

OVERHEAD COVERED CONDUCTOR SYSTEMS

FOR HV ABC, LV ABC, CCT



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ABOUT TRANSNET NZ LIMITED

TRANSNET COMPANY OVERVIEW

At TransNet we offer a large range of products to the Electrical Distribution, Transmission, Rail, OEM and Wholesale industry. We have the expertise and knowledge to assist with equipment specification as well as providing hands on service and support in the field.

With three stocking distribution facilities in Australasia, and 24hr contact, TransNet is able to offer local support and fast delivery.

TransNet is one of the largest suppliers to our industry in Australasia, offering the most diverse range of products and support. We have a switchgear workshop, an R&D workshop and a Raychem kitting room on site in our Auckland Head Office and we are well equipped to offer training and support for all our products.

At TransNet we pride ourselves on the ability to react quickly to any situation and have product to you whenever and wherever you need it. Our staff are knowledgeable and happy to help, we have a number of technical specialists in a range of product areas, all ready to assist if and when required.

As the sole New Zealand Distributor of TE Connectivity Energy products including brands such as Raychem, Utilux, AMP and Guro, we have the local and international support and expertise of one of the largest manufacturers in our business. TE Connectivity Energy has a research and development programme second to none, continuously improving existing products, while designing and testing new products to improve network reliability. We are proud to offer an extensive range of quality brands from around the globe for a holistic approach to supply in the electricity industry.



ENVIRONMENTAL RESPONSIBILITY

TransNet takes environmental responsibility seriously and as part of our commitment to the environment we have implemented a range of policies and practices to do our part in protecting the environment. We have achieved ISO14064-1 accreditation for quantification and reporting of GHG emissions and removals.



In addition to this, we have the first and only fully functioning Micro Grid of its kind in New Zealand right here at our head office, with 150kW of solar generation and a 30kW/130kWh smart storage system, we're able to power our entire operation for most of the day.

We're already moving to reduce our impact even more by adding electric vehicles to our fleet and using our solar farm to charge them.



LV ABC FITTINGS

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LV ABC FITTINGS

PRE-INSULATED COMPRESSION LUGS - BIMETAL

Pre-insulated lugs are used to terminate aerial bundled conductors onto switchgear, busbars or isolators. The range we stock is for bimetallic applications, there are other bimetallic or aluminium lugs available on request.

FEATURES

- Totally insulated and waterproof
- Colour coded to easily identify applicable cable size
- Labeled with cable size, die size, strip length and locations of crimps
- Permanently engraved with traceability data

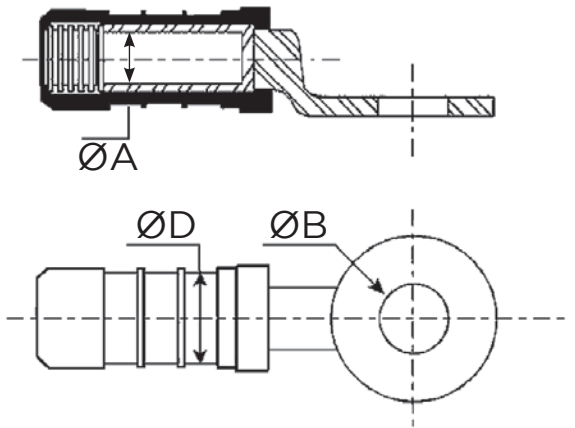
INSTALLATION

Crimping:

- Use a tool equipped with a suitable hexagonal die
- Standard 12T crimp tool can be used (with suitable dies)
- Crimp in the indicated area starting from the centre and going towards the end of the lug

COLOUR CODING

- 16mm² Blue
- 25mm² Orange
- 35mm² Red
- 50mm² Yellow
- 70mm² White
- 95mm² Grey
- 120mm² Pink
- 150mm² Violet



Cat No.	Cable Size (mm ²)	Diameter (mm)			TOTAL LENGTH (MM)	Palm Size (mm)	Die	
		Ø A	Ø B	Ø D			A/F (mm)	Die Cat No.
TNABCICL16	16	5.3	10.5	20	72	20	17.3	38-173AL9
TNABCICL25	25	6.5	10.5	20	72	20	17.3	38-173AL9
TNABCICL35	35	8	12.8	20	99	25	17.3	38-173AL9
TNABCICL50	50	9	12.8	20	99	25	17.3	38-173AL9
TNABCICL70	70	10.5	12.8	20	99	25	17.3	38-173AL9
TNABCICL95	95	12.5	12.8	25	99	30	21.5	38-215AL9
TNABCICL120	120	14.2	12.8	25	115	30	21.5	38-215AL9
TNABCICL150	150	15.5	12.8	25	115	30	21.5	38-215AL9

LV ABC FITTINGS

PRE-INSULATED FULL TENSION COMPRESSION SLEEVES

Pre-insulated links are used to make an electrical joint between two aerial bundled conductors. Our range is designed for full tension applications but of course they can be used in non tension applications. There are other links available on request for both non and full tension applications.

FEATURES

- Totally insulated and waterproof
- Colour coded to easily identify applicable cable size
- Labeled with cable size, die size, strip length and locations of crimps
- Permanently engraved with traceability data

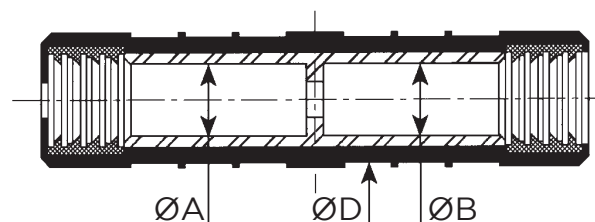
INSTALLATION

Crimping:

- Use a tool equipped with a suitable hexagonal die
- Standard 12T crimp tool can be used (with suitable dies)
- Crimp in the indicated area starting from the centre and moving out

COLOUR CODING

- 16mm² Blue
- 25mm² Orange
- 35mm² Red
- 50mm² Yellow
- 70mm² White
- 95mm² Grey
- 120mm² Pink
- 150mm² Violet



Cat No.	Cable Size (mm ²)	Diameter (mm)				Die	
		Ø A	Ø B	Ø D	Length	A/F (mm)	Die Cat No.
TNABCFTCS16	16	5.5	5.5	20	100	17.3	38-173AL9
TNABCFTCS25	25	6.5	6.5	20	100	17.3	38-173AL9
TNABCFTCS35	35	8	8	20	100	17.3	38-173AL9
TNABCFTCS50	50	9	9	20	100	17.3	38-173AL9
TNABCFTCS70	70	10.5	10.5	20	100	17.3	38-173AL9
TNABCFTCS95	95	12.2	12.2	25	100	21.5	38-215AL9
TNABCFTCS120	120	14.2	14.2	25	102	21.5	38-215AL9
TNABCFTCS150	150	15.5	15.5	25	102	21.5	38-215AL9

LV ABC FITTINGS

IPCS - INSULATION PIERCING CONNECTORS

All our IPC connectors have tinned copper teeth so are suited to both Aluminium and Copper conductor (unless otherwise stated). These connectors are range taking and therefore reduce inventory requirements.

FEATURES

- Tinned Copper teeth for Al/Cu application
- Insulated to Insulated & Insulated to Bare connectors available
- Shearhead bolt, snaps when correct connection torque is reached
- Application tool: IRW13/17 for 13mm O.D. Shearbolts (or 13mm socket)

IPC FOR LV ABC TO INSULATED ALUMINIUM OR COPPER TAP



Cat No.	Mains Cable		Branch Cable		Notes	Installation Bolt Size A/F (mm)
	Conductor Size (mm ²)	Conductor Type	Conductor Size (mm ²)	Conductor Type		
K223	16-95	INSULATED	1.5-10	INSULATED	FUSED IPC	13
0-1727912-3	16-95	INSULATED	1.5-10	INSULATED	ALUMINIUM & COPPER	13
0-1510619-3	16-95	INSULATED	4-35	INSULATED	ALUMINIUM & COPPER	13
0-1574150-1	25-95	INSULATED	25-95	INSULATED	ALUMINIUM & COPPER	13
1351230-2	50-150	INSULATED	50-150	INSULATED	ALUMINIUM & COPPER	13
0-1229731-2	50-150	INSULATED	6-35	INSULATED	ALUMINIUM & COPPER	13
1350329-1	50-300	INSULATED	6-35	INSULATED	ALUMINIUM & COPPER	13

IPC FOR LV ABC TO BARE ALUMINIUM OR COPPER MAIN CABLE



Cat No.	Mains Cable		Branch Cable		Notes	Installation Bolt Size A/F (mm)
	Conductor Size (mm ²)	Conductor Type	Conductor Size (mm ²)	Conductor Type		
K258	7-95	BARE	6-35	INSULATED	COPPER MAIN	13
K259	7-95	BARE	6-35	INSULATED	ALUMINIUM MAIN	13
0-0708030-1	25-100	BARE	25-95	INSULATED	ALUMINIUM & COPPER MAIN	13

LV ABC FITTINGS

IPC FOR INSULATED MAIN TO BARE TAP CABLE



Cat No.	Mains Cable		Branch Cable		Notes	Installation Bolt Size A/F (mm)
	Conductor Size (mm ²)	Conductor Type	Conductor Size (mm ²)	Conductor Type		
K473	25-95	INSULATED	10-95	BARE	COPPER BRANCH	17
K472	35-95	INSULATED	10-95	BARE	ALUMINIUM BRANCH	17

IPC FOR 2 INSULATED CABLES TO LV ABC



Cat No.	Mains Cable	Branch Cable		Installation Bolt Size A/F (mm)
	Conductor Size (mm ²)	Conductor Size (mm ²)	No. of Taps	
K394	16-95	6-35	2	13
K389	35-150	6-35	2	13

PUSH ON END CAP FOR ABC TAILS

TE push on end caps are pre-molded and reusable. To install, they are simply pushed on to the conductor free end. These end caps are made of thermoplastic or EPDM material and are UV-resistant offering a waterproof seal.

FEATURES

- Will fit conductors from 6 - 150mm² (depending on the range chosen)
- Can be removed and installed as required
- No tools required for installation
- Offers 100% moisture proof seal for conductor end



Cat No.	Descriptive Code	Type	Size Range (mm ²)
0-0739523-3	CECT16-150	MOLDED END CAP, BLACK, UV RESISTANT THERMOPLASTIC	16-150

LV ABC FITTINGS

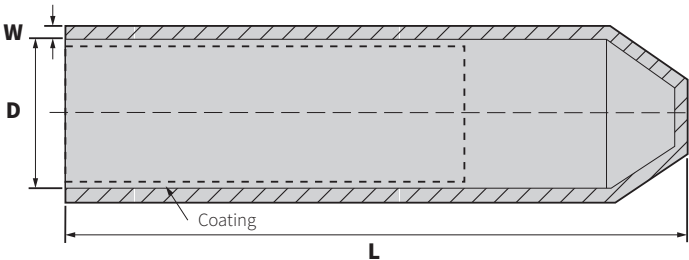
END CAPS - NON-VALVED HEATSHRINKABLE

Raychem Cable Caps shrink when heated to tightly fit a range of cable sizes and constructions. At the same time a special sealant also melts and flows under the shrinking action, gripping the cable and ensuring a high-integrity moisture seal.

Our advances in materials science ensure that these crosslinked halogen-free polymer products also provide high quality electrical insulation while at the same time resisting abrasion, weathering, and chemical attack.

FEATURES

- Environmental sealing of all cable types
- Resistant to corrosion and decay
- Caps for pressurised and live sealing are available
- Operating temperature range -40°C to 120°C
- Inner adhesive wall
- Sealant lined



Cat No.	Application Range (mm)	Inside Diameter D (mm)		Length L (mm)	Wall Thickness W (mm)
		Min A	Max B	(B) +15/-10%	(B) ± 20%
102L011-R05/S	4.0–8.0	10	4	38	2.0
102L022/S	8.0–17.0	20	7.5	55	2.3
102L033/S	17.0–30.0	35	15	90	3.0
102L044/S	30.0–45.0	55	25	143	3.3
102L048/S	45.0–65.0	75	32	150	3.3
102L055/S	65.0–95.0	100	45	162	3.8
102L066/S	95.0–115.0	120	70	145	3.8

Note: A = as supplied, B = after heating

LV ABC FITTINGS

MAINS ENTRY BOX

The mains entry box is mounted on the fascia of the building, it incorporates fully insulated removable connectors to connect both the aerial service and the customer's cable.

Available in single and three phase options they accept 6-35mm² supply cables & 4-35mm² customer cables.

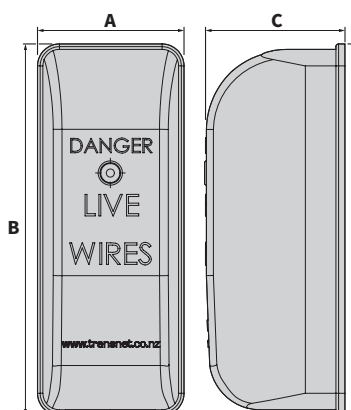
- 13mm socket/spanner for install & removal



Cat No.	Description
K453	SINGLE PHASE MAINS ENTRY BOX WITH 2 CONNECTORS, 1 × PH + 1 × NEUTRAL
K457	THREE PHASE MAINS ENTRY BOX WITH 4 CONNECTORS, 3 × PH + 1 × NEUTRAL
K208	CONNECTOR ONLY - SUPPLY CABLE 6-35MM2, CUSTOMER CABLE 4-35MM2, SHEAR HEAD BOLT

FEATURES

- Made of UV stable plastic that won't shatter
- Shear bolt connectors for perfect connection every time
- Safer – No bare live parts
- Main cable supported by gland in gland plate
- Strip length clearly outlined on connector body
- Make off connectors outside enclosure, saves time & effort
- Electrical test points and test point caps built into connector bolt for ease of testing
- Captive Stainless Steel cover screw
- Insulated bimetallic connectors will terminate AL/CU cables, 4mm²-35mm² range
- Tested to meet the requirements of AS/NZS 3820:2009 +A1



TRANSNET MAINS ENTRY BOX



The two and three phase products are housed in the same enclosure, the two phase unit will come complete with three connectors while the three phase will come with four connectors.

Cat No.	No. of Phases	Dimensions (mm)			Tool
		A	B	C	
TNMEB1PH	1	81.5	206.5	77.0	13MM SPANNER/ SOCKET
TNMEB2PH	2	146.5	246.5	87.0	
TNMEB3PH	3				
K208	CONNECTOR ONLY - SUPPLY CABLE 6-35MM2, CUSTOMER CABLE 4-35MM2, SHEAR HEAD BOLT				

LV ABC FITTINGS

HOUSE HOOK

Galvanised Steel threaded hook, used as an anchor point for securing LV shackle insulators. Simple to install and remove.



Cat No	Dimensions
HOUSEHOOK	175MM × 12MM x 25MM I.D.

SERVICE STRAIN CLAMPS

MATERIAL

Body: Glass Filled Nylon

Straps: Stainless Steel

Wedge strain clamps are UV stabilised, with the ability to take 1, 2 or 4 core ABC twisted cables.



Cat No.	Cable Size (mm ²) AS3560
SCH6/35	2 & 4 CORE 6–35MM ²
0-708046-3	SINGLE CABLE, 9–17MM OD
0-708018-1	SINGLE CABLE, 18–25MM OD

LV ABC FITTINGS

STRAIN CLAMPS

LV Termination clamps for ABC cable are available with a range of cable size capabilities. All clamps accommodate 2 core or 4 core cable making them the versatile choice. Use for the termination of LV ABC 2 core* x 25mm² to 4 core 150mm².

MATERIAL

Wedges: Glass Filled Nylon

Hardware: Galvanised Steel

Straps: Aluminium or Galvanised Steel (depending on model)

FEATURES

- Tested to AS3766
- Removable clevis pin
- Bolted full tension clamp for LV ABC



Cat No.	Strap Material	Cable Size (mm ²)	Rated Voltage (kV)	Rated Tension** (kN)
TNABCSC4/25-50	ALUMINIUM	2 & 4 CORE, 25-50	<1	8
TNABCSC4/50-95	ALUMINIUM	2 & 4 CORE, 50-95		15
TNABCSC4/95-150	ALUMINIUM	2 & 4 CORE, 95-150		23
TNABCSC4/95	GALVANISED STEEL	2 & 4 CORE, 25-120		19

*Use fillers if only 2 cores are utilised

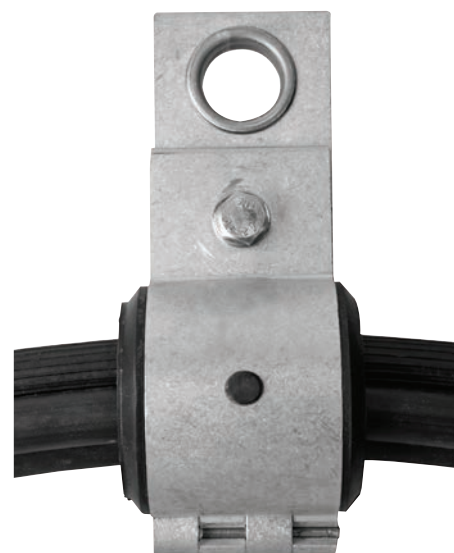
**Rated tension at largest cable diameter

SUSPENSION CLAMPS

LV suspension clamps for ABC cable are available with a range of cable size capabilities. Some can accommodate 2 and 3 core cables as well as 4 core cables. Use for suspension of LV ABC 25mm² to 150mm².

FEATURES

- Aluminium Alloy body with Stainless Steel hardware
- UV resistant Elastomer bushing
- Suitable for up to 30° line deviation
- For line deviation of 30° to 60° use with TNABC2XSUSBRKT
- Stainless Steel wear ring to protect suspension eyelet
- Tested to AS 3766-1990



Cat No.	Diameter of circumscribing circle over laid-up cable cores (mm)	Cable Size (mm ²)		
		2 Core	3 Core	4 Core
TNABCSPC4/35	22-27	50	50	35
TNABCSPC4/50	31-33	-	-	50
TNABCSPC4/70	30-37	95	-	70
TNABCSPC4/95	37-40	-	-	95
TNABCSPC4/150	43-47	-	-	150

LV ABC FITTINGS

K223 FUSED IPC

This fuse carrier is designed to use a 10.3x38mm fuse cartridge or neutral tube making it perfect for street light connections to an LV circuit. Maximum rating is 20A.

With the added simplicity of being an insulation piercing connector (IPC), installation is fast and simple. The special shear head bolt breaks off at the correct torque ensuring an accurate and consistent connection pressure is reached.

KEY FEATURES

- Wide range-taking ability on both main and tap
- Specially designed for the New Zealand market
- UV Stabilised black body
- Built-in end cap for tap conductor
- Double circlip for retention of fuse
- Captured fuse base, will stay in place even without fuse link
- Watertight cable entry points
- IPC connection
- 13mm shear head bolt for exact installation every time



Cat No.	Fuse Link Style	Cable Range (mm ²)	Amps
K223	10.3 × 38MM BARREL, CH10-NB RANGE	6–95 MAIN, 1.5–16 TAIL	20

K221 INLINE FUSED IPC

This Insulation Piercing fuse carrier is designed to accommodate 22x58mm barrel fuse cartridges, neutral tube or mini-switch. It is designed for use without mechanical load. Mechanical

tightening terminals allow installation in the Aerial Bundled Conductors (ABC) using a simple spanner. The K221 has an IP65 rating which makes it perfect for use in pillar boxes.

Fuse Link Style = HRC 22x58mm, ME Type (KR85)
Fuse Link Cat No. = TNMExxx (xxx denotes amps)



Cat No.	Fuse Link Style	Description	Cable Range (mm ²)	Amps
K221	22 × 58MM BARREL	IP65-IPC	6–50	100

LV ABC FITTINGS

TNNHP100

KEY FEATURES

- UV Stabilised Glass Reinforced body
- Double Circlip for retention of fuselink
- Captured fuse base, will stay in place even without fuse link
- Watertight cable entry ports
- Stainless steel bracket for cross arm application
- Swan neck pin for pole application
- Contacts are made of high quality materials and tested for performance
- Conductor range 6-35mm²



SWAN/NECK/PIN



TNNHP100



TNNHP100A

Cat No.	Description	Fuse Link Style	Cable Range (mm ²)	Amps
TNNHP100	FUSE CARRIER	22 × 58MM BARREL	6-35	100
TNNHP100A	FUSE CARRIER & SWAN NECK ADAPTOR	22 × 58MM BARREL	6-35	100
SWAN/NECK/PIN	NYLON HEAD THREADED PIN FOR TNNHP100A			

K491

This fuse switch disconnect is a single phase device that is normally used as a house service fuse or isolation point. It provides electrical protection to an individual customer. It is designed to accommodate up to 100A 22x58mm barrel fuse cartridge or neutral tube (according to IEC 269-2.1). It suits aluminium or copper insulated cables from 6 up to 35mm².

- Installation tool: 13mm socket/spanner



Cat No.	Fuse Link Style	Bracket Configuration	Cable Range (mm ²)	Amps
K491	22 × 58MM BARREL	STRAIGHT SINGLE BRACKET	6-35	100
K491TWBRKT	22 × 58MM BARREL	TWISTED SINGLE BRACKET		
K491BRAC001X3	NH00 DIN STYLE	3 UNITS ON STRAIGHT 3 WAY BRACKET		

LV ABC FITTINGS

K291 & K292 FUSE SWITCH DISCONNECTORS

These fuse switch disconnects are single phase devices that are normally used as house service fuses or isolation points. They provide electrical protection to either an aerial service supplying an individual customer or for a low voltage circuit of a pole mounted transformer.

- Installation tool: 13mm socket/spanner

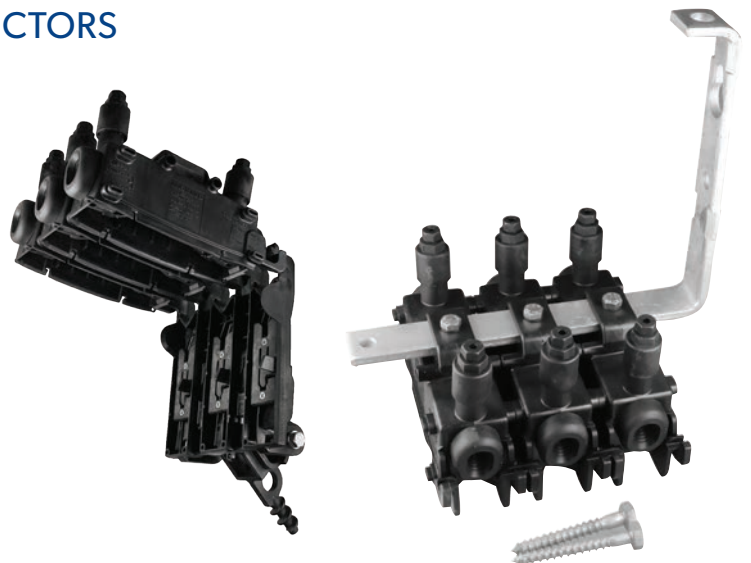
There are two types of FSD; the K292 suits 160A size 00 DIN fuse links and 240A solid connecting links (according to IEC 269-2.1) and the K291 suits up to 100A 22x58 barrel fuse links (according to IEC 269-2.1). FSD suits aluminium or copper insulated cables from 6 up to 95mm².



Cat No.	Fuse Link Style	Bracket Configuration	Cable Range (mm ²)	Amps
K291	22 × 58MM BARREL	STRAIGHT SINGLE BRACKET	6-95	100
K291TWBRKT		TWISTED SINGLE BRACKET		
K292	NH00 DIN STYLE	STRAIGHT SINGLE BRACKET	6-95	160
K292TWBRKT		TWISTED SINGLE BRACKET		
K292X3KIT	NH00 DIN STYLE	3 UNITS ON STRAIGHT 3 WAY BRACKET	6-95	160

K293 GANGED FUSE SWITCH DISCONNECTORS

- Triple pole
- Al-Cu insulated conductor section ranges from 6 to 95mm²
- Fully insulated terminals
- Connection is established using insulation piercing technology
- Fuse holders are opened, removed and closed simultaneously using a hook stick or a stick to be screwed on the adaptor
- The polarity test points are accessible on each terminal without removing the fuse holders
- IP33 rated
- The bracket is made of galvanised steel highly resistant to corrosion
- This range meets the criteria of IEC 60 947-3 and IEC 602 69-2
- Installation tool: 13mm socket/spanner



Cat No.	Fuse Link Style	Bracket Configuration	Cable Range (mm ²)	Max Amps
K293STRBRKT	3 X NH00 DIN STYLE	STRAIGHT SINGLE BRACKET	6-95	160
K293TWBRKT		TWISTED SINGLE BRACKET		

LV ABC FITTINGS

KGH160 - 160/250A

FEATURES

- Fully insulated
- On-load switching capability
- Corrosion proof
- Suits standard hook-stick
- Integral mounting bracket for bolting or strapping
- Takes size 00 NH fuse links or connecting links
- Rated operational voltage is 480V
- Can be mounted side by side, with ganged or unganged operation for two or three pole requirements

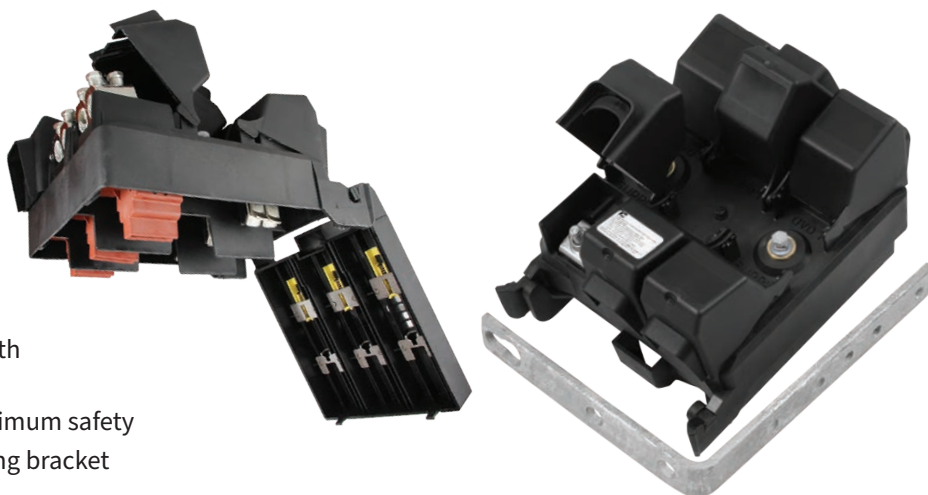


Cat No.	Catalogue Reference	No. of Poles	Ganged Switching	Pillar Ni Plated for 1x16-95mm ² Al & Cu Compacted Cables	Insulation Piercing for 2x25-150mm ² Al & Cu Compacted Cables
6459101500	KGH160 NH TUNNEL-TUNNEL	1	-	IN/OUT	-
6459101510	SWITCH KGH160 NH IPC-IPC	1	-	-	IN/OUT
6459101700	KGH160/3 GANGED	3	YES	IN/OUT	-

KGH400 - 400A (630A WITH SOLID LINK)

FEATURES

- Extremely compact
- One or three-pole units
- On-load switching capability
- Corrosion proof
- Fully insulated
- Suits standard hook-stick
- Takes size 1-2 NH fuse links
- Rated operational voltage is 450V (630A with TNDIN2630A)
- Individual, hinged terminal covers for maximum safety
- Triple pole switch is supplied with mounting bracket



Cat No.	Catalogue Reference	No. of Poles	Bracket Included	Ganged	Pillar		IPC	Lug
					For 2x16-95mm ² Al Compacted Cables	Ni Plated for 2x50-150mm ² Al & Cu cables	For 2x25-150mm ² Al & Cu Compacted Cables	12mm Stud for Lugs of up to 40mm Palm Width
6459100121	T150AL/C-T150AL/C	3	YES	YES	-	IN/OUT	-	-
6459100130	LUG-LUG				-	-	-	IN/OUT
6459100131	T95AL-LUG				IN	-	OUT	-
6459111520	2 × 50-185TUN/2 × 50-150TUN	1	NO	-	-	IN/OUT	-	-
6459111550	KGH400/1 IPC 25-150MM ²				-	-	IN/OUT	-
6459111560	LUG/LUG UNGANGED				-	-	-	IN/OUT
6459112200	2X25-150MM ² IPC	3	YES	YES	-	-	IN/OUT	-
TNDIN2630A	DIN2 630A SOLID LINK ONLY							

LV ABC FITTINGS

OVERHEAD FUSE SWITCH BRACKETS

KEY FEATURES

- All brackets are made of galvanised steel highly resistant to corrosion
- Fixing on pole is achieved by bolting galvanised bracket to pole/crossarm
- All brackets will fit all overhead Michaud fittings
- All overhead fuse carriers come with an individual bracket

Cat No.	Style	No. of Fuses	Compatible Fuses
BRAC001	STRAIGHT	UP TO 3	K491, K291, K292
BRAC002		1	
BRAC005		UP TO 4	
BRAC001TWISTED	TWISTED	UP TO 3	
BRAC002TWISTED		1	
6459312200	STRAIGHT	3PH UNIT	KRONE KGH
6459312300		1PH UNIT	



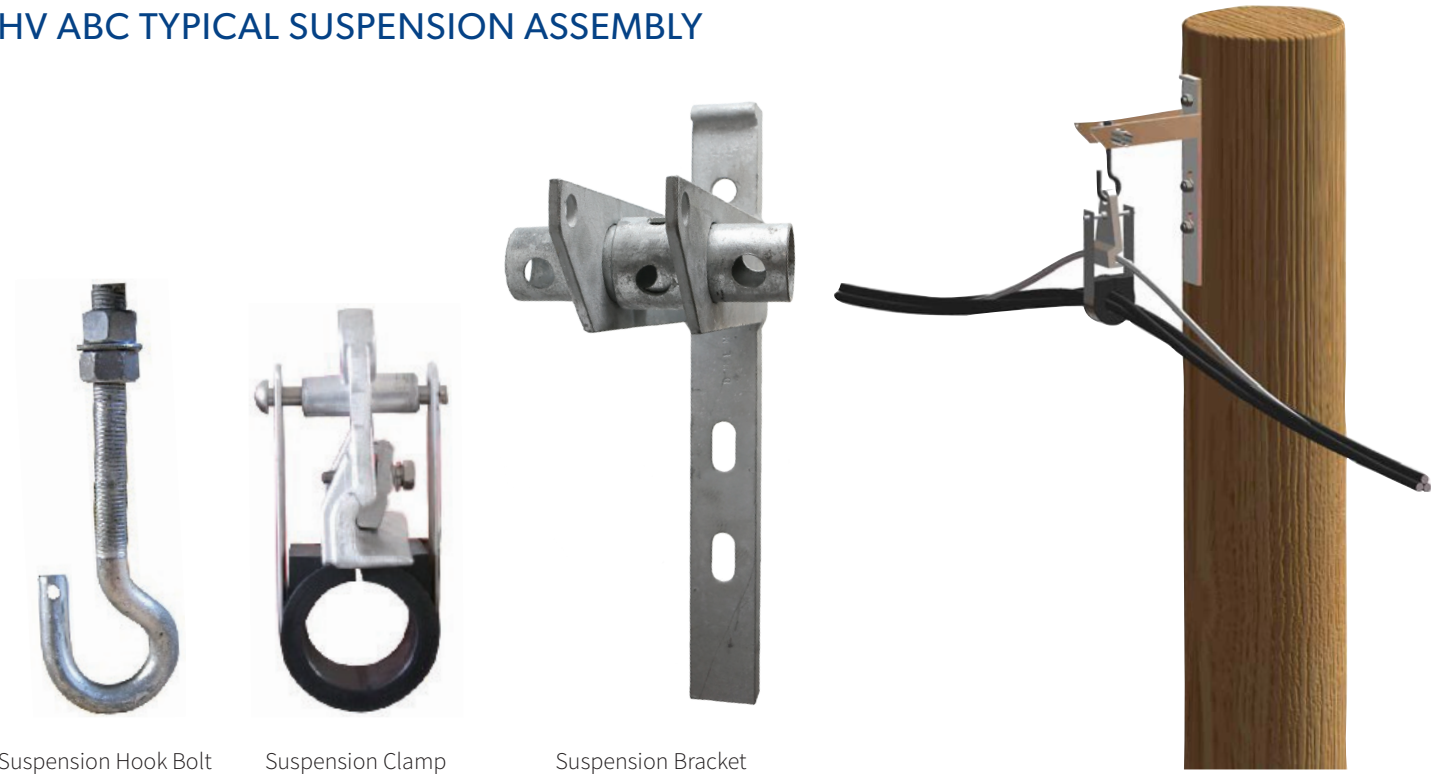
HV ABC FITTINGS

PAGE	CATEGORY
20	HV ABC Typical Suspension Assembly
20	Suspension Bracket & Hook Bolt
21	Suspension Clamps
22	Helical Bundle Restraints
22	Raychem Termination Kits



HV ABC FITTINGS

HV ABC TYPICAL SUSPENSION ASSEMBLY



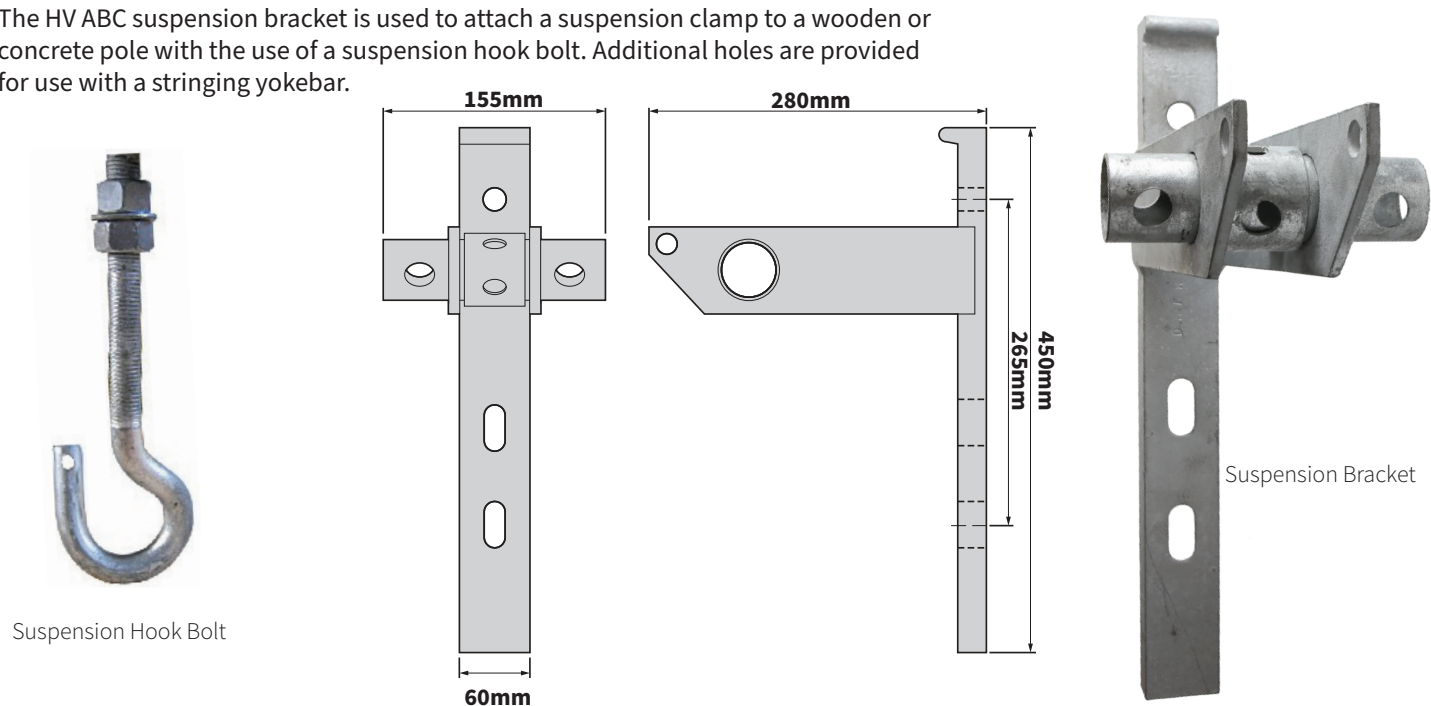
Suspension Hook Bolt

Suspension Clamp

Suspension Bracket

SUSPENSION BRACKET & HOOK BOLT

The HV ABC suspension bracket is used to attach a suspension clamp to a wooden or concrete pole with the use of a suspension hook bolt. Additional holes are provided for use with a stringing yokebar.



Suspension Hook Bolt

Suspension Bracket

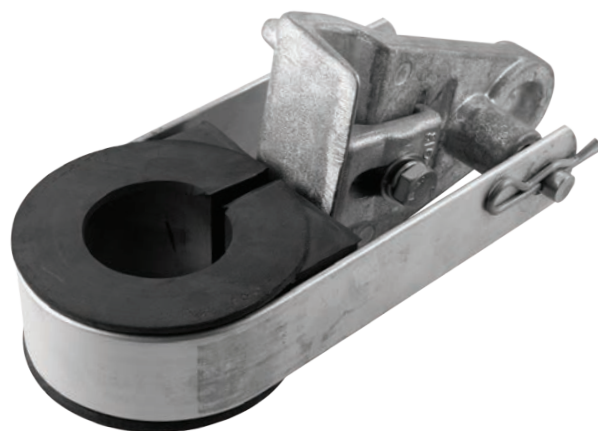
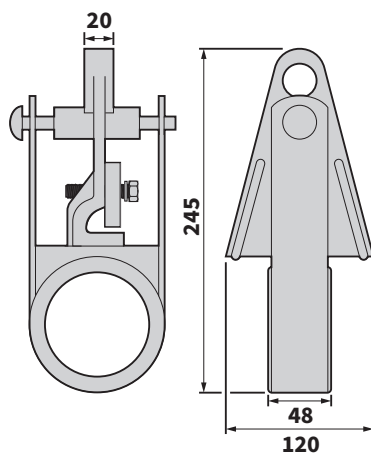
Cat No.	Description
TNSB10312	HV ABC SUSPENSION BRACKET
CTNSHB16-200	SUSPENSION HOOK BOLT WITH SPLIT PIN

HV ABC FITTINGS

SUSPENSION CLAMPS

The suspension clamp is suitable for use on High Voltage ABC cables. Whether the cables are metallic or non metallic screened.

It is suitable for up to 45° line deviation.



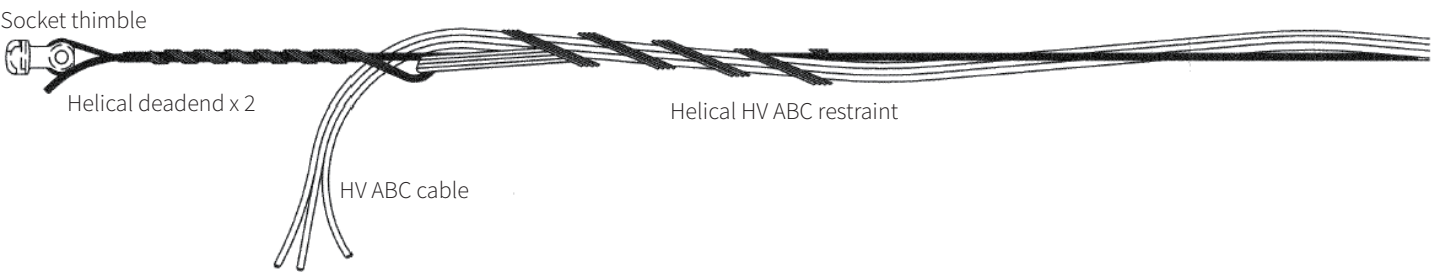
Cat No.	11kV Metallic Screened (mm ²)	22kV Metallic Screened (mm ²)	11kV Non Metallic Screened (mm ²)	22kV Non Metallic Screened (mm ²)
TNABCHVMSC-150	150	70 & 95	-	-
TNABCHVNMSC-35	-	-	35 & 50	-
TNABCHVNMSC-70	-	-	70	-
TNABCHVNMSC-95	-	-	95 & 120	35 & 50
TNABCHVNMSC-150	-	-	150	70
TNABCHVNMSC-185	-	-	185	95 & 120

HV ABC FITTINGS

HELICAL BUNDLE RESTRAINTS

The Helical restraint is a preventative restraint designed to minimise bird caging, also providing restraint from conductors unraveling from catenary cable at deadends. Part numbers below include three helical fittings to complete the bundle restraint.

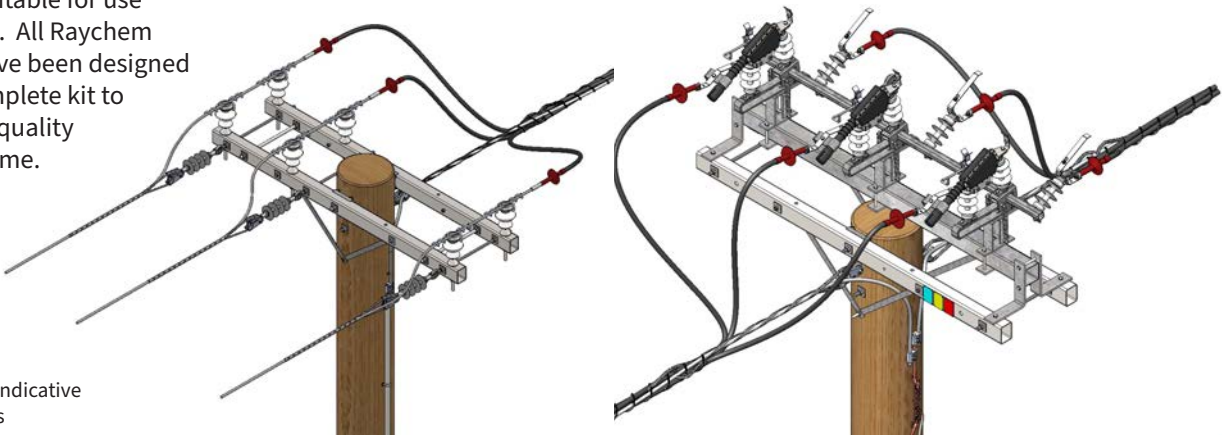
Bird caging is caused by either gravity forces pulling on the conductor or as a result of a fault current.



Cat No.	11kV Non Metallic Screened (mm²)	22kV Non Metallic Screened (mm²)
TNHR35-50	35 & 50	-
TNHR70	70	35
TNHR95	95	50
TNHR70-95	-	70 & 95
TNHR120-150	120 & 150	-
TNHR185	185	-
TNHR120-150L	-	120 & 150
TNHR185L	-	185

RAYCHEM TERMINATION KITS

Termination kits suitable for use with HV ABC cables. All Raychem termination kits have been designed and tested as a complete kit to ensure the highest quality installation every time.



*illustrations show two indicative termination installations

Cat No.	Size Range Al or Cu (mm²)	kV Rating	Connector Type	Tail Length (mm)
OXSUF-3121-M	16CU/25AL-95	11	MECHANICAL	300
OXSUF-3131-M	120-300			
OXSUF-5121-M	25-70	22	MECHANICAL	440
OXSUF-5131-M	70-240			

ABC HARDWARE

PAGE

24

24

24

25

25

25

CATEGORY

Weak Links

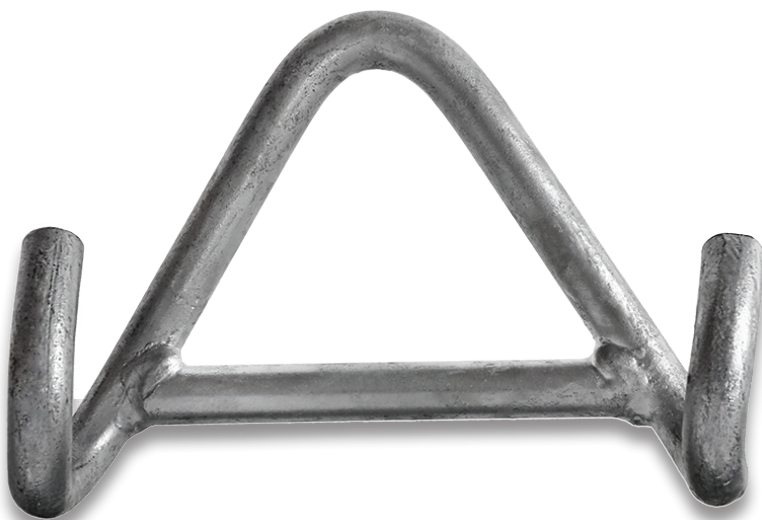
Eye Nuts

Hook Nuts

Hook Brackets

Double Suspension Yoke Bracket

Hook Bolts

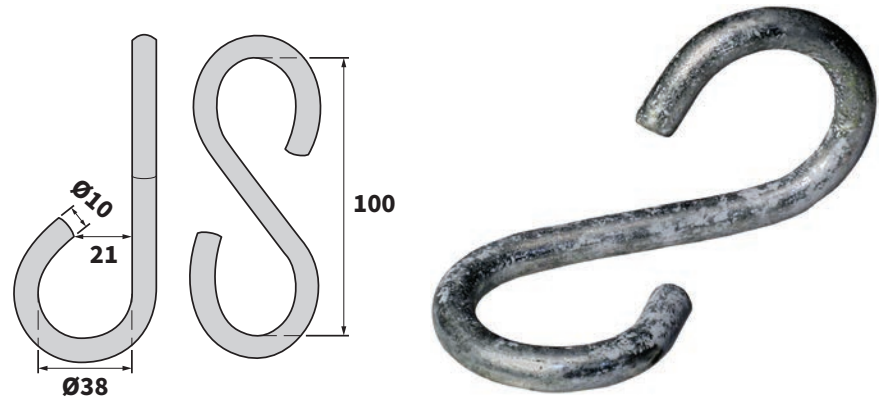


ABC HARDWARE

WEAK LINKS

MATERIAL

Carbon Grade Galvanised Steel



Cat No.	Diameter (mm)	Minimum Failing Load (kN)	Overall Length (mm)	Material Diameter (mm)
CTNABCWL-4KN	38	4	100	10
CTNABCWL-8KN	38	8	100	12

EYE NUTS

MATERIAL

Galvanised Steel

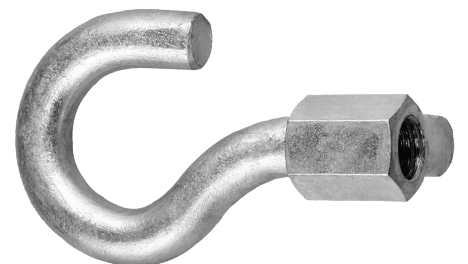


Cat No.	Thread Diameter (mm) AS3766	Thread Length (mm) AS3766	Diameter of Eye Material D (mm) AS3766	Minimum Failing Load (kN)
CTNABCEN-16	16	30	12	44
CTNABCEN-20	20	40	16	70
CTNABCEN-2020	20	40	20	120

HOOK NUTS

MATERIAL

Galvanised Steel



Cat No.	Thread Size	Dia. of Eye Material (mm)	Failing Load (kN)
TNABCHNM16	M16	16	12

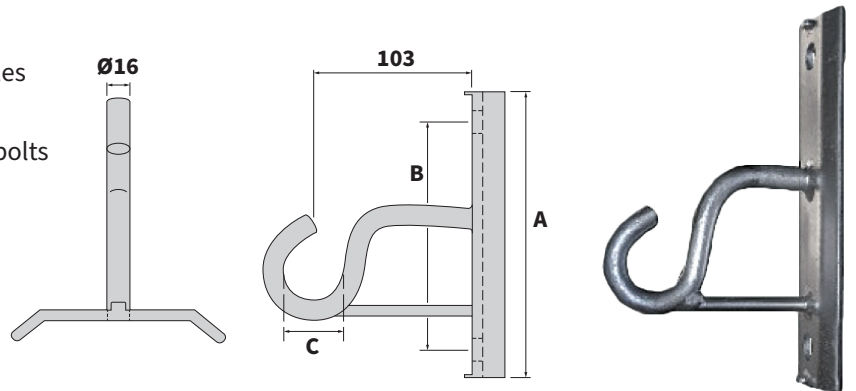
HOOK BRACKETS

The hook bracket can be fixed to concrete or steel poles with stainless steel strapping.

The hook bracket can be fixed to wooden poles with bolts or coach screws

MATERIAL

Galvanised Steel



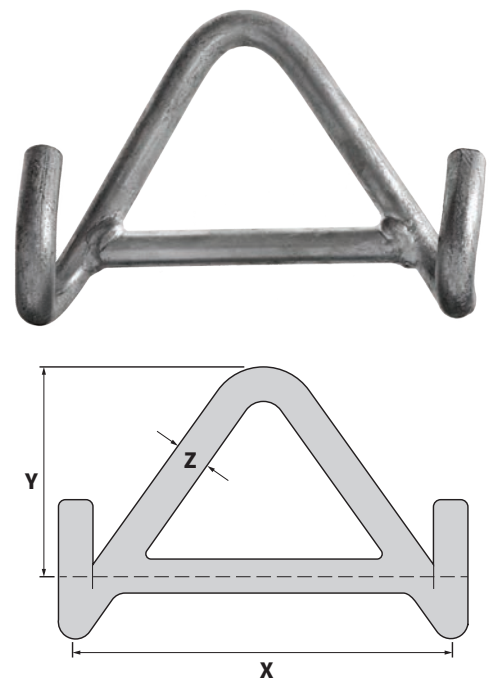
Cat No.	A (mm)	Hole Centres B (mm)	Diameter of Hook C (mm)	Minimum Failing Load (kN) AS3766
TNABCHBR-12	200	150	16	12

DOUBLE SUSPENSION YOKE BRACKET

The yoke bar is suitable for use with two of the TNABCSC style clamps on angle poles, where the line angle deviates by more than 30°.

MATERIAL

Galvanised Steel



Cat No.	Dimensions (mm)			Minimum Failing Load (kN)
	Z	Y	X	
TNABC2XSUSBRKT	16	105	195	12

ABC HARDWARE

HOOK BOLTS – CURVED LOCATING PLATE

MATERIAL

Galvanised Steel with curved locating shoulder for use with curved poles. Comes with washer & nut.

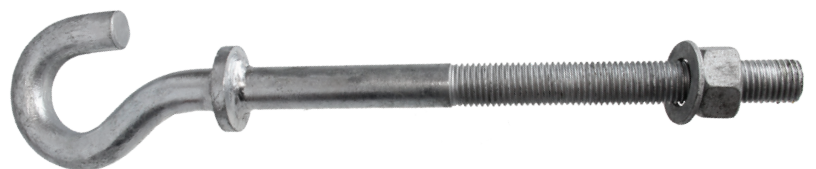


Cat No.		Length L (mm)	Thread (mm)
Diameter 16mm (AS3766)	Diameter 20mm (AS3766)		
CTNABCHB16-250	CTNABCHBM20X250	250	150
CTNABCHB16-325		325	150
CTNABCHB16-350		350	150
CTNABCHB16-400		400	150
CTNABCHB16-450		450	150

HOOK BOLTS – STRAIGHT LOCATING PLATE

MATERIAL

Galvanised Steel with straight locating plate for use with concrete or non-curved poles. Complete with washer & nut.



Cat No.	Diameter (mm)	Length L (mm)	Thread (mm)
TNABCHEB16X400-250	16	400	250

CCT COVERED CONDUCTOR FITTINGS

PAGE	CATEGORY
28	CCT Strain Clamps and Covers
29	Uncovered Strain Connections
28	CCT Compression Joints and Covers
29	Non-Metallic Helical Top & Side Ties for CCT
29	Polymer Post Insulators - 11kV
30	Porcelain Post Insulators - 11kV
30	Polymer Strain Insulators
31	AMPACT Connectors and GelPact Covers
31	AMPACT Bail Clamp Connector With GelPact Covers
32	CCT Insulator Mounting Brackets
32	Surge Arrester Assembly
32	CCT Surge Arrester Kits



CCT COVERED CONDUCTOR FITTINGS

CCT STRAIN CLAMPS WITH COVERS

- Wedge-style strain clamps for securing CCT conductors at tension/strain points
- Includes cover to encompass clamping arrangement
- Bolted retaining clamp to secure conductor in position
- Includes clevis – clevis hardware for compatibility with eye-tongue of strain insulator



Clamp Cat No.	CCT Cable Size (mm ²)	Clamp Range OD (mm)	Strength Rating	
			kN	kg
TNNXL-2	70-95	10.7-12.6	9	917
TNNXL-3	120-150	14.0-15.7	15	1529
TNNXL-4	180-240	17.0-20.25	23	2345

UNCOVERED STRAIN CONNECTIONS

- Helical formed deadend for use on covered conductors
- Will hold a minimum of 90% of the UTS of the conductor as required by AS1154.1 - 2004
- Relieved leg ends to avoid insulation damage
- Neoprene dipped, Aluminium alloy material



Cat No.	Cable Size (mm ²)	Cable Range (mm)
TNADE1625-CCT	40	15.66-16.88
TNADE1875-CCT	80	18.55-19.34
TNADE2100-CCT	120	20.4-21.82
TNADE2375-CCT	180	23.75-25.29

CCT COMPRESSION JOINTS AND COVERS

- Full tension hexagonal compression joint
- Supplied with appropriate Raychem WSCM tube to reinstate insulation
- Simple installation



Cat No.	Cable Size (mm ²)	CCT Cable Stranding (mm)
TNCJ80CCT	80	7/3.75
TNCJ120CCT	120	7/4.75

CCT COVERED CONDUCTOR FITTINGS

NON-METALLIC HELICAL TOP & SIDE TIES FOR CCT

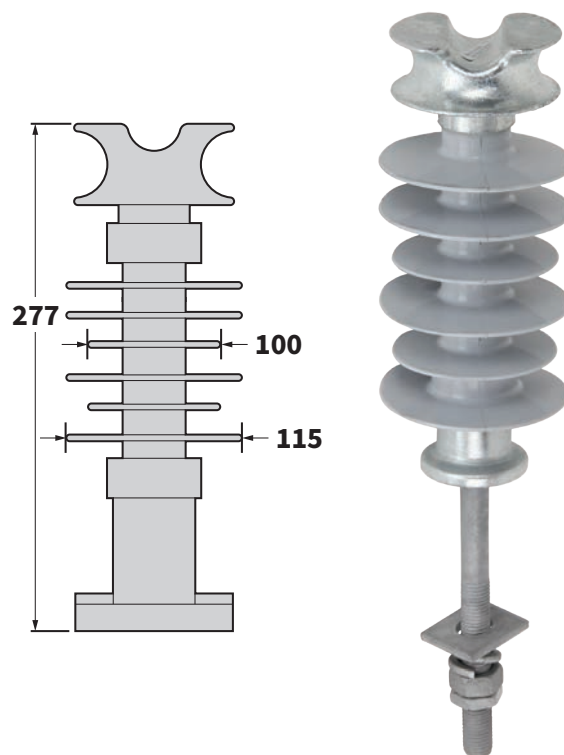
- Designed for use with covered conductor
- Formed to fit F-Neck insulators (76mm neck)
- Rigid PVC core, semi-conductive outer-layer (black only)
- Uniform holding power at each attachment point
- Double-pin ties for use at intersections or slight angles where space or double pin construction does not permit use of top tie



Cat No.	Type	Neck Size	Cable Size (mm ²)	Cable OD Over Insulation (mm)
TNPTT40	TOP TIE	F NECK (76MM)	40	15.8
TNPTT80			80	18.8
TNPTT120			120	21.9
TNPTT180			180	25.0
TNPST40	SIDE TIES	F NECK (76MM)	40	15.8
TNPST80			80	18.8
TNPST120			120	21.9
TNPST180			180	25.0
TNPDT40	DOUBLE TOP TIES	F NECK (76MM)	40	15.8
TNPDT80			80	18.8
TNPDT120			120	21.9
TNPDT180			180	25.0
TNPDST40	DOUBLE SIDE TIES	F NECK (76MM)	40	15.8
TNPDST80			80	18.8
TNPDST120			120	21.9
TNPDST180			180	25.0

POLYMER POST INSULATORS - 11KV

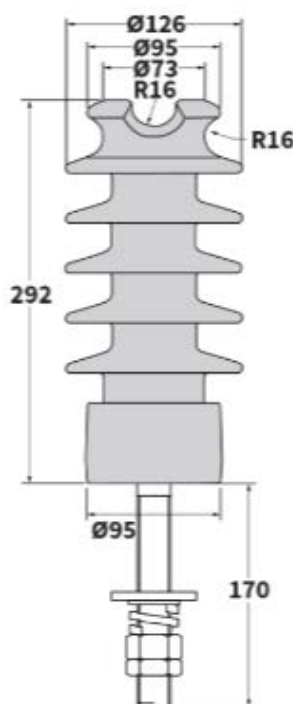
Cat No.	CZ2120-000
INSULATOR STYLE	TIE TOP
USAGE VOLTAGE (KV)	11
CREEPAGE DISTANCE (mm)	535
DRY ARC DISTANCE (mm)	223
NO OF SHEDS	6
SCL (KN)	11
WET POWER FREQUENCY WITHSTAND (kV)	38
DRY POWER FREQUENCY WITHSTAND (kV)	60
LIGHTNING IMPULSE WITHSTAND (kV)	105
WEIGHT (KG)	2.02
COLOUR	GREY
END FITTING	GALVANISED CAST STEEL
HOUSING	SILICONE
CORE	FRP
PIN INCLUDED	M20x219mm STUD, SPRING WASHER, DOUBLE HELIX SPRING WASHER SQUARE WASHER & NUT
BOX QTY	6 (48X6 PER PALLET)



CCT COVERED CONDUCTOR FITTINGS

PORCELAIN POST INSULATORS - 11KV

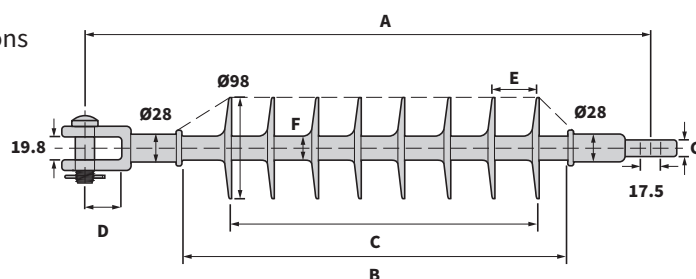
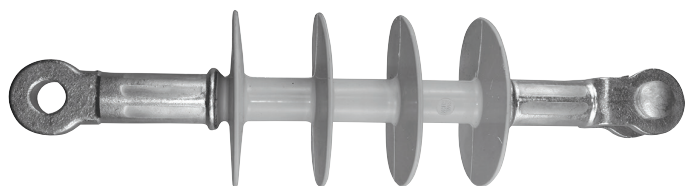
Cat No.	EN1597-000
INSULATOR STYLE	TIE TOP
USAGE VOLTAGE (KV)	11
CREEPAGE DISTANCE (mm)	400
SCL (KN)	10
WET POWER FREQUENCY WITHSTAND (kV)	72
BIL (KV)	105
APPROX. WEIGHT (KG)	5
COLOUR	GREY
RADIO SILENT GLAZE	YES
END FITTING	GALVANISED CAST STEEL
MATERIAL	PORCELAIN
PIN INCLUDED	M20x170mm STUD, SPRING WASHER, DOUBLE HELIX SPRING WASHER, SQUARE WASHER & LOCK NUT
BOX QTY	3



Approved for use on Vector Network

POLYMER STRAIN INSULATORS

- Triple Seal design, to eliminate all moisture ingress
- Forged Steel End Fittings, for consistency of all critical dimensions
- Fibreglass Rod, for better traction & tension load on RML & SML
- Meets requirements of all applicable international standards



Cat No.	DS-15S							DS-28S							DS-35S						
LINE VOLTAGE (KV)	15							28							35						
SECTION LENGTH (MM)	330							432							559						
DRY ARC (MM)	192							294							426						
LEAKAGE (MM)	401							628							954						
ELECTRICAL FLASHOVER																					
- DRY 60HZ	90							130							170						
- WET 60HZ	50							100							155						
- CIFO POSITIVE	140							190							280						
- CIFO NEGATIVE	145							220							290						
WEIGHT (KG)	1.2							1.3							1.4						
DIMENSIONS (MM)	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G
	340	160	141	27	47	Ø24.5	16	475	305	245	26	35	Ø23	14	555	385	315	26	35	Ø23	14

CCT COVERED CONDUCTOR FITTINGS

AMPACT CONNECTORS AND GELPACT COVERS

- The AMPACT system uses “Wedge Pressure Technology” for continuous performance
- Range taking connectors for all connection types
- GelPact covers protect the connection from harsh environments
- The GelPact cover is a UV stable plastic housing filled with hydrophobic Raychem PowerGel

NOTE: This is for CCT to CCT non-tension connections.

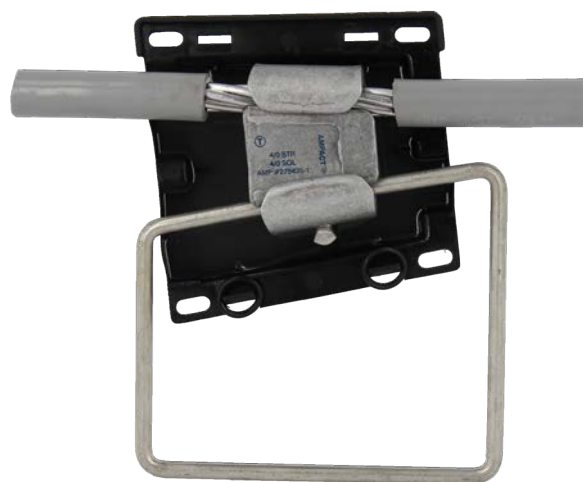
- **AMPACT can join CCT to any other wire combinations, please check with TransNet for Part # and availability**



Cat No.		Joins CCT	OD of CCT Conductor	Wedge, Cartridge & Cover Colour
AMPACT	GelPact Cover			
0-602283-0	1710500-1	40mm ² to 40mm ²	40mm ² = 8.4mm	WHITE
0-600411-0	1710523-1	80mm ² to 80mm ²	80mm ² = 11.4mm	BLUE
0-602002-0	1710501-1	120mm ² to 120mm ²	120mm ² = 14.5mm	YELLOW
0-602031-4	1710501-1	180mm ² to 180mm ²	180mm ² = 17.7mm	YELLOW

AMPACT BAIL CLAMP CONNECTOR WITH GELPACT COVERS

- Temporary Earth Connection Points
- Permanent MV connections / Droppers etc
- AMPACT Wedge Pressure Technology
- GelPact covers are UV stable plastic housings filled with hydrophobic Raychem PowerGel
- KIT INCLUDES:
 - AMPACT Connector
 - Bail Assembly
 - Suitable Gel Pact Cover



Cat No.	Description	OD of CCT Conductor	Wedge, Cartridge & Cover Colour
AB-CCT-40	AMPACT BAIL CLAMP & GEL COVER FOR 40mm ² CCT	40mm ² = 8.4mm	WHITE
AB-CCT-80	AMPACT BAIL CLAMP & GEL COVER FOR 80mm ² CCT	80mm ² = 11.4mm	BLUE
AB-CCT-120	AMPACT BAIL CLAMP & GEL COVER FOR 120mm ² CCT	120mm ² = 14.5mm	YELLOW

CCT COVERED CONDUCTOR FITTINGS

SURGE ARRESTER ASSEMBLY

- Class 2 - (station class) arrester
- Protection of MV networks/sensitive equipment/substations from lightning and switching surge related over voltages in areas with relatively high iso-keraunic levels
- Configured for insulated conductor applications
- Complete with bird cap and Nema crossarm mounting bracket

Cat No.	Type	U Continuous kV (r.m.s)	U Rated kV (r.m.s)
EH6266-000	OCP2	12	15



CCT SURGE ARRESTER KIT

KIT CONTENTS

- BOW-OCP2-12S-BEE-220 Surge Arrester
- With insulated bracket
- ELD (Earth Lead Disconnect) Safety Disconnect
- Bird Cap to suit surge arrester
- AMPACT connector suitable for CCT size to Kutu (9.00mm OD), jumper not supplied
- GelPact Cover
- Nema Bracket (crossarm mounting bracket)



Cat No. of Kitset	CCT Size (mm ²)	AMPACT	AMPACT Cover
CCTSAKIT40	40	0-602283-0	171523-1
CCTSAKIT80	80	0-600411-0	1710523-1
CCTSAKIT120	120	0-602000-0	1710501-1

STRINGING & ASSEMBLY EQUIPMENT

PAGE	CATEGORY
36	Cable Stripping Tool
36	LV ABC Core Separating Wedges
37	Universal Stringing Roller
38	Insulated Ratchet Spanner
38	Swivels
38	ABC Wire Grip
39	LV ABC Cable Pulling Sock
39	HV ABC Cable Pulling Socks - Single Eye
39	HV ABC Cable Pulling Socks - Double Eye
40	HV ABC Yokebar
40	ABC Installation Pulley



STRINGING & ASSEMBLY EQUIPMENT

CABLE STRIPPING TOOL – CCT

- Adjustable from 12.7-63.5mm cable diameter
- Adjustable blade pitch
- Unique clamping design
- Belleville springs for secure clamping
- Adjustable blade depth
- End strip capability
- Midspan stripping capability
- Concentric jacket remover capable
- Nylatron bearing surfaces for smooth turning
- Insulation chip deflector
- XLPE, PE, EPR insulation removal
- Universal single blade
- Ergonomic handles for turning leverage
- Removable handles to strip in tight locations
- Easy blade change out
- Glovable - easy use with gloves



Cat No.	Cable Diameter O.D (mm)	Insulation Thickness (mm)	Insulation Types	Cable Voltages
US01-7000	12.7-63.5	1.52-10.67	XLPE, PE, EPR	600V - 35KV

LV ABC CORE SEPARATING WEDGES

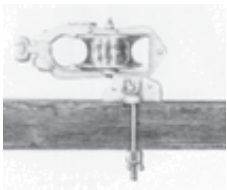
During the installation of connectors the phase conductors of an insulated overhead cable can be separated by using wedges. The wedge can also be used when installing suspension clamps. The wedges can be left on the cable even after the installation.



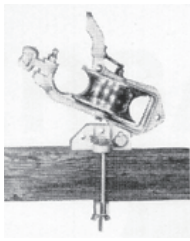
Cat No.	Description	Weight (g)	Package (pcs)
PHS	TWO PLASTIC WEDGES	100	10

STRINGING & ASSEMBLY EQUIPMENT

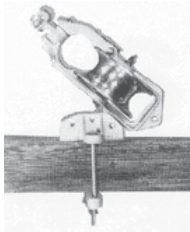
UNIVERSAL STRINGING ROLLER



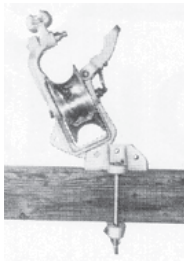
90 deg.



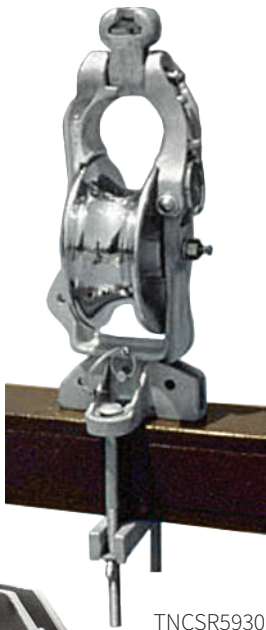
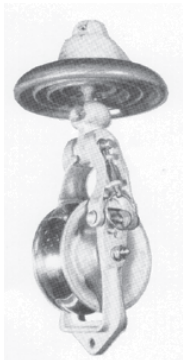
67.5 deg.



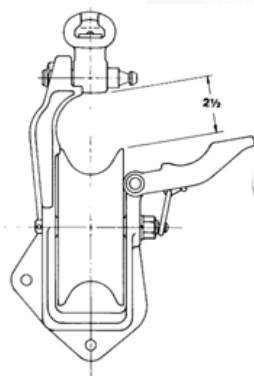
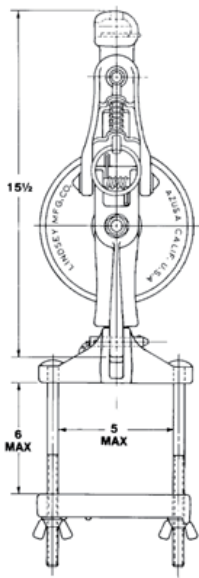
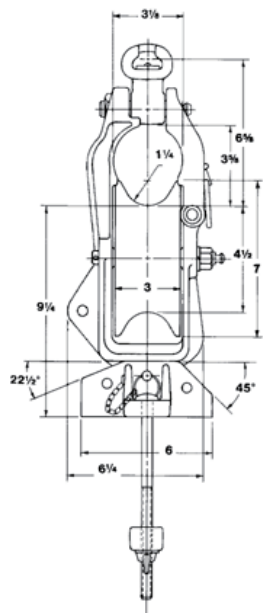
45 deg.



22.5 deg.



TNCSR5930



Keeper Locked
Open Position



TNCSR5900

Cat No.	Maximum Diameter of Conductor or Splice (mm)	Safe Working Load Suspended or Mounted (kN)	Combined Roller Weight (kg)
TNCSR-LVABC	45	11	6

STRINGING & ASSEMBLY EQUIPMENT

INSULATED RATCHET SPANNER

- For use with all shear bolt connectors (IPCs and Fuse Carriers)
- 13mm and 17mm A/F sockets in one spanner
- Reversible ratchet
- Fits stainless steel nuts used in strain and suspension clamps
- Fixed sockets that can not be lost or dropped during installation
- 1000V insulated for added user safety
- 6 sided hex sockets protect integrity of plastic bolt heads



Cat No.	Description
IRW13/17	INSULATED RATCHET SPANNER 13 & 17MM SOCKETS

SWIVELS

- For use with pulling socks to eliminate twist
- 1T, 1.5T & 2T safe working load options available



Fig 2

Image may differ from product supplied



Fig 1

Cat No.	Safe Working Load	Figure
SWIVEL	1.5T SWIVEL	1
TNSWI-22	1 TON	2
TNSWI-33	2 TON	2

ABC WIRE GRIP

- Jaw size 190mm
- Minimum cable size 4x35mm²
- Maximum cable size 4x95mm²
- Weight 3kg



Cat No.	Jaw Length (mm)	Min Cable Diameter (mm ²)	Max Cable Diameter (mm ²)	Weight (kg)
TNABC-GRIP	190	4 × 35	4 × 95	3

STRINGING & ASSEMBLY EQUIPMENT

- Nylon stranding, Alloy ferrule and soft eye
- For use on 4 x 95mm² ABC
- Grip length is approximately 800mm
- Maximum pull is approximately 25kN

LV ABC PULLING SOCK



Cat No.	Description
LV495	PULLING SOCK 4C 95MM ² ABC

HV ABC CABLE PULLING SOCKS - SINGLE EYE

- Galvanised tubular style weave
- Single eye
- Aluminium Alloy ferrule

Cat No.	Cable Size (O.D)	Net Grip Length	UTS kN
HDGW10CS	10-15	750	37
HDGW15CS	15-21	810	57

HV ABC CABLE PULLING SOCKS - DOUBLE EYE

- Nylon tubular weave
- Double eye
- Aluminium Alloy ferrule

Cat No.	Cable Size (mm ²)	Colour	No. of Ply	Net Grip Length	UTS kN
HV395	3X95	GR	4	900	31
HV3185	3X185	BL	4	900	31

STRINGING & ASSEMBLY EQUIPMENT

ABC INSTALLATION PULLEY

- Maximum load is 250kg
- Provides clear working space for field staff
- No lifting of cables required, simply pull them through the pulley and terminate into suspension clamp

Cat No.	Description
PO	INSTALLATION PULLEY UP TO 250KG



COVERING EXISTING CONDUCTORS

PAGE	CATEGORY
42	MVLC - Medium Voltage Line Cover
42	MVCC - Medium Voltage Conductor Cover
43	Panther Tail - Line Cover
43	Raptor Protection Cover - BCIC



COVERING EXISTING CONDUCTORS

MVLC - MEDIUM VOLTAGE LINE COVER

- State-of-the-art insulation to help prevent electrical outages caused by tree/wildlife contact with lines
- Designed to insulate existing bare lines without replacing the conductor, perfect for problem areas
- Can be applied to live lines as long as all live working requirements are adhered to and the correct application tool is used
- The tool forms, closes and feeds the MVLC along the conductor with speed and consistency
- Three sizes cover conductors from 16–800mm²
- Based on TE's Raychem products field proven experience with HV products in harsh environments
- UV stable as well as tracking and erosion resistant



Cat No.	Voltage Class (kV)	Spool Length (m)	Conductor Size (mm²)
MVLC-18-A/U-C-75	15	75M	185
MVLC-18-A/241-C	25		
MVLC-18-TOOL-LOAN	LOAN TOOL AVAILABLE TO CUSTOMERS ADVISE REQUIREMENTS WHEN ORDERING		

MVCC - MEDIUM VOLTAGE CONDUCTOR COVER

Raysulate Medium Voltage Conductor Covers (MVCC) provide high quality electrical insulation for substation leads and jumpers. These covers are made from a non-tracking silicone material that is suitable for harsh medium voltage outdoor environments. MVCC covers are split for easy installation.

FEATURES

- Flexibility allows installation on tight bends which makes it ideal for substation applications
- Designed to protect energised conductors from flashovers due to contact with birds and animals.
- Suitable for applications up to 25kV phase to earth
- Two sizes will fit conductors with diameters ranging from 12–28mm



Cat No.	Conductor Diameter Range (mm)	Colour	Length (m)
MVCC-G10/0.40	11	GREY	30.4
MVCC-G19/0.75	12–19	GREY	15.2
MVCC-G-25/1.0	19-28	GREY	7.6

COVERING EXISTING CONDUCTORS

PANTHER TAIL - LINE COVER

Panther Tail is a flexible conductor cover with a unique two tone design (black outside, yellow inside) for ease of visual inspection. Perfect for applications up to 15kV.

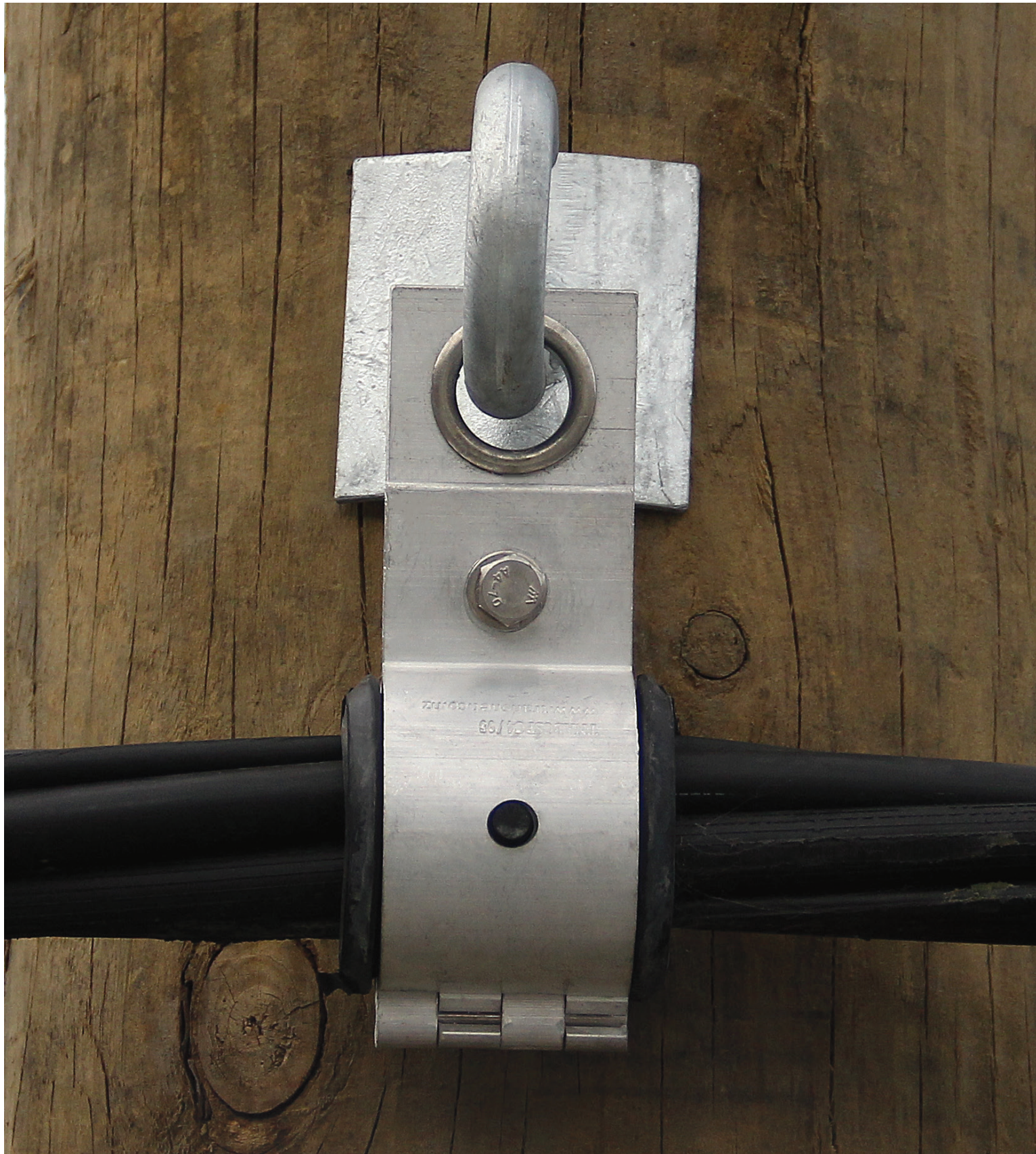
Supplied in a roll of 60m, with a special zip lock style fastening system, Panther Tails are quick and easy to install and can be cut to fit the required area exactly.

FEATURES

- Excellent weathering, UV, & abrasion resistance
- Low voltage or high voltage applications
- Lightweight and easy to install
- Tested and approved for use up to 15kV (Class 2)



Cat No.	Diameter (mm)	Length (m)
TPP15	15	BY METRE
TPP15-TL	PANTHER TAIL INSTALLATION TOOL	



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TRANSNET NEW ZEALAND LTD

ISO 14001 CERTIFIED
ISO 14064-1 CERTIFIED

Auckland

78 Cryers Road
East Tamaki
Auckland
NEW ZEALAND
Ph 0800 442 182
Fax 0800 442 183
PO Box 39 383
Howick, Auckland
NEW ZEALAND

Wellington

10 Petone Ave
Petone
Wellington
NEW ZEALAND
Ph 04 576 2530
Fax 04 576 0040
PO Box 39 383
Howick, Auckland

TRANSNET TONGA

Nuku'alofa

Lakalakaimonu Multi Utility Complex
Taufa'ahau Road
Poutaha, Nuku'alofa
TONGA
Ph +67 627 939
Fax +67 627 976
PO Box 2932
Nukualofa
TONGA



www.transnet.co.nz | sales@transnet.co.nz

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