



شركة المصنع السعودي لأجهزة الإطفاء
SAUDI FACTORY FOR FIRE EQUIPMENT Co.

Empowering
a Safer Future for
the Kingdom



BLACK
STATION



Certified
Diesel Driven
Engines

Quality Approvals for Various Products and Services

VER: 00-04/26



The Global Standard in Fire Safety

Since 1983, SFFECO has been the trusted name and a recognized global leader in manufacturing top-tier fire-fighting equipment. We don't just offer products; we provide total fire safety solutions like fire doors, fire cabinets, fire pumps, fire extinguishing systems, etc. Our commitment to excellence is certified by multiple international standards, including ISO 9001 (Quality), ISO 14001 (Environmental), and ISO 45001 (Health & Safety). With state-of-the-art facilities in Riyadh and Dubai, we ensure every product meets rigorous international quality standards.

One-Stop-Shop for Fire Protection

SFFECO is your single source for everything in fire protection and fire-fighting. Represented in over 100 countries through a vast network of dealers, our innovative approach and comprehensive, end-to-end product range deliver the full spectrum of solutions you need. We're dedicated to keeping you safe and updated, constantly integrating the latest fire-fighting technology into our knowledge and services. Choose SFFECO and get certified quality, global reach, and pioneering innovation—all in one place.



Quality Services

SFFECO is deeply committed to ensuring superior performance and accuracy in every product it delivers. This dedication is maintained through continuous, close collaboration with a wide array of stakeholders, including key certification bodies, government regulatory agencies, industry partners, and leading technology associations. This concerted effort focuses on the development and delivery of truly innovative and high-quality fire-fighting solutions. The commitment to excellence is rigorously upheld through extensive product testing and evaluation, alongside a strict, ongoing process for continued product quality compliance, guaranteeing that SFFECO's equipment operates with assured reliability when it matters most.

SFFECO is dedicated to providing fire safety products of the highest quality and performance. We achieve this by working closely with certification bodies, government regulatory agencies, industry partners, and technology associations. This collaboration ensures our innovative products are backed by extensive product testing and evaluation, and maintained through continuous quality compliance.

As global leaders since 1983, SFFECO believes in manufacturing quality products and offering exceptional service standards worldwide. Our primary goal is to reward our customers by keeping their investments safe and secure. Our manufacturing plant has steadily grown and is now equipped with modern hi-tech equipment and staffed by highly skilled professionals. With optimal ISO-certified operations, we consistently roll out products that match global standards to serve the needs of the growing fire safety market.



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Fire Pumps

UL/FM Approved



Being a Local Specialist Manufacturer gives SFFECO the unique opportunity and privilege to design and develop highly innovative pump assembly units, allowing us to tailor each pump package precisely to our clients' specific operational and technical requirements. Our expertise ensures that every pump system is not only customized for optimal performance but also fully compliant with stringent Local Authority Regulations and international standards, including NFPA-20 Selection and Operation Procedures.

At SFFECO, quality and reliability are at the core of our manufacturing process. Each pump undergoes meticulous inspection, rigorous testing, and comprehensive production control throughout the entire assembly process. Detailed records of all inspections and tests are systematically logged, ensuring complete traceability and transparency before the units are delivered to our valued customers.

To support this commitment, SFFECO has established a state-of-the-art, fully equipped, UL-compliant pump testing facility. Our advanced testing and calibration systems enable precise assessment of each centrifugal stationary fire pump, ensuring compliance with the highest performance and safety standards.

Within this facility, pumps undergo extensive performance evaluations, including operational performance testing, hydrostatic testing, impeller balancing, and other critical assessments. This rigorous process guarantees that every pump leaving our factory is fully tested, balanced, and verified to meet or exceed required compliance standards, providing our clients with reliable, high-performance fire protection solutions they can trust.



Black Stallion Diesel Driven Engines

BLACK STALLION today is a symbol for producing efficient, reliable, high performance, cost effective and premium quality internal combustion engines with a wide range of power.

Our wide range enables you to find the best engine to fit your needs to deliver effectively and efficiently. We produce engines that meet all the requirements of the NFPA20 quality and compliance standards and has passed all the tests of the UL 1247 and FM class Number 1333 requirements. Our manufacturing and testing facilities are witnessed by UL/FM and each product produced are tested to meet all the requirements before they are delivered.

BLACK STALLION is known for reengineering and developing internal combustion engines which is the crucial component for any fire pump.

BLACK STALLION is an internal combustion diesel engine trademark by SFFECO Global. It is known for reengineering and developing internal combustion engines which is the crucial component for any fire pump.

BLACK STALLION today is a symbol for producing efficient, reliable, high performance, cost effective and premium quality internal combustion engines with a wide range of power. Our wide range enables you to find the best engine to fit your needs to deliver effectively and efficiently. We produce engines that meet all the requirements of the NFPA 20 quality and compliance standards and has passed all the tests of the UL 1247 and FM class Number 1333 requirements.

To provide this confidence, each diesel engine of ours, goes through multiple tests like Endurance Test, and governor test before dispatch from our factory.

Engine Specifications:

- ❖ 1400, 1600, 1800, 2800, 2900, 3000 and 1400-1800, 2800-3000 (Refer individual ratings for RPM)
- ❖ Engine Type: In line 4 Stroke cycle.
- ❖ Cooling System: Water Cool
- ❖ Rated Power: From 15 HP to 590 Hp
- ❖ Number of Cylinders: 3, 4, 6 and 12 Cylinders
- ❖ Aspiration: Naturally Aspirated and Turbo Charger
- ❖ Rotation: Counter Clock Wise (Fronting Fly Wheel)

BLACK

STALLION



General Features:

- ❖ Disposable dry type air filter
- ❖ Able to reach the power within 20sec of starting of the engine
- ❖ Flexible hose supply and return fuel connections
- ❖ Spin-on type fuel and oil filter
- ❖ Inline type, gear driven fuel injection system
- ❖ High capacity automatic engine water heater to keep engine warm in the cold conditions
- ❖ Water to water, shell and tube type heat exchanger
- ❖ Instrumentation panel evaluates as per UL50E and meeting NEMA TYP-2 Requirements.
- ❖ Electronic over speed control with reset and test functions
- ❖ Energized to stop type solenoid
- ❖ High torque starters
- ❖ Tamper proof Adjustable speed control
- ❖ Water cooling loop
- ❖ Innovative Design
- ❖ Latest Technology
- ❖ Performance Oriented
- ❖ Competitive Pricing
- ❖ Premium Quality
- ❖ Compact Arrangement
- ❖ Low Maintenance
- ❖ Easy to Operate
- ❖ Efficient Fuel Consumption
- ❖ Fast & Timely Delivery

Black Stallion Specifications



Notes:

- ❖ Each engine is factory tested to verify power and performance.
- ❖ Engines are to be used for stationary emergency standby fire pump service only.
- ❖ Engines are to be tested in accordance with NFPA 25.
- ❖ Engines are rated at standard SAE conditions of 29.61 in. (752.1 mm) Hg above sea level] by the testing laboratory (see SAE Standard J1349).
- ❖ A deduction of 3 percent from engine horsepower rating at standard SAE Conditions shall be made for diesel engines for each 1000 ft. (305 m) altitude above 300 ft. (91.4m)
- ❖ A deduction of 1 percent from engine horsepower rating as corrected to standard SAE conditions shall be made for diesel engines for every 10°F (5.6°C) above 77°F (25°C) ambient temperature.



2800, 2900, 3000 RPM

15 - 275 HP



1400, 1600, 1800 RPM

300 - 588 HP

Black Stallion Specifications



Model Numbers	Rated Power, HP	Number of cylinders	Speed (RPM)	Certification
BS04040TMSF	40	4	2800	UL/FM
BS04050TMSF	50	4	2800	UL/FM
BS04057TMSF	57	4	2800	UL/FM
BS04080MSF	80	4	2800	UL/FM
BS04090MSF	90	4	2800	UL/FM
BS04100MSF	100	4	2800	UL/FM
BS04111MSF	111	4	2800	UL/FM
BS03020MSF	20	3	2900	UL/FM
BS04030MSF	30	4	2900	UL/FM
BS04040TMSF	40	4	2900	UL/FM
BS04050TMSF	50	4	2900	UL/FM
BS04040MSF	40	4	2900	UL/FM
BS04050MSF	50	4	2900	UL/FM
BS04057MSF	57	4	2900	UL/FM
BS04070MSF	70	4	2900	UL/FM
BS04075MSF	75	4	2900	UL/FM
BS04080MSF	80	4	2900	UL/FM
BS04090MSF	90	4	2900	UL/FM
BS04100MSF	100	4	2900	UL/FM
BS06100MSF	100	6	2900	UL/FM
BS06110MSF	110	6	2900	UL/FM
BS06118MSF	118	6	2900	UL/FM
BS06120MSF	120	6	2900	UL/FM
BS06128MSF	128	6	2900	UL/FM
BS06150MSF	150	6	2900	UL/FM
BS06160MSF	160	6	2900	UL/FM
BS06175MSF	175	6	2900	UL/FM
BS06186MSF	186	6	2900	UL/FM
BS06200MSF	200	6	2900	UL/FM
BS06210MSF	210	6	2900	UL/FM
BS06212MSF	212	6	2900	UL/FM
BS06220MSF	220	6	2900	UL/FM
BS06240MSF	240	6	2900	UL/FM
BS06250MSF	250	6	2900	UL/FM
BS06265MSF	265	6	2900	UL/FM
BS04040TMSF	40	4	3000	UL/FM
BS04050TMSF	50	4	3000	UL/FM
BS04056TMSF	56	4	3000	UL/FM
BS04080MSF	80	4	3000	UL/FM
BS04090MSF	90	4	3000	UL/FM
BS04100MSF	100	4	3000	UL/FM
BS04110MSF	110	4	3000	UL/FM
BS06300LSF	300	6	1400	UL/FM
BS06310LSF	310	6	1400	UL/FM
BS06329LSF	329	6	1400	UL/FM

Black Stallion Specifications



Model Numbers	Rated Power, HP	Number of cylinders	Speed (RPM)	Certification
BS06350LSF	350	6	1400	UL/FM
BS06375LSF	375	6	1400	UL/FM
BS06400LSF	400	6	1400	UL/FM
BS012430LSF	430	12	1400	UL/FM
BS012455LSF	455	12	1400	UL/FM
BS012480LSF	480	12	1400	UL/FM
BS012510LSF	510	12	1400	UL/FM
BS06300LSF	300	6	1600	UL/FM
BS06320LSF	320	6	1600	UL/FM
BS06336LSF	336	6	1600	UL/FM
BS06370LSF	370	6	1600	UL/FM
BS06372LSF	372	6	1600	UL/FM
BS06390LSF	390	6	1600	UL/FM
BS06405LSF	405	6	1600	UL/FM
BS012450LSF	450	12	1600	UL/FM
BS012475LSF	475	12	1600	UL/FM
BS012530LSF	530	12	1600	UL/FM
BS012545LSF	545	12	1600	UL/FM
BS06300LSF	300	6	1800	UL/FM
BS06320LSF	320	6	1800	UL/FM
BS06343LSF	343	6	1800	UL/FM
BS06370LSF	370	6	1800	UL/FM
BS012450LSF	450	12	1800	UL/FM
BS012500LSF	500	12	1800	UL/FM
BS012570LSF	570	12	1800	UL/FM
BS03015MSF	15	3	2900	UL
BS04036MSF	36	4	2900	UL
BS04057TMSF	56	4	2900	UL
BS04079MSF	79	4	2900	UL
BS04111MSF	110	4	2900	UL
BS06215MSF	215	6	2900	UL
BS06218MSF	218	6	2900	UL
BS06272MSF	272	6	2900	UL
BS06275MSF	275	6	2900	UL
BS012518LSF	518	12	1400	UL
BS012503LSF	502	12	1600	UL
BS012553LSF	552	12	1600	UL
BS06390LSF	400	6	1800	UL
BS06390LSF	410	6	1800	UL
BS012550LSF	550	12	1800	UL
BS012589LSF	590	12	1800	UL
BS03021MSF	21	3	2800	FM
BS04030MSF	30	4	2800	FM
BS04036MSF	35.5	4	2800	FM
BS04040MSF	40	4	2800	FM

Black Stallion Specifications



Model Numbers	Rated Power, HP	Number of cylinders	Speed (RPM)	Certification
BS04050MSF	50	4	2800	FM
BS04059MSF	58.5	4	2800	FM
BS04065MSF	65	4	2800	FM
BS04070MSF	70	4	2800	FM
BS04075MSF	75	4	2800	FM
BS06100MSF	100	6	2800	FM
BS06110MSF	110	6	2800	FM
BS06127MSF	127	6	2800	FM
BS06147MSF	146.5	6	2800	FM
BS06134MSF	133.5	6	2800	FM
BS06155MSF	154.5	6	2800	FM
BS06240MSF	240	6	2800	FM
BS03021MSF	21	3	2900	FM
BS04036MSF	35.5	4	2900	FM
BS04056TMSF	56	4	2900	FM
BS04060TMSF	60	4	2900	FM
BS04059MSF	58.5	4	2900	FM
BS04110MSF	110	4	2900	FM
BS04114MSF	114	4	2900	FM
BS06127MSF	127	6	2900	FM
BS06147MSF	146.5	6	2900	FM
BS06188MSF	187.5	6	2900	FM
BS06272MSF	271.5	6	2900	FM
BS03021MSF	21	3	3000	FM
BS04030MSF	30	4	3000	FM
BS04036MSF	35.5	4	3000	FM
BS04040MSF	40	4	3000	FM
BS04050MSF	50	4	3000	FM
BS04059MSF	58.5	4	3000	FM
BS04065MSF	65	4	3000	FM
BS04070MSF	70	4	3000	FM
BS04075MSF	75	4	3000	FM
BS04111MSF	111	4	3000	FM
BS06100MSF	100	6	3000	FM
BS06110MSF	110	6	3000	FM
BS06127MSF	127	6	3000	FM
BS06147MSF	146.5	6	3000	FM
BS06160MSF	160	6	3000	FM
BS06175MSF	175	6	3000	FM
BS06191MSF	190.5	6	3000	FM
BS06200MSF	200	6	3000	FM
BS06210MSF	210	6	3000	FM
BS06216MSF	216	6	3000	FM
BS06230MSF	230	6	3000	FM
BS06250MSF	250	6	3000	FM

Black Stallion Specifications



Model Numbers	Rated Power, HP	Number of cylinders	Speed (RPM)	Certification
BS06272MSF	271.5	6	3000	FM
BS06330LSF	330	6	1400	FM
BS06410LSF	410	6	1400	FM
BS012515LSF	515	12	1400	FM
BS06350LSF	350	6	1600	FM
BS06365LSF	365	6	1600	FM
BS06406LSF	406	6	1600	FM
BS012502LSF	502	12	1600	FM
BS012508LSF	508	12	1600	FM
BS012552LSF	552	12	1600	FM
BS012562LSF	562	12	1600	FM
BS06400LSF	400	6	1800	FM
BS06407LSF	407	6	1800	FM
BS012548LSF	548	12	1800	FM
BS012585LSF	585	12	1800	FM

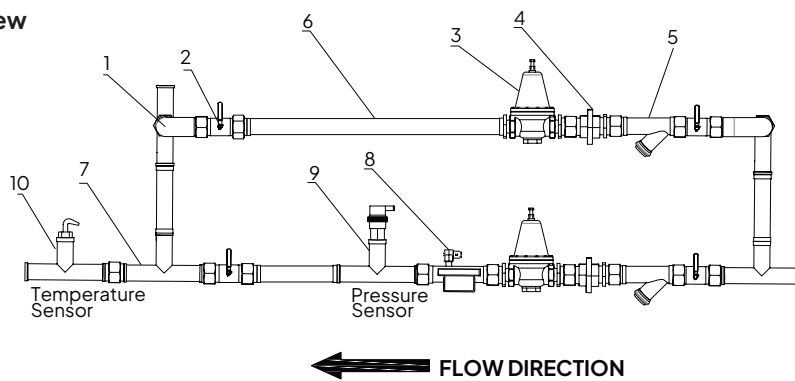
Black Stallion Speed Ranges

Sl. No.	Proposed Model Numbers	Minimum		Maximum		No. of Cylinders	Certification
		Rated Speed (rpm)	Rated HP	Rated Speed (rpm)	Rated HP		
1	BS0320MSR	2800	20	3000	21	3	FM
2	BS0440AMSR	2800	35.5	3000	35.5	4	FM
3	BS0440MSR	2800	57	3000	56	4	UL/FM
4	BS0460MSR	2800	58.5	3000	58.5	4	FM
5	BS0485MSR	2800	75	3000	75	4	FM
6	BS04100MSR	2800	111	3000	110	4	UL
7	BS04100MSR	2800	111	3000	111	4	FM
8	BS06130MSR	2800	127	3000	127	6	FM
9	BS06150MSR	2800	146.5	3000	146.5	6	FM
10	BS06195MSR	2800	133.5	3000	190.5	6	FM
11	BS06250MSR	2800	154.5	3000	216	6	FM
12	BS06300MSR	2800	240	3000	271.5	6	FM
13	BS06400LSR	1400	329	1800	343	6	UL
14	BS06400LSR	1400	330	1800	343	6	FM
15	BS06450LSR	1400	400	1800	410	6	UL
16	BS06450LSR	1400	410	1800	407	6	FM
17	BS12550LSR	1400	455	1800	550	12	UL
18	BS12550LSR	1400	455	1800	548	12	FM
19	BS12650LSR	1400	518	1800	588	12	UL
20	BS12650LSR	1400	515	1800	585	12	FM

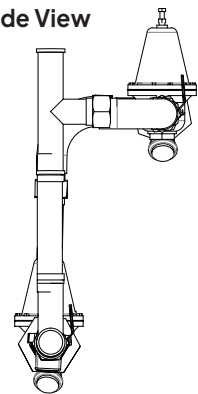
Cooling Loop

Part List

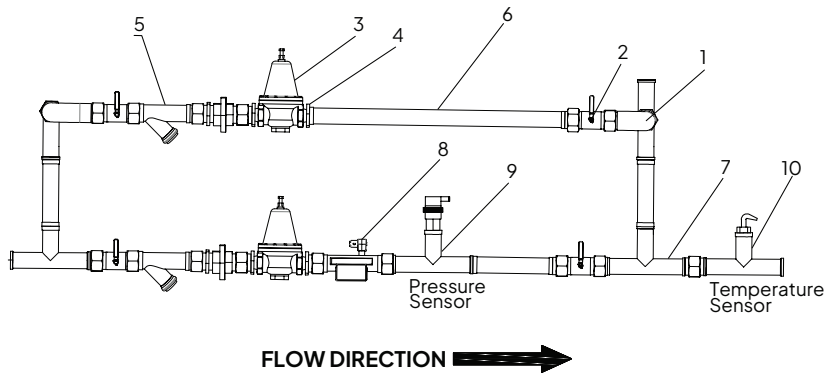
Front View



Side View



Side View



Engine HP	15	20	30	57	71	118	128	186	209	259
Cooling Loop Size	1/2" Cooling Loop				1	1/2" Cooling Loop				
Solenoid Valve	1/2" NPT, 12 V				12 V	1/2" NPT, 24 V				

No.	Description	1/2" cooling Loop	1" cooling Loop	Qty.
1	Elbow - 90	1/2" NPT	1" NPT	3 nos.
2	Ball Valve - UL Listed	1/2" NPT	1" NPT	4 nos.
3	Pressure Regulating Valve	3/4" NPT	1 1/4" NPT	2 nos.
4	Bush Reducer	3/4" x 1/2" NPT	1 1/4" x 1" NPT	4 nos.
5	Y-Strainer	1/2" NPT	1" NPT	4 nos.
6	G.I. Pipe	SCH. 40	SCH. 40	3 mtr.
7	Tee	1/2" NPT	1" NPT	3 nos.
8	Solenoid Valve	1/2" NPT, 12V	1" NPT, 24V	1 nos.
9	Pressure Sensor	FM Cooling loop requirements		1 nos.
10	Temperature Sensor	FM Cooling loop requirements		1 nos.

Cooling Loop Features

- ❖ Complying with UL /FM standards.
- ❖ Manufactured as per the guidelines of NFPA 20.
- ❖ Hydrostatically tested to assure optimum performance
- ❖ All components are checked for pipe strain and leakage prior to initial start-up.
- ❖ Black stallion cooling loop incorporates all components required by NFPA and is sized and selected to provide the required volume of water at the proper pressure for the heat exchanger of the engine models.
- ❖ Flushing type strainer is used to protect the regulator valve, solenoid valve and the tubes of the heat exchanger from foreign material.
- ❖ The regulator valves are used to control the volume and pressure of the cooling water.
- ❖ The pressure gauges indicates the back pressure on the cooling water discharge. The recommended back pressure to assure adequate flow is less than 20psi and should not exceed the allowable pressure.
- ❖ Cooling Loop is available in sizes of 1/2", 3/4", 1", 1 1/4", 1 1/2" and 2" as shown in the table below, selected as per the Engine Size.
- ❖ SS and GI Cooling loops are available.
- ❖ Option of diaphragm is available instead of solenoid valve.
- ❖ Black stallion standard cooling loop is available in Red Epoxy Coated Finish. Other finishes are available upon request





Since 1983, SFFECO has been a trusted name in fire protection, known for innovation and quality worldwide.

With state-of-the-art facilities in Riyadh and Dubai, we deliver a complete range of firefighting solutions that meet international standards.

Our innovative approach and comprehensive product portfolio make SFFECO the one-stop destination for reliable fire protection products and services.

شركة المصنع السعودي لأجهزة الإطفاء SAUDI FACTORY FOR FIRE EQUIPMENT Co.

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