

Product range

WELDING PROTECTION



 **optrel**[®]
swiss made 

PROTECTING
PROFESSIONALS



TO PREVENT WORK FROM
BECOMING A HEALTH RISK,
WE MAKE LIFE EASIER FOR
EVERYONE WHO LOVES
WELDING.

Marco Koch, President of optrel AG

FULL OF INNOVATIONS AND OPPORTUNITIES WELDING HELMETS AND CUTTING HELMETS FROM OPTREL

Modern welding helmets have many features that go far beyond simple glare protection. A crystal-clear view of the weld seam, pure colours and super-lightweight helmet designs are just a few examples.

With innovative welding helmets from optrel, you always work efficiently, comfortably and – above all – safely.

HELIX CLT

Hard work never felt so easy



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



CRYSTAL LENS TECHNOLOGY WITH BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4 TO 12



FADETRONIC



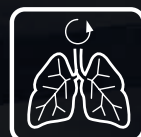
FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

HIGH PERFORMANCE MEETS PERFECT BRIGHTNESS AND COLOUR

The **helix CLT** combines a slide-up helmet and internal ADF with the brightness and natural colour view of crystal lens technology (CLT). CLT offers unrivalled brightness amongst welding helmets worldwide and ensures an outstanding visual and working experience. It provides you with the perfect basis for comfortable and easy work.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional industrial safety helmet in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix CLT welding helmet black, IsoFit® headgear, optrel EN 397 industrial safety helmet, black</p>	1050.200
 <p>optrel helix pure air CLT welding helmet black, IsoFit® headgear, optrel EN 397 industrial safety helmet, black</p>	4441.960
 <p>optrel helix CLT welding helmet black, IsoFit® headgear</p>	1050.210
 <p>Ready-to-Weld package helix CLT with swiss air PAPR</p>	4600.160
 <p>Ready-to-Weld package helix pure air CLT with e3000X PAPR</p>	4455.620

Technical data

Protection levels	ShadeTronic® 4-12 manual 7-12
Brightness level	Open: 1.0/closed: 2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	640 g

HELIX QUATTRO

Hard work never felt so easy



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



TOP MARKS IN ALL FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4 TO 13



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

A HARD-WORKING MACHINE FOR HARD WORKING CONDITIONS

With **helix quattro**, optrel offers a welding helmet for working under the most difficult conditions. A slide-up helmet with internal ADF that has all the technical features of an optrel helmet, combined with sight protection for any accompanying work. With an EN 379 optical classification of 1/1/1/1 for optimum protection at lateral viewing angles and a maximum protection level of 14*.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional industrial safety helmet in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix quattro welding helmet black, IsoFit® headgear, optrel EN 397 industrial safety helmet, black</p>	1050.100
 <p>optrel helix pure air quattro welding helmet black, IsoFit® headgear, optrel EN 397 industrial safety helmet, black</p>	4441.940
 <p>optrel helix quattro welding helmet black, IsoFit® headgear</p>	1050.110
 <p>Ready-to-Weld package helix quattro with swiss air PAPR</p>	4600.150
 <p>Ready-to-Weld package helix pure air quattro with e3000X PAPR</p>	4455.610

Technical data	
Protection levels	ShadeTronic® 4-13 (5-14*) manual 8-13 (9-14*) <i>*with additional protection lens SN+1</i>
Brightness level	Open: 1.0/ closed: 3.0/4.0*
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/1
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	620 g

HELIX 2.5

Hard work never felt so easy



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



BRIGHTNESS LEVEL 2.5



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVELS
5 TO 12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



RESPIRATORY
PROTECTION

HIGH PERFORMANCE MEETS PERFECT BRIGHTNESS AND COLOUR


With the **helix 2.5**, you get a slide-up helmet with internal ADF that offers all the advantages of the helix series in terms of comfort and low weight. An ADF with a protection level range from 5 to 12 covers most welding applications. It offers a brightness level of 2.5 and a clear view of all other work processes with the visor pushed up.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional industrial safety helmet in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix 2.5 welding helmet black, IsoFit® headgear, optrel EN 397 industrial safety helmet, black</p>	1050.000
 <p>optrel helix pure air 2.5 welding helmet black, IsoFit® headgear, optrel EN 397 industrial s afety helmet, black</p>	4441.980
 <p>optrel helix 2.5 welding helmet black, IsoFit® headgear</p>	1050.010
 <p>Ready-to-Weld package helix 2.5 with swiss air PAPR</p>	4600.140
 <p>Ready-to-Weld package helix pure air 2.5 with e3000X PAPR</p>	4455.600

Technical data

Protection levels	ShadeTronic® 5-12 manual 7-12
Brightness level	Open: 1.0/closed: 2.5
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	620 g

SPHERE X_{CLT}

A larger field of vision for comfort at work



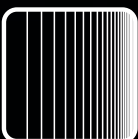
CRYSTAL LENS
TECHNOLOGY WITH
BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVEL
5 TO 12



FADETRONIC



SENSITIVITY
REGULATION



GRINDING MODE



RESPIRATORY
PROTECTION

FOR SAFETY WITH STYLE: SEE BRIGHTER AND SEE MORE

With its **sphereX clt**, optrel is providing a trend-conscious and fully automatic welding helmet: Newly designed helmet shell, innovative CLT technology, a **field of view more than 30% larger** compared with the sphere series, plus brightness level of 2.0.

You benefit from crystal-clear vision in bright conditions and detailed, high-contrast vision in dark conditions – combining for the perfect visual experience. Combined with the popular IsoFit® X headgear for maximum comfort and the two-position function (Position Locker) for enhanced safety at work, this helmet truly is in a class of its own.

The adaptive protection level regulation ensures the appropriate **protection level between 5 and 12** is applied completely automatically. For your optimum protection at all times – whatever the welding parameters!





Manual adjustments are no longer necessary, but they are of course possible.

Good to know: The auto-darkening filter of the sphereX series is compatible with the helmet shells of the sphere series, while the protection lens for both series is identical.



→ All info,
accessories and
replacement
parts



Helmet system		Item no.	Technical data	
	sphereX clt Welding helmet black	1006.980	Protection levels	ShadeTronic® 5-12 Manual 4-12
	sphereX clt pure air Fresh air helmet, black	4441.905	Brightness level	2.0
	Ready-to-weld package sphereX clt with swiss air P APR	4600.190	Adjustment	ShadeTronic® or manual
	Ready-to-weld package sphereX clt with e3000X P APR	4530.055	Activation	Automatic on/off, sleep mode
			Power supply	Battery (approx. 1500 hrs operating time)
			Sensitivity	Individually adjustable
			Switching time	Bright to dark: 0.10 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.05 s to 2.0 s (with FadeTronic)
			Classification EN 379	1/1/1/2
			Operating temp.	-5 °C to +55 °C
			Storage conditions	Dark environment
			Total weight	640 g
			Standards and norms	CE, ANSI, EAC, UKCA, AS/NZS, complies with CSA Z94.3

SPHERE X QUATTRO

A larger field of vision for comfort at work



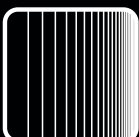
BEST CLASS FOR VIEWING ANGLE DEPENDENCE



TRUE-COLOUR VISION



SHADETRONIC® PROTECTION LEVEL 5 TO 13



FADETRONIC



GRINDING MODE



RESPIRATORY PROTECTION

FOR SAFETY WITH STYLE: ULTRA-HD QUALITY WITH OVER 30% LARGER FIELD OF VISION





The fully automatic **sphereX quattro** welding helmet brings with it multiple user benefits: It not only looks good thanks to the optically adapted helmet shell, it also gives a colour-realistic view with a **field of vision over 30% larger** than that of the sphere series, and it offers the best possible viewing angle dependence (class V1 as per ISO 16321). This allows you to work efficiently and comfortably. The new series also features as standard the popular IsoFit® X headgear for maximum comfort and the two-position function (Position Locker) for enhanced safety at work.

The adaptive protection level regulation adjusts the **protection level** as necessary in the range of **5 to 13** completely automatically. That way, you are always optimally protected whatever the welding parameters. Manual adjustments are no longer necessary, but they are of course possible.

Good to know: The auto-darkening filter of the sphereX series is compatible with the helmet shells of the sphere series, while the protection lens for both series is identical.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.	Technical data																								
 <p>sphereX quattro Welding helmet, black</p>	1006.580	<table border="1"> <tr> <td>Protection levels</td> <td>ShadeTronic® 5-13 manual 5-13</td> </tr> <tr> <td>Brightness level</td> <td>3</td> </tr> <tr> <td>Adjustment</td> <td>ShadeTronic® or manual</td> </tr> <tr> <td>Activation</td> <td>Automatic on/off, sleep mode</td> </tr> <tr> <td>Power supply</td> <td>Solar cells, battery (approx. 1500 hrs operating time)</td> </tr> <tr> <td>Sensitivity</td> <td>Individually adjustable</td> </tr> <tr> <td>Switching time</td> <td>Bright to dark: 0.17 ms at 23 °C 0.11 ms at 55 °C Dark to bright: 0.05 s to 2.0 s (with FadeTronic)</td> </tr> <tr> <td>Classification ISO 16321-2</td> <td>V1 (best class for viewing angle dependence)</td> </tr> <tr> <td>Operating temp.</td> <td>-5 °C to +55 °C</td> </tr> <tr> <td>Storage conditions</td> <td>Dark environment</td> </tr> <tr> <td>Total weight</td> <td>640 g</td> </tr> <tr> <td>Standards and norms</td> <td>CE, ANSI, EAC, UKCA, AS/NZS, complies with CSA Z94.3</td> </tr> </table>	Protection levels	ShadeTronic® 5-13 manual 5-13	Brightness level	3	Adjustment	ShadeTronic® or manual	Activation	Automatic on/off, sleep mode	Power supply	Solar cells, battery (approx. 1500 hrs operating time)	Sensitivity	Individually adjustable	Switching time	Bright to dark: 0.17 ms at 23 °C 0.11 ms at 55 °C Dark to bright: 0.05 s to 2.0 s (with FadeTronic)	Classification ISO 16321-2	V1 (best class for viewing angle dependence)	Operating temp.	-5 °C to +55 °C	Storage conditions	Dark environment	Total weight	640 g	Standards and norms	CE, ANSI, EAC, UKCA, AS/NZS, complies with CSA Z94.3
Protection levels	ShadeTronic® 5-13 manual 5-13																									
Brightness level	3																									
Adjustment	ShadeTronic® or manual																									
Activation	Automatic on/off, sleep mode																									
Power supply	Solar cells, battery (approx. 1500 hrs operating time)																									
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Classification ISO 16321-2	V1 (best class for viewing angle dependence)																									
Operating temp.	-5 °C to +55 °C																									
Storage conditions	Dark environment																									
Total weight	640 g																									
Standards and norms	CE, ANSI, EAC, UKCA, AS/NZS, complies with CSA Z94.3																									
 <p>sphereX quattro pure air Fresh air helmet, black</p>	4441.605																									
 <p>Ready-to-weld package sphereX quattro pure air, black with swiss air PAPR</p>	4600.180																									
 <p>Ready-to-weld package sphereX quattro pure air, black with e3000X PAPR</p>	4550.466																									

SPHERE X 2.5

A larger field of vision for comfort at work



BRIGHTNESS LEVEL 2.5



TRUE-COLOUR VISION



PROTECTION LEVEL
5 TO 12



LIGHTWEIGHT



GRINDING
MODE



RESPIRATORY
PROTECTION

SIMPLY MODERN: SEE BETTER. SEE MORE.

Now you can see better and view more realistic colours when you look into the weld pool.





You can also see more than you can with the sphere series because the **field of view is more than 30% larger**. All this is possible with the modern and fully automatic **sphereX 2.5** welding helmet with optically adapted helmet shell. It even boasts clever technologies for additional comfort and safety at work – and, in turn, a better working day: The IsoFit® X headgear provides maximum helmet stability while the tried-and-tested Position Locker serves as a two-position helmet function.

The adaptive **protection level** regulation ensures the appropriate protection level from **5 to 12** is applied completely automatically. For your optimum protection at all times – whatever the welding parameters! Manual adjustments are no longer necessary, but they are of course possible.

Good to know: The auto-darkening filter of the sphereX series is compatible with the helmet shells of the sphere series, while the protection lens for both series is identical.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.	Technical data	
 sphereX 2.5 Welding helmet, black	1006.680	Protection levels	ShadeTronic® 5–12 manual 4–12
 sphereX 2.5 pure air Fresh air helmet, black	4441.805	Brightness level	2.5
 Ready-to-weld package sphereX 2.5 with swiss air PAPR	4600.200	Adjustment	Manual, external
 Ready-to-weld package sphereX 2.5 with e3000X PAPR	4580.056	Activation	Automatic on/off, sleep mode
		Power supply	Battery (approx. 1.500 hrs operating time)
		Sensitivity	Individually adjustable
		Switching time	Bright to dark: 0.10 ms at 23 °C 0.07 ms at 55 °C
			Dark to bright: 0.05 s to 2.0 s (with FadeTronic)
		Classification ISO 16321-2	V2 (viewing angle dependence)
		Operating temp.	-5 °C to +55 °C
		Storage conditions	Dark environment
		Total weight	640 g
		Standards and norms	CE, ANSI, EAC, UKCA, AS/NZS, complies with CSA Z94.3

PANORAMAXX HYBRID CLT

The best of both worlds



for laser welding
& arc welding

2 IN 1



PANORAMIC
FIELD OF VIEW



CRYSTAL LENS
TECHNOLOGY WITH
BRIGHTNESS LEVEL 2.5



TRUE-COLOUR VISION



SHADETRONIC®
PROTECTION LEVELS
4 TO 12



FADETRONIC



FIVE-POINT
DETECTION



OPTREL RE-CHARGE



GRINDING
MODE



ISOFIT® HEADGEAR



RESPIRATORY
PROTECTION

IDEAL EYE PROTECTION FOR HYBRID WELDING WITH CLT





With the **panoramaxx hybrid clt**, optrel is offering a fully automatic welding helmet that combines Crystal Lens Technology (CLT) not only with an XXL field of vision and brightness level 2.5, but also with the tried-and-tested ShadeTronic® dark level adjustment in the 4-12 range. It offers excellent vision in every work situation (conventional welding, hand-held laser welding or other laser applications).

It goes without saying that **all varieties of helmet in the panoramaxx laser series can be combined with optrel's TH3 respiratory protection (swiss air or e3000X)**.

This ensures that your airways are always reliably protected against smoke, gas and dust.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 panoramaxx hybrid clt	1010.302
 panoramaxx pure air hybrid clt	4441.882
 Ready-to-weld package panoramaxx hybrid clt with swiss air PAPR	4600.171
 Ready-to-weld package panoramaxx pure air hybrid clt with e3000X PAPR	4550.681

Laser protection	
Wavelength range	1030-1100 nm
Eye protection	16321 OS W2.5/3-8/4<12 V2 +TIG 1030-1100 D LB7 IR LB7 OS 1030-1100 OD7 C5 PS3 ISO 19818-1 OS CE
Face and head protection	16321 OS W15 E 1-M 1000-1100 D LB4 IR LB5 OS B 1000-1100 OD5 C2 PS3 ISO 19818-1 OS E CE
Technical data	
Protection levels	ShadeTronic® 4-12 manual 3-8
Brightness level	2.5
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Bright environment
Total weight	Standard 685 g / Pure air 850 g

PANORAMAXX HYBRID

The best of both worlds



for laser welding
& arc welding

2 IN 1



PANORAMA
FIELD OF VIEW



TRUE COLOR VIEW



SHADETRONIC®
SHADE LEVEL 5 TO 13



FADETRONIC



MULTI SENSOR
DETECTION



RE-CHARGE
POWER TECHNOLOGY



GRIND MODE



ISOFIT® HEADGEAR



RESPIRATORY
PROTECTION

IDEAL EYE PROTECTION FOR HYBRID WELDING

With the **panoramaxx hybrid**, optrel has a fully automatic welding helmet with light level 3.0 including an XXL field of vision and the ShadeTronic® in the 5-13 range. It offers a true-colour view of the workpiece in various work processes (conventional welding, hand-held laser welding or other laser applications).

It goes without saying that **all helmet variants in the panoramaxx-laser series can be combined with optrel's TH3 respiratory protection** (swiss air or e3000X). This ensures that your airways are always reliably protected against smoke, gas and dust.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
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panoramaxx hybrid

1010.301



panoramaxx pure air hybrid

4441.881



Ready-to-Weld package
panoramaxx hybrid
with **swiss air** PAPR

4600.170



Ready-to-Weld package
panoramaxx pure air hybrid
with **e3000X** PAPR

4455.680

Laser protection

Wavelength range	1000-1100 nm
Eye protection	16321 OS W3/4-9/5<13 V2 1000-1100 D LB7 IR LB8 OS 1000-1100 OD7 C5 PS3 ISO 19818-1 OS CE
Face and head protection	16321 OS W15 E 1-M 1000-1100 D LB4 IR LB5 OS B 1000-1100 OD5 C2 PS3 ISO 19818-1 OS E CE

Technical data

Protection levels	ShadeTronic® 5-13 manual 4-9
Brightness level	3.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification	1/1/1/2 EN379
Operating temp..	-10°C to +55°C
Storage conditions	bright environment
Total weight	Standard 695 g / Pure air 860 g

PANORAMAXX L

Perfect for specific laser applications



for laser cleaning, laser cutting, and laser control work



PANORAMA
FIELD OF VIEW



ISOFIT® HEADGEAR







RESPIRATORY
PROTECTION

EYE PROTECTION FOR CERTAIN LASER APPLICATIONS

The **panoramaxx L** is the only passive welding helmet in this product range that is suitable for specific laser applications (laser cleaning, laser cutting or inspection tasks with a laser welding robot). It also features the popular XXL field of vision and protection level 2.

It goes without saying that **all helmet variants in the panoramaxx-laser series can be combined with optrel's TH3 respiratory protection** (swiss air or e3000X). This ensures that your airways are always reliably protected against smoke, gas and dust.

Helmet system	Item no.	
 panoramaxx L	1010.300	
 panoramaxx pure air L	4441.880	Laser protection Wavelength range 1000-1086 nm Eye protection 2 OS 1 S 1000-1086 D LB7 IR LB8 OS 1000-1086 OD8 C5 PS3 ISO 19818-1 OS CE
 Package panoramaxx L with swiss air PAPR	4600.175	Face and head protection OS 175 B 500g 1000-1100 D LB4 IR LB5 OS B 1000-1100 OD5 C2 PS3 ISO 19818-1 OS E CE
 Package panoramaxx pure air L with e3000X PAPR	4550.682	Technical data Protection levels 2.0 Brightness level 2.0 Operating temp.. -10°C to +55°C Total weight Standard 605 g / Pure air 775 g

PANORAMAXX CLT

You won't believe your eyes



PANORAMA FIELD OF VIEW



CRYSTAL LENS TECHNOLOGY WITH BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4 TO 12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW







The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.

CRYSTAL-CLEAR VIEW OF THE WELD POOL

The world-famous Crystal Lens Technology 2.0 is now also available in the **panoramamaxx CLT** version. With it, optrel engineers have once again pushed the boundaries of what is possible to a new level. Anyone who has ever welded using CLT will not believe their eyes.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel panoramaxx CLT welding helmet black</p>	1010.200
 <p>optrel panoramaxx CLT welding helmet silver</p>	1010.201
 <p>optrel panoramaxx CLT fresh air helmet black</p>	4441.780
 <p>optrel panoramaxx CLT fresh air helmet silver</p>	4441.781
 <p>Ready-to-Weld package panoramamaxx CLT with swiss air PAPR</p>	4600.010
 <p>Ready-to-Weld package panoramamaxx CLT with e3000X PAPR</p>	4550.590

Technical data

Protection levels	ShadeTronic® 4-12 manual 7-12
Brightness level	2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	Silver 610 g, black 600 g

PANORAMAXX QUATTRO

The best visibility in all positions



PANORAMA FIELD OF VIEW



TOP MARKS IN ALL FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4 TO 13



FADETRONIC



FIVE-POINT DETECTION



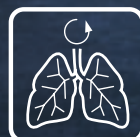
OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW

The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.

ONE HELMET WITH TOP MARKS IN ALL FOUR CATEGORIES





The **panoramaxx quattro** was developed for use in heavy-duty metal construction, where work is frequently carried out with a lot of energy and in a wide variety of welding positions.

Especially in constrained positions, you don't have a straight view of the welding point. Perfect viewing angle dependency, confirmed by the highest test mark (1) according to the EN 379 standard, guarantees that the **panoramaxx quattro** welder always has the best view of the welding process without having to manually readjust the protection level.

This results in interruption-free and fatigue-free work, which increases performance.



→ All info,
accessories and
replacement
parts

Helmet system		Item no.	Technical data	
	optrel panoramaxx quattro welding helmet black	1010.100	Protection levels	ShadeTronic® 4-13 manual 8-13
	optrel panoramaxx quattro fresh air helmet black	4441.760	Brightness level	3.0
	Ready-to-Weld package panoramaxx quattro with swiss air PAPR	4600.020	Adjustment	ShadeTronic® or manual
	Ready-to-Weld package panoramaxx quattro with e3000X PAPR	4550.560	Activation	Automatic on/off, sleep mode
			Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
			Sensitivity	Infinitely variable
			Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
			Classification EN 379	1/1/1
			Operating temp.	-10 °C to +55 °C
			Storage conditions	Dark environment
			Total weight	575 g

PANORAMAXX 2.5

As versatile as you



PANORAMA FIELD OF VIEW



BRIGHTNESS LEVEL 2.5



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 5 TO 12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW





The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.

A HUGE CINEMA AND YOU CHOOSE THE FILM

Welcome to the big league. The **panoramaxx2.5** combines the enormous field of view with optrel's popular 2.5 technology, and offers excellent vision in every work situation. Whether for welding, cutting, grinding or straightening work. Whatever you want, the optrel **panoramaxx2.5** keeps up with your varied tasks completely automatically.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel panoramaxx2.5 welding helmet black</p>	1010.000
 <p>optrel panoramaxx2.5 fresh air helmet black</p>	4441.660
 <p>Ready-to-Weld package panoramaxx2.5 with swiss air PAPR</p>	4600.030
 <p>Ready-to-Weld package panoramaxx2.5 with e3000X PAPR</p>	4550.550

Technical data

Protection levels	ShadeTronic® 5-12 manual 7-12
Brightness level	2.5
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.09 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	575 g

CRYSTAL 2.0

You won't believe your eyes



CRYSTAL LENS
TECHNOLOGY WITH
BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVEL
4 TO 12



FADETRONIC



SENSITIVITY
REGULATION



GRINDING MODE



RESPIRATORY
PROTECTION



HEAT-REFLECTIVE
COATING

CRYSTAL-CLEAR VIEW BEFORE, DURING AND AFTER WELDING



With **crystal2.0**, optrel offers brightness level 2.0 and CLT in the tried-and-tested sphere helmet shell. The light transmission here when inactive is 31 per cent.

The crystal-clear view when bright makes the **crystal2.0** the ideal combination helmet without having to make compromises. Colour perception when bright is already very close to the view through clear window glass. When dark, you get a detailed and high-contrast view of the weld pool with unprecedented clarity.



→ All info,
accessories and
replacement
parts



Helmet system	Item no.
 crystal2.0 welding helmet, silver	1006.900
 crystal2.0 fresh air helmet, silver	4441.900
 crystal2.0 welding helmet, black	1006.901
 crystal2.0 fresh air helmet, black	4441.901
 Ready-to-Weld package crystal2.0 with swiss air PAPR	4600.040
 Ready-to-Weld package crystal2.0 with e3000X PAPR	4530.050

Technical data

Protection levels	ShadeTronic® 4-12 manual 5-12
Brightness level	2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Battery (approx. 3000 hrs operating time)
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.10 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.05 s to 1.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +70 °C
Storage conditions	Dark environment
Total weight	482 g

E 6 8 4

Experience the difference



TOP MARKS IN ALL
FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVEL
5 TO 13



FADETRONIC



GRINDING MODE



RESPIRATORY
PROTECTION



HEAT-REFLECTIVE
COATING

THE FULLY AUTOMATIC SYSTEM WITH ULTRA-HD QUALITY





The auto-darkening filter of the optrel **e684** demonstrates top standard "1" in all four classifications for assessing image quality. It's the extremely good viewing angle dependency in particular that highlights the quality of the optrel auto-darkening filter and makes the optrel **e684** so pleasant to work with.

The adaptive protection level regulation adjusts the protection level as necessary in the range of 5 to 13 completely automatically. This is ensured by an additional brightness sensor that measures the intensity of the welding arc. So you always stay perfectly protected, no matter what parameters you are currently welding with. Manual adjustments are no longer necessary. But still possible at the push of a button, of course.

A specially developed UV/IR filter enables the realistic colour perception typical of optrel and brings colour into the welder's world.



→ All info,
accessories and
replacement
parts

Helmet system		Item no.	Technical data	
	e684 welding helmet	1006.500	Protection levels	ShadeTronic® 5-13
	silver matt black	1006.501		manual 5-13
	dark blue	1006.502	Brightness level	4
	e684 fresh air helmet	4441.600	Adjustment	ShadeTronic® or manual
	silver matt black	4441.601	Activation	Automatic on/off, sleep mode
	dark blue	4441.602	Power supply	Solar cells, battery (approx. 3000 hrs operating time)
	Ready-to-Weld package e684 with swiss air PAPR	4600.050	Sensitivity	Individually adjustable
		Ready-to-Weld package e684 with e3000X PAPR	4550.460	Switching time
			Classification EN 379	1/1/1/1
			Operating temp.	-10 °C to +70 °C
			Storage conditions	Dark environment
			Total weight	500 g
			Standards	CE, ANSI, EAC, AS/NZS, complies with CSA Z94.3

VEGAVIEW 2.5

Bright, brighter, vegaview



BRIGHTNESS LEVEL 2.5



LIGHTWEIGHT



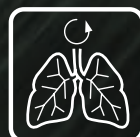
TRUE COLOUR VIEW



GRINDING MODE



PROTECTION LEVEL
8 TO 12







RESPIRATORY
PROTECTION

FOR ALL THOSE WHO WANT TO SEE BETTER WHEN WELDING

The optrel **vegaview2.5** finally fulfils what is probably the most common wish among welders – a bright view. Its bright auto-darkening filter offers a view that is approximately 400% better than conventional automatic welding helmets when bright and at protection level 2.5. This means that the **vegaview2.5** is still at the forefront when it comes to clear visibility during welding.



→ All info, accessories and replacement parts

Helmet system		Item no.	Technical data	
	vegaview2.5 welding helmet	1006.600	Protection levels	manual 8-12
	vegaview2.5 fresh air helmet	4441.800	Brightness level	2.5
	Ready-to-Weld package vegaview2.5 with swiss air PAPR	4600.060	Adjustment	Manual, external
	Ready-to-Weld package vegaview2.5 with e3000X PAPR	4580.050	Activation	Automatic on/off, sleep mode
			Power supply	Battery (approx. 3000 hrs operating time)
			Sensitivity	Individually adjustable
			Switching time	Bright to dark: 0.10 ms at 23 °C 0.07 ms at 55 °C Dark to bright: 0.05 s to 1.0 s (with FadeTronic)
			Classification EN 379	1/1/1/2
			Operating temp.	-10 °C to +70 °C
			Storage conditions	Dark environment
			Total weight	489 g
			Standards	CE, ANSI, EAC, complies with CSA

NEO P550

New, efficient, optimal



TRUE COLOUR VIEW



PROTECTION
LEVEL 9 TO 13



DELAY FUNCTION



SLIM DESIGN



LIGHTWEIGHT

NEW DESIGN FOR EFFICIENT WORK AT AN OPTIMAL PRICE

The optrel **neo p550** combines the advantages of the tried-and-tested p550 helmet shell with optrel's outstanding anti-glare technology. Experience true colour vision now – even from the mid-price segment. Now with approx. 3000 hours of operational readiness thanks to a new energy concept. And with a response time of only 0.1 ms upon switching on the arc. Perfect protection and comfort for your eyes.



→ All info,
accessories and
replacement
parts

Helmet system

Item no.



neo p550
welding helmet black

1007.000



neo p550
welding helmet green

1007.011



Ready-to-Weld package
neo p550
with **swiss air** PAPR

4600.080

Technical data

Protection levels	manual 9-13
Brightness level	4
Adjustment	manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, battery (approx. 3000 hrs operating time)
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.10 ms at 23 °C 0.10 ms at 55 °C Dark to bright: 0.05 s to 1.0 s
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +70 °C
Storage temperature	-20 °C to +70 °C
Total weight	495 g
Standards	CE, ANSI, EAC, AS/NZS, complies with CSA Z94.3

WELDCAP

Welding has never been so comfortable



JOIN THE REVOLUTION

The optrel **weldcap**® series offers automatic welding caps that combine the comfort of a baseball cap with the advantages of a full welding helmet. The comfortable and quick-to-remove textile part is made of flame-retardant material, and is hygienic and easy to wash.

The ergonomic nose recess of the optical unit provides an oversized field of view and conveys a whole new sense of space. The infinitely variable protection levels 9-12 cover the majority of all welding applications. Thanks to the bright view when open, the **weldcap**® is also perfectly suited to grinding work and plasma cutting.



→ All info, accessories and replacement parts



PROTECTION LEVEL 9-12



SLIM DESIGN



EXTENDED FIELD OF VIEW



LIGHTWEIGHT



GRINDING MODE



EASY HANDLING



Welding cap	Item no.
-------------	----------

	weldcap® RC 3/9-12	1008.000
	weldcap® bump RCB 3/9-12 with integrated bump cap	1008.001
	weldcap® hard RCH 3/9-12 For use with industrial safety helmet	1008.002
	Ready-to-Weld package weldcap® with swiss air PAPP	4600.100

Technical data	
Protection levels	manual 9-12
Brightness level	3
Cartridge	Ergonomic nose recess
Adjustment	Manual
Activation	Automatic on/off, sleep mode
Power supply	Battery (approx. 2000 hrs operating time)
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.16 ms at 23 °C 0.11 ms at 55 °C Dark to bright: 0.35 s
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +60 °C
Storage conditions	Dark environment
Total weight	Approx. 360 g
Standards	CE (EN 379, EN 166, EN 175), ANSI Z87.1, AS/NZS 1337/1338

HEAD PROTECTION

Fits like a glove



Item no. 5003.290

The optrel IsoFit® headgear is compatible with all optrel welding and grinding helmets. It can be adjusted in just a few seconds, and customised to any head size from S to XL.



Protection against stronger impacts and falling objects



Item no. 5002.840

N – PPE type 1 industrial bump cap
(not compatible with IsoFit® headgear)



Item no. 5003.530

halo – the comfort insert
for all optrel helmets
(not compatible with IsoFit®
headgear)

ACCESSORIES

Item no. 8000.100
Helmet rucksack – black/green



Item no. 8000.110
e3000X bag – black/green



Item no. 5002.900
Parking buddy for weldcap
and optrel welding helmets (not
compatible with IsoFit® headgear)



Item no. 4028.016
Leather head and neck
protection – black



Item no. 4028.031
Leather head and neck protection
– black, for fresh air helmets



Item no. 4028.015
Leather chest
protection – black





WELCOME TO THE WORLD OF OPTREL

protecting professionals
since 1986

Ready for an upgrade?

Trade in your used optrel system now and receive a credit when you purchase a new product! We reward your loyalty to the optrel brand with € 100.- for helmets, € 200.- for respiratory protection devices and even 300.- € for complete systems. Talk to your optrel dealer and find out more!

Trade-In
offer!

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