

R1600

corpro
a better fit

DESIGNED
TO PROTECT



PrimePackaging

Full Face Respirator



Features

- ▲ Patented 'Easy-On' filter connection helps users securely mount filters onto their mask from any orientation with ease
- ▲ Patented seal system
- ▲ Global fit profile created using anthropometric data resulting in three fit profiles - Small (580g), Medium (584g), Large (589g)
- ▲ Ultra low breathing resistance created using twin inhalation valves and low pressure-drop filters
- ▲ Five point head harness with elastomeric sealing components offers a secure balanced fit
- ▲ Optimal centre of gravity enables the mask to feel lighter when worn
- ▲ Fully maintainable with easy access to parts for pre-donning checks and part replacement
- ▲ Panoramic visor and swept-back filter position offers an unobstruction field of view
- ▲ High impact polycarbonate visor
- ▲ Reusable through sterilisation procedure

Standards & Certification

Force360 recognise that without product certification by a Notified Body all product performance testing, and adherence to standards claims cannot be independently verified. If they are not as claimed, serious safety implications for the wearer, and legal implications for the supplier and the employer may arise.

Force360 source their entire range of reusable respiratory protection from a single manufacturing partner to ensure consistency and reliability of product, but most importantly Force360 have taken the further step of engaging a globally recognised Notified Body to audit and certify both the manufacturing process and the products.

All of Force360's respiratory protection is certified to the latest AS/NZS respiratory protection standards.

Specifications

Part No.	R1600
Protection	Filter Dependent
Usage	Reusable

Sizing

R1600.S	Small
R1600.M	Medium
R1600.L	Large

Packaging

 **1 Respirator**

 **8 Boxes**



CERTIFIED PRODUCT



Australian & NZ Standards
AS/NZS 1716:2012
Lic. BMP 710742



Designed and
Assembled
in the UK

R1600 - Full Face Respirator - Technical Specifications

EN Requirement		Small	Medium	Large			
Weight	Actual	580g	584g	589g			
Leak Tightness	EN	A negative pressure of 10mbar is applied to the mask, the mask must not leak more than 1 mBar in 1 min					
Temperature Conditioning	EN	72 hrs in a dry atmosphere at 70°C followed by 72hrs at 70°C at 95-100% relative humidity followed by 24hrs at -30°C					
Flammability	EN CL1	The Full Face Mask is passed through a single burner, set up with a 40 mm, 800°C flame, at a constant speed of 60 mm/s at a distance of 20 mm between the burner and lowest part of the facepiece. The facepiece cannot continue to burn 5s after removal.					
	EN CL2	The Full Face Mask is placed directly above 6 burners each set at a distance of 250 mm from the mask surface, the flames are set at 950°C, the mask is held in the flame static for 5s. Upon removal from the flame the facepiece cannot continue to burn 5s after removal.					
Head Harness Pull Test	EN CL1	Withstand a pull of 100N for 10s					
	EN CL2	Withstand a pull of 150N for 10s					
Inhale Connectors Pull Test	EN CL1	Withstand a pull of 250N					
	EN CL2	Withstand a pull of 500N					
Exhale Connectors Pull Test	EN CL1	Withstand a pull of 50N for 10s tested 10 consecutive times					
	EN CL2	Withstand a pull of 150N for 10s tested 10 consecutive times					
Field of Vision	Actual	Effective 91.3% , Overlapped 92.4%					
	EN	Effective > 70% , Overlapped > 80%					
Breathing Resistance		Inhalation Resistance		Exhalation Resistance			
		30 l/min	95 l/min	160 l/min			
	Actual	0.12 mbar	0.43 mbar	0.77 mbar			
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar			
		Following 300 l/min exhalation flow					
		Inhalation Resistance		Exhalation Resistance			
		30 l/min	95 l/min	160 l/min			
	Actual	0.11 mbar	0.40 mbar	0.80 mbar			
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar			
		Following 300 l/min exhalation flow					
		Inhalation Resistance		Exhalation Resistance			
		30 l/min	95 l/min	160 l/min			
	Actual	0.10 mbar	0.33 mbar	0.54 mbar			
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar			
	CO ₂ Content of Inhaled Air	Actual	0.70%	0.75%	0.70%		
EN		< 1.00 %					
Inward Leakage - Based on average of the 10 subjects per exercise		Exercise				Notes	
		Walk	Head Side/Side	Head Up/Down	Talk	Walk	¹ 4 Subjects achieved results < 0.001 %
	Actual	0.006% ¹	0.006% ²	0.006% ³	0.007% ²	0.004% ²	² 5 Subjects achieved results < 0.001 %
	EN	< 0.050%					³ 6 Subjects achieved results < 0.001 %

R1600

Particulate Filters

Particulate filters capture particulates in the air such as dusts, mists and fumes. They do not protect the user against gases or vapors. Particulate filters are classified into three groups, relative to the particulate size filtration capacity and toxicity of the particulate.

Class P1 Filters P1 filters protect against mechanically generated particles. P1 filters are available as the powered type, replaceable filter type and disposable type.

Class P2 Filters P2 filters protect against mechanically or thermally generated particles (or both). P2 filters are available as the powered type, replaceable filter type and disposable type.

Class P3 Filters P3 filters are to protect against highly toxic or irritant particles. P3 filters are available as the powered type and replaceable filter type.

To achieve P3 filter classification a full-face piece is required (for non-powered air), or a head covering or full face piece for a Powered Air Purifying Respirator (PAPR).

Note: When a P3 filter is used in conjunction with a half face piece, the protection level is equivalent to a P2 filter.

Disposable respirators / dust masks are particulate filters, usually P1 or P2. They cover the mouth and nose and protect the wearer against airborne contaminants including dust, mists, liquids and some fumes, but not gases or vapors.

Dust masks are not suitable where:

- Contaminant concentrations are dangerous to life or health, unknown or exceed the relevant exposure standard
- Toxic gases or vapours are present
- A satisfactory fit of the mask is not obtained due to facial hair or other characteristics that prevent a good seal between the edge of the mask and the wearer's face
- If the atmosphere is deficient in oxygen, a confined space or poorly ventilated area
- If there is a smell or taste of a contaminant and/or if persons in the area experience nose and/or throat irritation – some dust masks do have an active carbon layer added to reduce nuisance levels of organic vapours that can create unpleasant smells

Class	Efficiency	Penetration	Application
P1	80% (Particles to 1µm micron = 0.001mm size)	Not more than 20%	Dust
P2	94% (Particles to 0.3µm micron = 0.0003mm size)	Not more than 6%	Toxic dusts, including welding fumes and asbestos
P3	99.95% (Particles to <0.3µm micron = less than 0.0003mm size)	Not more than 0.05%	Toxic dusts including asbestos, welding fumes (Only achieved with PAPR or Full Face)

Gas Filters

Classes for gas filters are distinguished by how much gas they're able to absorb. Gas filters are classified by one of the following classes:

- Class AUS** Low absorption capacity filters
- Class 1** Low to medium absorption capacity filters
- Class 2** Medium absorption capacity filters
- Class 3** High absorption capacity filters

Gas and particle filters also use a colour coded system for identification. Multiple colours represent filter type protection:

-  **A** Organic Vapours (boiling point >65°C)
-  **AX** Organic Vapours (boiling point <65°C)
-  **B** Inorganic Gases
-  **E** Acid Gases
-  **K** Ammonia
-  **Hg** Mercury

Combination Filters

Combination filters are used when gases/vapours occur simultaneously with particles, e.g. in high pressure cleaning, spray painting, heating substances or gas condensation. Select an appropriate combination filter from the Corpro range when subject to this environment.

Protection Factors

Depending on the combination of cartridge/filter and respirator, different levels of protection may be achieved. The Protection Factor is the reduction in exposure expected with correct use of a respirator. e.g. A protection factor of 10 means the wearer can expect a 10 times reduction in exposure to the airborne concentration of contaminants. As per the table below - the higher the protection factor, the greater the reduction in exposure to airborne contaminants for the wearer.

Particulate Protection

Respirator	Filter	Protection Factor
Half Face Respirator	P2 Filter	Up to 10
Half Face Respirator	P3 Filter	Up to 10
Full Face Respirator	P2 Filter	Up to 50
Full Face Respirator	P3 Filter	Up to 100

Gas/Vapour Protection

Respirator	Filter	Protection Factor
Half Face Respirator	Class 1	Up to 10
Half Face Respirator	Class 2	Up to 10
Full Face Respirator	Class 1	Up to 50
Full Face Respirator	Class 2	Up to 100