

● INDIVIDUAL EYE PROTECTION

Referring to all individual eye protectors used against different dangers which can harm them or altering their vision. X-ray, laser emissions and infrared rays emitted by low temperature sources are excluded

Protection against impacts that vary in intensity, optical radiation, melted metals and hot solids, drops and splashes, dust, gases, electric arcs from short circuits, or any combination of these hazards.

Eye and face protectors for general use are of **Category II**. Eye protectors intended for a basic or general use protect against nonspecific mechanical hazards. They must comply with the **basic requirements** of regulation EN 166.

One of these requirements is strength. There is a minimum strength that only filters and lenses with filtering effect must meet. The remainder of protectors must have an **enhanced strength**, which is represented by the S symbol placed on lenses and frame.

Range of use of protectors with enhanced strength must withstand the impact of a steel ball of 22 mm to 5.1 m/s. However, if the risk relates to an impact of high speed particles, the corresponding range of use must be selected.

TYPES:

- **Safety glasses with or without side shields:** lenses attached to / on frame with arm.
- **Integral frame safety glasses:** tightly enclose the orbital area and in contact with the face.
- **Face shield:** Protects eyes and the face partially or totally or other areas of the head.

MARKINGS ON THE LENS:

Risks associated with radiation

Optical Quality

- 1: Continuous work.
- 2: Intermittent work.
- 3: Occasional work with prohibition to permanently wear them.

Mechanical Hazards:

- Without symbol: minimal mechanical resistance.
- F: Resistance to low energy impact at 45m/s.
- B: Resistance to medium energy impact at 120m/s.
- A: Resistance to high energy impact at 190m/s.
- T: Resistance to high speed particles and extreme temperatures.

Electrical Hazards:

- 8: Resistance to short circuit electric arch.

Thermic Hazards:

- 9: Non-adherence to melted metal and resistance to penetration from red hot solids.

Coatings (optional check):

- K: Resistance to superficial damage caused by thin particles, anti-scratch coated.
- N: Resistance to fog.

MARKINGS ON THE FRAME:

Chemical Hazards:

- 3: Resistance to drops or liquid splashes.
- 4: Resistance thick dust particles greater than 5 microns.
- 5: Resistance to gas and thin dust particles of less than 5 microns.

Electrical Hazards:

- 8: Resistance to short circuit electric arch.

Mechanical Hazards

(when the mechanical strength is not equal for lens and frame, the lowest level for the entire protector will be taken):

- F: Resistance to low energy impact at 45m / s.
Valid for all types of protectors.
- B: Resistance to medium energy impact at 120 m / s.
Only valid for full frame safety glasses and face shields.
- A: Resistance to high energy impact at 190m /s. Only valid for face shields.
- T: Resistance to impact of high speed particles and extreme temperatures.

Thermic Hazards:

- 9: Non-adherence to melted metal and resistance to the penetration of red hot solids.