3M | **SCOTT™**
Fire & Safety

3M™ Scott™ X3-21 Pro SCBA

Question
Is the 3M™ Scott™ X3-21 Pro SCBA certified to NFPA 1986, Standard on Respiratory Protection Equipment for Tactical and Technical Operations, 2017 Edition?

Answer
The X3-21 Pro SCBA meets all performance requirements of and is certified to the NFPA 1986, 2017 Edition standard.

Question
Why was NFPA 1986 created, how is it different than NFPA 1981 Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, and what is the benefit of this new standard?

Answer
NFPA 1981 is focused on the needs of the structural firefighter and the hazards they face. Over time, the NFPA 1981 standard has evolved beyond the needs of those emergency services personnel who do not intend to participate in structural firefighting operations.

In 2012, the NFPA determined there was both need and demand for a standard related to the use of respiratory protection equipment for emergency operations that did not involve structural firefighting, such as technical rescue, hazardous materials response, tactical law enforcement operations, confined space entry, terrorist incident response, and other similar operations.

Key differences between the two standards include:
- Several features required under NFPA 1981 are optional under NFPA 1986. This allows the user to configure the X3-21 Pro SCBA to the needs of the operation and maintain its certification. Optional features include:
  - o Heads-up Display (HUD)
  - o Rapid Intervention Crew/Company Universal Air Connection (RIC/UAC)

- Where NFPA 1981 requires two, independent End-of -Service Time Indicators, NFPA 1986 only requires one

- While both standards require and test for flame resistance, the performance requirements under NFPA 1981 are more stringent and NFPA 1981 requires operational testing in extremely high-heat environments
- NFPA 1981 has requirements for electronics and datalogging that are not required under NFPA 1986
- The current edition of NFPA 1981 requires the End-of- Service Time Indicator (EOSTI) to activate at 35% (±2%) of the SCBA's rated cylinder pressure, whereas the current edition of NFPA 1986 reduces the EOSTI requirement to 25% (+4%/-0%) of the SCBA's rated cylinder pressure

Prior to development of NFPA 1986, an SCBA certified for Chemical, Biological, Radiological, and Nuclear (CBRN) protection required certification to NFPA 1981. NFPA 1986 will now allow for a CBRN rating to the SCBA while allowing the user to configure the SCBA to their specific operational needs.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA available with an emergency "buddy breather" accessory?

Answer
Yes. The X3-21 Pro SCBA can be ordered with an optional Emergency Breathing Safety System (EBSS) that allows two different users to share their available air supply in an emergency situation.

Question
What are the key features of the 3M™ Scott™ X3-21 Pro SCBA?

Answer
The X3-21 Pro SCBA is built on a foundation of redundant safety features, maintaining the reliability and durability of the Air-Pak SCBA, with a focus on enhancements to Cleanability and Comfort.

The X3-21 Pro SCBA combines high-performance materials for improved water repellency with an easy-to-remove harness for cleaning, decontamination, and serviceability. With minimal water absorption, the harness assembly may be machine laundered to help with exposure reduction efforts.

Ergonomics are at the heart of the X3-21 Pro SCBA. The shoulder harness, complete with MOLLE compatible webbing loops, improves the ease of donning and minimizes pressure points to help reduce user fatigue and improve comfort.

A naturally articulating waist pad promotes greater range of motion to the user, while transferring weight to the hips for a more balanced load. These features promote comfort in every sense of the word, including physical, respiratory, and psychological.

Question
What facepieces are approved for use with the 3M™ Scott™ X3-21 Pro SCBA?

Answer
3M™ Scott™ AV-3000 HT Facepiece – Compatible with the 3M™ Scott™ E-Z Flo+ Mask-Mounted Regulator and equipped with a head harness providing 5 points of attachment, 4 of which are adjustable. The AV-3000 HT facepiece is also available in an optional, adjustable five-strap configuration. Additional facepieces may be approved in the future.

Question
What type of cylinder connection is available on the 3M™ Scott™ X3-21 Pro SCBA?

Answer
The X3-21 Pro SCBA is available in either a Snap-Change or CGA threaded cylinder connection. The Snap-Change cylinder connection utilizes a quick release probe, whereas the CGA cylinder connection utilizes traditional CGA 347 threads. The Snap-Change cylinder connection provides several added benefits over the traditional threaded connection, in that it promotes rapid cylinder replacement, improves efficiencies during cylinder charging, and reduces wear and tear on the cylinder valve.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA available with an articulating waist pad option?

Answer
The X3-21 Pro SCBA comes standard with an articulating waist pad. Unlike traditional SCBA that offer mechanical articulation, the X3-21 Pro SCBA utilizes a reinforced Kevlar® webbing design to provide the user with a greater range of motion through natural articulation of the waist pad. The benefits of which is enhanced comfort and better weight distribution all without sacrificing durability of the product.

Question
Can the 3M™ Scott™ X3-21 Pro SCBA harness and webbing be easily detached from the backframe for cleaning and decontamination?

Answer
The X3-21 Pro SCBA incorporates an easy-to-remove harness to enable cleaning and decontamination following any Immediately Dangerous to Life or Health (IDLH) event. Requiring no tools and minimal training, removal of the harness can be accomplished by the SCBA user. The new harness assembly can be cleaned using a soft bristle brush with soap/water or it can be machine laundered, both of which are proactive steps to help with exposure reduction.

Question
Can the 3M™ Scott™ X3-21 Pro SCBA be ordered with a spare harness assembly?

Answer
The X3-21 Pro SCBA may be configured with a spare harness assembly at the time of ordering. The spare harness assembly is also available as a separately purchased part.

Question
What types of cylinders are compatible with the 3M™ Scott™ X3-21 Pro SCBA?

Answer
The X3-21 Pro SCBA will support two distinct operating pressures – 4500 psi and 5500 psi – and is compatible with breathing air cylinders rated for 30-minute, 45-minute, 60-minute, and 75-minute duration. Cylinders are available in the configurations listed below:

Type	Service Life	Pressure	Duration
Carbon	15-year	4.5	30-min, 45-min, 60-min
Carbon, ST7	15-year	4.5	30-min, 45-min, 60-min
Carbon	30-year*	4.5	30-min, 45-min, 60-min
Carbon	15-year	5.5	30-min, 45-min, 60-min, 75-min

*Not available in Canada.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA equipped with a rated drag handle?

Answer
The X3-21 Pro SCBA incorporates a drag rescue loop that is sewn into the shoulder harness assembly and attached to the backframe. The design promotes easy use with a gloved hand and provides a horizontal pull strength of 1000 lb to assist with drag rescue.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA interoperable with other 3M™ Scott™ SCBA?

Answer
The design of the X3-21 Pro SCBA is based on that of the 3M™ Scott™ Air-Pak™ X3 Pro SCBA, which is intended for firefighting and is certified to NFPA 1981 Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services. Given the similarity in design, many of the components and parts of the X3-21 Pro SCBA are common with the Air-Pak X3 Pro, and breathing air cylinders are fully interchangeable. Moreover, the commonality of design allows for simplified servicing and repair.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA easy to clean?

Answer
The X3-21 Pro SCBA combines high performance materials for improved water repellency with an easy-to-remove harness (no tools are required for removal) for cleaning, decontamination, and serviceability. With minimal water absorption, the harness assembly may be

machine laundered to help with exposure reduction efforts. Additional harnesses can also be ordered, enabling replacement of a soiled harness with a clean harness; thus, returning the X3-21 Pro SCBA to immediate service while the soiled harness is cleaned or laundered.

Question
Is a cylinder shroud available for the breathing air cylinder to minimize operator signature?

Answer
Yes. The X3-21 Pro SCBA is approved with an optional cylinder shroud that will cover and mask reflective parts of the cylinder, as well as provide additional abrasion protection for the cylinder. The shroud is also equipped with MOLLE compatible webbing loops.

Question
Is the 3M™ Scott™ X3-21 Pro SCBA available with an electronic heads-up display?

Answer
Yes. An optional heads-up display is available and integrates with the mask-mounted regulator to provide a visual indication of air supply status.

Question
Are there any communications accessories available for the 3M™ Scott™ X3-21 Pro SCBA?

Answer
Yes. The X3-21 Pro SCBA is available with several, optional electronic voice communications options:
- 3M™ Scott™ EPIC 3 RDI Voice Communication System – an optional facepiece-mounted radio direct interface communication system that provides voice amplification and wireless communication with compatible two-way radios via Bluetooth® connectivity.
- 3M™ Scott™ EPIC 3 RI Voice Communication System – an optional facepiece-mounted radio interface communication system that provides voice amplification and wireless communication with two-way radios utilizing a 3M Scott remote speaker microphone (RSM).
- 3M™ Scott™ EPIC 3 Voice Amplifier – an optional facepiece-mounted voice amplification device to electronically project the user's voice.

Question
Does the 3M™ Scott™ X3-21 Pro SCBA utilize an End-of-Service Time Indicator (EOSTI)?

Answer
Yes. The X3-21 Pro SCBA is equipped with a Vibralert EOSTI, which provides both an audible and tactile warning to the SCBA wearer when the cylinder pressure reaches 25% of its remaining air pressure.

Question
What is the warranty on the 3M™ Scott™ X3-21 Pro SCBA?

Answer
The X3-21 Pro SCBA, compliant to the NFPA 1986, 2017 Edition standard, is covered for as long as you own the product. The warranty covers defects in workmanship and materials for as long as the product is owned by the original end-user purchaser and does not require any type of overhaul or mandatory parts replacement to maintain warranty coverage. The X3-21 Pro SCBA provides a low lifetime cost-of-ownership, affording customers peace of mind knowing that your most important investment is backed for the lifetime ownership of the product. Furthermore, the warranty is backed by 3M Scott's extensive network of service centers, ensuring that critical safety equipment is repaired and placed back into service with minimal downtime.