

# BIOPAK 60TE



## More Time for Less

An hour of breathing time without paying penalties of size and weight! Biomarine's BioPak 60TE is the first NIOSH-approved closed-circuit self-contained breathing apparatus that maintains a positive pressure in the mask. Light, compact and with a true one-hour duration, the BioPak 60TE solves problems in firefighting and entry into toxic or oxygen-deficient environments.

## Our Background

Biomarine designed and produced the world's most advanced diving equipment. Original applications were focused towards usage in the U.S. military's special warfare teams and explosive ordnance disposal divers. Biomarine has evolved, manufacturing only above water breathing equipment today.



# BIOMARINE

*Leaders in Closed Circuit  
Breathing Apparatus*

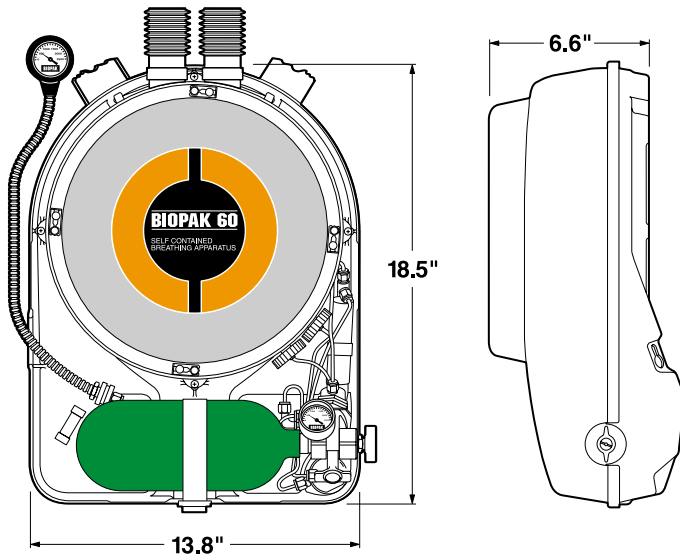
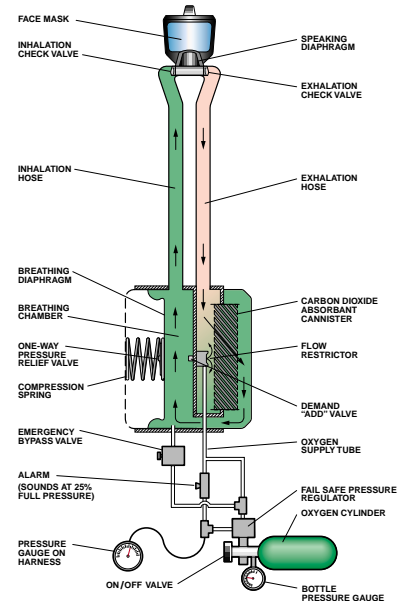


## Principle of Operation

The BioPak 60TE is an American made closed-circuit self-contained breathing apparatus. It recirculates the major portion of the user's exhaled gas. A small oxygen cylinder provides make-up gas to a breathing chamber. The user inhales the gas into a silicone facepiece. The user's exhaled breath passes through a carbon dioxide absorbent and back into the breathing chamber, where fresh oxygen is added. The replenished gas is now available for the next inhalation.

A spring-loaded diaphragm in the breathing chamber maintains the positive pressure in the system. If the user's inhalation fully depletes the breathing chamber, the demand, free-flow valve automatically supplies the additional oxygen required. If the user's exhalation causes the diaphragm to fully expand, excess gas is vented out of the relief valve.

A loud, high-pitched, pressure activated whistle alarm sounds when approximately 20-25% of the service life remains. A manual bypass is provided to override the supply system in an emergency.



## BIOPAK 60TE SPECIFICATIONS

Weight:	25 lbs. (11.25 kg)
O <sub>2</sub> Cylinder:	6.77 ft. <sup>3</sup> @ 2250 psig
Duration:	1 hour (60 minutes)
Constant Flow Rate:	1.9 ± .3 l/min
Materials:	High-impact fire-retarding Macralon® shell Neoprene hoses Anti-oxidant silicone rubber facepiece Optional fire-resistant aramid harness and straps
Packaging:	Soft pack case
Approval:	NIOSH/MSHA Certification TC-13F-371 and TC-13F-372 for use in temperatures as low as +15° F.

## Why Choose the BioPak 60TE?

### Long Duration

Regardless of the user's size or physical activity, the BioPak 60TE delivers at least sixty minutes duration. If the user's job does not take an hour, the BioPak 60TE's long duration provides a built-in safety factor for unforeseen problems.

### Light Weight

The BioPak 60TE weighs only 25 pounds, fully charged and ready for use. It is the lightest one-hour unit on the market.

### Low Profile

From front to back the BioPak 60TE measures only 6-5/8 inches, making it easy for entry through small spaces which can prohibit the use of bulkier equipment.

### Ease of Use and Comfort

The BioPak 60TE is simple to use. All controls and displays are easily accessible. The fully padded harness makes the unit extremely comfortable - the weight is carried on the hips not the shoulders. The well-fitting silicone facepiece with speaking diaphragm provides a durable, effective seal.

The over-the-shoulder hose design, along with low breathing resistance, reduces wearer fatigue.

### Ease of Maintenance

User maintenance requirements are minimized. Most repairs and testing can be done in the field. Optional training materials and programs describe tests and procedures necessary to keep the BioPak 60TE in perfect operating condition.

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