

# 3M<sup>™</sup> Sigma 2 Type 2 Self Contained Breathing Apparatus

# Description

The 3M<sup>™</sup> Scott Safety Sigma 2 Type 2 is an open circuit, selfcontained, compressed air breathing apparatus.

The Sigma 2 Type 2 consists of a backplate, carrying harness and pneumatic system, containing a reducer with integrated cylinder connector, pressure gauge, whistle and demand valve.

The Sigma 2 Type 2 can be configured in a number of different ways with various sized single cylinders and the choice of face masks including the Vision 3 or Promask PP full face mask.

#### Features

The Sigma 2 Type 2 Self Contained Breathing Apparatus has a proven high performance pneumatic system, compact first breath activated demand valve with a bypass and an ergonomically designed lightweight backplate and Type 2 harness.

A low maintenance set with low 'whole of life' cost it is certified to AS/NZS 1716:2012 and to MED (Marine Equipment Directive) "Shipswheel". It also features the Kevlar<sup>™</sup> blend flame retardant webbing with Kevlar cylinder band and corrosion resistant nickel plated components.

## Applications

The Sigma 2 Type 2 is specifically designed as a Marine/ Industrial Fire Fighting SCBA, but is also suitable for providing respiratory protection in any IDLH environment.

## Standards

The Sigma 2 Type 2 by 3M Scott Safety is certified to EN137:2006 Type 2 / MED / AS/NZS 1716:2012.



Suitable for use with Promask PP or Vision PP. Masks and cylinder purchased separately

# **Operation/Cleaning/Service/Training**

Users need to be trained in the safe operation of this equipment. Routine checks must be carried out in accordance with the user instructions. Cleaning should also only be carried out as specified in the user instructions.

For training requirements please contact 3M Training Department on Phone: 1800 445 867 or Email: anzfallprotectiontraining@mmm.com

All servicing must be carried out by trained personnel who have been trained and are deemed competent by the manufacturer and hold a current 3M Scott Safety SCBA technician's certificate.

For Annual SCBA Servicing requirements please contact 3M Scott fire & Safety Service department on Phone: 131 772 or Email: scbaservice@mmm.com

#### Storage

The apparatus must be stored in a clean dry environment away from direct heat and sunlight. Storage temperature should not exceed -10°C to +40°C.

## Disposal

Decontaminated equipment should be dismantled and disposed of as solid waste. Empty cylinders should be treated as special waste and disposed of according to local and state guidelines.

# **Specifications**

Materials	
Pressure Reducing Valve	Nickel Plated Brass
Rust Tube (Sabre Cyls)	Brass
Reducing Valve Seat	Polyamide (Nylon)
O-Rings	Nitrile, Silicone, EPDM
Reducing Valve Springs	Stainless Steel
HP Pressure Gauge	Stainless Steel, Polycarbonate Lens
HP Pressure Gauge Cover	Neoprene
MP Air Supply Hose Fittings	Nickel Plated Brass
Face mask	Neoprene, Silicone or Procomp
Face mask Visor	Polycarbonate
MP Air Supply Hose	Chlorinated Polyethylene, fabric braid reinforcement, Nitrile liner
HP Air Hose	PTCFE liner, stainless steel braiding, Estane sleeve
Valve Handwheel (Sabre Cyls)	Glass filled Polyamide
Harness	Flame retardant kevlar band
Backplate	Glass & Carbon filled Nylon composite
Backpad	Flame retardant proban and closed cell Polyethylene foam
Cylinder Band	100% Kevlar
Strap Buckles	Flame retardant 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 servoassisted, 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 and Acetyl with rubber seals and diaphragms.

First breath activation	-20 to -30 mbar
Peak flow performance	In excess of 1000 litres/ minute
Bypass flow	150 litres/minute nominal
Static positive pressure	1.0 – 4.0 mbar

#### **Reducing Valve**

First stage pressure reducing valve featuring nonadjustable, spring loaded piston mechanism and outlet sup- ply protected by pressure relief valve. Valve body and cap machined from nickel-plated brass with stainless steel spring and hose retainer Uclips.

5 to 9.5 bar
) to 11.0 bar
prox. 13.5 bar
5 litres/minute

Pressure Indicator & Warning Whistle		
Bourdon tube type dial indicator		
Heat and impact resistant Polycarbonate lens		
Safety blow-out vent in rear of gauge		
Accuracy	+/- 10 bar between 40-300 bar	

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	
Single configuration (less cylinder)	2.3 kg
Single configuration & Face mask (less cylinder)	3.0 kg
Length	600 mm
Width	278 mm
Depth (with 6.8 litre 300 Bar cylinder)	200 mm

#### **Ordering Information**

3M Code	Model#	Description
XP100136348	2023034	SCBA Sigma 2 T2
XI 100100040	2020004	Compliance set
XP100544202	013190	Promask PP Left Quick
XF100344202	013190	Fit Full Face Mask
XP100071271 1071671	1071671	Vision 3 PP Left Quick
XF100071271	1071071	Fit Full Face Mask
AT01070040 444004FT	1118245T	Cylinders 6.8L 300 Bar
AT010700113	11182431	Carbon Fibre T valve
AT010700121 1127413T	1107410T	Cylinders 9L 300 Bar
	112/4131	Carbon Fibre T valve
AT010645821 2014810	0014010	SCBA Moulded Carry
	2014810	Case

#### **Important Notice**

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