

FLITE COV

SUPPLIED AIR RESPIRATOR



FLITE COV is a positive pressure Supplied Air Respirator that also provides emergency respiratory protection and escape capability allowing the user to enter hazardous atmospheres including those identified as immediately dangerous to life or health (IDLH). If needed, the switch to the emergency air supply cylinder is accomplished by an automatic change over valve greatly simplifying response to a stressful situation.

The unit also features a flame retardant polyester harness with stainless steel buckles, combined cylinder and pressure reducing valve assembly and a rugged mask-mounted demand valve with automatic first breath activation. The FLITE COV is versatile and can be used in applications like confined space entry, hazardous materials handling and any number of general maintenance tasks in a wide variety of industries including chemical, petrochemical, oil & gas and public utilities.

PRODUCT HIGHLIGHTS

- In the event of an interruption of air flow from the primary supply source switchover to emergency cylinder air supply is immediately activated by the automatic change over valve to facilitate safe egress. Warning whistle informs user switch has been made to cylinder air.
- Combined cylinder and pressure reducing valve features a locking hand wheel that remains locked in the open position against inadvertent shutting and a pressure gauge
- Compressed air steel cylinders are provided in 10 and 15 minute durations with a 10 minute superlight carbon composite version also offered
- CEN type coupling as standard; other connections available.
- Features the time-proven Scott Tempest Demand Valve with low inspiratory resistance, automatic first breath activation and responsive dynamic performance
- The unit is comfortable and extremely simple to operate and maintain
- The FLITE COV meets all requirements and is certified to current EN 14593-1:2005 and EN 402:2003 standards (AS/NZS1716:2012)

FLITE COV

SUPPLIED AIR RESPIRATOR

Ordering Information

Article Number	Full / Empty Cylinder	Description
2031077		Flite COV Airline Breathing Apparatus comprising Tempest DV, supply hose and pigtail with CEN coupling, bandolier harness and facility to connect escape cylinder
2031078		Flite COV Airline Breathing Apparatus comprising Tempest DV, supply hose and pigtail with Foster/Hansen mil spec coupling, bandolier harness and facility to connect escape cylinder
2031079		Flite COV Airline Breathing Apparatus comprising Tempest DV, supply hose and pigtail with Hansen HK coupling, bandolier harness and facility to connect escape cylinder
2031080		Flite COV Airline Breathing Apparatus comprising Tempest DV, supply hose and pigtail with Staubli coupling, bandolier harness and facility to connect escape cylinder
2031535 2031536	FULL EMPTY	200 bar 10 minute charged steel cylinder complete with pouch and reducer/hose
2031537 2031538	FULL EMPTY	200 bar 15 minute charged steel cylinder complete with pouch and reducer/hose
2031539 2031540		300 bar 10 minute charged superlight carbon fibre composite cylinder complete with pouch and connection hose
1071671		Vision 3 Positive pressure Facemask, medium/large, left DV, rubber head harness
5513190		Promask Positive Pressure Facemask, medium/large, left DV, rubber head harness



Airline hoses are available from Scott in both PVC and anti-static rubber materials in various standard lengths. Standard safety locking connections are with CEN couplings.

DEMAND VALVE

The compact Scott Tempest Demand Valve has proven its utility in thousands of global positive pressure breathing apparatus applications. It features servo-assisted, tilting diaphragm mechanism with low inspiratory resistance and responsive dynamic performance, automatic first breath actuation and hands free bypass facility.

CYLINDER OPTIONS

- 10-minute 200 bar alloy steel; 400 litre free air capacity, empty weight 3.5 kg
- 15-minute 200 bar alloy steel; 600 litre free air capacity, empty weight 5.6 kg
- 10-minute 300 bar superlight carbon fibre; 540 litre free air capacity, empty weight 2.3 kg

FLITE COV is approved for use with the Scott Safety Vision 3 and Promask PP full facemasks. These masks feature ori-nasal inner mask to minimize carbon dioxide dead space and prevent visor misting, polycarbonate visor, fully adjustable, 5-point web, or net head harness, quick fit DV connector for the Tempest, reflex face seal and speech diaphragm.

COMPLETE SAR SYSTEMS

The FLITE COV can be integrated with a series of other Scott provided products such as the fitted airline in multiple lengths, the Modulair airline trolley that accommodates various compressed air cylinder quantities and sizes and a wide range of facemask options, to build a complete supplied air system. Numerous accessories are also available to maximize system functionality.

RELATED PRODUCTS



MODULAIR AIRLINE TROLLEY



VISION 3



MODULAIR MAX

Approvals: CE marked in accordance with EN 14593-1:2005 and EN 402:2003 standards (AS/ NZS1716:2012)



TECHNICAL DATASHEET

FLITE COV - SUPPLIED AIR RESPIRATOR



DESCRIPTION

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

An additional coupling allows the connection of an emergency air supply cylinder with automatic change over valve which provides an independent air supply with a duration of 10 to 15 minutes, dependent on cylinder size.

The apparatus can be used with the full range of EN approved Scott Safety positive pressure facemasks even 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 in any IDLH environment.

APPROVALS

CE marked in accordance with EN14593-1:2005

CE marked in accordance with EN402:2003 when fitted with an escape cylinder

AS/NZ 1716:2002

TECHNICAL DATASHEET

MATERIALS

Pressure Reducing Valve	Nickel Plated Brass
Rust Tube (Scott Safety Cyls)	Brass
Reducing Valve Seat	Polyamide (Nylon)
O-Rings	Nitrile, Silicone, EPDM
Reducing Valve Springs	Stainless Steel
Change Over Valve	Nickel Plated Brass, 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	DV - EPDM Cover, fabric braid reinforcement, EPDM liner Pigtail - 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

OPERATION

The airline coupling is a male CEN type and is mounted on a pigtail assembly. It also incorporates a non-return valve so air from the attached cylinder cannot escape when the apparatus is detached from the airline supply. Optional Foster, Hansen HK and Staubli type fittings are available.

The escape cylinder utilises a locking hand wheel to remain in the open position and eliminate inadvertent shutting. If airline delivery pressure is reduced by an interruption of the main supply the automatic change over valve switches the unit to cylinder air for safe egress. When there is a switch over to cylinder air the user is alerted via activation of a whistle.

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.

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 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 & 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 locking 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
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

Automatic Change Over Valve

The valve is manufactured from nickel plated brass with stainless steel spring and will automatically switch air supply to cylinder source if the main supply is interrupted. A whistle on the valve will sound continuously on cylinder air and silence when on line supply resumes.

Switch Over Pressure	6 bar (normal line pressure is 9 bar)
Warning whistle	90 dB

Hoses

Stainless Steel swivel hose fittings

Medium Pressure Hose

Maximum working pressure	16 bar
Minimum burst pressure	80 bar

Weight/ Dimensions

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

QUESTIONS & ANSWERS

FLITE COV SUPPLIED AIR RESPIRATOR

QUESTION

What does the COV in Flite COV stand for?

ANSWER

COV = Change Over Valve

QUESTION

What standard is the Flite COV approved to?

ANSWER

It is approved to EN14593-1 as an airline set and then additionally EN402 when fitted with an escape cylinder

QUESTION

What is the difference between EN14593-1 and EN139?

ANSWER

The major difference between the two standards is that EN14593-1 requires the set to have an automatic switch over device fitted if the product is to be fitted with a cylinder.

QUESTION

What does the switchover device do?

ANSWER

When the Flite COV is connected to an airline system with sufficient pressure in it, the switch over device allows the cylinder hand wheel to be opened therefore switching the cylinder on. The change over valve stops the air from the cylinder entering the breathing system until the airline pressure drops to a certain level at which point the air is released. This means that if the airline fails the user does not have to activate their cylinder as it is already open.

QUESTION

How do I know whether I am breathing airline air or cylinder air?

ANSWER

When the COV activates and the user is breathing a whistle will sound to ensure the user knows they are now breathing from their escape cylinder and they should exit the area.

QUESTION

What airline pressure does the COV operate at?

ANSWER

The COV will change over from airline to air to cylinder air when the airline pressure drops below 6 bar

QUESTION

How loud is the whistle?

ANSWER

The standard requires the whistle to sound at a minimum level of 90dB measured at the ear.

QUESTION

How much air is allowed to be used by the whistle?

ANSWER

The standard states that the whistle must use less than 5lpm of air.

QUESTION

What airline couplings are available for the FLITE COV?

ANSWER

We can supply the FLITE COV with male CEN pattern, Foster/Hansen mil spec, Hansen HK or Staubli couplings.

QUESTION

What escape cylinder durations are available?

ANSWER

Escape cylinders for the Flite are available in durations of 10 and 15 minutes.

QUESTION

Is a light weight escape cylinder available?

ANSWER

Yes an escape cylinder with a composite cylinder shell is available giving a duration of 10 minutes.
