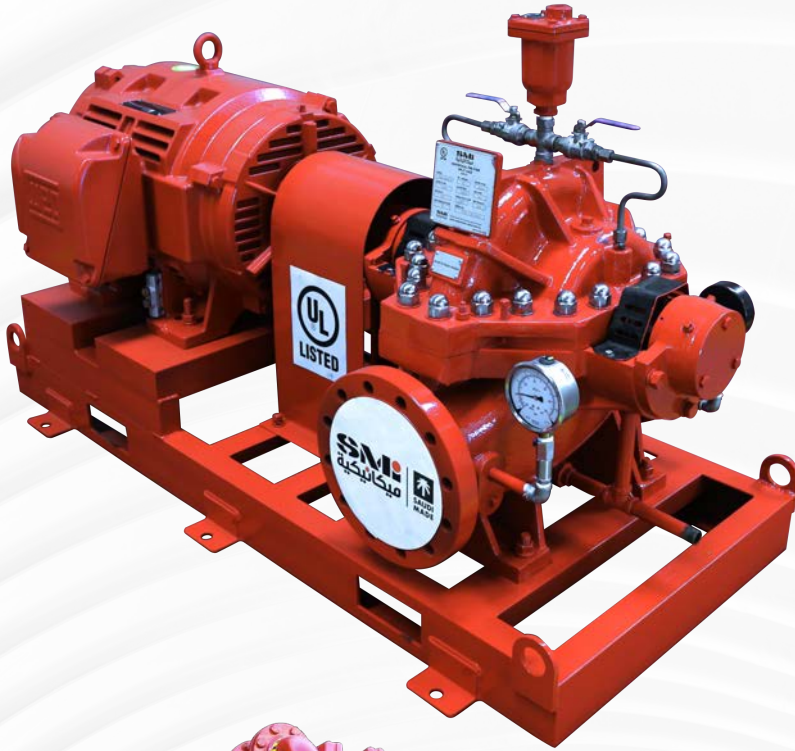


SMi
ميكانيكية



40th
ANNIVERSARY
أربعون عاماً من النجاحات
Forty years of success

SMi FIRE PUMPS





الشركة السعودية للصناعات الميكانيكية
SAUDI MECHANICAL INDUSTRIES CO.



VISION

To be a leading local manufacturer and reliable partner providing engineered products and solutions to our customers.

MISSION

Supporting the socio-economic development of the Kingdom.

- Enhance local content through technology transfer and human capital development.
- Contribute to the development of Oil & Gas, Water and upcoming industrial initiatives.

Manufacturer of engineered metal products and provider of solutions to our customers.

- Exceed customer expectations through partnerships, high quality and timely delivery.
- Focus on operational excellence in the manufacturing of engineered products.

Involved proactively with our key stakeholders.

- Care for our employees, community and the environment.
- Maximize shareholder value through innovation and effective resource utilization.

VALUES

Commitment

Be reliable and add value to our customers.

Empowerment

Trust our employees to make the right decisions.

Integrity

Show transparency in everything we do.

Excellence

Operate professionally, safely and effectively.

Collaboration

Deliver through cooperation and team work.



SMi is a world-class precision manufacturing company, offering a comprehensive service with emphasis on total customer satisfaction. With a dedicated and experienced team of skilled personnel, we provide an efficient service to achieve the required specification and quality set by our customers.

A Firefighting system is among the most important components of building services, as its aim to protect life and property.

Water based Firefighting techniques and equipment are the most common Firefighting systems which consists of large tanks, pumping system network of pipes and hydrants or sprinklers. Since pumps are the most critical equipment in a Firefighting system, several approvals have to be gained to certify any pump for fire services. The most commonly used approvals are UL and FM.

SMi Fire pumps are listed by Underwriters Laboratories (UL) and approved by Factory Mutual (FM). The range includes vertical turbine, end suction and split casing pump and complete industrial package fire pump sets in both 50 and 60 Hz.

SMi Fire pumps utilize the latest technologies in hydraulic design with almost 35 years of experience in the pumps manufacturing and applications.

SMi is an ISO 9001/2015 certificated company and complies with the requirements of the international specifications and standards like AWWA, Hydraulic Institute, NFPA20, UL and FM.

F-Series SMI Vertical Fire Pumps

SMi is listed by Underwriters Laboratories (UL) and approved by Factory Mutual (FM) for manufacturing vertical fire pump with flow range from 100 US GPM up to 2500 US GPM and a pressure more than 300 PSI.



Design Features:

F-Series Discharge Heads

Cast iron head, up to 350 psi discharge pressure. With inside profile for smooth discharge and less frictional losses. Steel guards for protection and easy maintenance.

Column Assembly

Threaded column assembly, steel ASTM A-53 with ductile iron couplings. 416 SS line shafts and couplings, bronze bearing retainer with bearings to maintain alignment and provide adequate shaft support.

Bowl Assembly

The bowl castings are manufactured of robust cast iron in close grained structure iron according to ASTM A48 CL30 with minimum 30,000 PSI tensile strength, and veined to guide water flow from one impeller to the next with maximum efficiency. Bowls are enameled to enhance pump performance and efficiency.

The enclosed impellers are cast from high-grade bronze with flow passages hand finished to a smooth surface for minimum efficiency losses. All impellers are statically and dynamically balanced to avoid vibration and secured to the pump shaft with tapered lock collet.

The pump shaft is made from high-grade tensile strength stainless steel according to ASTM A276-T416 of diameter sufficient to prevent distortion.

Bowl assemblies have varied specified components as heavy-duty sand collars, sand lugs, bowl bearings in bronze and rubber. To ensure long life under severe conditions, both rubber and bronze bearings (dual bowl bearings system) are used.



PERFORMANCE RANGE

RATED CAPACITY - 100 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F6MC	86-141	5-7	NA	NA	2900	6

RATED CAPACITY - 300 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F8LC	49 - 199	3-7	NA	NA	2900	8
2	F8HC	107 - 203	9-13	104-202	9-13	1750	8

RATED CAPACITY - 500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F8HC	88-258	3-6	NA	NA	2900	8
2	F10HC	122-207	6-9	115-210	6-9	1750	10
3	F11HC	108-355	4-11	NA	NA	1750	11

RATED CAPACITY - 750 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F11HC	99-335	4-11	105-214	4-7	1750	11
2	F12HC	110-376	4-11	NA	NA	1750	12
3	FH14XHC	71-95	2	NA	NA	1750	14
		113-238	3-5				

RATED CAPACITY - 1000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F12HC	101-346	4-11	100-220	4-7	1750	12
2	FH14XHC	69-93	2	NA	NA	1750	14
		109-234	3-5				

PERFORMANCE RANGE

RATED CAPACITY - 1250 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F14HC	98-127	2	NA	NA	1925	14
		147-190	3				
2	FH14XHC	66-91	2	NA	NA	1750	14
		106-229	3-5				
3	F14HC	81-103	2	82-307	2-6	1750	14
		122-308	3-6				

RATED CAPACITY - 1500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	F14XXHC	96-127	2	NA	NA	1925	14
		144-190	3				
2	FH14XHC	64-89	2	NA	NA	1750	14
		102-224	3-5				
3	F14XXHC	76-102	2	75-257	2-5	1750	14
		114-256	3-5				

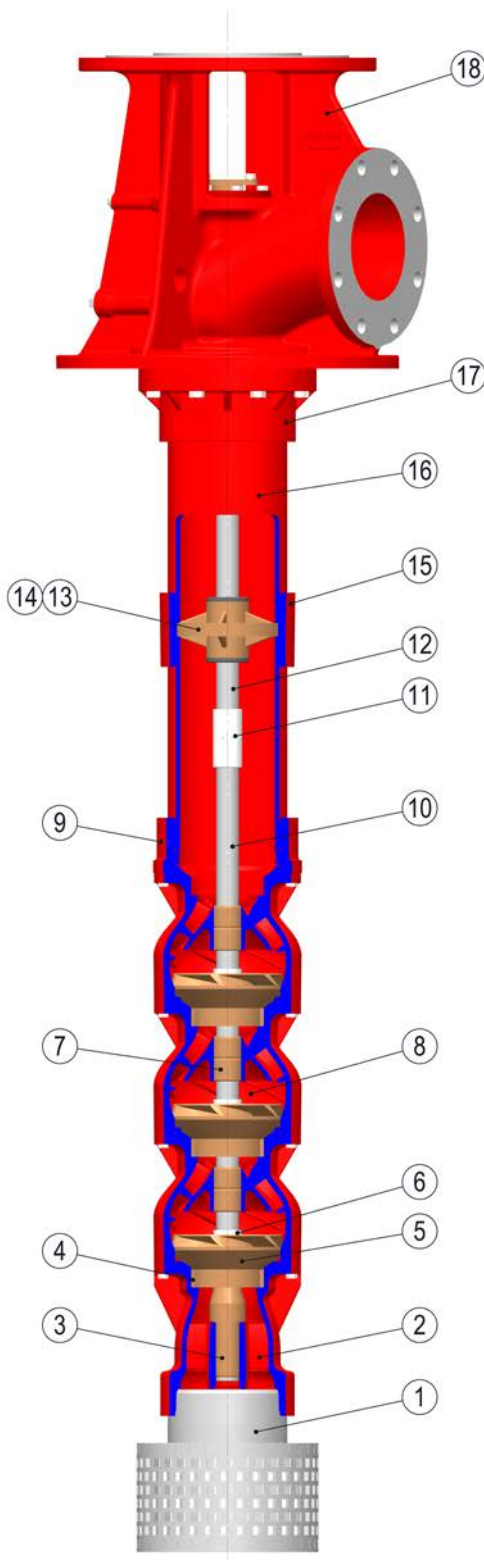
RATED CAPACITY - 2000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	FH14XHC	60-83	2	NA	NA	1750	14
		94-207	3-5				

RATED CAPACITY - 2500 US GPM

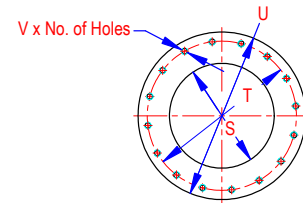
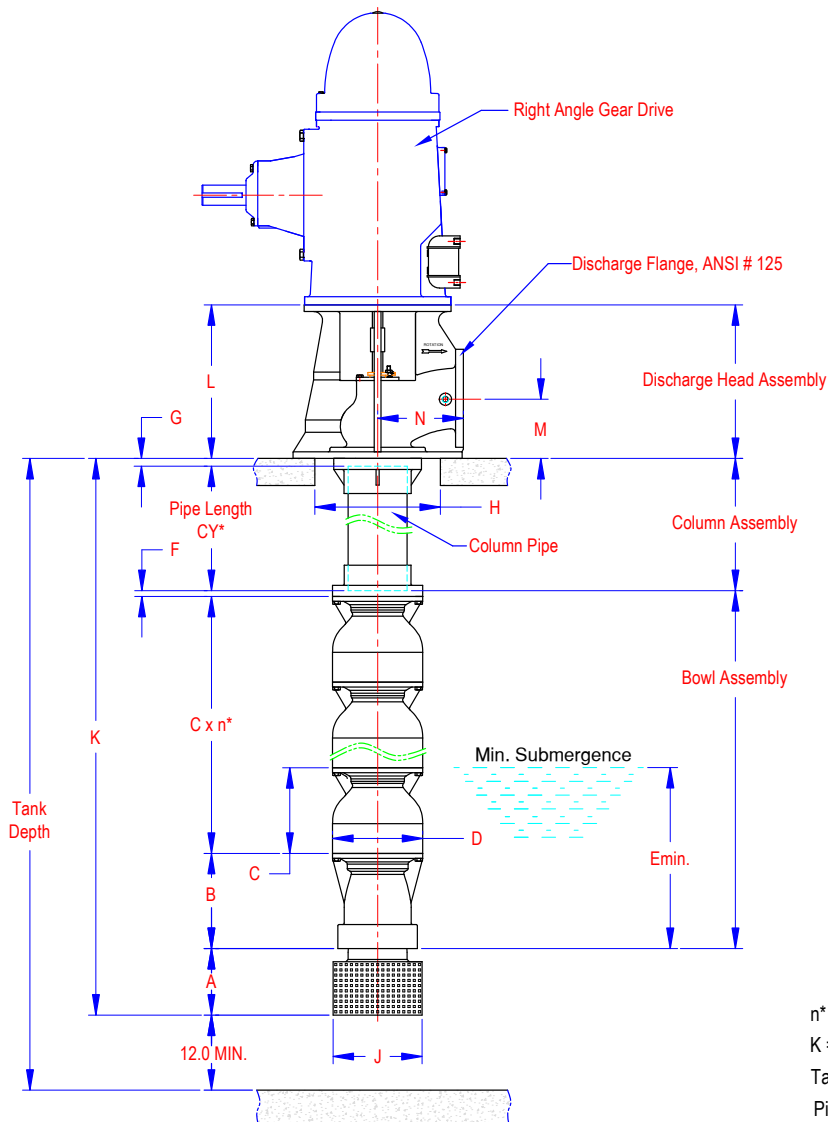
Sl. No.	Pump Model	UL Listed Pressure (psi)	UL Listed Stages	FM Approved Pressure (psi)	FM Approved Stage(s)	Rated Speed (RPM)	Discharge Dia. (inch)
1	FH14XHC	60-79	2	NA	NA	1750	14
		92-197	3-5				

MATERIAL OF CONSTRUCTION

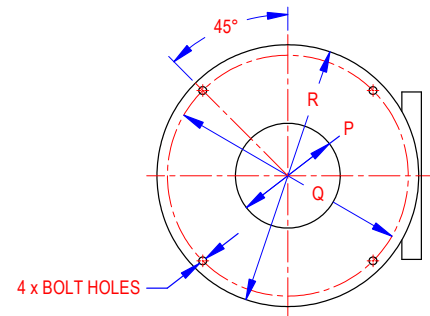


No.	Part Name	Material
1	Strainer	Stainless Steel
2	Suction Case	Cast Iron
3	Suction Bearing	Bronze
4	Wear Ring	Bronze
5	Impeller	Bronze
6	Collet	Stainless Steel
7	Bowl Bearing	Bronze
8	Intermediate Bowl	Cast Iron Enamelled
9	Column Adapter	Ductile Iron
10	Bowl Shaft	Stainless Steel
11	Shaft Coupling	Stainless Steel
12	Line Shaft	Stainless Steel
13	Bearing Retainer	Bronze
14	Rubber insert	NBR
15	Pipe Coupling	Ductile Iron
16	Column Pipe	Steel
17	Top Column Flange	Ductile Iron
18	F260 Discharge Head	Cast iron
	Fi-Pro Discharge Head	Ductile Iron

Overall Dimensions (F260 Heads)



DISCHARGE FLANGE DETAIL



DISCHARGE HEAD BASE & FOUNDATION HOLES DETAIL

n* : Number of Stages

K = A+B+Cxn+F+G+Pipe Length

Tank Depth : As per Order

Pipe Length (CY) : According to no. of stages & Tank Depth

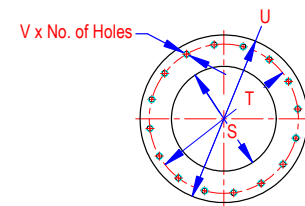
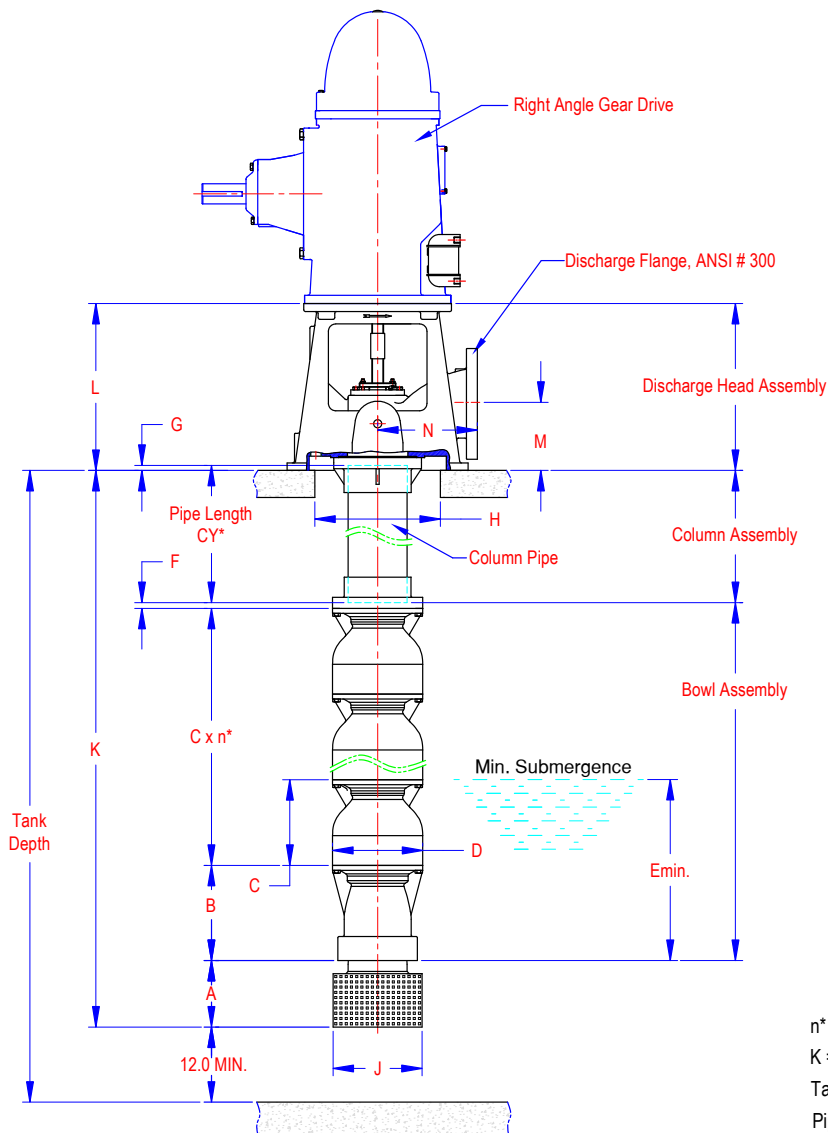
TABLE OF DIMENSIONS

Pump Model	A	B	C x n*	Ø D	Emin.	CY*	F	G	Ø H	Ø J	Suitable Dis. Head	
F6MC	7.21	7.06	4.00 x n	7.00	12.00	40	1.12	0.25	9.00	8.00	F4-260	
F8LC	7.48	8.34	6.50 x n	7.62	14.50	40	0.94	2.00	12.00	10.00	F6-260	
F8HC	7.48	8.38	7.25 x n	8.13	14.60	40	1.12	2.00	12.00	10.00		
F10HC	8.20	10.69	9.625 x n	10.13	10.50	40	1.43	2.00	12.00	10.00		
F11HC	9.37	10.00	9.875 x n	11.00	24.00	40	1.56	2.00	17.00	12.00	F8-260	
F12HC	9.37	11.38	10.50 x n	11.63	26.00	40	1.41	2.00	17.00	12.00		
F14HC	11.20	10.00	13.25 x n	14.13	22.50	40	0.56	0.30	20.00	18.00	F10-260	
F14XXHC	11.20	10.00	13.25 x n	14.13	22.50	40	0.56	0.30	20.00	18.00		
FH14XHC	11.20	12.25	14.13 x n	14.13	25.00	40	0.56	0.30	20.00	18.00		
Discharge Head Model	L	M	N	Ø P	Ø Q	Ø R	Bolt Holes Diameter	Ø S	Ø T	Ø U	V	No. of Holes
F4-260	15.75	5.38	8.50	5.50	14.25	16.00	0.63	4.00	7.50	9.00	0.75 DRILL	8
F6-260	17.25	6.75	9.63	7.38	17.00	19.00	0.63	6.00	9.50	11.00	0.88 DRILL	8
F8-260	19.25	6.75	12.50	8.13	23.00	25.00	0.63	8.00	11.75	13.50	3/4-10UNC	8
F10-260	21.25	8.63	12.69	11.25	23.00	25.00	0.63	10.00	14.25	16.00	7/8-9UNC	12

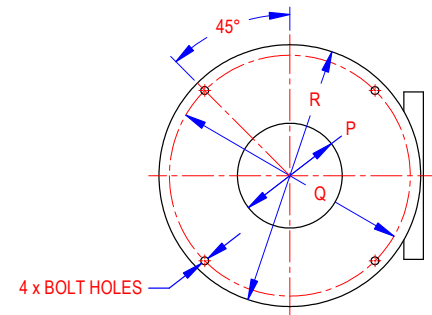
All dimensions are in inch.

CY* - Pipe Length & quantity subject to change with respect to tank depth.

Overall Dimensions (Fi-Pro Heads)



DISCHARGE FLANGE DETAIL



DISCHARGE HEAD BASE & FOUNDATION HOLES DETAIL

n* : Number of Stages

K = A+B+Cxn+F+(Pipe Length-G)

Tank Depth : As per Order

Pipe Length (CY) : According to no. of stages & Tank Depth

TABLE OF DIMENSIONS

Pump Model	A	B	C x n*	Ø D	Emin.	CY*	F	G	Ø H	Ø J	Suitable DH	
F8LC	7.48	8.34	6.50 x n	7.62	14.50	40	0.94	0.25	12.00	10.00	Fi-PRO 6"	
F8HC	7.48	8.38	7.25 x n	8.13	14.60	40	1.12	0.25	12.00	10.00		
F10HC	8.20	10.69	9.625 x n	10.13	10.50	40	1.43	0.25	12.00	10.00		
F11HC	9.37	10.00	9.875 x n	11.00	24.00	40	1.56	0.25	17.00	12.00	Fi-PRO 8"	
F12HC	9.37	11.38	10.50 x n	11.63	26.00	40	1.41	0.25	17.00	12.00		
F14HC	11.20	10.00	13.25 x n	14.13	22.50	40	0.56	1.94	20.00	18.00	Fi-PRO 10"	
F14XXHC	11.20	10.00	13.25 x n	14.13	22.50	40	0.56	1.94	20.00	18.00		
FH14XHC	11.20	12.25	14.13 x n	14.13	25.00	40	0.56	1.94	20.00	18.00		
Discharge Head Model	L	M	N	Ø P	Ø Q	Bolt Holes Diameter	Ø R	Ø S	Ø T	Ø U	V	No. of Holes
Fi-PRO 6"	21.50	9.00	13.00	6.00	20.50	0.88	22.00	6.00	10.63	12.50	0.88	12
Fi-PRO 8"	22.50	9.00	13.50	9.12	23.00	0.88	24.50	8.00	13.00	15.00	1.00	12
Fi-PRO 10"	24.50	10.50	15.00	11.00	25.00	0.88	26.50	10.00	15.25	17.50	1.13	16

All dimensions are in inch.

CY* - Pipe Length & quantity subject to change with respect to tank depth.

F-Series **SMi** End Suction Fire Pumps

SMi is listed by Underwriters Laboratories (UL) for manufacturing end suction pump with flow range from 100 US GPM up to 750 US GPM. and a pressure more than 200 PSI.

Design Features:

Pump Casing

The casing is back pull-out design to allow pulling out the internal components (rotating parts) for inspection and/or replacement without disturbing the pipe work. The volute is made of fine-grain cast iron as per ASTM A48 specification equipped with integrated support feet.

Impeller

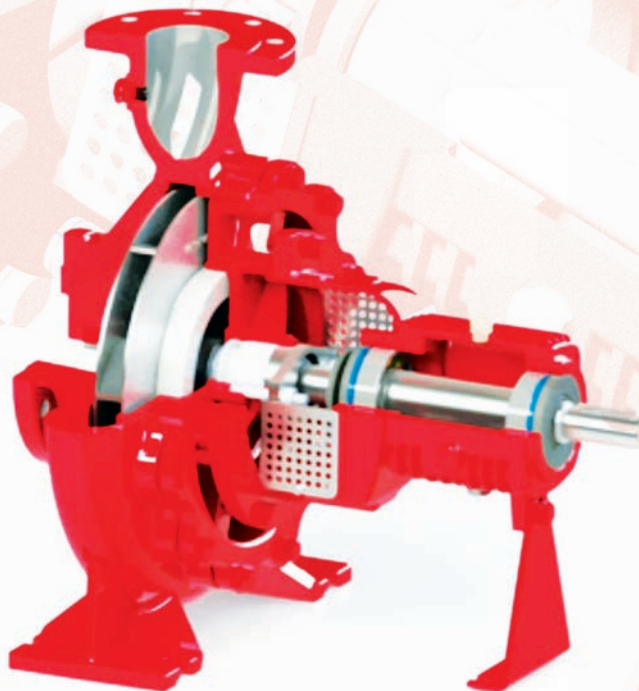
Enclosed, single suction type cast in one piece. The impeller is dynamically balanced to ISO1940 and hydraulically balanced through the thrust holes on impeller suction. The impeller is keyed to shaft and held in lateral position between the sleeve and the nut.

Wearing Rings

The pump is fitted with renewable type casing and impeller wearing rings to maintain proper running clearance and to minimize the leakage between the suction and discharge chambers.

Shaft Seal

TWINNER SYSTEM® sealing is made of soft-packed stuffing box with graphite impregnated rings. The gland is made of two halves that greatly facilitates the replacing operation of the soft packing without the need to disassemble any component. The stuffing box is fitted with lantern rings to improve the cooling and lubrication of the shaft.



PERFORMANCE RANGE

RATED CAPACITY - 100 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN1E40-200	65-94	2900	65 X 40	1
2	SN1E40-200	96-140	3550	65 X 40	1
3	SN2E40-250	93-149	2900	65 X 40	1
4	SN2E40-250	122-218	3550	65 X 40	1

RATED CAPACITY - 150 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN1E40-200	96-135	3550	65 X 40	1
2	SN1E40-200	59-89	2900	65 X 40	1
3	SN2E40-250	118-213	3550	65 X 40	1
4	SN2E40-250	89-143	2900	65 X 40	1
5	SN1E65-200	112-151	3550	80 X 65	1

RATED CAPACITY - 200 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN1E65-200	112 - 150	3550	80 X 65	1
2	SN3E65-250	139 - 212	3550	80 X 65	1

RATED CAPACITY - 250 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN3E65-250	92 - 140	2900	80 X 65	1
2	SN3E80-250	124 - 171	3550	100 X 80	1
3	SN3E65-250	139 - 212	3550	80 X 65	1
4	SN1E65-200	112-150	3550	80 X 65	1

RATED CAPACITY - 300 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN1E65-200	111 - 148	3550	80 X 65	1
2	SN3E80-250	125 - 171	3550	100 X 80	1
3	SN3E65-250	139 - 210	3550	80 X 65	1

PERFORMANCE RANGE

RATED CAPACITY - 400 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN3E65-250	89 - 134	2900	80 x 65	1
2	SN3E80-200	77 - 148	3550	100 x 80	1
3	SN1E65-200	109 - 143	3550	80 x 65	1
4	SN3E80-250	125 - 172	3550	100 x 80	1
5	SN3E65-250	136 - 206	3550	80 x 65	1

RATED CAPACITY - 450 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN3E80-200	76 - 147	3550	100 x 80	1
2	SN3E80-250	125-172	3550	100 x 80	1

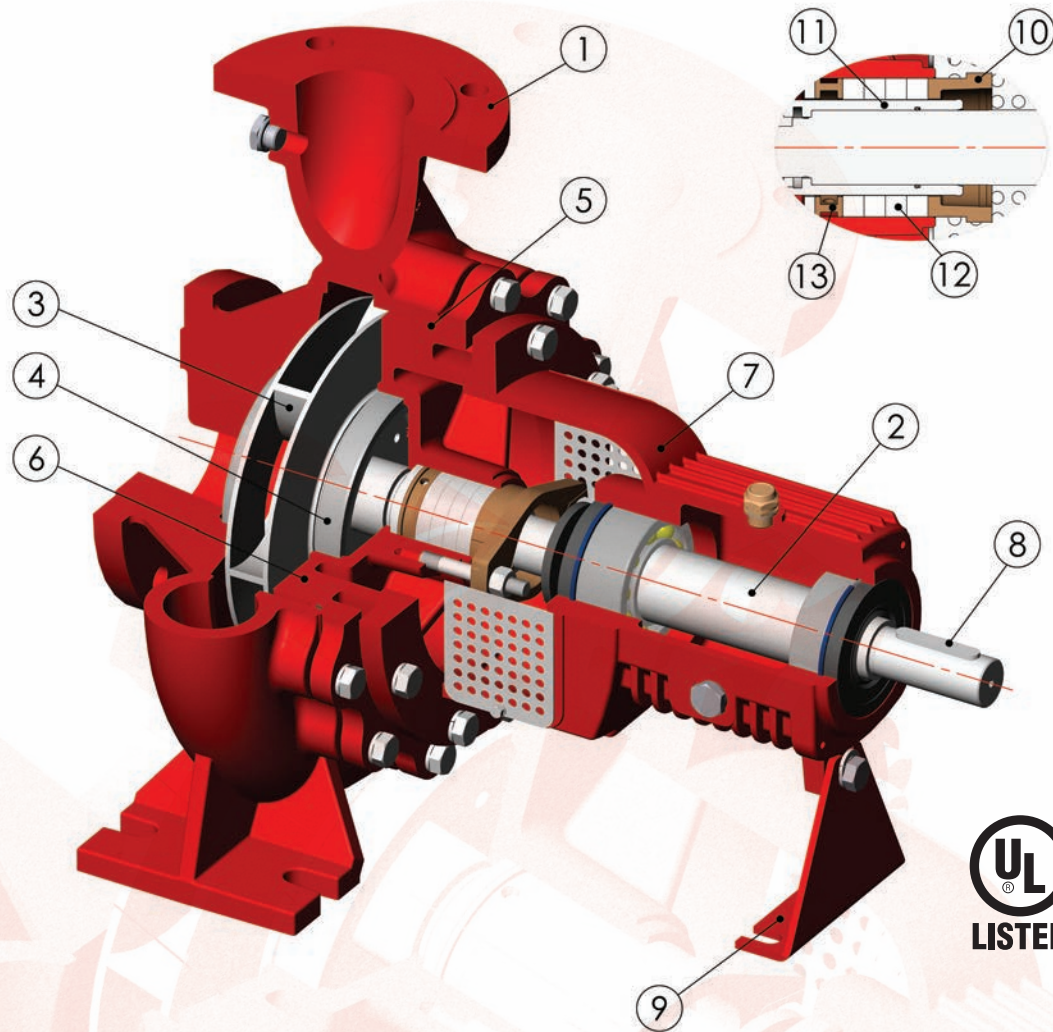
RATED CAPACITY - 500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN3E65-315	165 - 212	2900	80 x 65	1
2	SN3E80-200	75 - 147	3550	100 x 80	1
3	SN3E80-250	83 - 146	2900	100 x 80	1
4	SN3E80-250	126 - 173	3550	100 x 80	1

RATED CAPACITY - 750 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (mm)	Stage(s)
1	SN3E80-250	121 - 141	2900	100 x 80	1
2	SN3E80-200	107 - 142	3550	100 x 80	1
3	SN3E80-250	120 - 170	3550	100 x 80	1

MATERIAL OF CONSTRUCTION



No.	Part Name	Material
1	Casing	Cast iron
2	Shaft	Stainless steel
3	Impeller	Stainless steel
4	Wear Ring	Bronze
5	"O" Ring	NBR
6	Back cover	Cast iron
7	Bearing Housing	Cast Iron / Ductile Iron
8	Coupling Key	Stainless steel
9	Foot Support	Fab Steel
10	Gland	Bronze
11	Shaft Sleeve	Stainless steel
12	Gland Packing	Synthetic Fibers
13	Lantern ring	Bronze

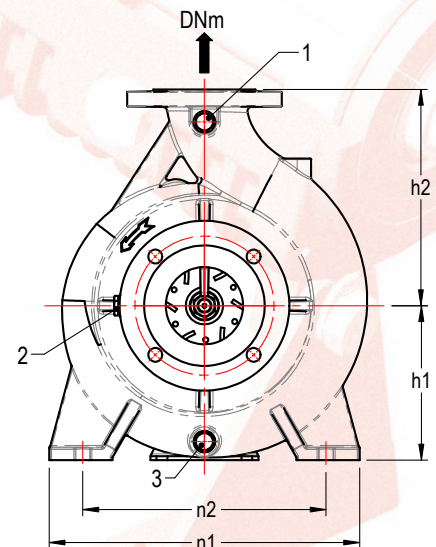
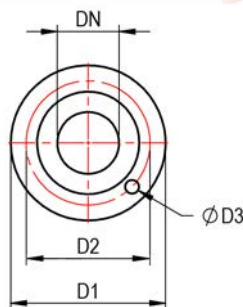
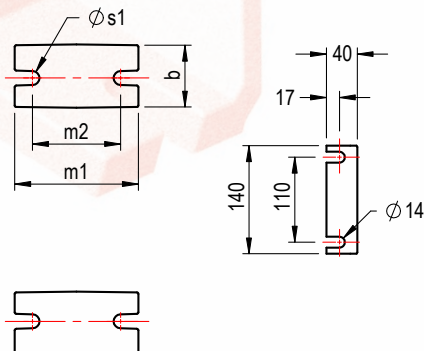
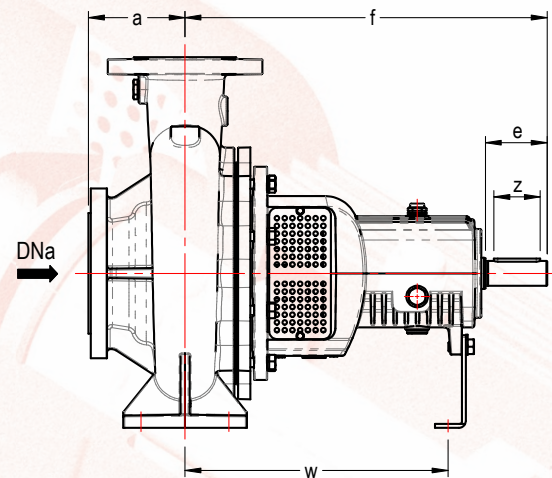
OVERALL DIMENSIONS

PUMP	DNa	DNm	a	b	f	h1	h2	m1	m2	n1	n2	s1	w	z
SN1E40 - 200	65	40	100	50	360	160	180	100	70	265	212	14	260	35
SN2E40 - 250	65	40	100	65	360	180	225	125	95	320	250	14	260	35
SN3E65 - 250	80	65	100	80	470	200	250	160	120	360	280	18	340	60
SN1E65 - 200	80	65	100	65	360	180	225	125	95	320	250	14	260	35
SN3E65 - 315	80	65	125	80	470	225	280	160	120	400	315	18	340	60
SN3E80 - 200	100	80	125	65	470	180	250	125	95	345	280	14	340	60
SN3E80 - 250	100	80	125	80	470	200	280	160	120	400	315	18	340	60

PUMP	Shaft				Connections			Weight (kg)
	d	e	t	u	1	2	3	
SN1E40 - 200	24	50	8	27	G1/4"	G1/4"	G1/2"	45
SN1E40 - 250	24	50	8	27	G1/4"	G1/4"	G1/2"	61
SN3E65 - 250	32	80	10	35	G3/8"	G3/8"	G1/2"	83
SN1E65 - 200	24	50	8	27	G1/4"	G1/4"	G1/2"	51
SN3E65 - 315	32	80	10	35	G1/2"	G3/8"	G1/2"	100
SN3E80 - 200	32	80	10	35	G1/4"	G1/4"	G1/2"	72
SN3E80 - 250	32	80	10	35	G3/8"	G3/8"	G1/2"	89

FLANGE DIMENSIONS

DN	PN	D1 [mm]	D2 [mm]	Holes	D3 [mm]
32	16	140	100	4	18
40	16	150	110	4	18
50	16	165	125	4	18
65	16	185	145	4	18
80	16	200	160	8	18
100	16	220	180	8	18
125	16	250	210	8	18
150	16	285	240	8	22
200	16	340	295	12	22



* Dimensions are in mm.

F-Series SMI Split-Casing Fire Pump

SMi is listed by Underwriters Laboratories (UL) for manufacturing horizontal single stage, double suction, between bearing centrifugal pump with flow ranges from 300 US GPM up to 7500 US GPM and a pressure more than 400 PSI.

Design Features:

Pump Casing

The casing is axially split design for easier assembly and disassembly. The design permits the inspection and replacement of internal components without having to remove the casing from the piping. The casing is made of fine-grain ductile iron equipped with integrated support feet.

Impeller

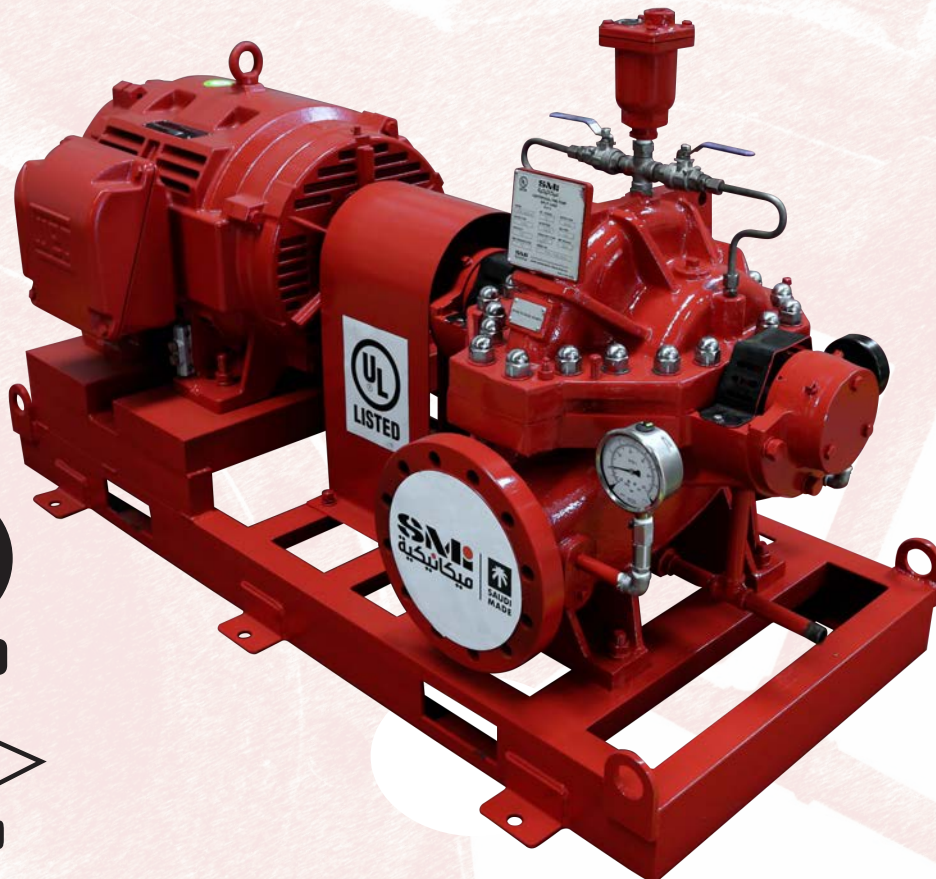
Enclosed, double suction type cast in one piece. The impeller is dynamically balanced to ISO1940 and hydraulically balanced through the double suction. The impeller is positively locked to the shaft by key.

Wearing Rings

The pump is fitted with renewable type front and rear wearing rings to maintain proper running clearance between impeller's hubs.

Shaft Seal

Soft-packed stuffing box. Cooling lines are provided for additional cooling of the gland packing.



PERFORMANCE RANGE

RATED CAPACITY - 300 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 5x3x10	84-136	* Under Process	2950	5x3	1
2	FSC 5x3x10	123-197	* Under Process	3550	5x3	1
3	FSC 5x4x12	126-200	* Under Process	2980	5x4	1
4	FSC 5x4x12	181-282	* Under Process	3550	5x4	1
5	SSCF100-300	98-124	-	2350	5x4	1
6	SSCF100-300	120-153	-	2600	5x4	1
7	SSCF80-250	55-87	-	2350	5x3	1
8	SSCF80-250	68-107	-	2500	5x3	1

RATED CAPACITY - 400 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 5x3x10	80-130	* Under Process	2950	5x3	1
2	FSC 5x3x10	120-196	* Under Process	3550	5x3	1
3	FSC 5x4x12	123-195	* Under Process	2980	5x4	1
4	FSC 5x4x12	179-277	* Under Process	3550	5x4	1
5	SSCF100-300	94-119	-	2350	5x4	1
6	SSCF100-300	117-1499	-	2600	5x4	1
7	SSCF80-250	51-84	-	2350	5x3	1
8	SSCF80-250	64-105	-	2600	5x3	1

RATED CAPACITY - 450 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 5x3x10	78-130	* Under Process	2950	5x3	1
2	FSC 5x3x10	117-194	* Under Process	3550	5x3	1
3	FSC 5x4x12	121-192	* Under Process	2980	5x4	1
4	FSC 5x4x12	178-274	* Under Process	3550	5x4	1
5	SSCF100-300	93-117	-	2350	5x4	1
6	SSCF100-300	116-146	-	2600	5x4	1
7	SSCF80-250	49-83	-	2350	5x3	1
8	SSCF80-250	63-103	-	2600	5x3	1

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 500 US GPM						
Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 5x3x10	84-136	* Under Process	2950	5x3	1
2	FSC 5x3x10	123-197	* Under Process	3550	5x3	1
3	FSC 5x4x12	126-200	* Under Process	2980	5x4	1
4	FSC 5x4x12	181-282	* Under Process	3550	5x4	1
5	FSC 6x5x12	139-205	* Under Process	2980	6x5	1
6	FSC 6x5x12	197-293	* Under Process	3550	6x5	1
7	FSC 6x5x10	118-164	* Under Process	2980	6x5	1
8	FSC 6x5x10	140-229	* Under Process	3550	6x5	1
9	SSCF100-300	90-114	-	2350	5x4	1
10	SSCF100-300	113-143	-	2600	5x4	1
11	SSCF125-250	76-101	-	2350	6x5	1
12	SSCF125-250	92-124	-	2600	6x5	1
13	SSCF125-250S	130-185	-	3550	6x5	1
14	SSCF125-400	208-283	-	2980	10x8	1
15	SSCF-80-350	184-295	-	2950	5x3	1
16	SSCF125-310	111-128	-	2350	6x5	1
17	SSCF125-310	136-158	-	2600	6x5	1
18	SSCF-80-250	47-80	-	2350	5x3	1
19	SSCF-80-250	60-101	-	2600	5x3	1
20	SSCF-80-350	112-184	-	2350	5x3	1
21	SSCF-80-350	140-227	-	2600	5x3	1
22	SSCF-80-350	269-308	-	3550	5x3	1
23	SSCF-80-350G	172-257	-	2980	5x3	1
24	SSCF-100-330x2	350-483	-	3550	5x4	2
25	SSCF-100-330x2	323-405	-	2950	5x4	2

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 750 US GPM						
Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 6x5x10	115-162	* Under Process	2980	6x5	1
2	FSC 6x5x10	139-230	* Under Process	3550	6x5	1
3	SSCF100-300	104-163	-	2980	5x4	1
4	FSC 6x5x12	136-201	* Under Process	2980	6x5	1
5	FSC 6x5x12	197-292	* Under Process	3550	6x5	1
6	SSCF100-300	157-247	-	3550	5x4	1
7	SSCF-80-250	108-120	-	2950	5x3	1
8	SSCF-80-250	105-185	-	3550	5x3	1
9	SSCF125-250	71-97	-	2350	6x5	1
10	SSCF125-250	89-121	-	2600	6x5	1
11	SSCF-80-350G	169-251	-	2980	5x3	1
12	SSCF125-400	203-276	-	2980	10x8	1
13	SSCF100-320	138-198	-	2980	6x4	1
14	SSCF-80-350	167-286	-	2950	5x3	1
15	SSCF125-310	105-123	-	2350	6x5	1
16	SSCF125-310	130-153	-	2600	6x5	1
17	SSCF-150-330	40-77	-	1760	8x6	1
18	SSCF-150-420	272-367	-	2950	8x6	1
19	SSCF-80-350	131-172	-	2350	5x3	1
20	SSCF-80-350	145-217	-	2600	5x3	1
21	SSCF-80-350	254-292	-	3550	5x3	1
22	SSCF-100-330x2	280-368	-	2950	5x4	2
23	SSCF-100-330x2	312-446	-	3550	5x4	2
24	SSCF-150-450x2	263-361	-	1800	8x6	2

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 1000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 6x5x10	130-226	* Under Process	3550	6x5	1
2	FSC 6x5x10	104-155	* Under Process	2980	6x5	1
3	FSC 6x5x12	191-283	* Under Process	3550	6x5	1
4	FSC 6x5x12	128-191	* Under Process	2980	6x5	1
5	FSC 8x6x12	169-282	* Under Process	3550	8x6	1
6	SSCF100-320	130-191	* Under Process	2980	6x4	1
7	SSCF150-310	119-237	-	2980	8x6	1
8	SSCF125-400	191-264	-	2980	10x8	1
9	SSCF150-310	58-147	-	2350	8x6	1
10	SSCF150-310	73-181	-	2600	8x6	1
11	SSCF-80-350	220-270	-	2950	5x3	1
12	SSCF-150-420	260-359	-	2950	8x6	1
13	SSCF150-310	119-237	-	2980	8x6	1
14	SSCF150-310	175-286	-	3550	8x6	1
15	SSCF-150-330	40-74	-	1760	8x6	1
16	SSCF-150-450x2	253-354	-	1800	8x6	2

RATED CAPACITY - 1250 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 8x6x12	117-234	* Under Process	2980	8x6	1
2	FSC 8x6x12	164-278	* Under Process	3550	8x6	1
3	FSC 8x6x10	130-220	* Under Process	3550	8x6	1
4	FSC 8x6x10	85-146	* Under Process	2950	8x6	1
5	SSCF125-300	116-190	-	2980	8x5	1
6	SSCF125-380	118-177	-	2200	8x6	1
7	SSCF-150-420	241-346	-	2950	8x6	1
8	SSCF150-310	76-141	-	2350	8x6	1
9	SSCF150-310	96-177	-	2600	8x6	1
10	SSCF-150-450x2	236-342	-	1800	8x6	2
11	SSCF-150-330	95-167	-	2350	8x6	1
12	SSCF-150-330	71-131	-	2600	8x6	1

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 1500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 8x6x12	110-225	* Under Process	2980	8x6	1
2	FSC 8x6x12	156-272	* Under Process	3550	8x6	1
3	FSC 8x6x10	122-211	* Under Process	3550	8x6	1
4	FSC 8x6x19	121-168	* Under Process	1760	8x6	1
5	FSC 8x6x13	121-201	* Under Process	2980	8x6	1
6	SSCF150-640	124-220	-	1480	8x6	1
7	SSCF150-460	115-181	-	1800	8x6	1
8	SSCF-150-400	121-181	-	2100	8x6	1
9	SSCF150-180	120-171	-	1760	8x6	1
10	SSCF-150-330	71-131	-	2350	8x6	1
11	SSCF-150-330	90-163	-	2600	8x6	1
12	SSCF-150-450x2	324	-	1800	8x6	2

RATED CAPACITY - 2000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF150-640	117-216	-	1480	8x6	1
2	SSCF150-460	118-175	-	1800	8x6	1
3	SSCF-200-350	123-239	-	2980	10x8	1
4	SSCF200-500S	118-186	-	1800	10x8	1
5	SSCF200-500S	149-234	-	2000	10x8	1
6	FSC 8x6x19	111-161	* Under Process	1760	8x6	1
7	FSC 8x6x13	109-189	* Under Process	2980	8x6	1
8	SSCF150-400	111-174	-	2100	8x6	1
9	FSC 10x8x20S	114-178	-	1760	10x8	1
10	FSC 10x8x20S	150-233	-	2000	10x8	1

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 2500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	FSC 10x8x20S	105-169	* Under Process	1760	10x8	1
2	SSCF150-640	107-206	-	1480	8x6	1
3	SSCF200-430	138	-	1800	10x8	1
4	SSCF-200-430	125-190	-	2100	10x8	1
5	SSCF200-500S	110-176	-	1800	10x8	1
6	SSCF200-500S	141-225	-	2000	10x8	1
7	SSCF-150-480	96-155	-	1760	8x6	1
8	SSCF-200-450	165-203	-	2000	10x8	1
9	SSCF150-400	160	-	2100	8x6	1
10	SSCF-200-350	114-227	-	2980	10x8	1
11	SSCF-200-450	124-155	-	1760	10x8	1
12	FSC 10x8x20S	105-169	-	1760	10x8	1

RATED CAPACITY - 3000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF150-640	162-194	1480	8x6	1	1
2	SSCF-250-640	176-249	1480	12x10	1	1
3	SSCF-200-430	144-187	2100	10x8	1	1
4	SSCF200-500	121-179	1760	10x8	1	1
5	SSCF200-500	162-238	2000	10x8	1	1
6	SSCF-200-600	166-246	1760	10x8	1	1
7	SSCF-200-450	158-197	2000	10x8	1	1
8	SSCF-200-600	114-188	1480	10x8	1	1
9	SSCF-250-500	120-154	1480	12x10		1
10	SSCF-200-450	115-147	1760	10x8	1	1
11	SSCF 300-250-640	176-249	1480	12x10	1	1

RATED CAPACITY - 3500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	FM Approved Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-250-500	117-152	1480	12x10	1	1
2	SSCF 300-250-640	169-242	1480	12x10	1	1
3	SSCF 200-500	154-229	2000	10x8	1	1
4	SSCF 200-500	136-170	1760	10x8	1	1
5	SSCF-200-600	107-184	1480	10x8	1	1
6	SSCF-200-600	160-241	1760	10x8	1	1
7	SSCF-250-640	169-242	1480	12x10	1	1
8	SSCF-200-600	114-188	1480	10x8	1	1

* FM approval is under process, Expected to have the certificate soon.

PERFORMANCE RANGE

RATED CAPACITY - 4000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-250-500	114-148	1480	12x10	1
2	SSCF 350-250-640	138-217	1480	14x10	1
3	SSCF 300-250-640	162-233	1480	12x10	1
4	SSCF 250-500	125-225	1800	12x10	1
5	SSCF-200-600	142-176	1480	10x8	1
6	SSCF-200-600	152-234	1760	10x8	1
7	SSCF-250-640	162-233	1480	12x10	1
8	SSCF-250-490	114-185	1800	12x10	1

RATED CAPACITY - 4500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-250-500	109-145	1480	12x10	1
2	SSCF-250-490	153-181	1800	12x10	1
3	SSCF 350-640	129-196	1480	16x14	1
4	SSCF 250-500	121-222	1800	12x10	1
5	SSCF-400-350-640	129-196	1480	16x14	1
6	SSCF-200-600	175-226	1760	10x8	1
7	SSCF 350-250-640	136-216	1480	14x10	1

RATED CAPACITY - 5000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	205-278	1480	16x12	1
2	SSCF 350-640	124-192	1480	16x14	1
3	SSCF-400-350-640	124-192	1480	16x14	1
4	SSCF-400-350-640	127-194	1480	16x14	1

RATED CAPACITY - 5500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	205-278	1480	16x12	1
2	SSCF 350-640	124-192	1480	16x14	1
3	SSCF-400-350-640	124-192	1480	16x14	1

PERFORMANCE RANGE

RATED CAPACITY - 6000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	204-277	1480	16x12	1
2	SSCF 350-250-640	127-209	1480	14x10	1
3	SSCF 350-640	120-190	1480	16x14	1
4	SSCF-400-350-640	120-190	1480	16x14	1

RATED CAPACITY - 6500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	203-276	1480	16x12	1
2	SSCF-400-350-640	116-186	1480	16x14	1
3	SSCF 350-640	116-186	1480	16x14	1
4	SSCF 350-250-640	205	1480	14x10	1
5	SSCF 350-250-640	216-276	1760	14x10	1

RATED CAPACITY - 7000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	200-274	1480	16x12	1
2	SSCF-400-350-640	113-182	1480	16x14	1
3	SSCF 350-640	113-182	1480	16x14	1
4	SSCF 350-250-640	201	1480	14x10	1
5	SSCF 350-250-640	211-271	1760	14x10	1

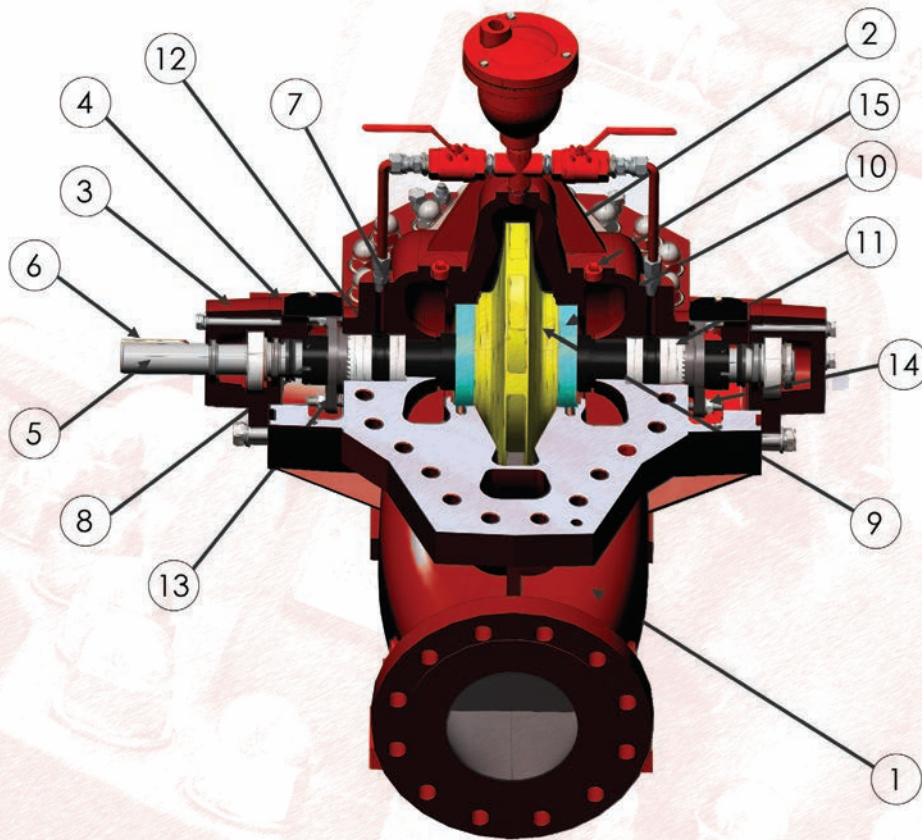
RATED CAPACITY - 7500 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	197-272	1480	16x12	1
2	SSCF-400-350-640	109-179	1480	16x14	1
3	SSCF 350-640	109-179	1480	16x14	1
4	SSCF 350-250-640	195	1480	14x10	1
5	SSCF 350-250-640	205-267	1760	14x10	1

RATED CAPACITY - 8000 US GPM

Sl. No.	Pump Model	UL Listed Pressure (psi)	Rated Speed (RPM)	Suction X Discharge Dia. (inch)	Stage(s)
1	SSCF-300-750	223-269	1480	16x12	1
2	SSCF-350-640	117-192	1540	16x14	1
3	SSCF 350-250-640	239-261	1760	14x10	1

MATERIAL OF CONSTRUCTION



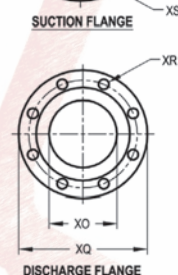
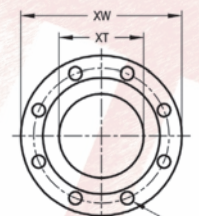
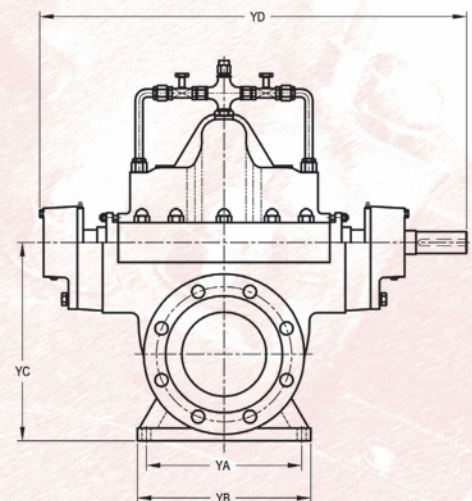
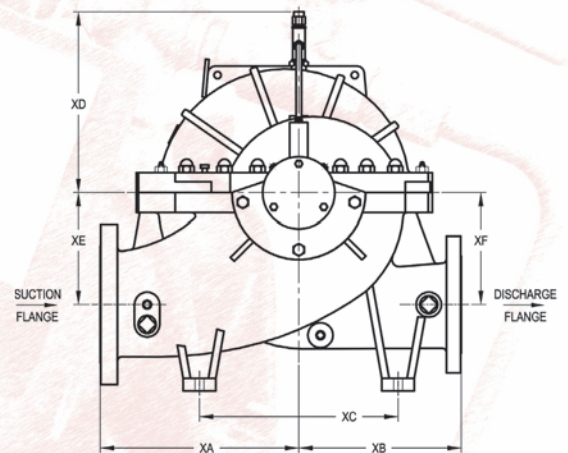
No.	Part Name	Material
1	Lower Casing	Ductile Iron
2	Upper Casing	Ductile Iron
3	Bearing Body	Cast Iron
4	Bearing Gland	Cast Iron
5	Shaft	Steel
6	Key	Stainless Steel
7	Sleeve	Stainless Steel
8	Sleeve Nut	Stainless Steel
9	Impeller	Stainless Steel
10	Casing Wear Ring	Bronze
11	Packing	Graphite
12	Lantern Ring	Stainless Steel
13	Packing Gland	Bronze
14	Studs	Stainless Steel
15	Casing Plug	Steel

OVERALL DIMENSIONS

S.No	Model No.	XA	AB	XC	XD	XE	XF	YA	YB	YC	YD
1	FSC 5x3x10	396	300	336	337	192	192	288	348	378	934
2	FSC 5x10x12	363	319	374	341	187	187	297	352	346.5	868
3	FSC 6x5x10	350	300	340	320	200	200	270	320	400	809
4	FSC 6x5x12	400	350	400	340	220	220	270	320	400	809
5	FSC 8x6x10	400	300	380	340	200	200	270	320	400	809
6	FSC 8x6x12	425	350	400	350	195	210	340	390	400	920
7	FSC 8x6x13	415	350	400	360	230	230	340	390	455	920
8	FSC 8x6x19	500	420	540	421	250	250	430	480	470	1019
9	FSC 10x8x20S	550	450	550	500	310	310	430	480	550	1182
10	SSCF-80-350	330	330	340	589	140	140	270	320	315	787
11	SSCF-150-420	450	400	400	415	250	280	340	390	455	920
12	SSCF-125-400	500	350	500	380	285	285	340	390	455	920
13	SSCF-150-400	450	370	440	402	250	250	340	390	455	920
14	SSCF-200-350	500	450	550	450	270	270	430	480	500	1110
15	SSCF-200-600	600	500	550	500	350	350	430	500	590	1220
16	SSCF-250-500	650	550	700	580	370	370	520	600	670	1316.5
17	SSCF 300-250-640	680	570	700	611	390	390	520	300	670	1316
18	SSCF 350-250-640	750	600	820	569	400	400	560	640	710	1458
19	"SSCF-150-450x2 (Multi Stage pump)"	500	500	440	655	280	300	600	690	500	1347

S.No	Model No.	Suction Flange Dimension			Discharge Flange Dimensions		
		XW	XT (Inches)	XS (HOLES DIA.)	XQ	XO (Inches)	XR (HOLES DIA.)
1	FSC 5x3x10	Ø 280	5"	"8 HOLES Ø 22 ON PCD 235 ANSI B16.1 #250 RF"	Ø 210	3"	"8 HOLES Ø 22 ON PCD 168 ANSI B16.1 #250 RF"
2	FSC 5x10x12	Ø 280	5"	"8 HOLES Ø 22 ON PCD 235 ANSI B16.1 #250 RF"	Ø 255	4"	"8 HOLES Ø 22 ON PCD 200 ANSI B16.1 #250 RF"
3	FSC 6x5x10	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"	Ø 280	5"	"8 HOLES Ø 22 ON PCD 235 ANSI B16.1 #250 RF"
4	FSC 6x5x12	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"	Ø 280	5"	"8 HOLES Ø 22 ON PCD 235 ANSI B16.1 #250 RF"
5	FSC 8x6x10	Ø 380	8"	"12 HOLES Ø 26 ON PCD 330 ANSI B16.1 #250 RF"	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"
6	FSC 8x6x12	Ø 380	8"	"12 HOLES Ø 26 ON PCD 330 ANSI B16.1 #250 RF"	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"
7	FSC 8x6x13	Ø 380	8"	"12 HOLES Ø 26 ON PCD 330 ANSI B16.1 #250 RF"	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"
8	FSC 8x6x19	Ø 380	8"	"12 HOLES Ø 26 ON PCD 330 ANSI B16.1 #250 RF"	Ø 320	6"	"12 HOLES Ø 23 ON PCD 270 ANSI B16.1 #250 RF"
9	FSC 10x8x20S	Ø 445	10"	"16 HOLES Ø 29.5 ON PCD 387.5 ANSI B16.1 #250 RF"	Ø 380	8"	"12 HOLES Ø 26 ON PCD 330 ANSI B16.1 #250 RF"
10	SSCF-80-350			†			†
11	SSCF-150-420			†			†
12	SSCF-125-400			†			†
13	SSCF-150-400			†			†
14	SSCF-200-350			†			†
15	SSCF-200-600			†			†
16	SSCF-250-500			†			†
17	SSCF 300-250-640			†			†
18	SSCF 350-250-640			†			†
19	"SSCF-150-450x2 (Multi Stage pump)"			†			†

† - Consult Factory



* Dimensions are in mm.

Right Angle Gear Drive

SMi gears are FM-APPROVED Right Angle Gear Drives. They are used to transfer the power from horizontal direction to vertical direction. Also, they are used to increase or decrease the speed.

Design Features:

Housings

The housing is made of high quality fine-grain cast Iron as per ASTM A48. The housing is filled with lubrication oil to facilitate the cooling of the gear sets while rotation.

Gears

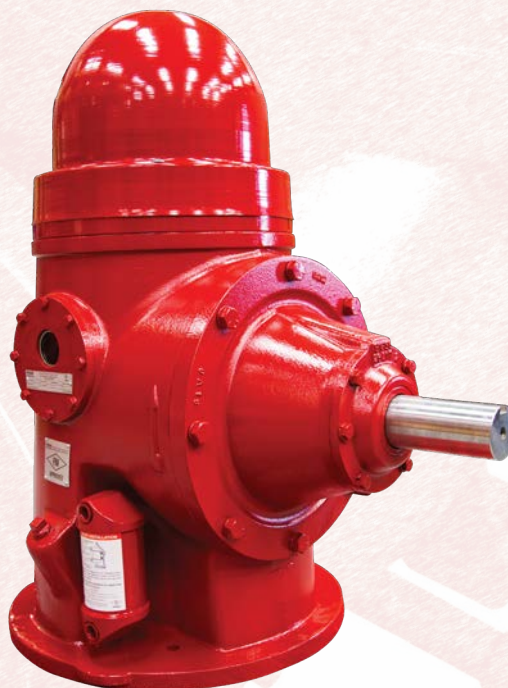
Gears are spiral bevel gears type, available in increasing or decreasing ratios. Gears are made of high strength steel precision machined for quiet and smooth operation and high torque transmission. Gears are designed to AGMA specifications with 1.5 service factor.

Shafts

Horizontal shaft is solid and the vertical shaft is hollow. Both shafts are designed to operate under high speed and transmit high torque. Shafts are made of high strength hardened steel for maximum performance.

Bearings

Large capacity thrust bearing are provided to handle wide range of pump equipment and heads of water. SMi RAGD are designed with TWO-WAY thrust bearings to handle the up-thrust and avoid equipment damage.

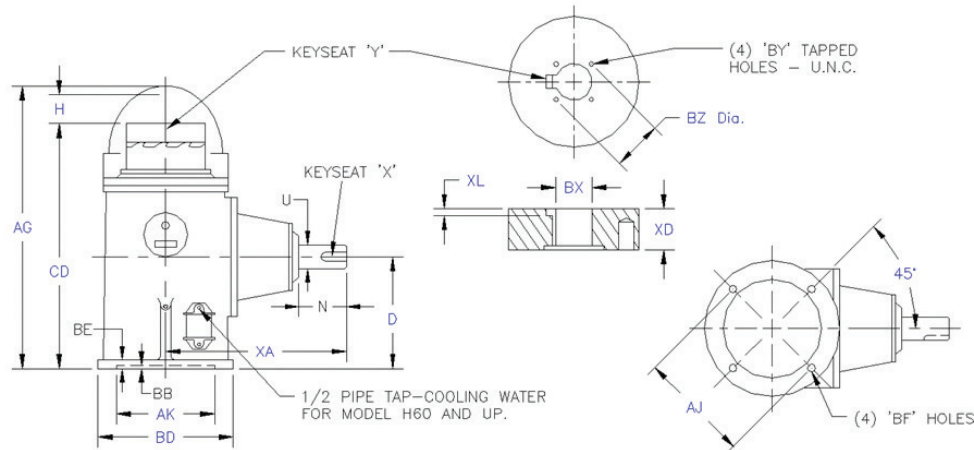


PERFORMANCE RANGE

Right Angle Gear Drive	Usable Power (HP)	Vertical Shaft Speed (RPM)	Horizontal Shaft RPM, Speed Increasing Ratios								
			Driver : Driven								
			1:2	4:7	2:3	3:4	4:5	5:6	10:11	1:1	9:4
H40	40	1760	880	1005	1173	1320	-	1466	-	1760	-
H60	60	1760	880	1005	1173	1320	-	1466	-	1760	-
H80	80	1760	880	1005	1173	1320	1408	1466	1600	1760	-
H110	110	1760	880	1005	1173	1320	1408	1466	1600	1760	-
H125	125	1760	880	1005	1173	1320	1408	1466	1600	1760	-
H150	150	1760	880	1005	1173	1320	1408	1466	1600	1760	3960
H200	200	1760	880	1005	1173	1320	1408	1466	1600	1760	3960
H250	250	1760	880	1005	1173	1320	1408	1466	1600	1760	3960
H300	300	1760	880	1005	1173	1320	1408	1466	1600	1760	3960
H350	350	1760	880	1005	1173	1320	1408	1466	1600	1760	3960
H425	425	1760	-	1005	1173	1320	1408	1466	1600	1760	3960

Right Angle Gear Drive	Usable Power (HP)	Vertical Shaft Speed (RPM)	Horizontal Shaft RPM, Speed Decreasing Ratios								
			Driver : Driven								
			11:10	6:5	5:4	4:3	5:3	3:2	7:4	2:1	9:4
H40	40	1760	1936	2112	-	2346	2930	2640	3080	3520	-
H60	60	1760	1936	2112	-	2346	2930	2640	3080	3520	-
H80	80	1760	1936	2112	2200	2346	2930	2640	-	-	-
H110	110	1760	1936	2112	2200	2346	2930	2640	3080	3520	-
H125	125	1760	1936	2112	2200	2346	2930	2640	3080	3520	-
H150	150	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960
H200	200	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960
H250	250	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960
H300	300	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960
H350	350	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960
H425	425	1760	1936	2112	2200	2346	2930	2640	3080	3520	3960

OVERALL DIMENSIONS



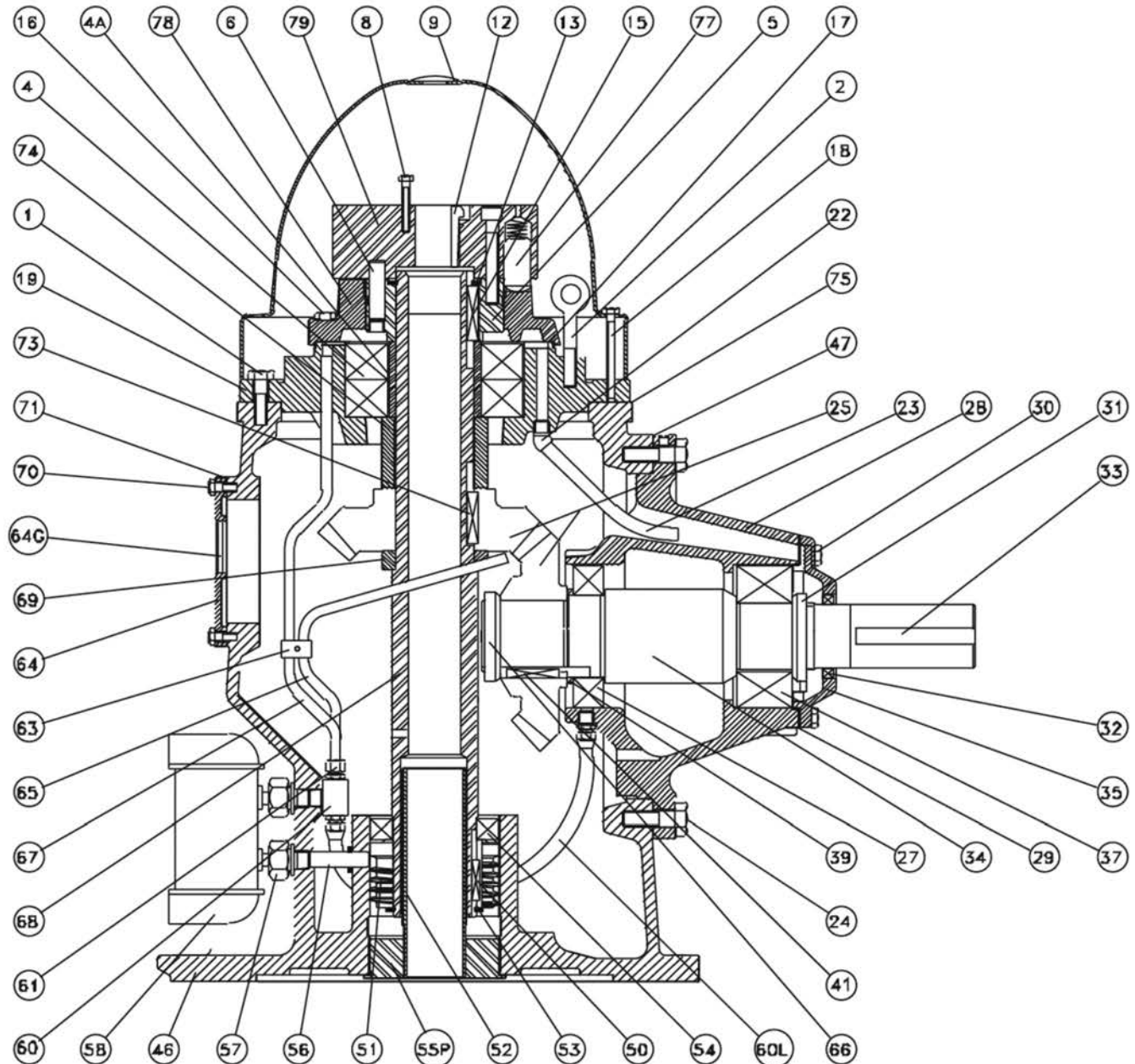
CD and H dimensions for all heavy thrust drives and U-XA-N and XD dimensions for all speed decreasing ratios in models H150 and up are subject to change.

Model	H40	H60	H80	H110	H125	H150	H200	H300	H350	H425
CD	20-1/4	20-1/4	20-1/4	25	25	30	30	34-1/4	38-1/2	39-1/2
D	9	9	9	11-3/8	11-3/8	13-1/4	13-1/4	15	16-1/2	16-1/2
U	1-1/2	1-1/2	1-7/8	2	2	2-7/16	2-7/16	2-3/4	2-3/4	3
XA	16	16	16-1/2	17-1/2	17-1/2	20-1/2	20-1/2	24	29	30
N	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	4-3/4	4-3/4	5-1/2	5-1/2	5-3/4
AG	24-3/4	24-3/4	24-3/4	29-1/2	29-1/2	34-1/2	34-1/2	40	46	46
H	4	4	4	4	4	4	4	5-1/4	7	6-1/4
BE	3/4	3/4	3/4	1	1	1	1	1-1/8	1-1/4	1-1/4
BD	16-1/2	16-1/2	16-1/2	16-1/2	16-1/2	20	20	20	24-1/4	24-1/4
AJ	14-3/4	14-3/4	14-3/4	14-3/4	14-3/4	14-3/4	14-3/4	14-3/4	22*	22*
AK	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
BB	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/8
BF	11/16	11/16	11/16	11/16	11/16	11/16	11/16	11/16	15/16	15/16

Model	KEYSEAT X	BX		XD	Net Weight Lbs.	Gross Weight - Lbs		
		MAX	STD.			Domestic	Container	Plywood
H40	3/8 X 3/16 X 2-3/4	1-1/2	1	1-3/4	240	265	280	295
H60	3/8 X 3/16 X 2-3/4	1-1/2	1	1-3/4	250	275	290	305
H80	1/2 X 1/4 X 2-3/4	1-1/2	1-1/4	1-3/4	280	305	320	335
H110	1/2 X 1/4 X 2-3/4	1-1/2	1-1/4	2-1/8	385	410	425	440
H125	1/2 X 1/4 X 2-3/4	1-1/2	1-1/2	2-1/8	395	420	435	450
H150	5/8 X 5/16 X 3-3/4	1-15/16	1-1/2	2-3/8	640	680	700	720
H200	5/8 X 5/16 X 3-3/4	1-15/16	1-1/2	2-3/8	640	680	700	720
H300	5/8 X 5/16 X 3-3/4	2	1-11/16	2-5/8	900	1000	1000	1050
H350	5/8 X 5/16 X 3-3/4	2-3/16	1-11/16	3	1390	1500	1500	1550
H425	3/4 X 3/8 X 4-3/4	2-7/16	1-15/16	3-3/8	1590	1700	1700	1750

* All dimensions in inches

TYPICAL GEAR ASSEMBLY



No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	Capscrew-Thrust Cage	*23	Flexible Tube	46	Main Housing	64	Inspection Plate
*2	Lifting Eyebolt	24	Capscrew-Horiz. Housing	47	Shim-Horz. Housing	*64G	Oil Sight Glass
4	Thrust Bearing	25	Gears	50	Key-Pump Runner	65	Oil Tube To Gears
*4A	Thrust Bearing Sleeve	27	Inner Bearing	51	Pump Runner	*66	Locknut & Washer
5	Lower Coupling	28	Horizontal Housing	52	Seal Tube	67	Oil Tube to Thrust Brg.
6	Coupling Pin	29	Gasket-Horz. Hsg. Cover	53	External Snap Ring	68	Hollow Shaft
8	Capscrew	30	Capscrew-Horz. Hsg. Cover	54	Pump Bearing	*69	Vertical U.G. Spacer
9	Dome			55P	Seal Plug	70	Capscrew-Insp. Plate
12	Gib Key	*31	Locknut & Washer	56	Oil Tube From Pump	71	Gasket-Insp. Plate
13	External Snap Ring	32	Oil Seal	57	Cooler Flexible Fittings	73	Key-Driven Gear
15	Key-Lower Coupling	33	Key	58	Oil Cooler	74	Vertical M.D. Spacer
16	Capscrew-Thrust Cover	34	Drive Shaft	60	Oil Distributor	75	Shim-Thrust Brg. Cage
17	Gasket-Thrust Cover	35	Horizontal Housing Cover	60L	Oil Tube To Inner Bearing	77	Ratchet Pins
18	Capscrew-Dome	37	Outer Bearing	61	Compression Fitting	78	Thrust Bearing Cover
19	Thrust Bearing Cage	39	Horizontal M.D. Spacer	63	Oil Tube Clamp	79	Upper Clutch
*22	Flexible Tube Fitting	41	Key-Drive Gear				

* These parts are not universal and are omitted in certain ratios and models.

Fire Pump Set Complementary Products

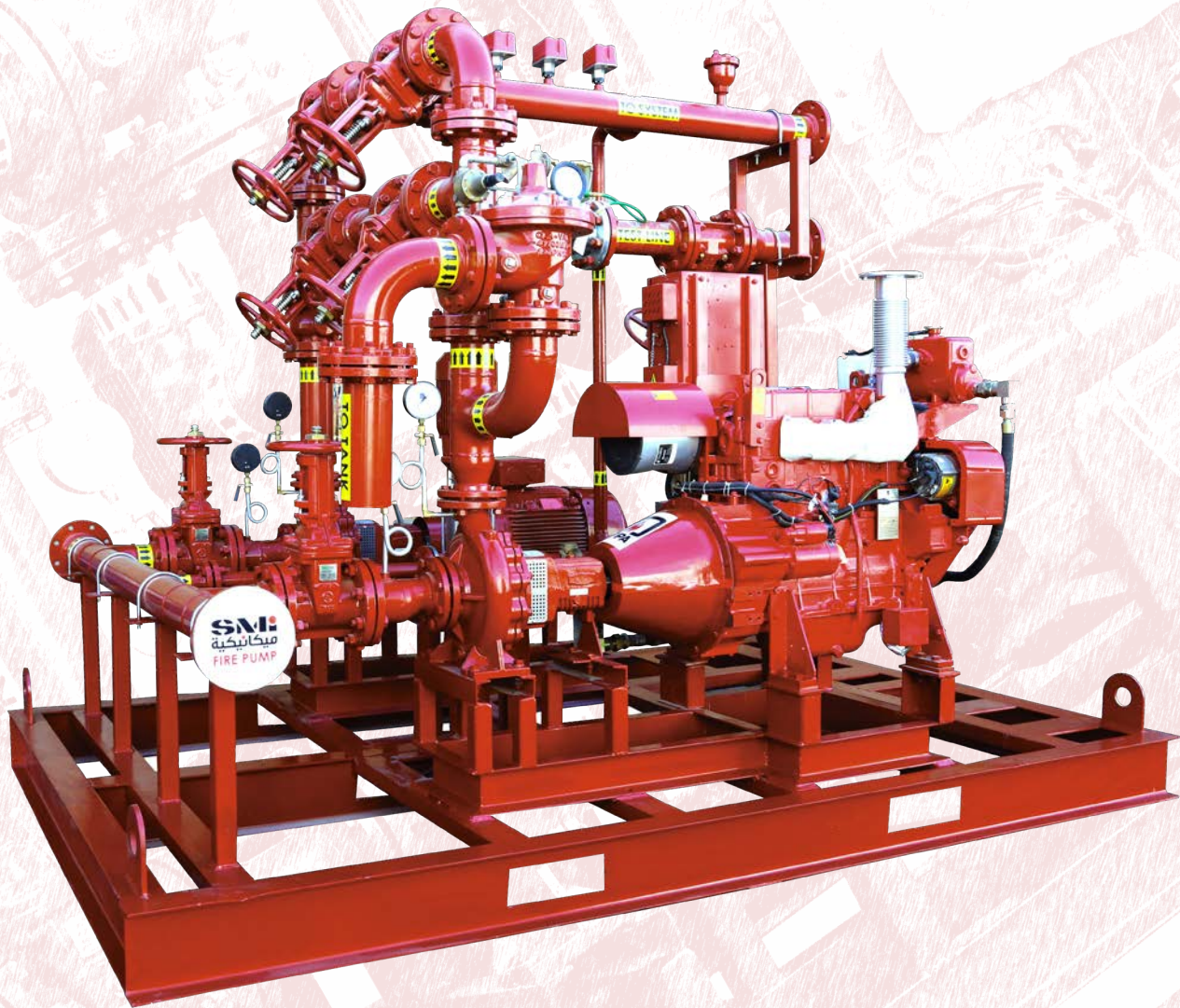


SMi provides a wide range of complementary products and accessories to give a single source of responsibility for the entire fire pump system that are sized as per NFPA 20, UL – listing and FM approval requirements.



Package Fire Pump Sets

SMi package fire pump system consists of pumps, drivers, controllers and accessories mounted on a common skid frame. The system is designed and build according to NFPA20 requirements using UL/FM certified components to meet the firefighting standard requirements. Wiring, fittings and valves are assembled in house. SMi provides end suction pumps and split-case pumps sets as per customer requirements.



Certificates

CERTIFICATE OF COMPLIANCE

Certificate Number 20181212-EX27109
Report Reference EX27109-20160616
Issue Date 2018-DECEMBER-12

Issued to: Saudi Mechanical Industries Co
 Second Industrial City, Street No. 234
 Riyadh SAUDI ARABIA

**This certificate confirms that
 representative samples of**

CENTRIFUGAL FIRE PUMPS, VERTICAL TURBINE
 USL, - Centrifugal Fire Pumps, Vertical Turbine; Models -
 F6MC, F8LC, F8HC, FH14XHC, FH14XHC, FH14XHC,
 FH14XHC, F14HC, F14HC, F14HC, F14HC, FH14XHC,
 FH14XHC, F14XXHC, F14XXHC, F14XXHC, F14XXHC,
 FH14XHC, FH14XHC, FH14XHC, FH14XHC, FH14XHC,
 FH14XHC

Have been investigated by UL in accordance with the
 Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 448 - Standard for Pumps for Fire-Protection Service
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and
 covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
 UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
 contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number EX27109
Report Reference EX27109-20200828
Issue Date 2020-SEPTEMBER-03

Issued to: Saudi Mechanical Industries Co
 Second Industrial City, Street No. 234
 Riyadh SAUDI ARABIA

This certificate confirms that representative samples of CENTRIFUGAL FIRE PUMPS, VERTICAL TURBINE
 F8HC, F10HC

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 448, Standard for Pumps for Fire-Protection Service
Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

B. Mahrenholz

Bruce Mahrenholz, Director North American Certification Program
 UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations>



CERTIFICATE OF COMPLIANCE

Certificate Number 20180928-EX27521
Report Reference EX27521-20171211
Issue Date 2018-SEPTEMBER-28

Issued to: Saudi Mechanical Industries Co
 Second Industrial City, Street No. 234
 Riyadh SAUDI ARABIA

This is to certify that CENTRIFUGAL FIRE PUMPS, END SUCTION
representative samples of See Addendum Page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 448 - Standard for Pumps for Fire-Protection Service
Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz

Bruce Mahrenholz, Director North American Certification Program
 UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number 2018-06-27-EX27751
Report Reference EX27751
Issue Date 2018-June-27

Issued to: SAUDI MECHANICAL INDUSTRIES CO.
SECOND INDUSTRIAL CITY, STREET NO. 234
RIYADH, SAUDI ARABIA

This is to certify that
representative samples of Centrifugal Fire Pumps, Split Case
See Addendum for Models

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 448 – Centrifugal Stationary Pumps for Fire-Protection Service
Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as
being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US
and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and
"US" identifiers:  the word "LISTED"; a control number (may be alphanumeric) assigned by UL;
and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at www.ul.com/contactus



CERTIFICATE OF COMPLIANCE

Certificate Number 20181212-EX27109
Report Reference EX27109-20181101
Issue Date 2018-DECEMBER-12

Issued to: Saudi Mechanical Industries Co
 Second Industrial City, Street No. 234
 Riyadh SAUDI ARABIA

This certificate confirms that representative samples of CENTRIFUGAL FIRE PUMPS, VERTICAL TURBINE
 Centrifugal Fire Pumps - Vertical Turbine; Model: F11HC, F12HC

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 448 - Standard for Pumps for Fire-Protection Service
Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz

Bruce Mahrenholz, Director North American Certification Program
 UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





Certificate of Compliance

This certificate is issued for the following:

Right Angle Gear Drives

Models H40, H60, H80, H110, H125, H150, H200, H250, H300, H350, H425
(see full listing on follow page)

Prepared for:

Saudi Mechanical Industries Co.
PO Box 59799
Riyadh, 11535
Saudi Arabia

Manufactured at:

Saudi Mechanical Industries Co.
PO Box 59799
Riyadh, 11535
Saudi Arabia

FM Approvals Class: 1338

Approval Identification: 0003060371

Approval Granted: December 15, 2017

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.



David Fuller
VP - Manager of Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062 USA



Certificate of Compliance

This certificate is issued for the following:

Centrifugal Fire Pumps (Vertical Shaft, Turbine Type)

Product #	Rated Capacity, (gpm/m³)	Rated Capacity, (gpm/m³)	Rated Net Head at Rated Capacity, (ft/m)	Rated Net Head at Rated Capacity, (ft/m)	Rated Speed, (rpm)	Manufacturer's Size, in.	Manufacturer's Size, mm	Stroke(s)
F8HC	300	1135	104-202	715-1395	1750	8	200	9-13
F10HC	500	1895	115-210	795-1450	1750	10	254	6-9
F11HC	750	2840	105-214	725-1475	1750	11	280	4-7
F12HC	1000	3785	100-220	690-1515	1750	12	305	4-7
F14HC	1250	4730	82-307	565-2115	1750	14	355	2-6
F14XXHC	1500	5680	75-257	515-1770	1750	14	355	2-5

Prepared for:

Saudi Mechanical Industries Co.
 PO Box 59799
 11535 Riyadh
 Saudi Arabia

FM Approvals Class: 1312

Approval Identification: 3061026 Approval Granted: January 29, 2018

To verify the product continues to be Approved please refer to www.approvalguide.com.

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller

David B. Fuller
 VP, Manager of Fire Protection
 FM Approvals
 1151 Boston-Providence Turnpike
 Norwood, MA 02062 USA



NOTE :

A faint, large-scale background image of a person's face, possibly a woman, with a soft, ethereal quality. The image is overlaid with a grid of horizontal lines, suggesting a page from a notebook or a document template.

www.smi.com.sa

SMI الشركة السعودية للصناعات الميكانيكية
ميكانيكية SAUDI MECHANICAL INDUSTRIES CO.



40th
ANNIVERSARY
أربعون عاماً من النجاح
Forty years of success

P.O. Box 59799 Riyadh 11535 Saudi Arabia Tel: +966 11 2651979 Fax: +966 11 2651494



Ref. No. SMIFPC-03
September 2024



SAUDI MECHANICAL INDUSTRIES