

# 3M™ Scott™ ELSA Muster Emergency Life Support Apparatus



## Description

The 3M™ Scott™ ELSA (Emergency Life Support Apparatus) Muster is a positive pressure escape set providing air on demand for situations where the escape route may require a lot of physical exertion or where the maximum levels of protection are required. It has an ancillary air in attachment for use at muster stations.

The ELSA Muster is an open circuit, positive pressure airline breathing apparatus consisting of; anti-static bag, high pressure reducing valve, automatic positive pressure demand valve and coupling for airline supply hose.

The ELSA Muster is supplied with either a Positive Pressure Facemask or with Positive Pressure Hood.

## Applications

The ELSA Muster is suitable for use in rapid escape situations and in conjunction with the use of Muster Stations.

## Maintenance/cleaning/servicing

Cleaning should only be carried out as specified in the user instructions. Maintenance and servicing must only be performed by trained personnel following the procedures in the service and maintenance manual.

## Reducing Cylinder Valve (RCV)

Manufactured from nickel plated brass, the valve features an EN144-2 threaded charging connector, a low profile pressure gauge and a handwheel that allows for automatic or manual activation.

## Auxiliary air in

The auxiliary air in connection is available in various options of couplings, CEN pattern, ISO6150/US-mil spec C4109 and ISO B couplings.

## Carrying bag

The carrying bag is made of anti-static polyurethane for working in potentially explosive atmospheres. This is black and is both flame retardant and chemical splash resistant. The bag can be worn across the chest, as a bandolier or worn with an optional waistbelt.

# Specification

## Approvals

CE marked to EN 402:2003

## Materials

Pressure reducing valve	Nickel plated brass
Rust tube cylinders	Brass
Reducing valve seat	Polyamide (nylon)
O-rings	Nitrile, silicone, EPDM
Reducing valve springs	Stainless steel
HP pressure gauge	Stainless steel, brass, polycarbonate lens
HP pressure gauge cover	Neoprene
MP air supply hose fittings	Nickel plated brass
Facemask	Silicone or procomp
Facemask visor	Polycarbonate
MP air supply hose	Chlorinated polyethylene, fabric braid reinforcement, nitrile liner
Carrying bag	Anti-static polyurethane
Strap buckles	Polyamide
Cylinder	Steel or Composite
Cylinder valve	Nickel plated brass
Demand valve casing	Glass filled polyacetal and polyamide

## Tempest demand valve

Compact positive pressure demand valve featuring servo-assisted, tilting diaphragm mechanism with low inspiratory resistance and responsive dynamic performance, automatic first breath actuation and hands free bypass facility. Components injection moulded from polyamide with rubber seals and diaphragms.

First breath activation	-20 to -30 mbar
Peak flow performance	In excess of 500 litres/minute
Bypass flow	150 litres/minute nominal
Static positive pressure	1.0 – 4.0 mbar

## Reducing valve

First stage pressure reducing valve featuring non-adjustable, spring-loaded piston mechanism and outlet supply protected by pressure relief valve. Valve body and cap machined from nickel-plated brass with stainless steel spring and hose retainer U-clips.

Outlet pressure	
200 bar inlet	5.5 to 9.5 bar
300 bar inlet	6.0 to 11.0 bar
Pressure relief valve protected	Approx. 13.5 bar
Flow restrictor to gauge supply hose	<25 litres minute

## Hoses

Stainless steel swivel hose fittings

### Medium pressure hose

Maximum working pressure	16 bar
Minimum burst pressure	80 bar

### High pressure hose

Maximum working pressure	450 bar
Minimum burst pressure	800 bar

## Weight/dimensions

Weight	10 minute bag version 4.2kg Steel, 3.8 Kg Composite cylinder 15 minute bag version 5.3kg Steel , 4.2Kg Composite cylinder
Length	450mm
Width	210mm
Depth	210mm

## Packing specification

10 minute bag version	56x21x18cm 6.0kg
15 minute bag version	56x21x18cm 6.5kg

## 3M Scott Fire & Safety

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