

TECHNICAL DATASHEET

3M™ Protective Visors – V4 Series

Description

The 3M™ Protective Visor V4 Series is a range of helmet mounted visors designed to meet the requirements of a range of Industrial applications. The range includes a selection of materials and shades offering protection from various optical hazards, chemical splashes and flying particles.

Product Range

V4D or V4DK: Acetate Visor
 VE or V4EK: Tinted Polycarbonate Visor
 V4F or V4FK: Clear Polycarbonate Visor
 V4H or V4HK: Clear Polycarbonate Visor
 V4KK: Large Clear Polycarbonate Visor
 K suffix indicates peak free versions.

Typical Applications

- General Industry
- Construction
- Chemical Handling, Laboratory
- Electrical Industry (4H and 4KK)

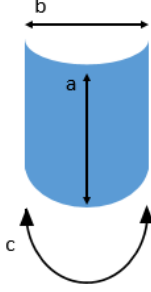
Key Features

The 3M™ Protective Visor V4 Series features a range of different visor specifications to suit a wide range of applications and tasks. The range features the same connection mechanism for attachment to 3M™ Industrial Safety Helmets.

All visors in the range are approved for protection against low energy impacts from high speed particles.

The 3M™ V4KK has additionally been tested in accordance with the requirements of GS-ET-29:2010 for Protective visors for electrical working and has been shown to meet the requirements for a Class 1 (4kA) visor.

Size



| | Model | Dimension (mm) | | |
|--|-------|----------------|-----|-----|
| | | a | b | c |
| | V4D | 181 | 210 | 330 |
| | V4E | 181 | 210 | 330 |
| | V4F | 181 | 210 | 330 |
| | V4H | 181 | 210 | 330 |
| | V4KK | 247 | 210 | 455 |

Materials

Face shields: As above

Frame and linkage: Polypropylene, Polyamide

Standards and Approvals

The 3M™ Protective Visor V4 Series meets the requirements of the PPE Directive (89/686/EEC) and are thus CE marked. The products have been examined by INSPEC International, Leslie Hough Way, Salford, Greater Manchester, M6 6AJ, UK (Notified Body number 0196) and FIOH, Finnish Institute of Occupational Health, Topeliuksenkatu 41 a A, FI-00250, Helsinki, Finland (Notified Body number 0403). The 3M™ Visors V4D, V4E, V4F and V4H have been tested and approved in accordance with EN166:1995. The 3M™ Visor V4KK has been tested and approved in accordance with EN166:2001.

Performance

The table below summarises the 3M™ V4 Series Protective Visor specifications according to EN166.

| | Filtering Performance | Optical Clarity | Impact Performance | Fields of use |
|------|-----------------------|-----------------|--------------------|---------------|
| V4D | | 2 | F | |
| V4E | 5-2 | 1 | F | |
| V4F | | 1 | F | |
| V4H | 3-1.2 | 1 | F | 8,9 |
| V4KK | 2C-1.2 | 1 | F | 8,9 |

Filtering Performance:

5-2 = Sunglare filter without IR filtration in accordance with EN172:1994 for outdoor use. Shade 2.

3-1.2 = UV filter with good colour recognition (EN166:1995), shade 1.2

2C-1.2 = UV filter with good colour recognition (EN166:2001), Shade 1.2

Optical Clarity:

The allowable variation in refractive powers for oculars is assessed during certification of the product. Class 1 is the highest performance class for optical clarity.

Impact Performance:

All visors in the 3M™ V4 Protective Visor series meet the requirement for protection against high speed particles for low energy impacts, marked F (45m/s).

Fields of use:

The 3M™ V4H and V4KK Visors additionally meet the optional requirements for protection against short circuit electric arc (8) and protection against splashes of molten metal and hot solids (9).

Use Limitations

Where the visor and frame markings do not match the lowest level of protection applies. Scratched or damaged oculars should be replaced

Eye-protectors against high speed particles worn over standard ophthalmic spectacles may transmit impacts, thus creating a hazard to the wearer. Do not use this product against

hazards other than those specified in this document.

Never modify or alter this product.

Please contact 3M for further information on alternative or additional protection requirements.

Compatibility

The 3M™ Protective Visors V4 Series are designed to be used with 3M™ Industrial Safety helmets.

Connection to the safety helmet can be easily achieved via a P3E earmuff adaptor or a P3EV/2 visor attachment if hearing protection is not required.

Storage

Temperature range for use and storage: +3° C - +40° C, <85% humidity

Maximum recommended shelf life: 5 years.

Spare Parts

4D, replacement face shield

4E, replacement face shield

4F, replacement face shield

4H, replacement face shield

4K, replacement face shield

V43, face shield holder with peak

V46, face shield holder without peak

V412, linkage kit

P3EV/2 Visor attachments

Important Notice

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use.

Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.