

# BLS Zer0 FLAT SERIES

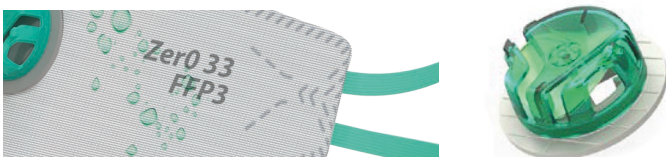
THREE-FLAP FLAT FILTERING FACEPIECES

BLS Zer0 Flat series 3-flap filtering facepieces offer high protection combined with exceptional breathing comfort. They feature a surface micro net that prevents clogging of the filtering material and absorption of liquids, thus ensuring a longer life of the device. The facepiece provides the protection of a P3 with the breathability of a P1 and can be used for more than one work shift.



## ARMOR® EXTERNAL PROTECTIVE LAYER

The outer protective layer surrounding the filter material protects it from dirt, dust and liquids, as well as the stress caused by prolonged use. The device performs for a longer period of time.



## HIGH-EFFICIENCY EOLO VALVE

An ultra-light membrane concentrates exhaled air in two maximum opening zones, 30% wider than standard valves, ensuring low breathing resistance and avoiding the risk of fogging up of spectacles.

## TEXTILE WELDED ELASTICS

The elastic bands are made of enduring and high-performance textile material. The addition of a backing layer allows the elastics to adhere to the filter body without the use of exposed metal parts.

## INTERNAL NOSE CLIP

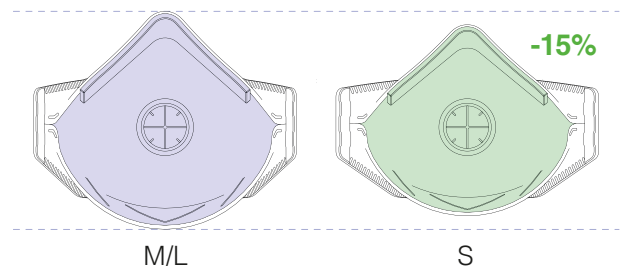
The nose clip, placed internally between the layers of filtering material, adapts optimally to the profile of the nose and eyes, ensuring good visibility and maximum compatibility with glasses.

## RIGID INNER CORE

The addition of an innovative inner core provides solidity to the filtering facepiece and high breathability, while maintaining low breathing resistance.

## AVAILABLE IN TWO SIZES

This series is available in two different sizes, S and M/L, to perfectly fit all face profiles. Size S has been specially designed for female faces.



## FLAT 3-FLAP DESIGN

BLS Zer0 Flat series 3-flap filtering facepieces offer high protection combined with exceptional breathing comfort. Easy to open and to be positioned on the face; well-designed shape, and significant inner volume, for a better comfort.

## OPTIMAL VISUAL FIELD

The geometry of the filtering facepiece guarantees a large filtering surface area, leaving the field of vision totally free.

# BLS Zer0 FLAT SERIES

## THREE-FLAP FLAT FILTERING FACEPIECES

### GASKET

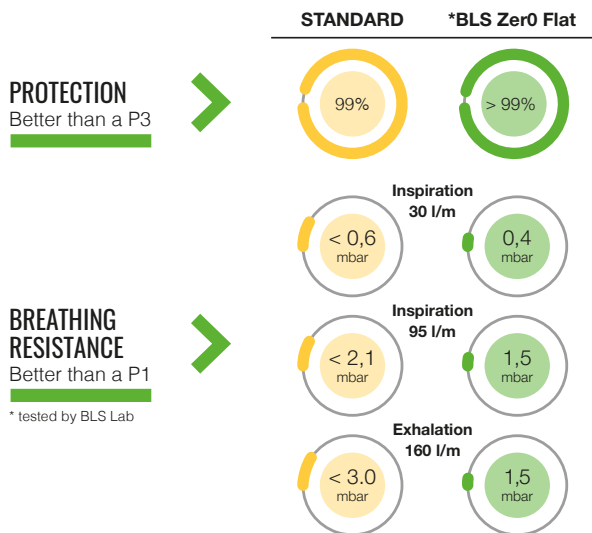
Soft gasket on the nose area, made of foamed polymer coupled with polyester textile (PES).

### IT BREATHES!

The mask has been tested according to ASTM E96 to ascertain the Water Vapour Transmission Rate (WVTR) in grams per hour and per square metre: The result is 3.380 g/(m<sup>2</sup>\*24h), which is far higher than the result achieved by the largest majority of the masks on the market.

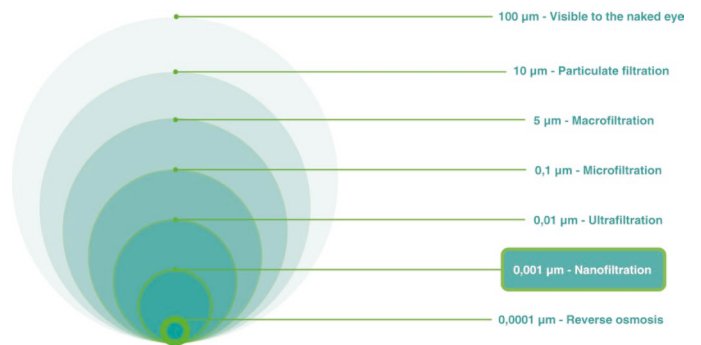
### LOW BREATHING RESISTANCE

An FFP3 certified disposable mask with a lower breathing resistance than an FFP1. Less breathing resistance implies less effort for the wearer, therefore enhanced comfort.



### WHAT ARE NANOPARTICLES AND WHY IS IT SO IMPORTANT TO PROTECT ONSELF?

They are particles with a diameter of approximately 1 to 100 nm (0.001 µm - 0.1 µm). Recent studies have shown that some nanoparticles can penetrate cells and tissues, move through the body and brain and cause biochemical damage. In particular, the small size of nanopowders allows them to behave in a manner that can be described as intermediate between that of gases and the rest of suspended particulate matter. Adequate protection is therefore essential.



### EXAMPLES OF NANOPARTICLES

Diesel engine emissions, in welding, metal cutting, foundries. BLS Zero filtering masks ensure 99% filtration of nanoparticles, as verified by tests carried out at the Itene Research Institute (Valencia) - Test report of September 10th 2022.

	NaCl	AL <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	ZnO	Graphene
Penetration (%)	0,89	0,92	0,91	0,61	0,92
Filtration efficiency (%)	99,211	99,08	99,09	99,39	99,08

### SINGLE PACKED

Each mask is packed in an individually sealed PE pouch, to maximize hygiene. It is also the best solution to carry the mask in a pocket, or have it available in vending machines.



# BLS ZerO FLAT SERIES

## THREE-FLAP FLAT FILTERING FACEPIECES

### MATERIALS

ELASTICS	Polyester (PES) and synthetic rubber
NOSE CLIP	Polypropylene (PP) reinforced with heat-treated metal
VALVE	Polypropylene (PP)
VALVE MEMBRANE	Silicone
GASKET	Soft technical polymeric foam
FILTERING MATERIAL	Polypropylene (PP)
PROTECTIVE LAYER	Polyethylene (PE)
CARBON LAYER	Polyester (PES) + carbon

*All components in direct contact with user's face are LATEX FREE  
BLS ZerO Flat series filtering facepieces are Made in Europe, just as all of their components*

### TECHNICAL DATA

PRODUCT	CODE	SIZE	CLASS of PROTECTION	FPN	VALVE	CARBON LAYER	ELASTICS	GASKET
BLS Zer0 33 NV	8101033	S	FFP3 R D	50*TLV			Textile	✓
BLS Zer0 33 NV	8101032	M/L	FFP3 R D	50*TLV			Textile	✓
BLS Zer0 33	8101031	S	FFP3 R D	50*TLV	✓		Textile	✓
BLS Zer0 33	8101030	M/L	FFP3 R D	50*TLV	✓		Textile	✓
BLS Zer0 33 C	8101029	S	FFP3 R D	50*TLV	✓	✓	Textile	✓
BLS Zer0 33 C	8101021	M/L	FFP3 R D	50*TLV	✓	✓	Textile	✓

*(NR) Non-reusable, maximum 8 hours (R) Reusable (TLV) Threshold limit value (FPN) Nominal protective factor  
(D) Product passed clogging test with Dolomite dust, simulates high concentration of solid particles  
(ACTIVE CARBON) Capable of blocking organic and acidic gases and vapours in concentrations below the TLV*

### TRANSPORT

PRODUCT	CODE	SIZE	WEIGHT (g)	Q.TY/BOX	Q.TY/CARTON	CARTON WEIGHT (Kg)	Q.TY/PALLET
BLS Zer0 33 NV	8101033	S	11	16	96	1,88	3072
BLS Zer0 33 NV	8101032	M/L	11	16	96	1,88	3072
BLS Zer0 33	8101031	S	15	8	48	1,55	1536
BLS Zer0 33	8101030	M/L	15	8	48	1,55	1536
BLS Zer0 33 C	8101029	S	17	8	48	1,70	1536
BLS Zer0 33 C	8101021	M/L	17	8	48	1,70	1536

### STORAGE

SHELF-LIFE	10 years/5 years (with activated carbon)
TEMPERATURE	+5°C/+40°C
RELATIVE HUMIDITY	<60%

# BLS Zer0 FLAT SERIES

## THREE-FLAP FLAT FILTERING FACEPIECES

### AVAILABLE MODELS



BLS Zer0 33 NV  
Size M/L - Size S



BLS Zer0 33  
Size M/L - Size S



BLS Zer0 33 C  
Size M/L - Size S

### CERTIFICATIONS

BLS filtering facepieces are:

- Certified according to European Regulation 2016/425 (Personal Protective Equipments)
- Certified as PPE of III category, in presumption of conformity to harmonized standard EN 149:2001+A1:2009
- Certified and controlled according to Annex D by Italcert S.r.l. (Notified Body n°0426)
- CE marked

BLS management system is ISO 9001 certified.

### FIELDS OF USE

FFP3 disposable masks can be used to protect the wearer from dusts/fibers/fumes of toxic particles in concentration of 50 x TLV (NPF). Ex. wood works, sanding, grinding, fiberglass cutting, and any activity in presence of asbestos fibers, chromium, lead, silica, antiplastics etc. BLS Zer033C is also particularly recommended for welding applications (ozone in concentrations < TLV).

### SELECTION GUIDE

CARBON LAYER\_ BLS Zer0 33 C

- Able to block organic and acid gases and vapours with concentrations lower than the TLV
- Ideal for operations with ozone related risk (concentrations lower than the TLV)

WITHOUT VALVE\_ BLS Zer0 33 NV

- Ideal in food industry, in medical contexts and all working environments where contamination by the user must be avoided

WITH VALVE\_ BLS Zer0 33 / BLS Zer0 33 C

- It allows to reduce the respiratory resistance, guaranteeing a higher comfort of the product

SIZE S\_ ALL MODELS

- It guarantees an optimal seal even on the smallest faces
- Size S has been specially designed for female faces

### IMPORTANT

BLS declines any responsibility, direct or indirect, from any misuse of both devices and instructions. User is responsible for the determination of product compliance with the intended use.