

SIGMA 2 TYPE 2

SELF CONTAINED BREATHING APPARATUS



PERFORMANCE AND RELIABILITY ECONOMY AND COMFORT



- Scott Safety have over 75 years experience in the design and manufacture of Respiratory Protection Equipment.

Approved to EN137:2006 Type 2, the Scott Sigma 2 Type 2 Self Contained Breathing Apparatus combines the highest level of respiratory protection in a simple to operate, cost effective piece of equipment that meets the needs of Industrial and Marine firefighters.

Sigma 2 Type 2's proven durability, reliability and appeal is confirmed by an extensive user base who demand a combination of maximum performance and true operational simplicity.

- Proven high performance pneumatic system
- Compact first breath activated demand valve with bypass
- Ergonomically designed lightweight backplate and type 2 harness
- Kevlar blend flame retardant webbing with Kevlar cylinder band
- Wide choice of facemasks from the Vision 3, Promask PP and Panaseal ranges
- Corrosion resistant Nickel plated components
- Simple operation for users
- All components are user serviceable, low cost and easy to maintain
- Will accept wide range of 200 and 300 bar cylinders
- Approved to the MED as a Type 2 set



SCOTT BREATHING APPARATUS

All Scott respiratory protection equipment is designed to the same exacting standards: to be simple and comfortable to use, robust and easy to maintain. With respiratory protective equipment experience all over the world, Scott are the respiratory protection specialists.

SELF CONTAINED BREATHING APPARATUS

The Scott range of SCBA offers first breath activated positive pressure sets designed to the latest European Standards and combine low cost and simple maintenance with high levels of comfort.

ESCAPE BREATHING APPARATUS

Out-performing the latest EN Standards – the pioneering Scott Escape range includes Constant Flow, Positive Pressure Demand Systems and Airline Escape Equipment with durations between 10 and 15 minutes.

AIRLINE BREATHING APPARATUS

Automatic first breath positive pressure systems and airline escape sets supported by airline trolley units, filter units and accessories.

SUPPORTED BY SCOTT

Scott treats the role of after sales support very seriously offering a comprehensive level of technical support and certified training courses for wearers, instructors and service technicians. This is backed up by our head office in the United Kingdom and through a global network of regional support centres and distributors. For queries regarding the location of our service centres visit www.scottsafety.com or call our technical support helpline on +44 (0)1695 711751.



PNEUMATIC SYSTEM

At the heart of the Sigma 2 set is a simple and reliable two-stage pneumatic system. A first breath activated positive pressure demand valve provides low breathing resistance and excellent dynamic performance - particularly at high flow rates. A first stage pressure reducing valve features only two moving parts and accepts cylinder pressures of up to 300 bar without adjustment. A cylinder connector assembly with standard breathing air thread is fitted, with an easily removed bronze filter to protect the pneumatics. The system includes a shoulder mounted combined pressure indicator with photo-luminescent face markings for low-light legibility and a robust stainless steel and polycarbonate case with a protective rubber shroud. A warning whistle has an operating pressure of 55 bar.





The Sigma 2 Type 2 Self Contained Breathing Apparatus combines the highest level of respiratory protection in a simple to operate, cost effective piece of equipment that meets the needs of Industrial, Marine and Firefighting.

SPECIFICATIONS & ORDERING INFORMATION

SIGMA 2 SELF CONTAINED BREATHING APPARATUS

Product Specifications

Weight

Single configuration (less cylinder)
2.3kg

Single configuration & Facemask (less cylinder)
3.0kg

Dimensions

Length 600mm
Width 278mm
Depth (with 6.8 litre 300 bar Cylinder) 200mm

Sigma 2		
Part Number	Description	Application
SIGMA-2-PS TYPE 2	SIGMA 2 positive pressure self contained breathing apparatus with PanaSeal Neoprene facemask with uncoated visor and moulded backframe to accept all cylinders listed below. 55 bar whistle	Marine / Industrial/ Firefighting
SIGMA-2 TYPE 2	SIGMA 2 positive pressure self contained breathing apparatus with moulded composite backframe to accept all cylinders listed below Less facemask - see price list for choice of facemasks	Marine / Industrial / Firefighting
SIGMA-2-VIS TYPE 2	SIGMA 2 positive pressure self contained breathing apparatus with Vision 3 facemask and moulded backframe to accept all cylinders listed below. 55 bar whistle	Marine / Industrial/ Firefighting

Compressed air cylinders	
<i>Cylinders for SCBA (alloy steel) with locking handwheel cylinder valve:</i>	
CYL-1200	1200 litre, 207 bar, 30 minutes
CYL-1640	1640 litre, 300 bar 41 minutes
CYL-1800	1800 litre, 207 bar, 45 minutes
<i>Cylinders for SCBA (carbon fibre, fully wrapped aluminium composite) with locking handwheel cylinder valve:</i>	
CYL-FWC-1300	1300 litre, 300 bar, 32 minutes
CYL-FWC-1640	1640 litre, 300 bar, 41 minutes
CYL-FWC-1800	1800 litre, 207 bar, 45 minutes
CYL-FWC-1860	1860 litre, 300 bar, 46 minutes
CYL-FWC-2460	2460 litre, 300 bar, 62 minutes

TECHNICAL DATASHEET

SIGMA 2 TYPE 2- SELF CONTAINED BREATHING APPARATUS



DESCRIPTION

The Scott Sigma 2 Type 2 is an open circuit, self-contained, compressed air breathing apparatus. It consists of a back plate, 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 Vision 3, Panaseal, Panavisor or Promask PP facemask.

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.

APPROVALS

CE marked in accordance with EN137:2006 Type 2

MED

AS/NZ 1716

TECHNICAL DATASHEET

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
Facemask	Neoprene, Silicone or Procomp
Facemask 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

MAINTENANCE/CLEANING/SERVICING

N.B. - 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.

TECHNICAL DATASHEET

TECHNICAL SPECIFICATIONS

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 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 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 Uclips.

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

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)	2.3kg
Single configuration & facemask (less cylinder)	3.0kg
Length	600mm
Width	278mm
Depth (with 6.0 litre 200 bar cylinder)	200mm