

# UNIX

## Isolating half-mask UNIX 1000



### PURPOSE

The half-mask is used as the facepiece of UNIX 1000 filter mask, designed to protect respiratory system from gaseous and vaporous harmful substances and particles. Suitable for application in any climatic regions at temperatures from -40 °C to +40 °C.

### ADVANTAGES:

1. Lightweight, compact, ergonomic
2. Convenient head harness adjustment and reliable fixing of the half-mask on the head
3. The half-mask is demountable by design, thus providing convenient in-service maintenance
4. Fast and reliable bayonet fastening of filters
5. Wide range of gas and particle filters

### SPECIFICATIONS

INDICATOR NAME	INDICATOR VALUE
Initial airflow resistance during inhalation at a constant volumetric flow rate of 160 dm <sup>3</sup> /min, Pa (mm wc), not more than: - during inhalation - during exhalation	127,5 (13,0) 196,0 (20,0)
Half-mask constant airflow resistance during exhalation at a flow rate of 30 dm <sup>3</sup> /min, Pa (mm wc), not more than	29,5 (3,0)
Weight, g, not more than	130
Size	1, 2, 3
Material: - half-mask body	thermoplastic elastomer
Guaranteed shelf life, years	5,5

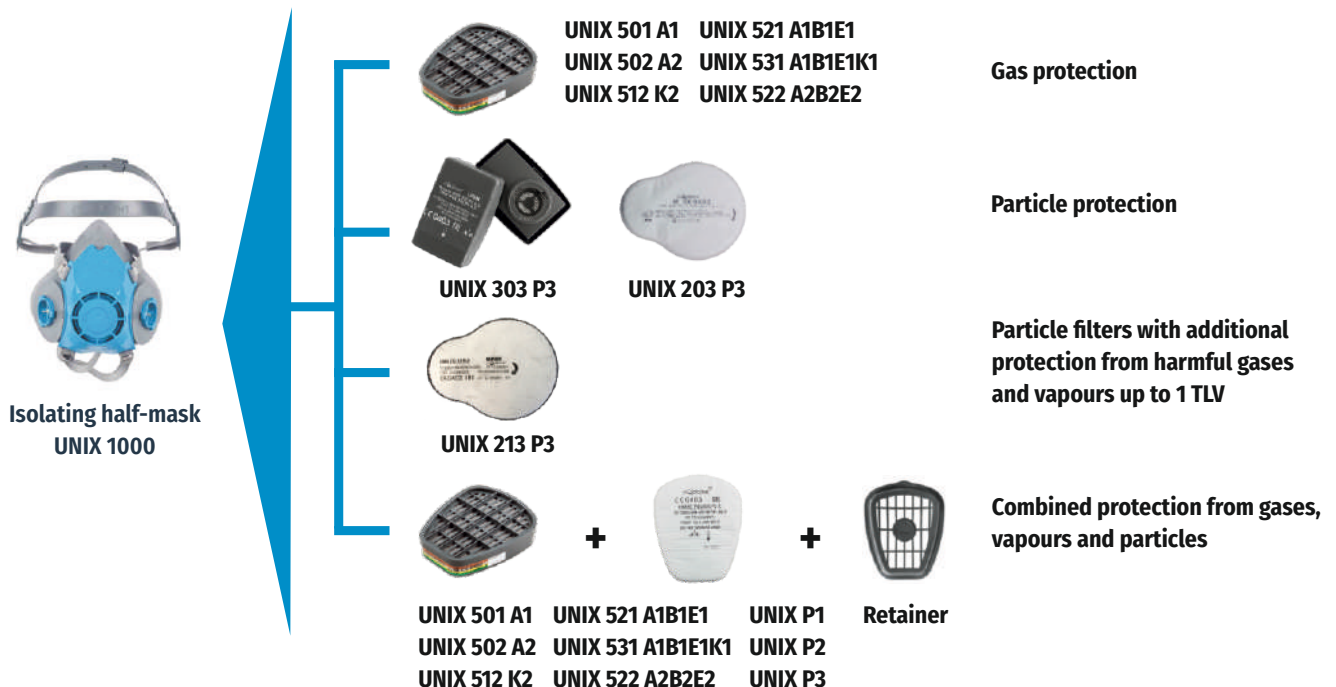
## FIELDS OF APPLICATION





UNIX 1000 half-mask is equipped with UNIX 500 series gas filters and UNIX 203 P3 D, UNIX 213 P3 D, UNIX 303 P3 D particle filters. UNIX P1, P2, P3 particle prefilters are used for the combined protection against harmful gases, vapors and particles.

Gas filters of UNIX 500 series protect against one or more harmful substances. They are attached to the mask with a bayonet connection.

Particle filters protect against harmful particles (dust, smoke, mist). They are attached to the mask by means of bayonet fastening.

- UNIX 203 P3 D particle filters are attached directly to the mask.
- UNIX 213 P3 D filters are attached directly to the mask. They provide protection against particles, as well as harmful gases and vapors up to 1 TLV.
- UNIX 303 P3 D filters of the closed type, are intended for work in the extreme moisture environment. They are attached directly to the mask.
- UNIX P1, P2, P3 particle prefilters together with gas filters of UNIX 500 series provide combined protection. They are attached with the retainer.



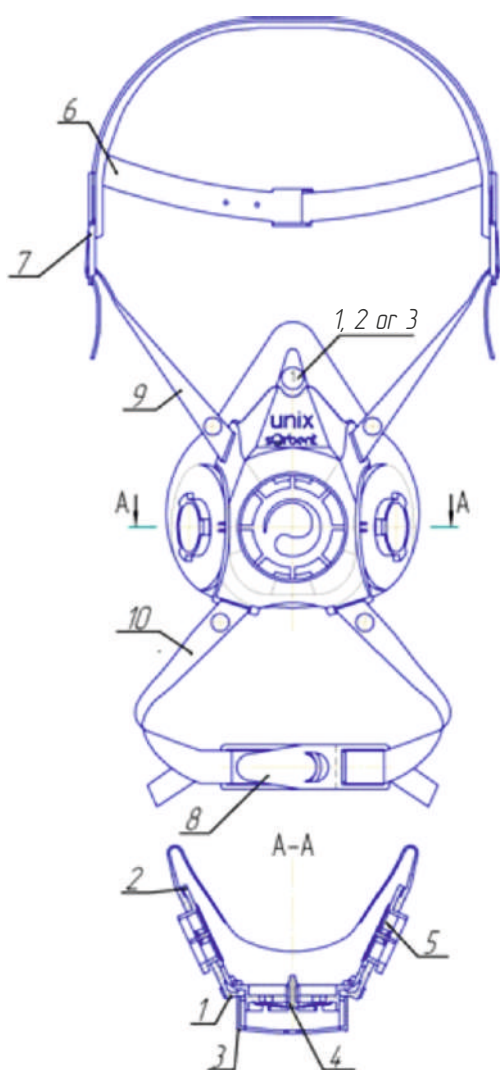
FILTER	COLOR	STANDARD	PROTECTION AGAINST	INDUSTRIAL FIELD
UNIX 501 A1 UNIX 502 A2		EN 14387:2004 +A1:2008	Organic gases and vapours with a boiling point >65°C	<ul style="list-style-type: none"> <li>- Motor industry</li> <li>- Aircraft construction and aircraft repair</li> <li>- Shipbuilding</li> <li>- Production and use of ink and dyes</li> <li>- Painting works</li> <li>- Production and use of glue</li> <li>- Production of paints and varnishes</li> <li>- Production and use of resins</li> </ul>
UNIX 512 K2		EN 14387:2004 +A1:2008	Ammonia and its organic derivatives	<ul style="list-style-type: none"> <li>- Production and maintenance of equipment</li> <li>- Spraying and processing of agricultural chemicals</li> </ul>
UNIX 521 A1B1E1  UNIX 522 A2B2E2		EN 14387:2004 +A1:2008	Combination of organic gases and vapours with a boiling point >65°C, inorganic and acid gases	<ul style="list-style-type: none"> <li>- Motor industry</li> <li>- Aircraft construction and aircraft repair</li> <li>- Shipbuilding</li> <li>- Production and use of ink and dyes</li> <li>- Painting works</li> <li>- Production and use of glue</li> <li>- Production of paints and varnishes</li> <li>- Production and use of resins</li> <li>- Electrolysis production</li> <li>- Acid cleaning</li> <li>- Metal etching</li> <li>- Metal engraving</li> </ul>
UNIX 531 A1B1E1K1		EN 14387:2004 +A1:2008	Combination of organic gases and vapours with a boiling point >65°C, inorganic, acid gases and ammonia	<ul style="list-style-type: none"> <li>- Motor industry</li> <li>- Aircraft construction and aircraft repair</li> <li>- Shipbuilding</li> <li>- Production and use of ink and dyes</li> <li>- Painting works</li> <li>- Production and use of glue</li> <li>- Production of paints and varnishes</li> <li>- Production and use of resins</li> <li>- Electrolysis production</li> <li>- Acid cleaning</li> <li>- Metal etching</li> <li>- Metal engraving</li> <li>- Production and maintenance of equipment</li> <li>- Spraying and processing of agricultural chemicals</li> </ul>

FILTER	COLOR	STANDARD	PROTECTION AGAINST	INDUSTRIAL FIELD
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### Particle filters

UNIX 203 P3 D	<input type="checkbox"/>	EN 143:2000 / A1:2006	Particles (dust, fume, mist)	<ul style="list-style-type: none"> <li>- Pharmaceutical substances / powders chemicals</li> <li>- Construction/quarrying</li> <li>- Ceramics/refractory materials</li> <li>- Foundry</li> <li>- Agriculture</li> <li>- Woodworking</li> <li>- Food industry</li> </ul>
UNIX 213 P3 D	<input type="checkbox"/>	EN 143:2000 / A1:2006	Particles (dust, fume, mist) + additional protection from harmful gases and vapours up to 1 TLV	<ul style="list-style-type: none"> <li>- Welding</li> <li>- Paper industry</li> <li>- Brewing</li> <li>- Chemical treatment</li> <li>- Ordinary smog</li> <li>- Inks and dyes</li> </ul>
UNIX 303 P3 D	<input type="checkbox"/>	EN 143:2000 / A1:2006	Particles (dust, fume, mist)	<ul style="list-style-type: none"> <li>- Pharmaceutical substances / powders chemicals</li> <li>- Construction/quarrying</li> <li>- Ceramics/refractory materials</li> <li>- Foundry</li> <li>- Agriculture</li> <li>- Woodworking</li> <li>- Food industry</li> </ul>
UNIX P1, P2, P3	<input type="checkbox"/>	EN 143:2000 / A1:2006	Particles (dust, fume, mist)	<ul style="list-style-type: none"> <li>- Pharmaceutical substances / powder chemicals</li> <li>- Construction/quarrying</li> <li>- Ceramics/refractory materials</li> <li>- Foundry</li> <li>- Agriculture</li> <li>- Woodworking</li> <li>- Food industry</li> </ul>

## HALF-MASK COMPONENTS



- 1 – half-mask body,
- 2 – inner frame,
- 3 – protective screen,
- 4 – exhalation valve disc,
- 5 – inhalation valve disc,
- 6 – head harness,
- 7 – head harness buckle,
- 8 – neck buckle,
- 9 – head harness band,
- 10 – neck band.

## OPERATIONAL LIMITATIONS

1. Application of half-mask is prohibited in circumstances where there is possibility of thin air (for example, in vessels, tanks, wells, and other similar isolated premises), or if the composition and concentrations of harmful substances is unknown, as well as for protection against low-boiling poorly sorbing organic substances (methane, ethane, butane, ethylene, acetylene, etc.)
2. Never use defective half-masks.
3. Never store half-masks near the heating system and heating devices.
4. If the half-mask was stored at air temperature below 0 °C, keep it at air temperature of (20 ± 5) °C for 24 hours before operation.
5. Half-masks with filters should never be used by people with beards, and sideburns that prevent the half-mask adherence to the face, leading to penetration of harmful substances under the half-mask along the gas mask facepiece contact line (seal line).

## PREPARATION OF THE HALF-MASK FOR USE AND OPERATION

### 1. BEFORE OPERATING IT IS NECESSARY TO:

- 1.1. choose a half-mask of three available sizes (1, 2 or 3). The half-mask is considered to be correctly selected if it fits well to the face along the entire strip of face seal.
- 1.2. conduct a visual inspection of the following indicators:
  - the integrity of the half-mask body (no punctures, breaks) by stretching and inspection it into the light;
  - the presence and quality of the inhalation and exhalation valve discs – they should not be torn, deformed, contaminated, and the edges of exhalation valve disc should fit tightly to the saddle;
  - condition of head harness (integrity and availability of buckles) and neck bands with buckles; In case of defects, the half-mask must be replaced.

### 2. PREPARATION OF HALF-MASK WITH FILTERS FOR USE

#### ● Gas protection



1. Locate the lines on the mask;
2. Locate the slots on the filter;
3. Align the three slots on the filter and the three protrusions on the half-mask so that the slot is placed between the two lines;
4. Turn the filter housing clockwise until it stops.

#### ● Particle protection



1. Align the three slots on the DOTeco P3D filter and the three protrusions on the half-mask;
2. Turn the filter housing clockwise until it stops.
3. Align the three slots on the UNIX 303 P3D filter and the three protrusions on the half-mask;
4. Turn the filter housing clockwise until it stops.

## ● Combined protection



- 1-2. Put the removable particle filter in the holder with the marking up;
3. Attach the holder to the gas filter cover until fully latched;
4. Attach the combined filter to the half mask as shown in step 3-4 above.

## 3. PUTTING ON AND REMOVING HALF-MASKS WITH FILTERS



1. Stretch the neck bands
2. Fix the neck buckles
3. Put on the head harness
4. Tighten the head harness bands
5. Tighten neck bands

## 4. REPLACEMENT OF FILTERS

### ● Gas filters

Replace if you feel the smell of harmful substances in the inner mask;

### ● Particle filters

Replace if you feel a sharp difficulty of breathing.

## 5. CLEANING AND STORAGE:

**5.1.** After using the half mask with filters, disconnect the filters and clean the half mask. Wash the parts in warm water with soap, rinse, dry at room temperature and collect the half mask.

After that, assemble the half-mask, paying attention to the installation of the protective screen. The protective screen should snap when installed on the inner frame and take a flat position without skewing.



1. Remove the protective shield with head harness and neckband;
- 2-4. Disconnect the inner frame.

**5.2.** Store the mask in a special bag (for storing and carrying) in a clean dry room away from heating appliances, protecting from moisture and mechanical effects.



- Bag for storage and carrying of the half-mask



## STANDARDS AND CERTIFICATES

UNIX 1000 half-mask and UNIX 500, UNIX 203 P3 D, UNIX 303 P3 D series filters comply with the basic safety requirements of European Community Directive 89/686/EEC and are CE marked. UNIX 213 P3 D filter complies with basic safety requirements in accordance with Regulation 2016/425 and is CE marked.

The products comply with the requirements of the technical regulations of the TR CU 019/2011 “On the safety of personal protective equipment.”

Compliance with regulatory documents:

1. UNIX 1000 half-masks: EN 140:1998
2. Gas filters of UNIX 500 series: EN14387:2004+A1:2008
3. UNIX 203 P3 D, UNIX 213 P3 D, UNIX 303 P3 D particle filters, UNIX P1, P2, P3 prefilters: EN143:2000 /A1:2006.

## TRANSPORTATION RULES

1. Boxes with half-masks are subject to transportation by any covered vehicle in accordance with haulage rules, effective for given type of transport.
2. Never throw and knock boxes with half-masks during loading and unloading operations.
3. Always store boxes with half-masks in warehouses on pallets; the stacks shall not exceed 4 boxes in height. The distance between the stacks shall be at least 0.8 m; the distance from the heat-emitting devices shall be at least 1 m.
4. After the storage of half-mask at air temperature below 0 °C, keep it at air temperature of  $(20 \pm 5)$  °C for 24 hours before operation.