SFFECO®

شركة المصنع السعودي لأجهزة الإطفاء

SAUDI FACTORY FOR FIRE EQUIPMENT Co.

- Foam System
- Deluge System
- Hydrant System
- Sprinkler System
- Hose Reel System
- Hose Rack System

علامة الجودة SASO QUALITY MARK

FIRE PUMPS
EXCEL SERIES

SFFECO Since 1983

We are very proud to be a vital part of the development of Saudi Arabia and Middle East since **1983** in fire protection industry.

Ver: 04 - 12/2021

About us

SFFECO is an ISO9001 certified manufacturing company by BRE Global, is a market leader and specialize in manufacturing of fire-fighting equipment in the world. SFFECO has a long standing established reputation for pioneering innovation ever since its foundation in 1983.

SFFECO has its own state-of-the-art manufacturing plants in Riyadh and Dubai producing end-to-end range of products for the fire fighting industry matching international standards in quality.

SFFECO with its innovative approach provides the entire gamut of products that caters to the needs of the Fire Protection and Fire Fighting industry. This makes SFFECO a one-stop-shop for customers, fulfilling their end-to-end needs in products, solutions and services for the industry.

SFFECO continually expands upon its knowledge and services to keep its clients updated with the latest Fire Fighting Technology in the world. The product range manufactured by SFFECO confirms and holds approval to international standards.

SFFECO Reputation for Quality & Reliability has made its trusted name through out G.C.C & other Countries Worldwide for its Products. SFFECO is not only rich in History & Quality, but on continuous improvement, & development of product features.

SFFECO is a member of National Fire Protection Association (NFPA), British Standards Institution (BSI), Fire Protection Association (FPA), as well as Approved Vendor to Many Governmental, & Semi - Governmental Sectors in G.C.C.

SFFECO Vision to develop with Wisdom & Prosper in Harmony, and continue to be the leader in the Fire Protection industry providing excellent service & superior products for many years to come.

SFFECO Fire Pump Packages

SFFECO Fire Pump System Technology

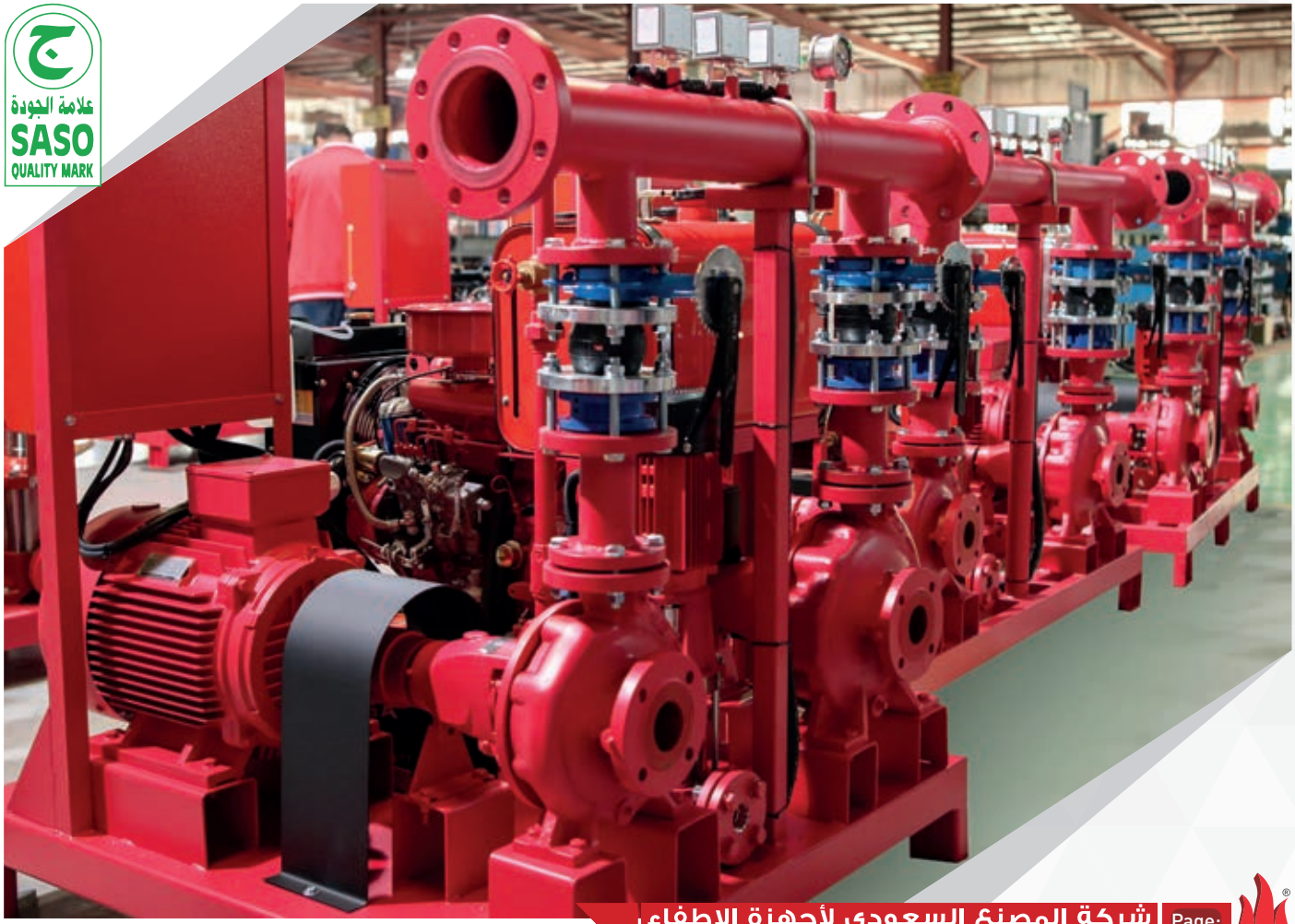
Being Local Specialist Manufacture gives SFFECO the Opportunity and Privilege to Develop an Innovative Pump Assembly Units, and Tailor Pump Packages to clients' specific needs, Moreover SFFECO has assured supplying Pump units comply with Local Authority Requirements, as well as NFPA - 20 Selection and Operation Procedures. SFFECO Excel Series Pumps are SASO Approved.

SFFECO Highly Skilled Team has years Combined Experience in Design, Assembly, and Pump Packages Testing.... Succeeded developing the "Excel SERIES" Pre- Fabricated Fire Pump Skids, where this developed technology assure providing Compact Design Pump Sets, easily to Handle ,Install,& Maintain, where all Pumping Elements, Drivers, Controllers are all skid Mounted, Pre-piped, Wired, & Factory tested .

Excel Series Standard Packages included wide variety of Fire Pump Units start from 50 GPM size up to 1500 GPM, with pressure range from 6 bars up to 14 bars. This wide Range of Pumping & Head Characteristics has Made Excel Series suitable in various market sectors such as; Government Buildings, Commercial and Residential Towers, Ware houses, Factories etc.

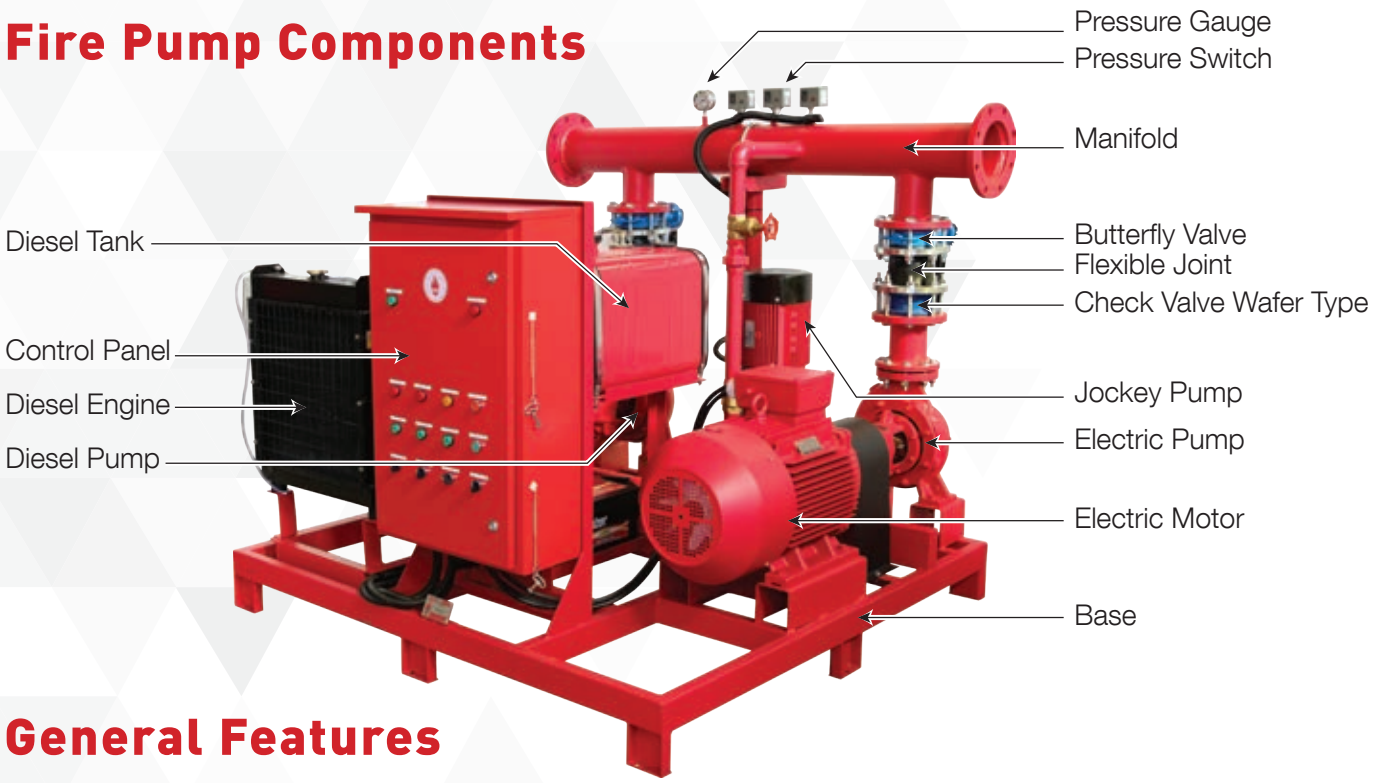
Excel Series is the right Choice for most of the Fire Fighting Applications like:

Fire Hose Cabinet Systems, Automatic Sprinkler Systems, Deluge Systems, Fire Hydrant Systems, Foam Systems, etc.



SFFECO Fire Pump Packages

Fire Pump Components



General Features

- ❖ Space Saving Design Efficiency:
- ❖ Nothing beat Excel Series packages since allows to fit in to small spaces.
- ❖ Easy to Install & Handle:
- ❖ Available in capacities from 50 GPM up to 1500 GPM and pressure range up to 12 BAR.
- ❖ Pre- fabricated, pre-piped wired, factory tested unit.
- ❖ In compliances with local civil defense requirement & NFPA 20 selection & operation procedure.
- ❖ Pumps coupled with heavy duty trouble free electrical & diesel drivers.
- ❖ Dynamic balanced pumps impellers.
- ❖ Pump set piping is hydrostatically tested to ensure piping integrity.

The Standard Models of "Excel Series" are EDJ, DJ and EJ.

Other specifications are also available as per customer request.

"Excel Series" Packages Offers Completed Skid Mounted Unit including High quality Horizontal End Suction / Split Case Pumps / Vertical Turbine Pumps that coupled with Heavy duty (Electrical/ Diesel) drivers that assembled with full discharge line control Gate & Butterfly Check Valves along with flexible joints. Pressure Switches & Gauge fitted on well Supported Header, where all pre-piped, wired, & fabricated in Common Compact Skid is Fully Automatic Operated through latest Design Control Panel.

"Excel Series" Innovated design has different Combinations & Models that suite different clients requirements, as well as Hazard application needs.

Model: EDJ

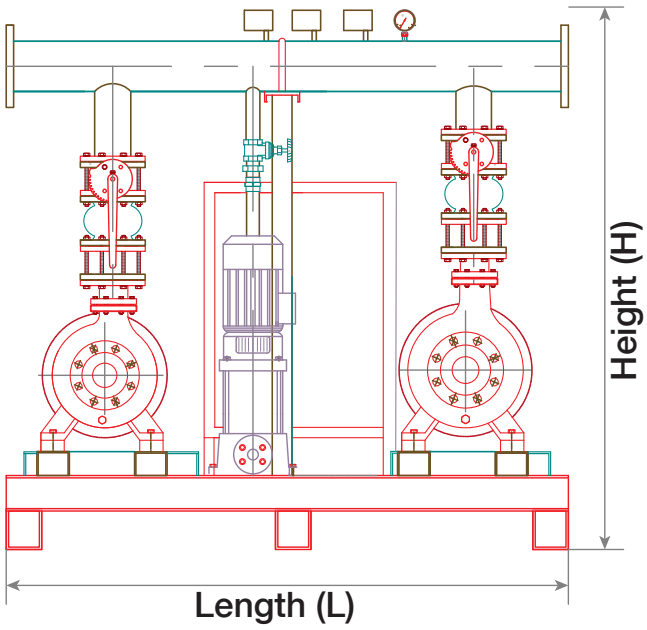
Electrical + Diesel + Jockey

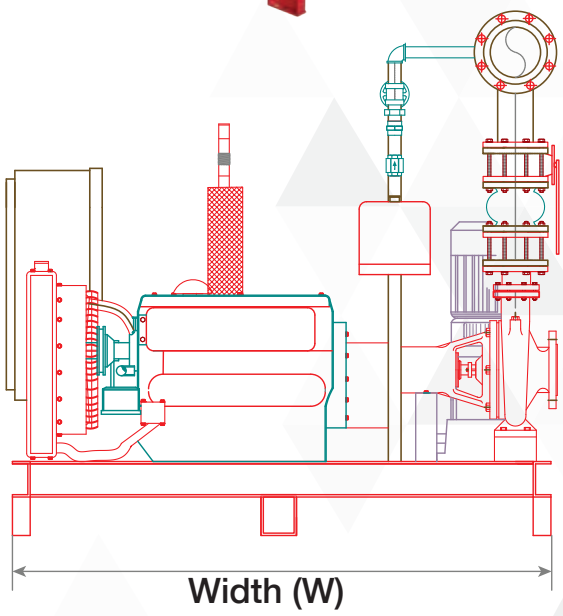
Consist of Main End Suction Pump driven by Electrical Motor, Stand by End Suction Diesel Pump driven by Diesel Engine, & Vertical multistage (Jockey) (Maintenance) Pump that all are assembled with discharge line accessories, as well as connected with Skid Mounted Control Panel.

Standard Models:-

50 GPM | 120 GPM | 150 GPM | 250 GPM | 300 GPM

350 GPM | 500 GPM | 750 GPM | 1000 GPM





Specifications

(GPM)	W (MM)	H (MM)	L (MM)	DIESEL (HP)	MOTOR (HP)	JOCKEY (HP/GPM)	(KG)	HEADDER PIPE
1000 Gpm @ 7 bar	1950	2220	2000	110	100	5.5/50	1575	6”
750 Gpm @ 7 bar	1950	1680	1800	85	75	5.5/35	1350	6”
500 Gpm @ 7 bar	1600	1680	1650	60	50	5.5/25	1160	6”
350 Gpm @ 7 bar	1680	1680	1500	40	40	3/20	1135	4”
250/300 Gpm @ 7 bar	1200	1420	1220	25	30	3/15	800	4”
120/150 Gpm @ 7 bar	1200	1300	1220	15	15	3/10	724	2.5”
50 Gpm @ 7 bar	650	1250	1230	8	5.5	3/10	315	2”

Note: Other models or capacities are also provided as per customer requirement.

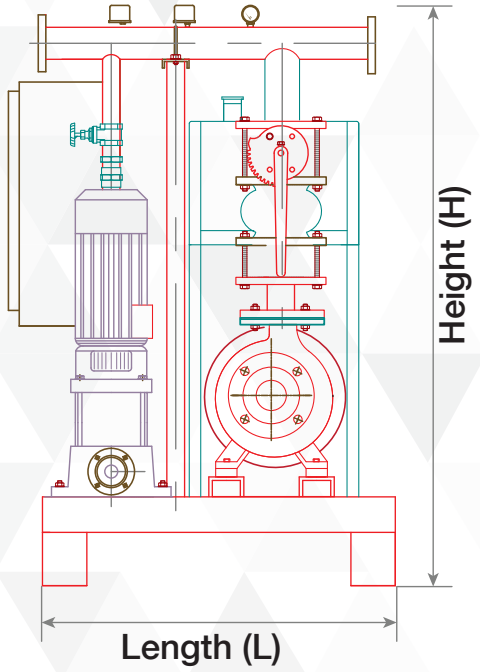
Model: DJ

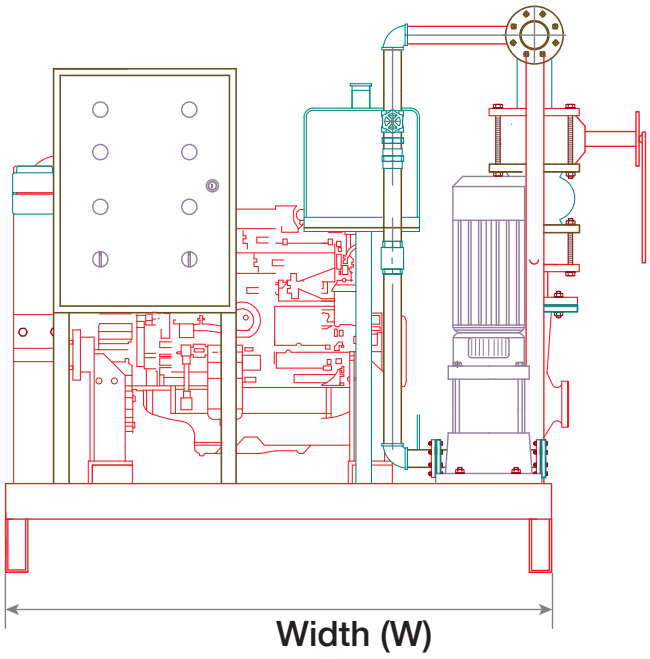
Diesel + Jockey

Consist of Main End Suction Diesel Pump driven by Diesel Engine, & Vertical Multistage Jockey (maintenance) Pump that all are assembled with discharge line accessories, as well as connected with Skid Mounted Control Panel.

Standard Models:-

50 GPM | 120 GPM | 150 GPM | 250 GPM | 300 GPM | 350 GPM | 500 GPM | 750 GPM





Specifications

(GPM)	W (MM)	H (MM)	L (MM)	DIESEL (HP)	JOCKEY (HP/GPM)	(KG)	HEADDER PIPE
750 Gpm @ 7 bar	1100	1760	1850	85	5.5/35	910	6”
500 Gpm @ 7 bar	1000	1670	1650	60	5.5/25	670	6”
250/300 Gpm @ 7 bar	840	1420	1220	25	3/15	520	4”
120/150 Gpm @ 7 bar	840	1280	1220	25	3/10	484	2”
50 Gpm @ 7 bar	700	1230	830	10	3/10	197	1.5”

Note: Other models or capacities are also provided as per customer requirement.

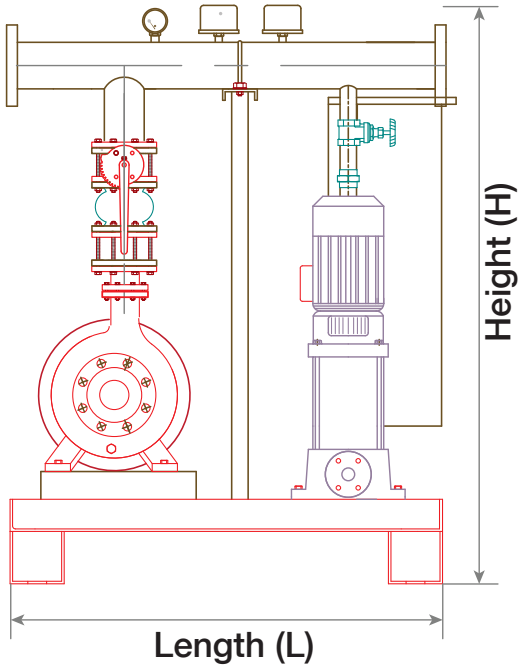
Model: EJ

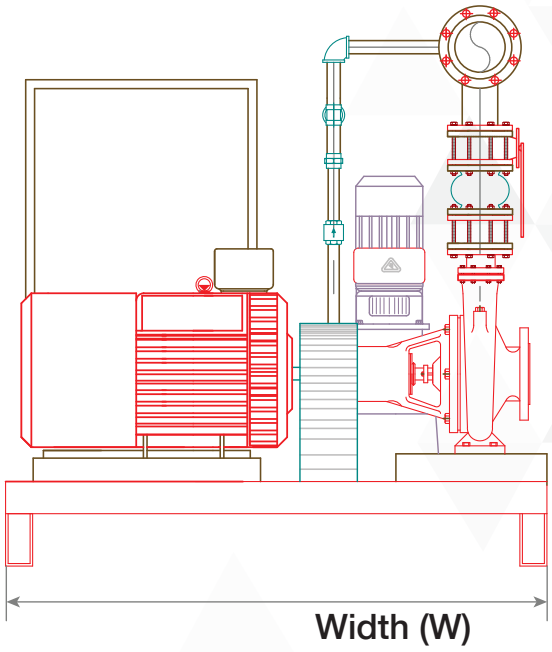
Electrical + Jockey

Consist of Main End Suction Pump driven by Electrical Motor, & Vertical Multistage Jockey (maintenance) Pump that all are assembled with discharge line accessories, as well as connected with Skid Mounted Control Panel.

Standard Models:-

50 GPM | 120 GPM | 150 GPM | 250 GPM | 300 GPM | 350 GPM | 500 GPM



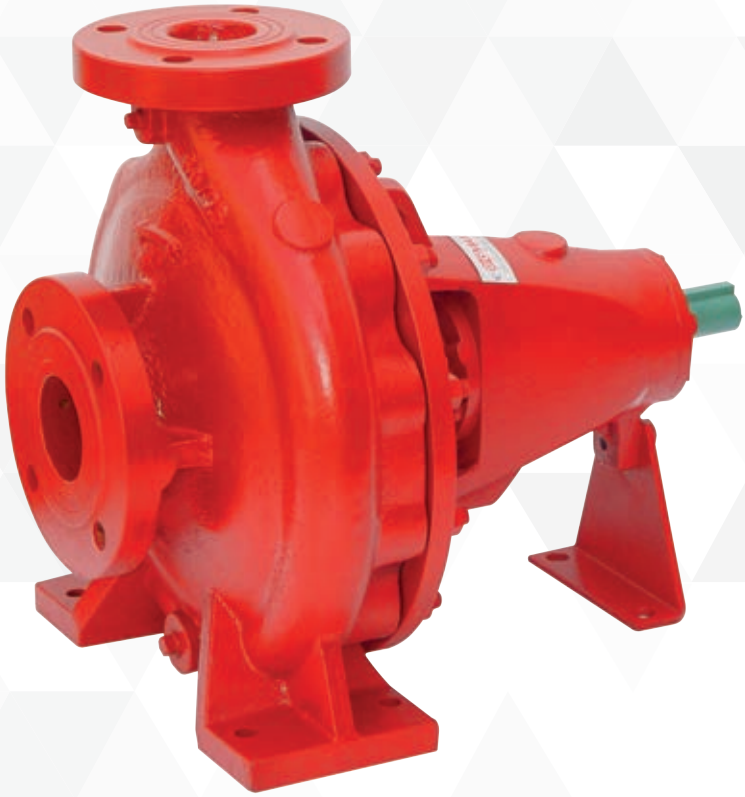


Specifications

(GPM)	W (MM)	H (MM)	L (MM)	MOTOR (HP)	JOCKEY (HP/GPM)	(KG)	HEADDER PIPE
500	900	1660	1450	50	5.5/25	570	6”
250/300	800	1420	1220	30	3/15	420	4”
120/150	800	1250	1220	15	3/10	309	2”
50	700	1230	830	5.5	3/10	175	1.5”

Note: Other models or capacities are also provided as per customer requirement.

End Suctioin Centrifugal Pump



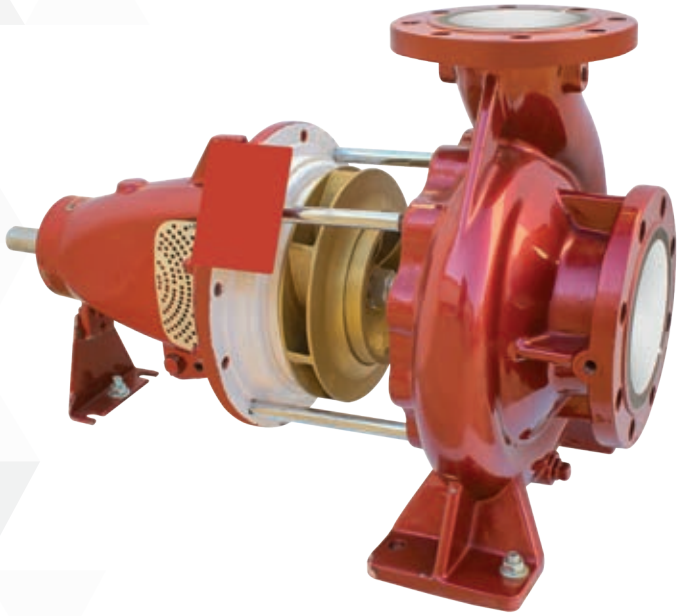
General

The casing is a heavy duty design. Back pull out design for fast and easy maintenance. Replaceable wear ring to assure optimum efficiency.

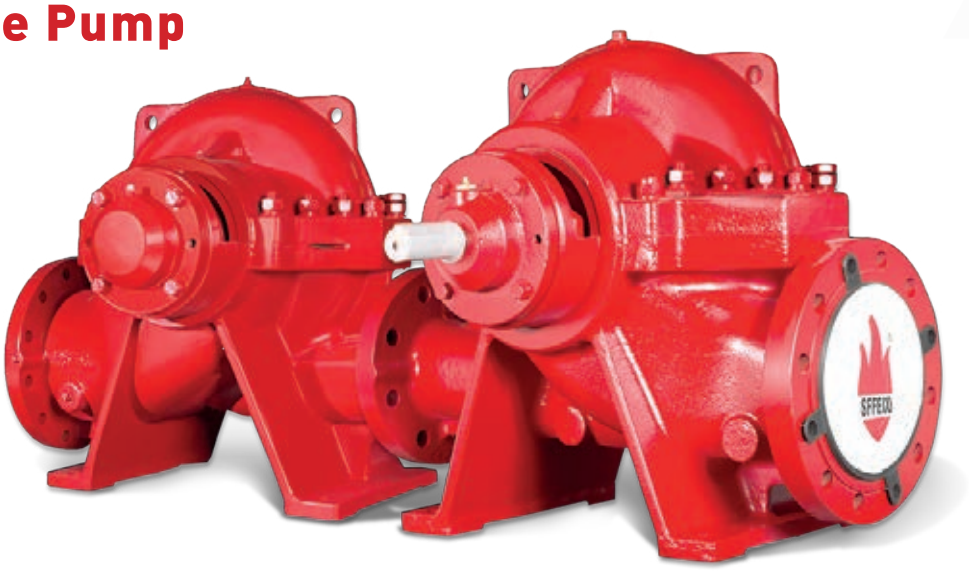
Removable and adjustable support foot provides added rigidity and ease of maintenance. Stainless steel shaft sleeve prevents damage to the shaft reduces the maintenance cost. Mechanical seal or soft packing on request.

Features

- Capacity up to 1500 GPM.
- Rear pull out design supplied as standard with spacer coupling that allow removal of rotating elements without disturbing piping Connection.
- Hydraulically balanced Impeller, assure smooth operation& long bearing life limit
- Available in Electrical motor or Diesel Engine driven configuration.
- Suitable for Commercial, Residential & Industrial applications.
- Top centre line discharge with foot supported casing

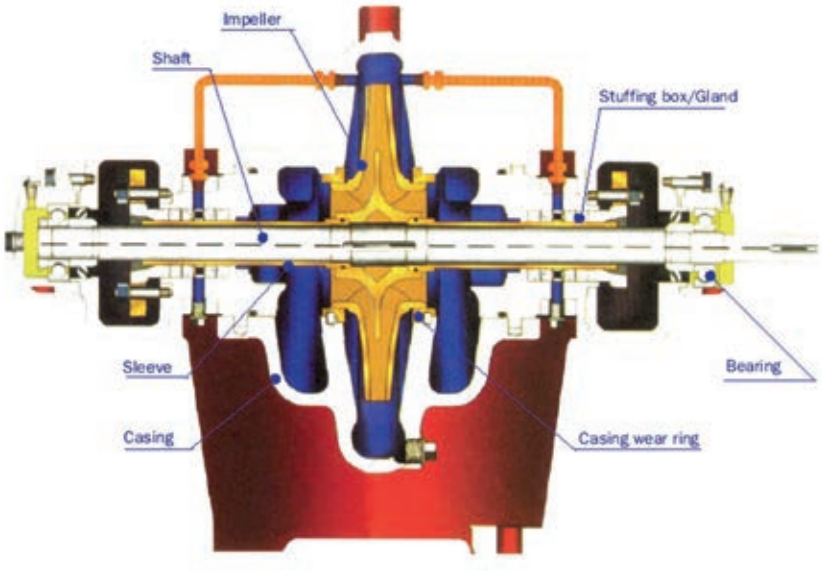


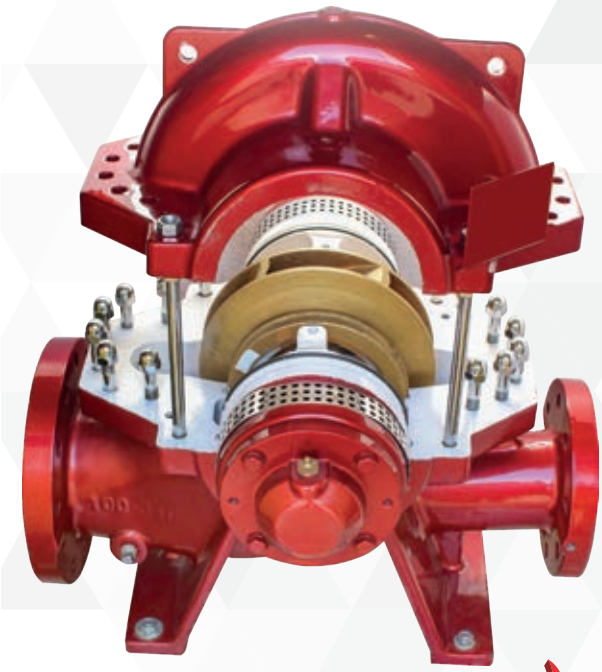
Split Case Pump



Specifications

- Capacity up to 2000 GPM.
- Split case design for easy maintenance & Upkeep. Due to easy removal of Upper casing &Inner assembly without disturbing piping Including Stuffing boxes, & bearing Housing.
- Engine configuration available in Electrical Motor or Diesel
- Suitable for Commercial, Residential and Industrial Applications.
- Suction & Discharge flanges are on common Horizontal center line.
- High Quality Cast iron Casing with Bronze wearing ring.
- Bronze Impeller
- Grease lubrication ball bearing provide L-10 rating
- Double suction type impeller offers low Pulsation.
- Removable drip pocket with tapped drain Outlet stuffing box.





Vertical Multistage Stainless Steel Centrifugal Pump

General

Close coupled vertical multistage pump with all stainless steel parts which are driven by a standard TEFC motor, discharge and suction in the same line.

Aluminum casing, single phase motor. Class F and IP55 are standard supply.

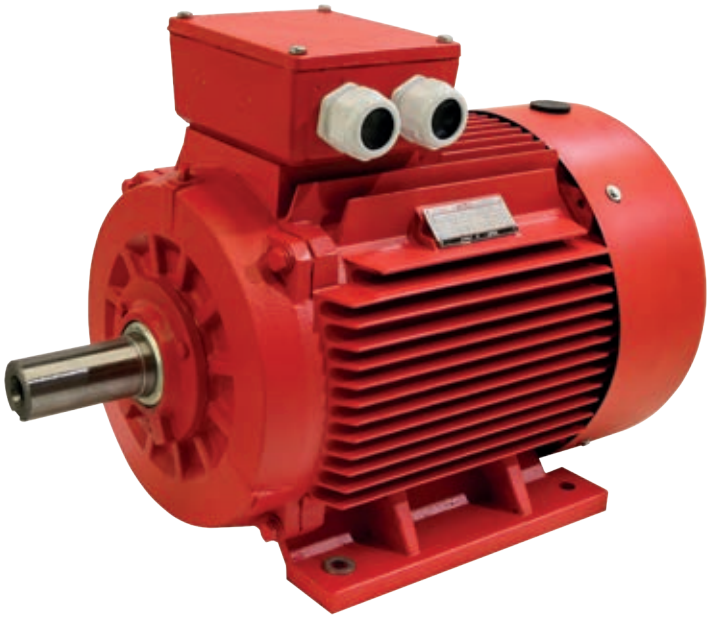
Standard supply for liquid temperature upto 90°C, high temperature pump are available on request. Mechanical seal is Tungsten Carbide / Graphite.

All the parts in contact with liquid are made of 304 Stainless Steel, The suction and discharge head can be made of cast iron on request.

Specifications

Parts	Material
Pump Head	Cast Iron EN-GJL-200
Pump Head Cover	Stainless Steel 304
Shaft	Stainless Steel 304
Base	Stainless Steel 304
Shaft Seal	Mechanical
Base Plate	Cast Iron EN-GJL-200
Rubber Parts	EDPM or FKM
Impeller	Stainless Steel 304
Chamber	Stainless Steel 304
Outer Sleeve	Stainless Steel 304
O-ring for Outer Sleeve	EDPM or FKM

Note: Stainless Steel on Request



Electric Motor

Hitec multipurpose motors are the ideal choice for installation in arduous environmental conditions. The range offers a variety of induction motors with a power rating of 0.09kW (0.12HP) to high powered motors providing 160kW (220HP). Class F and IP55 are standard supply. Motors for other voltages, frequencies, specifications and non-standard features are available on request.

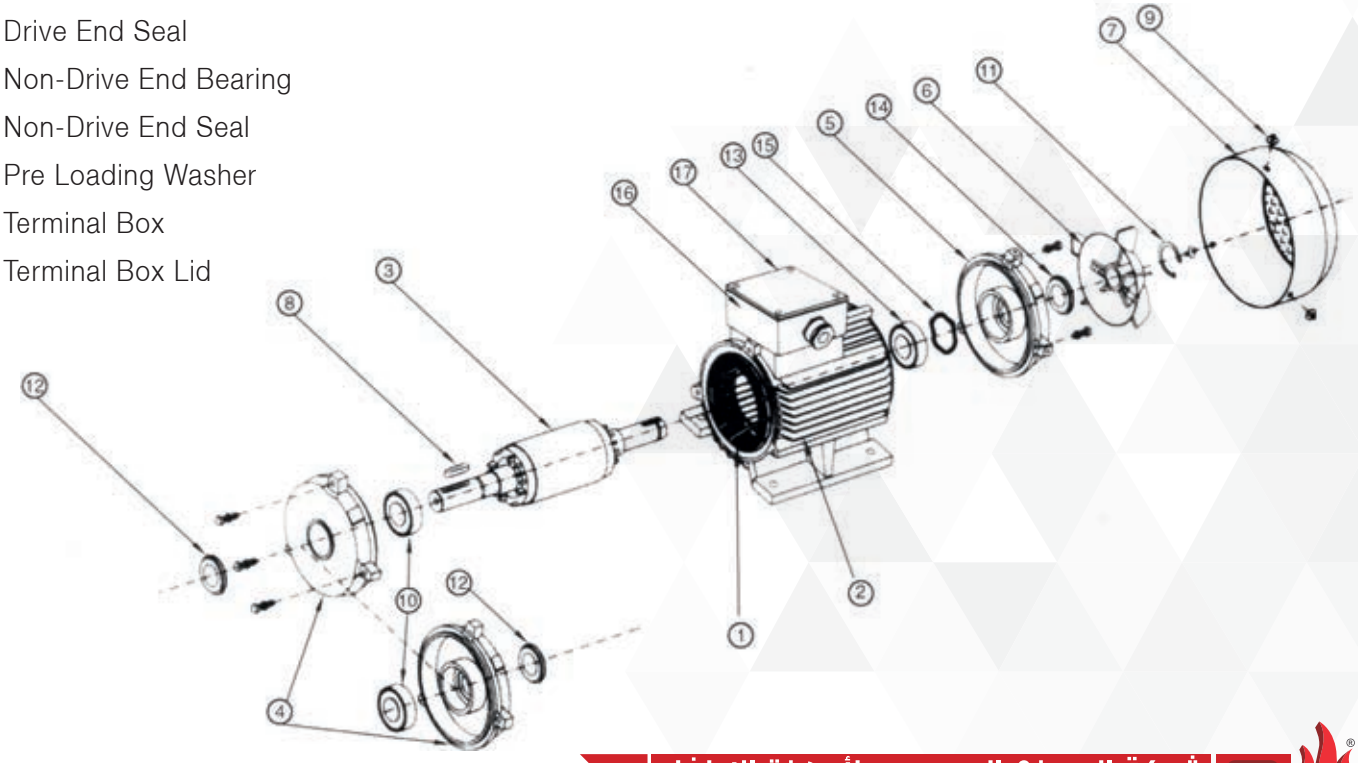
Hitec motor series are highly engineered to cope up with sudden load increases, longer thermal life, higher altitudes and voltage variants. All the motors are manufactured under strict quality control procedures and are fully tested against the applicable standards.

Hitec uses integrated design management techniques for enhancing the efficiency and durability of its products. Reliability, integrity, simplicity in design and ease of maintenance, all endorse the product as a world leader in electric motors.

Hitec motors can handle load and continue working reliability for long hours. The balanced design and the precision of the motor ensure superb performance.

Parts:

1. Wound Stator
2. Housing
3. Rotor
4. Drive End Shield
5. Fan
6. Fan Cover
7. Key
8. Fan Cover Screw
9. Drive End Bearing
10. Non-Drive End Circlip
11. Drive End Seal
12. Non-Drive End Bearing
13. Non-Drive End Seal
14. Pre Loading Washer
15. Terminal Box
16. Terminal Box Lid



Diesel Engine

Basic Engine Components

- Flywheel Housing S.A.E
- Fly Wheel
- Fire Resistant Fuel Pipes
- Rigid Mounts
- Fresh Water Circulating Pump
- Thermostat
- Fuel Pump Governor Rating 4.5% Rating
- Fuel Lift Pump
- Full Flow Fuel Filters
- Full Flow Lub. Oil Filters
- Exhaust manifold - Dry Type
- Exhaust Manifold Adaptor

General

MegaForce Diesel Engines are specially tailored to meet the customer's specification and optimum performance, thus guaranteeing the product best suited to the application.

Engine Fuel Systems calibrated to specific power and speed requirements, ensure MegaForce Diesel Engines for maximum efficiency.

MegaForce Diesel Engines have long periods of idleness, coupled to routine testing at maximum speed and at times with no load, necessitates a power unit of exceptional qualities. The range offers from small cylinder engine giving an output of 19kW @ 2900 rpm to a high powered configured engine of 400kW. All power units are manufactured to comply with strict control procedures (ISO 9001) and fully tested against the applicable standards in line with client requirements.

Model	Rating kW (HP)	RPM	Configuration	Bores x Stroke (mm)	Diameter (mm)	Length (mm)	Width (mm)	Height (mm)
MFS 25	19 (25)	3000	3 Cylinder /4 Stroke / Inline	80 x 90	42	600	515	608
MFS 40	30 (40)	2900	4 Cylinder /4 Stroke / Inline	85 x 95	48	735	515	645
MFS 60	45 (60)	3000	4 Cylinder /4 Stroke / Inline	95 x 100	48	735	515	650
MFS 85	63 (85)	3000	4 Cylinder /4 Stroke / Inline	102 x 118	60	810	695	780
MFS 110	82 (110)	3000	4 Cylinder /4 Stroke / Inline	113 x 125	60	920	595	800
MFS 130	97 (130)	3000	6 Cylinder /4 Stroke / Inline	113 x 120	60	1280	700	985
MFS 150	112 (150)	3000	6 Cylinder /4 Stroke / Inline	115 x 125	60	1280	700	985
MFS 180	134 (180)	3000	6 Cylinder /4 Stroke / Inline	115 x 125	60	1280	700	995
MFS 220	164 (220)	3000	6 Cylinder/4 Stroke/ Inline T	126 x 130	70	1520	950	1180
MFS 270	201 (270)	3000	6 Cylinder/4 Stroke/ Inline T	126 x 130	70	1520	950	1180
MFS 300	224 (300)	3000	6 Cylinder/4 Stroke/ Inline T	126 x 140	70	1520	950	1180
MFS 320	239 (320)	3000	6 Cylinder/4 Stroke/ Inline T	126 x 140	70	1520	950	1180
MFS 350	261 (350)	2900	6 Cylinder/4 Stroke/ Inline T	126 x 140	70	1520	950	1180
MFS 375	280 (375)	2900	6 Cylinder/4 Stroke/ Inline T	126 x 155	70	1520	950	1200
MFS 425	317 (425)	2900	6 Cylinder/4 Stroke/ Inline T	135 x 169	100	1497	904	1233
MFS 475	354 (475)	2900	6 Cylinder/4 Stroke/ Inline T	135 x 169	100	1497	904	1233
MFS 536	400 (536)	2900	6 Cylinder/4 Stroke/ Inline T	135 x 169	100	1497	904	1233

Diesel Engines of high capacities is available as per requirement.

Fire Pump Controllers

"Excel Series" Fire Pump Unit Controller is the Pump Package brain that designed to Control & Monitor the operation of the Main, Standby, and Jockey pumps Drivers, and makes up pumps for both Manual & Automatic modes, as well as turns pumps drivers ON/OFF under specific conditions.

The Fire Pump Package Controller detects signals through set of built in switches that reflect the system Pressure & Flow status enabling fire pump package drivers (Electrical /Diesel /Jockey) to operate in case of pressure in the system is lower than set point, as well as operating the Stand by driver due to power failure and/or substantial drop in pressure.

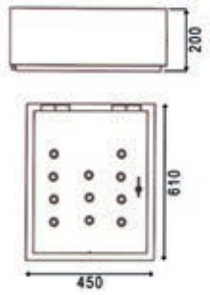
SFFECO's Excel Series Controllers are pre-wired, and factory tested before shipment and made ready for immediate usage.

Features

- Standard Dry Run Protection.
- DOL – Star Delta Starter Circuit available up on request.
- Different Mounting Styles.
- IP standard Available up on request (Optional).
- Low Maintenance Cost and available spare parts.
- Standard cable marking for easy maintenance.
- Low Pressure cut-off (timer based) (optional).
- Automatic or manual (test) operation.
- Compatible with any monitoring systems like BMS OR FACP (Optional).
- Electronic battery charger (current sensing).
- Lamp test facility (optional).
- Fault Trip facility (other than dry run - optional).
- Crank protection circuit for diesel engine (optional).
- Delayed start for fire signal (optional).
- Strong, Reliable and Elegant Standard Red Powder Coated Enclosure.

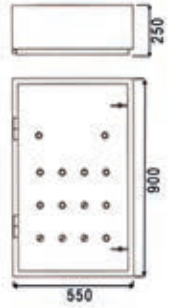
Stainless Steel Enclosures are available for out door applications (Optional).

Model A



- Wall & Base mounted arrangement.
- Standard up to 250 GPM Skid size.
- Standard as common panel for Electrical, Diesel & Jockey drivers.
- Seperate arrangement is available up on request.

Model B

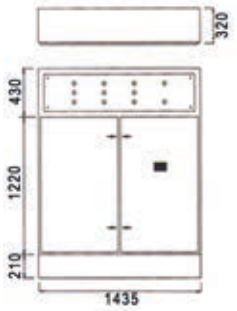


- Wall & Base mounted arrangement.
- Standard up to 750 GPM Skid size.
- Standard as common panel for Electrical, Diesel & Jockey drivers.
- Seperate arrangement is available up on request.

Model C

- Standard self standing arrangement.
- Standard up to 1500 GPM (Star Delta) Skid size.
- Standard as common panel for Electrical, Diesel & Jockey drivers.
- Seperate arrangement is available up on request.

Model D (Optional)



- Standard self standing arrangement.
- Standard as common panel for Electrical, Diesel & Jockey drivers.
- Seperate arrangement is not available.

شركة المصنع السعودي لأجهزة الإطفاء

SAUDI FACTORY FOR FIRE EQUIPMENT Co.

SFFECO®

SFFECO since 1983

FIRE HOSE REEL

FIRE HOSE

PUMPS

BLADDER TANKS

FIRE CABINETS

FUEL TANKS

SFFECO KITCHENHOOD SYSTEM

CO2 SYSTEM

TROLLEY / MODULAR EXTINGUISHERS

FIRE DOORS AND FRAMES

THERMO-ACT SYSTEM

PORTABLE EXTINGUISHERS

FOAM CONCENTRATES

HYDRANTS

In line with our policy of continuous product improvement, SFFECO reserves the right to modify specifications without prior notice.

www.SFFECO.com

Ver: 04 - 12/2021

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- Hose Rack System

NFPA COMPLAINT

UL CERTIFIED SAFETY US EX28309

UL CERTIFIED SAFETY US EX28310

UL CERTIFIED SAFETY US EX28311

علامة الجودة SASO QUALITY MARK

FIRE PUMP SYSTEMS

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We are very proud to be a vital part of the development of Saudi Arabia and Middle East since **1983** in fire protection industry.

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SFFECO continually expands upon its knowledge and services to keep its clients updated with the latest Fire Fighting Technology in the world. The product range manufactured by SFFECO confirms and holds approval to international standards.

SFFECO Reputation for Quality & Reliability has made its trusted name through out G.C.C & other Countries Worldwide for its Products. SFFECO is not only rich in History & Quality, but on continuous improvement, & development of product features.

SFFECO is a member of National Fire Protection Association (NFPA), British Standards Institution (BSI), Fire Protection Association (FPA), as well as Approved Vendor to Many Governmental, & Semi - Governmental Sectors in G.C.C.

SFFECO Vision to develop with Wisdom & Prosper in Harmony, and continue to be the leader in the Fire Protection industry providing excellent service & superior products for many years to come.

SFFECO Fire Pump Packages

SFFECO Fire Pump System Technology

Being Local Specialist Manufacture gives SFFECO the Opportunity and Privilege to Develop an Innovative Pump Assembly Units, and Tailor Pump Packages to clients' specific needs, Moreover SFFECO has assured supplying Pump units comply with Local Authority Requirements, as well as NFPA - 20 Selection and Operation Procedures.

Each pump undergoes required inspection, tests and production control during the assembly process and records are logged for the same, before being delivered to our customers.

SFFECO has established a fully equipped state of the art, UL complaint pump testing facility with advance testing and calibration devices that enables us to accurately advance testing and calibration devices that enable us to accurately inspect and test the operation of each centrifugal stationery fire pump to the required level of compliance standard.
Each pump produced, undergoes performance testing as operation test, hydrostatic test, impeller balancing, etc.

SFFECO Fire Pumps are the right Choice for most of the Fire Fighting Applications like:

Fire Hose Cabinet Systems, Automatic Sprinkler Systems, Deluge Systems, Fire Hydrant Systems, Foam Systems, etc.

NFPA COMPLAINT

UL CERTIFIED SAFETY US EX28309

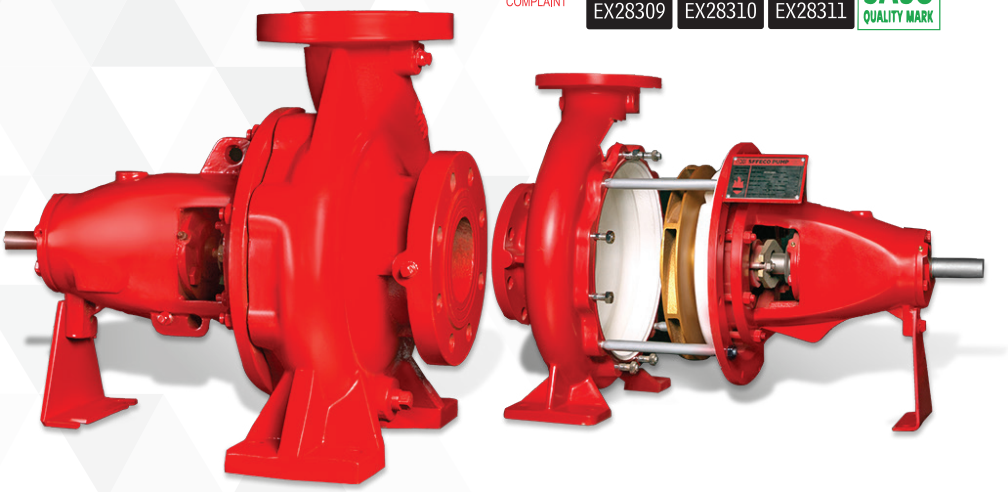
UL CERTIFIED SAFETY US EX28310

UL CERTIFIED SAFETY US EX28311

SASO QUALITY MARK

SFFECO Fire Pump Packages

CENTRIFUGAL FIRE PUMPS
END SUCTION
(50/60 HZ)



General Features

- Top Centerline Discharge
- Foot Supported Casing
- Back Pullout Design
- Self- Venting Design
- Efficiently Designed Impeller
- Frame-Mounted Design
- Small Footprint Ideal for Retrofit
- Dynamically Balanced Impeller
- Heavy Duty with Heavy Wall Thickness
- 100% Hydrostatic & Performance Tested
- Back Pump out Vanes

Casing	Cast Iron / Ductile Iron
Impeller	Bronze / Duplex (upon request)
Shaft	Alloy Steel / Stainless Steel / Duplex (upon request)
Capacity	50GPM to 1000 GPM
Pressure	65 to 234 PSI
Max. Working Pressure	180 to 315 PSI
Speed	2900, 3000, 3500 and 3600 RPM

Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP - 50- 20 EM - 2G	50	2 ½ X 2	74 - 93	2900	180
SFP - 50- 20 EM - 2G		2 ½ X 2	79 - 99	3000	180
SFP 50- 20 EM		2 x 1 ¼	68 - 87	2900	230
SFP 50- 20 EH		2 x 1 ¼	1 0 1 -1 2 9	3500	230
SFP 50- 26 EM		2 x 1 ¼	1 1 5 -1 4 0	2900	230
SFP 50- 26 EH		2 x 1 ¼	1 63 - 206	3500	230
SFP 50- 20 EH A		2 ½ x 2	1 06 - 1 29	3500	230
SFP 50- 20 EH B		3 x 2 ½	1 08 - 1 21	3500	230
SFP 50- 26 EM A		2 ½ x 1 ½	1 1 4 - 1 3 6	2900	230
SFP 50- 42 EH		2 ½ x 1 ½	1 22 - 1 46	3000	230
SFP 50- 40 EH		2 ½ x 1 ½	1 66 - 1 98	3500	230
SFP - 100- 20 EM - 2G	100	2 ½ X 2	72 - 92	2900	180
SFP - 100- 20 EM - 2G		2 ½ X 2	77 - 9 8	3000	180
SFP 100- 20 EH		2 x 1 ¼	1 1 9	3500	230
SFP 100- 26 EH		2 x 1 ¼	159 - 195	3500	230
SFP 100- 50 EH		2 ½ x 2	1 04 - 1 28	3500	230
SFP 100- 26 EM		2 ½ x 1 ½	1 09 - 1 34	2900	230
SFP 100- 42 EH		2 ½ x 1 ½	11 6 - 1 4 3	3000	230
SFP 100- 40 EH		2 ½ x 1 ½	1 62 - 1 98	3500	230
SFP 100- 20 EH B		3 x 2 ½	1 08 - 1 24	3500	230

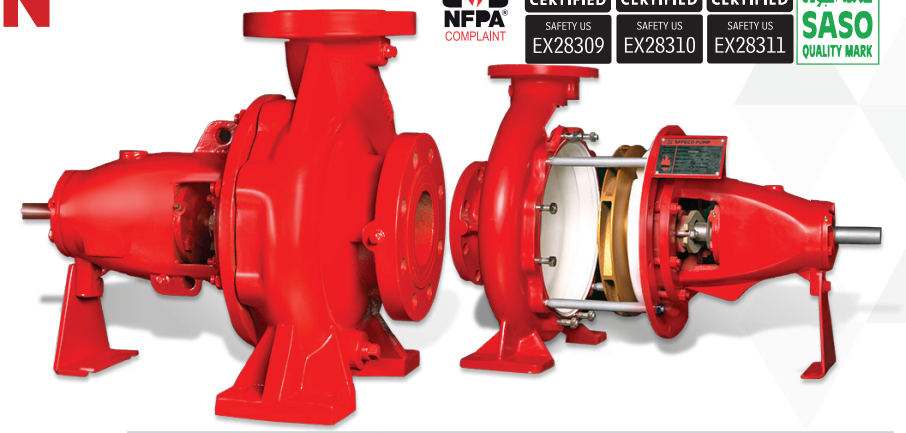
Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP - 150- 32 EM - 2G	150	3 X 2	95 - 1 42	2900	239
SFP - 150- 32 EM - 2G		3 X 2	1 0 2 - 1 53	3000	239
SFP - 150- 20 EM - 2G		2 ½ X 2	71 - 9 0	2900	180
SFP - 150- 20 EM - 2G		2 ½ X 2	76 - 97	3000	180
SFP - 150- 65 EM - 2G		3 X 2 ½	80 - 93	2900	180
SFP - 150- 65 EM - 2G		3 X 2 ½	86 - 99	3000	180
SFP 150- 20 EH		3 x 2 ½	108 - 128	3500	230
SFP 150- 26 EM		2 ½ x 1 ½	124	2900	230
SFP 150- 42 EH		2 ½ x 1 ½	107 - 135	3000	230
SFP 150- 26 EH		2 ½ x 1 ½	156 - 191	3500	230
SFP 150- 20 EH A		2 ½ x 2	102 - 126	3500	230
SFP - 200- 32 EM - 2G	200	3 X 2	89 - 139	2900	239
SFP - 200- 32 EM - 2G		3 X 2	96 - 149	3000	239
SFP - 200- 65 EM - 2G		3 X 2 ½	79 - 91	2900	180
SFP - 200- 65 EM - 2G		3 X 2 ½	85 - 98	3000	180
SFP 200- 20 EH		3 X 2 ½	106 - 127	3500	230
SFP 200- 20 EH A		2 ½ x 2	96 - 120	3500	230
SFP 200- 65 EM		3 X 2 ½	115 - 136	2900	230
SFP - 250- 32 EM - 2G	250	3 X 2	82 - 132	2900	239
SFP - 250- 32 EM - 2G		3 X 2	89 -143	3000	239
SFP - 250- 42 EM - 2G		4 X 2 ½	87 - 147	2900	239
SFP - 250- 42 EM - 2G		4 X 2 ½	94 - 156	3000	239
SFP - 250- 65 EM - 2G		3 X 2 ½	77 - 90	2900	180
SFP - 250- 65 EM - 2G		3 X 2 ½	83 -97	3000	180
SFP 250- 26 EM		3 x 2 ½	113 -134	2900	230
SFP 250- 20 EH		3 x 2 ½	103 - 124	3500	230
SFP - 300- 42 EM - 2G	300	4 X 2 ½	85 - 143	2900	230
SFP - 300- 42 EM - 2G		4 X 2 ½	91 - 154	3000	239
SFP - 300- 65 EM - 2G		3 X 2 ½	75 - 90	2900	180
SFP - 300- 65 EM - 2G		3 X 2 ½	81 - 96	3000	180
SFP 300- 26 EM		3 x 2 ½	110 - 132	2900	230
SFP 300- 20 EH		3 x 2 ½	101 - 123	3500	230
SFP - 400- 31 EM - 2G	400	5 X 3	134 - 218	2900	315
SFP - 400- 31 EM - 2G		5 X 3	143 - 234	3000	315
SFP - 400- 25 EM - 2G		5 X 3	86 - 139	2900	235
SFP - 400- 25 EM - 2G		5 X 3	93 - 149	3000	235
SFP - 400- 54 EM - 2G		5 X 4	137 - 215	2900	315
SFP - 400- 54 EM - 2G		5 X 4	147 - 230	3000	315
SFP - 400- 42 EM - 2G		4 X 2 ½	79 - 141	2900	239
SFP - 400- 42 EM - 2G		4 X 2 ½	86 - 151	3000	239
SFP 400- 26 EM		4 x 3	110 - 133	2900	230
SFP 400- 26 EH		4 x 3	191	3500	240
SFP 400- 32 EM		4 x 3	158 - 200	2900	250
SFP 400- 80 EH		4 x 3	105 - 193	3500	235
SFP - 450- 31 EM - 2G	450	5 X 3	131 - 217	2900	315
SFP - 450- 31 EM - 2G		5 X 3	141 - 232	3000	315
SFP - 450- 25 EM - 2G		5 X 3	85 - 138	2900	235
SFP - 450- 25 EM - 2G		5 X 3	91 - 148	3000	235
SFP - 450- 54 EM - 2G		5 X 4	136 - 214	2900	315
SFP - 450- 54 EM - 2G		5 X 4	146 - 229	3000	315
SFP - 450- 42 EM - 2G		4 X 2 ½	78 - 137	2900	239
SFP - 450 - 42 EM - 2 G		4 X 2 ½	84 - 148	3000	239
SFP 450- 26 EM		4 x 3	109 - 132	2900	230
SFP 450- 26 EH		4 x 3	188	3500	240
SFP 450- 32 EM		4 x 3	154 - 198	2900	250
SFP 450- 80 EH		4 x 3	102 - 190	3500	235

Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP - 500- 31 EM - 2G	500	5 X 3	129 - 217	2900	315
SFP - 500- 31 EM - 2G		5 X 3	139 - 232	3000	315
SFP - 500- 2 5 EM - 2G		5 X 3	83 - 136	2900	235
SFP - 500- 2 5 EM - 2G		5 X 3	90 - 146	3000	235
SFP - 500- 54 EM - 2G		5 X 4	136 - 214	2900	315
SFP - 500- 54 EM - 2G		5 X 4	146 - 229	3000	315
SFP - 500- 4 2 EM - 2G		4 X 2 ½	143	3000	239
SFP - 500- 20 EM - 2G		6 X 5	68 - 84	2900	175
SFP - 500- 20 EM - 2G		6 X 5	73 - 90	3000	175
SFP - 500- 20 EH - 2G		6 X 5	100 - 121	3500	210
SFP - 500- 20 EH - 2G		6 X 5	105 - 128	3600	210
SFP - 500- 26 EM - 2G		6 X 5	118 - 136	2900	230
SFP - 500- 26 EM - 2G		6 X 5	126 - 146	3000	230
SFP - 500- 26 EH - 2G		6 X 5	168 - 199	3500	290
SFP - 500- 26 EH - 2G		6 X 5	178 - 210	3600	290
SFP 500- 26 EM		4 x 3	108 - 131	2900	230
SFP 500- 26 EH		4 x 3	185	3500	240
SFP 500- 32 EM		4 x 3	149 - 194	2900	250
SFP 500- 80 EH		4 x 3	99 - 188	3500	235
SFP 500- 12 EM		5 x 4	111 - 133	2900	225
SFP 500- 13 EM		5 x 4	122 - 210	2900	245
SFP 750- 26 EM	750	5 x 4	102 - 127	2900	225
SFP 750- 32 EM		5 x 4	122 - 207	2900	245
SFP - 750- 54 EM - 2G		5 X 4	131 - 208	2900	315
SFP - 750- 54 EM - 2G		5 X 4	141 - 223	3000	315
SFP - 750- 20 EM - 2G		6 X 5	65 - 81	2900	175
SFP - 750- 20 EM - 2G		6 X 5	70 - 87	3000	175
SFP - 750- 20 EH - 2G		6 X 5	97 - 120	3500	210
SFP - 750- 20 EH - 2G		6 X 5	103 - 127	3600	210
SFP - 750- 26 EM - 2G		6 X 5	116 - 135	2900	230
SFP - 750- 26 EM - 2G		6 X 5	125 - 145	3000	230
SFP - 750- 26 EH - 2G		6 X 5	167 - 198	3500	290
SFP - 750- 26 EH - 2G		6 X 5	177 - 210	3600	290
SFP - 1000- 5 4 EM - 2 G	1000	5 X 4	122 - 200	2900	315
SFP - 1000- 5 4 EM - 2 G		5 X 4	132 - 215	3000	239
SFP - 1000- 2 0 EM - 2 G		6 X 5	60 - 78	2900	175
SFP - 1000- 2 0 EM - 2 G		6 X 5	65 - 84	3000	175
SFP - 1000- 2 0 EH - 2 G		6 X 5	92 - 116	3500	210
SFP - 1000- 2 0 EH - 2 G		6 X 5	98 - 123	3600	210
SFP - 1000- 2 6 EM - 2 G		6 X 5	113 - 133	2900	230
SFP - 1000- 2 6 EM - 2 G		6 X 5	121 - 143	3000	230
SFP - 1000- 2 6 EH - 2 G		6 X 5	164 - 196	3500	290
SFP - 1000- 2 6 EH - 2 G		6 X 5	174 - 208	3600	290

Notes:

- All Pumps are hydrostatically tested to minimum of 150% of its maximum working pressure and can with stand double the max. working pressure
- All Pumps have clock-wise rotation when viewed from the driver side
- All pumps are horizontal single stage pumps
- "The rated speed marked on the pump can vary within +/- 4% of the listed / approved rated speed example: 3000RPM pump can be driven with 2900 RPM drives."
- UL listed pumps compliant to NFPA 20 design and installation requirements.

CENTRIFUGAL FIRE PUMPS
END SUCTION
(50 HZ)



- ❖ Top Centerline Discharge
- ❖ Foot Supported Casing
- ❖ Back Pullout Design
- ❖ Self- Venting Design
- ❖ Efficiently Designed Impeller
- ❖ Frame-Mounted Design
- ❖ Small Footprint Ideal for Retrofit
- ❖ Dynamically Balanced Impeller
- ❖ Heavy Duty with Heavy Wall Thickness
- ❖ 100% Hydrostatic & Performance Tested
- ❖ Back Pump out Vanes

Capacity	50GPM to 1500 GPM
Pressure	87 to 2189 PSI
Speed	2900, 3000, 3500 and 3600 RPM

Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	Rated Net Pressure Range (PSI)	Approx Speed (RPM)
SFD - 50- 3EM 26	50	2 X 1 ¼	116 - 131	2900
SFD - 100- 2EM 100C	100	2 X 1 ¼	87 - 102	2900
SFD - 100- 4EM 26		2 ½ X 1 ½	116 - 131	2900
SFD - 120- 4EM 26	120	2 ½ X 1 ½	87 - 131	2900
SFD - 150- 4EM 26	150	2 ½ X 1 ½	87 - 131	2900
SFD - 200- 5EM 26	200	2 ½ X 2	87 - 131	2900
SFD - 200- 5EM 32		2 ½ X 2	145	2900
SFD - 250- 5EM 26	250	2 ½ X 2	87 - 145	2900
SFD - 250- 5EM 32		2 ½ X 2	145	2900
SFD - 300- 5EM 26	300	2 ½ X 2	87 - 131	2900
SFD - 300- 5EM 32		2 ½ X 2	145	2900
SFD - 350- 5EM 26	350	2 ½ X 2	87 - 116	2900
SFD - 350- 6EM 26		2 ½ X 2	131	2900
SFD - 350- 5EM 32		2 ½ X 2	145	2900
SFD - 400- 6EM 26	400	3 X 2 ½	87 - 131	2900
SFD - 400- 6EM 32		3 X 2 ½	145	2900
SFD - 500- 6EM 26	500	3 X 2 ½	87 - 116	2900
SFD - 500- 8EM 26		4 X 3	131	2900
SFD - 500- 6EM 32		3 X 2 ½	145 - 189	2900
SFD - 750- 8EM 26	750	4 X 3	102 - 131	2900
SFD - 750- 8EM 32		4 X 3	145 - 189	2900
SFD - 1000- 8EM 26	1000	4 X 3	102	2900
SFD - 1000- 10EM 26		5 X 4	116 - 131	2900
SFD - 1000- 10EM 32		5 X 4	145 - 189	2900
SFD - 1250- 10EM 26	1250	5 X 4	102 - 116	2900
SFD - 1250- 10EM 32		5 X 4	131 - 174	2900
SFD - 1500- 12EM 26	1500	6 X 5	102 - 116	2900
SFD - 1500- 12EM 32		6 X 5	131 - 145	2900

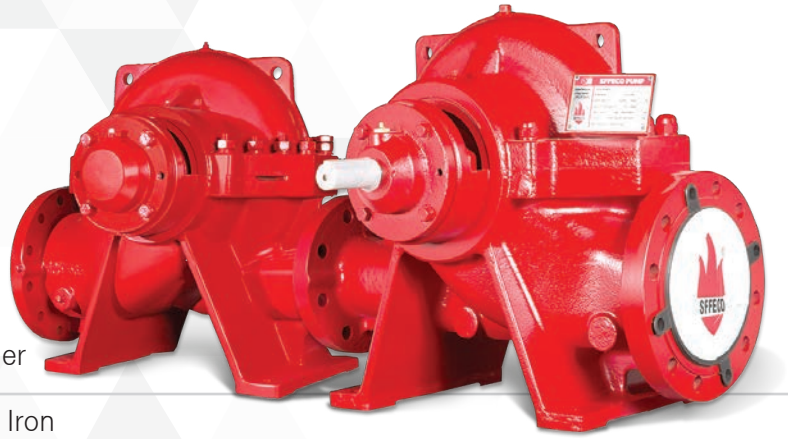
Notes:

- ❖ All Pumps are hydrostatically tested to minimum of 150% of its maximum working pressure and can with stand double the max. working pressure
- ❖ All Pumps have clock-wise rotation when viewed from the driver side
- ❖ All pumps are horizontal single stage pumps
- ❖ "The rated speed marked on the pump can vary within +/- 4% of the listed / approved rated speed example: 3000RPM pump can be driven with 2900 RPM drives."
- ❖ UL listed pumps compliant to NFPA 20 design and installation requirements.

CENTRIFUGAL FIRE PUMPS
SPLIT CASE
(50/60 HZ)

General Features

- Volute Type Thru-Bore Casing
- Frame-Mounted Design
- Small Footprint Ideal for Retrofit
- Heavy Duty with Heavy Wall thickness
- 100% Hydrostatic & Performance Tested
- Dynamically Balanced Double Suction Impeller



Casing	Cast Iron / Ductile Iron
Impeller	Bronze / Duplex (upon request)
Shaft	Alloy Steel / Stainless Steel / Duplex (upon request)
Capacity	150GPM to 3500 GPM
Pressure	88 to 335 PSI
Max. Working Pressure	220 to 410 PSI
Speed	2900, 3000, 3500 and 3600 RPM

Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP 150- 25SH	150	6 x 4	114 - 208	3 500	300
			121 - 220	3600	
SFP 150- 40SM		6 x 4	206 - 289	2900	385
			221 - 310	3000	
SFP 150- SN 3 1SH		6 x 4	226 - 316	3 500	405
			239 - 334	3600	
SFP 150- 28SM		5 X 3	101 - 156	2900	239
			108 - 167	3000	
SFP 150- 35SM		5 x 3	125 - 224	2900	318
			133 - 240	3000	
SFP 200- 25SH	200	6 x 4	114 - 207	3 500	300
			121 - 219	3600	
SFP 200- 40SM		6 x 4	206 - 289	2900	385
			220 - 309	3000	
SFP 200- SN 3 1SH		6 x 4	226 - 317	3 500	405
			239 - 335	3600	
SFP 200- 28SM		5 x 3	101 - 156	2900	239
			108 - 167	3000	
SFP 200- 35SM		5 x 3	124 - 224	2900	318
			133 - 240	3000	
SFP 250- 25SH	250	6 x 4	114 - 207	3 500	300
			121 - 219	3600	
SFP 250- 40SM		6 x 4	206 - 288	2900	385
			220 - 308	3000	
SFP 250- SN 3 1SH		6 x 4	226 - 317	3 500	405
			239 - 335	3600	
SFP 250- 28SM		5 x 3	122 - 222	2900	239
			131 - 237	3000	
SFP 250- 35SM		5 x 3	123 - 223	2900	318
			132 - 239	3000	

Model Dsg.	Rated Capacity (GPM)	Flange Size (SucXDis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP 300- 35SM	300	5 x 3	122 - 222	2900	319
			131 - 237	3000	
SFP 300- 25SH		6 x 4	114 - 206	3 500	300
			121 - 219	3600	
SFP 300- 4O SM		6 x 4	206 - 286	2900	385
			220 - 307	3000	
SFP 300- SN 3 1SH		6 x 4	226 - 316	3 500	405
			239 - 334	3600	
SFP 300- 28SM		5 x 3	100 - 156	2900	239
			107 - 167	3000	
SFP 400- 35SM	400	5 x 3	120 - 219	2900	319
			129 - 234	3000	
SFP 400- 28SM		5 x 3	98 - 155	2900	239
			105 - 166	3000	
SFP 400- 25SH		6 x 4	114 - 206	3 500	300
			120 - 218	3600	
SFP 400- 40SM		6 x 4	206 - 285	2900	385
			221 - 305	3000	
SFP 400- SN 3 1SH		6 x 4	225 - 314	3 500	405
			238 - 332	3600	
SFP 450- 37SM - 2G	450	6 x 4	220 - 293	2900	410
			236 - 315	3000	
SFP 450- 28SM		5 x 3	96 - 155	2900	239
			104 - 166	3000	
SFP 450- 25SH		6 x 4	113 - 206	3 500	300
			120 - 218	3600	
SFP 450- 40SM		6 x 4	205 - 284	2900	385
			220 - 304	3000	
SFP 450- SN 3 1SH		6 x 4	224 - 313	3 500	405
			233 - 325	3600	
SFP 500- 37SM - 2G	500	6 x 4	216 - 296	2900	410
			233 - 314	3000	
SFP 500- 37SM		5 x 3	134 - 233	2900	290
SFP 500- 3 1SM		6 x 4	137 - 203	2900	220
			x	3000	220
SFP 500- 28SM		5 x 3	94 - 154	2900	239
			102 - 165	3000	
SFP 500- 25SH		6 x 4	113 - 205	3500	300
			120 - 217	3600	
SFP 500- 32SM		6 x 4	119 - 198	2900	290
			128 -212	3000	
SFP 500- 40SM		6 x 4	204 - 284	2900	385
			219 - 304	3000	
SFP 500- SN 3 1SH		6 x 4	224 - 312	3500	405
			237 - 330	3600	
SFP 750- 37SM - 2G	750	6 x 4	202 - 276	2900	410
			218 - 298	3000	
SFP 750- 3 1SM		6 x 4	131 - 201	2900	220
			x	3000	
SFP 750- 25SH		6 x 4	106 - 199	3500	300
			113 - 211	3600	
SFP 750- 32SM		6 x 4	111 - 194	2900	290
			120 - 208	3000	
SFP 750- 29SM		8 x 5	148 - 182	2900	268
			159 - 196	3000	
SFP 75040SM		6 x 4	199 - 281	2900	385
			214 - 301	3000	
SFP 750- SN 3 1SH		6 x 4	218 - 309	3500	405
			231 - 327	3600	
SFP 750- 12SH		8 x 5	148 - 266	3500	362
			157 - 281	3600	
SFP 750- EL3 1SH		6 x 4	190 - 290	3500	377
			201 - 306	3600	

Model Dsg.	Rated Capacity (GPM)	Flange Size (Suc x Dis) (in)	UL Listed Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
SFP 1000- 36SM - 2G	1000	8 x 5	180 - 290	2900	405
			194 - 310	3000	
SFP 1000- 3 1SM		6 x 4	134 - 195	2900	220
			x	3000	
SFP 1000- 29SM		8 x 5	143 - 181	2900	268
			154 - 194	3000	
SFP 1000- 30SM		8 x 5	98 - 172	2900	275
			106 - 185	3000	
SFP 1000- 40SM		6 x 4	191 - 272	2900	385
			206 - 292	3000	
SFP 1000- 12SH		8 x 5	146 - 264	3500	362
			155 - 280	3600	
SFP 1000- 15SH		8 x 5	152 - 205	3500	300
			160 - 217	3600	
SFP 1000- 36SM		8 x 5	163 - 278	2900	375
			175 - 298	3000	
SFP 1000- EL3 1SH		6 x 4	187 - 289	3500	377
			199 - 306	3600	
SFP 1250- 36SM - 2G	1250	8 x 5	171 - 281	2900	405
			184 - 302	3000	
SFP 1250- 29SM - 2G		8 x 6	95 - 156	2900	250
			102 - 167	3000	
SFP 1250- 29SM		8 x 5	137 - 177	2900	268
			148 - 191	3000	
SFP 125030SM		8 x 5	94 - 170	2900	275
			101 - 182	3000	
SFP 1250- 12SH		8 x 5	207 - 264	3500	362
			219 - 279	3600	
SFP 1250- 15SH		8 x 6	150 - 205	3500	300
			159 - 217	3600	
SFP 1250- 36SM		8 x 5	155 - 278	2900	375
			168 - 298	3000	
SFP 1250- EL3 1SH		6 x 4	178 - 287	3500	377
			190 - 304	3600	
SFP 1500- 29SM - 2G	1500	8 x 6	100 - 155	2900	250
			105 - 167	3000	
SFP 1500- 6 1SL5- 2G		12 x 10	99 - 164	1480	260
			101 - 168	1500	
SFP 1500- 6 1SL6- 2G		12 x 10	142 - 168	1760	260
			149 - 176	1800	
SFP 1500- 30SM		8 x 5	88 - 167	2900	239
			95 - 179	3000	
SFP 1500- 15SH		8 x 6	149 - 207	3500	300
			158 - 218	3600	
SFP 1500- 36SM		8 x 5	153 - 275	2900	375
			164 - 295	3000	
SFP 2000- 15SH	2000	8 x 6	145 - 203	3500	300
			154 - 215	3600	
SFP 2000- 29SM - 2G		8 x 6	95 - 152	2900	250
			103 - 163	3000	
SFP 2000- 6 1SL5- 2G		12 x 10	94 - 162	1480	260
			97 - 166	1500	
SFP 2000- 6 1SL6- 2G		12 x 10	136 - 165	1760	260
			142 - 173	1800	
SFP 2500- 29SM - 2G	2500	8 x 6	89 - 145	2900	250
			95 - 156	3000	
SFP 2500- 6 1SL5- 2G		12 x 10	89 - 158	1480	260
			92 - 162	1500	
SFP 2500- 6 1SL6- 2G		12 x 10	132 - 163	1760	260
			139 - 170	1800	
SFP 3000- 6 1SL5- 2G	3000	12 x 10	104 - 153	1480	260
			108 - 157	1500	
SFP 3000- 6 1SL6- 2G		12 x 10	125 - 156	1760	260
			131 - 164	1800	
SFP 3500- 6 1SL5- 2G	3500	12 x 10	103 - 144	1485	260
			106 - 148	1500	
SFP 3500- 6 1SL6- 2G		12 x 10	119 - 148	1760	260
			125 - 156	1800	

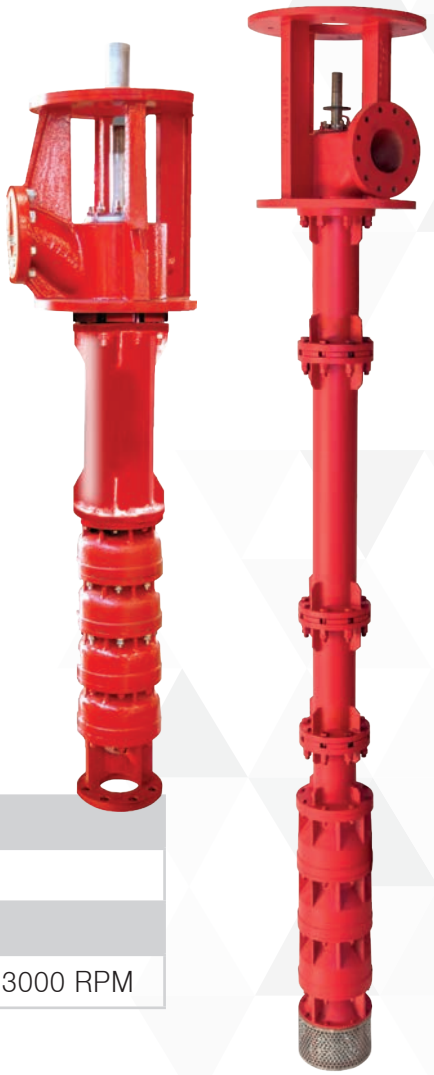
Notes:

- All Pumps are hydrostatically tested to minimum of 150% of its maximum working pressure and can with stand double the max. working pressure
- All Pumps have clock-wise rotation when viewed from the driver side
- All pumps are horizontal single stage pumps
- "The rated speed marked on the pump can vary within +/- 4% of the listed / approved rated speed example: 3000RPM pump can be driven with 2900 RPM drives."
- UL listed pumps compliant to NFPA 20 design and installation requirements.

CENTRIFUGAL FIRE PUMPS
VERTICAL TURBINE
(50/60 HZ)

General Features

- ❖ Designed and built as per UL 448 and NFPA20
- ❖ Dynamically Balanced Impeller
- ❖ Constructed in variety of metallurgies
- ❖ Available 50Hz and 60Hz
- ❖ Drivers with gear boxes at electrical and diesel speed
- ❖ Designed for easy maintenance
- ❖ Open line shaft
- ❖ Packaged systems available
- ❖ Self-Venting Design eliminates vapor lock
- ❖ Efficiently Designed Shaft
- ❖ Heavy wall thickness
- ❖ Sealing arrangement is packing design
- ❖ Modular Construction
- ❖ Space-saver design



Capacity	200GPM to 2000 GPM
Pressure	40 to 359 PSI
Max. Working Pressure	290 to 395 PSI
Speed	1450, 1480, 1760, 1780, 2900, 2980, 2950 & 3000 RPM

Model Dsg.	Rated Capacity (GPM)	UL Listed Rated Net Pressure Range (PSI)	Number of Stages	Approx Speed (RPM)
SFP - 200 - 70VT	200	40 - 289	2 - 12	1480
SFP - 200 - 70VT		48 - 348	2 - 10	1760
SFP - 200 - 30VT		60 - 305	2 - 6	2900
SFP - 200 - 30VT		63 - 323	2 - 6	2980
SFP - 200 - 30VT		64 - 327	2 - 6	3000
SFP - 750 - 70- VT	250	40 - 248	2 - 10	1480
SFP - 250 - 70VT		40 - 290	2 - 12	1480
SFP - 250 - 70VT		48 - 345	2 - 10	1760
SFP - 250 - 30VT		60 - 299	2 - 6	2900
SFP - 250 - 30VT		63 - 317	2 - 6	2980
SFP - 250 - 30VT		64 - 321	2 - 6	3000
SFP - 750 - 70- VT		40 - 248	2 - 10	1480
SFP - 750 - 70- VT		48 - 351	2 - 10	1760

Model Dsg.	Rated Capacity (GPM)	UL Listed Rated Net Pressure Range (PSI)	Number of Stages	Approx Speed (RPM)
SFP - 300 - 70VT	300	40 - 290	2 - 12	1480
SFP - 300 - 70VT		47 - 341	2 - 10	1760
SFP - 300 - 30VT		58 - 295	2 - 6	2900
SFP - 300 - 30VT		61 - 312	2 - 6	2980
SFP - 300 - 30VT		62 - 316	2 - 6	3000
SFP - 750 - 70- VT		40 - 247	2 - 10	1480
SFP - 750 - 70- VT		48 - 351	2 - 10	1760
SFP - 400 - 70VT	400	40 - 283	2 - 12	1480
SFP - 400 - 70VT		46 - 336	2 - 10	1760
SFP - 400 - 30VT		54 - 285	2 - 6	2900
SFP - 400 - 30VT		57 - 302	2 - 6	2980
SFP - 400 - 30VT		58 - 306	2 - 6	3000
SFP - 750 - 70- VT		40 - 244	2 - 10	1480
SFP - 750 - 70- VT		46 - 349	2 - 10	1760
SFP - 450 - 70VT	450	40 - 279	2 - 12	1480
SFP - 450 - 70VT		45 - 333	2 - 10	1760
SFP - 450 - 30VT		52 - 279	2 - 6	2900
SFP - 450 - 30VT		56 - 296	2 - 6	2980
SFP - 450 - 30VT		56 - 300	2 - 6	3000
SFP - 750 - 70- VT		40 - 241	2 - 10	1480
SFP - 750 - 70- VT		44 - 347	2 - 10	1760
SFP - 500 - 70VT	500	40 - 276	2 - 12	1480
SFP - 500 - 70VT		44 - 331	2 - 10	1760
SFP - 500 - 30VT		49 - 273	2 - 6	2900
SFP - 500 - 30VT		53 - 290	2 - 6	2980
SFP - 500 - 30VT		54 - 294	2 - 6	3000
SFP - 750 - 70- VT		40 - 236	2 - 10	1480
SFP - 750 - 70- VT		44 - 343	2 - 10	1760
SFP - 750- 70- VT	750	40 - 320	2 - 10	1760
SFP - 1500- 80- VT		42 - 254	2 - 8	1480
SFP - 750- 70VT		40 - 253	2 - 12	1480
SFP - 750- 70VT		40 - 309	2 - 10	1760
SFP - 750- 80VT		43 - 306	2 - 10	1480
SFP - 750- 80VT		62 - 359	2- 8	1760
SFP - 750- 30VT		72 - 79	2	2900
SFP - 750- 30VT		108 - 119	3	2900
SFP - 750- 30VT		144 - 159	4	2900
SFP - 750- 30VT		180 - 198	5	2900
SFP - 750- 30VT		216 - 238	6	2900
SFP - 750- 30VT		150 -166	4	2950
SFP - 750- 30VT		187 - 207	5	2950
SFP - 750- 30VT		225 - 249		2950
SFP - 750- 30VT		83-87	2	3000
SFP - 750- 30VT		117 - 130	3	3000
SFP - 750- 30VT		167 - 173	4	3000
SFP - 1000- 70VT	1000	56	3	1480
SFP - 1000- 70VT		73	4	1480
SFP - 1000- 70VT		88	5	1480
SFP - 1000- 70VT		112	6	1480
SFP - 1000- 70VT		131	7	1480
SFP - 1000- 70VT		145	8	1480
SFP - 1000- 70VT		160	9	1480
SFP - 1000- 70VT		187	10	1480
SFP - 1000- 70VT		203	11	1480
SFP - 1000- 70VT		218	12	1480
SFP - 1000- 70VT		102	6	1450

Model Dsg.	Rated Capacity (GPM)	UL Listed Rated Net Pressure Range (PSI)	Number of Stages	Approx Speed (RPM)
SFP - 1000- 70VT	1000	117	7	1450
SFP - 1000- 70VT		174	10	1450
SFP - 1000- 70VT		189	11	1450
SFP - 1000- 70VT		57	2	1760
SFP - 1000- 70VT		80	3	1760
SFP - 1000- 70VT		106	4	1760
SFP - 1000- 70VT		133	5	1760
SFP - 1000- 70VT		160	6	1760
SFP - 1000- 70VT		189	7	1760
SFP - 1000- 70VT		218	8	1760
SFP - 1000- 70VT		247	9	1760
SFP - 1000- 70VT		276	10	1760
SFP - 1000- 70VT		58	2	1780
SFP - 1000- 70VT		87	3	1780
SFP - 1000- 70VT		116	4	1780
SFP - 1000- 70VT		145	5	1780
SFP - 1000- 70VT		175	6	1780
SFP - 1000- 70VT		204	7	1780
SFP - 1000- 70VT		233	8	1780
SFP - 1000- 70VT		262	9	1780
SFP - 1000- 70VT		291	10	1780
SFP - 1000- 80VT		40 - 287	2 - 10	1480
SFP - 1000- 80VT		59-343	2 - 8	1760
SFP - 1000- 90VT		57 - 328	2 - 7	1480
SFP - 1000- 90VT		85 - 337	2 - 5	1760
SFP - 1500- 80- VT		40 - 244	2 - 8	1480
SFP - 1500- 80- VT		58 - 355	2 - 8	1760
SFP - 2000- 90- VT		58 - 239	2 - 5	1480
SFP - 1250- 80VT	1250	40 - 273	2 - 10	1480
SFP - 1250- 80VT		54 - 330	2 - 8	1760
SFP - 1250- 90VT		55 - 317	2 - 7	1480
SFP - 1250- 90VT		80 - 329	2 - 5	1760
SFP - 1500- 80- VT		40 - 225	2 - 8	1480
SFP - 1500- 80- VT		54 - 341	2 - 8	1760
SFP - 2000- 90- VT		56 - 230	2 - 5	1480
SFP - 2000- 90- VT		80 - 335	2 - 5	1760
SFP - 1500- 80VT	1500	84 - 254	4 - 10	1480
SFP - 1500- 80VT		60 - 76	3	1480
SFP - 1500- 80VT		49 - 312	2 - 8	1760
SFP - 1500- 90VT		52 - 309	2 - 7	1480
SFP - 1500- 90VT		78 - 314	2 - 5	1760
SFP - 1500- 80- VT		58 - 317	2 - 8	1760
SFP - 2000- 90- VT		52 - 225	2 - 5	1480
SFP - 2000- 90- VT		78 - 325	2 - 5	1760
SFP - 2000- 90- VT	2000	72 - 312	2 - 5	1760
SFP - 2000- 90VT		71 - 82	2	1480
SFP - 2000- 90VT		100 - 123	3	1480
SFP - 2000- 90VT		133 - 165	4	1480
SFP - 2000- 90VT		167 - 288	5 - 7	1480
SFP - 2000- 90VT		96 - 118	3	1450
SFP - 2000- 90VT		128 - 157	4	1450
SFP - 2000- 90VT		72 - 302	2 - 5	1760

Notes:

- All Pumps are hydrostatically tested to minimum of 150% of its maximum working pressure and can with stand double the max. working pressure
- All Pumps have clock-wise rotation when viewed from the driver side
- All pumps are horizontal single stage pumps
- "The rated speed marked on the pump can vary within +/- 4% of the listed / approved rated speed example: 3000RPM pump can be driven with 2900 RPM drives."
- UL listed pumps compliant to NFPA 20 design and installation requirements.

FIRE PUMP SYSTEM
COMPONENTS

DIESEL TANKS

All Sffeco steel above ground tanks for flammable and combustible liquid are assembled and tested to all requirements as follows

- ANSI/UL-142-Complaint.
- Installation standard compliance to NFPA 30, NFPA30A and NFPA31

Primary Containment Tanks

- Horizontal Cylindrical Construction (Capacity upto 75000 Gallon)
- Vertical Cylindrical Construction (Capacity upto 60000 Gallon)
- Rectangular Construction (Capacity upto 550 Gallon)

Secondary Containment Tanks

- Horizontal Cylindrical Construction (Capacity upto 75000 Gallon)
- Vertical Cylindrical Construction (Capacity upto 60000 Gallon)

JOCKEY PUMPS

Jockey pumps are small, motor driven pumps used in conjunction with main fire pumps to compensate for minor leaks in the fire protection system and automatically maintain stand-by pressure. This reduces wear on the main pump and controller caused by unnecessary, frequent operation. Jockey Pump controllers are available for across the-line starting.

FIRE PUMP CONTROLLERS

- ELECTRICAL PUMP CONTROLLER
- DIESEL PUMP CONTROLLER
- JOCKEY PUMP CONTROLLER
- ALARM PANEL

All Fire Pump Controllers are factory assembled, wired, tested as a unit and comply with all requirements of the latest edition of NFPA-20 (Centrifugal Fire Pumps) and NFPA-70 (National Electrical Code). Controllers are listed by Underwriters Laboratories, Inc., in accordance with UL218, Standard for Fire Pump Controllers, CSA, and Standard for Industrial Control Equipment (CUL) and approved by Factory Mutual (FM). All controllers are Y2K compliant.

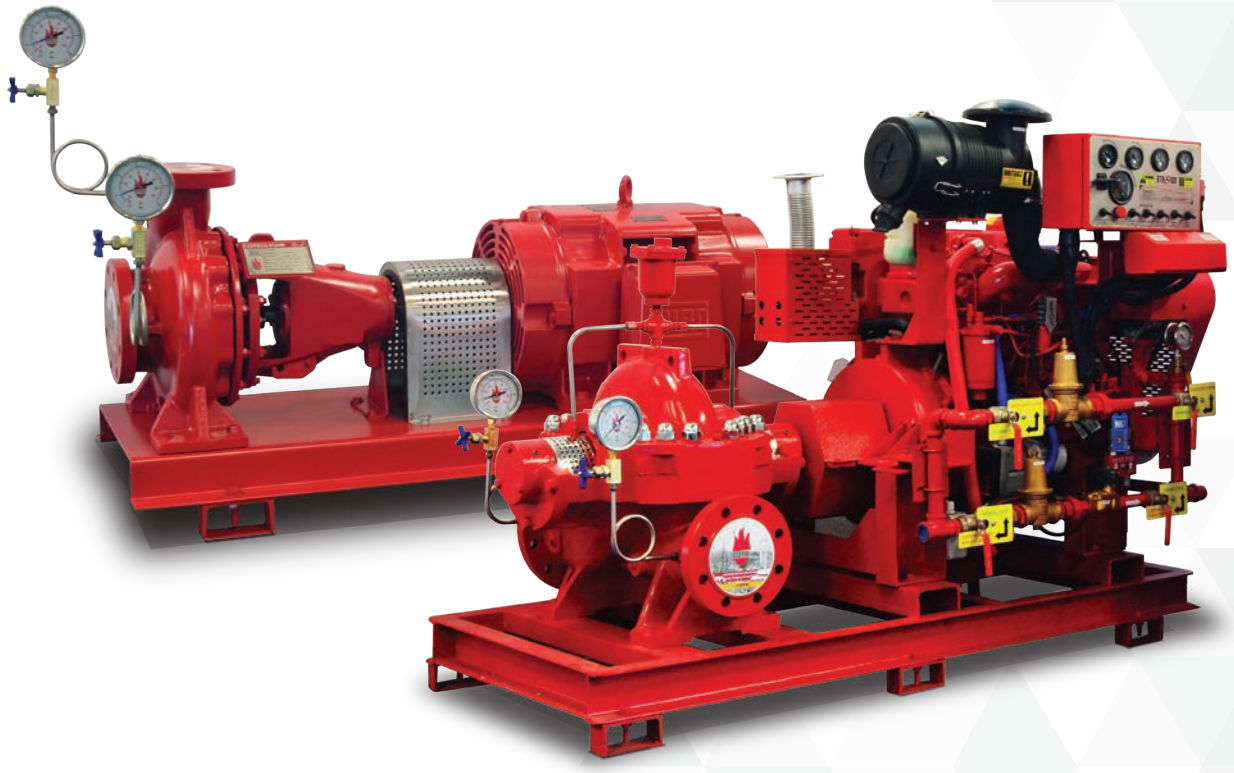
This component plays a vital role in operation of fire pumps as it controls the entire system. It is selected as per customer choice if any, otherwise it can be either TORNATECH, OR EATON.

FIRE PUMP SKID

DIESEL DRIVEN & ELECTRICAL MOTOR

SFFECO is an established well reputed manufacturer of Premium Custom Engine Driven Centrifugal Fire Pump Skids. We specialized in designing and developing packages in accordance to NFPA 20 requirements with Listed & Approved Drivers.

- SFFECO offers listed Centrifugal Fire Pump Skids that meet every fire protection need.
- Driven by Listed & Approved Diesel Engines & Electric Motors.
- Skid Packages are pre-tested and inspected thoroughly before release to customers.
- Well aligned and coupled for direct operation
- One piece base plate with anchor bolt holes
- Engineered, coated, hot rolled mild steel to resist corrosion and abrasion
- Heavy fabricated C-Channel Structure constructed to provide proper alignment of pump with diesel engine or pump
- Heavy fabricated steel base plate rigidly constructed to provide proper alignment of pump and electric motor
- Compact skid design with small foot-print for retrofit
- High standard of quality in material construction finish and workmanship



SFFECO maintains its standard with using it's proudly own listed & approved Black Stallion Diesel Engines & High efficiency and Centrifugal Fire Pumps to package Heavy Duty and High Quality Compact Skids.

Our Listed and Approved Fire Pumps can also be coupled with any other Electric Motor and Listed Diesel Engine of any specific brands as per customer's requirement.

ORDER FORM
Technical Data

GENERAL INFORMATION

CLIENT NAME: _____

PROJECT _____ LOCATION: _____

PURCHASE ORDER NO.: _____ SALES ORDER NO.: _____

CENTRIFUGAL PUMP DETAILS

☐ END SUCTION PUMP ☐ HORIZONTAL SPLIT CASE PUMP

FLOW: GPM PRESSURE BAR SPEED RPM

PUMP MODEL NO.: DUTY POINT CURVE NO.: SDC

MOTOR DRIVER DETAILS

MOTOR POWER HP MOTOR DRIVEN SKID NO.:

VOLTAGE: V Ph Hz RPM

STARTER CONNECTION:

☐ DIRECT ON-LINE (DOL) ☐ START DELTA (Y-Δ) ☐ OTHERS:

MOTOR PROTECTION:

☐ OPD (IP 23) ☐ TEFC (IP 55) BRAND:

ELECTRIC MOTOR CONTROLLER:

BRAND: CONTROLLER MODEL NO:

PROTECTION: ☐ NEMA 2 ☐ OTHERS:

TYPE: ☐ GPA ☐ GPY ☐ GPL ☐ OTHERS:

OTHER SPECIFIC REQUIREMENTS:

**Remarks: The pump & Power selection made to cover the 150% of the rated capacity, where factory is ready to provide higher selection subject to AHJ request & approval.

ENGINE DRIVER DETAILS

ENGINE POWER: _____ RPM **STARTER VOLTAGE:** ☐ 12 VDC ☐ 24 VDC

BRAND: _____ **ENGINE MODEL NO.:** _____

DIESEL DRIVEN SKID NO.: _____

DIESEL ENGINE CONTROLLER:

BRAND: _____ **CONTROLLER MODEL NO:** _____

TYPE: ☐ GPD **PROTECTION:** ☐ NEMA 2 ☐ **OTHERS:** _____

OTHER SPECIFIC REQUIREMENTS:

**Remarks: The pump & Power selection made to cover the 150% of the rated capacity, where factory is ready to provide higher selection subject to AHJ request & approval.

JOCKEY PUMP DETAILS

BRAND: _____ **JOCKEY MODEL NO.:** _____

POWER: _____ **VOLTAGE:** _____ V _____ Ph _____ Hz

FLOW: _____ **PRESSURE** _____ **SPEED** _____ RPM

JOCKEY PUMP CONTROLLER:

BRAND: _____ **CONTROLLER MODEL NO:** _____

TYPE: ☐ JP3 **PROTECTION:** ☐ NEMA 2 ☐ **OTHERS:** _____

OTHER SPECIFIC REQUIREMENTS:

**Remarks: The Jockey Pump capacity showing in the quotation is indicative only, While factory has the right to select a different model/flow rate capacity assuring that will be between1-10% from the flow rate capacity of the main pump.

ACCESSORIES

STANDARD ACCESSORIES:
Included in all SFFECO UL Listed Fire Pump Systems

- Discharge and Suction Gauges
- Air Release Valve (Split Case Pump Only)
- Casing Relief Valve
- Battery
- Battery Cable and Clamps
- Flexible Fuel Hoses
- Diesel Tank and Accessories
  - Ball Valve
  - Fuel Level Gauge
  - SFFECO Tank Breather

OPTIONAL ACCESSORIES:

- ☐ Flow Meter
- ☐ Main Relief Valve
- ☐ Waste Cone
- ☐ Check Valve
- ☐ Discharge TEE
- ☐ Flexible Connector
- ☐ Eccentric Reducer
- ☐ Concentric Reducer
- ☐ Hose Valves with Cap and Chain
- ☐ Ball Drip Valve

Isolating Valve

☐ OS&Y Gate Valve ☐ Butterfly Valve

If Flow and pressure is not known; please send the brief description of application (hazard).
Pump location, connection system (hydrant, sprinkler.. Etc), as well as the maximum height to generate and recommend the suitable pump for the application

ORDER FORM
Technical Data
FOR VERTICAL PUMPS

NFPA COMPLAINT

UL CERTIFIED SAFETY US EX28309

GENERAL INFORMATION

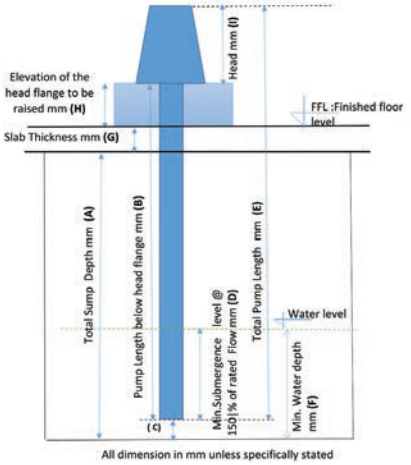
CLIENT NAME: _____

PROJECT _____ LOCATION: _____

PURCHASE ORDER NO.: _____ SALES ORDER NO.: _____

CENTRIFUGAL PUMP DETAILS

MODEL NO.:	GPM	A =	MM
CURVE NO.:		B =	MM
FLOW:	GPM	C =	MM
PRESSURE:	BAR(PSI)	D =	MM
SPEED:	RPM	E =	MM
STAGES:		F =	MM
		G =	MM
		H =	MM
		I =	MM



All dimension in mm unless specifically stated

ELECTRICAL SKID DETAILS

ELECTRICAL SKID NO.: _____ TYPE : ☐ HORIZONTAL MOTOR ☐ VERTICAL MOTOR BRAND : _____

MOTOR DETAILS : POWER _____ HP SPEED _____ RPM FREQUENCY _____ HZ
VOLTAGE _____ V PHASE _____ SERVICE FACTOR _____

MOTOR PROTECTION: ☐ ODP (IP23) ☐ WP-1 ☐ TEFC(IP55) ☐ OTHERS _____

MOTOR EFFICIENCY: ☐ IE1 ☐ IE2 ☐ IE3 ☐ OTHERS _____

STARTER CONNECTION: ☐ DIRECT ON LIN (DOL) ☐ STAR-DELTA ☐ OTHERS _____

☐ GEAR DRIVE DETAIL FOR HORIZONTAL MOTOR

- GEAR DRIVE MAKE :
- GEAR DRIVE MODEL NO.:
- GEAR DRIVE SHAFT MODEL NO.:
- GEAR DRIVE SHAFT BX SIZE(MM):
- GEAR DRIVE NOMINAL RATIO :
- GEAR DRIVE ACTUAL RATIO :
- GEAR DRIVE INPUT SPEED (RPM):
- GEAR DRIVE OUTPUT SPEED
- GEAR DRIVE COUPLING SIZE(MMXMM) :
- GD CARDAN SHAFT MODEL NO.:

☐ VERTICAL MOTOR DETAIL

- MOTOR TYPE :
- MOTOR MAKE :
- MOTOR MODEL NO.:
- MOTOR SHAFT MODEL NO.:
- MOTOR SHAFT BX SIZE(MM) :
- MOTOR OUTPUT SPEED (RPM) :
- MOTOR COUPLING SIZE (MMXMM) :
- RATCHET TYPE : NON-REVERSE
- DIRECTION OF ROTATION(TOP VIEW) : COUNTER CLOCK WISE
- INSULATION CLASS : F

ELECTRICAL MOTOR CONTROLLER: BRAND ☐ _____ CONTROLLER MODEL NUMBER ☐ _____

PROTECTION : ☐ _____ OTHERS ☐ _____ TYPE : ☐ GPA ☐ GPY ☐ GPL ☐ OTHERS

OTHER SPECIFIC REQUIREMENTS:

NOTE: THE PUMP AND PUMP DRIVER SELECTION IS MADE ON THE BASIS OF MAXIMUM HORSEPOWER OF THE PUMP WHERE ACCEPTED BY AHJ, SELECTION CAN BE PROVIDED AT POWER REQUIRED AT 150% OF THE RATED FLOW.

ENGINE DRIVER DETAILS

ELECTRICAL SKID NO.: | ENGINE POWER: HP | RPM

STARTER VOLTAGE: ☐ 12 VDC ☐ 24 VDC BRAND : | ENGINE MODEL NO.:

☐ GEAR DETAIL FOR DIESEL ENGINE :

- GEAR DRIVE MAKE :
- GEAR DRIVE SHAFT MODEL NO.:
- GEAR DRIVE NOMINAL RATIO.:
- GEAR DRIVE INPUT SPEED (RPM):
- GEAR DRIVE COUPLING SIZE (MMXMM :
- GEAR DRIVE MODEL NO.:
- GEAR DRIVE SHAFT BX SIZE (MM):
- GEAR DRIVE ACTUAL RATIO :
- GEAR DRIVE OUTPU SPEED:
- GD CARDAN SHAFT MODEL NO. :

☐ GEAR DETAIL FOR DIESEL ENGINE :

BRAND : | CONTROLLER MODEL NO.: | PROTECTION:

BRAND : | TYPE : ☐ GPD

OTHER SPECIFIC REQUIREMENTS:

NOTE: THE PUMP AND PUMP DRIVER SELECTION IS MADE ON THE BASIS OF MAXIMUM HORSEPOWER OF THE PUMP WHERE ACCEPTED BY AHJ, SELECTION CAN BE PROVIDED AT POWER REQUIRED AT 150% OF THE RATED FLOW.

JOCKEY PUMP DETAILS

BRAND: | JOCKEY MODEL NO.:

POWER: HP | VOLTAGE: V | Ph | Hz

FLOW: GPM | PRESSURE BAR (psi) | SPEED RPM

JOCKEY PUMP CONTROLLER:

BRAND: | CONTROLLER MODEL NO:

TYPE: ☐ JP3 | PROTECTION: ☐ NEMA 2 ☐ OTHERS: please specify

OTHER SPECIFIC REQUIREMENTS:

ACCESSORIES

STANDARD ACCESSORIES:
Included in all SFFECO UL Listed Fire Pump Systems

- Discharge and Suction Gauges
- Air Release Valve (Split Case Pump Only)
- Casing Relief Valve
- Battery
- Battery Cable and Clamps
- Flexible Fuel Hoses
- Diesel Tank and Accessories
  - Ball Valve
  - Fuel Level Gauge
  - SFFECO Tank Breather

OPTIONAL ACCESSORIES:

- ☐ Flow Meter
- ☐ Main Relief Valve
- ☐ Waste Cone
- ☐ Check Valve
- ☐ Discharge TEE
- ☐ Flexible Connector
- ☐ Eccentric Reducer
- ☐ Concentric Reducer
- ☐ Hose Valves with Cap and Chain
- ☐ Ball Drip Valve

Isolating Valve

☐ OS&Y Gate Valve ☐ Butterfly Valve

If Flow and pressure is not known; please send the brief description of application (hazard).
Pump location, connection system (hydrant, sprinkler.. Etc), as well as the maximum height to generate and recommend the suitable pump for the application

شركة المصنع السعودي لأجهزة الإطفاء

SAUDI FACTORY FOR FIRE EQUIPMENT Co.

SFFECO®

SFFECO since 1983

In line with our policy of continuous product improvement, SFFECO reserves the right to modify specifications without prior notice.

www.SFFECO.com

Ver: 04 - 12/2021

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المواصفات السعودية
Saudi Standards

الهيئة السعودية للمواصفات والمقاييس والجودة
Saudi Standards, Metrology and Quality Org.

علامة الجودة
SASO
QUALITY MARK

شهادة ترخيص باستعمال علامة الجودة
License For Use of The Quality Mark

رقم الترخيص: 20210283541 License Number:

تشهد الهيئة السعودية للمواصفات والمقاييس والجودة بأنها رخصت باستعمال علامة الجودة على المنتجات الموضحة أدناه بعد استيفاءها للمتطلبات اللازمة وفق المراجع القياسية الخاصة بها:

SASO certifies that it has granted the right to use (SASO) quality mark on the following products, after fulfilling the required requirements according to the related normative references:

المنشأة:	شركة المصنع السعودي لأجهزة الاطفاء سفيكو	The Establishment:
عنوان المنشآة:	الرياض - الصناعية الثانية - طريق الخرج	The Establishment's Address:
موقع خط الإنتاج:	الرياض - الصناعية الثانية - طريق الخرج	Production Line Location:
المراجع القياسية:	SASO NFPA 20/2010	Normative References:
العلامة التجارية:	SFFECO	The Trade Mark:
المنتج: (تفاصيل المنتج في الملحق)	المضخات الثابتة للحماية من الحريق	The Product:
تاريخ المنح:	2021/11/09	Date of Granting:
تاريخ التجديد:	-	Date of Renwal:
تاريخ الانتهاء:	2024/11/08	Date of Expiry:

نائب المحافظ للمطابقة والعمليات
Vice-Governor, Operations and Conformity

المهندس/ سعود بن راشد العسكر
Eng. Saud R. AlAskar

الإدارة العامة لمنح الشهادات
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