

# ERGOS PLUS ARC VISOR RANGE



# ARC ERGOS2/3 PLUS

## Description

The Dromex® BSD ErgoS Plus range of face shields, models numbers below, are designed for optimum face protection against the thermal and impact hazards of an arc flash incident.

- ErgoS 3 Plus 12 cal/cm<sup>2</sup> universal bracket attachment
- ErgoS 2 Plus 12 cal/cm<sup>2</sup> EU approved helmet slotted attachment
- ErgoS 2 Plus 26 cal/cm<sup>2</sup> EU approved helmet slotted attachment
- ErgoS 3 Plus 27 cal/cm<sup>2</sup> universal bracket attachment
- ErgoS 2 Plus 40 cal/ cm<sup>2</sup> Hook and Loop attachment (fits directly into the 50 cal arc hood configuration, not sold as an individual visor) \* refer to datasheet 55 Cal Arc Suit for more information
- ErgoS 2 Plus 100 cal/ cm<sup>2</sup> Hook and Loop attachment (fits directly into the 100 cal arc hood configuration, not sold as an individual visor) \* refer to datasheet 100 Cal Arc Suit for more information

The ErgoS Plus range features an extended single layer, clear length visor and transparent chin guard (not available in the 40 and 100 cal configuration due to hood integration design), which offers optimized weight balance and no time limit durability, making the ErgoS Plus visor, the ideal solution when used by electrical workers and electricians working in the vicinity of live parts or with high voltage connections. The 40 cal arc visor construction consists of two polycarbonate layers, whilst the 100 cal consists of three polcarbonate layers offering true vision technology.

The electricians face shield ErgoS Plus is fitted with a universal bracket for use with front brim arc protective hard hats only, according to EN 50365 or EN 397 standards.

This face shield is also available in an EU helmet slotted version, for compatibility with EN approved arc hard hats.

Because of its high arc protection level against thermal hazards, this face shield can be used at electrical installations with higher short circuit energy up to WLBP = 318 k J according to risk assessment pursuant German DGUV-I 203-077 and according to the guidelines IEEE 1584 and NFPA 70E. The ErgoS Plus face shield provides protection against molten metals and hot solids hazards, that is tested to EN 166 as follows:

#### Test 1:

Tested with molten grey cast iron at temperatures of 1450°C. Tested with molten aluminium at temperatures of 750°C. To pass the test no metal should stick to the surface.

## Test 2:

Tested against complete penetration by hot solids, with a hot steel ball (temperature of 900°C, diameter of 6 mm) placed on the surface of the visor. This test passes when the steel ball does not penetrate through the full visor before 7 seconds.

These tests are threshold values and does not determine any maximum temperature the visor can withstand, due to application and environments. It is recommended to trial this visor before use for hazards of molten metal and hot solids.

## **Special Instructions**

No protection is given unless the visor is correctly fitted and in the lowered position. None of the materials used in the manufacture of the face shield are known to adversely affect user hygiene or health.

Susceptible individuals may experience an allergic reaction to parts of the face shield that encounter the wearer's skin. In this event, leave the hazard area, remove the face shield and seek medical advice. The visor can be raised or lowered as required by loosening the two side pivot nuts.

These face shields are suitable for use to the lowest marking on the bow guard or the visor. Do not use if items appear damaged or parts are missing. Users must importantly note the dangers of modifying or removing any of the original component parts of the face shield, other than as recommended by the faceshield manufacturer.

Shields should not be adapted for the purpose of fitting attachments in any way not recommended by the face shield manufacturer. Do not apply paint, solvents, adhesives or self-adhesive labels, except in accordance with the instructions of the face shield manufacturer.

# **Compliancy & Conformity**

Meets the essential requirements according to PPE Regulation (EU) 2016/425 and approved to the standards:

- EN166:2001
- DIN EN 170: 2002
- E DIN 58118: 2011
- DGUV GS-ET-29: 2011
- ASTM F2178
- ANSI/ ISEA Z.87.1-2010

# Specifications

Style:

Lens: Minimum robustness: Colour rendering index: Resistance to ultraviolet radiation (oculars only): Resistance to corrosion: Resistance to ignition: High speed particles @ medium energy impact: Visor carrier, with visor and intergrated chin and edge face protection, available with either a headband or helmet slotted adaptor for front brim hard hat attachments Special coating polycarbonate Ø22mm steel ball @100±2N > 95 %

Luminous transmittance NA: 43 % No corrosion (8ofEN168) No Ignition (7ofEN168)

B - Ø6mm steel ball (0.86g) @ 120(+3 -0) m/s

**Optical Class:** 

Lateral vision: Compatibility: Other tests and approvals: 1 - Refractive power (S±0.06, A0.06 Δprismatic, BO 0.75, BI 0.75, V 0.25) 180° Other Dromex PPE 8 ~Short circuit electric arc 3 ~Protection against splashes of liquids 9 ~Protection against molten metals and hot solids.

# Packaging, Storage & Obsolescence

 $\mathsf{Dromex}^{\ast}$  part numbers below are packed individually in a protective bag marked with the item information:

- ARC ERGOS3 12
- ARC ERGOS2 12-EU
- ARC ERGOS2 26-EU
- ARC ERGOS3 27

Dromex<sup>®</sup> part numbers below are sold integrated into Dromex Arc flash hoods:

- DH-ARC55-SH (ARC ERGOS 2PLUS 40 CAL ARC VISOR IN SWITCHING HOOD)
- DH-ARC55-SHV (ARC ERGOS 2PLUS 40 CAL ARC VISOR IN SWITCHING HOOD WITH VENTILATION)
- OH-ARC100-SHV (ARC ERGOS 2PLUS 100 CAL ARC VISOR IN SWITCHING HOOD WITH VENTILATION)

When not in use or during transportation the visor must be stored in the protective visor bag provided, protecting the visor from damage, scratching and direct sunlight.

Plastic materials are subject to natural ageing. Frequent use and direct solar radiation can cause accelerated aging of plastics, should the face shield show indications of aging, the face shield should be removed from service and replaced.

Face shields should be inspected for mechanical damage and cracks before they are used.

Should the visor be cracked or show mechanical damage, the face shield should not be used.

The most common defects are normally caused by small scratches to the visor. The radiation technology used by the BSD face shield will remain effective, and the protection level will not be influenced, even if small scratches are visible on the visor surface. This was proven during tests performed in accordance with the requirements of DGUV GS-ET-29, Class 2, where the scratched visor had no influence on the protection level provided by the face shield.

# **Cleaning & Maintenance**

Rinse with mild detergent in clean water & air dry to avoid scratching. Common disinfectants can be used.

# Shelf life

Disclaime

There is no time limitation on the visors (lenses).

## Dromex: 30 Umganu Road, Flanders, Blackburn Cornubia Ridge Logistics Park, Kwazulu-Natal, 4319, South Africa T. +27(31) 713 1960 E. info@dromex.co.za www.dromex.co.za

Latest update: 16/04/2024



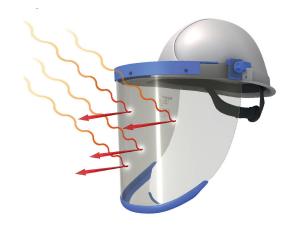
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#### **Dromex BSD Realview visor technology**

#### Features protection by reflection:

• The special coating technology of the polycarbonate carrier provides unique optical properties and reflects thermal radiation due to the non-tinted visor which provides realistic colour reproduction > 95% reduced.

• During daily use there is no absorption of light components by the visor, therefore there is no optical aging of the visor resulting in a long life span (no weed criteria).



#### **Other brand visors**

#### Features protection by absorption:

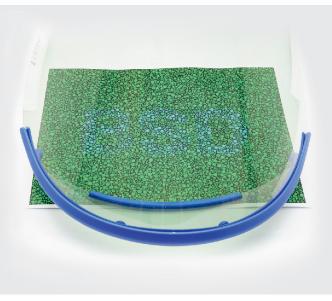
 Polycarbonate lenses working with absorption principles are mixed with special colour additives (yellow or green colours) that absorb the thermal radiation (IR and UV) producing a colour rendering index which is significantly reduced.

• Daily sunlight and ambient light are constantly absorbed and stored by the visor, resulting in the visor aging and replacement of visors.

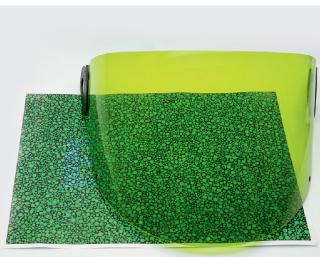


#### Visor colour reproduction illustration

#### Dromex BSD visor



#### Other brand visors



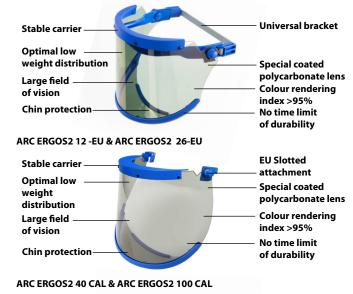
So why use a Face shield from Dromex?

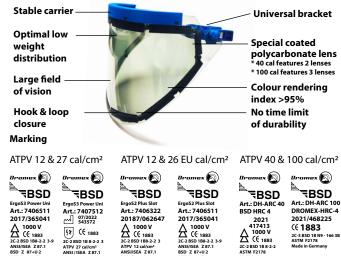
- Work safer
- Because of real view of the workplace environment
- Save money

Because of long life use of the visor.









# Made in Germany

Disclaime

ATPV 12.0 cal/cm

BSD Z 87 + U6 CSA Z94.3 BSD 2.0

All industrial waste should be disposed of correctly per local regulations and good disposal practice. Facial protective devices should be disposed of considering the hazardous substances they were used for. Please consider recycling.

BSD Z 87+U 2

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ATPV 26 cal/cm

Made in Germany

Latest update: 16/04/2024

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