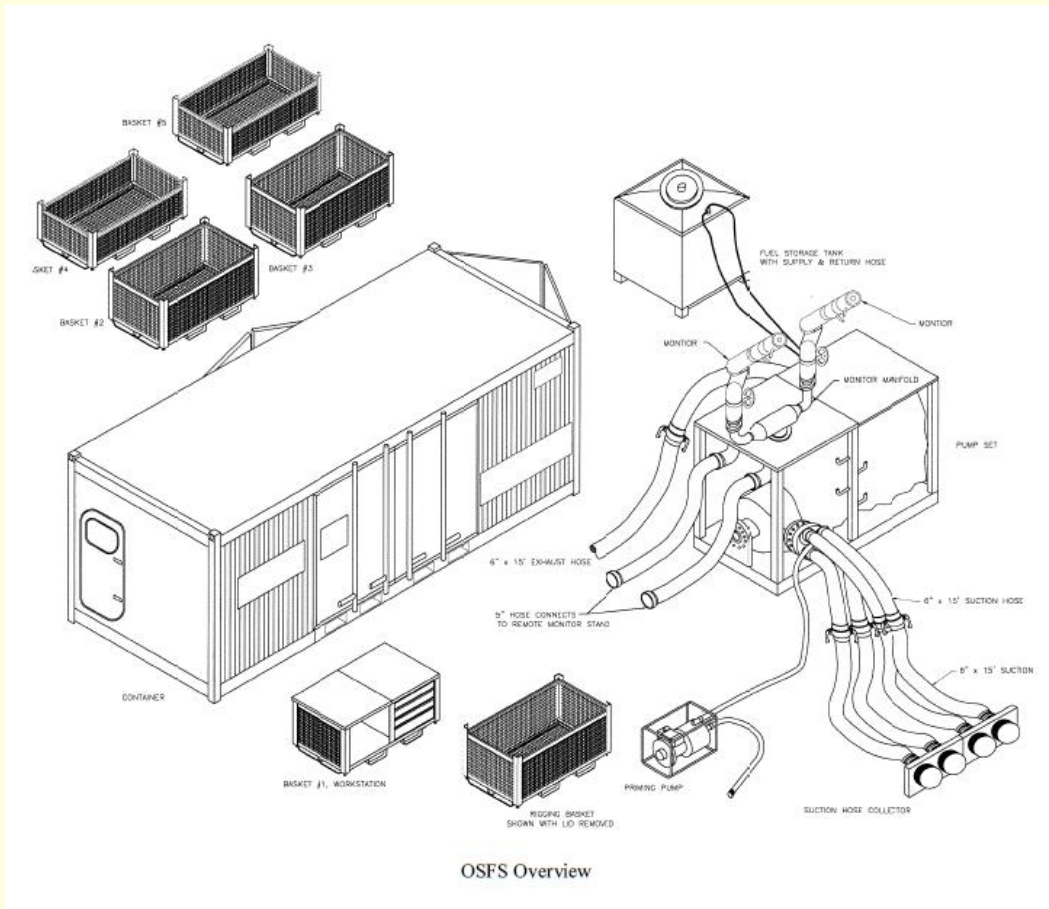


S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100



OSFS Overview

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

The Portable Off-Ship Firefighting System P07100 (OSFS) is a portable firefighting system that has two configurations: a prototype system and a second-generation system.

Both configurations contain a portable, self-contained, diesel driven centrifugal firefighting pump set that is skid-mounted and is capable of delivering 3000 gpm of water at a pressure of 175 psi. The pump sets for both configurations have hydraulic starting systems and a control panel that allows the operator to monitor the operation of the unit. The prototype system has a 350-gallon internal fuel tank for the pump set, while the second-generation system is configured with an external 350-gallon portable stainless steel fuel tank (TK0040) with fittings that will accommodate the fuel pickup tubes for that pump set.

Both systems are supplied with monitors, hoses (suction, discharge, and firefighting), nozzles (1250-gpm and 125-gpm hand-held), proportioners, pickup tubes, and the ancillary equipment needed to successfully fight a fire.

The ancillary equipment for each system is stored inside five ancillary baskets, which are stored in the system van VA0520. The van also provides storage for the pump set, various hoses, lifting slings, and personnel equipment bags.

Both systems also have a rigging basket (FF0501) with various tie-down components, such as turnbuckles, chains, and eyebolts.

The OSFS is designed to supplement a salvage ship's installed firefighting system by providing an additional supply of firefighting water. The system also provides firefighting capabilities for vessels that are otherwise incapable of performing firefighting operations. In addition, the system has Aqueous Film Forming Foam (AFFF) proportioning capabilities. However, the AFFF is not a part of the OSFS system and will have to be provided by the user.

System Components for P07100

Alternates

ESSM No	Nomenclature	Type	Qty	NS	Cont
FF0501	RIGGING BASKET, OSFS	BL	1		
TK0040	TANK, DIESEL FUEL, 350-GALLON, TRANSPORTABLE	BL	1		
VA0520	VAN, FIREFIGHTING SYSTEM (PORTABLE)	BL	1		Y
CP3012	CONTAINMENT POOL, MCHRY, 10' X 8' X 12"	Contents	1		
DE0010	DEHUMIDIFIER, MODEL SSP-6A	Contents OPTL	1		
FF0500	PUMP SET, CENTRIFUGAL, DIESEL, 3000 GPM @ 175 PSI	Contents	1		
PU2110	PUMP, CENTRIFUGAL, 2", DIESEL	Contents	1		
PU2115	PUMP, CENTRIFUGAL, 3", DIESEL, MODEL L40E	ALTN		*	

Baseline verified on 6/24/2016, * Not shown in catalog.

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - FF0501 RIGGING BASKET, OSFS



OSFS Rigging Basket FF0501

The OSFS Rigging Basket FF0501 is a metal, wire mesh container used to store and transport the rigging gear for the P07100 Firefighting System. The rigging basket contains turnbuckles, chains, eyebolts, and a 5-gallon plastic bucket used for stowage of eyebolts.

Specifications

Type	Description	Qty
Manufacturer	Commercial	
Model	FF0501	
The basket contains the following items:		
Container, Wire Mesh, 62" x 36" x 41"		1
Bracket,	hanging, steel	2
Bucket,	plastic, 5-gallon	1
Chain	3/8" x 12', grade 4, w/grab & slip hooks	36
Chain	3/8" x 6', grade 4, w/grab & slip hooks	20
Cover	plywood, marine grade, 3/4" x 36" x 64"	1
Eyebolt,	galv, 1 7/8" x 3 5/8" x 1 3/4" x 1"	56
Inventory	aminated	1
Turnbuckle	1/2" x 9", hook & eye ends	20

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

Specifications

Type	Description	Qty
Turnbuckle	3/4" x 12", hook & eye ends	

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	5 ft, 2 in		
Width	3 ft, 0 in		
Height	3 ft, 5 in		
Cube	53 cu ft		
Footprint	16 sq ft		
Weight (lb)	1956 lb		

References

Ref No	Reference
1	None

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - TK0040 TANK, DIESEL FUEL, 350-GALLON, TRANSPORTABLE



350-Gallon Diesel Fuel Tank TK0040

The 350-Gallon Diesel Fuel Tank TK0040 is a portable, stainless steel container used to provide No. 2 diesel fuel to high flow components such as air compressors and firefighting systems. The tank is equipped with four lifting pad eyes at the top and forklift slots at the base to facilitate handling. A tank opening with a cap is provided for filling and for attachment of a fuel pickup and return assembly. A ball valve, located on the bottom of the tank, is used to drain fuel from the tank.

Specifications		
Type	Description	Qty
Manufacturer	Hoover Materials Handling Group	
Design pressure	9.5 psi	
Material	Stainless steel	
Capacity	350 gallons	

Physical Characteristics			
Type	Descriptions		
	Shipping (empty)	Operating full)	
Length	4 ft, 2 in	4 ft, 2 in	
Width	3 ft, 8 in	3 ft, 8 in	
Height	4 ft, 5 in	4 ft, 5 in	
Cube	68 cu ft	68 cu ft	

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

Physical Characteristics

Type	Descriptions		
Footprint	16 sq ft	16 sq ft	
Weight	473 lb	2400 lb	

References

Ref No	Reference
1	None

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - VA0520 VAN, FIREFIGHTING SYSTEM (PORTABLE)



(PORTABLE) FIREFIGHTING SYSTEM VAN VA0520



(PORTABLE) FIREFIGHTING SYSTEM VAN (INTERIOR) VA0520

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

The Portable Firefighting System Van VA0520 is used to store the skid-mounted firefighting pump set and ancillary equipment baskets for the OSFS as listed below. Also stored in the van are water suction and engine exhaust hoses, lifting slings, and personnel equipment bags.

NOTE: Reference ancillary inventory for VA0520 for detailed contents of the equipment baskets.

- | | |
|--|-----|
| 1. Pump Set, Centrifugal, Diesel, 3,000 gpm @175 psi - ESSM FF0500 | (1) |
| 2. Basket #1, Work station with mechanic's standard and metric tool sets | (1) |
| 3. Basket #2, Adapters, flanges, collection device, and related hardware | (1) |
| 4. Basket #3, Adapters, discharge manifold | (1) |
| 5. Basket #4, Monitors, foam nozzles, 2 1/2-in adapters, monitor gauges | (1) |
| 6. Basket #5, 1 1/2-in, 2-in, 5-in fire hose and fuel pickup tubes | (1) |
| 7. Bag, personnel equipment | (7) |

Specifications

Type	Description	Qty
Manufacturer	ESSM Facility	
Model	VA0520	

Physical Characteristics

Type	Descriptions		
	Prototype	Second-Generation	
	Shipping	Shipping	
Length	20 ft, 0 in	20 ft, 0 in	
Width	8 ft, 0 in	8 ft, 0 in	
Height	8 ft, 0 in	8 ft, 0 in	
Cube	1360 cu ft	1280 cu ft	
Weight	22880 lbs	20720 lbs	
Footprint	160 sq ft	160 sq ft	

References

Ref No	Reference
1	Operations Manual for Off-Ship Firefighting System

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - CP3012 CONTAINMENT POOL, MCHRY, 10' X 8' X 12"

The Machinery Containment Pool CP3012 is a 10' x 8' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

Specifications

Type	Description	Qty
Manufacturer	Basic Concepts	
Model	1003-00249-201	

References

Ref No	Reference
1	None

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - DE0010 DEHUMIDIFIER, MODEL SSP-6A



SPP6A Model Dehumidifier DE0010

The SPP6A Model Dehumidifier DE0010 easily maintains environments at relative humidity levels that prevent corrosion and/or the formation of mold or mildew. It is uniquely suited to storage facilities that require the highest reliability and ruggedness. This compact unit can remove up to 25ppd of moisture in extreme environments.

Specifications

Type	Description	Qty
Manufacturer	EBAC Industrial Products Inc.	
Model	SSP6A	
Voltage	115 V ac	
Airflow	150 cfm	
Effective volume	3,000 cu. ft.	
Minumim operating temp	33° F	
Maximum operating temp	131° F	

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	1 ft, 7 in		
Width	1 ft, 2 in		

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

Physical Characteristics

Type	Descriptions		
Height	0 ft, 11 in		
Cube	2 cu ft		
Footprint	2 sq ft		
Weight	60 lbs		

References

Ref No	Reference
1	None

S0300-BV-CAT-020

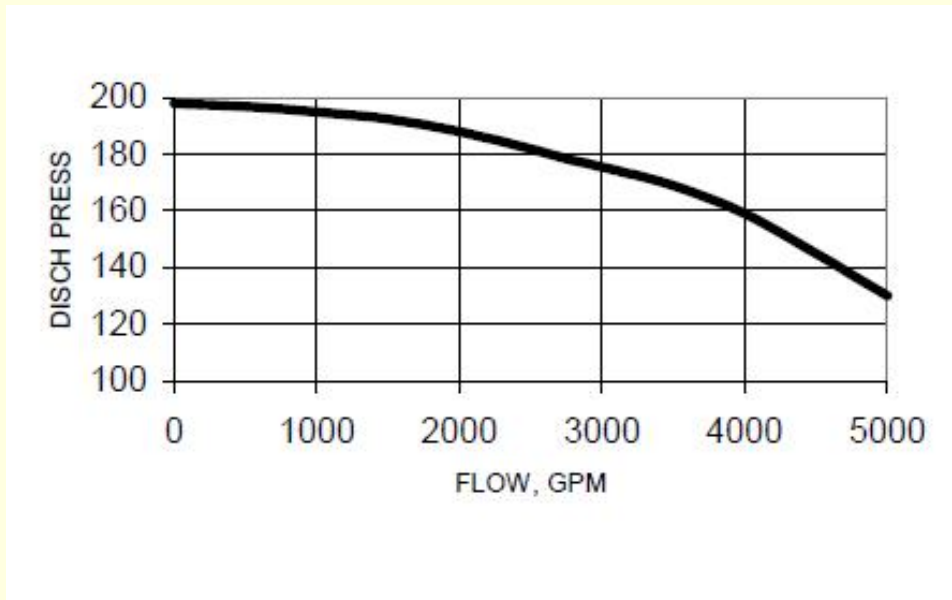
FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - FF0500 PUMP SET, CENTRIFUGAL, DIESEL, 3000 GPM @ 175 PSI



3000-Gpm Centrifugal Pump FF0500



Design Performance Curve

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

The Pump Set FF0500 is a portable, self-contained, skid-mounted firefighting unit. It is used aboard salvage ships or other vessels of opportunity and supplements the ship's installed firefighting system by providing additional flow of water and foam proportioning capabilities. The pump set also provides firefighting capabilities for vessels that are otherwise incapable of performing firefighting operations.

The pump set consists of a centrifugal pump, a diesel engine, and skid assembly. The pump is capable of delivering 3000 gpm of water at a pressure of 175 psi. The ancillary equipment for the pump set includes a davit, slings, a 2-inch centrifugal priming pump, and various other components that are contained inside five equipment baskets.

Specifications		
Type	Description	Qty
Fire Pump Assembly		
Manufacturer	Fischcon Trading & Engineering	
Model	Hellbeater	
Pump		
Manufacturer	Nijhuis	
Model	HGTFD-1-250-500-H	
Type	Centrifugal	
Capacity	3000 gpm @ 175 psi w/20' suction lift	
Engine		
Manufacture	Volvo-Penta	
Model	TAMD 122D	
Number of cylinders	6	
Fuel	#2 Diesel	
Fuel source:		
Prototype	350-gal int	
Second-Gen.	350-gal ext	

Physical Characteristics			
Type	Descriptions		
	Shipping	Shipping	
	Prototype	Second-Generation	
Length	8 ft, 0 in	8 ft, 1 in	
Width	4 ft, 0 in	4 ft, 2 in	
Height	5 ft, 4 in	5 ft, 8 in	
Cube	171 cu ft	191 cu ft	
Footprint	32 sq ft	34 sq ft	

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

Physical Characteristics

Type	Descriptions		
Weight	7000 lbs	6230 lbs	

References

Ref No	Reference
1	Operations Manual for Off-Ship Firefighting System
2	Volvo-Penta Workshop Manual, Pub. No. 5333
3	Volvo Penta Instruction Book Owner's Manual

S0300-BV-CAT-020

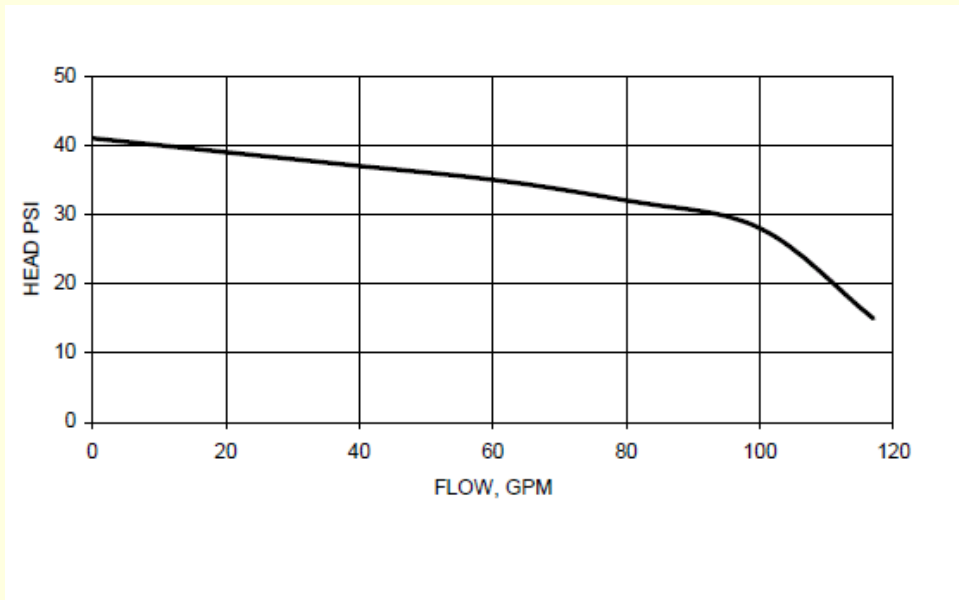
FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

ESSM - PU2110 PUMP, CENTRIFUGAL, 2", DIESEL



2" Centrifugal Pump PU2110



Performance Curve

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

The 2" Centrifugal Pump PU2110 is a diesel driven, centrifugal pump, which is lightweight, rugged, and portable. The pump is used to prime the OSFS and designed to pump water at a rate of 90 gpm with a discharge pressure of 28 psi at a 15-foot lift. Maximum practical suction lift is 26 feet above the water surface. The pump is driven by a 1-cylinder, 4.2-horsepower (at 3600 rpm), air-cooled, 4-cycle, diesel engine. The engine has a recoil starter, direct fuel injection with a variable speed control, and its own integral fuel system.

Specifications		
Type	Description	Qty
Pump Assembly		
Manufacturer	Peabody Barnes	
Model	4280-C	
Type	Centrifugal	
Capacity	115 gpm @ 28 psi, w/15' suction lift	
Engine		
Manufacturer	Yanmar Diesel	
Model	L40AE-DP	
Bore	68 mm	
Stroke	55 mm	
Displacement	199 cc	
Compression ratio	20:1	
Rpm	3600	
Horsepower	4.2	
Fuel	Diesel	
Fuel capacity	0.66-gal int. tank	
Fuel consumption	0.5 gph	

Physical Characteristics			
Type	Descriptions		
	Shipping	Operating	
Length	2 ft, 0 in	2 ft, 0 in	
Width	1 ft, 6 in	1 ft, 6 in	
Height	1 ft, 8 in	1 ft, 8 in	
Cube	5 cu ft	5 cu ft	
Footprint	3 sq ft	3 sq ft	
Weight (lb)	108 lb	108 lb	

S0300-BV-CAT-020

FIREFIGHTING SYSTEM (PORTABLE)

System - P07100

References

Ref No	Reference
1	Yanmar Service Manual for Model L-A Series Engine
2	Yanmar Operations Manual for Model L-A Series Engine
3	Yanmar Diesel Engine Parts Catalog, 51 Pub. No. 000Y00R3981