



MPG
The Eyewear
Company



TACTICAL
VISION



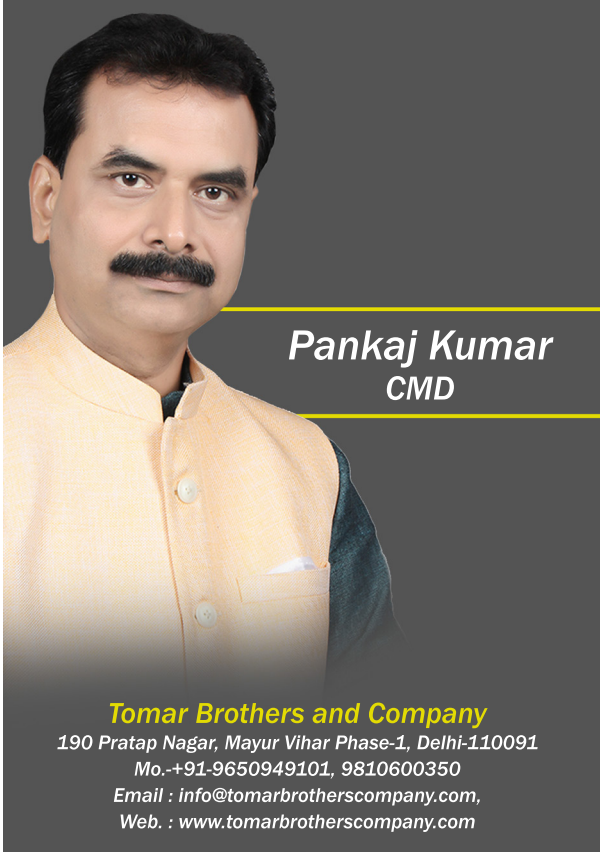
Tomar Brothers and Company

190 Pratap Nagar, Mayur Vihar Phase-1, Delhi-110091,

Mo.-+91-9650949101, 9810600350

Email : info@tomarbrotherscompany.com, Web. : www.tomarbrotherscompany.com

Authorized Distributors in All India (Govt. & other sectors)
Marketed by Tomar Brothers and Company. Associate with **P.S. Overseas.**



Pankaj Kumar
CMD

Tomar Brothers and Company
190 Pratap Nagar, Mayur Vihar Phase-1, Delhi-110091
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Desoma.

Desoma GmbH • Janzgasse 4, A - 8010 Graz

To Whom it may Concern

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E-Mail: jp@desoma.org
Web: www.desoma.org
Date: 11.Dez.2023

Subject: Authorisation Letter to Represent Desoma in India

We, Desoma GmbH (Janzgasse 4, A - 8010 Graz), hereby state that company Tomar Brothers & Company (190, Pratap Nagar, Mayur Vihar Phase-1, New Delhi 110091, India) is our authorized distributor an exclusive partnership for safety googles VECTRUS from MPG, including accessories in India.

Desoma GmbH (Janzgasse 4, A - 8010 Graz) , hereby authorize Tomar Brothers & Company to exclusively handle all rights pertaining to written content originating from Desoma GmbH company in India.

This authorization includes, but is not limited to, the reproduction, distribution, and publication of written materials produced by Desoma GmbH.
Tomar Brothers & Company is granted the exclusive right to represent, negotiate, and manage all written content on behalf of Desoma GmbH within the specified geographical scope.

Their contact details are as follows:

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190, Pratap Nagar, Mayur Vihar Phase-1, New Delhi 110091, INDIA
1. Shri Manoj Kumar Singh.
Aadhar Number: 9721 970 20897
2. Mr. Pankaj Kumar
Aadhar Number: 800267736225

issued by the Unique Identification Authority of India under the Government of India.
For any enquiries, please feel free to contact Mr. Manoj Singh on mobile number +91 96509 49101, Mr. Pankaj Kumar on mobile number +91 9810600350 or email mksaicc@gmail.com

Signed for and on behalf of Desoma GmbH

With Kind Regard


Johann Preinsberger
Managing Director



Desoma GmbH • Janzgasse 4, 8020
Graz, Austria Commercial register • Local court Graz, FN 434568 X,
VAT ID: ATU89744547, Managing Director: Johann Preinsberger

Bank details • UniCredit Bank Austria AG, IBAN: AT38 1200 0100 1285 2044, BIC: BKUAT330 • Restricted

PRODUCER

- MPG is an independent corporate group
- 70 years experience in optic industry
- Key focus in optics and design – lenses, optical frames, sunglasses
- Own production in Germany
- International distribution in 70 countries
- 2,500 employees



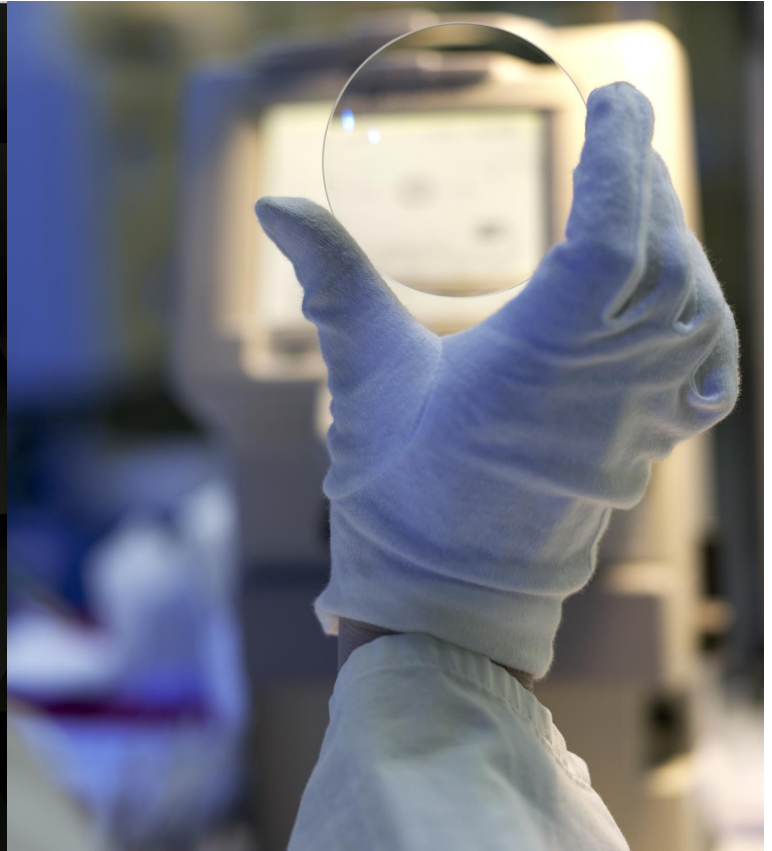
LOGISTICS

- Super modern logistics center in Domažlice / CZ
- Currently 17,000 m² storage area
- 1.5 Mio. optical lenses stored
- 1.5 eyewear frames and sunglasses stored
- Overnight-deliveries in Central Europe



LENS PRODUCTION

- Premium quality lenses developed in Austria and produced in Germany
- Development of innovative technologies
- Continuous development of the high tech machinery
- Wide range of quality optical lenses, developed for the individual needs of spectacle wearers





OEM PROJEKTE

Create your own tactical eyewear according to your vision.

Fully customizable in every aspect:

- Colors
- Material
- Branding
- Glass colors
- Glass certifications

Benefit from our full-service package including comprehensive marketing support.





developed for the
AUSTRIAN ARMY
In 2018 for delivery in 2019

winner of international
TENDER PROCESS

DESIGNED & DEVELOPED
with special requirements for
MILITARY USE

B- TAC

SAFETY SPECIAL GLASSES SYSTEM

premium optical
QUALITY LENSES

ULTRA FLEXIBLE
sustainable materials

highest ballistic
SAFETY GLASSES

HIGHEST
production quality



FORCE

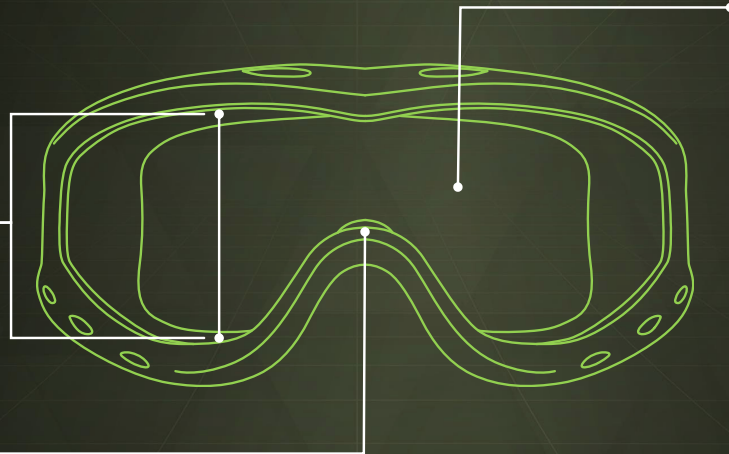
The B-TAC FORCE safety spectacles offer maximum comfort with comprehensive protection. In addition stable hold, four lenses can be replaced as required.

MAXIMUM
FIELD OF VIEW



INNOVATIVE
CLICK SYSTEM

EASY LENSE
CHANGE



ANTI SCRATCH
RESISTANCE



DUST RESISTANCE



PROTECTION AGAINST
DROPS AND SPLASHES



RESISTANCE
TO FOGGING



RESISTANCE
TO FLAMMABILITY



BALLISTIC
PROTECTION

Impact resistance: level III, 40Joule @ 10m / 0.08g per shot at max. 400 m/s

CERTIFIED IN ACCORDANCE WITH

EN 166

Flammability, Resistance to fogging, Surface resistance to damage from small particles, Protection from droplets and splashing, Protection from gases and fine dust

STANAG 4296

Ballistic protection

EN 170 / EN 172

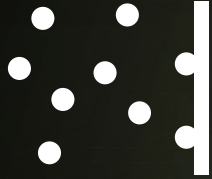
Transmittance

EN 207

Filter resistance to laser radiation



ANTI SCRATCH
RESISTANCE



DUST RESISTANCE



PROTECTION AGAINST
DROPS AND SPLASHES



RESISTANCE
TO FOGGING



RESISTANCE
TO FLAMABILITY



BALLISTIC
PROTECTION

Impact resistance level BT (bullet 6 mm / 0,86 gr shot at max 432 m/s)

CERTIFIED IN ACCORDANCE WITH

EN 166

Flammability, Resistance to fogging, Surface resistance to damage from small particles, Protection from droplets and splashing, Protection from gases and fine dust

STANAG 4296

Ballistic protection

EN 170 / EN 172

Transmittance

EN 207

Filter resistance to laser radiation

FORCE

THE OUTTRIGGER ENABLES
CUSTOMISED ADAPTATION
TO A WIDE RANGE OF
SAFETY HELMETS

USEFUL PROTECTIVE
CASE FOR STORING
THE GLASSES



ADJUSTABLE
LENGT SYSTEM

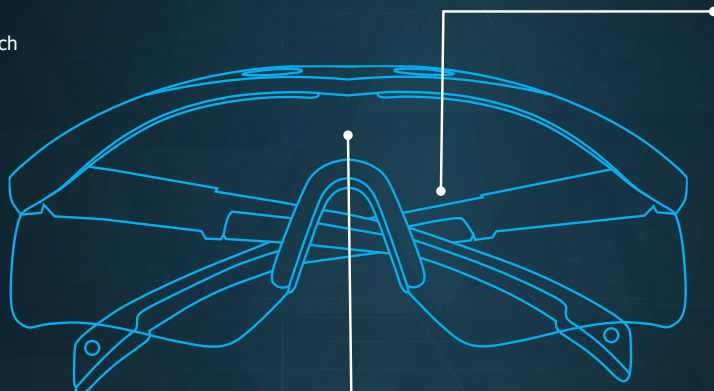
HEADBAND IS
FIXED WITH
VELCRO TO BE
REMOVED AND
CLEANED.



VISION

The B-TAC VISION open consists of a flexible frame with flat, adjustable temple and changeable ballistic lenses, which snap into the frame.

The B-TAC VISION is available in 2 sizes: Regular and Large.



INNOVATIVE
CLICK SYSTEM

EASY LENSE
CHANGE



ANTI SCRATCH
RESISTANCE



PROTECTION AGAINST
DROPS AND SPLASHES



RESISTANCE
TO FOGGING



RESISTANCE
TO FLAMMABILITY



BALLISTIC
PROTECTION

Impact resistance level ST 01006 & 0001 / 0,086 g/sph at max. 102 m/s

CERTIFIED IN ACCORDANCE WITH

EN 166

Impact resistance to fogging, further resistance to damage from acid particles

STANAG 4296

Ballistic protection

EN 170 / EN 172

Transmittance

EN 207

Filter resistance to laser radiation



ANTI SCRATCH
RESISTANCE



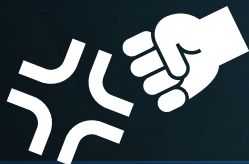
PROTECTION AGAINST
DROPS AND SPLASHES



RESISTANCE
TO FOGGING



RESISTANCE
TO FLAMABILITY



BALLISTIC
PROTECTION

Impact resistance level BT (bullet 6 mm / 0,86 gr shot at max 162 m/s)

VISION

CUSTOMISED ADAPTATION

THE TEMPLE LENGTH
CAN BE EASILY
ADJUSTED

NECKBAND FOR A
GOOD FIT - CAN BE
ATTACHED AND
REMOVED EASILY





SMOKE

Reduce extreme glare. Use outdoors or in bright conditions.



CONTRAST

Provide crisp definition in low-light conditions.
Use during dull, cloudy or hazy conditions.



LASER

Protects against laser beams.



CLEAR

Maximum light transmittance. Use indoors or at night.



LASER PROTECTION SYSTEM



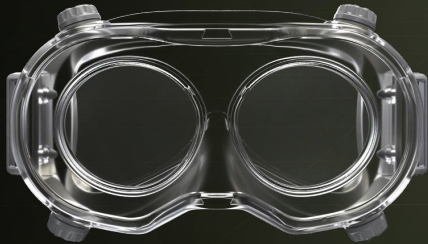
- Unique developed laser safety lenses formula with multiple wavelength spectrum lenses
- Highest laser stream absorption in defined wavelength spectres for maximum protection of the eyes against external laser attacks
- Defined laser-compatible wavelength spectres for optimal handling with own laser-controlled equipment



CLIP-ON ADAPTER FOR PRESCRIPTION LENSES

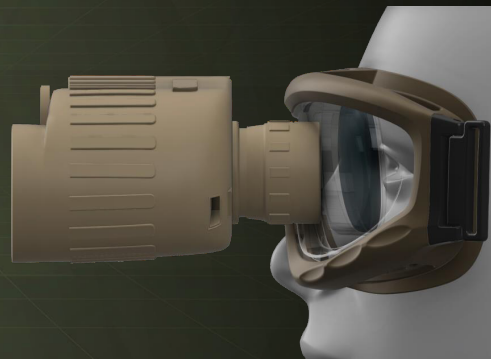


The same clip-on can be mounted in Goggle and Frame. This is a space and cost saving solution available on our models VISION and FORCE.



EYEBOWS® protective visor is made:

- To uniquely provide Field of View (Eye-Relief) in the combined use with telescopic/microscopic visual aids
- For even those users with vision correction provides standard eyeglasses/spectacles Vertex Distance
- To allow the use of any type of lenses (Plano, clear, sun, contrast, laser)





MPG
The Eyewear
Company



TACTICAL
VISION



**Tactical Goggles
Military/Safety (SB)**

Designed & developed
with special requirements for
MILITARY USE

Premium optical
QUALITY LENSES

SAFETY SPECTACLES SYSTEM

B-TAC

Highest ballistic
SAFETY GLASSES

Highest
production
QUALITY

ULTRA-FLEXIBLE
sustainable materials



BF001 B-TAC FORCE

Lens base 5 / Cylindrical / thickness 3 mm



Clip-on adapter for prescription lenses

Certified according to:

Impact resistance level BT (bullet \varnothing 6 mm / 0,86 gr shot at max 432 km/h)

Resistance to flammability

Resistance to fogging

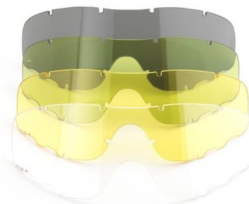
Protection against drops, splashes and liquids

Gas and fine dust particles

Surface antistrach resistance against damage by Large dust particles

Laser lens filter resistance against laser beams

Ballistic protection according with STANAG 4296 V50



Available lenses:

SMOKE (5-3,1 1 FTKN)

Yellow (2-1,2 1 FTKN)

Clear (2C-1,2 1 FT KN)

Laser 694 DIR LB3 \ 830-860 DIR LB2 \ 1064 DIR LB5



3

BV100-1 | B-TAC VISION

Lens base 6 / spherical / thickness 2.50 mm



Clip-on adapter for prescription lenses



Certified according to:

Impact resistance level FT (bullet ø 6 mm / 0,86 gr shot at max 162 km/h)

Resistance to flammability

Resistance to fogging

Surface antistrach resistance against damage by small particles

Laser lens filter resistance against laser beams

Ballistic protection according with STANAG 4296

Product available in 2 sizes (regular and large)



Available lenses:

SMOKE (5-3,1 1 FTKN)

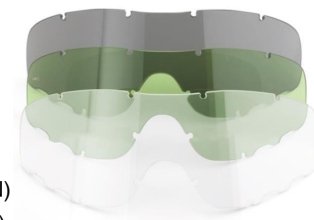
Yellow (2-1,2 1 FTKN)

Clear (2C-1,2 1 FT KN)

Laser 694 DIR LB3 \ 830-860 DIR LB2 \ 1064 DIR LB5

P-TAC101 COBRA

Sunglass = base 7 / spherical / thickness 2.50 mm Color: RAL7013



Available lenses:

SMOKE (5-3,1 1 FTKN)

Clear (2C-1,2 1 FT KN)

Laser 694 DIR LB3 \ 830-860 DIR LB2 \ 1064 DIR LB5

Certified according to:

Impact resistance level FT (bullet \varnothing 6 mm / 0,86 gr shot at max 162 km/h)

Resistance to flammability

Resistance to fogging

Surface antistrach resistance against damage by small particles

Laser lens filter resistance against laser beams

Ballistic protection according with STANAG 4296

Super slim tip-end for comfortable fitting with headphone



Test Report

No. 0377-ECS-20

Contact person: Angelica Soto Duran
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Fax: +49 (0)7361 5562434
E-mail: angelica.soto@ecs-eyosafe.de
Web: www.ecs-eyosafe.de
Test lab accredited by DAkkS D-PL-19590-02

Notified by the Central
Authority of the Federal States
for Safety Technologies (ZLS) ZLS-NB-0304

Customer	Manufacturer
Michael Pachleitner Group GmbH Liebenauer Tangente 4 8041 GRAZ AUSTRIA	
Test report contains	Main part and 1 measurement report
Number of pages in this test report	12
Product	Laser eye-protector, laser protection filter
Arrival of the samples	Sep 18, 2020
Period of testing	Sep 30, 2020 – Jun 28, 2021
Test specifications (Standards)	EN 207 : 2017
Remarks	-

The results described in this test report refer to the mentioned test samples, exclusively. A copy of the test report, complete or in extracts, is not allowed without any written permission of the ECS GmbH Aalen.

Aalen, 28 Jun 2021

M.Sc. Angelica Soto Duran
Head of ECS test lab

Adresse: Hülffeldstraße 50 73430 Aalen	Geschäftsführer: Dr. Bernhard Schmitz	Registereintrag: Ulm HRB 720731	USt-IdNr.: DE253376674
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Test objects, tests and results

Based on the tables as written in the standards EN 207, the main part assigns the test samples to the named tests. The test results are documented according to the named standards.

Signs and symbols

The requirements are described in EN 207.

+	meet the requirements
-	do not meet the requirements
/	not tested
n.a.	not applicable
n.v.	not available
G	borderline case
Ab	interruption of the testing sequence
D	continuous-wave (cw) laser
I	free-running, pulsed laser
R	giant-pulsed laser (Q-switched laser)
M	mode-coupled pulsed laser
BO	Base out
BI	Base in
RT	Room temperature

Whenever the dioptric power of the surface is stated, this value was calculated using the formula $F=0,523/r$, where "r" is the radius of the curved surface.

The relative measurement uncertainties of the applied optical metrological instruments correspond to the required one in EN 167.

Unless stated otherwise, the measurements were carried out in the main viewing point of the specimens and, in the case of lenses with corrective power, at the applicable reference point.

Test results

The annexes document the test results of each individual measurement. All results printed in bold and italic type document that the test sample did actually not meet the requirements which are demanded in the specified standards.

Samples and summary of the test results

Type: Laser protection filter, BF100-1R / BV100-1R						
Test report: 03771-ECS-20						
Number of delivered samples:						
Number of test samples:						
Test sequence	Requirement	according to				Samples 20377-1 to -
		EN	Clause	EN	Clause	
1	Marking	207	6	207	6	+
2	Information delivered by the manufacturer / applicant	207	5	207	5	n.a.
3	Construction of the filter	207	3.9	207	3.9	+
4	Field of vision	207	3.8	207	4.9	n.a.
5	Area of coverage	207	3.9	207	4.10	n.a.
6	Quality of material and surface	207	3.5.1	167	5	+
7	Spherical + astigmatic refractive powers	207	3.4	207 167	4.5 3	+
8	Prism imbalance	207	3.4	207 167	4.5 3	+
9	Diffusion of light, reduced luminance coefficient	207	3.5.2	207 167	4.6.2 4	+
10	Luminous transmittance rel. NA / D65	207	3.2	207 167	4.3 6	+
11	Spectral transmittance at laser wavelength/s	207	3.1	207 167	4.2 6	+
12	Resistance of filters to laser radiation	207	3.3	207	4.4	+
13	Resistance to ageing – elevated temperature	207	3.6	207	4.7	+
14	Resistance to ageing – UV radiation	207	3.6	207 168	4.7 6	+
15	Mechanical strength / increased robustness (S)	207	3.10	166 168	7 4	+
16	Resistance to ignition	207	3.7	207 168	4.8 7	+

See the measurement report 1 for the individual results of each test sample.

Test mark: 03771-ECS-20

Type: Laser protection filter, BF100-1R / BV100-1R

Measurement Report 1

Description of the type - general construction

Design:	Laser protection filters. Green colored polycarbonate lenses covering both eyes. Two variants: cylindrical (BF100-1R) and spherical (BV100-1R)		
		BF100-1R	BV100-1R
		3.0 ± 0.05	2.4 ± 0.05
Dimensions:		Middle thickness of the lens / mm:	
a / mm:	BF100-1R 210	BV100-1R 215	Vertex power / dpt:
b / mm:	90	78	BF100-1R +5.6
			BV100-1R +6.1
			vertical +0.2
			+6.2
Filter:	Identification mark:	none	
	Material:	Polycarbonate	
Additional information delivered by the manufacturer:	expected wavelength ranges for laser safety		

Samples assigned to numbers

Samples number	Model laser protection filter	
20377- odd numbers	BF100-1R, cylindrical laser filter	
20377- even numbers	BV100-1R, spherical laser filter	

Test mark: 03771-ECS-20

Type: Laser protection filter, BF100-1R / BV100-1R

Quality of material and surface, field of vision, area of coverage, refractive powers, prism imbalance, diffusion of light, transmission

test ↓		sample →		20377					
				-1	-2	-3	-4	-5	-6
quality of material and surface				+	+	+	+	+	+
field of vision				+	+	+	+	+	+
area of coverage				+	+	+	+	+	+
spherical power	R	dpt	-0.01	-0.01	-0.01	0.00	-0.01	0.00	
	L		-0.01	-0.01	-0.01	-0.01	-0.01	0.00	
astigmatic power	R	dpt	0.00	0.03	0.01	0.02	0.01	0.02	
	L		0.00	0.03	0.01	0.02	0.02	0.02	
prism imbalance (horizontal/vertical)	cm /	m	0.00 /	BI 0.05	0.00 /	BI 0.05	BO	BI 0.10	
			0.00	/ 0.03	0.00	/ 0.00	0.05 /	/ 0.00	
optical class			1	1	1	1	1	1	
reduced luminance coefficient, diffusion of light	R	cd/m ²	0.35	0.27	0.18	0.29	0.25	0.17	
	L	lx	0.35	0.23	0.20	0.21	0.22	0.11	
luminous transmittance rel. NA τ _v		%	43.5	43.7	43.8	44.0	43.1	43.2	
luminous transmittance rel. D65 τ _v		%	46.4	46.5	46.6	46.8	45.8	46.0	

Test mark: 03771-ECS-20

Type: Laser protection filter, BF100-1R / BV100-1R

Transmission spectra / Absorption spectra

test ↓		sample →		20377					
				-1	-3	-5	-2	-4	-6
spectral transmittance at laser wavelengths for BF100-1R	694 nm	OD > 3							
	830 nm – 860 nm	OD > 4							
	1064 nm	OD > 6							
spectral transmittance at laser wavelength/s for BV100-1R	694 nm	OD > 3							
	830 nm – 860 nm	OD > 4							
	1064 nm	OD > 6							
optical density @ 1064 nm				7.0	7.4	7.3	7.7	7.8	7.5

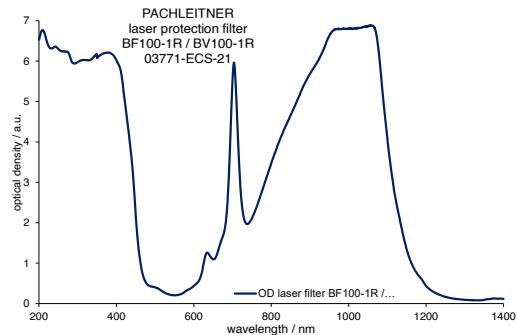


Figure 2: Spectral transmittance of laser filter BF100-1R and BV100-1R

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Quality of material and surface, refractive powers, diffusion of light, transmission after test to thermal ageing

test ↓	sample →	20377			
		-1	-2	-3	
quality of material and surface		no visible surface modification after thermal ageing			
spherical power	R	dpt	-0.01	-0.01	0.00
	L		-0.01	-0.01	0.00
astigmatic power	R	dpt	0.01	0.01	0.01
	L		0.01	0.01	0.02
reduced luminance coefficient, diffusion of light	cd/m ² lx		0.23	0.24	0.18
			0.18	0.16	0.18
luminous transmittance rel. D65 τ _v	%	45.6	46.5	46.0	
relative change	%	1.7	0.1	1.3	

Quality of material and surface, refractive powers, diffusion of light, transmission after test to UV ageing

test ↓	sample →	20377		
		-4	-5	-6
quality of material and surface		no surface modifications or cracks after UV ageing, surface gets hazy after breathing on the surface		
spherical power	dpt	-0.01	-0.01	-0.01
astigmatic power	dpt	0.01	0.01	0.01
reduced luminance coefficient, diffusion of light	cd/m ² lx	0.60	0.21	0.31
reduced luminance coefficient, diffusion of light after breathing on the surface	cd/m ² lx	1.9*	1.2*	1.5*
luminous transmittance rel. D65 τ _v	%	45.3	43.9	44.9
relative change	%	3.3	4.3	2.3

*Remark: An increased value for the reduced luminance coefficient / scattered light after breathing on the samples' surfaces indicates a beginning depletion of the surface coatings.

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Increased robustness

sample ↓	test →	test temperature / °C	test point	results
20377-19		-5	left frontal	+
20377-20		-5	left frontal	+
20377-21		-5	right frontal	+
20377-22		-5	right frontal	+
20377-23		+55	right frontal	+
20377-24		+55	right frontal	+
20377-25		+55	left frontal	+
20377-26		+55	left frontal	+

Resistance to ignition

test ↓	sample →	20377		
		-19	-20	-21
flammability		temperature ≥ 650 °C no ignition, no further glowing		

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Resistance to laser radiation

Wavelength range: 315 nm to 1400 nm

Laser	RUBIN-Laser, Type NWL Meltemi Q-switch ruby laser	Wavelength	694 nm
Test report	<p>The following measurements were performed on 27 May 2021 at: Institut für Lasertechnologien in der Medizin und Meßtechnik an der Universität Ulm, Helmholtzstraße 12, 89081 ULM, GERMANY The tests were performed by: Dipl.-Ing. Rolf Diebold, senior scientist at the ILM</p>		
Samples	Laser protection filter BF100-1R / BV100-1R, labelled by 20377-16, -17, -18		
Test conditions		Observations	
LB-scale number to be tested	R LB3	<p>Laser-facing side: no material or surface modification observed on laser irradiated area</p> <p>Eye-facing side: no thermally induced surface modification observed</p> <p>No transmission registered.</p>	
required energy density	5 J/m ²		
pulse duration / measurement period / number of pulses	40 ns / 50 s / 50 pulses		
pulse repetition rate	1 Hz		
beam diameter	1 mm		
irradiated area	0.79 mm ²		
avg. power, externally measured	4.1 mW		
energy per pulse, externally measured	4.1 mJ		
energy density, radiant exposure	5,2 * 10 ³ J/m ²		
measured LB-scale number	10 ⁵ R LB3		

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Resistance to laser radiation

Wavelength range: 315 nm to 1400 nm

Laser	Diode pumped Ytterbium-Faserlaser, type IPG YLR-200-SM-WC	Wavelength	1070 nm
Test report	<p>The following measurements were performed on 16 Dec 2020 at: Bayerisches Laserzentrum GmbH, Konrad-Zuse-Straße 2-6, 91052 ERLANGEN, GERMANY Test report: BLZ-ECS 1129-20</p>		
Samples	Laser protection filter BF100-1R / BV100-1R, labelled by 20377-7, -8, -9		
Test conditions		Observations	
LB-scale number to be tested	D LB6	<p>Laser-facing side: surface melting effects and foaming on laser irradiated areas</p> <p>Eye-facing side: no thermally induced surface modification observed</p> <p>No sample showed any transmission.</p>	
required power density	10 ⁷ W/m ²		
laser mode / measurement period	cw / 5 sec		
beam diameter	1.0 mm		
irradiated area	0.79 mm ²		
power, externally measured	8.1 W		
power density, irradiance	1.0 * 10 ⁷ W/m ²		
measured LB-scale number	1.0 * D LB6		

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Resistance to laser radiation

Wavelength range: 315 nm to 1400 nm

Laser	Quanta Ray GCR 4 flashlight pumped pulsed Nd:YAG laser, free running mode	Wavelength	1064 nm
Test report	The following measurements were performed on 13 Dec 2020 at: Institut für Lasertechnologien in der Medizin und Meßtechnik an der Universität Ulm, Helmholtzstraße 12, 89081 ULM, GERMANY The tests were performed by: Dipl.-Ing. Rolf Diebold, senior scientist at the ILM		
Samples	Laser protection filter BF100-1R / BV100-1R, labelled by 20377-10, -11, -12		
Test conditions		Observations	
LB-scale number to be tested	LB6	Laser-facing side: no material or surface modification observed on laser irradiated area Eye-facing side: no thermally induced surface modification observed No transmission registered.	
required radiant exposure	$5 \cdot 10^3 \text{ J/m}^2$		
pulse duration / measurement period / number of pulses	150 μs / 5 s / 50 pulses		
pulse repetition rate	10 Hz		
beam diameter	1 mm		
irradiated area	0.79 mm ²		
avg. power, externally measured	48 mW		
energy per pulse, externally measured	4.8 mJ		
radiant exposure	$6.0 \cdot 10^3 \text{ J/m}^2$		
measured LB-scale number	1.2 * 1 LB6		

Test mark:	03771-ECS-20
Type:	Laser protection filter, BF100-1R / BV100-1R

Resistance to laser radiation

Wavelength range: 315 nm to 1400 nm

Laser	Quanta Ray GCR 4 flashlight pumped pulsed Nd:YAG laser, Q-switch mode	Wavelength	1064 nm
Test report	The following measurements were performed on 13 Dec 2020 at: Institut für Lasertechnologien in der Medizin und Meßtechnik an der Universität Ulm, Helmholtzstraße 12, 89081 ULM, GERMANY The tests were performed by: Dipl.-Ing. Rolf Diebold, senior scientist at the ILM		
Samples	Laser protection filter BF100-1R / BV100-1R, labelled by 20377-10, -11, -12		
Test conditions		Observations	
LB-scale number to be tested	R LB6	Laser-facing side: no material or surface modification observed on laser irradiated area Eye-facing side: no thermally induced surface modification observed No transmission registered. No induced transmission observed.	
required radiant exposure	$5 \cdot 10^3 \text{ J/m}^2$		
pulse duration / measurement period / number of pulses	9 ns / 5 s / 50 pulses		
pulse repetition rate	10 Hz		
beam diameter	1 mm		
irradiated area	0.79 mm ²		
avg. power, externally measured	46 mW		
energy per pulse, externally measured	4.6 mJ		
radiant exposure	$5.8 \cdot 10^3 \text{ J/m}^2$		
measured LB-scale number	1.1 * R LB6		

– End of Measurement Report 1 –



CERTOTTICA
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I - 32013 Longarone BL
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EU TYPE-EXAMINATION CERTIFICATE

no: AC 19229

Pursuant to Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016,

CERTOTTICA Scrl
Italian Institute for the certification of optical products
Notified body under PPE Regulation with identification number: 0530

considering application for EU type-examination no. 19236 submitted on 22/05/2019

CERTIFIES THAT

the following personal protective equipment type

Personal eye protector - Spectacle
BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2

submitted by

Michael Pachleitner Group
Liebenauer Tangente 4, 8041 Graz - AUSTRIA

meet the essential health and safety requirements which apply to it.

Description of the personal protective equipment model, references to the standards, test results and description of the CE marking placed on the equipment are described on pages 2, 3 and 4 of this document.

First issued on: 06/09/2019

Renewal or revision date: /

Expiry date: 05/09/2024

Longarone, 06/09/2019

Certification Services Manager
(Giuseppe Sommariva)

Longarone

S.C.R.L.

This document has no. 4 numbered pages.

EU type-examination certificate no. AC 19229 dated 06/09/2019



FIG. N°1428
Istituto Italiano per la Certificazione dei Prodotti Ottici Scrl
Via S. Vito, 1
32013 Longarone (BL) - Italy
Signature of the Notified Body
Personnel Management Representative

1. Description of the Personal Protective Equipment

Identification of the PPE: BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2
Trade name: B-TAC
Kind of equipment: Personal eye protector - Spectacle
Ocular Material: Polycarbonate
Frame Material: Nylon and TPR
In compliance with Standard(s): EN 166:2001 and /

PPE Category: II
Field(s) of use: Protection against high-speed particles at extremes of temperature - Low energy impact;
Protection against optical radiation - Ultraviolet filters - EN 170 (Clear and Yellow oculars);
Protection against optical radiation - Sunglare filters for industrial use - EN 172 (Smoke ocular);
Resistance to surface damage by fine particles;
Resistance to fogging of oculars.

Note: The eye-protector model BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2 has two frame variants: regular size - reference code BV100-1 and large size - reference code BV100-2. The eye-protector model BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2, in both frame variants, has three ocular variants: Clear (protection against optical radiation - ultraviolet filters), Yellow (protection against optical radiation - ultraviolet filters) and Smoke (protection against optical radiation - sunglare filters for industrial use).

Manufacturer's name: Michael Pachleitner Group
Manufacturer's address: Liebenauer Tangente 4, 8041 Graz - AUSTRIA
Authorised representative's name: /
Authorised representative's address: /
Certificate's holder: Michael Pachleitner Group
Holder's address: Liebenauer Tangente 4, 8041 Graz - AUSTRIA





PRO N°1438
 D.C. 02/19/2005, Accreditazione di Pubblica Responsabilità
 Ministero di P.A., D.P.R. 27/02/2004, n. 52/04
 D.M. 01/08/2002, n. 27082

2. Levels of protection offered by the PPE

Applicable harmonised standards/technical specifications:

EN 166:2001 - Personal eye-protection - Specifications

EN 167:2001 - Personal eye-protection - Optical test methods

EN 168:2001 - Personal eye-protection - Non-optical test methods

EN 170:2002 - Personal eye-protection - Ultraviolet filters - Transmittance requirements and recommended use

EN 172:1994/A1:2000/A2:2001 - Personal eye-protection - Sunglare filters for industrial use

Personal protection equipment model BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2 complies with the basic requirements and with the following additional requirements provided for by the harmonised standard(s)/technical specification(s) for the particular use of this PPE in the foreseeable conditions of use :

EN 166:2001 and /

Protection against high-speed particles at extremes of temperature - Low energy impact;

Resistance to surface damage by fine particles;

Resistance to fogging of oculars.

/

/

Moreover, the personal protection equipment complies with the specific requirements provided for by the connected harmonised standard(s)/technical specification(s) for the particular fields of use:

EN 170 and EN 172

The eye-protector model BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2 with the ocular variants Clear and Yellow is designed for protection against optical radiation - ultraviolet filters.

The eye-protector model BIONIC 002/Vision Regular BV100-1 BIONIC 002/Vision Large BV100-2 with the Smoke ocular variant is designed for protection against optical radiation - sunglare filters for industrial use.

3. Test and examinations results are covered by the following test reports:

CERTOTTICA	193773	11/07/2019
CERTOTTICA	193774	11/07/2019
CERTOTTICA	193775	11/07/2019
CERTOTTICA	193776	11/07/2019
CERTOTTICA	195460	23/08/2019
CERTOTTICA	195461	23/08/2019
CERTOTTICA	195462	23/08/2019

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PRO N°1438
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 Ministero di P.A., D.P.R. 27/02/2004, n. 52/04
 D.M. 01/08/2002, n. 27082

4. The marking elements reproduced on the oculars are the following:

Variant	Clear ocular	Ocular 1 2C-1,2	Ocular 2 /
Scale Number	Yellow ocular	2-1,2	/
	Smoke ocular	5-3,1	/
		/	/
Manufacturer's Identification			sp /
Optical class		1	/
Standard of reference			/
Symbol of Mechanical Resistance		FT	/
Resistance to surface damage by fine particles		K	/
Resistance to fogging of oculars		N	/
/		/	/
/		/	/
/		/	/
CE Marking		CE	/

Marking position: On the front side of the right ocular, upper central position.

5. The Marking elements reproduced on the frame are the following:

Manufacturer's Identification	EN 166 sp
Reference standard	EN 166
Protection against high-speed particles at extremes of temperature - Low energy	FT
/	/
/	/
/	/
/	/
CE Marking	CE

Marking: Inside the spectacles frontal, in the left middle position.

6. Statement for category III PPE:

/



Terms and conditions under which the Certificate is issued

- Marking and instructions have been examined in English. Obtaining and supplying versions in languages accepted by the countries where the product is sold are under the complete responsibility of the Manufacturer or of his authorized representative.
- Any changes to the product, to the technical documentation or, in set cases, to the manual or to the quality control procedures, shall be notified in time to Certottica.
- The Manufacturer or his authorized representative shall respect the procedures and rules provided for by Certottica for the issuing of the EU type-examination.
- Copies of this EU type-examination certificate, supplied to third parties, shall be reproduced in their entirety.
- This EU type-examination certificate shall be kept by the Manufacturer to be shown, on request, to the market surveillance authorities.
- This EU type-examination certificate remains property of Certottica, which can ask it to be returned if any of the above mentioned conditions is not respected.

cTAC

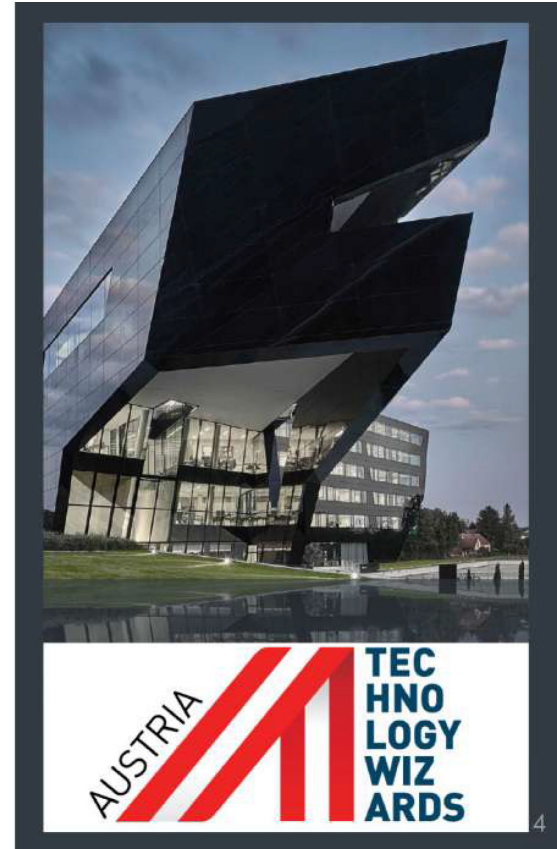
Protection
meets
Design



Trendy, ballistic eyewear developed in Austria

We work together with the best and most innovative eyewear manufacturer in the optical sector in Austria.

cTAC focuses not only on optimum quality and functionality for military / police use, but also on a particular appealing design. Using the latest technologies and by having the right feeling for trends and eye safety.



Designed & Developed
for special requirements in
MILITARY and POLICE use

Made in
AUSTRIA

cTAC

HIGHEST
production
quality

Best
LASER
PROTECTION

Best ballistic
SAFETY GLAS

ULTRA-FLEXIBLE
sustainable materials



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