

FEEL FREE TO **BREATHE**



CATALOGUE

2018

ENGLISH 💥

TABLE OF CONTENTS

| 1 | TABLE OF CONTENTS |
|----|---|
| 2 | ABOUT BLS BLS, OUR MILESTONES BLS, 48 YEARS OF PRODUCTS, SERVICE AND EXPERTISE |
| 6 | SOME BASICS ON DISPOSABLE DEVICES REUSABLE DEVICES |
| 8 | DEVICE SELECTION GUIDE |
| 10 | DISPOSABLE DEVICES CUP SHAPED RESPIRATORS |
| 12 | BLS ZER0 SERIES FLAT FOLDABLE RESPIRATORS |
| 14 | BLS FLICKIT SERIES CUP SHAPED RESPIRATORS |
| 16 | BLS CLASSIC SERIES |
| 19 | REUSABLE DEVICES HALF MASK |
| 22 | BLS 4000 SERIES — b-lock connection |
| 23 | READY TO USE KIT BLS 4000 — <i>b</i> -lock connection |
| 24 | BLS SGE46 — Universal connection |
| | READY TO USE |
| 26 | BLS 8000 SERIES |
| | FULL FACE MASK |
| 28 | BLS 5000 SERIES — b-lock connection |
| 30 | BLS 5000 SERIES — Universal connection |
| 32 | BLS 3000 SERIES— Universal connection |
| 35 | FILTERS |
| 35 | BLS 400 SERIES — Universal connection |
| 36 | BLS 200 SERIES — b-lock connection |
| 37 | BLS 201 SERIES — b-lock connection |
| 38 | ACCESSORIES |
| 39 | AN OVERVIEW ON BLS RESPIRATORY PROTECTION PRODUCTS |





1970

BLS starts its activity in Milan by setting up its first manufacturing plant, laboratories and offices. Initially, production was focused on disposable cup shaped respirator masks.

1996

CE marking is introduced. BLS is one of the first manufacturers to optain such certification.



2006

In order to meet a rising global demand, BLS starts to invest on its own internal **engineering team** to design and develop fully automated production lines.

2003

BLS widens its offer by setting up the first production of reusable half mask and full face mask respirators.



2005

BLS obtains the ISO 9001 certification.



2010

BLS completes its offer by acquiring a facility in Spain, specialized in the manufacture of filters for reusable respirators. **BLS Iberia** is born.

2017

Aiming to offer premium assistance to the markets of UK, Benelux and Ireland, the Rotterdam based branch, **BLS NorthWest**, opens its commercial offices in The Netherlands.



2012

BLS do Brasil launches a new office in Curitiba, in order to reach the South American market.



2014

BLS builds new headquarters in Milan extending over a 5000 sqm surface. They were built with the most modern technologies.



48 YEARS OF PRODUCTS, SERVICE AND EXPERTISE

– strengths

EXPERIENCE & MADE IN ITALY

Operating in Milan since 1970, with almost 50 years of experience, BLS is highly specialized in the production of negative pressure respiratory protection devices.

QUALITY & ENGINEERING

From the concept to the shipment, BLS designs, develops and produces all its products internally.

PROTECTION & COMFORT

Our mission is to offer maximum protection without giving up on user's comfort.









— thinking

R&D DEPARTMENT

An innovation driven team that constantly designs, develops and upgrades BLS products.

CUSTOMER SERVICE

An efficient and well organized customer service gives the best assistance to our clients.

TEST LAB

Thanks to state-of-the-art machineries, quality is always under the watch of our well trained operators. From the raw materials to the final product.

making

DISPOSABLE & REUSABLE DEVICES

All our production lines are designed and engineered internally by our technical team.

FILTERS

Strong investments in the automation of many time-wasting industrial processes and a special care on choosing the best raw materials make our facility in Barcelona an innovation hub for the whole group.

CUSTOMIZED PRODUCTS

Quickly developed, taylor-made products in a variety of colours, with a common brand or a client's logo.







PROTECTION FROM DUSTS, MISTS AND FUMES

DUSTS are formed when a solid material is decomposed into tiny fragments.

MISTS are tiny droplets that are formed from liquid materials through condensation and atomization processes.

FUMES are formed when a solid material (e.g.: a metal) is vaporized through high temperature. The vapour cools quickly and condenses into extremely fine particles.

The term **PARTICULATE** commonly identifies the collection of these solid particles in the air.

There are two families of products for protection against particulates:

A) FILTERING FACEPIECES, indicated with "FFP"; EN 149 standard.

B) FILTERS (for half or full face masks), indicated with "P"; EN 143 standard.

In reference to the protection from particulates, the legislation confers an increased protection with the increase of the filtering efficiency: FFP1, FFP2, FFP3 / P1, P2, P3.

MINIMUN FILTERING EFFICIENCY

| EN 149 |) | EN 143 | |
|--------|-----|--------|--------|
| FFP1 | 80% | P1 | 80% |
| FFP2 | 94% | P2 | 94% |
| FFP3 | 99% | P3 | 99,95% |

CLASS OF PROTECTION

The European Standard EN 529:2005 shows how to select the correct breathing apparatus based on the risk assessment. This standard indicates the "protection factor" which is by definition the parameter that expresses the ratio between the concentration of the contaminant in the environment and its concentration inside the breathing apparatus. An important distinction concerns the **nominal protection factor (NPF)** and the **assigned protection factor (APF)**. The nominal protection factor (**NPF**) is a number derived from the maximum percentage of total loss (towards the inside of the breathing apparatus) allowed by European standards. The assigned protection factor (**APF**) is the level of respiratory protection that one can realistically expect in the workplace by 95% of the PPE users. Furthermore, an important reference for choosing the breathing apparatus is the **Threshold Limit Value** (**TLV**), or rather the "exposure limit value", which indicates the environmental concentrations of airborne chemicals below which most workers can remain repeatedly exposed to day after day for their working life without any negative effect on their health.

| FILTERING FACEPIECES | | | HALF MASK WITH FILTERS | | | FULL FAC | FULL FACE MASK WITH FILTERS | | |
|----------------------|-----|-----------|------------------------|-----|--------------|-----------------|-----------------------------|--------------|--|
| CLASS | NPF | MAX CONC. | FILTER CLASS | NPF | MAX CONC. | FILTER CLASS | NPF | MAX CONC. | |
| FFP1 | 4 | 4xTLV | P1 | 4 | 4xTLV | P1 | 5 | 5xTLV | |
| FFP2 | 12 | 12xTLV | P2 | 12 | 12xTLV | P2 | 16 | 16xTLV | |
| FFP3 | 50 | 50xTLV | P3 | 48 | 48xTLV | P3 | 1000 | 1000xTLV | |

*TLV: time-weighted average concentration of a substance to which the operator can be exposed without adverse health effects.

If the concentration of the pollutant in the workplace is unknown, the first rule for selecting the minimum level of protection can be provided by the following table:

| PROTECTION LEVEL | P1 | P2 | P3 |
|------------------------------------|-----------|-----------------------------|------------------------|
| POLLUTANT TLV / MINIMUM EFFICIENCY | ≥ 10mg/m³ | 0.1 < > 10mg/m ³ | ≤ 0.1mg/m ³ |

PROTECTION FROM GASES AND VAPOURS

GASES are substances which at an ambient temperature and pressure are in a liquid or solid state and pass to a gaseous state through boiling or evaporation processes (e.g.: oxygen, nitrogen, carbon dioxide). VAPOURS are substances which at ambient temperature and pressure become gaseous through evaporation from a liquid or a solid (e.g.: acetone, toluene, hexane). For protection against this type of contaminant it requires a carbon layer filter suitably treated to selectively absorb different substances.

The European Standard 14387:2004+A1: 2008 defines protection against gases and vapours according to the following table:

| TYPE | COLOUR | PROTECTION |
|------|--------|---|
| A | BROWN | Organic gases and vapours with a boiling point higher than 65°C |
| В | GREY | Inorganic gases and vapours |
| E | YELLOW | Acid gases |
| К | GREEN | Ammonia and derivates |
| AX | BROWN | Organic gases and vapours with a boiling point lower than 65°C |

CLASS OF PROTECTION

To select the right protection against gases and vapours, the chemical nature of the pollutant must be known referring, if necessary, to the tables provided by BLS, which indicate the type of filter to use depending on the contaminant and its concentration, making sure that the level of oxygen is greater than 17%. Regulations provide three filter capacity classes: low (class 1), medium (class 2), high (class 3).

For protection against gases and vapours, the nominal protection factor is determined by the type of mask and not by the filter used. Although the filtering efficiency of the filter is close to 100%, the duration of filter increases with increase of the capacity, since the quantity of carbon layer is larger. On the contrary, by increasing both the volume and the weight of the filter, the breathing effort increases.

| CLASS | 1 | 2 | 3 |
|-------------------|-------------|-------------|--------------|
| CAPACITY | LOW | MEDIUM | HIGH |
| EXPOSURE LIMIT | 1000 ppm | 5000 ppm | 10000 ppm |

| | HALF N | MASK | FULL F | ACE MASK |
|--------|--------|-------------------|--------|-------------------|
| | NPF | MAX CONCENTRATION | NPF | MAX CONCENTRATION |
| GAS | 50 | 50xTLV | 2000 | 2000xTLV |
| GAS P3 | 48 | 48xTLV | 1000 | 1000xTLV |

*TLV: time-weighted average concentration of a substance to which the operator can be exposed without adverse health effects.

COMBINED FILTERS

In the presence of both gases/vapours as well as particulates, protection with combined filters is required. These filters combine a gas filter to a dust filter.

GUIDE TO THE SELECTION OF THE DEVICE

| | | | | RECOMM | ENDED DEVICE | | |
|--|----------------|----------------|--------------------|-------------------|-----------------------------|---|------------------------|
| PROCESS | PROTECTION | DI | SPOSABLE RESPIRATO | RS | RESPIRATORS WITH FILTERS | FILTERS (dto connect with a reusable respirator) | |
| | | ZER0 SERIES | CLASSIC SERIES | FLICKIT SERIES | 8000 SERIES | 200/201 B-LOCK SERIES | 400 UNIVERSA SERIES |
| BUILDING | | | | | | | |
| Masonry | FFP2 | | 128 BW, 129BW | 828, 829 | | | |
| Sandblasting | FFP3, P3 | 030, 031 | 505 BW, 525B | 860 | | 201-3, 202 | 401 |
| Asbestos reclamation | FFP3, P3 | 030, 031 | 505 BW, 525B | 860 | | | |
| Soil decontamination | ABE1P3 | | | | | 226 | |
| Bitumen, catrams | A2P3 | | | | 8100, 8600 | 221, 251 | 421 |
| WELDING | | | | | | | |
| Steel, zinc (gas, MIG/MAG) | FFP2 + carboni | | 225, 226B, 226B RS | 837 | | | |
| Steel alloy (with electrode) | FFP3 + carboni | 030C, 031C | | | | | |
| Brazing | FFP3 + carboni | 030C, 031C | | | | | |
| Stainless steel | FFP3, P3 | 030C, 031C | | | | 201-3, 202 | 401 |
| WOOD | | | | | · | | |
| Cutting, grinding, drilling | FFP3, P3 | 030, 031 | | | | 201-3, 202 | 401 |
| Mordants, water-based diluents | FFP2 + carboni | | 225, 226B, 226B RS | 837 | | | |
| Solvent-based paint | A2P3 | | | | 8100, 8600 | 221, 251 | 421 |
| HYDROCARBONS | | | | | | | |
| Oil, petrol | A2P3 | | | | 8100, 8600 | 221, 251 | 421 |
| FOOD | | 1 | | | · | | |
| Flour and powder of cereals | FFP2 | | 128 BW, 129BW | 828, 829 | | | |
| Food preservatives | FFP2 | | 128 BW, 129BW | 828, 829 | | | |
| Coffee, spices, fish protein | FFP2 | | 128 BW, 129BW | 828, 829 | | | |
| AGRICULTURE / FARMING | 1 | | | | | | |
| Pollen, animal hair | FFP2 | | 128 BW, 129BW | 828, 829 | | | |
| Pesticides, pesticides, herbicides | A2P2 | | | | 8100 | 211 + 301 | 421 |
| GALVANIZATION | 1 | | | | | | |
| Degreasing | A2P3 | | | | 8100, 8600 | 221, 251 | 421 |
| Pickling, galvanizing | ABEK1P3 | | | | 8400 | 222 | 424 |
| Chromium, nickel and copper plating; tinning, brassing | ABE1P3 | | | | | 226 | |
| IN PRESENCE OF | | 1 | | | - | | |
| Dioxin | ABEK2HgP3 | | 225, 226B, 226B RS | 837 | | | 430* |
| Formaldehyde | ABE, ABEK | | | | | 213, 214, 222, 226, 242, 243, 253*, 254* | |
| Sulfur dioxide | ABE | | | | | 213, 242 | 414 |
| Hydrochloric acid | ABE | | | | | 213, 242 | 414 |
| Ammonia and derivatives | К | | | | | 244 | 413 |



WARNING: This guide is only an exemplary scheme and should not be used as the only selecting criteria for the protection device. For more information, please contact <u>info@blsgroup.it</u>

SOME BASICS ON **DISPOSABLE DEVICES**

The minimum service life is one work shift. They can only protect from particles, fumes and mists. There are three classes of devices ranked according to filtering efficiency and inward leakage (FFP1, FFP2, FFP3).

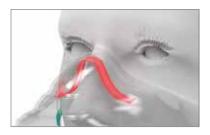
________ Main features /



EXHALATION VALVE / Helps to ease the breathing resistance and dissipates heat and humid air exhaled by the user.

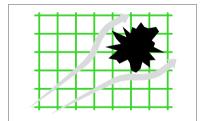


FACE SEAL / A foamy strip placed around the respirator is essential to guarantee maximum protection avoiding air flows passing through unsealed borders. It can be partial (sealing the upper nose) or complete.

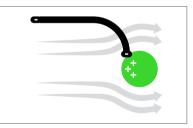


NOSE CLIP / Along with the face seal it secures the fit of the respirator to the most critical part of the face among users, the upper nose.

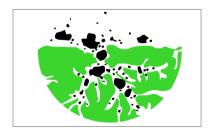
Filtration principles /



MECHANICAL / The filtering material has a net structure with meshes blocking particles bigger than the net of fibres.



ELECTROSTATIC / Smaller particles are subject to a further filtration by the electrostatically charged filtering material. Therefore, the smaller the particulate, the stronger is the electrostatic attraction.



ACTIVATED CARBONS / A layer impregnated with activated carbons could be added to the filtering material enhancing the protection and comfort of the product in presence of nuisance odours.

BLS TECHNOLOGIES FOR DISPOSABLE PRODUCTS

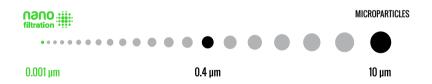
EOLO

Eolo Technology is our latest fastening system of the ultralight membrane of the exhalation valve which is fixed on three aligned points instead of a single one concentrating the exhaled air into two zones of maximum aperture, 30% wider than before. With these improvements breathing resistance decreases significantly.



NANOFILTRATION

If inhaled, nanoparticles (between 1 and 100 nanometers wide), are able to cross cellular membranes reaching internal organs and potentially cause severe harm to the body being very difficult to dispose. Specific tests have helped us to develop a filtering medium able to successfully block the access of such substances. With NANOFILTRATION, BLS can guarantee a new standard of protection against nanoparticles.







ARMOR

It's an external layer that ensures the protection of the filtering material from dirt, dust and liquids as well as the normal mechanical stress extending and preserving filtering efficiency and making the device safer.



- 11

DISPOSABLE PRODUCTS / CUP SHAPED FILTERING FACEPIECES **BLS ZERO SERIES**

Why ZerØ?/

Why give up maximum comfort if you can have it with the best protection?

BLS Zer0 is designed to offer both: **maximum protection and maximum comfort.** It includes only FFP3 models but provides a breathing resistance comparable to a FFP1 respirator.



Features /

WATCH THE VIDEO

voutube.com/user/BLSRespiratory1



ANATOMIC

The pre-formed and elastic support makes an easier and reliable fit to all kinds of faces. It offers an excellent visual field and a great compatibility with glasses.

FACE SEAL

02

It is made of a soft foam coupled with a technical fabric providing excellent compression and deformation combined with an elevated user's comfort. The textile layer is very smooth and pleasant to the touch, absorbs sweat and keeps the skin cool and dry.

Available products /

| CODE | CODE for SINGLE PACKED | PRODUCT | PROTECTION | EXHALATION VALVE | WELDED STRAPS | CARBON LAYER | GASKET | PROTECTIVE LAYER |
|---------|---------------------------|----------------|------------|-----------------------|------------------|-----------------------|----------|-----------------------|
| 8006295 | 8006302 | BLS ZerO 30 NV | FFP3 NR D | | \checkmark | | partial | ✓ |
| 8006296 | 8006303 | BLS ZerO 30 | FFP3 NR D | ✓ | \checkmark | | partial | ✓ |
| 8006297 | 8006304 | BLS ZerO 31 | FFP3 R D | ✓ | \checkmark | | complete | ✓ |
| 8006299 | 8006306 | BLS ZerO 30 C | FFP3 NR D | ✓ | \checkmark | ✓ | partial | ✓ |
| 8006301 | 8006308 | BLS ZerO 31 C | FFP3 R D | \checkmark | \checkmark | ✓ | complete | ✓ |

REUSABLE PRODUCTS







Zero 35

Hill D

two nano who h

04

73

03

03 EXTERNAL PROTECTIVE LAYER

It is an external protective layer that ensures the protection of the filtering material from dirt, dust and liquids as well as the normal mechanical stress due to prolonged use thus extending and preserving filtering efficiency and making the device safer.



04

02

01

IT BREATHES!

The ratio of transmission of water vapour through the material is 4500 g/sqm*24hrs. A value that defines materials of a high transpiration range making it ideal for hard physical work.



FILTERS

DISPOSABLE PRODUCTS / FOLDABLE FILTERING FACEPIECES BLS Flick*it* SERIES

One size fits all /



Single packed & pocket size /



WATCH THE VIDEO

youtube.com/user/BLSRespiratory1

Features /



FOLDS

Allow the respirator to be pocket sized and able to be distributed with alternative solutions such as vending machines.



FIT

The wide surface gives a lower breathing resistance and an excellent fit.



HYGIENE

Very well preserved by the single package on all models and by the possibility to unfold the device without touching the inner mask in direct contact with the face.

Available products /

| CODE | PRODUCT | PROTECTION | EXHALATION VALVE | SINGLE PACKED | WELDED STRAPS | CARBON LAYER |
|---------|---------|------------|-----------------------|------------------|-----------------------|-----------------------|
| 8006170 | BLS 820 | FFP1 NR D | | \checkmark | \checkmark | |
| 8006171 | BLS 822 | FFP1 NR D | ~ | \checkmark | \checkmark | |
| 8006172 | BLS 828 | FFP2 NR D | | \checkmark | \checkmark | |
| 8006173 | BLS 829 | FFP2 NR D | ✓ | \checkmark | \checkmark | |
| 8006256 | BLS 837 | FFP2 NR D | ✓ | \checkmark | \checkmark | ✓ |
| 8006174 | BLS 860 | FFP3 R D | \checkmark | \checkmark | ✓ | |



DISPOSABLE PRODUCTS / CUP SHAPED FILTERING FACEPIECES BLS CLASSIC SERIES

Historical series / Wide choice of protection factors and features to accommodate any specific need.



Features /



FACEPIECE

The shape of the device offers a reduced breathing resistance.



NOSE CLIP Located between two internal layers, it is not in direct contact with the face.

| CODE | CODE for SINGLE PACKED | PRODUCT | PROTECTION | EXHALATION VALVE | WELDED STRAPS | ADJUSTABLE STRAPS | CARBON LAYER | GASKET |
|---------|---------------------------|--------------------------------|----------------------------------|---------------------|-----------------------|----------------------|-----------------------|---------|
| 8006186 | 8006212 | BLS 120BW | FFP1 NR D | | ~ | | | partial |
| 8006187 | 8006213 | BLS 122BW | FFP1 NR D | ✓ | ✓ | | | partial |
| 8006149 | - | BLS 212B | FFP1 NR D | | | | ~ | partial |
| 8006150 | - | BLS 213B | FFP1 NR D | ✓ | | | | partial |
| 8006188 | 8006214 | BLS 128BW | FFP2 R D | | | | | partial |
| 8006184 | 8006211 | BLS 129BW | FFP2 R D | ✓ | | | | partial |
| 8006153 | - | BLS 225B | FFP2 NR D | | | | ~ | partial |
| 8006154 | 8006037 | BLS 226B | FFP2 NR D | ✓ | | | ✓ | partial |
| 8006155 | 8006101 | BLS 226B RS | FFP2 NR D | ✓ | | ✓ | ~ | total |
| 8006282 | - | BLS 226B RS Flame Retardant | FFP2 NR D flame retardant | ~ | | ~ | ~ | total |
| 8006131 | 8006030 | BLS 217B | FFP2 NR D acid gases and vapours | ~ | | | ~ | partial |
| 8006189 | 8006215 | BLS 505BW | FFP3 R D | ✓ | \checkmark | | | total |
| 8006157 | 8006049 | BLS 525B | FFP3 R D | ✓ | | ✓ | | total |

Available products /

REUSABLE PRODUCTS

O3 AVAILABLE WITH ACTIVATED CARBONS

Activated carbons protect from acid and organic gases-vapours and ozone below the Threshold Limit Value (TLV), specific for every substance.

02

05

01

1.12

04

WELDED ELASTICS

Developed to eliminate all exposed metal parts.

05

ADJUSTABLE ELASTICS

Allow to have a custom fit. The textile fibres let the skin breathe and don't rub the hair.

SOME BASICS ON REUSABLE DEVICES

Full face masks are divided according to the type of application:

1- Light, 2- General, 3- Special.

Gas filters can be classified according to duration (gases and vapours), efficiency (particles) or both (combined).

Particle filters can be classified, according to filtering efficiency.

______ Main features /



HALF MASKS / The use of a half mask can reduce the fatigue and stress of breathing and may be the best option in many cases. It is essential to analyse each risk and determine the correct protection needed.



FULL FACE MASKS / Protect the whole face and ensure a higher protection factor. They can be used in combination with supplied-air products or PAPR.



FILTERS / They are connected to the mask. They can protect from particles, gases&vapours or a combination of both. The same filter can sometimes be used in both half or full face mask, depending on its features.

DISPOSABLE PRODUCTS

Filter types /



PARTICLES / Particles filtration is ensured by means of a pleated medium. The pleating of the material ensures a higher filtering surface and reduces breathing fatigue.



GASES&VAPOURS / Gases and vapours are adsorbed by activated carbons grains. This material is characterized by a high porosity structure that traps gases and vapours in its surface. They can be treated to adsorb selectively one or more groups of specific substances.



COMBINED / Combined filters are built with two sections, the first one with a pleated medium for particles filtration, the second one with activated carbons, for gases and vapours protection.

FILTERS TECHNOLOGY FOR **REUSABLE DEVICES**

BLS's products range is the result of almost 50 years of experience on field. In addition to the universal connection (EN 148-1) BLS developed a simplified twin connection to meet the highest performances and security standards.

BAYONET CONNECTION

This connection is highly intuitive, allowing a quick and safe hold on the mask. It has a locking feedback allowing the user to know if the filter has been properly placed.





UNIVERSAL CONNECTION EN 148-1

Standard thread connection according to EN 148-1, universal among all respiratory protection devices.



The quality of the activated carbons used by BLS for the filtration of gases and vapours meets high standards of safety ensuring excellent filtration performances. They are produced without toxic additives such as Hexavalent Chromium (Cr VI) and they are food grade certified (REGVE231 / 2017).

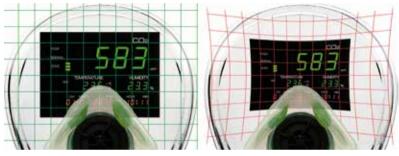


BLS TECHNOLOGY FOR REUSABLE DEVICES

LIVE VISOR

Optical class 1 (EN 166) allows a panoramic visual field without optical distortions. A vitrification treatment on its surface makes it scratch resistant.*

* Eye protectors with no corrective effects are categorized in 3 classes depending on their spherical, astigmatic and prismatic optical imperfections (EN 166). Class 1 is the best quality class attainable. BLS full face masks with Live Visor technology are tested to reach optical class 1.







VISOR **Optical class 1**

VISOR Lower optical class

K-OMFORT

The harness is fixed on 6 points directly on the rigid body of the mask in order not to deform the face seal. It allows to distribute the weight of the respirator evenly without leaving face marks.





Designed to avoid visor fogging through the control of the cold and hot air flows inside the mask, instead of treatments which can easily be spoiled with use.



K-omfor

technology

REUSABLE PRODUCTS / HALF MASK BLS 4000 SERIES

Available in two sizes /



Ready to use kits: mask + filters /



WATCH THE VIDEO

youtube.com/user/BLSRespiratory1





EASY AND FAST MAINTENANCE

It can be disassembled in less than a minute making cleaning and maintenance much easier.

02

FACE PIECE

Available in soft thermoplastic rubber (4000 R) or silicone rubber (4000 S) and in two sizes (S/M and M/L) for better comfort and perfect fit.



HARNESS

Fixed on 2 points directly on the rigid body of the mask allowing to distribute the weight of the respirator evenly without leaving face marks.

Available products /

| CODE | PRODUCT | FACE SEAL | SIZE |
|---------|------------|----------------------|------|
| 8002079 | BLS 4000 R | Thermoplastic rubber | S/M |
| 8002080 | BLS 4000 R | Thermoplastic rubber | M/L |
| 8002081 | BLS 4000 S | Silicone rubber | S/M |
| 8002082 | BLS 4000 S | Silicone rubber | M/L |

Compatible with / 200/201 SERIES FILTERS (pg36/37)



04 BAYONET CONNECTION

This connection is highly intuitive allowing a quick and safe hold on the mask. It has a locking feedback allowing the user to know if the filter has been properly placed.

| Ready to use h | kit / Half mask 4000 S or R* S/M + filte | ers |
|----------------|--|-----|
|----------------|--|-----|

| KIT | FILTERS | PROTECTION | DESCRIPTION |
|------------|--|---|---|
| BLS 4100 | + BLS 211 + BLS 301 (pre-filters) | A2P2 NR | Organic gases and vapours (bp $> 65^\circ\mathrm{C})$ and dust |
| BLS 4400 | + BLS 222 | ABEK1P3 R | Organic, inorganic and acid gases and vapours and ammonia, dust and formaldehyde |
| BLS 4500 | + BLS 202 | P3 R | Dust |
| BLS 4600 | + BLS 221 | A2P3 R | Organic gases and vapours (bp $> 65^{\circ}$ C) and dust |
| BLS 4100R* | + BLS 221 + BLS 301 (pre-filters) | A2P2 NR | Organic gases and vapours (bp $> 65^\circ\mathrm{C}$) and dust |
| | BLS 4100 BLS 4400 BLS 4500 BLS 4600 | BLS 4100 + BLS 211 + BLS 301 (pre-filters) BLS 4400 + BLS 222 BLS 4500 + BLS 202 BLS 4600 + BLS 221 | BLS 4100 + BLS 211 + BLS 301 (pre-filters) A2P2 NR BLS 4400 + BLS 222 ABEK1P3 R BLS 4500 + BLS 202 P3 R BLS 4600 + BLS 221 A2P3 R |

04

100

03

REUSABLE PRODUCTS / HALF MASK

Optimal fit /



Available products /

| CODE | PRODUCT | FACE SEAL | SIZE |
|---------|---------|-----------------|------|
| 8002059 | SGE46 | Silicone rubber | U |

Features /



FACE PIECE

The face piece made of silicone rubber is designed to universally adapt to all face sizes giving a better comfort and perfect fit.

02

HARNESS

Standard thread for respiratory fixed on 2 points directly on the rigid body of the mask allowing to distribute the weight of the respirator evenly without leaving face marks.



UNIVERSAL CONNECTION

Standard thread connection according to EN 148-1, universal among all respiratory protection devices.

*

Compatible with / 400 SERIES FILTERS (pg35)



03



02

REUSABLE PRODUCTS / HALF MASKS

REUSABLE PRODUCTS / READY TO USE BLS 8000 SERIES

Ready to use and maintenance free /

This half masks does not require maintenance and is ready to use. The mask is simply replaced when the filters are used up.



Available products /

| CODE | PRODUCT | FACE SEAL | PROTECTION |
|---------|----------|----------------------|------------|
| 8002098 | BLS 8100 | Thermoplastic rubber | A2P2 R D |
| 8002050 | BLS 8600 | Thermoplastic rubber | A2P3 R D |

Features /

OI SIMPLE LIKE A DISPOSABLE PROTECTING LIKE A REUSABLE

This mask combines the simplicity of disposable products with the protection of the reusable ranges offering an easy-to-implement and certified protection against both PARTICLES and GASES.

02

ACTIVATED CARBONS

The quality of the activated carbons used by BLS for the filtration of gases and vapours meets high standards of safety ensuring excellent filtration performances. They are produced without toxic additives such as Hexavalent Chromium (Cr VI) and are food grade certified (REGVE231 / 2017).

03

FACE PIECE

The facepiece is made of a durable and hypoallergenic thermoplastic elastomer. It is certified for alimentary use and talcum perfumed.





DESIGN AND VISUAL FIELD

The shape of the mask offers a perfect seal without any unpleasant pressure on the nose or mouth of the user. It also allows high visibility and low interference with the visual field thanks to the lower positioning of the filters and to its compact size.

04

FILTER PROTECTIVE LAYER

It's an external layer that ensures the protection of the filtering material from dirt, dust and liquids as well as the normal mechanical stress due to prolonged, use thus extending and preserving filtering efficiency and making the device safer.



8100 100000

03

05



REUSABLE PRODUCTS / FULL FACE MASK

High resistance /



Available products /

| CODE | PRODUCT | CLASS | FACE SEAL | VISOR | HOOD |
|---------|------------|-------|----------------------|------------|-----------------------|
| 8001083 | BLS 5600 | 2 | Thermoplastic rubber | Live Visor | |
| 8001036 | BLS 5700 | 2 | Silicone rubber | Live Visor | |
| 8001097 | BLS 5700/C | 2 | Silicone rubber | Live Visor | ✓ |

Features /



FACE SEAL

Available in soft thermoplastic rubber (BLS 5600) or silicone rubber (BLS 5700) both with FDA certification for a higher safety.



BAYONET CONNECTION

This connection is highly intuitive allowing a quick and safe hold on the mask. It has a locking feedback allowing the user to know if the filter has been properly placed.

03 FACE PIECE IN SILICONE Guarantees performance and duration.

Compatible with / 200/201 SERIES FILTERS (pg36/37)

REUSABLE PRODUCTS / FULL FACE MASKS



HARNESS

Fixed on 6 points directly on the rigid body of the mask in order not to deform the face seal. It allows to distribute the weight of the respirator evenly without leaving face marks.

REUSABLE PRODUCTS / FULL FACE MASK

Easy removal /



Available products /

| CODE | PRODUCT | CLASS | FACE SEAL | VISOR | HOOD |
|---------|------------|-------|----------------------|------------|--------------|
| 8001035 | BLS 5150 | 3 | Thermoplastic rubber | Live Visor | |
| 8001039 | BLS 5400 | 3 | Silicone rubber | Live Visor | |
| 8001084 | BLS 5400/C | 3 | Silicone rubber | Live Visor | \checkmark |

Features /



FACE SEAL

Available in soft thermoplastic rubber (BLS 5150) or silicone rubber (BLS 5400 and 5400/C) both with FDA certification for a higher safety.



UNIVERSAL CONNECTION

Standard thread connection according to EN 148-1, universal among all respiratory protection devices.



FACE PIECE IN SILICONE

Guarantees performance and duration.

04

ANTI-FOG

Designed to avoid visor fogging through the control of the cold and hot air flows inside the mask, instead of treatments which can easily be spoiled with use.

*

Compatible with / 400 SERIES FILTERS (pg35)



06

HARNESS

Fixed on 6 points directly on the rigid body of the mask in order not to deform the face seal. It allows to distribute the weight of the respirator evenly without leaving face marks.

03

04

02



Hood

Anti-acid hood covers head, shoulders and upper torso, eliminating any contaminate penetration.98.5% permeation resistant to Sulphuric Acid.

FILTERS

REUSABLE PRODUCTS / FULL FACE MASK **BLS 3000 SERIES**

Glass visor /



Features /



FACE SEAL Available in EPDM (BLS 3150) or in silicone (BLS 3400).

02

UNIVERSAL CONNECTION

Standard thread connection according to EN 148-1, universal among all respiratory protection devices.

03

ANTI-FOG

Designed to avoid visor fogging through the control of the cold and hot air flows inside the mask, instead of treatments which can easily be spoiled with use.

Available products /

| CODE | PRODUCT | CLASS | FACE SEAL | VISOR |
|---------|-----------|-------|-----------------|---------------|
| 8001064 | BLS 3150 | 2 | EPDM | polycarbonate |
| 8001066 | BLS 3150V | 2 | EPDM | glass |
| 8001065 | BLS 3400 | 2 | Silicone rubber | polycarbonate |

Compatible with / 400 SERIES FILTERS (pg35)



FILTERS / UNIVERSAL CONNECTION EN 148-1 BLS 400 SERIES

*



Compatible with / HALF MASK RESPIRATORS BLS SGE46 (pg24) FULL FACE MASK RESPIRATORS BLS 5000 SERIES (5150, 5400, 5400C) (pg30) FULL FACE MASK RESPIRATORS BLS 3000 SERIES (pg33)



Available products /

| CODE | PRODUCT | PROTECTION | COLOUR CODE | |
|--|-------------------------|---|-------------|--|
| 8011013 | 401 P3 R | Dust | 0 | |
| 8011002 | 411 A2 | Organic gases and vapours, class 2 | ٠ | |
| 8011023 | 412 AX | Organic gases and vapours with a boiling point lower than 65° C | ٠ | |
| 8011005 | 413 K2 | Ammonia and derivatives, class 2 | | |
| 8011111 | 414 ABE2 | Organic, inorganic and acid gases and vapours, class 2 | | |
| 8011007 | 415 ABEK2 | Organic, inorganic and acid gases and vapours and ammonia and derivatives, class 2 | | |
| 8011008 | 421 A2P3 R | Organic gases and vapours, class 2 and dust | •0 | |
| 8011024 | 422 AXP3 NR | Organic gases and vapours with a boiling point lower than 65°C and dust | •0 | |
| 8011017 | 423 ABE2P3 R (1) | Organic, inorganic and acid gases and vapours, class 2 and dust | | |
| 8011022 | 424 ABEK1P3 R | Organic, inorganic and acid gases and vapours, ammonia, class 1 and dust | | |
| 8011012 | 425 ABEK2P3 R (1) (2) | Organic, inorganic and acid gases and vapours, ammonia, class 2 and dust | | |
| 8011014 | 430 ABEK2HgP3 R (1) (2) | Organic, inorganic and acid gases and vapours and ammonia and derivatives, mercury vapours class 2 and dust | | |
| (1) these filters cannot be used with half masks because their weight is greater than 300g (2) these filters are tested against hydrogen fluoride | | | | |

FILTERS / BAYONET CONNECTION BLS 200 SERIES

*



Compatible with / HALF MASK RESPIRATORS BLS 4000 SERIES (pg22) FULL FACE MASK RESPIRATORS BLS 5000 SERIES (5600, 5700) (pg28)



Available products /

| CODE | PRODUCT | PROTECTION | COLOUR CODE |
|---------|-----------------------|---|-------------|
| 8011118 | 202 P3 R | Dust | 0 |
| 8011109 | 211 A2 | Organic gases and vapours, class 2 | • |
| 8011205 | 212 AX | Organic gases and vapours with a boiling point lower than 65° C | • |
| 8011110 | 213 ABE1 | Organic, inorganic and acid gases and vapours, class 1 | |
| 8011111 | 214 ABEK1 | Organic, inorganic and acid gases, vapours, ammonia and derivatives, class 1 | |
| 8011112 | 221 A2P3 R | Organic gases and vapours, class 2 and dust | •0 |
| 8011113 | 222 ABEK1P3 R | Organic, inorganic and acid gases and vapours and ammonia and derivatives, class 1 and dust | |
| 8011206 | 225 AXP3 NR (2) | Organic gases and vapours with a boiling point lower than 65°C and dust | •0 |
| 8011145 | 226 ABE1P3 R | Organic, inorganic and acid gases and vapours, class 1 and dust | |
| 8011132 | 241 A2 ⁽⁴⁾ | Organic gases and vapours, class 2 | • |
| 8011133 | 242 ABE2 (3) | Organic, inorganic and acid gases and vapours, class 2 | |
| 8011114 | 243 ABEK2 (3) | Organic, inorganic and acid gases, vapours, ammonia and derivatives, class 2 | |
| 8011134 | 244 K2 | Ammonia and derivatives, class 2 | • |
| 8011138 | 251 A2P3 R (4) | Organic gases and vapours, class 2 and dust | •0 |
| 8011140 | 253 ABE2P3 R (1) | Organic, inorganic and acid gases and vapours, ammonia, class 2 and dust | |
| 8011141 | 254 ABEK2P3 R (1) (2) | Organic, inorganic and acid gases and vapours and ammonia and derivatives, class 2 and dust | |
| | 301 P2 NB (5) | Dust | 0 |

(4) these filters have long duration

(5) dust prefilter mounted on gas filters BLS 211, 213, 214, 241, 243, 244

FILTERS / BAYONET CONNECTION BLS 201 SERIES

* Compatible with / HALF MASK RESPIRATORS BLS 4000 SERIES (pg22) FULL FACE MASK RESPIRATORS BLS 5000 SERIES (5600, 5700) (pg28)





Available products /

| CODE | PRODUCT | PROTECTION | CARBON LAYER |
|---------|-----------------|--------------------------|--------------|
| 8011218 | BLS 201-3 P3 R | Dust | |
| 8011219 | BLS 201-3C P3 R | Dust and nuisance odours | \checkmark |

FILTERS

REUSABLE PRODUCTS / ACCESSORIES



C43 Washable bag for half mask and filters.



C41

Washable bag whith shoulder belt for full face masks and filters



C22

Frame for prescription lenses for full face mask 5000 series.



C23 Frame for prescription lenses for full face mask



K15

Polycarbonate visor cover for full face mask 5000 series. Applications: in sandblasting and in presence of abrasive substances.



K19 / K16

Protective film in acetate for full face mask 5000 series (K19) and 3000 series (K16).Applications: Industrial painting and in presence of chemical splashes.



C10

Textile harness for full face mask more comfortable especially with long hair.



C90

Wall mounted container for full face mask and filters.

AN OVERVIEW OF BLS RESPIRATORY PROTECTION PRODUCTS







BLS Flickit



BLS 8000





BLS 4000 S



BLS 4000 R



BLS 5700



BLS 5600





BLS SGE46



BLS 5400



BLS 5150



BLS 3150

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