EN

Mask Logic IdealFIT 100 (IF100)

EN 140:1999

Instructions for use

Applicable to the Mask Logic half mask respirators IdealFIT 100 series: IF100_A05-B3_105, IF100_A05-B3_115, IF100_A05-B3_125, IF100_A05-B3_135.

EU Type Examination in accordance with European PPE Regulation (EU) 2016/425 BS-EN-140-1999.

Important: Keep these Instructions for Use for reference.

Mask Logic Ltd.
1st Edition - November 2025
Subject to alteration.

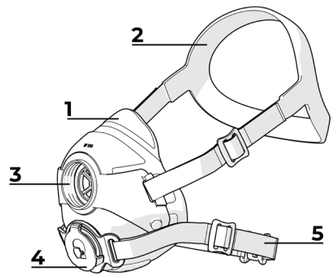
CE 2777

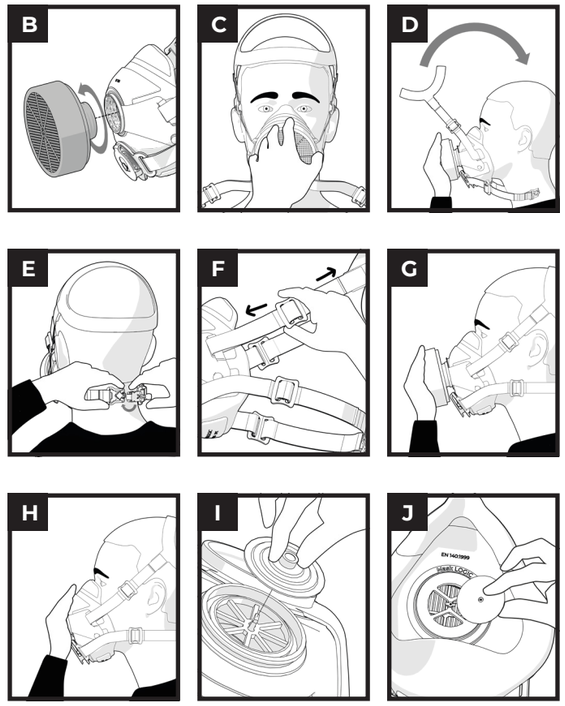
IdealFIT 100 Test Results

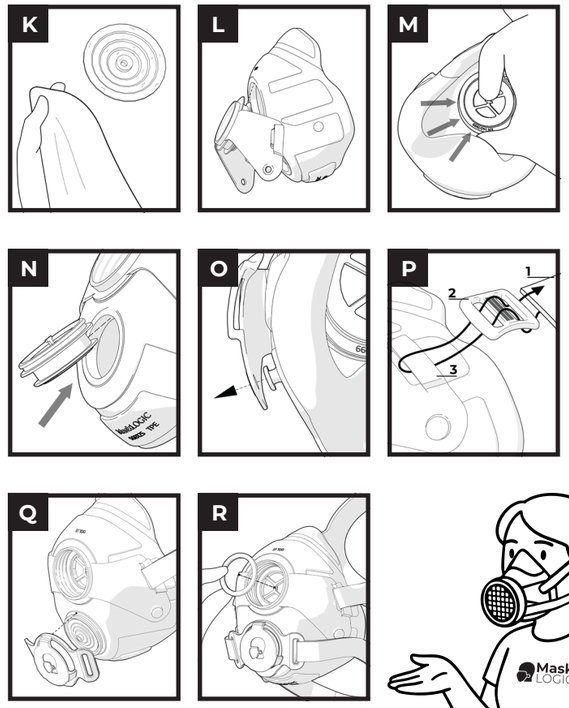
EN 140:1999 Test	EN 140:1999 Requirement			Mask Logic IdealFIT 100 Result		
Temperature Conditioning	24 hrs in a dry atmosphere at 70°C followed by 24 hrs at -30°C.			PASS		
Flammability	The Half Mask is passed through a single burner, set up with a 40 mm, 800°C flame, at a constant speed of 60mm/s at a distance of 20 mm between the burner and lowest part of the facepiece. The facepiece cannot continue to burn 5s aer removal.			PASS		
Head Harness Pull Test	Withstand a pull of 50N for 10 seconds.			PASS		
Connectors Pull Test	Withstand a pull of 50N for 10 seconds.			PASS		
Breathing Resistance: Inhalation	<0.50mbar @30l/min	<1.3mbar @95l/min	<2.00mbar @160l/min	0.33mbar @30l/min	0.91mbar @95l/min	1.57mbar @160l/min
Breathing Resistance: Exhalation	<3.00mbar @160l/min			1.43mbar @160l/min		
CO_2 Content of Inhaled Air	<1.00%			0.93%		
Inward Leakage*	<2.000%			0.743%		

*Based on the average of 10 test participants.

A







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1. Important information

IMPORTANT: Mask Logic masks are custom made to each individual. ***ALWAYS ensure that you are using the correct mask, identifiable with your unique user ID.*** If you are unsure if you are using the correct mask, speak to your Health and Safety supervisor. Failure to use the correct mask could result in improper fit.

Strictly follow the instructions for use

Before using the respirator, a full understanding of the *Instructions for use* is strictly required.

Failure to follow all instructions and limitations on the use of this respirator and/or failure to wear this respirator during all times of exposure can reduce respirator effectiveness and ***may result in sickness or death.***

Markings

Manufacturer: Mask Logic
Product name: IdealFIT 100 (IF100)
Material of mask body: TPE (thermoplastic elastomer)
Shapes*: SSB105, SSB115, SSB125, SSB135

*Your assigned mask body shape is determined by your MENSELL (m) measurement. This data is taken from your face scan and used to achieve your optimal fit.

The mask

Please refer to figure **A**. Replacement parts are listed in the table below.

1 - Mask body with custom nose piece; **2** - headband with upper strap;
3 - filter connection; **4** - exhalation valve; **5** - lower strap.

Part Code	Part Name	Description
IF100_P05-B0	Threadwings	Threaded component for housing the filter and upper strap.
IF100_P06-B0	ExVal holder	Houses the exhalation valve disc.
IF100_P07-B3	ExVal cap	Protects the exhalation valve disc and provides attachement points for the lower strap.
IF100_P15-B1	Upper strap	Straps and headband for securing the mask to the user.
IF100_A04-B1	Lower strap assembly	Straps and buckle for securing the mask to the user.
IF100_P08-B0	InhValve	Membrane for protecting the filter from exhaled air.
IF100_P09-B0	ExValve	Membrane which allows exhaled air to safely exit the mask.
IF100_P10-B0	Gasket	Ensures adeqaute sealing of threaded filters.
IF100_P14-C0	Tri glide	Component used on the upper and lower straps for user adjustment of strap tightness and fit.

2. Intended use

Description

IdealFIT 100 (IF100) is a custom-made reusable half mask respirator, approved and designed to help provide respiratory protection against certain airborne contaminants when used in accordance with all Instructions For Use and limitations and applicable safety and health regulations.

The airborne contaminants which can be dangerous to your health include those that are so small you may not be able to see or smell them.

Before use

IF100 must be inspected before each use to ensure that it is in good operating condition. Any damaged or defective parts must be replaced before use. The following inspection procedure is recommended:

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1. Check facepiece for cracks, tears and dirt. Be certain facepiece, especially faceseal area, is not distorted.

2. Examine inhalation valves for signs of distortion, cracking or tearing.

3. Make sure that head straps are intact and have good elasticity.

4. Examine all plastic parts for signs of cracking or fatiguing. Make sure filter gaskets are properly sealed and in good condition.

5. Remove exhalation valve cover and examine exhalation valve and valve seat for signs of dirt, distortion, cracking or tearing. Replace exhalation valve cover.

DO NOT USE FOR

Do not use for concentrations of contaminants which are immediately dangerous to life or health (IDLH), are unknown or when concentration exceeds 10 times the permissible exposure limit (PEL) in air purifying mode, 50 times PEL in supplied air mode or according to specific OSHA standards or applicable government regulations, whichever is lower.

Do not alter, abuse or misuse the respirator.

Do not use with beards or other facial hair or other conditions that prevent a good seal between the face and faceseal of the respirator.

Do not enter unventilated areas, such as containers, shafts or ducts, when wearing this half mask. The type of contaminant must be known.

Filter selection

The Mask Logic IF100 half mask respirator is designed for use with certified (EN-143-2021, EN-14387-2021) and compatible (EN-148-1-2018) threaded filters.

As per the EN-143-2021 standard, filters exceeding 300g in mass are not compatible for use with half mask respirators. Filters exceeding this limit are denoted with the adjacent symbol, and are NOT compatible with the IF100 series of masks.

Filters are available as particle, gas, or combined filters. Particle filters are classified according to their filtering efficiency:

Filter type	Colour	Filter class	Efficiency
P	White	1	Low
		2	Medium
		3	High

Gas and combined filters are classified in types and classes according to their application and gas capacity:

Filter type	Colour	Use case
AX	Brown	Gases and vapours of organic compounds with boiling point ≤65°C.
A		Gases and vapours of organic compounds with boiling point >65°C.
B	Grey	Inorganic gases and vapours.
E	Yellow	Sulphur dioxide, hydrogen chloride.
K	Green	Ammonia and organic ammonia derivatives.

Always ensure you are using the correct filter combination for your working environment.

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3. Fitting instructions

The following instructions must be followed each time the respirator is worn.

Please use the QR code provided at the end of the document for instructional videos and further information.

Filting the filter

Please refer to figure **B**. Using a compatible filter (as defined in *Filter selection*), align the threads and rotate clockwise until resistance is felt at the base of the filter. To remove the filter, rotate counter clockwise until the filter releases.

Donning the mask

For a more detailed guide to donning the mask, please scan the QR code and refer to "INSTRUCTIONS for DONNING". **It is necessary to review these instructions if this is your first time donning the mask.**

Please refer to figures **C-F**. Holding the mask by the filter, place the mask on your face, using the custom nose piece to aid with alignment. Bringing it over the forehead, locate the headband on the crown of the head. Take each end of the lower strap by the attached buckle, and bring the two halves together at the base of your neck. The buckles will snap into place using a magnetic connection.

Adjust the straps by holding the triglides and threading the straps through their respective connection points to the mask. Mask Logic recommends using a mirror or a second person during the first donning of the mask. Once you are happy with the tightness of the straps, slide the triglides towards the headband to secure any excess strap in place.

Performing a seal check

Please refer to figures **G & H**. Perform a negative pressue test by completely covering the filter opening with your hand. Breathe in until negative pressure is achieved. Hold your breath for three seconds and ensure negative pressure is maintained. If this test fails, adjust the straps and repeat until successful. If your hand is too small to cover the filter, this test can be performed by first removing the filter and covering the filter connection aperture.

4. Mask care

Inspection, cleaning and maintenance

Before each use, visually inspect the mask for any signs of obvious damage or wear. ***If you are unsure, always check with your safety manager.***

Please refer to figures **I-K**. Before each use, always inspect the exhalation and inhalation valve discs for dirt, dust, and wear. In the instances of damage, a replacement valve is required. To clean the valve discs, use lint-free isopropanol cleaning wipes.

Wipe cleaning is recommended after every use to extend the life of the mask and ensure optimal performance. Every three months, or in cases of excessive dirt build-up, full disassembly and cleaning is recommended. The IF100 is designed to be fully disassemblable, with the exception of the custom nose piece which is permanently connected to the mask body and the connector (thread) which is integrated into the Threadwings (IF100_P05-B0) component.

Using warm soapy water or a universal cleaning agent, submerge all mask components (with the exception of the straps, where wipe cleaning is recommended) and clean gently with a cloth. Rinse all components with water and allow to air dry completely. A drying oven may be use to accelerate the process (do not exceed 60°C).

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Assembly

Please refer to figures **L-R**. Attach the threaded component to the body of the mask by aligning the two apertures and pushing the soft material into the rigid groove (figure **L**). Following figure **M**, use your thumb to ensure that the part is properly seated. Repeat this process on the lower aperture with the exhalation valve disc holder (figure **N**). As per figure **O**, push the mask body protrusions through the corresponding rigid apertures.

Following figure **P**, thread the upper strap (1) through the triglide (2) and mask connection point (3) following the path of the arrow in the diagram.

After cleaning and inspection, attach the exhalation valve disc to its holder (refer back to figure **I**). Cover the valve by pushing the cap onto the ridge of the valve holder (figure **Q**) - it should click into place. Using the same method as the upper strap (figure **P**), attach the lower strap to the arms of the cap.

Insert the sealing component into the channel at the base of the thread (figure **R**). Ensuring that it is properly aligned, secure the component in place by threading in your filter, as described in *Fitting the filter*.

Storage and disposal

The IF100 has a recommended lifespan of two years.

Maximum shelf life is five years starting from the date of manufacture as stamped on the mask. The mask must be stored in its original packaging or other suitable container, in a dry. dust-free environment. Please prevent storing the mask in a manner where it could be subject to deformation, and avoid direct exposure to light or heat.

5. Additional information

Regulatory information

Notified Body
Notified body responsible for Module C2 ongoing conformity and EU type-examination is:

SATRA Technology Europe Ltd,
Bracetown Business Park Clonee,
D15 YN2P, Ireland
(Notified Body No.: 2777)

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EU Declaration of Conformity
Mask Logic's EU Declaration of Conformity can be found by following the QR code.

Find out more

For more information on the IdealFIT 100 and Mask Logic, please visit our website:

www.masklogic.co.uk.

For any questions or comments, please use:

info@masklogic.co.uk.

Detailed instructional videos for mask use, care, and assembly can be found on our website by using the QR code provided below.

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