

## FLITE – Self Contained Breathing Apparatus

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### Technical Datasheet

#### Description

The Sabre FLITE is an open circuit, positive pressure airline breathing apparatus generally comprising; bandolier harness, positive pressure airline apparatus comprising automatic positive pressure demand valve; supply hose and coupling for airline supply hose.

An additional coupling allows the connection of a emergency air supply cylinder which provides an independent air supply with a duration from 10 to 15 minutes, dependant on cylinder size.

The apparatus can be used with the full range of Sabre positive pressure facemasks as well as the Sprint positive pressure hood when used as an escape only apparatus.



#### Applications

The FLITE is specifically designed as an airline working set and with its optional hip mounted cylinder as an airline escape set, it has many applications but is particularly suited to confined space entry and the oil and gas industry. It is also suitable for providing respiratory protection for any IDLH environment.

#### Approval Information

- CE marked in accordance with EN139
- CE marked in accordance with EN402



## 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, brass, 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
Cylinder bag	Flame retardant PVC Coated Nylon / Polyester
Valve Handwheel	Glass filled Polyamide
Harness	Flame retardant polyester
Strap buckles	Stainless Steel
Harness Padding	closed cell Polyethylene foam
Cylinder	Steel or Composite
Cylinder Valve	Nickel Plated Brass
Demand Valve Casing	Glass filled Polyacetal and Polyamide

## Maintenance/Service/Cleaning

**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 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 and Acetyl 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

### Combined Cylinder and Pressure reducing Valve

The valve is manufactured from nickel plated brass and has a pressure indicator and DIN type charging connection (stainless steel). There is a large handwheel, a low profile pressure gauge and burst disc assembly incorporated into the valve.

Neck thread for standard steel cylinders	M18 x 1.5mm parallel
Neck thread for composite cylinders	M18 x 1.5mm parallel
Optional neck thread available for conversions	0.715" BS 341 taper

The first stage pressure reducer features a non-adjustable, spring loaded piston mechanism and outlet supply protected by an integral pressure relief valve.

Valve body and cap manufactured from nickel plated brass with stainless steel spring and hose retainer U-clips.

The pressure reducer will accept inlet pressures of 300 bar.

A medium pressure hose leads from the reducer ending in a CEN male fitting which can be connected to the CEN type female on the Flite apparatus sited above the non-return valve.

#### **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	<25 litres minute

#### **Airline connection**

The airline coupling is a male CEN type and is mounted on a swivelled pigtail assembly. It also incorporates a non-return valve so air from an attached cylinder can not escape when the apparatus is detached from the airline supply.

Optional Foster and Hansen HK type fittings are available

#### **Hoses**

Stainless steel swivel hose fittings

#### **Medium pressure hose**

Maximum working pressure	16 bar
Minimum burst pressure	80 bar

#### **Packing Specifications**

Single Flite (less cylinder)	40x28x16cm	2.5kg
Flite with 10 minute steel cylinder	56x21x18cm	6.0kg
Flite with 13 minute carbon cylinder	56x21x18cm	5.0kg
Flite with 15 minute steel cylinder	56x21x18cm	8.0kg

<b><u>Weight/Dimensions</u></b>	
Flite (less cylinder)	1.9kg
Flite with 10 minute cylinder (3.5kg)	5.4kg
Flite with 10 minute superlight cylinder (2.3kg)	4.2kg
Flite with 15 minute cylinder (5.6kg)	7.5kg
Facemask (Approximate)	0.7kg