

# 3M™ SecureFit™ SF400 Series Safety Spectacles

## Technical Data Sheet

### Product Description

The 3M SF400 Series is an extension to the successful SecureFit range of protective eyewear. Each model in the SF400 series is comprised of a rimless lens and fixed-length temple arm. An integrated side-shield is included for added protection. The temples feature 3M™ Pressure Diffusion Temple Technology which helps diffuse pressure over the ear to enhance frame comfort across a diverse workforce. This innovative design promotes improved comfort and security of fit. Adjustable nose pads and soft-touch temple inlays provide increased comfort and improved grip.

The SF400 series also includes a selection of models with reader segment lenses to aid reading or precision work.

The 3M™ Scotchgard™ Anti-Fog (SGAF) coating has been added to some spectacles in the SF400 Series to give EN166 Anti-Fog (N) and Anti-Scratch (K) protection.

### Key Features

- Optical class 1 lens suitable for prolonged use
- Design provides excellent coverage and good field of vision
- Offers excellent protection against Ultraviolet (UV) radiation
- Lightweight design (19g)
- 3M™ Pressure Diffusion Temple Technology for secure and comfortable fit
- Adjustable nose pads for a personalised fit
- Soft-touch dual moulded temples for increased comfort and grip
- Reader lenses on selected models (+1.5, +2.0 and +2.5 diopters)
- 3M™ Scotchgard™ Anti-Fog (SGAF) coating on selected models to give EN166 Anti-Fog (N) and Anti-Scratch (K) protection.



### Product Range

Prod ID	Lens	Temple colours
SF401AF	Clear	black/green
SF402AF	Grey	black/green
SF403AF	Amber	black/green
SF410AS	I/O Mirror	black/green
SF408AS	Blue Mirror	black/green
SF415AF	Clear +1.5	black/green
SF420AF	Clear +2.0	black/green
SF425AF	Clear +2.5	black/green
SF401SGAF-RED	Clear	grey/red
SF401SGAF-BLU	Clear	grey/blue
SF401SGAF-BLU-F	Clear	grey/blue
SF402SGAF-BLU	Grey	grey/blue
SF407SGAF-BLU	I/O	grey/blue
SF403SGAF-YEL	Amber	black/yellow
SF405SGAF-BLA	Brown	brown transparent / black
SF406SGAF-BLA	Orange	brown transparent / black

## Typical Applications

These products may be suitable for use in a wide range of applications including:

- Construction
- Engineering
- General assembly
- Inspection work
- Light duty maintenance and repair

## Intended Use

These products are intended for protection against high speed particles at low energy (F) at extreme temperature conditions, -5°C and +55°C (T) in accordance with EN166:2001. They also protect against UV radiation in accordance with EN170:2002 (clear and amber lenses), and sun glare in accordance with EN172:1994 (grey, I/O and blue mirror lenses). A number of lens options are available for a variety of different applications:

- Clear - Good colour recognition and excellent UV protection
- Grey - Protection from sunglare
- Amber - Enhanced contrast in low light conditions
- Blue mirror - Protection from sunglare
- I/O mirror - Perfect for workers that move in and out of strong sunlight
- Reader Lenses - available in 3 powers of magnification: +1.5, +2.0 and +2.5 diopters to aid reading or precision work
- 3M™ Scotchgard™ – for added protection against fogging and scratching (EN166 Anti-Fog (N) and Anti-Scratch (K))

## Use Limitation

- Never modify or alter this product
- Do not use this product against hazards other than those specified in this document.
- These products are not suitable for grinding or welding
- These products are NOT designed to be worn over prescription spectacles.
- In accordance with EN166:2001 safety spectacles cannot be tested and approved for use against liquid droplets. Where liquid protection is specified a suitable product should be considered, for example safety goggles.

## Standards and Approval

This protective eyewear has been shown to meet the basic safety requirements under Article 10 of the European Community Directive 89/686/EEC and is thus CE marked.

These products have been examined at the design stage by ECS GmbH - European Certification Service, Huettfeldstrasse 50, 73430 Aalen, Germany (Notified Body number 1883).

These products are tested and CE approved against EN166:2001.

## Materials Listing

Component	Material
Lens	Polycarbonate
Temple Arm	Polycarbonate
Temple inlay	TPE
Temple Pin	Stainless steel
Weight	19g
Foam Insert:	
Brow	Nylon
Foam Insert	EVA Foam

## Marking

The products have demonstrated compliance with the requirements of EN 166:2001 and associated standards and bear the following marks:

Lens	Marking
Clear PC:	2C-1.2 3M 1 FT
Clear PC SGAF:	2C-1.2 3M 1 FT KN
Grey PC:	5-3.1 3M 1 FT
Grey PC SGAF:	5-3.1 3M 1 FT KN
Amber PC:	2C-1.2 3M 1 FT
Amber PC SGAF:	2C-1.2 3M 1 FT KN
Blue Mirror PC:	5-3.1 3M 1 FT
I/O Mirror PC:	5-1.7 3M 1 FT
I/O PC SGAF:	5-1.7 3M 1 FT KN
Brown PC SGAF:	5-2.5 3M 1 FT KN
Orange PC SGAF:	2-1.7 3M 1 FT KN
+1.5 Clear PC:	2C-1.2 3M 1 FT (+1.5 diopter reader lens)
+2.0 Clear PC:	2C-1.2 3M 1 FT (+2.0 diopter reader lens)
+2.5 Clear PC:	2C-1.2 3M 1 FT (+2.5 diopter reader lens)

## Frame marking

All variants SF400 Series	3M EN166 FT CE
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## Explanation of Marking

Marking	Description
2C-1.2 and 2-1.7 (EN 170:2002)	UV protection with good colour recognition (2C). This product conforms to the requirements of the standard, providing UV protection for the complete specified range (210nm – 365nm).
5-1.7, 5-2.5 and 5-3.1 (EN 172:1994 (as amended))	Sun-glare protection conforming to the requirements of the standard, providing UV protection for the complete specified range (280nm – 350nm).
1	Optical class 1 – suitable for all day wear
F	Impact protection against high speed particle at low energy (45m/s)
T	Tested for impact protection at extreme temperature conditions -5°C and +55°C
K	Resistance to surface damage by fine particles
N	Resistance to fogging
+1.5 +2.0 +2.5	Power of Magnification (Diopters)

## IMPORTANT NOTICE

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

For more information on 3M products and services please contact 3M.