate (NO2-N)	<0.100	1000 (Nitrate + Nitrate)
Cyanide	<0.005	20

Physical state	Powder
Appearance	Dark grey
Odour	None
Dry density	~1400kg/m3 (hardened state)
Wet density	0.015% at 28 days
Compressive strength	28 days 21 MPa
Permeability to water	3.8X 10-7cm/sec
Hygroscopic property (water absorption)	32.4%
Resistivity (ASTM G187-05)	3.06 to 6.38 ohm-cm
Electrolytic corrosion resistance	Reduction in corrosion of 86%
High fault current test withstand	1686V for 500ms
Environmental impact/pH in situ	Neutral

Leachate data (TCPL Procedure) based on Regulation 558 performed by Accuracy Environmental Laboratories Ltd. demonstrates that Conducrete(R) is environmentally neutral. All results are expressed as ppm unless otherwise stated 'v' denotes less than method detection limit (MDL).



Heavy Duty Earth Housings

The Ducab heavy duty earth housing provides exceptional access, strength and durability for any application. Able to stand a full 2000kg more than a concrete alternative, this earth housing accommodates earth bars and is secured using a lock mechanism, which can be unlocked in emergency with a standard screwdriver.

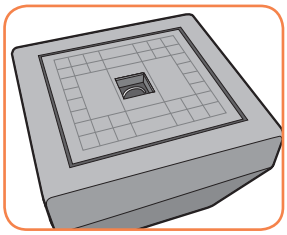
Material: Polypropylene base with GRP lid

Part number	Lid Colour	L x W mm	H mm	L1 x W mm	Pack Quantity	Unit Weight kg
PIT03	Grey	350	350	225	1	1.5

Concrete Earth Housings

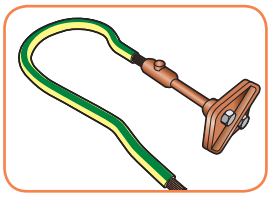
Ducab concrete earth houses can accommodate an internal earth bar fitted diagonally across in slots provided in the base. It is not suitable for use in areas where high load, small wheel vehicles are used due to the compressive loads such vehicles exert.

Material: concrete.



Part number	L x W mm	W mm	H mm	Pack Quantity	Unit Weight kg
P T01	325	325	145	1	27 00

Earth Bonding Points with Pre-Welded Tails



The pre-welded tail is provided, where required, for increased ease and speed of installation.

Material: Gunmetal body with PVC insulated copper cable tail.

Part number	No Holes	Type	Pack Quantity	Unit Weight kg
EPT01-05	1	EP01 with pre-welded 500mm long of 70mm² PVC insulated cable	1	0.64
EPT02-05	2	EP02 with pre-welded 500mm long of 70mm² PVC insulated cable	1	0.77
EPT02-10		EP02 with pre-welded 1000mm long of 70mm² PVC insulated cable	1	1.14
EPT02-15		EP02 with pre-welded 1500mm long of 70mm² PVC insulated cable	1	1.50
EPT04-05	4	EP04 with pre-welded 500mm long of 70mm² PVC insulated cable	1	1.02
EPT04-10		EP04 with pre-welded 1000mm long of 70mm² PVC insulated cable	1	1.39
EPT04-15		EP04 with pre-welded 1500mm long of 70mm² PVC insulated cable	1	1.75

Earth Seals

Construction sites or facilities located in areas with a high water table can sometimes suffer with the ingress of water at earth rod electrode locations. To avoid this a Conducrete® solution may be possible, or alternatively Ducab can provide the earth seal, which prevents water penetration; this product is particularly useful in instances where earth rod electrodes are present in basements.

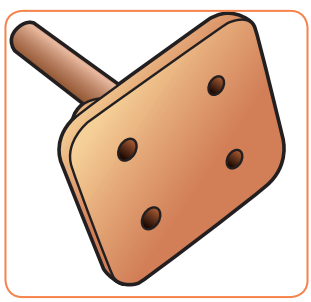
Material: plastic.

Single Flange

Part number	Earth Rod Type	Flange Øm	Pipe L mm	Pack Quantity	Unit Weight kg
ES015	15mm Ø	366	300	1	2.00
ES016	16mm Ø				
ES020	20mm Ø				
ES058	5/8" UNC threaded				
ES034	3/4" UNC threaded				

Double Flange (for deep concrete slab applications)

Part number	Earth Rod Type	Flange Øm	Pipe L mm	Pack Quantity	Unit Weight kg
ES015	15mm Ø	366	1200	1	3.20
ES016	16mm Ø				
ES020	20mm Ø				
ES058	5/8" UNC threaded				
ES034	3/4" UNC threaded				



Earth Bonding Points

Earth bonding points provide an effective earth system connection point in concrete structures. When cast in to concrete they connect the re-bar to the earthing or lightning protection system.

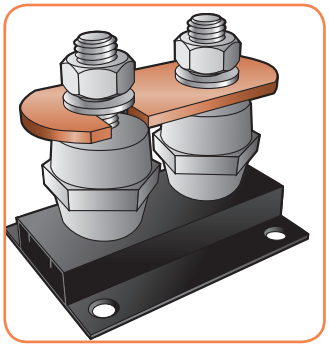
Material: Gunmetal.

Part number	No Holes	Hole Size mm	Plate Size mm	Stem Ø mm	L mm	Pack Quantity	Unit Weight kg
EP01	1	M10 x 20	38 x 38	10.7 (70mm²)	75	1	0.12
EP02	2		70 x 35			1	0.28
EP04	4		65 x 65			1	0.41

Disconnecting Link

As periodic testing or inspections may require the isolation of earth connections this disconnecting link provides the means to do so.

Material: Bar: 50x6mm hard drawn copper bar to BS EN 13601.
Base: plastic

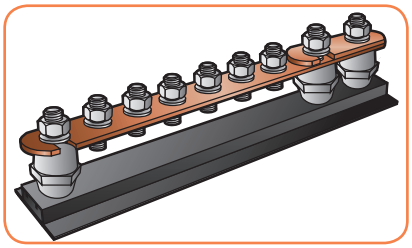


Part number	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
EBDL01	120	45	45	1	0.60

Earth Bars

As earth bars are required in a breadth of structures Ducab provide a complete range, and will produce bespoke earth bars for specific projects. Earth bars are also available for installations within earth housings. The following images and tables should provide an indication of some standard earth bars.

Material: Bar: 50 x 6mm hard drawn copper bar to BS EN 13601. Base: Plastic
Fittings: M10 head set screws, nuts and washers.



Earth Bars

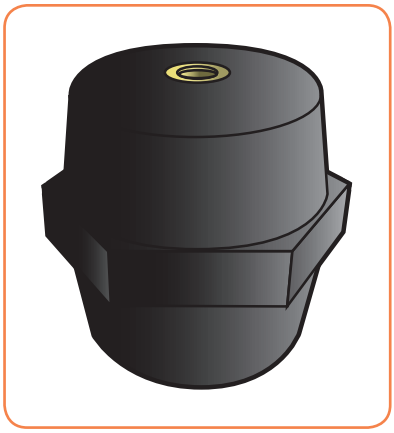
Part No	No Terminations	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
EB60-6	6	400	90	60	1	2.00
EB60-8	8	500			1	2.30
EB60-10	10	650			1	3.20
EB60-12	12	750			1	4.00
EB60-14	14	850			1	4.90
EB60-16	16	950			1	5.80
EB60-18	18	1100			1	6.70
EB60-20	20	1250			1	7.60
EB60-22	22	1300			1	8.50
EB60-24	24	1400			1	9.40
EB60-26	26	1550			1	10.30
EB60-28	28	1650			1	11.20
EB60-30	30	1800			1	12.10

Earth Bars with Single Disconnecting Link

Part No	No Terminations	L mm	W mm	H mm	Pack Quantity	Unit Weight (kg)
EB61-6	6	485	90	60	1	2.50
EB61-8	8	585			1	3.00
EB61-10	10	735			1	3.90
EB61-12	12	835			1	4.70
EB61-14	14	935			1	5.60
EB61-16	16	1035			1	6.50
EB61-18	18	1185			1	7.40
EB61-20	20	1335			1	8.30
EB61-22	22	1385			1	9.20
EB61-24	24	1485			1	10.10
EB61-26	26	1635			1	11.00
EB61-28	28	1735			1	11.90
EB61-30	30	1885			1	12.80

Earth Bars with Double Disconnecting Links

Part No	No Terminations	L mm	W mm	H mm	Pack Quantity	Unit Weight (kg)
EB62-6	6	570	90	60	1	3.10
EB62-8	8	670			1	3.70
EB62-10	10	820			1	4.50
EB62-12	12	920			1	5.30
EB62-14	14	1020			1	6.20
EB62-16	16	1120			1	7.10
EB62-18	18	1270			1	8.00
EB62-20	20	1420			1	8.90
EB62-22	22	1470			1	9.80
EB62-24	24	1570			1	10.70
EB62-26	26	1720			1	11.60
EB62-28	28	1820			1	12.50
EB62-30	30	1885			1	13.40



Components

Insulators

Ducab provides insulators for earth bar applications.

Material: reinforced polyester.

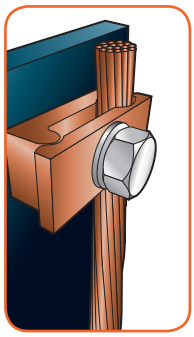
Part number	Type	Thread Size	W mm	H mm	Pack Quantity	Unit Weight (kg)
INS02	Insulator only	M10	40	40	10	0.08
INS01	Insultator with 2 studs & 3 nuts					0.16

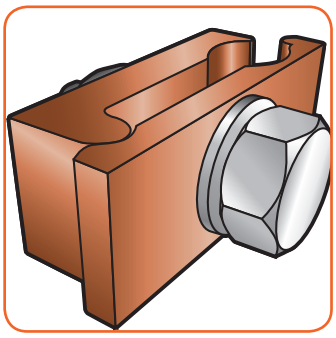
Tower Earth Clamps

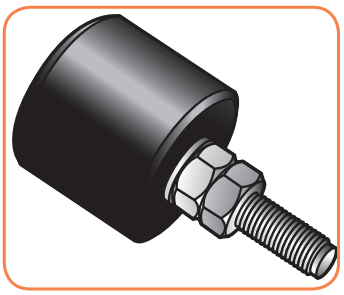
Utilised extensively when bonding conductors on to steel surfaces, tower earth clamps posses a unique double plate design which is useful in cladded areas.

Material: Gunmetal.

Part number	Conductor Range mm²	L mm	W mm	H mm	Set Screw	Pack Quantity	Unit Weight (kg)
BEC1670	16-70	45	30	17	M10 x 50mm	1	0.12
BEC70120	70-120	48	35	22	M12 x 60mm	1	0.23
BEC120185	120-185	55	40	28	M12 x 70mm	1	0.30
BEC185240	185-240	63	45	35	M12 x 80mm	1	0 40
BEC240300	240-300	70	53	42	M12 x 90mm	1	0.60







Earth Bosses

Earth bosses serve to provide an earth connection point in structures and marine vehicles.

Material: mild steel with stainless steel fittings

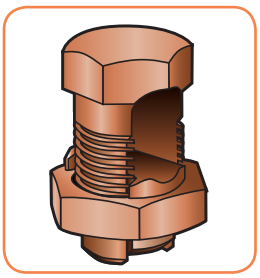
Part number	D mm	L mm	Thread Size	Pack Quantity	Unit Weight (kg)
EBOS01	50	50	M10	1	0.77
EBOS02	50	40		1	0.62
EBOS03	50	30		1	0.47
EBOS04	40	40		1	0.47
EBOS05	40	30		1	0.35

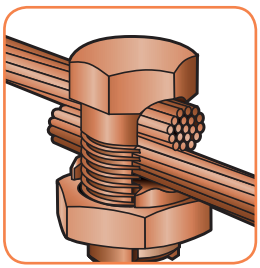
Split Bolt Connectors

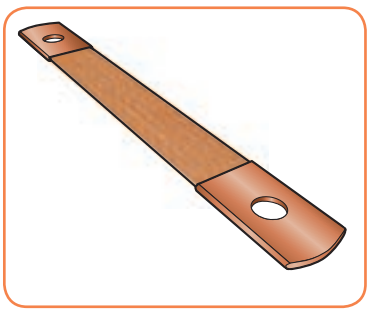
Split bolt connectors are used to secure a wide range of stranded copper conductors.

Material: Gunmetal

Part number	Main Conductor A mm²	Tap Conductor B mm²	H mm	W mm	Pack Quantity	Unit Weight (kg)
SBBC10	10	1.5-10	20	4.1	200	0.02
SBBC16	16	2.5-16	23	5.3	150	0 03
SBBC25	25	2.5-25	28	6.8	100	0 04
SBBC35	35	2.5-35	29	7.9	80	0 05
SBBC50	50	2.5-50	35	9.5	50	0.08
SBBC70	70	2.5-70	39	10.7	35	0.12
SBBC95	95	2.5-95	45	13.5	20	0.15
SBBC120	120	10-120	47	14.7	20	0.18
SBBC150	150	10-150	51	16.2	10	0.23
SBBC185	185	50-185	57	17.8	10	0.35
SBBC240	240	95-240	64	19	10	0.46







Flexible Copper Braid Bonds

Flexible copper braid bonds are used for creating areas of equipotential bonds between various conductive elements, and as they are flexible they are useful on moving parts, such as gates and fences. These can be made to different lengths and in 'x' formations.

Material: Tinned copper

Part number	Size W x H mm	Hole Centres L mm	Hole Size mm	Pack Quantity	Unit Weight (kg)
FEB02	25 x 3.5	200	11	10	0.05
FEB03		300			0.08
FEB04		400			0.12

Flexible tinned copper braid bonds

Part number	Size W x H mm	Hole Centres L mm	Hole Size mm	Pack Quantity	Unit Weight (kg)
FEB02T	25 x 3.5	200	11	10	0.05
FEB03T		300			0.08
FEB04T		400			0.12

Exothermic Welding: SudaWeld

What is Exothermic Welding?

Exothermic welding is a process used predominantly to create a permanent connection between two metallic elements that will guarantee conductivity and performance for the lifetime of the earth system.

Frequently used by contractors to create reliable bonds to ensure conductivity or to create equipotential zones. The benefit and purpose of equipotential integrated elements is to avoid dangerous sparking between areas of differing electrical potentials. The process results in a weld metal powder superheating and liquefying to release liquid copper on to the conductors requiring connection, which fuses the metals together. The weld metal powders contain a number of sacrificial and contributing ingredients, including copper oxide and aluminium, which facilitate the formation of the exothermic connection. As this process takes only a few moments to complete and does not require any external power source it is ideal for use in remote locations, and project managers with restricted budgets for plant.

Exothermic connections perform more effectively than any mechanical or pressure type surface-to-surface contact connector. Because the connection produced is a molecular bond, an exothermically welded connection will not loosen, independently corrode, or increase in resistance over the lifetime of the installation.

As recommended by IEC and IEEE regulations all earthing system connections should be made by exothermic weld. Connections should include, but not be limited to, all cable to cable splices, all cable to earthing rods, earthing rod splices, cable to steel and cast iron, cable lug terminations, bus bar connections and cable to rail connections.

Advantages of exothermic welding:

- Current carrying (fusing) capacity equal to that of the conductor.
- Will not deteriorate with age.
- Permanent molecular bond that cannot loosen or corrode.
- Will withstand repeated faults.
- Low labour costs.
- No special skills required for usage.
- No external power or heat required.
- Can be checked visually for quality.
- Portable and usable even in remote locations.

Exothermic welding is applicable to materials such as:

- Copper
- Common steel
- Copper-clad steel
- Bronze
- Wrought iron
- Stainless steel
- Cast iron
- Brass
- Silicon Bronze
- Steel rail
- Columbium
- Commercially pure iron
- Galvanised metals
- Monel
- Niobium

EXOTHERMIC WELDING

SudaWeld Preparation Kit:

TS 01 (tape)
TS 02 (cable)

Exothermic welding requires preparation such as cleaning conductors with wire brushes, cleaning the mould with a natural soft-brush, carefully scraping the crucible with a scraping tool and for this purpose Ducab provides a preparation kit, which includes a flint ignition gun

Blow Torch

BLT-01

The graphite moulds used in exothermic welding need to be thoroughly heated prior to use to ensure that they are fully dry. Even if graphite feels dry to the touch it is still likely to contain an amount of water absorbed from the atmosphere, so warming it for a minute with a blowtorch prior to use will ensure that the mould is ready to use in the SudaWeld process. Should a mould be used without correct preparation then it is possible that the weld will be ineffectual, which is why it is vital to heat the mould properly.

Mould Sealer

This sort of sealer is used to pack around a conductor to facilitate the exothermic process. In most cases this is not required but if a mould is being used repeatedly it may be prudent to pack around the conductor spaces to prevent the escape of molten weld metal, or the access of air to the crucible during the weld process.

MS SD

Safety Gloves:

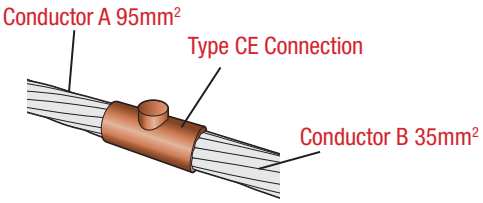
Whilst the Ducab SudaWeld system is designed to contain the heat from a user, it is recommended to protect the hands of users with protective safety gloves.

GLV 01

Moulds, Handle Clamps and Joint Types:

The type of joint that you wish to make will determine the mould that you need; the shape of the mould will determine the type of handle clamp necessary. The diagram below shows the way to determine the mould number of the joint you wish to make.

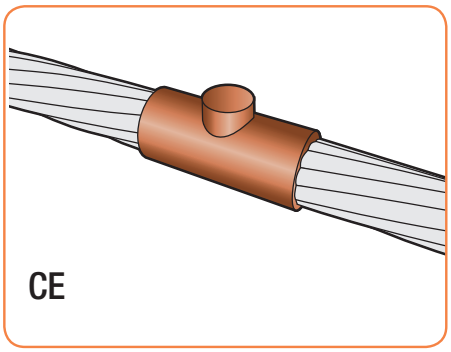
Part Numbering & Ordering Information



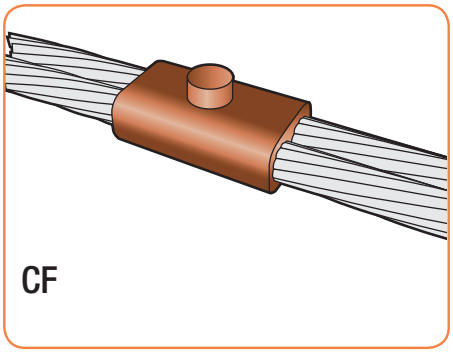
CE-3-95/35
Mould Type
Conductor A
Conductor B

Ducab Connect
MAKING CONNECTIONS

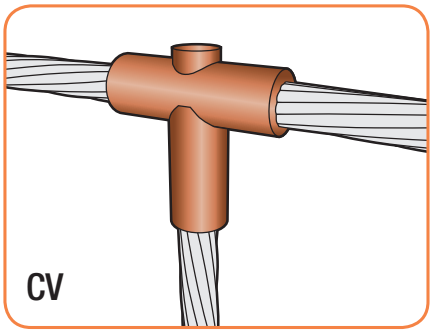
Conductor A (mm²)	Conductor B (mm²)	Mould Type	Handle Clamp	Weld Metal
10	10	CE-M-10/10	CL-3	32
16	16	CE-M-16/16	CL-3	32
25	25	CE-M-25/25	CL-3	32
30	30	CE-M-30/30	CL-3	32
35	35	CE-3-35/35	CL-3	32
50	50	CE-3-50/50	CL-3	45
50	70	CE-3-50/70	CL-3	65
50	95	CE-3-50/95	CL-3	90
70	70	CE-3-70/70	CL-3	65
70	95	CE-3-70/95	CL-3	90
70	120	CE-3-70/120	CL-3	115
95	95	CE-3-95/95	CL-3	90
95	120	CE-3-95/120	CL-3	115
120	120	CE-3-120/120	CL-3	115
150	150	CE-3-150/150	CL-3	115
185	185	CE-3A-185/185	CL-4	150
240	240	CE-3A-240/240	CL-4	200
300	300	CE-3A-300/300	CL-4	250
400	400	CE-6-400/400	CL-4	2 x 150
500	500	CE-6-500/500	CL-4	2 x 200



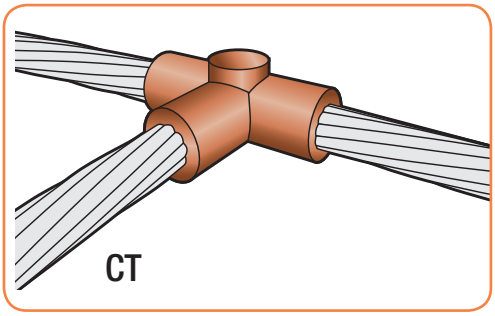
Conductor A (mm²)	Conductor B (mm²)	Mould Type	Handle Clamp	Weld Metal
10	10	CF-3-10/10	CL-3	45
16	16	CF-3-16/16	CL-3	45
25	25	CF-3-25/25	CL-3	45
30	30	CF-3-30/30	CL-3	65
35	35	CF-3-35/35	CL-3	65
35	25	CF-3-35/25	CL-3	65
50	50	CF-3-50/50	CL-3	90
50	35	CF-3-50/35	CL-3	90
50	25	CF-3-50/25	CL-3	90
70	70	CF-3-70/70	CL-3	115
70	50	CF-3-70/50	CL-3	115
70	35	CF-3-70/35	CL-3	90
70	25	CF-3-70/25	CL-3	90
95	95	CF-3A-95/95	CL-3	150
95	70	CF-3A-95/70	CL-3	150
95	50	CF-3A-95/50	CL-3	150
95	35	CF-3-95/35	CL-3	115
120	120	CF-3A-120/120	CL-3	200
120	95	CF-3A-120/95	CL-3	200
120	70	CF-3A-120/70	CL-3	200
120	50	CF-3A-120/50	CL-3	150
150	150	CF-3A-150/150	CL-3	250
150	120	CF-3A-150/120	CL-3	250
150	95	CF-3A-150/95	CL-3	200
150	70	CF-3A-150/70	CL-3	150
185	185	CF-4-185/185	CL-3	2 X 150
185	150	CF-3A-185/150	CL-3	250
185	120	CF-3A-185/120	CL-3	250
240	240	CF-8-240/240	CL-4	2 X 250
240	185	CF-7-240/185	CL-4	2 X 200



Conductor A (mm²)	Conductor B (mm²)	Mould Type	Handle Clamp	Weld Metal
10	10	CV-3-10/10	CL-3	32
16	16	CV-3-16/16	CL-3	32
25	25	CV-3-25/25	CL-3	32
35	25	CV-3-35/25	CL-3	45
35	35	CV-3A-35/35	CL-3	45
50	35	CV-3A-50/35	CL-3	90
50	50	CV-3A-50/50	CL-3	90
70	50	CV-3A-70/50	CL-3	115
70	70	CV-3A-70/70	CL-3	115
95	50	CV-3A-95/50	CL-3	150
95	70	CV-3A-95/70	CL-3	150
95	95	CV-3A-95/95	CL-3	150
120	70	CV-3A-120/70	CL-3	150
120	95	CV-3A-120/95	CL-3	150
120	120	CV-3A-120/120	CL-3	150
150	70	CV-3A-150/70	CL-3	200
150	95	CV-3A-150/95	CL-3	200
150	120	CV-3A-150/120	CL-3	200
150	150	CV-3A-150/150	CL-3	200
185	95	CV-3A-185/95	CL-3	200
185	120	CV-3A-185/120	CL-3	200
185	150	CV-3A-185/150	CL-3	200
185	185	CV-3A-185/185	CL-3	250
240	120	CV-3A-240/120	CL-3	250
240	150	CV-3A-240/150	CL-3	250
240	185	CV-6-240/185	CL-4	2 x 150
240	240	CV-6-240/240	CL-4	2 x 150

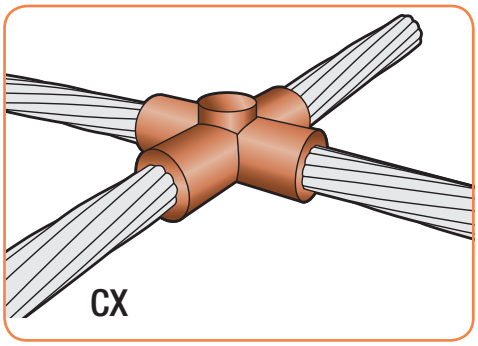


Conductor A (mm^2)	Conductor B (mm^2)	Mould Type	Handle Clamp	Weld Metal
10	10	CT-3-10/10	CL-3	32
16	16	CT-3-16/16	CL-3	45
25	25	CT-3-25/25	CL-3	45
25	16	CT-3-25/16	CL-3	45
30	30	CT-3-30/30	CL-3	45
30	25	CT-3-30/25	CL-3	45
30	16	CT-3-30/16	CL-3	45
35	35	CT-3-35/35	CL-3	45
35	30	CT-3-35/30	CL-3	45
35	25	CT-3-35/25	CL-3	45
35	16	CT-3-35/16	CL-3	45
50	50	CT-3-50/50	CL-3	45
50	35	CT-3-50/35	CL-3	45
50	30	CT-3-50/30	CL-3	45
50	25	CT-3-50/25	CL-3	45
50	16	CT-3-50/16	CL-3	45
70	70	CT-3-70/70	CL-3	90
70	50	CT-3-70/50	CL-3	90
70	35	CT-3-70/35	CL-3	65
70	30	CT-3-70/30	CL-3	65
70	25	CT-3-70/25	CL-3	65
70	16	CT-3-70/16	CL-3	65
95	95	CT-3-95/95	CL-3	115
95	70	CT-3-95/70	CL-3	90
95	50	CT-3-95/50	CL-3	90
95	35	CT-3-95/35	CL-3	90
95	30	CT-3-95/30	CL-3	90
95	25	CT-3-95/25	CL-3	65
95	16	CT-3-95/16	CL-3	65
120	120	CT-3A-120/120	CL-3	150
120	95	CT-3A-120/95	CL-3	150
120	70	CT-3-120/70	CL-3	90
120	50	CT-3-120/50	CL-3	90
120	35	CT-3-120/35	CL-3	90
120	25	CT-3-120/25	CL-3	90
120	16	CT-3-120/16	CL-3	90
150	150	CT-3A-150/150	CL-3	200
150	120	CT-3A-150/120	CL-3	150
150	95	CT-3A-150/95	CL-3	150
150	70	CT-3-150/70	CL-3	90
150	50	CT-3-150/50	CL-3	90
150	35	CT-3-150/35	CL-3	90
150	30	CT-3-150/30	CL-3	90
150	25	CT-3-150/25	CL-3	90
185	185	CT-3A-185/185	CL-3	200
185	150	CT-3A-185/150	CL-3	200
185	120	CT-3A-185/120	CL-3	200
185	95	CT-3A-185/95	CL-3	150
240	240	CT-4-240/240	CL-3	2 x 150
240	185	CT-3A-240/185	CL-3	200
240	150	CT-3A-240/150	CL-3	200
240	120	CT-3A-240/120	CL-3	200
240	95	CT-3A-240/95	CL-3	200
300	300	CT-8-300/300	CL-4	2 x 200
300	240	CT-8-300/240	CL-4	2 x 200
300	185	CT-3A-300/185	CL-3	250
300	150	CT-3A-300/150	CL-3	200
300	120	CT-3A-300/120	CL-3	200
300	95	CT-3A-300/95	CL-3	200
300	70	CT-3A-300/70	CL-3	200
400	400	CT-8-400/400	CL-4	2 x 250
400	300	CT-8-400/300	CL-4	2 x 200

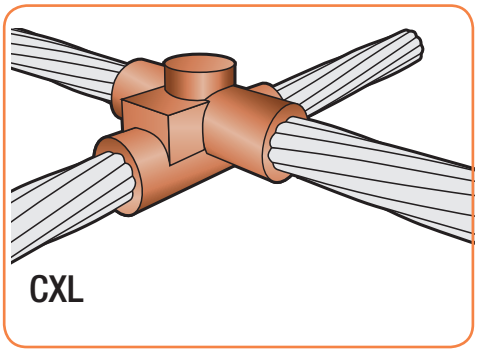


CT

Conductor A (mm²)	Conductor B (mm²)	Mould Type	Handle Clamp	Weld Metal
10	10	CX-3-10/10	CL-3	45
16	16	CX-3-16/16	CL-3	45
25	25	CX-3-25/25	CL-3	45
30	30	CX-3-30/30	CL-3	65
35	35	CX-3-35/35	CL-3	65
35	25	CX-3-35/25	CL-3	65
50	50	CX-3-50/50	CL-3	90
50	35	CX-3-50/35	CL-3	90
50	25	CX-3-50/25	CL-3	90
70	70	CX-3-70/70	CL-3	115
70	50	CX-3-70/50	CL-3	115
70	35	CX-3-70/35	CL-3	115
70	25	CX-3 70/25	CL-3	115
95	95	CX-3A-95/95	CL-3	150
95	70	CX-3A-95/70	CL-3	150
95	50	CX-3-95/50	CL-3	115
95	35	CX-3-95/35	CL-3	115
120	120	CX-3A-120/120	CL-3	200
120	95	CX-3A-120/95	CL-3	200
120	70	CX-3A-120/70	CL-3	150
120	50	CX-3A-120/50	CL-3	150
120	35	CX-3A-120/35	CL-3	150
120	25	CX-3A 120/25	CL-3	150
150	150	CX-3A-150/150	CL-3	250
150	120	CX-3A-150/120	CL-3	250
150	95	CX-3A-150/95	CL-3	200
150	70	CX-3A-150/70	CL-3	150
150	50	CX-3A-150/50	CL-3	150
185	185	CX-4-185/185	CL-3	2 x 150
185	150	CX-3A-185/150	CL-3	250
185	120	CX-3A-185/120	CL-3	250
185	95	CX-3A-185/95	CL-3	200
185	70	CX-3A-185/70	CL-3	200
240	240	CX-8-240/240	CL-4	2 x 250
240	185	CX-8-240/185	CL-4	2 x 200
240	150	CX-8-240/150	CL-4	2 x 200
240	120	CX-4-240/120	CL-3	2 x 150
240	95	CX-3A-240/95	CL-3	250
300	300	CX-8-300/300	CL-4	2 x 250



Conductor A (mm²)	Conductor B (mm²)	Mould Type	Handle Clamp	Weld Metal
10	10	CXL-6-10/10	CL-3	65
16	16	CXL-6-16/16	CL-3	65
25	25	CXL-6-25/25	CL-3	65
30	30	CXL-6-30/30	CL-3	90
35	35	CXL-6-35/35	CL-3	90
35	25	CXL-6-35/25	CL-3	90
50	50	CXL-6-50/50	CL-3	150
50	35	CXL-6-50/35	CL-3	150
50	25	CXL-6-50/25	CL-3	115
70	70	CXL-6-70/70	CL-3	200
70	50	CXL-6-70/50	CL-3	200
70	35	CXL-6-70/35	CL-3	150
70	25	CXL-6-70/25	CL-3	150
95	95	CXL-6-95/95	CL-3	250
95	70	CXL-6-95/70	CL-3	250
95	50	CXL-6-95/70	CL-3	200
95	35	CXL-6-95/35	CL-3	200
120	120	CXL-9-120/120	CL-4	2x150
120	95	CXL-9-120/95	CL-4	2x150
120	70	CXL-6-120/70	CL-3	250
120	50	CXL-6-120/50	CL-3	250
120	35	CXL-6-120/35	CL-3	150
120	25	CXL-6-120/25	CL-3	150
150	150	CXL-9-150/150	CL-4	2x200
150	120	CXL-9-150/120	CL-4	2x200
150	95	CXL-9-150/95	CL-4	2x150
150	70	CXL-9-150/70	CL-4	2x150
185	185	CXL-9-185/185	CL-4	2x250
185	150	CXL-9-185/150	CL-4	2x250
185	120	CXL-9-185/120	CL-4	2x250
185	95	CXL-9-185/95	CL-4	2x200
185	70	CXL-9-185/70	CL-4	2X150
240	240	CXL-9-240/240	CL-4	3x250
240	185	CXL-9-240/185	CL-4	3x200
240	150	CXL-9-240/150	CL-4	3x200
240	120	CXL-9-240/120	CL-4	2x250
300	300	CXL-10-300/300	CL-4	4x250
400	400	CXL-10-400/400	CL-4	5x250



LIGHTNING PROTECTION PRODUCTS

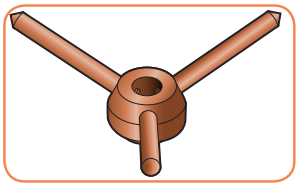
The materials and components contained within this publication reflect our highest demanded products as opposed to an exhaustive list. Most products can be manufactured out of different materials (such as stainless steel or galvanised steel) than those presented in this publication. The range herein contained focuses specifically upon the flat tape approach to lightning protection. Alternative lightning protection system components include those for cable, wire and solid circular systems. A complete range of cable, wire and solid circular fixings is available upon request.

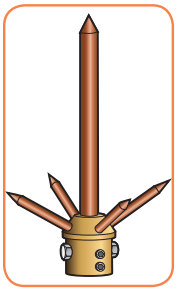
Multi-point

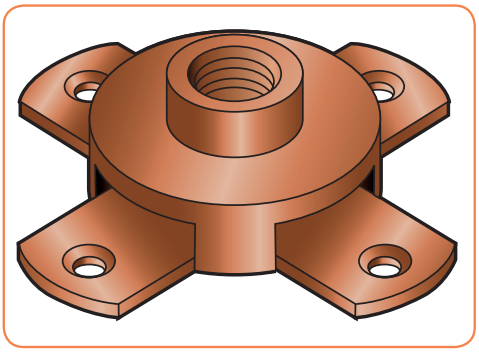
This item can be used in conjunction with the taper pointed copper air rods, but are not essential for installations and are essentially a decorative item.

Material: Gunmetal base with copper spikes

Part number	Air Rod Ø mm	H mm	W mm	Pack Quantity	Unit Weight kg
CMP600	16 & 20	156	72	1	0.31







Air Rod Saddles

Air rod saddles are the fixing enabling air rods to be installed on flat roof surfaces and have slots accommodating the installation of air termination network conductors.

For use with copper air rods

Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
ATBC16	M16	101	37	1	0.50
ATBC20	M20			1	

Material: Gunmetal

For use with aluminium air rods

Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
ATBA15	M16	101	37	1	0.16

Material: Aluminium

Air Rod Ridge Saddles

Pitched roofs require an alternative fixing to the standard air rod saddle, which is why ridge saddles were developed.

For use with copper air rods

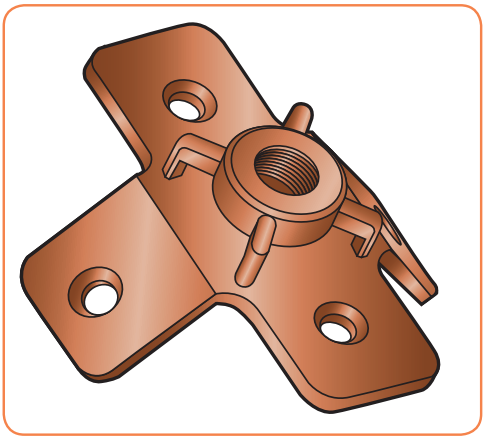
Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
RS115	M16	137	34	1	1.07

Material: Gunmetal

For use with aluminium air rods

Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
AS115	M16	137	34	1	0.70

Material: Aluminium



Taper Pointed Rods

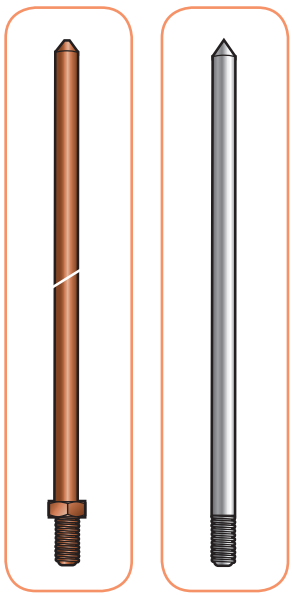
Air rods are used in conventional lightning protection systems to be the point of interception for lightning strikes and as such should be considered for inclusion in any air termination design.

Copper Air Rods

Part number	Thread size	L mm	L1 mm	Pack Quantity	Unit Weight kg
CAR0315	M16	300	41	1	0.53
CAR0515		500		1	0.85
CAR1015		1000		1	1.70
CAR1515		1500		1	2.59
CAR2015		2000		1	3.47
CAR0320	M20	300	41	1	0.80
CAR0520		500		1	1.34
CAR1020		1000		1	2.68
CAR1520		1500		1	4.02
CAR2020		2000		1	5.36

Aluminium Air Raods

Part number	Thread size	L mm	L1 mm	Pack Quantity	Unit Weight kg
AAR0315	M16	300	41	1	0.18
AAR0515		500		1	0.29
AAR1015		1000		1	0.57
AAR1515		1500		1	0.98
AAR2015		2000		1	1.09



Side Mounting Air Rod Brackets

Designers frequently wish to affix air rods to the walls of structures to minimise aesthetic impacts, or to prevent impacts upon the horizontal roof surface, or due to other client requirements. The side mounting air rod bracket, accompanied by the rod to tape coupling is the fixing to achieve this sort of installation.

For use with copper air rods

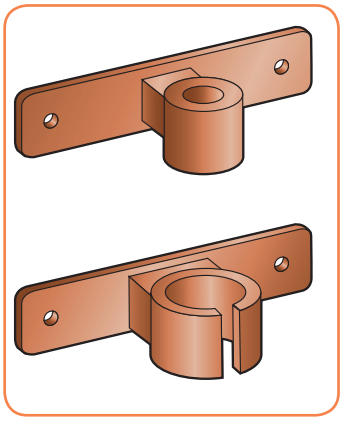
Part number	RodØ mm	L mm	W mm	Pack Quantity	Unit Weight kg
CBR015	16	97	120	PR	0.90
CBR020	20			PR	0.28

Material: Gunmetal

For use with aluminium air rods

Part number	RodØ mm	L mm	W mm	Pack Quantity	Unit Weight kg
ABR015	16	97	120	PR	0.28

Material: Aluminium



Rod to Tape Couplings

This component is designed to incorporate air rods into a down conductor and must be accompanied by the side mounting air rod brackets.

For use with copper air rods

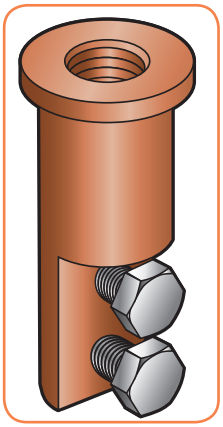
Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
TTRC16	M16	80	40	1	0.23
TTRC20	M20			1	

Material: Gunmetal

For use with aluminium air rods

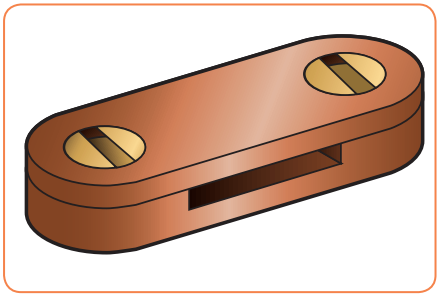
Part number	Thread Size	L mm	H mm	Pack Quantity	Unit Weight kg
TTRA16	M16	80	40	5	0.08

Material: Aluminium



Metallic DC Clips

A robust and familiar method of affixing down conductors to walls, metallic DC clips are reliable and simply installed.



For use with bare copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
DCC203	20 x 3	50	20	10	10	0.06
DCC253	25 x 3	50		10	10	0.07
DCC254	25 x4	50		10	25	0.07
DCC256	25 x6	50		12	10	0.08
DCC313	31 x3	60		10	25	0.09
DCC316	31x6	60		13	25	0.09
DCC383	38x3	64		10	25	0.12
DCC385	38x5	64		13	25	0.13
DCC386	38x6	64		13	25	0.14
DCC503	50x3	80		10	10	0.15
DCC504	50x4	80		11	10	0.15
DCC506	50x6	80		14	10	0.16
DCC508	50x8	80		14	10	0.16

Material: Gunmetal

For use with PVC covered copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
DCC600	25x3	55	20	14	10	0.10
DCC605	25x6	58		18	10	0.13
DCC610	50x6	91		19	10	0.26

Material: Gunmetal

For use with lead covered copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
DCC700	25x3	77	27	25	25	0.34

Material: phosphor bronze

For use with bare aluminium tapes

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
DCC600	25x3	55	20	14	10	0.10
DCC605	25x6	58		18	10	0.13
DCC610	50x6	91		19	10	0.26

Material: Aluminium

For use with PVC covered aluminium tape

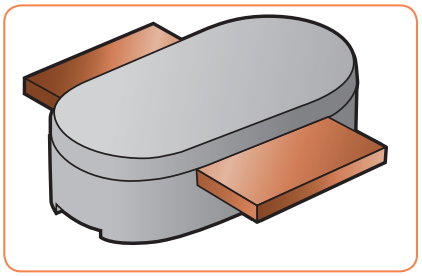
Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
DCA600	25x3	55	20	20	25	0.04
DCA610	50x6	80		23	10	0.05

Material: Aluminium

Non-metallic DC clips

A lightweight alternative to the metallic DC clips, this polypropylene DC clip benefits from a hinged lid which facilitates speed of installation, and UV stabilisation; the combined result is a clip which will not become brittle and suffer scant colour degradation. Available in a number of colours to match bare and PVC covered copper and aluminium tapes.

Material: Polypropylene



For use with bare copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Colour	Pack Quantity	Unit Weight kg
DC203BN	20x3	55	18	16	Brown	50	0.01
DC253BN	25x3	50	18	16			
DC506BN	50x6	80	25	26			

For use with bare aluminium tape

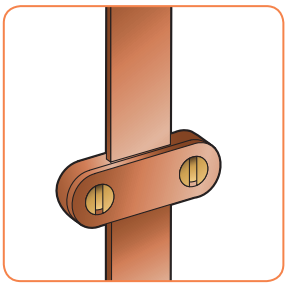
Part number	Conductor Size mm	L mm	W mm	H mm	Colour	Pack Quantity	Unit Weight kg
DC203GY	20x3	50	18	16	Grey	50	0.01
DC253GY	25x3						

For use with PVC copper & aluminium tape

Part number	Conductor Size mm	L mm	W mm	H mm	Colour	Pack Quantity	Unit Weight kg
DC25BN	25x3	50	18	16	Brown	50	0.01
DC25BL					Black		
DC25GY					Grey		
DC25GN					Green		
DC25ST					Stone		
DC25WH					White		

Tape Clips

An alternative to the DC clip range, these tape clips hold flat conductors to the surface of a structure.



For use with bare copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
TAPC203	20x3	68	20	7	50	0.02
TAPC253	25x3	70		7		0.02
TAPC506	50x6	73		8		0.03

Material: Copper

For use with PVC covered tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
TAPC254	25x3	70	20	7	50	0.02

For use with bare aluminium tapes

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
TAPA203	20x3	68	20	7	50	0.01
TAPA253	25x3	70				

For use PVC covered aluminium tapes

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
TAPA254	25x3	70	20	7	50	0.01

Slate holdfasts

Slate holdfasts are a solution to affixing conductors to slate roofs without the need for drilling. Most commonly supplied with a non-metallic DC clip to enable a swift installation but it is also possible to supply them with a metallic DC clip (as demonstrated in the picture).

Material: Polypropylene clip with aluminium tail

For use with copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Colour	Pack Quantity	Unit Weight kg
HF253BN	25x3	300	50	16	Brown	50	0.02
HF253GY					Grey		

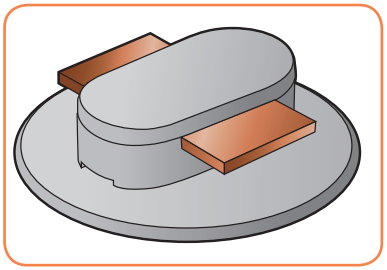
For use with PVC copper & aluminium copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Colour	Pack Quantity	Unit Weight kg
HFP253BN	25x3	300	50	16	Brown	50	0.02
HFP253BL					Black		
HFP253GY					Grey		
HFP253ST					Stone		
HFP253WH					White		

Adhesive DC clips

Comparable in terms of both design and brief adhesive DC clips are intended for installation on non-PVC roofs. A non-metallic DC clip is attached to the adhesive base and the down conductor is simply inserted and secured with the hinged polypropylene lid

.Material: Policarbonate base with polypropylene clip



For use with bare copper & aluminium tape

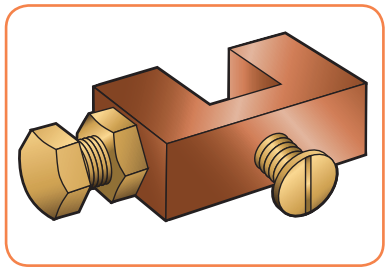
Part number	Conductor Size mm	D mm	H mm	Colour	Pack Quantity	Unit Weight kg
ADC253BN	25x3	65	23	Brown	50	0.03
ADC253GY				Grey		

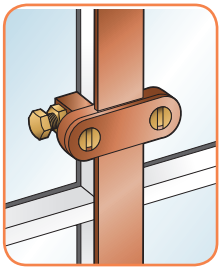
For use with PVC covered tape

Part number	Conductor Size mm	D mm	H mm	Colour	Pack Quantity	Unit Weight kg
AD25BN	25x3	65	23	Brown	50	0.03
ADC25BL				Black		
ADC25GR				Grey		
ADC25ST				Stone		
ADC25WH				White		

Glazing Bar Holdfasts

Also within the Ducab holdfast provision is this holdfast which should be used when conductor is being affixed to a stable metallic groove. As the picture indicates, a DC clip (of either sort) can then be installed on top.





For use with copper tape

Part number	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
GBHC	35	22	20	10	0.12

Material: Gunmetal

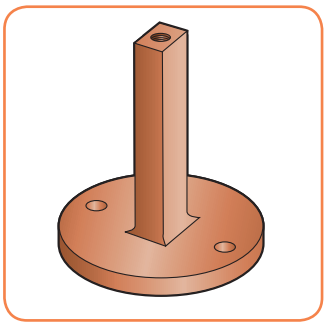
For use with aluminium tape

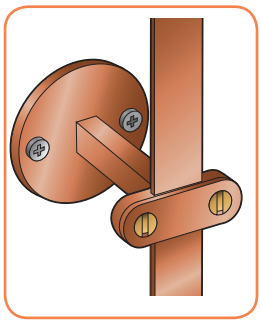
Part number	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
GBHA	35	22	20	10	0.04

Material: Aluminium

Back Plate Holdfasts

The square junction clamp is a versatile, high demand item used in both air termination networks and down conductor networks, but less frequently in earth termination networks, where it is more advisable to use the SudaWeld procedure. With the ability to support straight through applications like a DC clip, t-junctions and full cross connections, the square junction clamp is a popular item to buy in bulk as it can undertake a number of functions.





For use with copper tape

Part number	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
BPHFC	35	22	20	10	0.12

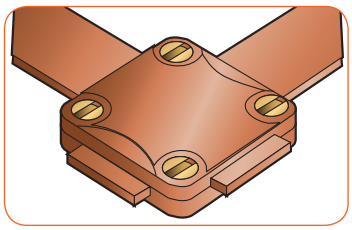
Material: Gunmetal

Square Junction Clamps

The square junction clamp is a versatile, high demand item used in both air termination networks and down conductor networks, but less frequently in earth termination networks, where it is more advisable to use the SudaWeld procedure. With the ability to support straight through applications like a DC clip, t-junctions and full cross connections, the square junction clamp is a popular item to buy in bulk as it can undertake a number of functions.

For use with bare copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
STC253	25x3	50	50	13	5	0.15
STC256	25x6	50	50	20	5	0.25
STC313	31x3	60	60	14	5	0.22
STC386	38x6	71	71	22	5	0.59
STC503	50x3	80	80	16	5	0.50
STC506	50x6	79	79	22	5	0.52



Material: Gunmetal

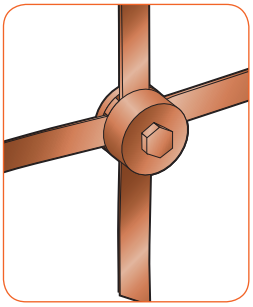
For use with bare aluminium tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
STA253	25x3	70	70	25	25	0.86

Material: Aluminium

Screw Down Test Clamp

The screw down test clamp fulfils the same requirement as the plate type test clamp, but facilitates a swifter disconnection, the consequence is a slightly more prominent profile. The selection between these products is essentially one of choice, being mindful of future requirements



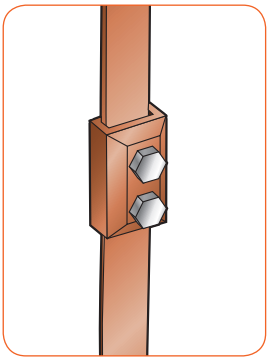
For use with copper tape

Part number	Max Conductor Size mm	D mm	Pack Quantity	Unit Weight kg
SDTC253	26x8	61	1	0.70

Material: Gunmetal

Oblong Junction Clamps

The oblong junction clamp connects tapes in a down conductor network and is able to secure an array of sizes. It is advisable, where possible, to overlap the conductors within the oblong junction clamp to vouchsafe conductivity.



For use with bare copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
OBC253	26x 8	68	40	23	2	0.29
OBC506	51x10	90	63	26	2	0.60

Material: Gunmetal

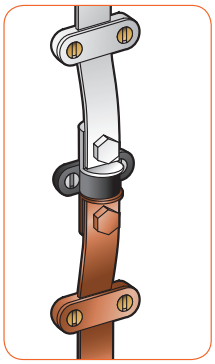
For use with bare aluminium tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
OBA253	26x8	68	40	23	2	0.10

Material: Aluminium

Bimetallic Connectors

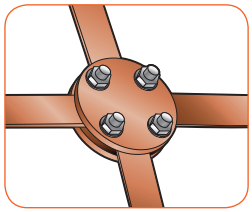
As direct surface to surface connection of copper and aluminium results in aggressive corrosion this component has been developed to enable swift incorporation of both aluminium and copper tapes within the same down conductor run. Fix using countersunk woodscrews 1½" x No. 10 and No. 10 wall plugs.



Part number	Conductor Size mm	Material Type	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
BIM700	25 x 3	Aluminium & Copper	98	29	25	1	0.20
BIM500		Stainless steel	76	21	20	1	0.16

Plate Type Test Clamps

It is prudent to incorporate a test clamp of some variety into a down conductor network to facilitate any required testing as test clamps enable a disconnection between the down conductor and the earth termination system. This plate type test clamp is popular due to its unobtrusive profile on the building surface.



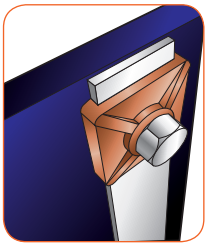
For use with copper tape

Part number	Conductor Size mm	L mm	H mm	Pack Quantity	Unit Weight kg
PTC400	26 x15	70	38	1	0.60

Material: Gunmetal

'B' Bonds

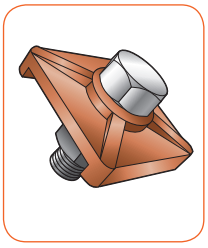
Utilised extensively in equipotential bonding, the 'B' bond is used to secure conductor tapes to metallic conductive items.



For use with copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
BBBC	25 x 3	35	35	10	5	0.10

Material: Gunmetal with M10 x 35mmStainless steel set screw.



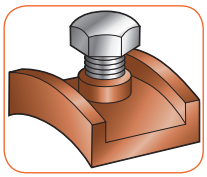
For use with aluminium tape

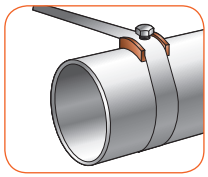
Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
ABBC	25 x 3	35	35	10	5	0.05

Material: Aluminium with M10 x 35mm Stainless steel set screw.

Watermain Pipe Bond

Utilised extensively in equipotential bonding, the 'B' bond is used to secure conductor tapes to metallic conductive items.





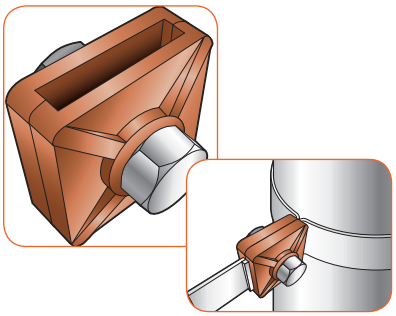
For use with copper tape

Part number	Conductor Size mm	L mm	W mm	Pack Quantity	Unit Weight kg
WPB010	26	45	36	5	0.21

Material: Gunmetal with M10 x 35mm Stainless Steel set screw

Rainwater Pipe Bond

A further equipotential bonding product which enables the swift incorporation of tape conductor to a metallic element.



For use with copper tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
BWPB	26	32	32	16	5	0.12

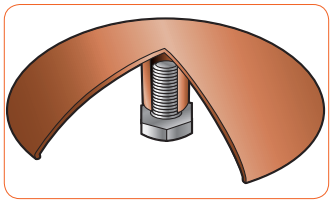
Material: Gunmetal with M10 x 40mm Stainless steel set screw

For use with aluminium tape

Part number	Conductor Size mm	L mm	W mm	H mm	Pack Quantity	Unit Weight kg
BWPB	26	32	32	16	5	0.08

Material: Aluminium with M10 x 40mm stainless steel set screw.

Strike Pads



In some applications it is not possible to install conductors to the external surfaces of a structure, particularly where the external surface is accessible to the public. The strike pad provides an air termination for concealed conductors beneath the final surface level.

For use with copper conductor

Part number	L mm	W mm	Pack Quantity	Unit Weight kg
SPC01	122	40	5	0.60

Material: Gunmetal

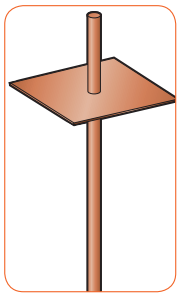
For use with aluminium conductor

Part number	L mm	W mm	Pack Quantity	Unit Weight kg
SPA01	122	40	5	0.20

Material: Aluminium

Puddle Flange

Created to prevent water ingress through a roof level, this product is frequently used to enable electrical continuity to the down conductor without risking water damage



For use with copper conductor

Part number	L mm	W mm	Pack Quantity	Unit Weight kg
PFC001	600	150 x 150	1	1.68

Material: Copper

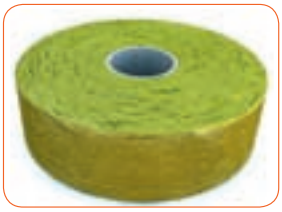
For use with aluminium conductor

Part number	L mm	W mm	Pack Quantity	Unit Weight kg
PFA001	600	150 x 150	1	0.54

Material: Aluminium

Waterproof Sealing Tape

A waterproof tape for wrapping joints to provide protection against corrosion. A waterproof tape for wrapping underground joints.

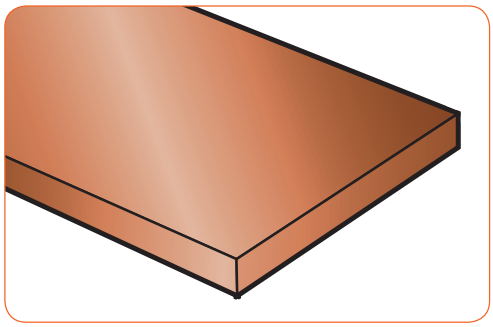


Part number	Description	Pack Quantity	Unit Weight kg
DENSO	50mm wide x 10m length roll	1	0.75

Conductors

The purpose of a conductor is to provide a planned route for electricity, and as such is a fundamental element of any electrical safety system. There are a number of standards against which conductors are measured (depending upon their variety) and also project specific requirements based upon their usage on site. Conductors must be suitable for their ultimate destination (i.e. the environment to which they will be exposed) and usage (able to withstand repeated usage) and in line with their interface with other impacts. The current carrying capacity is an essential performance criteria for any conductor and as such an indicative table for copper tape is provided below (please refer to BS7430 for more detail). With presence on numerous significant projects Ducab is the obvious choice for all conductor requirements. This publication does not contain our full scope of conductor provision so should your requirement not feature please do not hesitate to contact a member of the Ducab team.

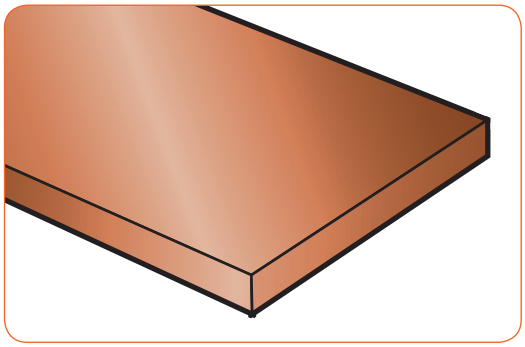
Bare Hard Drawn Copper Bars



Standard Coil size 4m.
Material: Copper to BS EN 12163 (formerly BS 2874)

Part number	Size WxH mm	C.S.A mm²	Weight per metre kg
HDB203	20 x 3	60	0.53
HDB253	25 x 3	75	0.67
HDB254	25 x 4	100	0.89
HDB256	25 x 6	150	1.33
HDB305	30 x 5	150	1.33
HDB386	38 x 6	228	2.03
HDB506	50 x 6	300	2.68
HDB4010	40 x 10	400	3.56
HDB756	75 x 6	450	4.02
HDB5010	50 x 10	500	4.48
HDB1005	100 x 5	500	4.48
HDB6010	60 x 10	600	5.38
HDB1006	100 x 6	600	5.38
HDB10010	100 x 10	1000	8.89

Conductor size mm	kA for 1 sec	kA for 3 secs	C.S.A mm²
12.5 x 1.5	3.3	1.9	18.75
12.5 x 3	6.6	3.8	37.5
20 x 1.5	5.3	3.0	30
20 x 3	10.6	6.1	60
25 x 1.5	6.6	3.8	37.5
25 x 3	13.2	7.6	75
25 x 4	17.6	10.2	100
25 x 6	26.4	15.2	150
30 x 2	10.6	6.1	60
30 x 3	15.8	9.1	90
30 x 4	21.1	12.2	120
30 x 5	26.4	15.2	150
31 x 3	16.4	9.5	93
31.5 x 4	22.2	12.8	126
31 x 6	32.7	18.9	186
38 x 3	20.1	11.6	114
38 x 5	33.4	19.3	190
38 x 6	40.1	23.2	228
40 x 3	21.1	12.2	120
40 x 4	28.2	16.3	160
40 x 5	35.2	20.3	200
40 x 6	42.2	24.4	240
40 x 6.3	44.4	25.6	252
50 x 3	26.4	15.2	150
50 x 4	35.2	20.3	200
50 x 5	44.0	25.4	250
50 x 6	52.8	30.5	300
50 x 6.3	55.4	32.0	315



Bare Copper Tapes

Utilised on an array of earthing and lightning protection systems on projects around the globe. Ducab bare copper tape is manufactured with a focus on ease of manual handling and installation, however it is imperative that a site and task specific risk assessment is undertaken before any installation.

Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight per metre kg
BCT1215	12.5 x 1.5	18.75	100	0.17
BCT1230	12.5 x 3	37.5	100	0.33
BCT2015	20 x 1.5	30	100	0.27
BCT2030	20 x 3	60	100	0.53
BCT2515	25 x 1.5	37.5	100	0.33
BCT2530/25	25 x 3	75	25	0.67
BCT2530	25 x 3	75	50	0.67
BCT2540	25 x 4	100	50	0.89
BCT2560	25 x 6	150	40	1.33
BCT3020	30 x 2	60	50	0.53
BCT3020	30 x 3	90	50	0.80
BCT3040	30 x 4	120	40	1.07
BCT3050	30 x 5	150	40	1.33
BCT3130	31 x 3	93	50	0.83
BCT31540	31.5 x 4	126	40	1.13
BCT3160	31 x 6	186	30	1.65
BCT3830	38 x 3	114	50	1.01
BCT3850	38 x 5	190	30	1.69
BCT3860	38 x 6	228	25	2.02
BCT4030	40 x 3	120	40	1.06
BCT4040	40 x 4	160	30	1.42
BCT4050	40 x 5	200	25	1.78
BCT4060	40 x 6	240	25	2.16
BCT4063	40 x 6.3	252	25	2.24
BCT5030	50 x 3	150	40	1.33
BCT5040	50 x 4	200	30	1.78
BCT5050	50 x 5	250	20	2.22
BCT5060	50 x 6	300	20	2.68
BCT5063	50 x 6.3	315	20	2.80
BCT5080	50 x 8	400	15	3.60

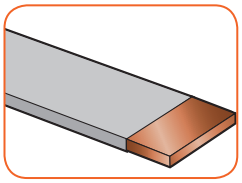
Material: Copper to BS EN 13601 (formerly BS 1432).

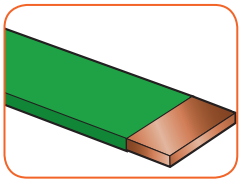
EARTHING & LIGHTNING PROTECTION SYSTEMS

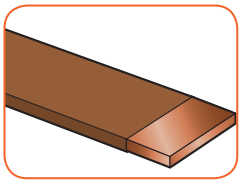
Ducab Connect
MAKING CONNECTIONS

PVC Covered Copper Tapes

The benefit of a PVC covered conductor is that they can be selected to more closely harmonise with the aesthetics of a structure. Ducab provides the following PVC colours in accordance with BS 5252: Black (18B29), Green (06C39), Grey (00A07), Stone (08B23), Whire (10B15) and can also provide PVC in Brown (BS 6746C). As with all Ducab products we will always seek to accommodate the need for alternative colours if requested.



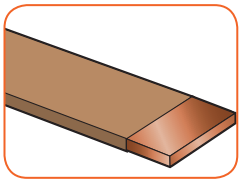




Part number	Size WxH mm	Colour	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
	12.5 x 1.5	Black	18.75	100	0.21
CTBN253	25 x 3	Brown	75	50	0.77
CTBL253		Black			
CTGY253		Grey			
CTGN253		Green			
CTST253		Stone			
CTWH253		White			
CTGN256	25 x 6	Green	150	40	1.33
CTGN503	50 x 3	Green	150	40	1.33
CTGN506	50 x 6	Green	300	20	2.68

Material: Copper to BS EN 13601 (formerly BS 1432) PVC colours to BS 5252 except green to BS 6746C.

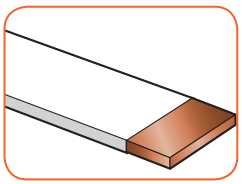
Green & Yellow PVC Insulated Copper Tape



Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
CT253GY	25 x 3	75	50	0.79

Material: Copper to BS EN 13601 (formerly BS 1432) PVC colours to BS 5252 except green to BS 6746C.

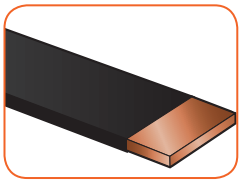
Lead Covered Copper Tape



Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
LCT253	25 x 3	75	25	2.56

Material: Copper to BS EN 13601 (formerly BS 1432)

LSOH Covered Copper Tapes



Part number	Size WxH mm	Colour	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
LSF253GN	25 x 3	Green	75	50	0.77
LSF256GN	25 x 6		150	40	1.53
LSF506GN	50 x 6		300	20	2.95

Material: Copper to BS EN 13601 (formerly BS 1432). PVC colour to BS 6746C.

Tinned Copper Tapes

Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
TCT1215	12.5x1.5	18.75	100	0.17
TCT1230	12.5x3	37.5	100	0.33
TCT2015	20x1.5	30	100	0.27
TCT2030	20x3	60	100	0.53
TCT2515	25x1.5	37.5	100	0.33
TCT2530	25x3	75	50	0.67
TCT2540	25x4	100	50	0.89
TCT2560	25x6	150	40	1.33
TCT3020	30x2	60	50	0.53
TCT3030	30x3	90	50	0.80
TCT3040	30x4	120	40	1.07
TCT3050	30x5	150	40	1.33
TCT3130	31x3	93	50	0.83
TCT31540	31.5x4	126	40	1.13
TCT3160	31x6	186	30	1.65

Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
TCT3830	38x3	114	50	1.01
TCT3850	38x5	190	30	1.69
TCT3860	38x6	228	25	2.02
TCT4030	40x3	120	40	1.06
TCT4040	40x4	160	30	1.42
TCT5040	40x5	200	25	1.78
TCT4060	40x6	240	25	2.16
TCT4063	40x6.3	252	25	2.24
TCT5030	50x3	150	40	1.33
TCT5040	50x4	200	30	1.78
TCT5050	50x5	250	20	2.22
TCT5060	50x6	300	20	2.68
TCT5063	50x6.3	315	20	2.80
TCT5080	50x8	400	15	3.60

Material: Copper to BS EN 13601 (formerly BS 1432).

Tinned Copper Flat Braids

Ducab tinned copper braids are utilised as flexible earth bonding leads with additional corrosion protection. Whilst the image depicted is the tinned copper flat braid, but this item is also available in plain copper. Other sizes, materials and constructions are available upon request.

Copper Flat Braids

Part number	Nominal C.S.A mm²	Nominal Size WxH mm	Braid Construction	Current Rating Amps	Standard Coil Size	Weight/ metre (kg)
FCB1210	6	12 x 1.0	24/8/0.2mm	66	100	0.06
FCB1515	10	15 x 1.5	48/7/0.2mm	90	50	0.10
FCB1925	16	19 x 2.5	48/11/0.2mm	120	50	0.16
FCB2320	25	23 x 2.0	48/17/0.2mm	160	50	0.25
FCB2535	35	25 x 3.5	48/23/0.2mm	200	50	0.34
FCB3050	50	30 x 5.0	48/33/0.2mm	250	50	0.48
FCB3260	70	32 x 6.0	48/46/0.2mm	300	50	0.63

Material: copper wire to BS EN 13602 (formerly BS 4109)

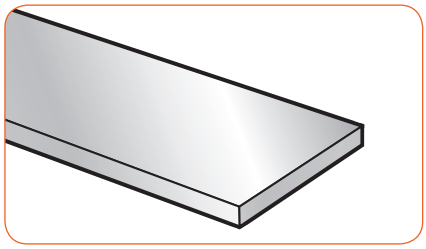
Tinned Copper Flat Braids

Part number	Nominal C.S.A mm²	Nominal Size WxH mm	Braid Construction	Current Rating Amps	Standard Coil Size	Weight/ metre (kg)
FCB1210T	6	12 x 1.0	24/8/0.2mm	66	100	0.06
FCB1515T	10	15 x 1.5	48/7/0.2mm	90	50	0.10
FCB1925T	16	19 x 2.5	48/11/0.2mm	120	50	0.16
FCB2320T	25	23 x 2.0	48/17/0.2mm	160	50	0.25
FCB2535T	35	25 x 3.5	48/23/0.2mm	200	50	0.34
FCB3050T	50	30 x 5.0	48/33/0.2mm	250	50	0.48
FCB3260T	70	32 x 6.0	48/46/0.2mm	300	50	0.63

Material: copper wire to BS EN 13602 (formerly BS 4109)

Bare Aluminium Tapes

Bare aluminium tapes should not be used on earthing applications; they should exclusively be used on lightning protection air termination and down conductor networks.

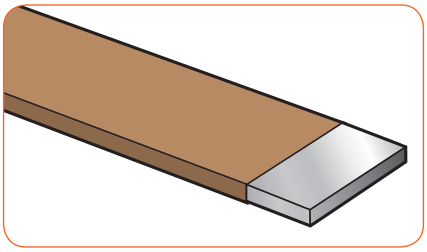


Part number	Size WxH mm	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
BAT1215	12.5 x 1.5	18.75	50	0.05
BAT2030	20 x 3	60		0.15
BAT2530	25 x 3	75		0.21
BAT3030	30 x 3	90		0.25
BAT2560	25 x 6	150		0.42
BAT4060	40 x 6	240		0.67
BAT5060	50 x 6	300		0.85

Material: Aluminium to BS 2898

PVC Covered Aluminium Tapes

Much like our provision with PVC covered copper tapes, Ducab supply PVC covered aluminium tapes in a range of colours and sizes.



Part number	Size WxH mm	Colour	C.S.A mm²	Standard Coil Size	Weight / metre (kg)
ATBL1215	12.5 x 1.5	Black	18.75	50	0.21
ATBL2030	20 x 3	Black	60	50	0.25
ATBR2530	25 x 3	Brown	75	50	0.30
ATBL2530		Black			
ATGY2530		Grey			
ATGN2530		Green			
ATST2530		Stone			
ATWH2530		White			

Material: Aluminium to BS 2898. PVC to colours to BS 5252 except green to BS 6746C.

Anti-Vandal Tape Guards

As many electrical safety elements are metallic they can fall victim to thieves or vandals. Should they be damaged or stolen then the protection of that structure could be severely impacted. To combat against this Ducab provides multipurpose anti-vandal conductor guards, which can be used on tape and circular conductors.

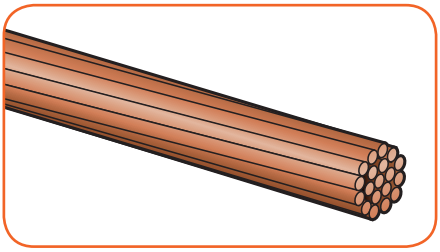
Part number	L mm	W mm	W1mm	H mm	Pack Quantity	Unit Weight kg
AVG2G	2000	72	40	17	1	1.98
AVG3G	3000					2.72

Material: galvanised steel

Anti-Vandal Tape Guards with Power Coating

Part number	L mm	W mm	W1mm	H mm	Pack Quantity	Unit Weight kg
AVG2GP	2000	72	40	17	1	1.98
AVG3GP	3000					2.722

Material: galvanised steel with black powder coating



Bare stranded copper conductors

Ducab bare stranded copper conductor is used predominantly on earthing projects but can be incorporated into lightning protection systems. Available as both soft and hard drawn.

Soft Drawn

Part number	C.S.A mm²	Stranding No. x Ø mm	Nominal Ømm	Max Resistance @20°C /km	Weight / metre (kg)
CW006	6	7 x 1.04	3.12	3.080	0.05
CW010	10	7 x 1.35	4.05	1.830	0.09
CW016	16	7 x 1.70	5.10	1.150	0.15
CW025	25	7 x 2.14	6.42	0.727	0.23
CW035	35	19 x 1.53	7.65	0.524	0.32
CW050	50	19 x 1.78	8.90	0.387	0.43
CW070	70	19 x 2.14	10.70	0.268	0.62
CW095	95	19 x 2.52	12.60	0.193	0.86
CW120	120	37 x 2.03	14.21	0.153	1.09
CW150	150	37 x 2.25	15.75	0.124	1.33
CW185	185	37 x 2.52	17.64	0.099	1.67
CW240	240	61 x 2.25	20.25	0.075	2.20
CW300	300	61 x 2.52	22.68	0.060	2.76
CW400	400	61 x 2.85	25.65	0.047	3.53

Material: Copper to BS 6360.

Hard Drawn

Part number	C.S.A mm²	Stranding No. x Ø mm	Nominal Ømm	Max Resistance @20°C /km	Weight / metre (kg)
HDCW035	35	7 x 2.52	7.65	0.540	0.32
HDCW050	50	7 x 3.00	8.90	0.399	0.43
HDCW070	70	7 x 3.55	10.72	0.276	0.62
HDCW095	95	37 x 1.78	12.60	0.199	0.86

Material: Copper to BS125.

P CLASS PRINTER

Single Printer for all
Electrical and Electronic Identification

The 300 dpi, German manufactured printer is the perfect one stop solution for all switch gear, control panel, telecommunication, data communication and other electrical and electronic related industries. It is a rugged printer which can print on a wide variety of materials which cover every imaginable electrical application. Switching printing media is very simple and it even comes with a dedicated software to run. Much better than other printers which are only restricted to printing on sleeves or paper and polyester labels.

- **RESOLUTION**
  300 dpi
- **SPEED**
  Upto 8” per second
- **ACCESSORIES**
  Cutter
- **MEDIA**
  It can print on a wide variety ranging from heat shrink to polyester, vinyl, polyamide, high temperature substrates, etc.
  Maximum width: 110 mm
  Maximum print area: 100 mm
- **PHYSICAL DIMENSIONS ICAL DIMENSIONS**
  Height: 274 mm
  Depth: 446 mm
  Width: 242 mm
  Weight: 9 kg
- **WARRANTY AND LIFE OF PRINT HEAD**
  Warranty: 1 year
  Life: 50 kms.
- **ELECTRONICS**
  32-bit Microprocessor 266 Mhz
  64 MB RAM
  8 MB ROM Flash
  Compact Flash Type 1 - Memory card slot
  Real Time Clock / Date
  Navigator Pad
  Operation Panel
  Coloured LEDs
  LCD Display

300 dpi Printing
Ensures highest quality printing for an aesthetic look.

200 mm/sec Speed
Prints hundred of labels in a matter of seconds.

Media Flexibility
Can print on a variety of media ranging from heat shrink tubes, to polyester, vinyl, polyamide, amongst others.

E CLASS PRINTER

Cost effective solution for Medium and Small Scale Enterprises

The Ducab-E Class Printer is a 300 dpi, 75 mm per second, small desktop printer to fulfill the needs of a small harness or panel shop. It is able to print on the entire range of media to cover all electrical identification applications.

- **RESOLUTION**
  300 dpi
- **SPEED**
  3.0” per second
- **CUTTER**
  Rotary half cutter included
- **MEDIA**
  104 mm (4.09”)
- **PHYSICAL DIMENSIONS ICAL DIMENSIONS**
  288 mm (L) x 232 mm (W) x 156 mm (H)
  11.34” (L) x 9.13” (W) x 6.14” (H)
- **PRINTER WARRANTY**
  12 months
  25 km
  2 MB Flash
  2 MB DRAM
  Real-Time-Clock

300 dpi Printing
Ensures highest quality printing for an aesthetic look.

75 mm/sec Speed
Prints hundred of labels in a matter of seconds.

Media Flexibility
Can print on a variety of media ranging from heat shrink tubes, to polyester, vinyl, polyamide, amongst others.

PT 0-HAL

High Spec Printer Tube For Electrical Wire Marking

- **CERTIFICATIONS**
  UL 224 certified, CSA recognized, Flame Retardant VW-1, 0-Halogen, RoHs Compliant.
- **STANDARD COLOURS**
  White and Yellow
  Other colours are available for special orders.
- **RECOMMENDED PRINTING RIBBON**
  R-1002 for printing as per MIL 81531
- **OPERATING TEMPERATURE**
  -55°C to 125°C
- **MINIMUM SHRINK TEMPERATURE**
  For full recovery, min + 90°C
  Shrinking starts +70°C
- **STORAGE**
  Store in original packaging
  Recommended temperature +10°C to 50°C
- **APPLICATIONS**
  For high quality wire marking in control panel automation, electrical, railway, aerospace, harness and data communication applications.

Ducab Connect
MAKING CONNECTIONS

TECHNICAL DETAILS

THERMAL PROPERTIES

Properties	Test Method	Standard Requirements
Heat Shock -23053	SAE-AMS-DTL (250 C x 4)	No crack, flowing or dripping
Elongation After Heat Ageing (158 C x 168 h)	SAE-AMS-DTL -23053	100% minimum elongation
Copper Corrosion (175 C x 16 h)	SAE-AMS-DTL -23053	No corrosion

PHYSICAL PROPERTIES

Properties	Test Method	Standard Requirements
Specific Gravity	ASTM D 792	1.35 maximum
Tensile Strength	ASTM D 638	14 MPa minimum
Elongation at Break	ASTM D 638	200%

CHEMICAL PROPERTIES

Properties	Test Method	Standard Requirements
Flammability	UL 224 VW-1	Pass
Water Absorption	ASTM D 570	100% Min elongation
Fluid Resistance (after immersion 23C x 24h)	SAE-AMS-DTL -23053	6.9 MPa Tensile strength
Fungus Resistance	ASTM G 21	No growth

PHYSICAL PROPERTIES

Properties	Test Method	Standard Requirements
Voltage Rating	UL 224	600V
Dielectric Voltage withstand (2.5 kV x 60 sec)	UL 224	No breakdown
Volume Resistivity	ASTM D 876	1014 ohm-cm, min
Dielectric Strength	ASTM D 876	120 kV/mm min

DIMENSIONS

Diameter as supplied (inches)	Diameter as supplied	Wire sizes (mm)	Meters/Roll (mm)
1/8	3.2	0.2,1,1.5 Sq.mm	100
3/16	4.8	2.5, 4sq.mm	100
1/4	6.4	6.10 sq. mm	100
3/8	9.5	16 sq. mm	50
1/2	12.7	25 sq. mm	50
3/4	19.0		50
1	25.4		30
1 1/2	38.1		30
2	50.8		30

Ducab Connect
MAKING CONNECTIONS

Ducab Lablex

Pre-cut wire marking sleeves mounted on a ladder for easy use. These are UL 224 Recognized, CSA Certified, 3:1 heat shrinkable, Flame retardant VW-1, 0- Halogen. Ideal for Railways, Metro, Aerospace, Defense and other such applications.

- **STANDARD COLOURS**
  White and Yellow
- **RECOMMENDED RIBBON FOR PRINTING**
  R-2007
- **OPERATING TEMPERATURE**
  -55°C to 125°C
- **MINIMUM SHRINK TEMPERATURE**
  For full recovery, min 115°C
  Shrinking starts +85°C
- **STORAGE**
  Minimum Storage Temprature +50°C

Diameter as supplied (mm)	Length	PCS/ROLL
2.4	50	2500
3.2	50	2500
4.8	50	2000
6.4	50	2000
9.5	50	2000
12.7	50	1000
19.1	50	1000
25.4	50	500
38.1	50	500
50.8	50	250
76.2	50	250

Ribbons

Each of the materials supplied is paired with a matching ribbon to print on. Use of the recommended ribbon ensures 'MARK PERMANENT' Printing.

Ribbon series	Materials
R-1000	ACS-PT and Polyester labels
R-2000	Lablex, Self Lamknating and Polyamide Labels

Last digit	Size
2	40 mm wide
4	60 mm wide
7	110 mm wide

Self Laminating Labels

The next generation of wire marking labels. These are high specification Vinyl wrap around labels that are ideal for adhesion to the wire sheaths. Their thin facestock enables them to easily go around the wire and stick longer and stronger for years to come. Ideal for applications were protection from harsh environments is required, especially in wire harness applications.

- **FACESTOCK**
  UL certified transparent flexible viynl for easy wrapping around wires. Print receptive white coating on upper side forms print area for marking
- **ADHESIVE**
  Permanent acrylic based adhesive suitable for adhering to PVC and other sheath materials.
- **RIBBON**
  R-SL
- **PERFORMANCE DATA**

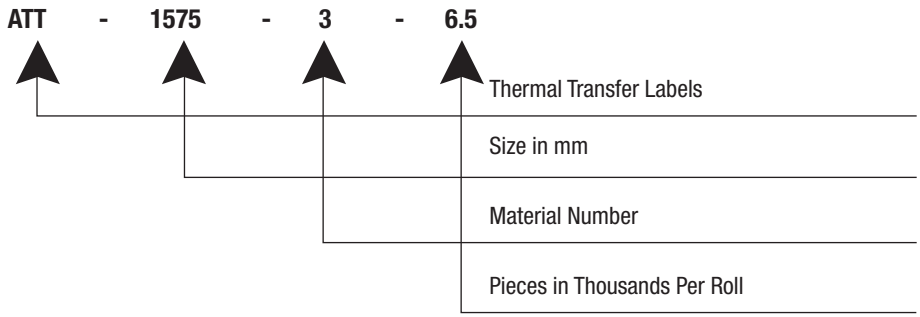
Initial tack	420 N/m
Peel adhes. 90 degrees	250 N/m
Minimum Application Temperature	+5 degrees celcius
Service Temperature	-20°C to +80°C

- **SHELF LIFE**
  Two years, stored at 22°C and 50% RH.

High Specification Labels

Ducab has a high end die-cutting facility with materials from different suppliers. Label sizes can be custom made to customer specifications and applications.

Material	Number
White Polyester	1
Silver Polyester	2
UL approved White Ployester	3
UL approved Silver Pliyester	4
1 mil Pliyamide	5



Part Number	Size
SF1	35 mm
SF2	50 mm
SF3	65 mm
SF4	75 mm

Part Number	Size
SF5	15 mm
SF6	20 mm
SF7	23 mm

DUCAB XLPE Insulated 600/1000V Cables to BS 5467
CABLE ACCESSORIES REFERENCE CHART







Nom. Area	No. of Cores	BW Gland		CW Gland		E1W Gland		Tinned Copper Connector	Industrial Cleat HFIC00000	Two Bolt Cleat HFIC00000
		Size	HGIB00000	Size	HGIB00000	Size	HGIB00000			
1.5	2	20S	17	20S	29	20S	46	HBT2C-	49	-
	3	20S	17	20S	29	20S	46	HBT2C-	49	-
	4	20S	17	20S	29	20S	46	HBT2C-	49	-
	7	20	18	20	30	20	47	HBT2C-	50	-
	12	25	19	25S	31	25S	48	HBT2C-	51	-
	19	25	19	25	32	25	49	HBT2C-	52	-
	27	32	20	32	33	32	50	HBT2C-	53	-
	37	32	20	32	33	32	50	HBT2C-	54	-
	48	32	20	32	33	32	50	HBT2C-	54	-
2.5	2	20S	17	20S	29	20S	46	HBT2C-	49	-
	3	20S	17	20S	29	20S	46	HBT2C-	49	-
	4	20S	17	20S	29	20S	46	HBT2C-	49	-
	7	20	18	20	30	20	47	HBT2C-	51	-
	12	25	19	25	32	25	49	HBT2C-	52	-
	19	32	20	32	33	32	50	HBT2C-	53	-
	27	32	20	32	33	32	50	HBT2C-	54	-
	37	40	21	40	34	40	51	HBT2C-	55	-
4	2	20S	17	20S	29	20S	46	HBT6C-	50	-
	3	20S	17	20S	29	20S	46	HBT6C-	50	-
	4	20	18	20	30	20	47	HBT6C-	51	-
6	2	20	18	20	30	20	47	HBT6C-	50	-
	3	20	18	20	30	20	47	HBT6C-	51	-
	4	20	18	20	30	20	47	HBT6C-	51	-
10	2	25	19	25S	31	25S	48	HBT10C-	52	-
	3	25	19	25S	31	25S	48	HBT10C-	52	-
	4	25	19	25	32	25	49	HBT10C-	52	-
16	2	25	19	25S	31	25S	48	HBT16C-	52	-
	3	25	19	25S	31	25S	48	HBT16C-	52	-
	4	25	19	25	32	25	49	HBT16C-	52	-

Nom. Area	No. of Cores	BW Gland		CW Gland		E1W Gland		Tinned Copper Connector	Industrial Cleat HFIC00000	Two Bolt Cleat HFIC00000
		Size	HGIB00000	Size	HGIB00000	Size	HGIB00000			
25	2	25	19	25	32	25	49	HBT25C-	53	-
	3	32	20	32	33	32	50	HBT25C-	53	-
	4	32	20	32	33	32	50	HBT25C-	53	-
35	2	32	20	32	33	32	50	HBT35C-	53	-
	3	32	20	32	33	32	50	HBT35C-	54	-
	4	32	20	32	33	32	50	HBT35C-	54	-
50	2	32	20	32	33	32	50	HBT50C-	53	-
	3	32	20	32	33	32	50	HBT50C-	54	-
	4	32	20	32	33	32	50	HBT50C-	54	-
70	2	32	20	32	33	32	50	HBT70C-	54	-
	3	32	20	32	33	32	50	HBT70C-	54	-
	4	40	21	40	34	40	51	HBT70C-	55	-
95	2	32	20	32	33	32	50	HBT95C-	54	-
	3	40	21	40	34	40	51	HBT95C-	55	-
	4	50S	22	50S	35	50S	52	HBT95C-	56	11
120	2	40	21	40	34	40	51	HBT120C-	55	11
	3	50S	22	50S	35	50S	52	HBT120C-	55	11
	4	50	23	50	36	50	53	HBT120C-	56	12
150	2	40	21	40	34	40	51	HBT150C-	55	11
	3	50S	22	50S	35	50S	52	HBT150C-	55	12
	4	50	23	50	36	50	53	HBT150C-	56	13
185	2	50S	22	50S	35	50S	52	HBT185C-	56	11
	3	50	23	50	36	50	53	HBT185C-	56	12
	4	63S	24	63S	37	63S	54	HBT185C-	-	13
240	2	50	23	50	36	50	53	HBT240C-	56	12
	3	63S	24	63S	37	63S	54	HBT240C-	-	13
	4	63	25	63	38	63	55	HBT240C-	-	14
300	2	63S	24	63S	37	63S	54	HBT300C-	-	13
	3	63	25	63	38	63	55	HBT300C-	-	14
	4	75S	26	75S	39	75S	56	HBT300C-	-	15
400	2	75S	26	75S	39	75S	56	HBT400C-	-	15
	3	75S	26	75S	39	75S	56	HBT400C-	-	15
	4	75	27	75	40	75	57	HBT400C-	-	17
500	4	75	27	90	41	90	58	HBT500C-	-	17
630	1	-	-	* 50	09	-	-	HBT630C-	56	12

Ordering Ref: When ordering connectors specify stud hole size required. Eg. HBT10C8 is a 10mm² connector with a 8mm stud hole.
Note: The dimensions of cable vary with manufacturing tolerances. We advise the cable diameter is measured where possible before purchasing components. The recommendations here are given in good faith but Ducab cannot be held liable for mistakes in selection however caused.
* CW Aluminium Cable Gland recommended

Ducab Connect MAKING CONNECTIONS

DUCAB Smokemaster LSF 600/1000V Cables to BS 6724
CABLE ACCESSORIES REFERENCE CHART







Nom. Area	No. of Cores	BW Gland		CW Gland		E1W Gland		Tinned Copper Connector	Industrial Cleat HFIC00000	Two Bolt Cleat HFIC00000
		Size	HGLB00000	Size	HGLB00000	Size	HGLB00000			
1.5	2	20S	17	20S	29	20S	46	HBT2C-	57	-
	3	20S	17	20S	29	20S	46	HBT2C-	57	-
	4	20S	17	20S	29	20S	46	HBT2C-	57	-
	7	20	18	20	30	20	47	HBT2C-	58	-
	12	25	19	25S	31	25S	48	HBT2C-	59	-
	19	25	19	25	32	25	49	HBT2C-	60	-
	27	32	20	32	33	32	50	HBT2C-	61	-
	37	32	20	32	33	32	50	HBT2C-	62	-
	48	32	20	32	33	32	50	HBT2C-	62	-
2.5	2	20S	17	20S	29	20S	46	HBT2C-	57	-
	3	20S	17	20S	29	20S	46	HBT2C-	57	-
	4	20S	17	20S	29	20S	46	HBT2C-	57	-
	7	20	18	20	30	20	47	HBT2C-	59	-
	12	25	19	25	32	25	49	HBT2C-	60	-
	19	32	20	32	33	32	50	HBT2C-	61	-
	27	32	20	32	33	32	50	HBT2C-	62	-
	37	40	21	40	34	40	51	HBT2C-	63	-
4	2	20S	17	20S	29	20S	46	HBT6C-	58	-
	3	20S	17	20S	29	20S	46	HBT6C-	58	-
	4	20	18	20	30	20	47	HBT6C-	59	-
6	2	20	18	20	30	20	47	HBT6C-	58	-
	3	20	18	20	30	20	47	HBT6C-	59	-
	4	20	18	20	30	20	47	HBT6C-	59	-
10	2	25	19	25S	31	25S	48	HBT10C-	60	-
	3	25	19	25S	31	25S	48	HBT10C-	60	-
	4	25	19	25	32	25	49	HBT10C-	60	-
16	2	25	19	25S	31	25S	48	HBT16C-	60	-
	3	25	19	25S	31	25S	48	HBT16C-	60	-
	4	25	19	25	32	25	49	HBT16C-	60	-

Nom. Area	No. of Cores	BW Gland		CW Gland		E1W Gland		Tinned Copper Connector	Industrial Cleat HFIC00000	Two Bolt Cleat HFIC00000
		Size	HGLB00000	Size	HGLB00000	Size	HGLB00000			
25	2	25	19	25	32	25	49	HBT25C-	61	-
	3	32	20	32	33	32	50	HBT25C-	61	-
	4	32	20	32	33	32	50	HBT25C-	61	-
35	2	32	20	32	33	32	50	HBT35C-	61	-
	3	32	20	32	33	32	50	HBT35C-	62	-
	4	32	20	32	33	32	50	HBT35C-	62	-
50	2	32	20	32	33	32	50	HBT50C-	61	-
	3	32	20	32	33	32	50	HBT50C-	61	-
	4	32	20	32	33	32	50	HBT50C-	62	-
70	2	32	20	32	33	32	50	HBT70C-	62	-
	3	32	20	32	33	32	50	HBT70C-	62	-
	4	40	21	40	34	40	51	HBT70C-	63	35
95	2	32	20	32	33	32	50	HBT95C-	62	-
	3	40	21	40	34	40	51	HBT95C-	63	-
	4	50S	22	50S	35	50S	52	HBT95C-	64	35
120	2	40	21	40	34	40	51	HBT120C-	63	-
	3	50S	22	50S	35	50S	52	HBT120C-	63	35
	4	50	23	50	36	50	53	HBT120C-	64	36
150	2	40	21	40	34	40	51	HBT150C-	55	11
	3	50S	22	50S	35	50S	52	HBT150C-	64	35
	4	50	23	50	36	50	53	HBT150C-	-	37
185	2	50S	22	50S	35	50S	52	HBT185C-	64	35
	3	50	23	50	36	50	53	HBT185C-	64	36
	4	63S	24	63S	37	63S	54	HBT185C-	-	37
240	2	50	23	50	36	50	53	HBT240C-	56	12
	3	63S	24	63S	37	63S	54	HBT240C-	-	37
	4	63	25	63	38	63	55	HBT240C-	-	38
300	2	63S	24	63S	37	63S	54	HBT300C-		13
	3	63	25	63	38	63	55	HBT300C-	-	38
	4	75S	26	75S	39	75S	56	HBT300C-	-	39
400	2	75S	26	75S	39	75S	56	HBT400C-	-	39
	3	75S	26	75S	39	75S	56	HBT400C-	-	39
	4	75	27	75	40	75	57	HBT400C-	-	38
500	4	75	27	90	41	90	58	HBT500C-	-	38
630	1	-	-	* 50	09	-	-	HBT630C-	64	36

Ordering Ref: When ordering connectors specify stud hole size required. Eg. HBT10C8 is a 10mm² connector with a 8mm stud hole.

Note: The dimensions of cable vary with manufacturing tolerances. We advise the cable diameter is measured where possible before purchasing components. The recommendations here are given in good faith but Ducab cannot be held liable for mistakes in selection however caused.

* CW Aluminium Cable Gland recommended

N SYSTEMS CABLE IDENTIFICATION & MARKING INDUSTRIAL CABLE GLANDS COMPRESSIO.. TOOLS & CONNECTORS .NDUSTRIAL SEATS

Ducab - Head Office
P.O. BOX 11529, Jebel Ali
Dubai, United Arab Emirates
Tel : +9714 8082 500
Fax : +9714 8082 599
email : connect@ducab.com

Ducab Branch - Oman
P.O. BOX 3542, 112 Ruwi
Muscat, Sultanate of Oman
Tel : +968 245 651 78
Fax : +968 245 643 02
email : ducabomn@omantel.net.om

BICC MET W.L.L
P.O. BOX 11413, Manama
Kingdom of Bahrain
Tel : +973 177 497 61
Fax : +973 177 280 27
email : biccmet@batelco.com.bh

Ducab Qatar LLC
P.O. BOX 23209, Street No. 52
Salwa Industrial Area, Doha
State of Qatar
Tel : +974 3320 9077
email : dqsales@ducab.com

Ducab – KSA
Dammam, Plan 71, Al Fasel St.
Farhan Al-Zuabi Building
Kingdom of Saudi Arabia
Tel : +966 563 212 090

دوكاب كونكت
Ducab Connect
MAKING CONNECTIONS

DuCat015/Version 1.1/0910 (1000 copies)