

3M™ 4-series Clear Protective Faceshields

Technical datasheet



Product description

The 3M™ 4-series Clear Protective Faceshields are a range of helmet and earmuff mounted, clear solid plastic faceshields designed to meet the requirements in various industrial applications. The range includes a selection of materials and sizes offering protection from various optical hazards, liquid splashes and flying particles.

Product range

4D: Acetate Faceshield

4F: Polycarbonate Faceshield

4H: Polycarbonate Faceshield

4KK: Polycarbonate Faceshield

3M™ V43: Faceshield Holder with peak

3M™ V46: Faceshield Holder without peak

3M™ V40: Faceshield Holder

3M™ Industrial Safety Helmets

3M™ PELTOR™ over-the-head Earmuffs

P3E: Attachment adaptor

Preassembled combinations with the following product designation are offered:

Visor model	3M™ Safety Helmets G22, G2000, G3000, H700		3M™ PELTOR™ Earmuffs H510, H520, H540, H31
	V43	V46	V40
4D	V4D	V4DK	V40D
4F	V4F	V4FK	V40F
4H	V4H	V4HK	N/A
4KK	N/A	V4KK	N/A

Typical applications

- ▶ General industry
- ▶ Chemical industry
- ▶ Construction
- ▶ Metal working

Key features

- ▶ The 3M™ 4-series clear protective faceshields are designed to be used with a wide range of 3M™ Safety Helmets
- ▶ 3M™ 4-series faceshield holders are available with and without peak, V43 and V46 respectively, offering the flexibility to choose between coverage from the environment (sun glare, rain) or upward visibility
- ▶ 3M™ V40 faceshield holder allows attachment of the faceshields directly with 3M™ PELTOR™ earmuffs without the need for head protection

Size (mm)

Diagram	Model	Dimension		
		A	B	C
	4D	181	210	330
	4F	181	210	330
	4H	181	210	330
	4KK	247	210	455

Model	Thickness	Weight
4D	1.0mm	84g
4F	1.0mm	70g
4H	1.2mm	83g
4KK	1.5mm	162g

Materials

Component	Material
Faceshields	As above
Faceshield holder	Polyamide

Performance

The table below summarises the 3M™ 4-series Clear Protective Faceshield specifications according to EN 166:2001.

Model	Filtering performance	Optical clarity	Impact performance	Fields of use	Optical requirements
4D		2	F		
4F		1	F		
4H	2C-1.2	1	F	9	
4KK	2C-1.2	1	F	9	

Filtering performance:

2C-1.2 = UV filter with good colour recognition, 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 faceshields in the 3M™ 4-series Clear Protective Faceshield series meet the requirement for protection against high speed particles for low energy impacts, marked F (45m/s).

Fields of use:

The 3M™ 4H and 4KK Faceshields additionally meet the optional requirements for protection against splashes of molten metal and hot solids (9).

Standards and approvals

The 3M™ 4-series Clear Protective Faceshields meet the requirements of the PPE Regulation (EU) 2016/425 and are thus CE marked. The products have been examined by DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Alboinstrasse 56, 12103 Berlin, Germany (Notified body number 0196). The 3M™ 4-series Clear Protective Faceshields have been tested and approved in accordance with EN 166:2001.

Use limitations

- ▶ Where the faceshield 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™ 4-series Clear Protective Faceshields are designed to be used with 3M™ Industrial Safety helmets. Please ensure that the combination of faceshield, faceshield holder and safety helmet is CE certified.

Connection to the safety helmet can be easily achieved via a P3E earmuff or a P3E faceshield adaptor if hearing protection is not required.

Use and storage

Recommended storage conditions	+3° C – +40° C, <85% humidity
Maximum recommended product life	Up to 5 years from date of manufacture*

* The product life as defined is indicative data. The product life is subject to many external and non-controllable factors and should not be interpreted as a warranty.