



3M™ Scott™ Air-Pak™ X3 Pro SCBA NFPA 1981/1982, 2018 Edition



Question

Is the Air-Pak X3 Pro SCBA certified to the NFPA 1981/1982, 2018 Edition standards?

Answer

The Air-Pak X3 Pro meets the latest performance requirements of and is certified to the NFPA 1981/1982, 2018 Edition standards.

Question

What are the changes in the NFPA 1981/1982, 2018 Edition standards?

Answer

There are several design and performance changes required in the NFPA 1981/1982, 2018 Edition standards. A summary of those changes is below:

NFPA 1981

- Pneumatic Data-logging
- Universal Emergency Breathing Safety System (UEBSS)
 - New standardized fittings (Rectus-type) for all manufacturers

NFPA 1982

- Universal PASS Tone
 - This requirement was originally incorporated into the NFPA 1982, 2013 Edition standard as part of a Tentative Interim Amendment (TIA)

Question

What has changed on the Air-Pak X3 Pro SCBA for the NFPA 1981/1982, 2018 Edition standards?

Answer

The Air-Pak X3 Pro incorporates the following changes as part of the latest NFPA 1981/1982, 2018 Edition model:

- Universal EBSS (for those SCBA configured with an accessory hose)
- Rectus-type fittings (for those SCBA configured with a quick-disconnect regulator)
- New branding

Question

Is the Universal EBSS compatible with 3M Scott Air-Pak SCBA certified to earlier editions of the NFPA 1981 standard?

Answer

The Universal EBSS utilizes a Rectus-type fitting, as required per the NFPA 1981, 2018 Edition standard, and is not compatible with the EBSS fittings found on 3M Scott Air-Pak SCBA certified to earlier editions of the NFPA 1981 standard. This includes Air-Pak SCBA models certified to the 1997, 2002, 2007, and 2013 editions of the NFPA 1981 standard.

For those customers utilizing Air-Pak SCBA models certified to earlier editions of the NFPA 1981 standard, 3M Scott is seeking approvals for an emergency breathing safety system (EBSS) accessory manifold that will incorporate the Rectus-type fitting(s) to enable compatibility with the new Universal EBSS.

Question

What are the key features of the Air-Pak X3 Pro SCBA?

Answer

The Air-Pak X3 Pro 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, Comfort, and Connectivity.

The Air-Pak X3 Pro 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.

Offering enhanced electronics with Bluetooth® technology, the Air-Pak X3 Pro supports wireless connectivity between devices for improved configurability, data transmission/retrieval, firefighter safety and fireground accountability. An electronic personnel accountability report (ePAR) feature enables incident command to check the status of a firefighter with a simple click of a button (using 3M™ Scott™ Monitor Pro telemetry software), helping to reduce excess radio traffic.

Questions & Answers

Ergonomic improvements have been made to the Air-Pak X3 Pro that help redefine the user experience. A new shoulder harness design 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 enhancements help to promote comfort in every sense of the word, from physical, respiratory, and psychological.

Question

What facepieces are approved for use with the Air-Pak X3 Pro SCBA?

Answer

To meet the high temperature and communications performance requirements in the NFPA 1981, 2018 edition standard, there are two facepieces approved for use with the Air-Pak X3 Pro SCBA:

Vision C5 Facepiece - 3M Scott's latest facepiece offering, compatible with the E-Z Flo C5 regulator

AV-3000 HT Facepiece - Compatible with the E-Z Flo+ regulator, and available in a 4-strap or 5-strap configuration

Question

What type of cylinder connection is available on the Air-Pak X3 Pro SCBA?

Answer

The Air-Pak X3 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 CGA 346/347 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

What types of cylinders are compatible with the Air-Pak X3 Pro SCBA?

Answer

The Air-Pak X3 Pro will support three distinct operating pressures – 2216psi, 4500psi, and 5500psi – 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	2.2	30-min
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

Question

Is the Air-Pak X3 Pro SCBA available with an articulating waist pad option?

Answer

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

Question

Can the Air-Pak X3 Pro SCBA harness and webbing be easily detached from the backframe for cleaning and decontamination?

Answer

The Air-Pak X3 Pro incorporates an easy-to-remove harness to enable cleaning and decontamination following any IDLH event. Requiring no tools and minimal training, removal of the harness can be accomplished by the SCBA wearer. 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 Air-Pak X3 Pro SCBA be ordered with a spare harness assembly?

Answer

To help support best practices in exposure reduction, the Air-Pak X3 Pro 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

Is the Air-Pak X3 Pro SCBA equipped with a rated drag handle?

Answer

The Air-Pak X3 Pro incorporates a drag rescue loop that is sewn into the shoulder harness assembly and attached to the backframe. The new design promotes easier use with gloved hands and provides a horizontal pull strength of 1000 lbs to assist with firefighter rescue. 3M™ Scotchlite™ Reflective Material enhances visibility of the drag rescue loop to assist with locating in low light conditions.

Questions & Answers

Question

Does the Air-Pak X3 Pro SCBA provide enhanced visibility of the firefighter while operating on the fireground?

Answer

Utilizing a combination of 3M™ Scotchlite™ Reflective Material, the Air-Pak X3 Pro harness and webbing provide enhanced visibility of the SCBA when operating in low-light conditions. Electronic “buddy” lights enable a 360° view of the firefighter’s status (i.e. air pressure and PASS), improving safety and accountability on the fireground.

Question

How does the Air-Pak X3 Pro SCBA help to improve fireground accountability?

Answer

A feature of the Air-Pak X3 Pro is the integration of an electronic personnel accountability report (also known as ePAR) as part of the SEMS II wireless SCBA telemetry system. Utilizing SEMS II Pro in conjunction with Monitor Pro telemetry software, the incident commander has the ability to initiate a PAR request through a simple touch command on the computer. The PAR request is transmitted wirelessly over a mesh network to each individual SCBA wearer, who in turn will receive a visual and audible alert notification. The SCBA wearer may acknowledge the PAR request by pressing a button on the PASS Console, transmitting a signal back to Monitor Pro and clearing the PAR request.

Question

How does the ePAR feature on the Air-Pak X3 Pro SCBA help to improve fireground communications?

Answer

Maintaining personnel accountability and effective communications are two of the biggest challenges on the fireground. Maintaining personnel accountability requires effective communications and often times it is a lack of effective communications that can turn a bad situation to worse. This is where ePAR can help improve fireground communications. By reducing excess radio traffic and relying instead on data transmission through the SEMS II wireless SCBA telemetry system, accountability is preserved while maintaining effective communications for when it matters most.

Question

Is SEMS II Pro a standard feature on the Air-Pak X3 Pro SCBA?

Answer

No. SEMS II Pro is an option on the Air-Pak X3 Pro. While the SEMS II Pro feature enables improved fireground accountability when used in conjunction with Monitor Pro telemetry software, 3M Scott Fire & Safety understands that not all fire departments have the same level of staffing to support this type of system. As such, the Air-Pak X3 Pro may be configured with either the Pak-Tracker or SEMS II Pro PASS device.

Question

Is Pak-Tracker a standard feature on the Air-Pak X3 Pro SCBA?

Answer

Yes. Pak-Tracker is a standard feature on the Air-Pak X3 Pro. In early 2017, 3M Scott Fire & Safety began incorporating the Pak-Tracker firefighter locator into all NFPA 2013 edition Air-Pak SCBA in an effort to improve firefighter safety. This same great feature is also standard on the NFPA 2018 edition Air-Pak X3 Pro SCBA.

Question

Is the Air-Pak X3 Pro SCBA available in a Hazmat configuration?

Answer

Yes. The Air-Pak X3 Pro may be ordered in a special Hazmat configuration that has the motion sensor deactivated, effectively disabling the automated PASS alarm activation.

Incorporating the same great features as the SEMS II Pro option, the Hazmat configuration enables SCBA telemetry and electronic PAR capability, while also providing a manual alarm option for the SCBA wearer.

The Hazmat configuration is identified by a yellow console and is not compliant to the NFPA 1982, 2018 Edition standard.

Question

Is the Air-Pak X3 Pro SCBA equipped with a temperature sensor?

Answer

Yes. The Air-Pak X3 Pro is equipped with an embedded temperature sensor to monitor the performance and integrity of the system electronics.

In the event that the electronics exceed an elevated internal temperature threshold (approximately 176° F), the SCBA will emit an alarm tone signifying an evacuation to the wearer. This is referred to as a System Integrity Alarm.

Question

How does the System Integrity Alarm integrate with Monitor Pro telemetry software?

Answer

Prior to activation of the System Integrity Alarm on the SCBA, Monitor Pro telemetry software will initiate a pre-alert (at approximately 170° F) to notify Incident Command of the elevated temperature inside the SCBA electronics. This notification serves as an advance warning to give Incident Command the option to evacuate the SCBA wearer.

Questions & Answers

Question

Does the Air-Pak X3 Pro SCBA have an option for an integrated thermal imaging camera?

Answer

Yes. As part of the Air-Pak X3 Pro product solution, customers can configure their AV-3000 HT facepiece to utilize the 3M™ Scott™ Sight In-Mask Thermal Imager, the first and only hands-free thermal imager. Integrated into the facepiece rather than the SCBA, Sight combines an exterior-mounted camera with a display inside of the facepiece to eliminate the need for reaching down and lifting up a camera. Firefighters now have both hands free for effective communication, victim extraction, and carrying tools.

Question

Are the Air-Pak X3 Pro SCBA electronics programmable?

Answer

Yes. Certain features of the Air-Pak X3 Pro electronics may be wirelessly configured using a mobile application, such as programming the Pak-Tracker ID.

Question

In the event that 3M Scott Fire & Safety releases new firmware for the Air-Pak X3 Pro SCBA, how do I upgrade the electronics?

Answer

The Air-Pak X3 Pro incorporates Bluetooth technology to enable fast and reliable wireless connection to a mobile device for use in upgrading the electronics firmware.

Question

Can the Air-Pak X3 Pro SCBA be configured with an integrated self-rescue belt?

Answer

Yes. The Air-Pak X3 Pro may be configured with a standard waist belt or the EZ-Scape Pro integrated self-rescue belt. The EZ-Scape Pro is available in a jettison or fixed belt configuration and offers an NFPA 1983 rated attachment point, providing versatility for use in a variety of fireground situations. Due to the required attachment method to the backframe, the EZ-Scape Pro waist pad assembly cannot provide the natural articulation as found with the standard Air-Pak X3 Pro waist pad assembly.

Question

Is there a chest strap option available for the Air-Pak X3 Pro SCBA?

Answer

Yes. Although the Air-Pak X3 Pro is designed to evenly distribute weight to the SCBA wearer's hips for a more balanced load, some customers may feel more comfortable using a chest strap. A universal chest strap accessory is available for integration into the Air-Pak X3 Pro harness and may be installed in an upper or lower position to accommodate different firefighter body types.

Question

What type of facepiece connection does the Air-Pak X3 Pro SCBA mask-mounted regulator use and does it meet the NFPA 1981, 2018 edition performance requirement for Strength of Interface testing?

Answer

One of the benchmarks of the Air-Pak SCBA, the E-Z Flo+ mask-mounted regulator utilizes a quarter-turn design, to help improve the strength of interface connection to the facepiece, minimizing the possibility for inadvertent separation or removal. The E-Z Flo+ mask-mounted regulator meets all requirements for the NFPA 1981, 2018 edition standard.

The latest E-Z Flo C5 regulator utilizes a similar quarter-turn design, while also meeting the performance requirements for the NFPA 1981, 2018 Edition standard.

Question

Does the mask-mounted regulator utilize a heads-up display?

Answer

Yes. A heads-up display is integrated into the mask-mounted regulator to provide critical information to the SCBA wearer, including air status, PASS status and a low battery warning.

The E-Z Flo C5 regulator incorporates a new, extended heads-up display to provide additional visual alerts to the SCBA wearer for electronic personnel accountability report (ePAR), EVAC and System Integrity Alarm. These additional visual alerts are only active with the Air-Pak X3 Pro SCBA, configured with SEMS II Pro wireless SCBA telemetry system.

Question

Does the Air-Pak X3 Pro SCBA utilize an End-of-Service Time Indicator (EOSTI)?

Answer

Yes. The Air-Pak X3 Pro utilizes two independent EOSTI devices to notify the SCBA wearer when their air supply is getting low. The primary EOSTI is a Vibralert, which provides both an audible and tactile warning to the SCBA wearer when the cylinder pressure reaches 35% of its remaining air pressure. The secondary EOSTI is a heads-up display and provides a visual indicator of the SCBA air status.

Question

How has the Vibralert changed on the E-Z Flo C5 regulator?

Answer

The E-Z Flo C5 regulator utilizes a reduced frequency Vibralert, helping to improve two-way radio communications while continuing to provide an audible and tactile low air warning for immediate recognition on the fireground.

Questions & Answers

Question

Can the Air-Pak X3 Pro SCBA be upgraded to meet the NFPA 1981/1982, 2018 Edition standards?

Answer

Yes. The Air-Pak X3 Pro was designed to be forward compatible when it comes to changing regulatory standards. With the exception of the new Universal EBSS (UEBSS), any Air-Pak X3 Pro purchased prior to the release of the NFPA 1981/1982, 2018 edition standards meets the design and performance requirements of the NFPA 1981/1982, 2018 edition standards.

As part of our continued focus to deliver value-added product solutions to meet the needs of our customers, 3M Scott Fire & Safety will offer upgrade kits to the NFPA 1981, 2018 Edition standard for any Air-Pak X3 Pro SCBA configuration that was purchased as a NFPA 1981/1982, 2013 edition model.

Availability of upgrade kits is still to be determined at this time. As more information becomes available, 3M Scott Fire & Safety will keep our valued customers informed.

Question

What will be required to upgrade the Air-Pak X3 Pro SCBA to meet the NFPA 1981/1982, 2018 Edition standards?

Answer

Based on the current design of the Air-Pak X3 Pro, the following components would need to be updated or replaced to meet the NFPA 1981/1982, 2018 Edition standards:

- Universal EBSS (required if Air-Pak X3 Pro is configured with a Dual EBSS accessory hose)
- Firmware (required for those Air-Pak X3 Pro manufactured before July 16, 2018)
- Regulatory labels

For those SCBA with a quick-disconnect regulator, customers may choose to upgrade to the Rectus-type fittings in order to maintain compatibility with the new Universal EBSS.

Question

When was the last ship date for SCBA certified to the NFPA 1981/1982, 2013 Edition standards?

Answer

The last ship date for all NFPA 1981/1982, 2013 Edition SCBA was August 31, 2019. Any SCBA shipped after that date were not permitted to be labeled as certified to NFPA 1981/1982, 2013 edition.

Question

Will 3M Scott Fire & Safety continue to offer the Air-Pak X3, Air-Pak 75, and Air-Pak Wireframe SCBA models?

Answer

Effective September 1, 2019, the Air-Pak X3, Air-Pak 75, and Air-Pak Wireframe SCBA models will no longer be offered as NFPA 1981/1982 compliant respirators. 3M Scott Fire & Safety will continue to support these SCBA models and will offer them in a NIOSH-approved configuration only. While the functional design of the SCBA will not change, these models will no longer be labeled as NFPA compliant.

For those customers that are currently using the Air-Pak X3, Air-Pak 75, and Air-Pak Wireframe SCBA models, 3M Scott Fire & Safety will continue to provide warranty and service support for an indefinite period.

Question

What is the warranty on the Air-Pak X3 Pro SCBA?

Answer

The Air-Pak X3 Pro SCBA, compliant to the NFPA 1981/1982, 2018 Edition standards, 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 Air-Pak X3 Pro 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.

Question

Is new software required for flow testing the Air-Pak X3 Pro SCBA?

Answer

To support changes in the NFPA 1981, 2018 edition standard, a new software revision is required for existing 3M Scott authorized service centers. Availability of this software revision will be communicated through the 3M Scott Service & Repair network.

Questions & Answers

Question

Will 3M Scott Fire & Safety offer service kits to enable existing Air-Pak X3 SCBA users to convert to the Air-Pak X3 Pro SCBA?

Answer

Yes. The Air-Pak X3 Pro utilizes a different electronics package and backframe/harness design as compared to the Air-Pak X3 SCBA. For those customers that wish to take advantage of the Air-Pak X3 Pro enhancements without the added cost of purchasing new SCBA, 3M Scott Fire & Safety will offer spare sub-assembly part numbers to complete the conversion.

NOTE: NFPA 1981, 2018 Edition upgrades will be available at a later time.

For those Air-Pak X3 customers wishing to convert to the Air-Pak X3 Pro harness only, the following part numbers are available, depending on the desired configuration.

**Backframe & Harness, Parachute Buckle		
Description	Part Number	Includes
Back-Pak Assembly, Parachute Buckles	201615-03	Backframe, Shoulder Harness, Waist-to-Shoulder Straps (x2), Waist Pad, Waist Belts (male/female), Regulator Holder, Cable Clamp Routing Kit (x2)
*Dual EBSS Pouch	201611-01	Dual EBSS Pouch

* Required only if SCBA is configured with Dual EBSS

** Additional parts may be required. Contact 3M Scott Fire & Safety for more information.

**Backframe & Harness, Alligator Buckle		
Description	Part Number	Includes
Back-Pak Assembly, Alligator Buckles	201615-04	Backframe, Shoulder Harness, Waist-to-Shoulder Straps (x2), Waist Pad, Waist Belts (male/female), Regulator Holder, Cable Clamp Routing Kit (x2)
*Dual EBSS Pouch	201611-01	Dual EBSS Pouch

* Required only if SCBA is configured with Dual EBSS

** Additional parts may be required. Contact 3M Scott Fire & Safety for more information.

For those Air-Pak X3 customers wishing to convert to the Air-Pak X3 Pro electronics only, the following part numbers are available, depending on the desired configuration.

Electronics, PASS		
Description	Part Number	Includes
PASS, Sensor Module	201160-24	Sensor Module, Pak-Tracker
PASS, Console, Standard, 2.2	201110-12	Console Standard
PASS, Console, Standard, 4.5	201110-11	Console Standard
PASS, Console, Standard, 5.5	201110-13	Console Standard
Hose Assy, Q/D, CGA	201136-03	Hose Assy, Q/D
Hose Assy, Q/D, Snap-Change	201136-04	Hose Assy, Q/D
Hose Assy, Long, CGA	201138-03	Hose Assy, Long
Hose Assy, Long, Snap-Change	201138-04	Hose Assy, Long

Electronics, SEMS II Pro		
Description	Part Number	Includes
PASS, Sensor Module	201160-24	Sensor Module, Pak-Tracker
PASS, Console, SEMS II Pro, 2.2	201122-12	Console, SEMS II Pro
PASS, Console, SEMS II Pro, 4.5	201122-11	Console, SEMS II Pro
PASS, Console, SEMS II Pro, 5.5	201122-13	Console, SEMS II Pro
Hose Assy, Q/D, CGA	201136-03	Hose Assy, Q/D
Hose Assy, Q/D, Snap-Change	201136-04	Hose Assy, Q/D
Hose Assy, Long, CGA	201138-03	Hose Assy, Long
Hose Assy, Long, Snap-Change	201138-04	Hose Assy, Long



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