

FIRE PROTECTION SERVICES GLOBALLY

WE **DELIVER** ON
OUR **PROMISES**

PRODUCT **CATALOGUE**



UNRIVALLED

QUALITY INNOVATION, CUSTOMER SERVICE

Frontier Safety Ltd UK - A Success Story - is one of Britain's largest and most respected manufacturers of innovative products for demanding and diverse fire pumps.

FRONTIER SAFETY LTD UK-A UNIQUE STORY

Providing outstanding commercial, industrial, and residential fire protection services in the United Kingdom (UK), United Arab Emirates (UAE) and globally.

Specializing in fire pump design, fabrication, installation, and support as well as fire alarm, emergency lights, fire extinguishers, FM 200 system, sprinkler heads designs, installation and support in both the commercial and residential markets. Security Fire Protection recognizes our success stems from leaders who are knowledgeable, respected, and trustworthy, working with employees who exemplify pride, initiative, and personal conviction.

Through these high ideals, we lead as an entity with genuine concern for our employees, making them top priority. The resulting loyalty and sense of honor elevates a greatness that is measured by the achievements of our employees. Security Fire Protection sets itself apart from other fire protection & safety contractors. Through our strong relationships with customers and employees, innovation, and time-tested quality work.

Our goal is to provide better customer services than any other contractor. We accomplish this through developing personal relationships with our customers and ensuring that they are completely satisfied with our work.

VERTICAL TURBINE FIRE PUMPS

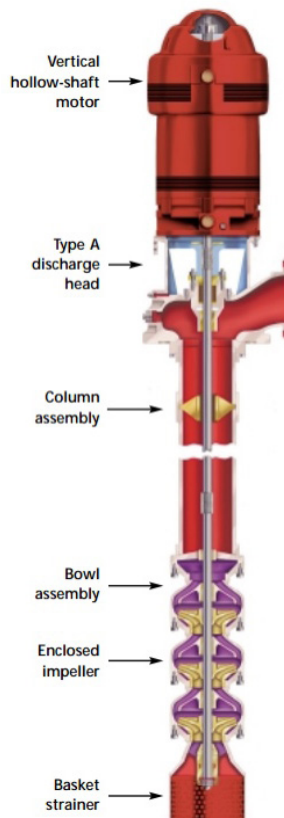


VERTICAL TURBINE FIRE PUMP

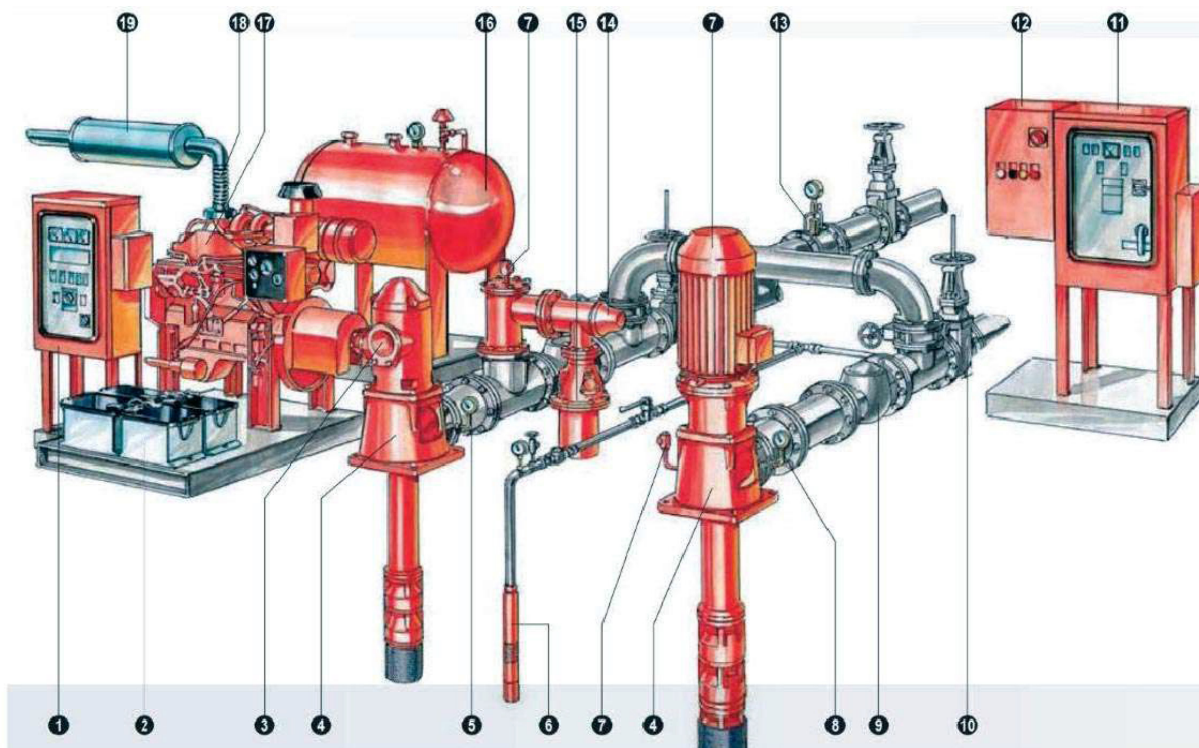
VERTICAL TURBINE PUMPS

Vertical shaft turbine type fire pumps have submerged impellers contained in a series – bowl assembly at the bottom of a vertical shaft. The design is similar to the pumps used extensively for industrial & municipal services. These pumps are UL approved for discharging water from tanks, streams, open sumps, drilled wells. Each pumps consist of a discharge head, motor, stand, column pipe, line shaft, bowl assembly and suction strainer.

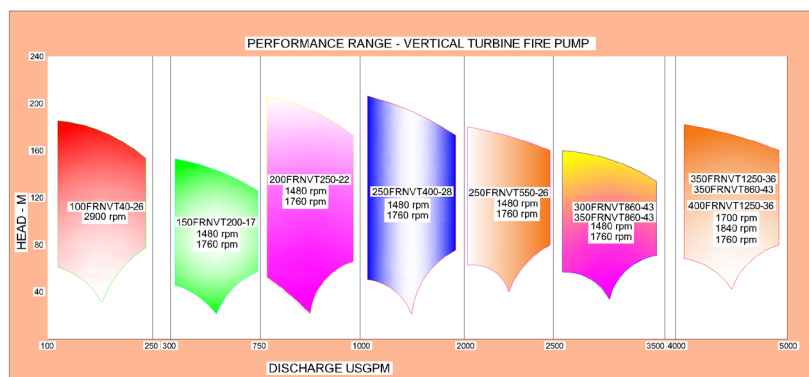
TECHNICAL DATA SUMMARY



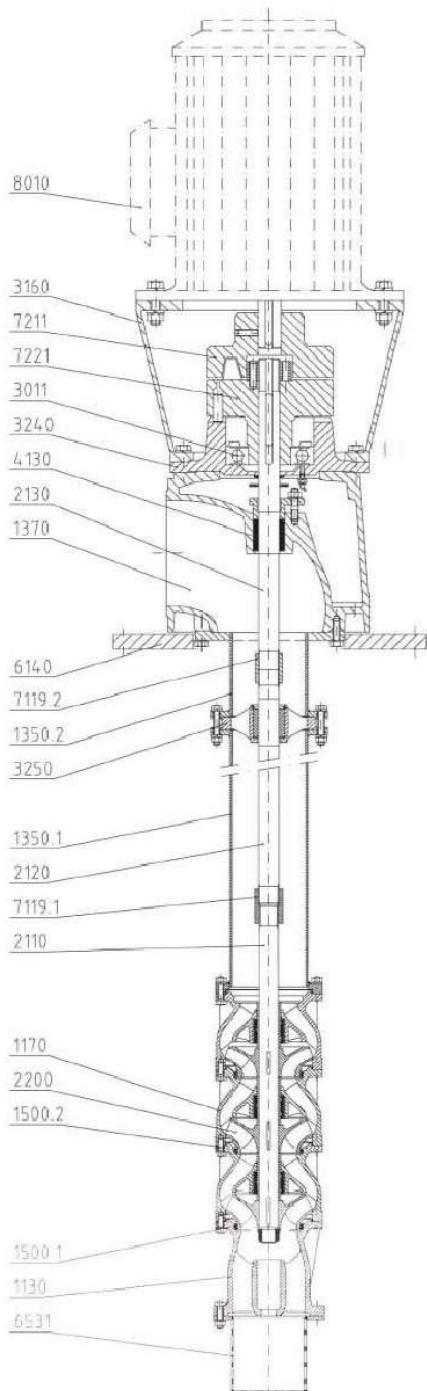
VERTICAL TURBINE FIRE PUMP



1	Diesel engine fire pump controller
2	Batteries
3	Jockey pump
4	Concentric discharge increaser
5	Enclosed discharge overflow cone
6	Eccentric suction reducer
7	Suction pressure gauge
8	Pump
9	Circulation relief valve
10	Electric motor
11	Check valve
12	OS & Y gate valve
13	Electric motor fire pump controller
14	Jockey pump controller
15	Flow meter
16	Automatic air release valve
17	Main relief valve
18	Discharge pressure gauge
19	Fuel tank
20	Diesel engine
21	Flexible exhaust connector
22	Exhaust muffler



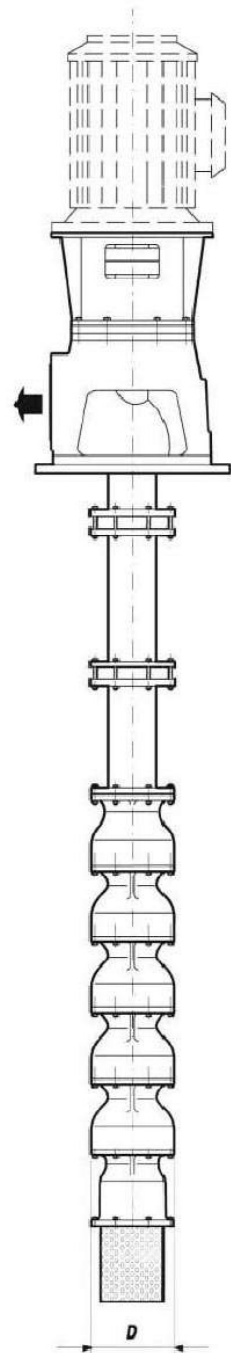
VERTICAL TURBINE FIRE PUMP SECTIONAL DRAWINGS



TYPE D(“) D(MM)

152	12"	290
180	12"	300
200	14"	354
250	17"	418
251	17"	418

REF	DESCRIPTION	MATERIAL
1130	Bell mouth	Cast iron – G25
1170	Pump bowl	Cast iron – G25
1350, 1	Column pipe	Stainless steel
1350, 2	Column pipe	Stainless steel
1370	Delivery casing	Cast iron – G25
1500, 1	Wear ring	Bronze
1500, 2	Wear ring	Bronze
2110	Pump shaft	Stainless steel
2120	Intermediate shaft	Stainless steel
2130	Top shaft	Stainless steel
2200	Impeller	Cast iron – G25
3011	Ball bearing	Stainless steel
3160	Motor spool	Cast iron – G25
3240	Bearing housing	Cast iron – G25
3250	Bearing bracket	Cast iron – G25
4130	Gland packing	Teflon Carbon
6140	Foundation plate	Steel Fe 430
6531	Suction strainer	Steel Fe 510
7119, 1	Screwed coupling	AISI 420
7119, 2	Screwed coupling	AISI 420
7211	Coupling half side motor	Cast iron – G25
7221	Coupling half side pump	Cast iron – G25



VERTICAL TURBINE FIRE PUMP

UL PRODUCT CATEGORY

Centrifugal Fire Pumps, Vertical Turbine

EX28018

FRONTIER SAFETY LIMITED

85 GREAT PORTLAND STREET, FIRST FLOOR
LONDON, W1W 7LT UNITED KINGDOM

Rated Capacity (gpm)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed(rpm)	Stages
100	100FRNVT40-6	40-44	2900	1
100	100FRNVT40-6	61-265	2900	2-6
150	100FRNVT40-6	40-44	2900	1
150	100FRNVT40-6	60-263	2900	2-6
200	100FRNVT40-6	40-43	2900	1
200	100FRNVT40-6	56-257	2900	2-6
250	100FRNVT40-6	40-42	2900	1
250	100FRNVT40-6	52-250	2900	2-6
300	150FRNVT200-17	40-235	1480	2-8
400	150FRNVT200-17	40-227	1480	2-8
450	150FRNVT200-17	40-225	1480	2-8
500	150FRNVT200-17	40-221	1480	2-8
500	150FRNVT200-17	40-241	1760	2-6
750	150FRNVT200-17	74	1760	2
750	150FRNVT200-17	111	1760	3
750	150FRNVT200-17	148	1760	4
750	150FRNVT200-17	185	1760	5
750	150FRNVT200-17	222	1760	6
750	200FRNVT250-22	40-313	1480	2-8

Centrifugal Fire Pumps, Vertical Turbine

EX28018

Rated Capacity (gpm)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed(rpm)	Stages
750	200FRNVT250-22	40-58	1760	1
750	200FRNVT250-22	75-288	1760	2-5
1000	200FRNVT250-22	40-288	1480	2-8
1000	200FRNVT250-22	40-54	1760	1
1000	200FRNVT250-22	69-272	1760	2-5
1250	250FRNVT400-28	41-51	1480	1
1250	250FRNVT400-28	82-102	1480	2
1250	250FRNVT400-28	124-153	1480	3
1250	250FRNVT400-28	165-305	1480	4-6
1250	250FRNVT400-28	60-74	1760	1
1250	250FRNVT400-28	120-147	1760	2
1250	250FRNVT400-28	180-221	1760	3
1250	250FRNVT400-28	240-294	1760	4
1500	250FRNVT400-28	40-49	1480	1
1500	250FRNVT400-28	77-97	1480	2
1500	250FRNVT400-28	115-292	1480	3-6
1500	250FRNVT400-28	58-71	1760	1
1500	250FRNVT400-28	115-143	1760	2
1500	250FRNVT400-28	173-214	1760	3
1500	250FRNVT400-28	230-285	1760	4
2000	250FRNVT400-28	63	1760	1
2000	250FRNVT400-28	125	1760	2
2000	250FRNVT400-28	188	1760	3
2000	250FRNVT400-28	251	1760	4
2000	250FRNVT550-26	40-44	1480	1
2000	250FRNVT550-26	77-88	1480	2
2000	250FRNVT550-26	116-132	1480	3
2000	250FRNVT550-26	155-176	1480	4
2000	250FRNVT550-26	194-264	1480	5-6

Centrifugal Fire Pumps, Vertical Turbine

EX28018

Rated Capacity (gpm)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed(rpm)	Stages
2000	250FRNVT550-26	57-66	1760	1
2000	250FRNVT550-26	113-133	1760	2
2000	250FRNVT550-26	170-199	1760	3
2000	250FRNVT550-26	227-266	1760	4
2500	250FRNVT550-26	61	1760	1
2500	250FRNVT550-26	123	1760	2
2500	250FRNVT550-26	184	1760	3
2500	250FRNVT550-26	245	1760	4
2500	300FRNVT860-43	50-82	1480	1
2500	300FRNVT860-43	100-245	1480	2-3
2500	350FRNVT860-43	74-118	1760	1
2500	350FRNVT860-43	149-236	1760	2
3000	300FRNVT860-43	53-78	1480	1
3000	300FRNVT860-43	105-235	1480	2-3
3000	350FRNVT860-43	69-115	1760	1
3000	350FRNVT860-43	139-230	1760	2
3500	350FRNVT860-43	73-111	1760	1
3500	350FRNVT860-43	146-222	1760	2
3500	350FRNVT1250-36	47-62	1480	1
3500	350FRNVT1250-36	93-124	1480	2
3500	350FRNVT1250-36	140-249	1480	3-4
3500	350FRNVT1250-36	56-74	1600	1
3500	350FRNVT1250-36	112-148	1600	2
3500	350FRNVT1250-36	168-295	1600	3-4
4000	350FRNVT860-43	104	1760	1
4000	350FRNVT860-43	207	1760	2

Centrifugal Fire Pumps, Vertical Turbine

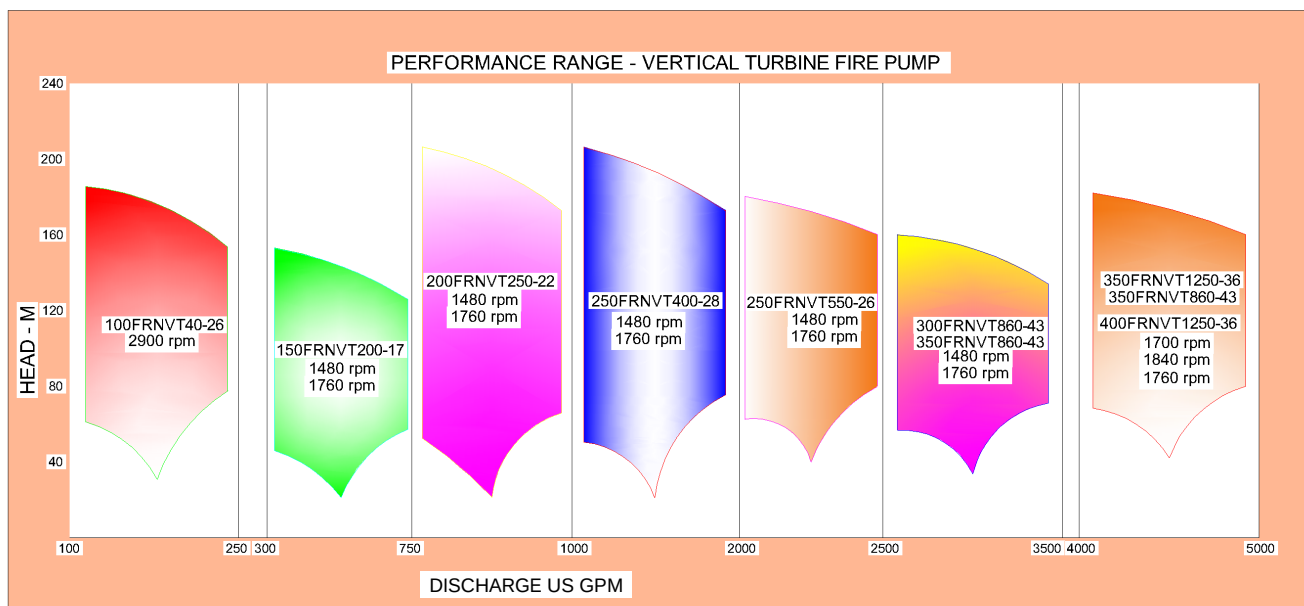
EX28018

Rated Capacity (gpm)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed(rpm)	Stages
4000	350FRNVT1250-36	45-61	1480	1
4000	350FRNVT1250-36	90-121	1480	2
4000	350FRNVT1250-36	135-243	1480	3-4
4000	350FRNVT1250-36	54-72	1600	1
4000	350FRNVT1250-36	107-144	1600	2
4000	350FRNVT1250-36	161-288	1600	3-4
4000	400FRNVT1250-36	61-82	1700	1
4000	400FRNVT1250-36	122-163	1700	2
4000	400FRNVT1250-36	183-245	1700	3
4000	400FRNVT1250-36	66-88	1760	1
4000	400FRNVT1250-36	133-177	1760	2
4000	400FRNVT1250-36	199-265	1760	3
4000	400FRNVT1250-36	74-98	1840	1
4000	400FRNVT1250-36	148-195	1840	2
4000	400FRNVT1250-36	222-293	1840	3
4500	400FRNVT1250-36	58-79	1700	1
4500	400FRNVT1250-36	116-159	1700	2
4500	400FRNVT1250-36	174-238	1700	3
4500	400FRNVT1250-36	63-86	1760	1
4500	400FRNVT1250-36	126-172	1760	2
4500	400FRNVT1250-36	189-259	1760	3
4500	400FRNVT1250-36	70-95	1840	1
4500	400FRNVT1250-36	141-190	1840	2
4500	400FRNVT1250-36	211-285	1840	3
5000	400FRNVT1250-36	229	1700	3
5000	400FRNVT1250-36	249	1760	3

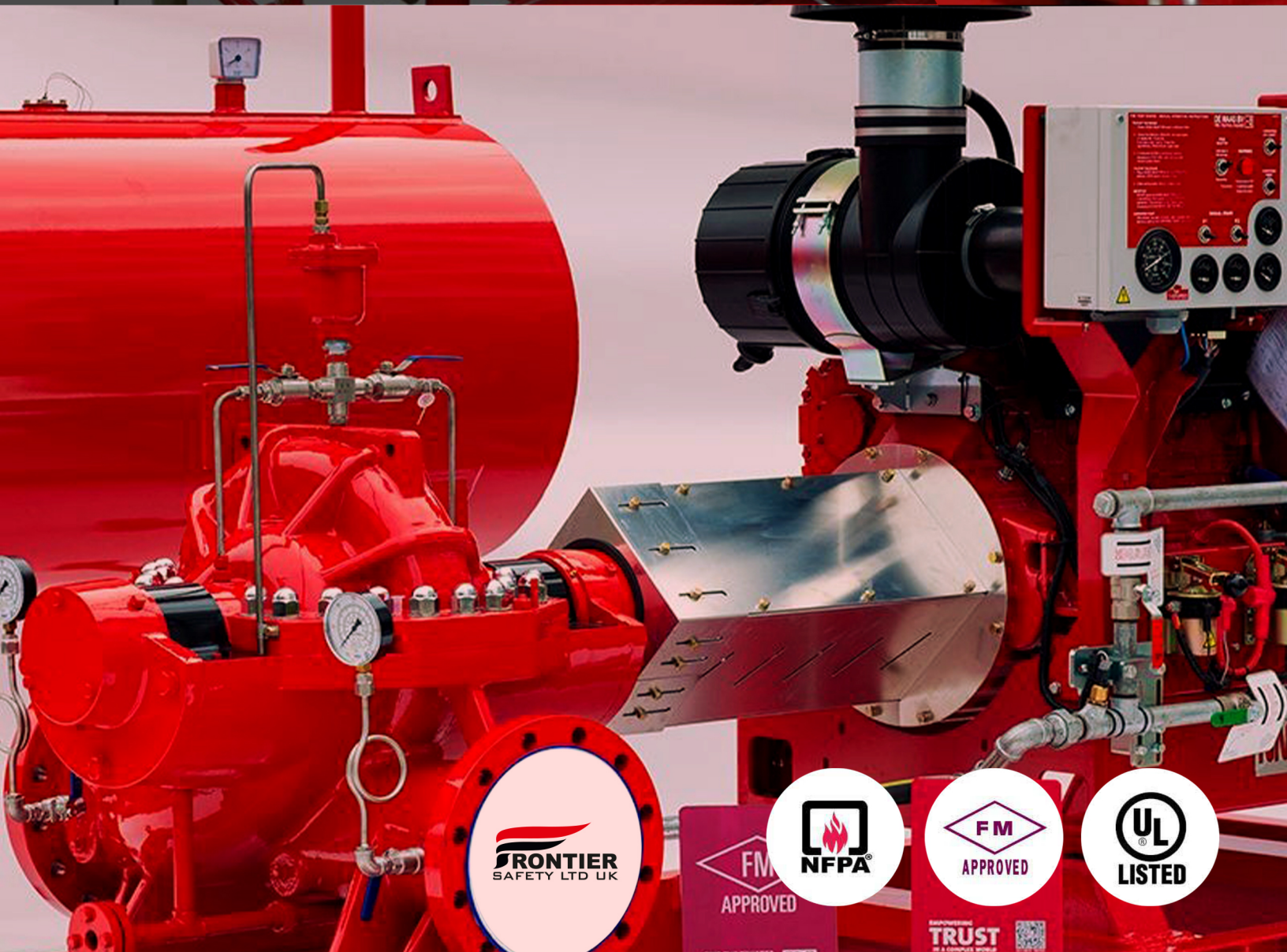
VERTICAL TURBINE FIRE PUMP PERFORMANCE RANGE

Centrifugal Fire Pumps, Vertical Shaft, Turbine Type

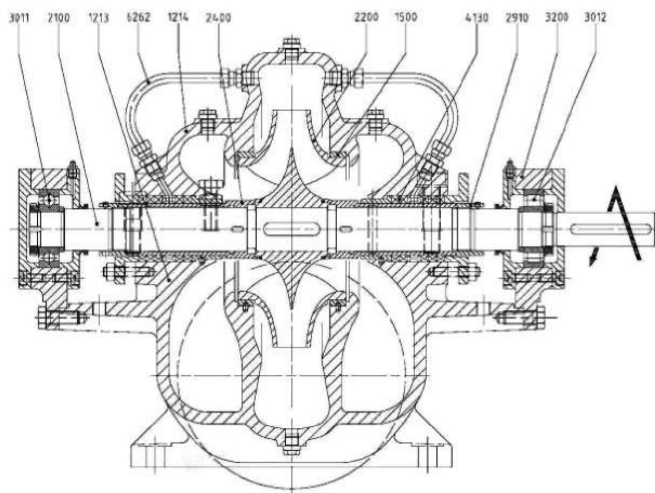
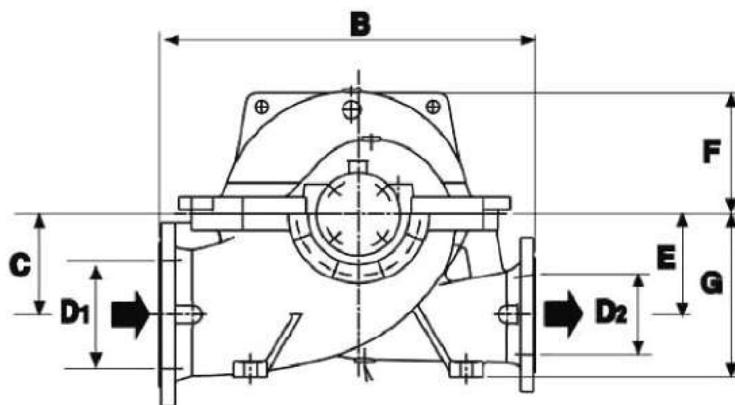
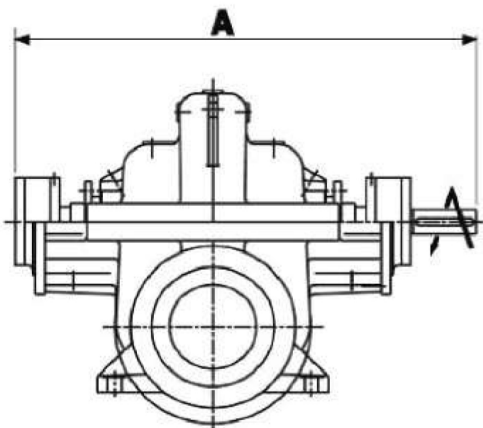
Performance Range-Centrifugal Fire Pumps, Vertical Shaft Turbine Type



HORIZONTAL SPLIT CASE FIRE PUMPS



HORIZONTAL SPLIT CASE FIRE PUMP DIMENSIONAL & SECTIONAL DRAWINGS



REF	DESCRIPTION	MATERIAL
1213	Casing half lower	Cast iron – G30
1214	Casing half upper	Cast iron – G30
1500	Casing wear ring	Bronze
2100	Shaft	Stainless steel
2200	Impeller	Bronze
2400	Sleeve	Bronze
2910	Shaft nut	Bronze
3011	Radial ball bearing	-
3012	Radial roller bearing	-
3200	Bearing housing	Cast iron – G30
4100	Staffing box	Bronze
4130	Gland packing	PTFE
4200	Mechanical seal	On request
6262	Pipe	Stainless steel

HORIZONTAL SPLIT CASE FIRE PUMP

UL PRODUCT CATEGORY

Centrifugal Fire Pumps, Split Case

EX27923

FRONTIER SAFETY LIMITED
85 GREAT PORTLAND STREET
FIRST FLOOR
LONDON, W1W 7LT UNITED KINGDOM

Fire pumps, single stage

Rated capacity (gpm)	Size (in.)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
1500	8x6	SCF200-150-460	115-181	1800	275
2000	8x6	SCF200-150-460	118-175	1800	275
750	5x3	FRNHSC125-80-350G	169-251	2980	261
750	6x4	FRNHSC150-100-320	138-198	2980	202
1000	6x4	FRNHSC150-100-320	130-191	2980	202
1250	8x5	FRNHSC200-125-300	116-190	2980	187
1250	8x5	FRNHSC200-125-380	118-177	2200	261
1500	8x6	FRNHSC200-150-460	115-181	1800	275
2000	8x6	FRNHSC200-150-460	118-175	1800	275
2000	10x8	FRNHSC250-200-350	123-239	2980	362
2500	10x8	FRNHSC250-200-350	114-227	2980	362
2500	10x8	FRNHSC250-200-430	138	1800	275
2500	10x8	FRNHSC250-200-430	125-190	2100	275
3000	10x8	FRNHSC250-200-430	144-187	2100	275
3500	12x10	FRNHSC300-250-490	119-189	1800	290
4000	12x10	FRNHSC300-250-490	114-185	1800	290
4500	12x10	FRNHSC300-250-490	153-181	1800	290
300	5x4	FRNHSC125-100-300	123-195	2980	400
400	5x4	FRNHSC125-100-300	123-195	2980	400
450	5x4	FRNHSC125-100-300	123-195	2980	400

Centrifugal Fire Pumps, Split Case

EX27923

Rated capacity (gpm)	Size (in.)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
500	5x4	FRNHSC125-100-300	123-195	2980	400
750	5x4	FRNHSC125-100-300	123-195	2980	400
300	5x4	FRNHSC125-100-300	123-195	3550	400
400	5x4	FRNHSC125-100-300	123-195	3550	400
450	5x4	FRNHSC125-100-300	123-195	3550	400
500	5x4	FRNHSC125-100-300	123-195	3550	400
750	5x4	FRNHSC125-100-300	123-195	3550	400
1000	8x6	FRNHSC200-150-310	123-195	2980	350
1250	8x6	FRNHSC200-150-310	112-230	2980	350
1500	8x6	FRNHSC200-150-310	109-221	2980	350
1000	8x6	FRNHSC200-150-310	175-286	3550	370
1250	8x6	FRNHSC200-150-310	168-281	3550	370
1500	8x6	FRNHSC200-150-310	158-269	3550	370
4500	16x14	FRNHSC400-350-640	129-196	1480	315
5000	16x14	FRNHSC400-350-640	127-194	1480	315
5500	16x14	FRNHSC400-350-640	124-192	1480	315
6000	16x14	FRNHSC400-350-640	120-190	1480	315
6500	16x14	FRNHSC400-350-640	116-186	1480	315
7000	16x14	FRNHSC400-350-640	113-182	1480	315
7500	16x14	FRNHSC400-350-640	109-179	1480	315
500	6x5	FRNHSC150-125-250	117-162	2980	310
750	6x5	FRNHSC150-125-250	114-160	2980	310
1000	6x5	FRNHSC150-125-250	103-151	2980	310
500	6x5	FRNHSC150-125-250	137-230	3550	310
750	6x5	FRNHSC150-125-250	138-230	3550	310
1000	6x5	FRNHSC150-125-250	130-225	3550	310
500	6x5	FRNHSC150-125-250S	130-185	3550	290
500	6x5	FRNHSC150-125-310	137-207	2980	370
750	6x5	FRNHSC150-125-310	132-203	2980	370
1000	6x5	FRNHSC150-125-310	121-192	2980	370
500	6x5	FRNHSC150-125-310	196-294	3550	370

Centrifugal Fire Pumps, Split Case

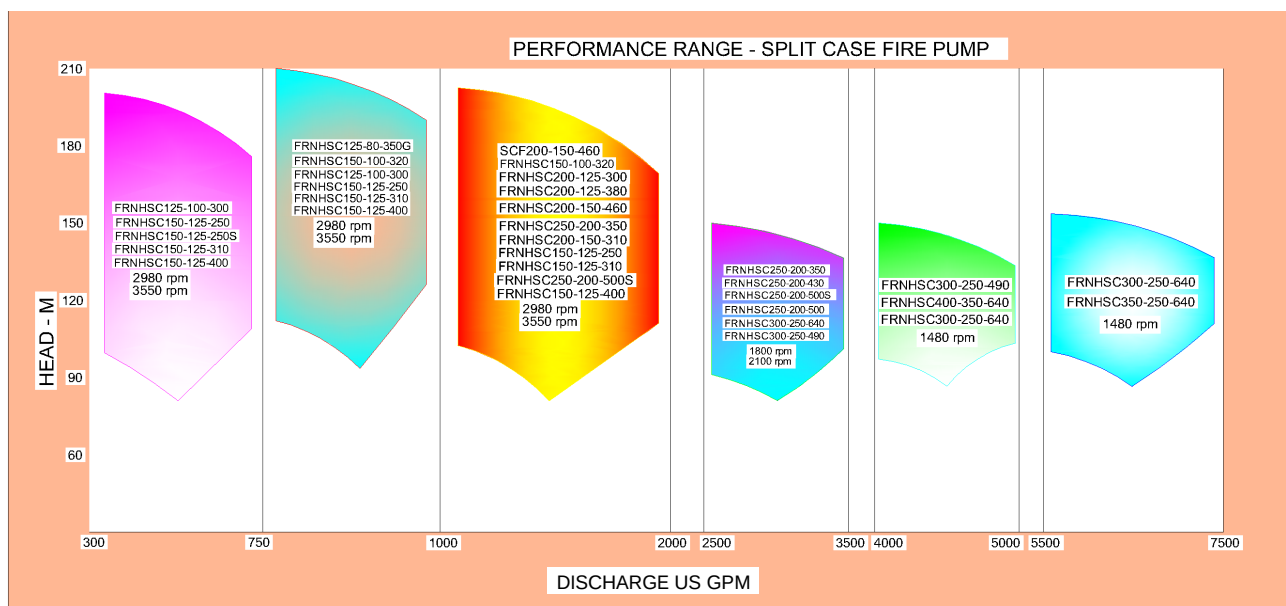
EX27923

Rated capacity (gpm)	Size (in.)	Model Dsg	Rated Net Pressure Range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
750	6x5	FRNHSC150-125-310	191-291	3550	370
1000	6x5	FRNHSC150-125-310	182-283	3550	370
2000	10x8	FRNHSC250-200-500S	118-186	1800	320
2500	10x8	FRNHSC250-200-500S	110-176	1800	320
2000	10x8	FRNHSC250-200-500S	149-234	2000	320
2500	10x8	FRNHSC250-200-500S	141-225	2000	320
500	6x5	FRNHSC150-125-400	208-283	2980	370
750	6x5	FRNHSC150-125-400	203-277	2980	370
1000	6x5	FRNHSC150-125-400	192-265	2980	370
3000	10x8	FRNHSC250-200-500	121-179	1760	340
3500	10x8	FRNHSC250-200-500	136-170	1760	340
3000	10x8	FRNHSC250-200-500	162-238	2000	340
3500	10x8	FRNHSC250-200-500	154-229	2000	340
3000	12x10	FRNHSC300-250-640	176-249	1480	330
3500	12x10	FRNHSC300-250-640	169-242	1480	330
4000	12x10	FRNHSC300-250-640	162-233	1480	330
4000	14x10	FRNHSC300-250-640	138-217	1480	300
4500	14x10	FRNHSC300-250-640	136-216	1480	300
5000	14x10	FRNHSC300-250-640	134-214	1480	300
6000	14x10	FRNHSC300-250-640	127-209	1480	300
4000	14x10	FRNHSC350-250-640	138-217	1480	300
4500	14x10	FRNHSC350-250-640	136-216	1480	300
5000	14x10	FRNHSC350-250-640	134-214	1480	300
6000	14x10	FRNHSC350-250-640	127-209	1480	300

HORIZONTAL SPLIT CASE FIRE PUMP PERFORMANCE RANGE

Centrifugal Fire Pumps, Horizontal Split-Case Type

UL SCF SINGLE STAGE DOUBLE SUCTION FIRE PUMP PERFORMANCE RANGE (MOTOR 50HZ)

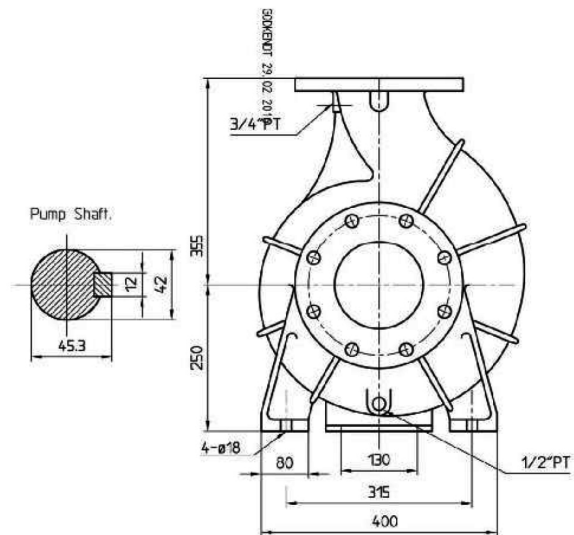
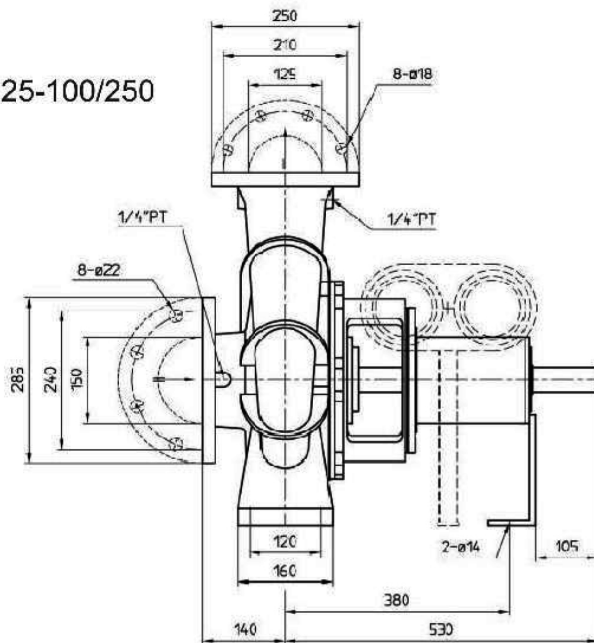


END SUCTION FIRE PUMPS

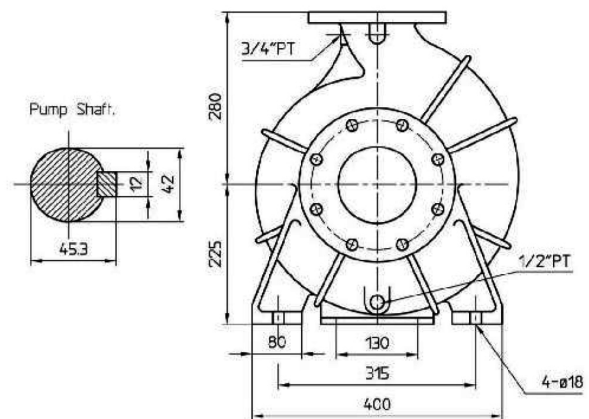
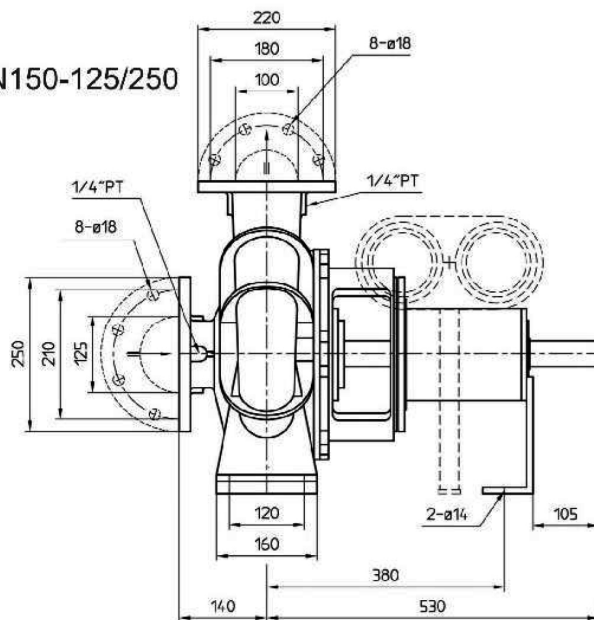


END SUCTION FIRE PUMP SECTIONAL & DIMENSIONAL DRAWINGS

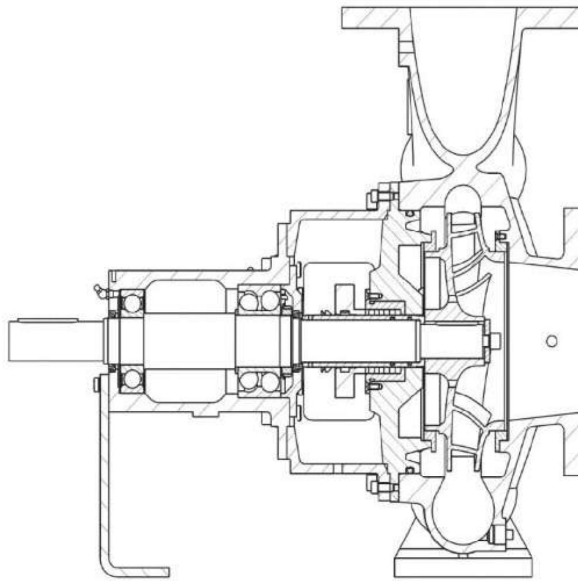
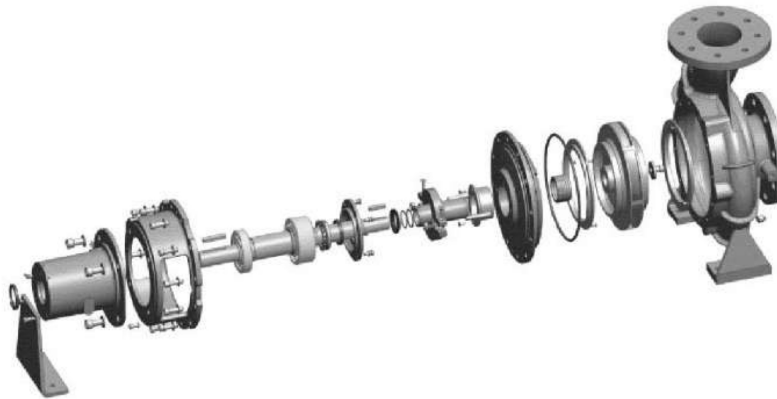
CN125-100/250



CN150-125/250



END SUCTION FIRE PUMP SECTIONAL & DIMENSIONAL DRAWINGS



END SUCTION FIRE PUMP UL PRODUCT CATEGORY

Centrifugal Fire Pumps, End Suction

EX28017

FRONTIER SAFETY LIMITED

85 GREAT PORTLAND STREET, FIRST FLOOR
LONDON, W1W 7LT UNITED KINGDOM

Rated Capacity gpm	Size In	Model Dsg	Rated Net pressure range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
200	2-1/2x2	FRNES 50/26	105-140	2980	232
250	2-1/2x2	FRNES 50/26	99-136	2980	232
250	3x2-1/2	FRNES 65/26	119-147	2980	239
300	3x2-1/2	FRNES 65/26	119-147	2980	239
400	3x2-1/2	FRNES 65/26	119-141	2980	239
450	3x2-1/2	FRNES 65/26	114-138	2980	239
500	3x2-1/2	FRNES 65/26	111-135	2980	239
500	4x3	FRNES 80/26	116-138	2980	232
750	4x3	FRNES 80/26	105-132	2980	232
200	2-1/2x2	FRNES 50/20	72-99	2980	232
250	2-1/2x2	FRNES 50/20	69-99	2980	232
200	2-1/2x2	FRNES 50/20	102-142	3550	232
250	2-1/2x2	FRNES 50/20	101-141	3550	232
250	3x2-1/2	FRNES 65/20	86-107	2980	232
300	3x2-1/2	FRNES 65/20	86-107	2980	232
400	3x2-1/2	FRNES 65/20	83-104	2980	232

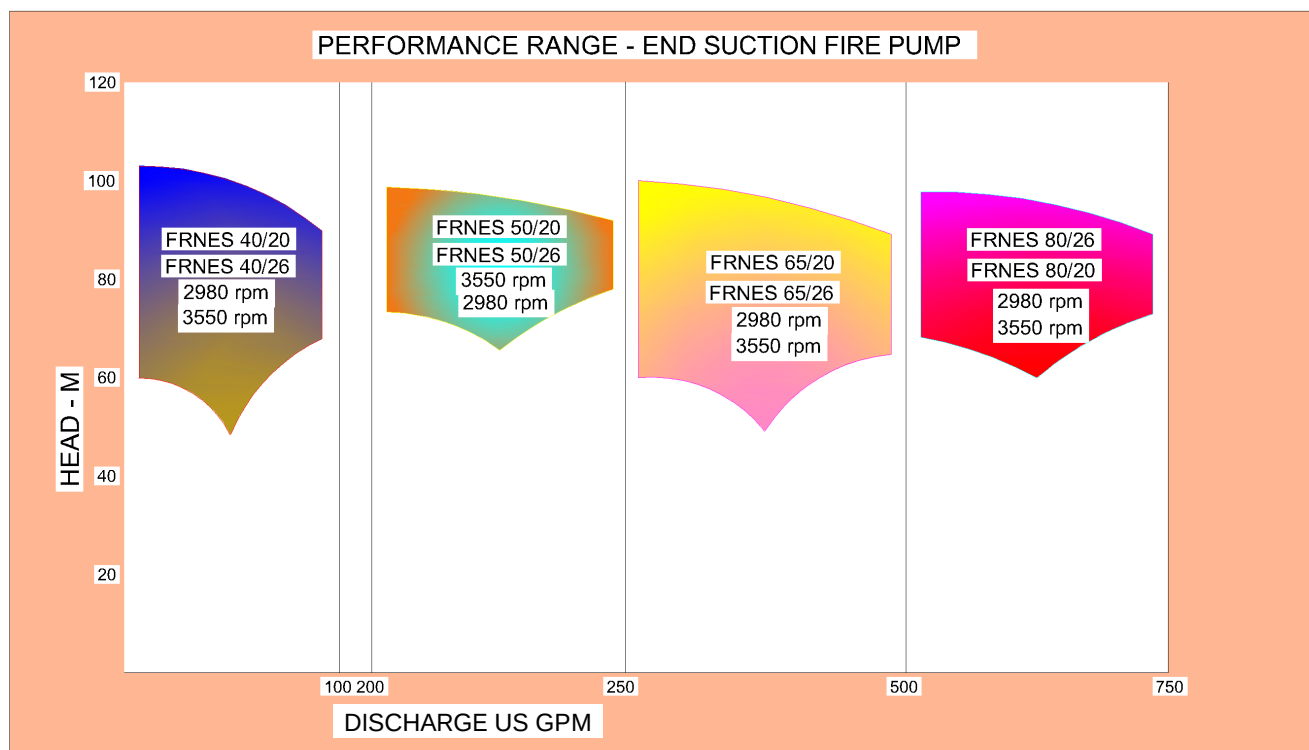
Centrifugal Fire Pumps, End Suction

EX28017

Rated Capacity gpm	Size In	Model Dsg	Rated Net pressure range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
450	3x2-1/2	FRNES 65/20	80-102	2980	232
500	3x2-1/2	FRNES 65/20	77-99	2980	232
250	3x2-1/2	FRNES 65/20	113-152	3550	232
300	3x2-1/2	FRNES 65/20	112-152	3550	232
400	3x2-1/2	FRNES 65/20	108-150	3550	232
450	3x2-1/2	FRNES 65/20	105-148	3550	232
500	3x2-1/2	FRNES 65/20	101-145	3550	232
500	4x3	FRNES 80/20	90-100	2980	232
750	4x3	FRNES 80/20	87-98	2980	232
500	4x3	FRNES 80/20	129-142	3550	232
750	4x3	FRNES 80/20	127-142	3550	232
50	2-1/2x1-1/2	FRNES 40/20	76-111	2980	232
100	2-1/2x1-1/2	FRNES 40/20	72-109	2980	232
50	2-1/2x1-1/2	FRNES 40/20	108-157	3550	232
100	2-1/2x1-1/2	FRNES 40/20	105-157	3550	232
100	2-1/2x1-1/2	FRNES 40/26	100-138	2980	232

END SUCTION FIRE PUMP PERFORMANCE RANGE

Performance Range of Pump-End Suction (50HZ)





FRONTIER SAFETY LTD UK

