

Dromex



ARC FLASH SUIT ATPV 12.4 Cal/cm²



Decription

Dromex A.P.T™ (Arc Protective Technologies) product range is designed to protect the user from the hazards of heat and to reduce total burn injury when working in environments exposed to electric arc hazards.

The Dromex A.P.T™ 12.4 cal/cm² attire is suitable for use in category 1 and 2 ARC related hazards.



This attire consists of the following:

Jacket features:

- Flame retardant reflective tape on shoulders for enhanced visibility when working in poor lighting environments.
- Concealed brass zip with flame retardant Velcro strips.
- Seams with triple needle top stitching.
- Flame retardant rib knit cuff.
- 2 waist pockets and 1 left breast pocket with a mitred flap and concealed flame-retardant Velcro closure.
- Side slits for better fit over waist.
- ATPV 12.4 cal/cm² embroidery for garment suitability identification.

Pants features:

- A concealed brass zip at front.
- Side swing pockets.
- All seams with triple needle top stitching for durability.
- Ruler pocket on right with double needle topstitching

These garments are commonly used in the following industries:

- Automotive
- Construction
- Mining
- Petroleum
- Utilities
- Data centres
- High volume manufacturing

Dromex A.T.P™ fabrics are self-extinguishing, heat resistant and resistant to ignition.

Special Instructions

None of the materials or processes used in the manufacture of these products are known to be harmful to the wearer.

The manufacturer has examined under the system for ensuring quality of production by means of monitoring and inspection.

These Arc flash suits are designed to accommodate the basic safety requirements and standards for Personal Protective Equipment.

The information contained herein is intended to assist the wearer in the selection of personal protective equipment.

Actual conditions of use cannot be directly simulated in a test environment therefore it is the responsibility of the end user and not the manufacturer or supplier to determine the arc flash suitability for the intended use.

Arc flash protective suits should be thoroughly inspected before use to ensure no damage is present

Specifications

- Style: 2-piece long sleeve conti suit, with reflective strips, available in navy blue or orange
- Fabric composition: 88% COTTON 12% NYLON
- Mass: 305 GSM
- Reflective tape: 50mm
- Additional: Arc protective suits and visors must be worn with other arc protective attire and equipment to ensure complete protection against the hazards of arc flash. Refer to table "Arc Flash PPE Categories for further compatible ppe".

Packaging

- Jacket: DW-ARC12-J (Navy blue) and DW-ARC-12-OR-J (Orange) are packed in a resealable poly bag and sold individually
- Pants: DW-ARC12-P (Navy blue) and DW-ARC-12P-OR-P (Orange) are packed in a resealable polybag and sold individually.

Sizes Available

Jacket: 32-60

Size designation	Nominal measurements of finished garment (cm)			
	Chest circumference	Back length	Back width	Sleeve length
77	94	70	36	47
82	99	71	38	47
87	104	72	40	48
92	109	73	42	48
97	114	74	44	49
102	119	74,5	46	49
107	124	75	48	50
112	129	75,5	50	50
117	134	76	52	51
122	139	76,5	54	51
127	144	77	56	52
132	149	77,5	58	52
137	154	78	60	53
142	159	78,5	62	53
147	164	79	64	54
152	169	79,5	66	54
157	174	80	68	54

Pants: 28-56

Size designation	Nominal measurements of finished garment (cm)		
	Waist extended	Outside leg length	Inside leg length
77/67	80	102	78
82/72	85	104	79
87/77	90	106	80
92/82	95	108	81
97/87	100	110	82
107/92	105	110	82
112/102	115	111	82
117/107	120	111	81
122/112	125	111	81
127/117	130	111	80
132/122	135	111	80
137/127	140	112	80
142/132	145	112	80
147/137	150	113	80
152/142	155	113	80
157/147	160	113	80

Dromex: Unit 1, 1 Blase Road, New Germany, 3620, South Africa
 T. +27(31) 713 1960 E. info@dromex.co.za
 www.dromex.co.za

Compliance & Conformity

- Complies to marking SANS 724, Personal protective equipment and protective clothing against the thermal hazards of an electric arc.
- IEC 61482-1-1 - Live working - Protective clothing against the thermal hazards of an electric arc - Open Arc Test Method. It determines the Arc Thermal Protection Value (ATPV level) of the garment. The basic principle is that the ATPV of the garment must be higher than the Arc Flash energy.
- IEC 61482-1-2, Live working - Protective clothing against the thermal hazards of an electric arc - Box Test Method. It determines the Arc Protection Class Rating of the material or garment by using a constrained and directed arc:
 - EN 61482-1-2:2014 - LIVE WORKING - PROTECTIVE CLOTHING AGAINST THE THERMAL HAZARDS OF AN ELECTRIC ARC - PART 1-2: TEST METHODS - METHOD 2: DETERMINATION OF ARC PROTECTION CLASS OF MATERIAL AND CLOTHING BY USING A CONSTRAINED AND DIRECTED ARC (BOX TEST) (IEC 61482-1-2:2014).
- NFPA 2112 - Standard on flame resistant clothing for protection of industrial personnel against short duration thermal exposures from fire.
- ASTM F1959, Standard Test Method for Determining the Arc Rating of Materials for Clothing.
- ASTM F2621-12, Standard Practice for Determining Response Characteristics and Design Integrity of Arc Rated Finished Products in an Electric Arc Exposure.
- EN 11611:2015, Protective clothing for use in welding and allied processes.
- EN 11612:2015 Protective clothing -- Clothing to protect against heat and flame -- Minimum performance requirements.
- ASTM F2178-12 -Standard Test Method for Determining the Arc Rating and Standard Specification for Eye or Face Protective Products.

Cleaning & Maintenance

For electric arc exposures, wear the correct number of flame-resistant clothing layers as dictated by an electric arc hazard analyst. In potentially explosive environments, proper grounding procedures must be used for protection against electrostatic spark ignition. Do not put on or remove garments when in a potentially explosive environment. Garments of Dromex A.P.T™ brand fibre can be cleaned by home or commercial laundry or by dry cleaning procedures without loss of their inherent protective features.

The following suggestions will help keep your garment safe, and neat. If home procedures do not remove contaminants, commercial laundering or dry-cleaning is recommended:

- Laundry garments of Dromex A.P.T™ separate from personal non-flame resistant clothing to help avoid contamination by flammable materials.
- Pre-treat greasy stains and collar/cuff lines.
- Wash garments in warm water with heavy duty detergent.
- Do not overload home laundry equipment.
- Do not use chlorine bleach or detergents containing chlorine bleach.
- Chlorine bleach may cause fading and reduce fabric strength.
- Tumble dry garments at a low setting
- Remove and hang garments as soon as tumbler stops.
- Do not hang in direct sun.
- Sunlight can cause fading and reduce fabric strength.
- When using commercial laundry aids, be sure to read and carefully follow the manufacturer's instructions.



Disposal

All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Workwear should be disposed of considering the hazardous substances they were used for as well as the material they are made up of. Please consider recycling.

Marking

TYVEK ATPV LOOP FOLD CARE LABEL

ATPV 12.4 cal/cm²
This garment is made of Dromex A.P.T™ (Arc Protective Technologies) and is a trademark of Dromex. Manufactured by Dromex, P.O. Box 2005, New Germany, 3620. Tel: 031 713 1960. Fax: 031 705 6508. The purpose of this garment is to protect against the thermal hazards created by an Arc Flash.

This garment is not suitable for fire fighting or any other exposures where flame is of a continuous nature.

Flammable contaminants will reduce the thermal protection of any flame-resistant garment. Wash the garment frequently to ensure that no greases, oil soils and other flammable contaminants are present when the garment is worn. Repairs to the garment must be made with flame resistant components.

RECOMMENDATIONS

To maximise protection, garments should be:

- Loose fitting.
- Worn with flame resistant undergarments.
- Only made of cotton, silk or wool.

To maximise comfort:

- Try on garments to check for correct fit before washing.
- Wash new garments before wearing to remove fabric processing aids or finishes.

For electric ARC exposure, wear the correct number of flame resistant clothing layers as dictated by an electric arc hazard analyst. In potentially explosive environments, proper grounding procedures must be used for protection against electrostatic spark ignition. Do not put on or remove garments when in a potentially explosive environment.

Garments of Dromex A.P.T™ brand fibre can be cleaned by home or commercial laundry or by dry cleaning procedures without affecting the lifespan of the garment or its protective features. The following suggestions will help keep your garment looking neat, attractive and safe. If home procedures do not remove contaminants, commercial laundering or dry cleaning is recommended.

Laundry garments of Dromex A.P.T™ separate from personal non-flame resistant clothing to help avoid contamination by flammable materials. Pre-treat greasy stains and collar/cuff lines.

Wash Garments in hot water with a heavy duty detergent. Do not overload home laundry equipment.

Do not use chlorine bleach or detergents containing chlorine bleach as it may cause fading and reduce fabric strength.

Tumble dry garments at a low setting. Use the cool down cycle if available. Remove and hang garments as soon as tumble dryer stops. Do not hang in direct sunlight as it can cause fading and reduce fabric strength.

When using commercial laundry aids, be sure to read and carefully follow the manufacturer's instructions.

- Position:
- Jacket - Above side slits (Left hand side)
 - Pants - Inside (below left pocket)

ORIGIN & YOM LABEL

MADE IN
SOUTH AFRICA
Y. O. M. 2018

- Position:
- Jacket - Neck
 - Pants - Inside (left pocket)

SIZE LABEL

CHEST: 38 / 97
WAIST: 34 / 87

- Position:
- Jacket - Neck
 - Pants - Inside (left pocket)

MAIN LABEL

- Position:
- Jacket - Neck (Inside)
 - Pants - Left pocket (Inside)

ARC HEAT TRANSFER PRINT

- Position:
- Jacket - Right hand side of sleeve

ARC HEAT TRANSFER PRINT

- Position:
- Jacket - Left chest pocket flap
 - Pants - Back pocket flap

EMBROIDERY (WHITE THREAD)

- Position:
- Jacket - Right breast (Centre of panel)
 - Pants - Back left (Centre of panel)

Arc Flash PPE Categories

Hazard/Risk Category	Recommended clothing used at this level	Required minimum ATPV (Cal/cm ²) as per EN	Workwear	Other PPE
HRC 1	FR shirt (T-shirt Short sleeve worn inside Long sleeve shirt) and FR pants; or coveralls; (Single base layer of FR protection)	4	 <p>ARC T-SHIRT SS&LS</p> <p>ARC SHIRT ARC DENIM JEAN</p> <p>ARC 2 PIECE CONTI-SUIT</p>	 <p>ARC LEATHER GLOVES</p> <p>ARC VISOR *(must wear with Balaclava)</p> <p>ARC BALACLAVA</p>
HRC 2	FR under garments (undershirt, underwear), FR shirt and FR pants; or FR coveralls; (2 or more layers of FR protection)	8	 <p>ARC PADDED JACKET</p> <p>ARC BOXER SHORT</p> <p>ARC SHIRT ARC DENIM JEAN</p> <p>ARC 2 PIECE CONTI-SUIT</p>	 <p>ARC LEATHER GLOVES</p> <p>ARC VISOR *(must wear with Balaclava)</p> <p>ARC BALACLAVA</p> <p>ARC HARD HAT</p> <p>EARPLUGS</p>
HRC 3	FR under garments (undershirt, underwear), FR shirt, FR jacket, FR pants or FR coveralls; (2 -3 or more layers of FR protection)	25		 <p>ARC LEATHER GLOVES</p> <p>ARC VISOR *(must wear with Balaclava)</p> <p>ARC BALACLAVA</p> <p>ARC HARD HAT</p> <p>EARPLUGS</p>
HRC 4	(Undershirt, underwear), FR shirt, FR jacket/coat, FR pants or FR coveralls; (3-4 or more layers of FR protection)	40	 <p>ARC BIB & BRACE AND HOOD WITH VISOR</p>	 <p>ARC LEATHER GLOVES</p> <p>EARPLUGS</p>