

Product Catalogue





"WHO WE ARE"

Since 1974, Balmoral Engineering has been manufacturing and supplying a range of safety products for the Electricity Industry with a core focus on the prevention of Power Line Strikes.

We are a multi-generation family business with a long term view and partnership approach to working with our Utility customers.

We have forged close relationships not only with our customers, but also our Japanese suppliers who are also a multi-generation family company. For decades these partnerships have developed with a foundation of trust creating bilateral respect and dependable outcomes. This is reflected in the tenure of many of these relationships, some dating back to the companies inception.





Sections





WARRING MARKERS

2

LINE GUARDS









GLOVES & SLEEVES





MATS & COVERS



5 RESCUE KITS & ACCESSORIES









WARNING MARKERS



• Marine grade components



 Reduced line loading by design



• Thermally tested



UV Resistant



 Soft jaw protects cable and prevents creeping.
 Fits all lines from 2-50mm diameter



Compliant with AS 3891.2 2018



Dielectric strength tested



Snow and ice tested



Ozone tested



Wind tunnel tested



 Aerodynamic 3D design, rotates for high impact visibility from all angles of approach



ROTAMARKA™

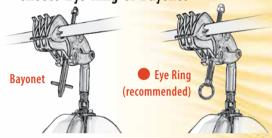




Recommended Products

Choose Eye Ring or Bayonet

WARNING MARKERS



WART Ladd x 23mm SS (works with Fig. a

WMDT | ~42 x 22mm SS (works with Eye or Bayonet)



ROTAMARKA Install/uninstall tool - universal - Eye

LLCR-E | ~300 x 55

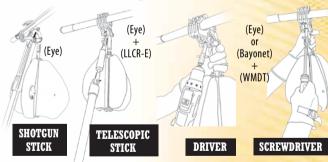
Can be installed from Bucket Truck with Shotgun Stick (Eye version)



Can be installed from ground ck with Telescopic Stick and LLCR-E Tool (Eye version)



Installation Options



This is a guide only, consult our Instructions For Use for further details.

Perform a risk assessment prior to undertaking any work.

Only to be used by industry certified personnel.

Must comply with all relevant work practice rules and industry quidelines.

*4Nm recommended tightening torque

**Image representative only

WARNING MARKERS

ROTAMARKA™





Recommended Products







Power line strikes from construction and agricultural plant and equipment are an all too common occurrence, potentially causing serious injury or death.

These incidents can result in major asset damage and power outages.

Our Rotamarka™ has been specifically designed to mitigate against these risks faced by electrical transmission and distribution companies, as well as contractors and industry workers worldwide.

- Designed with science
- Premium reflectors on all fins
- High internal contrast of fins provides better visibility in a range of environmental conditions
- Less markers required on lines
- Highly tested, designed for durability
- Aerodynamic design rotates for high impact visibility
- AS 3891.2 2018 Clause 2.3.1 (d) compliant
- 3D design provides enhanced visibility from all angles of approach



ROTAMARKA™





Recommended Products

WARNING MARKERS

Warning Marker - Part Number Legend

Example:: WM-CS-B-1H-RW

A B C D E

- A Product type: WM (Warning Marker)
- **B** Line attachment: CS (Clamp Screw)
- C Hot Stick Attachment: B/E (Bayonet or Eye Ring)
- D Style of warning device: 1H/1J (Rotamarka™ Flag)
- E Colour: RW/O/BY/BW (Red/White, Orange, Black/Yellow, Black/White)





 Unique striped safety feature



- Stamped & rated to comply with Australian and International Standards
- Robust design and construction backed by decades of engineering to ensure the highest quality & safety standards
- Eyelet in bell housing allows locking by cable ties & complies with WHS requirements

















- LV & HV options available
- Rigid guards or flexible style hose cater for most requirements
- Suitable for use on Power Lines & Wires as visual warning, mechanical protection and electrical insulation





Recommended Products





DB45B | 2m x 45mm male/female lengths
PE, Yellow outer, Black inner safety feature
ASTM F 712, Class 2 15KV*



DB35B | 2m x 35mm male/female lengths PE, Orange outer, Black inner safety feature ASTM F 712, Class 3 26KV*



Class 3



*Both phases covered | Other length options available on request

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Recommended Products





DB35A | 2.5m x 35mm



DB35ARB | 2.5m x 35mm



DB35ARB125 | 1.25m x 35mm



DB45A 2.5m x 45mm





HS 4202 650V ASTIN F712 14.6KV





Recommended Products



- 1. TPP15 | 60m x 15mm roll | EVA Black outer, Yellow inner safety feature | Electrically tested to ASTM F 712 Class 2 15KV*
 - 2. TPP20 | 3m x 20mm male / female lengths | HDPE, Black Outer, Yellow inner safety feature | ASTM F 712 Class 2 15KV*
 - 3. TPP35 | 3m x 35mm male / female lengths | HDPE, Black Outer, Yellow inner safety feature | ASTM F 712 Class 2 15KV*

*Both phases covered



Guy Guards

GG 2m x 45mm | HDPE

For Stay & Guy Wires (not rated for electrical insulation)



Jumper Wire Guards

IPEP | 10m x 35mm | EVA | AS4202 Class 1 | 650V



Flexible hose for covering Bonds, Bridges & Jumper Wires





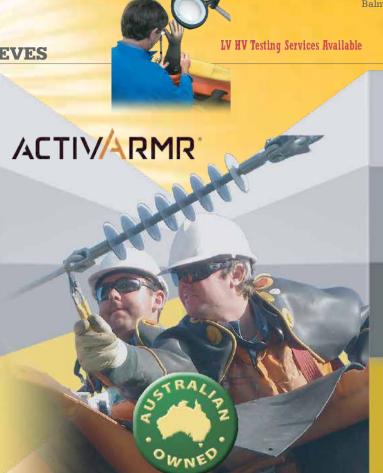


GLOVES & SLEEVES





- Certified to EN/IEC 60903 also available in ASTM D120
- Ergonomically shaped excellent strength & durability
- Supreme feel & flexibilty
- Outer Protector Gloves custom designed to perfectly complement the Rubber Insulating Glove



- Manufactured without the use of solvents & hazardous chemicals utilising a proprietary aqueous dipping process
- Acid resistant
- Ozone resistant
- Low temperature resistant
- Comprehensive range of classes, colours, lengths and sizes, including half sizes
- Various cuff styles available including straight, contour and bell
- Arc flash certified

GLOVES & SLEEVES

Use the Chart below to determine the appropriate level of protection for your application

Labeling Chart Natural Rubber Electrical Protection Equipment			
Class Colour	Proof Test Voltage AC/DC	Max. Use Voltage AC/DC	Insulating Rubber Glove Label
00 Beige	2,500 / 10,000	500 / 750	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 00
0 Red	5,000 / 20,000	1,000 / 1,500	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 0
1 White	10,000 / 40,000	7,500 / 11,250	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 1
2 Yellow	20,000 / 50,000	17,000 / 25,500	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 2
3 Green	30,000 / 60,000	26,500 / 39,750	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 3
4 Orange	40,000 / 70,000	36,000 / 54,000	MARIGOLD INDUSTRIAL ANSI / ASTM D120 EN60903 TYPE 1 10 CLASS 4

LV HV Testing Services Available

Outer Protector Gloves should always be worn over Rubber Insulating Gloves to prevent mechanical damage to the rubber gloves. The Outer Protector must be properly sized and shaped to avoid the deformation or damage of the Rubber Insulating Glove. The minimum distance between the cuff of the Rubber Insulating Glove and the cuff of the Outer Protector Glove is listed in the table below "Clearance for Outer Protectors".

Clearance Table for Outer Protectors

Glove Class	Min. Distand Outer Pro Rubber Insul inches	tectors &
00, 0	1/2	13
1	1	25
2	2	51
3	3	76
4	4	102



LV HV Testing Services Available

GLOVES & SLEEVES



Glove Length 280 mm (11 inch) 360 mm (14 inch) 400 mm (16 inch) 460 mm (18 inch)

Glove Size	Nominal Hand Circumference		
7	7 inches		
8	8 inches	203 mm	
81/2	8½ inches	216 mm	
9	9 inches	229 mm	
91/2	9½ inches	241 mm	
10	10 inches	254 mm	
10½	10½ inches	267 mm	
11	11 inches	279 mm	

Tolerance = +/- 13 mm

Rubber Insulating Glove Item Number Legend



Example :: RIG-4-18-YB-C-10H

ABCDEF

A - Glove type: RIG (Rubber Insulating Glove)

B - Class: 00/0/1/2/3/4

C - Length: 11/14/16/18 (inches)

D - Colour: R/Y/YB/BY (Red, Yellow, Yellow under Black, Black under Yellow)

E - Cuff: S/C/B (Straight/Contour/Bell)

F - Size: 7/8/8H/9/9H/10/10H/11 (H = $\frac{1}{2}$ sizes)



How to measure

Measure around your hand above the V of the thumb. This gives you the circumference in inches.

^{*} Allow an extra half inch if cotton inners are to be used



GLOVES & SLEEVES

LV HV Testing Services Available

Rubber Insulating Sleeve Item Number Legend

Example :: RIS-4-RY-EC-Regular

A B C D E



- A Sleeve type: RIS (Rubber Insulating Sleeve)
- B Class: 2/3/4
- C Colour: RY (Red under Yellow)
- D Arm: EC/S (Extra Curve/Straight)
- E **Size**: S/R/L/EL (Small/Regular/Large/Extra Large)



GLOVES & SLEEVES



LV HV Testing Services Available



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Recommended Products

ACTIVARMR'



Class 00 - 500V Straight Cuff 11 inch

RIG0011R	S7 Siz	e 7
RIG0011R	S8 Siz	e 8
RIG0011R	S8H Siz	e 8½
RIG0011R	S9 Siz	e 9
RIG0011R	S9H Siz	e 9½
RIG0011R	S10 Siz	e 10
RIG0011R	S10H Siz	e 10½
RIG0011R	S11 Siz	e 11



Class 00 - 500V Straight Cuff 14 inch

RIG0014YS7 Size 7* RIG0014YS8 Size 8* RIG0014YS9 Size 9* RIG0014YS10 | Size 10* RIG0014Y11 | Size 11* *Special Order



Class 0 - 1000V Straight Cuff 14 inch

RIG014YS7 Size 7 RIG014YS8 Size 8 RIG014YS8H Size 8½ RIG014YS9 Size 9 RIG014YS9H Size 9½ RIG014YS10 Size 10 RIG014YS10H | Size 10½ RIG014YS11 Size 11



Class 0 - 1000V Straight Cuff 11 inch

Size 8* RIG011YS8 Size 9* RIG011YS9 RIG011YS10 Size 10* **RIG011 YS11** Size 11*



Class I - 5KV Straight Cuff 14 inch

RIG114YBS8 Size 8* RIG114YBS8H Size 81/2* RIG114YBS9 Size 9 RIG114YBS9H Size 91/2 RIG114YBS10 Size 10 RIG114YBS10H | Size 101/2 RIG114YBS11 | Size 11*

ACTIVARMR Balmoral Engineering :: Revision 12a Section 3 Page 6

LV HV Testing Services Available



Class 2 - 17KV Bell Cuff 16 inch

GLOVES & SLEEVES

RIG216YRR8 Size 8* RIG216YBB8H | Size 81/2* RIG216YBB9 Size 9 RIG216YBB9H | Size 9½ RIG216YBB10 | Size 10 RIG216YBB10H | Size 10½ RIG216YBB11 | Size 11*



Class 2 - 17KV Straight Cuff 16 inch

RIG216YBS8 Size 8 RIG216YBS8H | Size 81/2 Size 9 RIG216YBS9 RIG216YBS9H | Size 9½ RIG216YBS10 | Size 10 RIG216YBS10H Size 10½ RIG216YBS11 | Size 11



Class 2 - 17KV Contour Cuff 18 inch

RIG218YRC8 Size 8* RIG218YBC8H | Size 81/2* RIG218YBC9 Size 9 Size 9½ RIG218YBC9H RIG218YBC10 Size 10 RIG218YBC10H | Size 10½ RIG218YBC11 | Size 11*



Class 3 - 26.5KV **Bell Cuff** 16 inch

RIG316YBB8 Size 8* RIG316YBB8H | Size 81/2* RIG316YBB9 Size 9 RIG316YBB9H | Size 9½ RIG316YBB10 Size 10 RIG316YBB10H | Size 10½ RIG316YBB11 | Size 11*



Class 3 - 26.5KV Straight Cuff 16 inch

RIG316YBS8 Size 8 RIG316YBS8H Size 8½ RIG316YBS9 Size 9 RIG316YBS9H Size 91/2 RIG316YBS10 Size 10 RIG316YBS10H | Size 10½ RIG316YBS11 Size 11



Class 3 - 26.5KV **Contour Cuff** 18 inch

RIG318YBC8 | Size 8* | Size 81/2* RIG318YBC8H RIG318YBC9 Size 9 RIG318YBC9H Size 9½ RIG318YBC10 Size 10 RIG318YBC10H | Size 10½ RIG318YBC11 | Size 11*

*Special Order

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LV HV Testing Services Available

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GLOVES & SLEEVES



Class 4 - 36KV **Bell Cuff** 18 inch

RIG418YBB9 Size 9 RIG418YBB9H | Size 91/2 RIG418YBB10 | Size 10 RIG418YBB10H | Size 101/2 RIG418YBB11 | Size 11*



Class 4 - 36KV Straight Cuff 18 inch

RIG418YBS9 | Size 9 RIG418YBS9H | Size 91/2 RIG418YBS10 | Size 10 RIG418YBS10H | Size 101/2 RIG418YBS11 | Size 11



Class 4 - 36KV Contour Cuff 18 inch

RIG418YBC9 Size 9 RIG418YBC9H | Size 91/2 RIG418YBC10 | Size 10 RIG418YBC10H | Size 101/2 RIG418YBC11 | Size 11*



Class 2 - 17KV Extra Curved

RIS2RYECS | Small RIS2RYECR | Regular RIS2RYECL | Large



Class 3 - 26.5KV Extra Curved

RIS3RYECS | Small RIS3RYECR | Regular RIS3RYECL Large



Class 4 - 36KV Extra Curved

RIS4RYECS | Small RIS4RYECR | Regular RIS4RYECL Large



GLOVES & SLEEVES



LV HV Testing Services Available



LV Outer Protector 10 inch - Goatskin Velcro Cotton Strap Keylar Thread

OUTLVGS7	Size 7
OUTLVGS8	Size 8-81/2
OUTLVGS9	Size 9-91/2
OUTLVGS10	Size 10-101/2
OUTLVGS11	Size 11

Note: Choose same size as Marigold Class 00 and 0 gloves or best fit for comfort



HV Outer Protector 12 inch - Goatskin

OUTHVGS8 | Size 8-8½
OUTHVGS9 | Size 9-9½
OUTHVGS10 | Size 10-10½
OUTHVGS11 | Size 11

Note: Choose same size as Marigold Class 1, 2, 3 & 4 gloves or best fit for comfort



Powerflex, Neo Coat LVL4 Flame, LVL5 Cut EN

PFLEX-8 | Size 8 PFLEX-9 | Size 9 PFLEX-10 | Size 10 PFLEX-11 | Size 11

Note: Choose one size up if using over Marigold Class 00 and 0 Gloves or best fit for comfort

Inner Liners One Size Fits All

COT1 | Cotton - Interlock | 10" COT2 | PolyCotton - Knitted | 10" COT3 | Cotton - Interlock | 14"



Glove Talc

GLO-TALC | 100a



Glove Air Test Tool

GLO-ROL1 | 360 x 40 | HV GLO-ROL2 | 300 x 25 | LV



Sleeve Accessories

B2 | Sleeve Buttons (1pc)

B22 | Sleeve Buttons (2pc - 4 pack)

H1 Harness C/W 4 B2 Buttons

S1 | Straps (2) C/W 4 B2 Buttons





Solid Walls

LV HV Testing Services Available



Recommended Products

LV Glove Bag 2 Pocket Treated Canvas Velcro Close - Webbing Loops

LV GLOVES ONLY

GLOVES & SLEEVES

26012 390x210x45

LV Glove Bag 1 Pocket Loomstate Canvas Velcro Close - Webbing Loop

26023 | 400x220x75

LV Glove Bag 2 Pocket Loomstate Canvas Velcro Close - Webbing Loop



Slimline front pocket suitable for leather storage

LV Glove Bag 3 Pocket Loomstate Canvas Velcro Close - Webbing Loop



Slimline front pocket suitable for leather storage

HV Glove Bag 2 Pocket Loomstate Canvas Velcro Close - Metal Snap Hook

26042 500x220x150

Hard Base Breathable



HV Glove & Sleeve Bag 3 Pocket Loomstate Canvas Velcro Close - Metal Snap Hook

26035 | 700x200x250



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- EPDM Rubber or PVC material options
- Dual colour material safety options available

 Non-slip & flexible Ground Mats

Weather resistant





Crease in Class I
 PVC style covers

 to conform to line







Velcro

Stu

Magne

- Stamped & rated to comply with Australian and International Standards
- Meets ENA & electrical safety rules and guidelines in most States and Territories

Recycling of off-cuts

into firehose when possible





LV HV Testing Services Available



Recommended Products

Ground Mats EPDM

MATS & COVERS

- 1. | 181A-1 | 1mx1mx6mm | Class A | 650V | Cut-out | 181A-2 | 1.2mx1mx6mm | Class A | 650V | Plain
- 3. | 181A-3 | 1.5mx1mx6mm | Class A | 650V | Slots | 181A-4 | 900x900x6mm | Class A | 650V | Plain

Equipotential Mats

• | 181EP-1 | 770x770mm | C/W Bag













181A-ROLL* | Class A | 650V 1810-ROLL* | Class 0 | 1000V 1811-ROLL* | Class 1 | 7.5KV

1811-ROLL* | Class 1 | 7.5KV

1813-ROLL* | Class 3 | 26.5KV

1814-ROLL* | Class 4 | 36kV

AS2978 Minimum 900mm cut size

* IEC61111 Minimum 600mm cut size

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Line Covers 650V PVC Magnet/Press Studs AS4202

2003 | 1.2mx225mm drop 3003 | 1.2mx300mm drop 4004 | 1.2mx375mm drop



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Line Covers 650V PVC Studs AS4202

2001 | 1.2mx225mm drop 3001 | 1.2mx300mm drop 4001 | 1.2mx375mm drop 5001 | 1.5mx225mm drop 6001 | 1.8mx225mm drop

5001 | 1.5mx225mm 6001 | 1.8mx225mm

Section 4 Page

Line Covers 650V EPDM Velcro AS4202

2004 | 1.2mx225mm drop 2006 | 600x225mm drop 2010 | 1mx235mm drop 3002 | 1.2mx300mm drop



Cross Arm Covers 650V AS4202

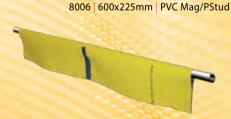
7001 | 1.2mx375mm drop | PVC Studs 7004 | 1.2mx225mm drop | EPDM Velcro 7008 | 1.2mx225mm drop | PVC Mag/PStuds 7010 | 1mx235mm drop | EPDM Velcro



Comms Cable Covers

650V AS4202

7002 | 1.2mx225mm | EPDM Velcro 8002 | 600x225mm | PVC Studs



Fuse Link Covers

650V AS4202

8001 | 600x375mm drop | PVC Studs

8007 | 850x850mm | PVC Plain 8010 | 850x700mm | EPDM Velcro

8016 | 400x400mm drop | PVC Studs

8020 | 600x375mm drop | PVC Mag



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LV HV Testing Services Available



Recommended Products





Available Fasteners: (Magnetic, Eyelet, Clamps) 16002 (9008) (9007) (9019) (181A) (25006) (26031) (YS-211-3-5)

2 x small plain Drapes, 2 x medium plain Drapes, 1 x large plain Drape, 1 x Ground Mat, 1 x Velcro Strap, 1 x Bag, 4 x Clamps

16003 (10005) (10006) (181A) (25006) (26031)

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Ground Mat, 1 x Velcro Strap, 1 x Bag

16004 (10005) (10021) (26031) (YS-211-3-5)

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Bag, 4 x Clamps

16005 (10005) (10006) (26031)

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Bag

16006 (10029) (10030) (181A) (25006) (26031)

4 x small magnetic Drapes, 2 x large magnetic Drapes, 1 x Ground Mat,

1 x Velcro Strap, 1 x Bag

16007 | (10031) (10032) (26031) (YS-211-3-5)

2 x small clear magnetic Drapes, 2 x large clear magnetic Drapes,

4 x Clamps, 1 x Bag

Custom kits available upon application, MOQ's apply

Street Light Column Kits



14001 (23002) (INS-S) (INS-L) (26004)

1 x magnetic Column Cover (pair), 2 x small Inserts, 2 x large Inserts, 1 x Bag

14002 (23002) (INS-S) (INS-L) (181A) (25006) (26031)

1 x magnetic Column Cover (pair), 2 x small Inserts, 2 x large inserts,

1 x Ground Mat, 1 x Velcro Strap, 1 x Bag

14003 (23002) (INS-S) (26004)

1 x magnetic Column Cover (pair), 2 x small Inserts, 1 x Bag

Custom kits available upon application, MOQ's apply





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LV HV Testing Services Available

Recommended Products

Substation & Switchboard Drapes EPDM 650V

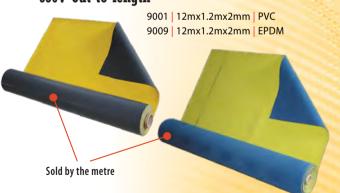


Substation & Switchboard Drapes PVC 650V



8008	850x850mm magnetic
9007	600x450mm plain
9008	400x300mm plain
9019	1.2mx900mm plain
10005	600x450mm eyelets/mag
10006	1.2mx600mm eyelets/mag
10020	900x900mm eyelets
10021	2mx600mm magnetic

Substation & Switchboard Drapes 650V Cut-to-length



Cable End Covers PVC 650V

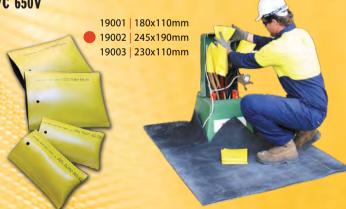


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Bags

PVC - Zipper

- 1. 26014 | Line Cover Bag | 1.4mx400x100mm
- 2. | 26015 | Ground Mat Bag | 1.1mx150x100mm





YS-211-3-5 | 220x115x22mm

Straps Velcro 25005 | 500x50mm 25006 | 1mx50mm



Studs

Sold each not pair

- 1. | 24003 | Magnet
- 2. PB4 | Standard Stud
- 3. | PB5 | Male and female Press Stud

3



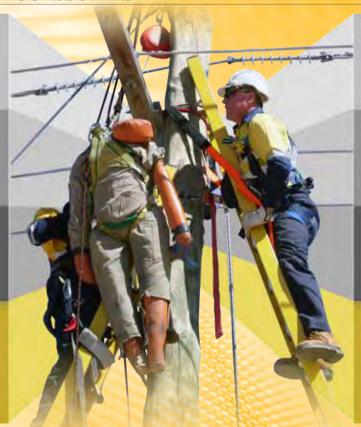
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RESCUE KITS & ACCESSORIES

- Pole Top Kits and components
- Low Voltage Switchboard Rescue Kits and components
- Latest comfort style Linesman Safety Harnesses/Belts, leading brands
- Customised kits and accessories to meet local and national industry standards



 Quality manufacturers and brands

Easy adjusting Pole Straps

- Friction descenders and lowering devices
- Rescue Bags & Boxes
 Pouches
 Knives
 Gloves
 Cutters
 Crooks

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Images representative only, actual brands supplied actual may differ.

Recommended Products

RESCUE KITS & ACCESSORIES

Pole Top Rescue Kit (NSW - ASP - C/W Bag)

11006 | 1x Bag, 1x CPR card, 1x Anchor Strap 1x Body Belt & Pole Strap, 1x Knife, 1x Rope, 1x Rubber Gloves



Pole Top Rescue Kit (NSW - ASP - C/W Box)

11019 | 1x Box, 1x CPR card, 1x Body Belt & Pole Strap, 1x Knife, 1x Rope, 1x Rubber Gloves, 1x Anchor Strap



LV Switchboard Rescue Kit

11002 | 1x Bag, 1x CPR Card, 1x Crook, 1x Torch, 1x Isolate Here Sign, 1x Trauma Dressing, 1x Fire Blanket, 1x Rubber Gloves



Pole Top Rescue Kit (VIC & TAS)

11003 | 1x Bag, 1x CPR card, 1x Anchor Strap, 1x Body Belt and Pole Strap, 1x Pliers, 1x Riggers Gloves, 1x Webbing Cutter, 1x Rubber Gloves



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RESCUE KITS & ACCESSORIES

Tool Bags

26018 | 350x150x250 | 15 Internal Pockets

26022 | 380x290 | 2 External Pockets

26028 | 9 Pocket | Webbing Belt





PPE Equipment Bags

26036 | 780 x 286 x 360 Canvas (heavy duty) 26040 | 550 x 300 x 300 Canvas (medium duty)





Rescue Descender Devices

ANC-ST-2 1.8m



LV Crooks

GAN-CRK 370 x 25 HDPE





NOTES

