

IM76 Mask

User manual

Notice/Warranty disclaimer – Safety regulations – Liability

This instruction manual must be read and followed. Any warranty made by IMPERTECH will be void should this product not be used and maintained according to this manual. Correct selection and use of respiratory protective devices are the responsibility of the user. National or local regulations must be regarded.

1. Description

IM76 is a full face mask system in accordance with EN 136:1998, class 3, for special use with a connector, in accordance with EN 148-1. Using this connector, it can be combined to a complete respiratory protective device with:

- Filters, in accordance with EN 14387 or EN 143.
- Negative pressure self-contained breathing apparatus, in accordance with EN 137, or
- Airline equipment with negative pressure demand valve, in accordance with EN 14593-1 using the same connection type.

The relevant instructions for use of the filters or apparatus and applicable national standards and regulations must be observed.

2. Features

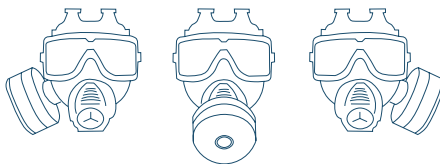
2.1 Sizes

IM 76 comes in three sizes, medium, small and large, fitting a wide range of head sizes.

2.2 Filter connector

IM76 is equipped with female thread connectors according to EN 148-1. Depending on the version, the connector is located either at the center, or left or right side of the IM76 mask. On some versions it is possible to change the location of the connector prior to use.

Attention: Only one connector is allowed to be used, all other female thread connectors must be plugged.



Left filter position

center filter position

Right filter position

To change the connector from one position to the other, see Section 4.1 Changing Connector Position

2.3 Harness versions

There are two head harness versions available within the IM 76 system:

- Rubber
- Textile

The head harness can be exchanged by the user (see Section 4.2 Connecting and disconnecting harness)

2.4 Speech Diaphragm

IM76 is equipped with a speech diaphragm. The speech diaphragm enhances the quality of the voice transmitted from the wearer to another person.

2.5 Drinking Tube

IM76 is equipped with a drinking tube. The drinking tube allows the wearer to drink while wearing the full face mask, even in a contaminated area. Drinking is possible only from a dedicated water tank, equipped with the dedicated connection for the drinking tube. The mask interface is supplied with a drinking pipe and valve only (without a water tank).

2.6 Accessories

2.6.1 Corrective Eyewear

Frames for corrective glasses are available for IM76, which can be inserted into the mask by the user (see Section 4.3.1. Corrective Eyewear).

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Attention: Do not use the IM76 mask with any other corrective glasses, as it will interrupt the sealing between the wearer's skin and the IM76 mask.

2.6.2 Protective Visor for ballistic and UV-protection

IM76 can be equipped with an additional visor for ballistic and UV-protection. The visor can be clicked-on by the user (see Section 4.3.2 Protection visor).

2.6.3 External electronic communication plug

Optimal connector for transmitting communication from inside the mask to various radios (figure 2.6.3)

3. Application and Limitation

The IM76 mask can be used as part of a complete respiratory protective device. To form a complete respiratory protective device, it must be combined with an appropriate filter, an appropriate negative pressure self-contained breathing apparatus or an appropriate airline equipment with negative pressure demand valve. These devices' instructions must be observed, as well as any applicable local regulation.

The complete respiratory protective device protects the wearer from inhaling harmful gases, vapors or particles (dust, smoke, biological agents). There is a higher risk of flammability in oxygen-enriched environments. IM76 is not intended to be used in potentially explosive environments.

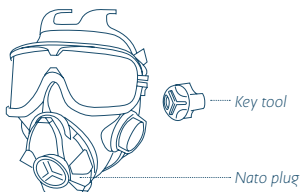
In case the wearer smells or tastes any contaminant, feels dizzy or irritated, becomes exhausted, or faces breathing difficulties, he or she should immediately leave the contaminated area, and remove the full face mask in a clean air environment.

Wearers with facial hair (beards, sideburns) or scars running under the face seal, cannot expect that the leakage requirements be achieved.

Other personal protective equipment or clothing worn by the user shall not interfere with the seal or any other function of IM76. This needs to be checked prior to use.

3.1 Filtering Devices

Please notice the following when used with a filter: Filtering respiratory protective devices do not supply oxygen. They cannot be used in oxygen-deficient environments. Oxygen deficiency limits are usually set by national or local regulation (typical limits are at least 17% or 19% of oxygen in the air). The filter (type and class) has to be selected in accordance with national or local regulations, depending on the type and concentration of the contaminants. Some gases or vapors cannot be filtered. Please notice the concentration limits for the use of filtering respiratory protective devices. Particles can only be filtered by particle filters (EN 143); gases and vapors can only be filtered by gas filters (EN 14387). Combination filters (EN 14387) must

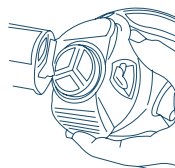


[figure 4.1_1]

Change connector position



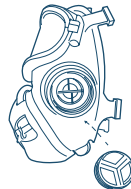
[figure 4.1_2 A]



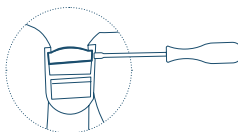
[figure 4.1_2 B]



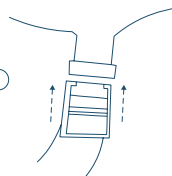
[figure 4.1_2 C]



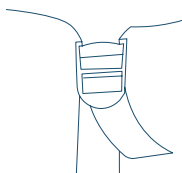
[figure 4.1_2 D]



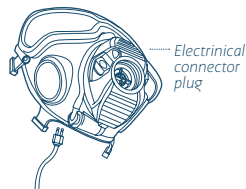
[figure 4.2_1]



[figure 4.2_2]



[figure 4.2_3]



[figure 2.6.3]

be used when particles and gases and/or vapors are present as contaminants. The filter must be equipped with a male thread, according to EN 148-1 or STANAG 4155 thread. The maximum allowed filter mass is 500 g. Filter instructions must be regarded.

4. Preparation

4.1 Changing Connector Position

If the filter position needs to be changed, align the tool key to the NATO plug, and turn the tool key counter clockwise to unscrew the NATO plug" (figure 4.1_1). Remove the NATO plug from the thread connector and screw it (turn clockwise) into the other thread connector. Plug must be tightly screwed with the use of the key tool by hand (figures 4.1_2 A to D). The plug is marked "IM76 019006501."

Important: Never connect more than one filter at a time! All other thread connectors must be tightly plugged.

4.2 Disconnecting and connecting harness

The mask could be provided with two options, rubber/textile harness interfaces. Changing between the options can be done by the user, as shown.

Note: the upper straps can be adjusted only in the textile harness.

Connecting and disconnecting harnesses for maintenance or changing the harness (for cleaning or disinfection) can be done by the user, as shown.

Use a flat, narrow screwdriver between the buckle and the buckle connector, (see figure 4.2_1) and carefully lever the buckle connector (see figure 4.2_2 and 4.2_3). Repeat on all other buckles, so that the harness can be removed.

To attach the new harness, align all 6 buckles to their corresponding rubber straps on the mask (one at a time) and click in the buckle connectors back to their positions.

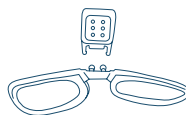
Note: make sure to attach the new harness in the correct orientation: - Rubber harness: the manufacturing date is visible when worn. - Textile harness: the IMPERTECH logo is seen when worn.

In any case, the ends of the harness straps must face outside (figure 4.2_3).

4.3 Use of Accessories

4.3.1 Corrective eyewear

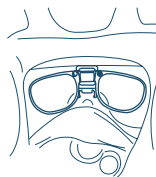
Frames for corrective glasses can be ordered empty, i.e. without corrective lenses. The frame comes with an adapter to fit into the IM76. Whenever eyewear is needed, an optician can fit the corrective lenses to the dedicated frame. To assemble the frame into the IM76 mask (see figure 4.3_1 A-C). The connector is marked "IM76 019006607."



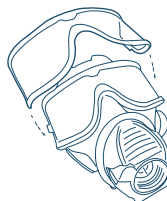
[figure 4.3_1 A]



[figure 4.3_1 B]



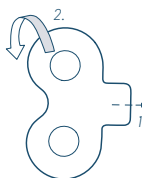
[figure 4.3_1 C]



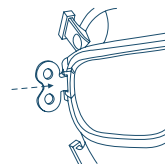
[figure 4.3_2]



[figure 4.3_3]



[figure 4.3_4]



[figure 4.3_4 A]



[figure 4.3_4 B]

4.3.2 Protection visor

For assembling, see figures 4.3_2 to 4.3_3, and 4.3_4 A/B for disassembling. The protective visor is marked "019006609."

Important! The protective visor should only be removed using the designated tool –Visor key 19006601. Insert it into the appropriate slot and turn backward.

5. Use

The size of the mask should be checked on the user's face in terms of fit and comfort. Choose a medium, large or small mask size accordingly. The size of the mask is marked on the left temple strap. (figure 8.1) For selection of the size it is recommended to start with medium size mask. If the face length is longer than 12 cm a large size mask should be tried as well. If the face length is below 11 cm a small size mask should be tried as well (figure 5). For further information see 5.3 Leak check. Further Information about qualitative and quantitative fit test methods can be found in ISO 16975-3:2017-09.

Only use IM76 when it is clean and properly maintained. Check for any damages prior to use, i.e. tears, rips, cracks, out of shape parts, loss of harness tensile strength, etc. If any damage is observed do not use IM76. If there is any damage on the harness, exchange harness by a new one. For any other damages send the mask to the manufacturer for repair, or discard.

Check the correct orientation of the valve disk holder (main rib must be horizontal, see figure 5_1 A and B) Check to see that all valves are positioned flat and work correctly.

Important!! Make sure that the main rib of the valve disk holder is horizontal, as shown

When delivered, the visor for the IM76 is protected with a protective film. Prior to the first use, pull off the visor's protective film for a clear view (figure 5_2).

5.1. Completing the Respiratory Protective Device

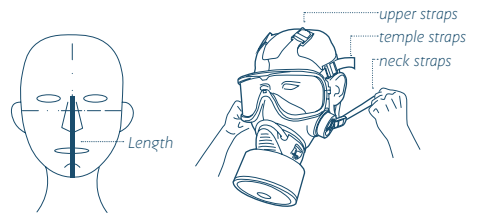
Connect the missing part of the respiratory protective device (filter, SCBA, airline equipment) to the IM76 by screwing the EN 148-1 male thread of the filter or the demand valve clockwise into the inlet opening of the IM76 (see figures 5.1_1 to 5.1_2). Tighten by hand.

5.2. Donning

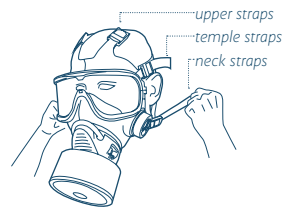
Make sure the filter and the plugs are firmly screwed in, and the filter is open on the inlet side. Make sure the drinking handle is closed and pointing downward (figure 5.5_1).

Loosen all head harness straps. Hold the mask with the inner part to your face (figure 5.2_2). Put the full face mask on your face, starting at the chin pocket (figure 5.2_3). Make sure that no facial hair interferes with the sealing line. Pull the harness over your head, so that it lays flat on your head.

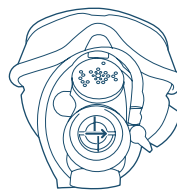
Hold the full face mask with one hand to your face, while pulling the temple straps, one strap after the other. Pull both neck



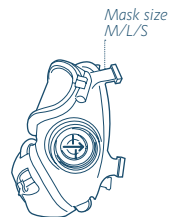
[figure 5]



[figure 5.2_4]



[figure 5.1_A]



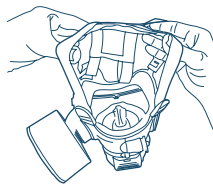
[figure 5.1_B]



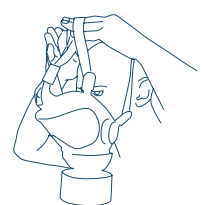
[figure 5.1_1]



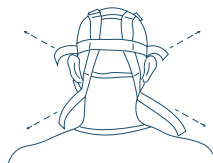
[figure 5.1_2]



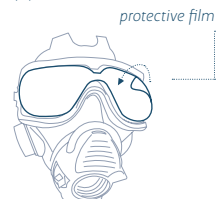
[figure 5.2_2]



[figure 5.2_3]



[figure 5.4_1]



[figure 5_2]

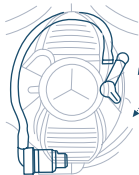
straps, if needed, pull the temple straps again (figure 5.2_4). When using the textile harness, the upper straps can also be adjusted for additional fitting.

Note: Do not overtighten! Position the mask correctly on your head.

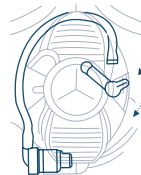
Attention: You must perform a leak check prior to exposure to potentially contaminated environments.

5.3 Leak check

Cover the air inlet opening (thread connector on front or side) or the filter air inlet opening, if attached, with the palm of your hand, inhale and hold the breath for 5 to 10 seconds. During this time, no air from the outside should leak into the full-face mask (figures 5.3_1 and 5.3_2). If a leak is detected, try to readjust the IM76 mask on your head, including the straps. If still no tight fit is achieved try another mask size. If you cannot achieve a tight fit, do not enter potentially contaminated environments.



[figure 5.3_1]



[figure 5.3_2]



[figure 5.3_1]



[figure 5.3_2]

5.4 Doffing

Loosen the temple straps and neck straps by lifting the buckles and let the straps slip (figure 5.4_1). Remove the mask from your head. Should the IM76 mask be used repeatedly by the same wearer, the buckles of the two upper head straps can be left closed as a pre-adjustment for the next time it would be worn.

5.5 Use of drinking device

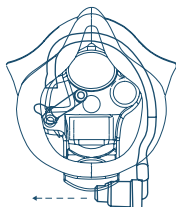
5.5.1. Operating phase 1 of the drinking system: Open the drinking handle by lifting it upward (figure 5.5_1 and 5.5_2), this will place the drinking straw in the wearer's mouth (figure 5.5_3), and will allow the flow of water.

5.5.2. Operating phase 2 of the drinking system: Pull the pipe with the mask drinking valve out from its port on the mask (figure 5.5_4). Then, connect it to the complementary drinking valve of the water tank system (figure 5.5_5).

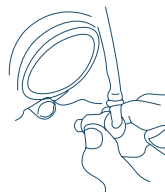
Connection diagram scheme of the two system valves; pull off the drinking tube from the receptor below the component housing. Align the connector of the water tank to the mask connector (figure 5.5_6). Push both together (5.5_7) and rotate both tubes counter clockwise, one against the other (figure 5.5_8), so that the drinking system interface is open and the user can drink.

The water tank drinking valve is marked "IM76 019006201," figure 5.5_9.

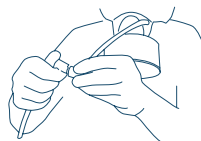
5.5.3. When done using the drinking system, disconnect the drinking valves from one another, bring the mask valve back to its port on the mask. Bring the drinking handle down, to secure its closing and move the straw away from the wearer's mouth (figure 5.5_1).



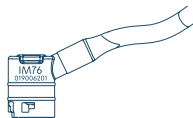
[figure 5.5_3]



[figure 5.5_4]



[figure 5.5_5]



[figure 5.5_9]



[figure 5.5_6]



[figure 5.5_7]



[figure 5.5_8]

6. Maintenance

Other than cleaning and disinfection, the IM76 is a maintenance-free mask. Any repairs or maintenance can only be done by the manufacturer, except for the harness system, when needed (see Section 4.2.)

6.1 Cleaning

Prior to cleaning, the component platform cover must be disassembled from the mask, by pulling the bottom edge of the component platform cover and removing it (see figures 6.1_1). Clean the mask by submerging in lukewarm water containing a mild detergent. Rinse with clean water; let water run off as much as possible (shaking it in several directions helps remove most of the water) and let dry at maximum 50°C. Avoid radiant heat (i.e. direct sunlight). Reassemble only when dry.

6.2 Reassembly

Reassemble the parts only when completely dry. Reassemble the component platform cover. Align the cover to the upper hook and snap the hook on at the chin area (see figures 6.2_1)

6.3 Disinfection

All parts can be disinfected with alcohol for one minute. For disinfection, disassemble component housing cover (see Section 6.1.). Rinse with clean water, let water run off as much as possible (shaking it in several directions helps remove most of the water) and let dry at maximum 50°C. Avoid radiant heat (i.e. direct sunlight). Reassemble according to Section 6.2.

7. Storage

Store the full face mask after cleaning and disinfection, if needed, in a dry and clean area, individually packed in a closed, clear bag. Store the IM76 without folding, between 0°C and 70°C. It is recommended to use the suggested storage bags (see ordering information).

8. Marking and approvals

The IM76 mask conforms to the Regulation (EU) 2016/425 and fulfils the requirements of EN 136:1998

The EU type examination was carried out by: DEKRA Testing and Certification GmbH, Dinnendahlstr. 9, 44809 Bochum, Germany, Notified Body number: 0158

This PPE is subject to the conformity assessment module C2 under surveillance of the Notified Body: ITALCERT S.r.l., viale Sarca, 336, 20126 Milano MI, Italy, notified Body Number: 0426

The EU Declaration of Conformity can be downloaded at <https://supergum.com/download-catalogs/>

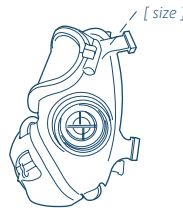
The face area of the IM76 is marked with the following: size mark in the temple area (left side) M = Medium, S=Small, L=Large. (see figure 8.1) The nose cup is marked with the following: (see figure



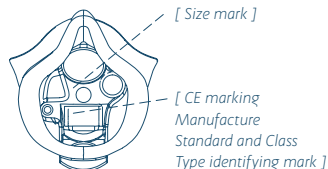
[figure 6.1_1]



[figure 6.2_1]



[figure 8.1]



[figure 8.2]

8.2) size mark s = small for im76 small size, m/l = medium/large for im76 medium size or large size. The rubber harness is marked in the middle, on the outside, with the manufacturing date (month/year). The textile harness is marked with the IMPERTECH logo on the outside (see 4.2, 2nd Note, last sentence) 019006001 Rev.

9. Ordering Information

Catalog numbers for IM76 are: 019006000, plus extension letters for size, port position and harness as shown in table. For ordering the suitable configuration, please state the designated extension letters on the order code after the main Part number of the IM76.

Versions	Extention letter
Small size	S
Medium Size	M
Large size	L
Front position only	F
Right and front position (interchangeable)	R
Left and front position (interchangeable)	L
Two sides and front (interchangeable)	T
Rubber harness	RH
Textile harness	TH
Electronic Communication System	E

All versions are equipped with a drinking tube, a tool key for changing thread connector position and textile bag.

For example: IM76 medium size front and two sides position with textile head harness the catalogue number will be 190006000-M-T-TH

Catalog numbers for accessories or spare parts:

- Head harness (Rubber) 019006618
- Head harness (Textile) 019006630
- Frame and adapter for corrective eyewear (corrective glasses will not be supplied) 019006602
- Protection visor 019006609
- Tool key 019006606
- Textile bag 019006631
- Visor key 19006601



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