



400 series filters

Protection against gases, vapours and dusts, fumes and mists

DATA SHEET

423 ABE2P3 R

Cod. 8011017

EN 14387:2004+A1:2008



Test according to EN 14387:2004		ABE2P3 R	423
Minimum breakthrough time (min)	Cyclohexane C6H12 (5000 ppm)	> 35	46
	Chlorine Cl2 (5000 ppm)	> 20	38
	Hydrogen Sulphide H2S (5000ppm)	> 40	79
	Hydrogen Cyanide HCN (5000 ppm)	> 25	43
	Sulphur Dioxide SO2(5000 ppm)	> 20	23
Filter penetration (DOP) (%)	after 3 min	< 0,05	0,0005
	after 63 min	< 0,05	0,001
	after storage	< 0,05	0,001
Breathing Resistance (mbar)	Inhal 30l/min	< 2,6	2,3
	Inhal 95 l/min	< 9,8	8,6

Characteristics

The 423 filter is an anti gas and anti particles filter that protects against contaminant gases and airborne dusts. 423 filter is equipped with a standard threaded connection conforming to EN 148-1 standard and it's possible to use it on half mask and full face mask equipped with the same standard connection.

Application

The 423 filter that protects from organic, inorganic, acid gases and vapours and sulphur dioxide. Gases must have a boiling point upper than 65°C. It can be used with substances as solvents, toxic particles and microorganisms. It is a filter classified as class 2 (medium efficiency filter) for the anti gas part and class 3 (high efficiency filter) for the anti dust part.

Protection

Exposure limit for filter 423:
with full face masks: for gases and vapours until to 400* x TLV;
for dusts, fumes and mists 400* x TLV
* = APF (Assigned Protection Factor) as detailed in EN 529:2005 standard

Materials

The 423 filter is made by:

- filter case: ABS
- gas filtering part: activated charcoal ABE
- filtering layer: filtering pleated layer of glass fibres

Height (thread excluded): 82 mm
Diameter: 100 mm
Weight: 327±10 grams
This filter can be used on full face masks.

Certification

The 423 filter is CE marked as a PPE of III category, as provided by the 89/686/EEC European Directive (In Italy D. Lgs 475/1992), according to the EN 14387:2004+A1:2008 technical standard. The compliance model PPE (Art. 10) and the monitored production control (Art.11.B), are certified by Italcert S.r.l., Notified Body n°0426.

BLS is a company with a quality management system certified according to the ISO 9001:2008 standard.

Certification Tests

The 423 filter meets the requirements of 14387:2004+A1:2008 standard and has been submitted to the tests provided by class 2 and gas part and those for the class 3 for the dusts part.

• Breathing resistance

The resistance offered from the filter to the air flow must be lower as possible and, in any case, must not be greater than the following values for antiparticles filters (par. 6.11 of EN 14387 standard): with an air flow of 30 l/min must be lower than 2,6 mbar and with an air flow of 95 l/min must be lower than 9,8 mbar.

• Efficiency of protection (gas part)

The 423 filter is tested according to par. 6.12 of the EN 14387:2004 standard to determine the breakthrough times when it is exposed to a test gas at a certain concentration. For the ABE2 filter the test gases are those required by the standard and reported in the table, with their break-up time.

• Efficiency of protection (particles part)

Filtering efficiency of the filtering material, is determined using sodium chloride and paraffin oil test aerosols. P3 class provided a minimum filtering efficiency of 99,95 % (filter penetration <0,05%). The filters keep unchanged their filtering efficiency also after the long exposure test (up to 120 mg of concentration of the aerosol used for the test) and they are certified as reusable for more than one work shift (R marking).

Applications, Limitations, Warnings

BLS filters should not be used in the following circumstances:

- Where the nature and the concentration of the contaminant are unknown, - where the oxygen content is less than 17% by volume (easily in closed environments such as wells, tunnels, cisterns or without ventilation), - where the contaminant is found to be carbon monoxide or otherwise odorless and tasteless gas - where certain conditions represent an immediate danger in life and safety for the operator - the filter mustn't be changed or altered; - leave the work area where the filter or respirator has been damaged and if you have difficulty in breathing and / or fainting; - people with altered sense of smell must refrain from the use of respiratory filters, - in works with open flames or in the presence of molten metal splashes the use of personal protective equipment with gas filters might be a risk to the operator.

Use and maintenance of filters:

BLS filters are connected to half masks and full masks with the same connection. Each new filter is packed in a sealed bag. Choose the right filter by the color and symbol identification and verify that the type of the filter is suitable for the intended use. Check that the filter has not expired (the expiration date is printed on each filter, this date will be valid if the filter was preserved according to the instructions for storage). Check that the filter and the breathing apparatus, are not broken or damaged. In order to use it, open the sealed package, place the filter in the filter half mask or full mask, manually screwing up to the beat.

Under normal conditions of use, the filter's duration depends not only on the concentration of the contaminant but also by many other factors that are difficult to determine as the rate of air humidity, temperature, the volume of air inhaled the state of fatigue of the subject, etc. The operator shall leave the work area and replace the filter when it starts to feel the smell of the contaminant. At the end of the shift, you must place the filter in a clean and dry location, according to the instructions on the user's filter.

BLS filters are maintenance free and at the end of their use they should not be blown, washed or regenerated in any way. The exhausted filters must be replaced and disposed according to national regulations and keeping in consideration the substance retained.

Storage time: 5 years (factory sealed); the storage limit is marked on filter label and box.

Storage conditions: temperature -10° and +50°C, RH < 70%.

Minimum unit of sale: box (1 filter)

Technical Details

In order to ensure high hygiene and increase the lifespan of the filter, the filtering paper is folded without the use of any glues.

Each filter is tested:

- breathing resistance tests and weight for charcoal against gases
- filtering efficiency tests for particles part



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