

MODEC, INC.
ISRAEL MoD RFP 157-40269/01
PRODUCT TECHNICAL SPECIFICATIONS



UNIT SPECIFICATIONS:

Modec and its industrial partner ARMICK (www.armick.com) are proposing the 25-gallon (95-Liter) FI-25HP retrofitted for 2 SCBA air bottles. This handcart unit, (providing 90% greater volume than a 50-liter unit) is ergonomically designed with four wheels for safer transport and ease of lifting as it weights only 55 lbs. In addition, this unit can be produced in any color including black.





Already in military service around the world, this portable foam system produces variable expansion foam (including 100% liquid). Easy to operate and maneuver, this unit projects foams with excellent stability great distances from its standard 30' hose. Its one-piece spare part replacement insures insignificant repair and service downtime.

This unit will provide the MoD with extended operational decontamination time having 95 liters of capacity. Being compact, it can be used either inside or outside. It will be equipped with two separate lifting positions affording uses easy movement in and out of vehicles. Incorporating an 8" fill port opening, the unit can be supplied with solutions in less than two minutes. This eliminates the need for storage in the unit that is subject to contamination and other storage issues (Modex specifically recommends against storage of product outside of its original packaging). Lifting a full unit that will weigh nearly 200 lbs. represents a major safety issue for operators. This is offset by the fact that the unit can be filled with 50 liters of solution in approximately one minute in the field. The single tank system also eliminates the need for a dosing method. Dosing equipment routinely needs adjustment and field servicing and historically are unreliable long-term.



FI-25HP SPECIFICATIONS

One-piece, rotationally molded plastic (Linear low density polyethylene)
Seamless, lightweight and virtually indestructible
20" x 26" x 35", 55 lbs. dry weight
25 gallon (95 liters) capacity
Eliminates the need for "dosage" or mixing system
Level indicators incorporated into tank
Four wheels, with two separate lifting positions
Heavy-duty tires and axles for rough terrain use
30-ft. hose (9.1 meters) with foam nozzle with 15° Fan tip
8" diameter fill port insures rapid solution filling
Standard air port for alternative sources of air
Integral drain port
Well labeled operating panel
Retrofitted for two 9-liter SCBA High Pressure air bottles (Specs below)
Includes Tescom High Pressure Regulator (Specs below)

Pump Specifications:

FLOJET Air Diaphragm
P/N: FJ G575205
Max Flow: 26.5 liter/minute
Max Pressure: 100 psi (8.3 bar)
Air consumption: 1.1 - 4.8 CFM
Diaphragm Material: Santoprene
Check valve Material: Santoprene
Pump Body: Polypropylene
Springs: Hastelloy
Inlet: 3/8" (9.5 mm)
Outlet: 3/8" (9.5 mm)
Noise Level: 87 dB



The FI-25HP provides the highest flow rate for any air pump of comparable size. Stall-proof design with patented shuttle valve. Robust design is highly chemical resistant. Operates quietly with internal exhaust muffler incorporated into the unit. The specially designed system inducts air into the liquid motive flow to generate foam. This output, which can be all liquid, can be adjusted to generate varying expansion rates of foam. Expansion rates then can be calibrated and indicted on the dial located on the exterior of the panel.

SPECIAL FEATURES



The Modec FI-25HP features a one-piece panel that literally functions as the single repair item - in essence - a single spare part. It is easily removed, then replaced. This significantly reduces support costs, downtime and warranty follow-up. This advantage is only available from Modec.

The heavy-duty panel is well labeled (and will be provided in Hebrew to the MoD). The panel is affixed to bolt receivers that are actually molded into the tank giving it tremendous strength and durability. It also accepts alternative sources of compressed air.




HIGH PRESSURE AIR CYLINDERS

Model	Luxfer Composite L87A
Type	Carbon/Epoxy overwrapped with S-glass layer
Water Capacity	9 liters
Filling Pressure	300 bar
Diameter	6.81" +/- 0.04 in
Length	21.9" +/- 0.15 in
Weight	10.6 lbs. Max
Thread	M18 x 1.5
Paint	None
Label	PED Approved
Approval	Approved for use in Europe

HIGH PRESSURE REGULATOR

Modex installs Tescom BB-1 Series Piston Sensed high pressure reducing regulators. The Tescom Specifications are as follows (P/N BB-13AL2KVA4):

Criteria	ANSI/ASME B31.3	 BB-13AL2KVA4
Function	Pressure Reducing	
Body Material	Aluminum 6061	
Load Type	Adjustable	
Outlet Pressure	0-140 psig	
Seat	CTFE	
O-Ring Seal	Viton	
Porting	1/4" NPT	

HIGH PRESSURE VALVE

Model	Ceodeux C21000093
Series	C210
Inlet	M18 x 1.5 with O-Ring
Outlet	G 5/8" females (DIN 477-5 Nr 50)
Plate	Chrome
Bar	300
PSI	4,350
Seat	4 mm
Material	Nylon, Cv = .41
Filter	Sintered
Handwheel	Rubber

HIGH PRESSURE GAUGE

WIKA Instrument 9117911, Adjustable gauge, type: 131.11.1.5", 1/8" NPT

LOW PRESSURE REGULATOR

Speed Air Model 4ZM08 Inlet: 300 PSIG/21 Bar; Outlet: 125 PSIG (max), 8.6 bar. Low pressure gauge - USG Instruments.

9 LITER BOTTLE SPECIFICATIONS

Luxfer Composite L87A and Ceodeux C21000093 valve only.