



CE 1883

EN-166; EN 170; GS-ET-29;
(PS90, PS91)

NFPA 70E, ASTM F2178
(PS91)

MANUFACTURERS ADDRESS :

Portwest Limited, Westport, Co Mayo, Ireland

NAME & ADDRESS OF THE NOTIFIED BODY HAVING ISSUE EC CERTIFICATE:

EC5 GMBH-EUROPEAN CERTIFICATION SERVICE

Augenschutz und Persönliche Schutzausrüstung, Laserschutz und Optische Messtechnik,

Hüttfeldstraße 50, 73430 Aalen, Germany

1883: ID NUMBER OF NOTIFIED BODY

EN | USER INFORMATION ARC FLASH FACE SHIELDS - MODELS: PS90, PS91

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INTRODUCTION

With the PORTWEST Arc Flash Face shields you have purchased a Personal Protective Equipment (PPE) minimizing the effects of an arc flash accident (electrical fault arc) to your eyes and face, when correctly selected and used. To be properly protected you must carefully study this manual before use!

1. GENERAL WARNINGS

Use by skilled persons as per your Hazard in Risk Analysis only. Free head movement and personal view may be affected. Do not over expose to sunlight. Do not use for welding.

Do not expose to open fire for long periods of time. Surface may get hot when exposed to electromagnetic radiation. Replace when exposed to chemicals, oils and lubes. Replace if damaged by mechanical impact. Only use as a kit. Only use original replacement parts. Make sure that your work place is sufficiently illuminated. Insufficient packing may decrease the level of protection. Thus, follow the instructions as per Chapter 8 'Storing'.

The following warnings are standard warnings as per EN 166:

Material which may come into contact with the wearer's skin could cause allergic reactions to susceptible individuals. (REMARK: PORTWEST carefully selects the materials and is not aware of any allergic reaction so far.)

The PORTWEST Arc Flash Face shields protect against high speed particles. When worn over standard ophthalmic spectacles, they may transmit impacts, thus creating a hazard to the wearer. The protector shall only be used against high speed particles at room temperature. The protector shall only be used against high speed particles at room temperature.

2. FIELD OF APPLICATION

The PORTWEST Arc Flash Face shields, together with additional PPE appropriate for the afore determined level of protection, protects the qualified user during live working or when staying in the vicinity of live parts. The PORTWEST Arc Flash Face shields provide safety to eyes and face only, if used as intended. Do not use the PORTWEST Arc Flash Face shields for electric arc welding and do not use / store them close to arc welding work.

The PORTWEST Arc Flash Face shields only provides protection for eyes and face against the thermal and mechanical hazards of an arc flash when completely assembled with all components and worn together with additional PPE appropriate to the determined level of protection

3. USAGE - GENERAL

Always check the PORTWEST Arc Flash Face shields assembly components before use. Make sure the PORTWEST Arc Flash Face shields is securely fastened to the cap bracket or headgear with the cam locks. Adjust the bracket to the cap, if necessary. NOTE: A headgear never can fully substitute a safety helmet. Due to national safety rules and company policies in some countries or companies the usage of a helmet is mandatory. For the same reason safety glasses may have to be worn underneath the visor.

NOTE: An arc flash / electrical fault arc of high incident energies may cause permanent impairment of sight or other serious personal injury. PPE - Personal Protective Equipment should be considered as the last barrier if everything else fails. Consider higher protective equipment to gain extra safety buffers in case a real accident generates more energy than originality calculated in the hazard and risk assessment. However, there should be no live working under conditions, which cannot be protected by Arc Protection Class 2 products. The PORTWEST Arc Flash Face shields described in this document are Class 1 (PS90) and Class 2 (PS91) products.

Despite of the fact that the PORTWEST Arc Flash Face shields can be fixed in any position, while working at live parts or in the vicinity of live parts (live working), the intended protection can be provided only, when the visor is securely fixed in the deployed position.

The operating temperature shall be between -5°C and 45°

NOTE: PORTWEST Arc Flash Face shields are designed to protect eyes and face against the mechanical and thermal hazards of an arc flash. However, it does not substitute prescription glasses, other eye & face PPE, respirator masks or further PPE required for sufficient protection as per the hazard and risk analysis and particular work safety regulations at a particular workplace. In some countries or companies the usage of face shields is only permitted in combination with safety glasses.

4. STANDARDS

Refer to the product label for detailed information on the corresponding standards. Only standards and icons that appear on both the product and the user information below are applicable. All these products comply with the requirements of Regulation (EU 2016/425).

PORTWEST Arc Flash Face shields are certified to EN 166:2001 & 170:2002, GS-ET-29:2011-05, (Class 1 Open-Box test at 135 kJ/m², ~ 3.2 cal/cm²) They are designed to meet ANSI Z87.1.

5. DESCRIPTION PS90 ARC FLASH VISOR CLASS 1

The PORTWEST Arc Flash Face shields PS90 are Arc Protection Class 1 and VLT Class 0 products as per GS-ET-29. They provide the maximum light transmittance and 'improved colour recognition' as per EN 170. At regular working conditions additional lighting may not be required. Nevertheless check your colour recognition before using this product under your particular working condition.

The PORTWEST Arc Flash Face shields PS90 Arc Flash Visor Class 1 consists of a face shield with a bracket for slotted caps.

5.1 CE MARKINGS

PS90 Arc Flash Visor Class 1 : 2C-1.2 PW 1 B 8-1-0 3 CE 1883

2: UV filter

C: Improved colour recognition

1.2: Shade number (> = 74,4% VLT)

PW: Manufacturer code (PORTWEST Ltd)

1: Optical class

B: Medium energy impact (high speed test; 6 mm steel ball at 120 m/s at room temperature)

8-1-0: Resistance to short circuit electrical arc, Arc Protection Class 1 (Open-Box Test),

Light Transmittance Class 0 (VLT > = 75 %) as per GS-ET-29

3: Protection against splashes of liquids

CE : CE Mark

1883: ID number of Notified Body

5.2. Assembly Instructions PS90 Arc Flash Visor Class 1

Mount the PORTWEST Arc Flash Face shields PS90 Arc Flash Visor Class 1 only to a helmet that is approved for arc flash protection at the maximum expected level. In case of any doubt, contact your helmet manufacturer. Tighten the pivot screws, so that the arc shield easily can be flapped up and down and securely rests in any position.

Installation for PS90 Arc Flash Visor Class 1

Insert the adapters (snap-in blades) of the PORTWEST Arc Flash Face shields cap bracket into the accessory slots at the sides of the helmet. There will be an audible click when the adapter is fully seated into the slot of the helmet

6. DESCRIPTION - PS91 Arc Flash Visor Class 2

Portwest PS91 Arc Flash Visor Class 2 are Arc Protection Class 2 and VLT Class 1 products as per GS-ET-29. They exceed the specification of the highest arc flash protection class according to GS-ET-29 and are designed to maximize colour perception and visible light transmittance. For a light transmittance of VLT class 1 as per GS-ET-29 an additional illumination may be required. Check your individual colour recognition in your working environment. Due to variations in working condition please evaluate the need for additional lighting (minimum illumination of 30 lux to be attained behind the PORTWEST Arc Shields) and check your colour recognition before using this product under the local illumination conditions. Some illuminations (e.g. LED lamps) may also change the colour recognition.

6.1 CE MARKINGS

PS91 Arc Flash Visor Class 2 : 2C-1.4 PW 1 B 8-2-1 3 CE 1883

2: UV filter

C: Improved Color Recognition

1.4: Shade number (74,4% > VLT > 58,1%)

PW: Manufacturer code (PORTWEST Ltd)

1: Optical class

B: Medium Energy Impact (increased robustness (S) + high speed steel ball test at 120 m/s passed)

8: Resistance to short circuit electrical arc

2: Class 2 Open-Box test passed at 423 kJ/m² ~ 10,1 cal/cm² as per GS-ET-29

1: Transmittance class 1 (50 % < VLT < 75 %) as per GS-ET-29

3: Protection against splashes of liquids

CE CE Mark

1883: ID number of Notified Body

7. CLEANING

Clean and inspect PORTWEST Arc Flash Face shields prior to each use. Clean with a damp cloth unless heavily soiled. Should further cleaning be required, clean with mild soap and water and pat dry. If necessary for cleaning and inspection, disassemble the PORTWEST Arc Flash Face shields from the helmet bracket or headgear and, depending on the product model, from the chin protector. Make sure that before usage all components are correctly re-assembled!

8. STORING

For best results store the PORTWEST Arc Flash Face shields in a protective bag as used PORTWEST as original packaging. (NOTE: Various other packing materials are containing solvents which may decrease the level of protection.) Store out of sunlight in a clean, dry environment. The storage temperature shall be between 0°C and 35°C. Do not expose to any arc welding operation.

9. MAINTENANCE, REPAIR AND REPLACEMENT

PORTWEST Arc Flash Face shields must be replaced if:

They are scratched or damaged

They have been exposed to an arc flash

They have been exposed to chemicals, oils or lubes

They are damaged by mechanical impact

They have reached normal life span

They have been exposed to high heat or over exposed to sun light

They have been exposed to fire for long periods of time

ATTENTION: The protection for eyes and face against the thermal and mechanical hazards of an arc flash can only be provided by using Portwest original components.

SPARE PARTS: No spare parts available

10. INSPECTION CRITERIA AND DETERMINATION OF END OF USEFUL LIFE

Inspect and replace any damaged or worn components. Never re-use the PORTWEST Arc Flash Face shields if they have been in an arc flash incident or any replacement criteria delineated above is fulfilled. PORTWEST arc shield is made from high quality materials and by leading manufacturing processes and designed for long term use (5 years). Nevertheless, like any other product made from plastic or plastic alloys it suffers from typical combinations of daily work factors, such as UV radiation, contact with oil and lubes, scratches and mechanical impacts like all plastic products. Therefore, PORTWEST recommends to replace the shield in case one of the replacement criteria listed in Chapter 8 is fulfilled. For reasons of safety, the user is requested to track the time of use and to consider a safe time for replacement. This is a general safety recommendation and independent to the arc protective technology.

11. HAZARDS ASSESSMENT

In order to select appropriate eye and face protecting devices, a hazard and risk analysis shall be carried out by well-trained experts and the eye, face and/or head protector never shall be used in environments with a higher risk rating than the protection rating indicated on the marking. According to this Hazard Risk Assessment, PORTWEST Arc Flash Face shields shall be combined with further arc flash protective PPE such as helmets, garments, gloves, etc. Inappropriate usage, e.g. at higher arc exposures, may cause severe damages to the life and health of the user.

12. LIMITATIONS - WARNING

Failure to follow these instructions can result in a permanent impairment of sight or other serious personal injury.

Download declaration of conformity @ www.portwest.com/declarations