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3M[™] 4-series Mesh Protective Faceshields

Technical datasheet



Product description

The 3M™ 4-series Mesh Protective Faceshields is a range of helmet and earmuff mounted faceshields designed to meet the requirements of Forestry and Arboriculture applications. The range includes a selection of lightweight and robust faceshields offering protection from flying wood chips and large particles.

Product range

4G: Steel Mesh Faceshield

4B: Polyamide Mesh Faceshield

4C: Stainless Steel Faceshield

4J: Etched Metal Faceshield

3M™ V43: Faceshield Holder with peak

3M™ V46: Faceshield Holder without peak

3M™ V40: Faceshield Holder

 $3M^{\scriptscriptstyle\mathsf{TM}}$ 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	
4G	V4G	V4GK	V40G	
4B	V4B	V4BK	N/A	
4C	V4C	V4CK	V40C	
4J	V4J	V4JK	N/A	

Typical applications

- Forestry
- Arboriculture
- ► Facilities maintenance

Key features

- > 3M™ Mesh Faceshields offer eye and face protection from flying wood chips and large particles, whilst allowing fog-free vision and increased ventilation* when working in difficult outdoor conditions
- 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
- The 3M™ 4C and 4J Mesh Faceshields are constructed from materials selected for hard working environments
- The 3M™ 4J offers good visibility with low light reduction in the main viewing area whilst maintaining protection for the face

Size (mm)

ь:	Model	Dimension		
Diagram		Α	В	С
В	4G	161	210	306
(A)	4B	161	210	306
	4C	161	210	306
0	4J	161	210	306

^{*}Compared to solid plastic faceshields

Mesh types



4G: Steel Mesh

Aperture: 1.8mm x 1.8mm Wire Diameter: 0.3mm o.d. Light Reduction: 35%



4B: Polyamide Plastic Mesh

Aperture: 1.0mm x 1.0mm Wire Diameter: 0.3mm o.d. Light Reduction: 45%



4C: Stainless Steel Mesh

Aperture: 1.8mm x 2.5mm Wire Diameter: 0.2mm o.d. Light Reduction: 25%



4J: Etched Metal Mesh (viewing area)

Aperture: 4.0mm x 1.5mm hex Faceshield thickness: 0.15mm

Light Reduction: 18%

The 4J faceshield is designed in 3 zones with different aperture sizes. Light reduction increases away from the viewing area as the aperture size decreases:

Zone 2: 28% light reduction, 3.8mm x 1.4mm Zone 3: 37% light reduction, 3.7mm x 1.3mm

Materials

Component	Material		
Faceshields	As above		
Faceshield frame and holder	Polypropylene, polyamide		

Standards and approvals

The 3M™ 4-series Mesh 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). 3M™ 4-series Mesh Protective Faceshields have been tested and approved in accordance with EN 1731:2006.

Protection

These faceshields meet the requirements for Increased Robustness (S) in accordance with EN 1731:2006.

Use limitations

- Where the faceshield and frame markings do not match the lowest level of protection applies
- ► Faceshields marked 'S' should not be used for protection if there is a foreseeable risk from hard or sharp flying particles
- Mesh face shields do not provide protection against liquid splash (including molten metals), hot solids, electrical hazards, infrared or ultraviolet radiation
- Protective goggles must be worn when there is a risk of injury to the eyes by particles that may penetrate the face shield. Never modify or alter this product
- Please contact 3M for further information on alternative or additional protection requirements

Compatibility

The 3M[™] 4-series Mesh Faceshields are designed to be used with 3M[™] Industrial Safety helmets and 3M[™] PELTOR[™] Earmuffs.

The faceshield holders V43 and V46 are connected to the helmets through a 3M™ PELTOR™ earmuff or a 3M™ P3E adapter if hearing protection is not required. The faceshield holder V40 can be directly mounted to over-the-head earmuffs.

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