

## **Specifications**

### **Single Deadman 150 psi (10.3 bar) Air Lifting Bag (ALB) Controller**

#### **Introduction**

These purchase specifications cover the minimum requirements of a Single Deadman Air Lifting Bag (ALB) Controller with relief valve to be purchased. The Single Deadman ALB Controller shall enable inflation of one (1) Air Lifting Bag System from a safe distance. The Single Deadman ALB Controller must be able to control an air lifting bag by activating a rocking lever to control inflation or deflation. As a minimum the system must consist of:

- Single Deadman ALB Controller  
(Equivalent to Paratech 22-889510G2-150)

#### **Instruction to Bidders**

Bidders shall conform as much as possible to these specifications to ensure interoperability with other equipment. Exceptions or omissions must be set out in writing on a separate sheet entitled "Exceptions" which must accompany the bid. Failure to do so will result in an automatic rejection of the bid.

The buyer shall be the sole interpreter of the intent of any clause of these specifications and shall be the sole judge as to whether the equipment or any part thereof complies with the specifications.

The buyer reserves the right to reject any and all bids, to waive informalities in bidding, to negotiate small options with the successful bidder and to accept the bid, which in the opinion of the buyer, will be in its best interest.

#### **General System Construction Features**

The controller shall be designed for maximum portability and confined space operations.

The controller shall be ergonomically shaped and equipped with a single air inlet and one air outlet.

#### **Quantity, Dimensions and Capacities**

\_\_\_ Single Deadman ALB Controller (equivalent to Paratech 22-889510G2-150) must be supplied with these minimum capacities:

A carrying strap shall be provided to allow maximum operator mobility.

Weight of the Controller without a strap must not exceed = 3.04 lbs. (1.4 kg).

Overall dimensions must not exceed:	Width:	2.23" (2.7 cm)
	Height:	3.10" (7.9 cm)
	Length:	10.75" (27.4 cm)

The gauge shall be a minimum of 1.5" (3.81 cm) in diameter and must be housed by a tight-fitting protective shroud. Accuracy of the grade B gauge at 73.4°F (23°C) is 3%, 2%, 3% of span.

The Single Deadman ALB Controller shall have a self-resetting relief valve to prevent accidental over-pressurization of the lift bag which activates at 150 psi (10.3 bar) with a flow rate of 10.05 SCFM (602.76 SCFH).

Both the inlet and the outlet shall be spring-loaded, female, quick-connect couplings. A secondary integral threaded safety lock system on the coupling must be in place.

An internal check valve shall be provided to prevent air from escaping if inlet hose is cut or damaged.

The Single Deadman ALB Controller shall be equipped with an inflation and deflation rocking lever, which requires positive pressure on the end of the lever during the inflation or deflation of the lifting bag. The lever shall be color-coded with proper labels to denote the function of the valve.

The forward button must be for inflating and the rear button for deflating.

The controller body must allow for the attachment of additional Single ALB Controllers in series with (1) air inlet and multiple outlets, that require: (1) Distributor Module (equivalent to Paratech 22-889531) per additional Controller, (4) Connecting Screws (equivalent to Paratech 22-890931) for the first two Controllers and then (2) extra screws per additional unit. Only (1) Distributor End Module (equivalent to Paratech 22-889532) and (2) Hex Lock Nuts (equivalent to Paratech 22-015716) are needed for any multiple configurations.

It is required that the equipment meets or exceeds the EN 13731 Lifting Bag Systems for fire and rescue service use - Safety and performance requirements.

## **Specifications**

### **Dual Deadman 150 psi (10.3 bar) Air Lifting Bag (ALB) Controller**

#### **Introduction**

These purchase specifications cover the minimum requirements of a Dual Deadman Air Lifting Bag (ALB) Controller with relief valve to be purchased. The Dual Deadman ALB Controller shall enable inflation of one (1) or two (2) Air Lifting Bag Systems from a safe distance. The Dual Deadman ALB Controller must be able to control an air lifting bag by activating a rocking lever to control inflation or deflation. As a minimum the system must consist of:

- Dual Deadman ALB Controller  
(Equivalent to Paratech 22-8909000G2-150)

#### **Instruction to Bidders**

Bidders shall conform as much as possible to these specifications to ensure interoperability with other equipment. Exceptions or omissions must be set out in writing on a separate sheet entitled "Exceptions" which must accompany the bid. Failure to do so will result in an automatic rejection of the bid.

The buyer shall be the sole interpreter of the intent of any clause of these specifications and shall be the sole judge as to whether the equipment or any part thereof complies with the specifications.

The buyer reserves the right to reject any and all bids, to waive informalities in bidding, to negotiate small options with the successful bidder and to accept the bid, which in the opinion of the buyer, will be in its best interest.

#### **General System Construction Features**

The controller shall be designed for maximum portability and confined space operations. The controller shall be ergonomically shaped and equipped with a single air inlet and dual air outlet.

#### **Quantity, Dimensions and Capacities**

\_\_\_ Dual Deadman ALB Controller (equivalent to Paratech 22-890900G2-150) must be supplied with these minimum capacities:

A carrying strap shall be provided to allow maximum operator mobility.

Weight of the Controller without a strap must not exceed = 4.6 lbs (2.1 kg).

Overall dimensions must not exceed:	Width:	3.81" (9.68 cm)
	Height:	3.27" (8.31 cm)
	Length:	10.73" (26.34 cm)

The controller shall be equipped with two (2) multi-colored operating gauges. The gauges shall be a minimum of 1.5" (3.81 cm) in diameter and must be housed by a tight-fitting protective shroud. Accuracy of the grade B gauge at 73.4°F (23°C) is 3%, 2%, 3% of span.

The controller shall have a self-resetting relief valve to prevent accidental over-pressurization of the lift bag which activates at 150 psi (10.3 bar) with a flow rate of 10.05 SCFM (602.76 SCFH).

Both the inlet and the outlet shall be spring-loaded, female, quick-connect couplings. A secondary integral threaded safety lock system on the coupling must be in place.

An internal check valve shall be provided to prevent air from escaping if inlet hose is cut or damaged.

The Dual Deadman ALB Controller shall be equipped with two (2) each independently operated inflation and deflation rocking levers, which require positive pressure on the end of the lever during the inflation or deflation of the lifting bags. Each of the two (2) push levers shall be color-coded with proper labeling to denote the function and pressure limit of the valve with slip-resistant up & down rocker buttons. The forward button must be for inflating, rear for deflating.

It is required that the equipment meets or exceeds the EN 13731 Lifting Bag Systems for fire and rescue service use - Safety and performance requirements.

## **Specifications**

### **Pressure Regulator 5,500-200 psi (379.2-13.8 bar)**

#### **Introduction**

These purchase specifications cover the minimum requirements of a Pressure Regulator with a self-resetting relief valve to be purchased. The Pressure Regulator shall be capable of reducing inlet pressure of 5,500 psi (379 bar) to a constant working pressure of 200 psi (13.8 bar). The Pressure Regulator must be piston-type designed primarily for use with an SCBA air cylinder. As a minimum the system must consist of:

- Pressure Regulator  
(Equivalent to Paratech 22-895401G2)

#### **Instruction to Bidders**

Bidders shall conform as much as possible to these specifications to ensure interoperability with other equipment. Exceptions or omissions must be set out in writing on a separate sheet entitled "Exceptions" which must accompany the bid. Failure to do so will result in an automatic rejection of the bid.

The buyer shall be the sole interpreter of the intent of any clause of these specifications and shall be the sole judge as to whether the equipment or any part thereof complies with the specifications.

The buyer reserves the right to reject any and all bids, to waive informalities in bidding, to negotiate small options with the successful bidder and to accept the bid, which in the opinion of the buyer, will be in its best interest.

#### **General System Construction Features**

The Pressure Regulator shall be designed to reduce the pressure from a high-pressure air source to a suitable working pressure for use with an Air Lifting Bag System. The Pressure Regulator shall be of piston-type design and equipped with a 3/4" CGA inlet and 1/4" NPT male nipple outlet.

#### **Quantity, Dimensions and Capacities**

\_\_\_ Pressure Regulator (equivalent to Paratech 22-895401G2) must be supplied with these minimum capacities:

Weight of the Pressure Regulator must not exceed = 3.62 lbs (1.64 kg).

Overall dimensions must not exceed:	Width:	5.77" (14.7 cm)
	Depth:	3.52" (8.9 cm)
	Length:	6.05" (15.2 cm)

The Pressure Regulator shall be equipped with two (2) operating gauges. One gauge shall monitor the supplied high pressure air with corresponding markings up to 6000 psi (400 bar). The second gauge shall monitor the outlet pressure with corresponding markings up to 400 psi (28 bar). The gauges shall be a minimum of 1.5" (3.81 cm) in diameter and must be housed by a tight-fitting protective shroud. Accuracy of the grade B gauge at 73.4°F (23°C) is 3%, 2%, 3% of span.

The Pressure Regulator shall have a self-resetting relief valve to prevent accidental over-pressurization of the lift bag which activates at 200 psi (13.8 bar) with a flow rate of 9.55 SCFM (270.5 SLM).

The Pressure Regulator shall be equipped with a 0-200 psi (13.8 bar) manual adjusting knob and have the ability to vent pressure when adjusting down the pressure (counter-clockwise rotation).

The Pressure Regulator shall be equipped with a 90° lever shut-off valve to disengage the air flow to the outlet. The lever positions shall be clearly marked with color-coded labels to indicate on and off points.

It is required that the equipment meets or exceeds the EN 13731 Lifting Bag Systems for fire and rescue service use - Safety and performance requirements.