

Eye protection

Eye protection



Introduction

Eye protection is a very personal product to all workers. It not only has to offer the highest possible protection but also maximum comfort with perfect fit. North has taken a lead in the market with models such as; The Edge & Tornado. North eyewear is state-of-the-art in design and performance, and included in this catalogue is a complete line of safety spectacles, RX safety spectacles, goggles and accessories. The complete product range satisfies all industries for most applications where protection is required.

EN Standards



EN166 Specifications for personal protective eyewear

EN167 Standard for optical test methods EN168 Standard for non-optical test methods

by application types

Standard for welding filters EN169 EN170 Standard for ultraviolet filters

Standard for solar protection filters for industrial use

Lens coating & material descriptions



anti-scratch

anti-static

All of North's protective eyewear is treated with a scratch resistant coating or North's exclusive 4A coating. The Anti-Fog treatment is applied on both sides of the lens.

- Scratch resistant coating
- · Permanently bonded to the lens
- · Very durable
- · Extends lens life
- Excellent optical quality
- · Resistant to a wide range of chemicals

4A+ coating is an unique lens treatment that will meet the additional EN166 standard K= scratch resistant & N= Anti-Fog features on both sides of the safety lens.

Marking frame & lens

- Increased robustness (22 mm steel ball weighing 43 gr. launched at a speed of 5.1 m/s)
- Resistance to low energy impact (6 mm steel ball launched at a speed not exceeding 45 m/s)
- Resistance to medium energy impact (6 mm steel ball launched at a speed not exceeding 120 m/s)
- Resistance to high energy impact (6 mm steel ball launched at a speed not exceeding 190 m/s)

Marking frame

- Protection against impact at extreme temperatures
- Frame is designed to fit a small head

Marking lens

- 2 UV-light filter
- 2C UV-light filter with good colour recognition
- 5 Solar protection filter

Additional markings

- 3 Protection against drops and splashes
- Protection against dust particles greater than 5 microns 4
- 5 Protection against dust particles less than 5 microns
- Protection against electric arc discharges caused by short-circuiting
- 9 Protection against molten metal and hot solids
- Κ Symbol for resistance to surface damage by particles
- Symbol for resistance to fogging

The marking must be visible on each component to comply with the standard EN 166.

- anti-static

Lens selection chart



Clear

For indoor and outdoor applications where impact protection is required.



Ambei

For low light applications where contrast enhancement is required







Smoke Blue mirror smoke Gold mirror smoke

For outdoor applications where sunlight and glare cause eye strain and fatigue



In/outdoor

Ideal for applications where work situations change from indoor to outdoor and visa versa and looking into artificial light at seilings like forklift truck drivers.

Material Properties

CR-39

- Polymer + Anti-Scratch
- Increased robustness: Class S
- Suitable for grinding, drilling and milling work
- · Chemical resistance

PC

- Polycarbonate
- · Medium energy impact: Class B
- Extremely suitable for heavy grinding, drilling and milling work
- · Limited chemical resistance

CP

- · Cellulose propionate
- Low energy impact: Class F
- Extremely suitable for work with chemicals, light grinding, drilling and milling work
- High chemical resistance

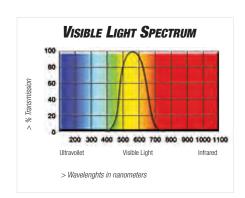
PETG

- Polyethylene Terephthalate Glycol
- Low energy impact: Class F
- Suitable for work with chemicals, light grinding, drilling and milling work
- · Recyclable product

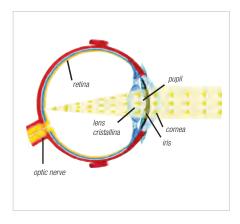
Toughened Glass

- Hardened mineral glass
- Increased robustness: Class S
- Suitable for grinding, drilling and milling work
- High chemical resistance

Spectrum



Effects on the eye related to the risks



Mechanical

hazards caused by impact of dust, metal or sand particles.

Consequences:

Lesion or perforation of the Cornea, laceration of the Iris, opacity/ cloudiness of the lens.

Chemical

risk caused by hazardous liquid substances like: solvents, spray, lime, cement, mortar.

Consequences:

burns or blurs of the Cornea (Conjunctivitis), viral infections.

High temperature

hazards caused by molten metals, flames or liquid at high temperatures.

Consequences:

burn of perforation of the Cornea, loss of the eye.

Electrical

hazards caused by direct contact or electrical arc by short circuit.

Consequences:

lesion of the Cornea, Retina or Lens, Burn of the Retina.

Bright radiations

hazards caused by Laser, Infrared, UV or Visible light.

Consequences:

lesion or burn of the Retina blurred Cornea.

Extreme Style

Tactile T2400













- Soft Nose Pad
- Soft Touch Straight Temples
- 8-base curved PC lens

Lens	Coating	Black frame	Marking
Clear	3A	908730	EN166 1F CE
Blue Mirror Smoke	3A	908731	5-3.1 EN166 1F CE
In/Outdoor	3A	908736	2-1.7 EN166 1F CE

Slimline T1300











- Soft Touch Straight Temples
- 8-base curved PC lens

Lens	Coating	Art. nr.	Marking
Clear	4A	906700	2C-1.2 EN166 1FT CE
Smoke	4A	906701	2C-3 / 5-3.1 EN166 1FT CE
Amber	4A	906702	2C-1.2 EN166 1FT CE
In/Outdoor	4A	906706	2C-1.7 EN166 1FT CE

Velocity T6100









- Curved Temples
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Marking
Clear	4A	906300	2-1,2 EN166 1F CE
Smoke	4A	906301	5-2,5 NN166 1F CE
Amber	4A	906302	2-1,2 EN166 1F CE
IR3.0	3A	906307	3 EN166 1F CE
ÌR5.0	3A	906308	5 EN166 1F CE

Extreme Style

Tornado T5700















- Lens Pivoting System
- Curved Extendable Temples
- 6-base curved PC lens

Lens	Coating	Black frame	Blue frame	Marking
Clear	4A	908100		2C-1.2 N166 1FT CE
Blue Mirror Smoke	3A		908105	2C-3 / 5-3.1 EN166 1FT CE
In/Outdoor	3A	908136		2C-1.7 EN166 1FT CE
Smoke	4A	908131		5-3.1 EN166 1F CE

Tornado T5800















- Lens Pivoting System
- Straight Temples
- 6-base curved PC lens

Lens	Coating	Black frame	Marking
Gold Mirror Smoke	3A	908201	2C-3 / 5-3.1 EN166 1FT CE
Amber	4A	908202	2C-1.2 EN166 1FT CE

Attractive Style

Lightning Metal











- Soft-touch adjustable temples for extra comfort
- Flexi-fit non slip nose piece
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Silver frame	Marking	
Clear	4A	908500	2C-1.2 EN166 1F CE	
Smoke	4A	908501	2C-3 / 5-3.1 EN166 1F CE	
Amber	4A	908502	2C-1.2 EN166 1F CE	
Replacemen	t nose piece	65RB		
RX insert		202600.0.4822		

Lightning HTA













- Extensible curved temples
- Flexi-fit non slip nose piece
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Repl. Lens	Marking
Clear	4A	908510	606190	2C-1.2 EN166 1F CE
Smoke	4A	908511	606191	2C-3 / 5-3.1 EN166 1F CE
Amber	4A	908512	606192	2C-1.2 EN166 1F CE
Replacemen	nt nose piece	65RB		
RX insert		202600.0.4822		

Attractive Style

Lightning T6500













- Bowed auto adjustable temples
- Flexi-fit non slip nose piece
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Repl. Lens	Marking
Clear	4A	906100	606190	2C-1.2 EN166 1F CE
Smoke	4A	906101	606191	2C-3 / 5-3.1 EN166 1F CE
Amber	4A	906102	606192	2-1.2 EN166 1F CE
In/outdoor	3A	906106	606196	2-1.7 EN166 1F CE
Replacemen	nt nose piece	65RB		
RX insert		202600.0.4822	2	

Lightning Plus















- Soft Touch Straight Temples
- Flexi-fit non slip nose piece
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Blue frame	Silver frame	Repl. Lens	Marking
Clear	4A	906200	906210	906230	606190	2C-1.2 EN166 1F CE
Smoke	4A	906201		906231	606191	2C-3 / 5-3.1 EN166 1F CE
Amber	4A	906202			606192	2C-1.2 EN166 1F CE
In/outdoor	3A	906206			606196	2C-1.7 EN166 1F CE
Replacemer	nt nose piece	65RB				
RX insert		202600.0.4822				

Attractive Style

N-Vision T5655













- Extensible Curved & Straight Temples enclosed
- Flexi-fit non slip nose piece
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Blue frame	Grey frame	Repl. Lens	Marking
Clear	4A	906600	906610	906640	606790	2-1.2 EN166 1F CE
Smoke	4A	906601			606791	5-3.1 EN166 1F CE
Amber	4A	906602			606792	2-1.2 EN166 1F CE
In/outdoor	3A	906606			493HRL	2-1.2 EN166 1F CE
Replacemen	t nose piece	65RB				
RX-Insert		202600.0.482	2			

The Edge T5600













- Extensible Curved & Straight Temples enclosed
- 8-base curved PC lens
- Integrated side shields

Lens	Coating	Black frame	Blue frame	Grey frame	Repl. Lens	Marking
Clear	4A	908320	908310	908300	608390	EN166 1F CE
Smoke	4A	908321	908311	908301	608391	5-3.1 EN166 1F CE
Amber	4A	908324		908304	608394	2-1.2 EN166 1F CE

High Performance

VX-7













- Lens Pivote System
- Temples and strap are included
- 6-base curved PC lens
- Soft pouch

Lens	Coating	Blue frame	Grey frame	Repl. lens	Marking
Clear	4A	908610	908640	608690	2-1,2 EN166 1FT CE
Blue mirror smoke	4A	90861B		60869B	5-3,1 EN166 1FT CE
Gold mirror smoke	4A		908649	608699	5-2,5 EN166 1FT CE
Amber	4A		908642	608692	2-1,2 EN166 1FT CE
In/outdoor	3A		90864A	60869A	2-1,7 EN166 1FT CE
IR3.0	3A		908647	608697	3 EN166 1FT CE
IR5.0	3A		908648	608698	5 EN166 1FT CE
RX Insert				208600.0.4822	<u> </u>

Flash T8800













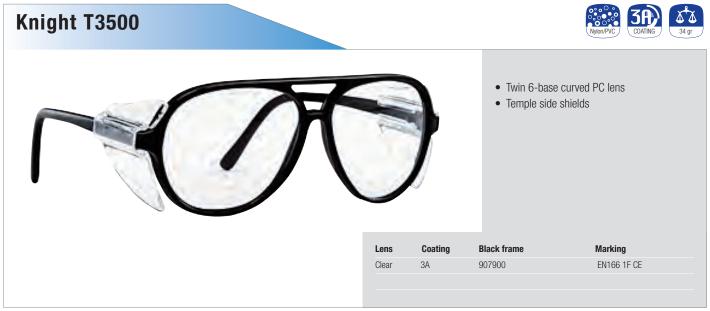
- Lens Pivote System
- Curved Extensable Temples
- Twin 6-base curved PC lens
- Integrated vented temple side shields
- Dust cover
- Two sizes

Lens	coating	Crystal frame	Green frame	Marking
Clear	4A	T88005 (58MM)		2C-1,2 EN166 1F CE
Clear	4A	T87005 (54MM)		2C-1,2 EN166 1F H CE
Green IR3.0	ЗА		T88015G3.0	3 EN166 1F CE
Green IR5.0	ЗА		T88015G5.0	5 EN166 1F CE

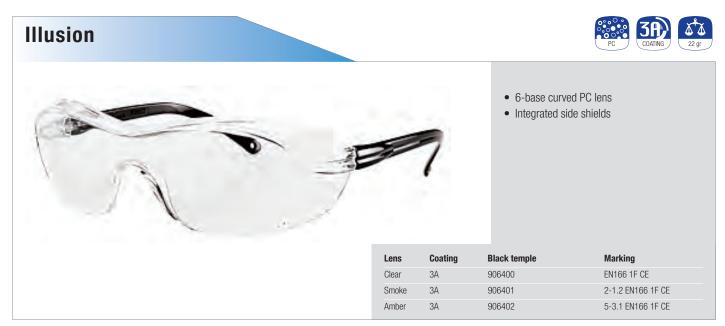
Classic Style

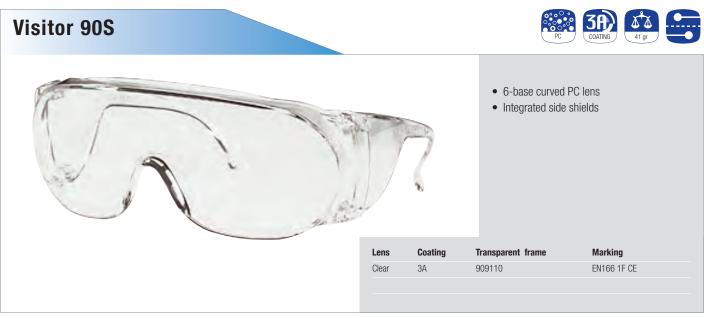


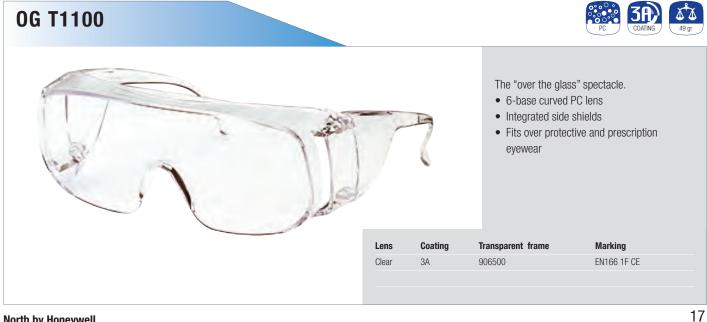




Classic Style







Flexy Line goggles

Novad









- New design soft frame
- 4-base curved PC lens
- Fits over protective and prescription eyewear
- No ventilation valves

Lens	Coating	Frame	Marking frame	Marking lens
Clear PC	3A	906800	EN166 3 4 5 9 BT CE	EN166 1BT 9 CE

UV 5000









- Large goggle
- Fits over protective or prescription eyewear
- Indirect ventilation

Lens	Transp. frame	Marking Frame	Marking Lens
Clear PC	908082	EN166 3 4 F CE	EN166 1F CE

Amigo











- Flip up welding goggle
- Soft vinyl frame
- 50mm Xantos 5

Art. nr.	Lens	Marking Frame	Marking Lens
805403.Z	Clear PC	EN166 F CE	EN166 1F CE
805425.Z	Xantos 5	EN175 F CE	5 EN166 1S CE

Flexy Line goggles

Novent



• Large goggle

Indirect ventilation



• Fits over protective or prescription eyewear







Lens	Coating	Frame	Repl. lens	Marking frame	Marking lens
Clear PETG	3A	906800	805101	EN166 3 4 F CE	EN166 1F CE

Flexy serie



• Soft frame









•	Fits over	protective	and	prescription
	eyewear			

Туре	Lens	Coating	Ventilation	Frame	Repl. lens	Marking Frame	Marking Lens
Flexconomy	PETG	ЗА	4 valves	805151	805101	EN166 3 4 F CE	EN166 1F CE
Flexconomy	CP	4A	4 valves	805152	805102	EN166 3 4 F CE	EN166 1F CE
Flexacid	CP	4A	no neoprene strap	805171	805102	EN166 3 4 F CE	EN166 1F CE
Flexy	PC	ЗА	6 valves	805101	805101	EN166 3 4 F CE	EN166 1F CE
Flexy	CP	4A	6 valves	805102	805102	EN166 3 4 F CE	EN166 1F CE

Flexy 6000













- 4-base curved PC lens for maximum panoramic & peripheral field of vision
- Soft frame
- Fits over protective and prescription
- Indirect ventilation

2010 Codding France marking runo marking lone	ens Coating Frame	Frame Marking frame	Marking lens
Clear PC 3A 806004 EN166 3 9 B CE EN166 1B 9 CE	ear PC 3A 806004	806004 EN166 3 9 B CE	EN166 1B 9 CE
Clear PC 4A 806005 EN166 3 9 B CE EN166 1B 9 CE	ear PC 4A 806005	806005 EN166 3 9 B CE	EN166 1B 9 CE

Prescription Eyewear













Timeless design safety spectacle.

- Frame size 53-20
- Colours: Chrome, Gold-Demi-Amber

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Panto











Trendy metal safety frame.

- Frame sizes: 45-20, 50-20
- Colours: Silver, Gold-Demi-Amber

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Retro











Traditional metal safety spectacle that offers a perfect fit.

- Frame size: 48-22
- Colours: Silver, Gold, Antique, Gold-Demi-Amber

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Kappa











Modern lightweight safety spectacle, made of non conductive plastic.

- Frame size: 50-22
- Colours: Red, Blue, Black

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Prescription Eyewear

AirFrame











Lightweight is the key element of this pure Titanium innovative "Frame-Less" concept safety spectacle.

- High flexible temples and nosebridge
- Frame sizes: 49-19, 51-19
- Colours: Silver, Black
- Side shields detachable

Lens	Lens marking
CD 30 1	EN166 19 CE

Tango











Stylish Monel RX safety frame.

- Spring hinge temples
- Equipped with Polarized magnetic clip. Takes out glare of reflecting surfaces like roads and water.
- Frame sizes 48-20, 51-20
- Colours: Silver, Blue, Gun metal

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Delta











Stylish office look frame with aluminium temples.

- Soft-touch pvc temple-ends
- Fixed side shields
- Frame sizes 49-19, 51-19
- Colour: Gun Metal

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Oval











North's famouse frame was the first Titanium and fully hypoallergenic frame on the market.

- Frame sizes: 46-19, 49-19
- Colours: Brushed Silver, Antique, Gold-Demi-Amber

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Prescription Eyewear

Luctor











Aviator style metal safety spectacle.

- · Titanium flex bridge
- Frame Sizes: 52-18, 54-18
- Colours: Chrome, Gold, Antique, Gold-Demi-Amber

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Vega











Classic style metal safety frame.

- Robust design
- Integrated adjustable nose bridge
- Fixed sides shields
- Frame size 52-18
- Colour: Chrome

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

Alpha











Classic style safety frame made of non conductive plastic.

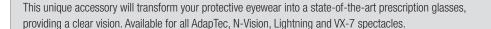
- Robust design
- Frame size 53-20
- · Colour: Havanna

Lens	Lens marking
CR-39 + Anti Scratch	EN166 1S CE
Mineral lenses	EN166 1S CE
PC	EN166 1F CE

RX-inserts







RX12 FFM-TT - is an Rx-insert specially designed with thin sports temples to use in combination with a Full Face Mask.







Accessories

Wrap case



- Black vinyl hard case
- Belt loop
- Velcro closure
- Fits all RX and duo lens frames

Art. nr.

204518

Sports mode case II



- Black hard shell case
- Zipper lock
- Fits "Extreme" and "Attractive" frames

Art. nr.

204512

Slip in case



- Black vinyl soft case
- Fits all RX and duo lens frames

Art. nr.

204504

Soft pouch



- Black Micro fibre soft pouch
- Fits all style frames

Art. nr.

204517

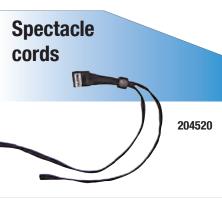
Tube case



- Soft shell tube lens protector
- Fits all style frames

Art. nr.

204513





- Black nylon
- Fits all style frames

Art. nr.	Description	
204522	PVC loops	
204520	Slide over temple SS32	

Accessories









Icons used

Hand protection General Fall protection EN 388 Servicable Material Weight EN374.2003 Positioning Customizable EN374.2003 Ladder climbing 3A coating EN374.2003 Rescue 4A coating EN407 Descent Fall arrest 4A+ coating EN511 EN421 Confined spaces Eye protection Lollypop packaging Construction working EN421 **RX** Insert Coating Extended D-ring Replaceable lens Packaging Work restraint Scaffolding work Pantoscopic angling EN420 - Consult the instructions for use **Hearing protection** SNR Value Respiratory protection Adjustable fit Dust filter Gas filter