



## 9.9 CAL ARC T-SHIRT UNDERGARMENTS



DW-ARC9.9-SST



DW-ARC9.9-LST

### Description

The Dromex® Arc 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.

Dromex® Arc garments are manufactured with our exclusive Dromex® A.P.T™ (Arc Protective Technologies) fabric blend, which has been carefully developed by our team along with industry experts and professionals to ensure specialised Arc safety and global standards are met.

Our Dromex® A.P.T™ fabric and garments have been tested to NFPA, ASTM, EN, SABS and IEC standards.

This attire consists of the following:

- Seams are double-sided cover stitched for added durability.
- The round neck design provides additional protection on the neck.
- The long sleeve t-shirt features a flame retardant knitted cuff providing a great seal when used with gloves and prevents sleeves from rolling upwards.
- Left chest with Dromex® Arc heat transfer print and ATPV 12.4 cal/cm<sup>2</sup> embroidery for garment identification.

Dromex® 9.9 cal/cm<sup>2</sup> short-sleeves shirts must only be worn as an undergarment.

These garments are commonly used in the following industries:

- Automotive
- Construction
- Mining
- Petroleum
- Utilities and Power Generators
- Data centres
- High volume manufacturing
- Substations and switchrooms

Dromex® A.P.T™ fabrics are self-extinguishing, heat resistant and resistant to ignition. Dromex® Arc garments are sewn with inherent flame retardant thread.

### Special Instructions

Note: 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.

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 t-shirts 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 t-shirts should be thoroughly inspected before use to ensure no damage is present.

### Specifications

**Style:** Round neck navy blue, short sleeve and long sleeve t-shirts.  
**Fabric composition:** 88% Cotton 12% Nylon.  
**Mass:** 203gsm.  
**Thread:** Flame retardant.  
**Additional:** Arc clothing must be worn with additional and correctly selected Arc PPE to ensure complete protection against the hazards of Arc Flash. Refer to table "Arc Flash PPE Categories" for further compatible PPE.

### Sizes Available

Short sleeve design: DW-ARC9.9-SST : S-3XL.

Long sleeve design: DW-ARC9.9-LST : S-3XL.

### Nominal measurements of finished garment (cm)

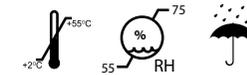
Size designation	Chest	Back length	Sleeve overarm excl.cuffs	Neck rib opening	Neck rib width	Shoulders	Cuff opening	Cuff width	Sleeve opening
S	98	72	60	44	2.5	14.3	18	5.5	36
M	106	74	61	44	2.5	14.9	18	5.5	38
L	114	76	62	44	2.5	15.9	19.5	5.5	40
XL	122	78	63	44	2.5	16.9	19.5	5.5	42
2XL	130	80	64	44	2.5	17.9	21	5.5	44
3XL	138	82	65	44	2.5	18.9	21	5.5	46
4XL	146	84	66	44	2.5	19.9	21.5	5.5	48
5XL	154	86	67	44	2.5	20.9	21.5	5.5	50

### Packaging, Storage & Obsolescence

DW-ARC9.9-SST and DW-ARC9.9-LST are packed in a resealable polybag and sold individually.

Inspect all Arc PPE prior to use and do not use garments that are damaged (such as tears or burn holes) or dirty as the level of protection may be reduced.

The level of protection may also be reduced if you do not carefully follow the wash care instructions on the label. If exposed to an Arc Flash incident, the garment must be replaced immediately.



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## 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.
- NFPA 70E - Standard for electrical safety clothing for employees.
- 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.

## Cleaning & Maintenance

Dromex® A.P.T™ Garments can be cleaned by home or commercial laundry or by dry cleaning procedures without loss of their protective features. The following suggestions will help keep your garment safe and neat. Should home procedures not remove contaminants, commercial laundering or dry-cleaning is recommended:

- Launder 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 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 sunlight as fading and may occur.
- When using commercial laundry aids, be sure to carefully follow the manufacturer's instructions.

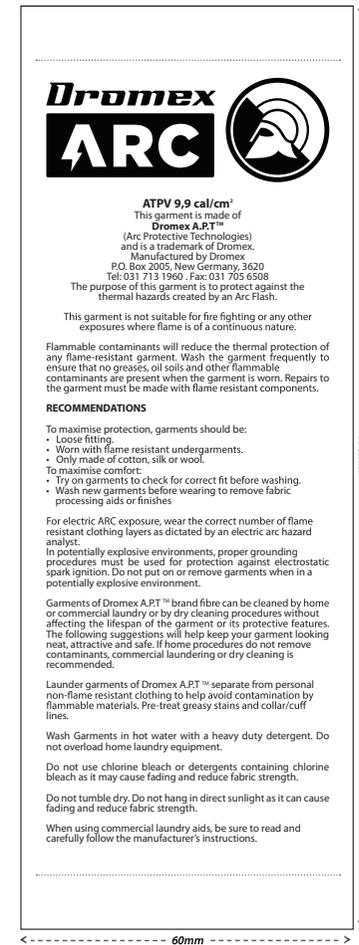


## Disposal

All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Please consider recycling.

## Marking

### TYVEK ATPV LOOP FOLD CARE LABEL



Position:  
Left side seam (Above hem, inside garment)

### MAIN ARC HEAT TRANSFER PRINT



Position:  
Neck (Inside)

### ARC HEAT TRANSFER PRINT



Position:  
Chest - Left hand side

### EMBROIDERY (WHITE THREAD)



Position:  
Chest - Left hand side  
(Below print)

### DROMEX ARC BOOKLET



Position:  
Tag attached inside garment

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**Arc Flash PPE Categories**

Hazard/Risk Category	Required minimum ATPV (Cal/cm <sup>2</sup> ) as per EN	Workwear	Other PPE
<p>HRC 1</p> 	<p>4</p>	 <p>ARC T-SHIRT SS      ARC BOXER SHORT</p>  <p>ARC T-SHIRT LS      ARC SHIRTS &amp; DENIM JEANS      ARC DUST COAT      ARC POSEIDON BOILERSUIT      ARC X BIB      ARC 2 PIECE CONTI-SUIT      ARC BOILERSUIT</p>	 <p>ARC LEATHER GLOVES      ARC VISOR *(must wear with Balaclava)      BSD ARC ERGOS INTEC      ARC BALACLAVA      EARPLUGS      ARC BLANKET</p>
<p>HRC 2</p> 	<p>8</p>	 <p>ARC T-SHIRT LS      ARC SHIRTS &amp; DENIM JEANS      ARC DUST COAT      ARC POSEIDON BOILERSUIT      ARC X BIB      ARC 2 PIECE CONTI-SUIT      ARC BOILERSUIT</p>	 <p>ARC SWITCHING MITT GLOVES      DIPPED ARC GLOVES      ARC SWITCHING GLOVES      ARC HARD HAT      ARC ANKLE SAFETY BOOTS</p>
<p>HRC 3</p> 	<p>25</p>	 <p>ARC SUIT      ARC PADDED JACKET</p>	 <p>EARPLUGS      ARC BLANKET      ARC LEATHER GLOVES      ARC HARD HAT      ARC ANKLE SAFETY BOOTS      ARC SWITCHING MITT GLOVES      ARC SWITCHING GLOVES      ARC VISOR *(must wear with Balaclava)      BSD ARC ERGOS INTEC      ARC BALACLAVA</p>
<p>HRC 4</p> 	<p>40</p>	 <p>ARC PADDED JACKET      ARC BIB &amp; BRACE, JACKET AND HOOD WITH VISOR      ARC BIB &amp; BRACE, JACKET AND HOOD WITH VISOR</p>	 <p>ARC SWITCHING MITT GLOVES      ARC SWITCHING GLOVES      ARC LEATHER GLOVES      ARC BLANKET      EARPLUGS      ARC ANKLE SAFETY BOOTS</p>

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