



Standard Fire-fighting pump set
(Electric motor)



OPTIONAL
Fire-fighting pump with Jockey pump set
(Electric Motor)

▲ Main Pump Selection

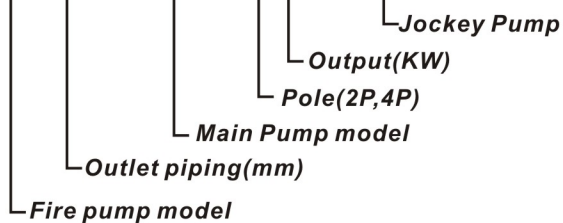
XA-series (DIN24255)
End suction centrifugal pump



- Output range : 7.5HP~100HP
- Pump inlet: 2"~6"
- Pump outlet: 1 1/4"~5"
- Head range: 37~127M
- Capacity: 150~3800L/min

▲ Model Code

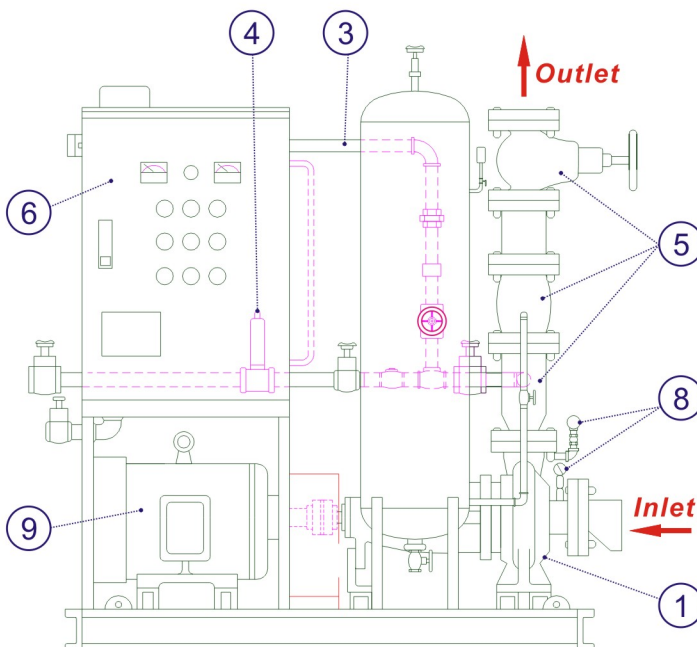
FF150- XA8026-275+JP27.5



▲ Applications

Water supply and auto boost water pressure to the fire sprinkler system, fire hydrant, fire foam system of the buildings, malls, hotels, factories, stadium, parking area, stations, airports, schools,...,etc.

▲ Structure



▲ Jockey Pump Selection

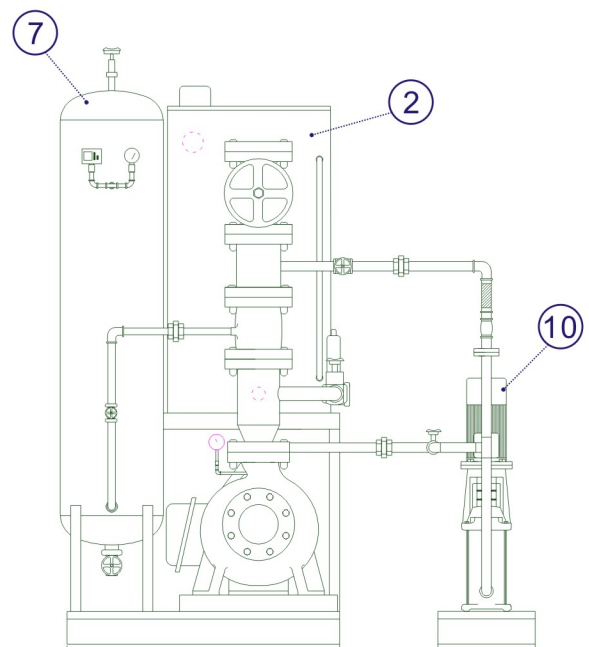


▲ Function:

In order to avoid frequent running of main pump due to minor water leakage or small water volume required, the mounting of jockey pump is purposed to take care of the water leakage or small water volume in this regard, that is, jockey pump will be started/ stopped when there is an occurrence of water leakage taken place to the pipeline while the main pump will not be started.

▲ Specification:

Output range: 1.5~11KW
Pole: 2P; HZ:60 ; Speed:3500rpm
Pump Inlet /Outlet: 1 1/2"~2"
Rated head range: 38~200M
Rated capacity range: 100~200 L/min



▲ Structure Illustration

① Main Pump

Adopting XA model End suction single stage centrifugal pump

- 1.1 In accordance with DIN24255(EN733) standard.
2. Back-pull-out design for easily repairing.
3. Shaft sealing with mechanical seal.
4. diverse material options of pump casing, shaft, and impeller.
5. 42 different sizes in the range,
6. Capacity: 1080M³/hr.
7. Head up to 100meters.
8. Operating pressure: Max. 1.0~1.6 Mpa.

② Water priming device

- 2.1 Outfit: Water storage tank for priming water, drain pipes for overflowing water, water-stopping cock with removal of remaining water, makeup water inlet connector(floating ball valve included), alarm device for low water level, auto water makeup device(check valve and water-stop clock included).
- 2.2 Storage tank is made of steel plate while its capacity of effective storage volume is above 100L.
- 2.3 Piping diameter of water supply pipes: 15A, drain pipes for water overflowing: 50A, water priming pipe: 40A.
- 2.4 Alarm device for low water level: Applied the floating ball switch or the electrode method; the alarm will be triggered when the water level in water storage tank has been dropped to 1/2 capacity.

③ Thermal protector device

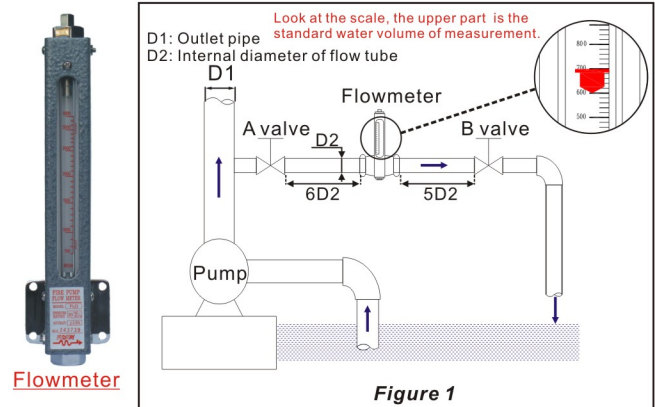
- 3.1 The discharging pipe for preventing the temperature rise of water is connected to the primary side of check valve to the discharging side of water pump with an orifice plate mounted in between them so that the pump can discharge minor volume of water into the room-temperature water storage tank during its operation.
- 3.2 There shall be no valves with a diameter bigger than 15A mounted to the piping of discharging pipes for preventing the temperature rise of water.
- 3.3 The water volume flowing inside the discharging pipe for preventing the temperature rise of water is able to prevent the water temperature inside the water pump from going higher than 30°C when pump is at fully-shut status and continuous running condition.

④ Test device for flow rate and performance

- 4.1 Able to test the pump water capacity during regular check.
- 4.2 Flowway flowmeter to measure and read directly the rated water volume and the range of 150% rated flow.
- 4.3 Mounted a pressure gauge with a precision above 1.5 class.

⑤ Main piping

- 5.1 If required Head is over 100M: ductile Iron silent check valve, ductile Iron Gate valve, Other connecting piping, 20K flanges.
- 5.2 If required Head is below 100M: cast Iron silent check valve, cast Iron gate valve, other connecting piping, 10K flanges.



⑥ Control panel

- 6.1 Indicators: power supply indicator, start indicator, water-reducing indicator of priming tank, overload indicator, automatic isolation indicator.
- 6.2 Operation switches: stop push button switch, start push button switch, reset switch, auto/stop/manual selection switch.
- 6.3 Alarm devices: alarm buzzers for overload of electric motor and water reduction of priming tank; manual and direct operation is needed to stop buzzing and reset the buzzer; motor will not stop automatically when alarm buzzer is triggered.
- 6.4 Instrument: ammeter and voltmeter.
- 6.5 Terminals: input terminal for start, input terminal for detecting the water reduction in priming tank, output terminal for alarm signal, output terminal for pump's running signal, terminal for grounding. No-fuse breaker, electromagnetic switch, thermal relay.

⑦ Pressure Tank

- 7.1 Standard capacity of pressure tank is 100L, the maximum working pressure is 2.0Mpa.
- 7.2 Equipped with pressure gauge, pressure switch, bronze gate valve, safety valve.

⑧ Pressure gauge and vacuum meter

- 8.1 Pressure gauge and vacuum meter with a precision above 1.5 Level.

⑨ Electric Motor (Diesel engine is optional per request)

- 9.1 Output ranges: 5.5~75KW (Above 75KW output specifications are available upon special request).
- 9.2 Voltage/HZ: Three phase 220V/440V; 380/660V/60HZ.
- 9.3 IP54; Insulation E, B, F; Enclosed Fan cooled induction motor (IEC standard).
- 9.4 Pole/RPM: 2P~4P/3500rpm~1750rpm.

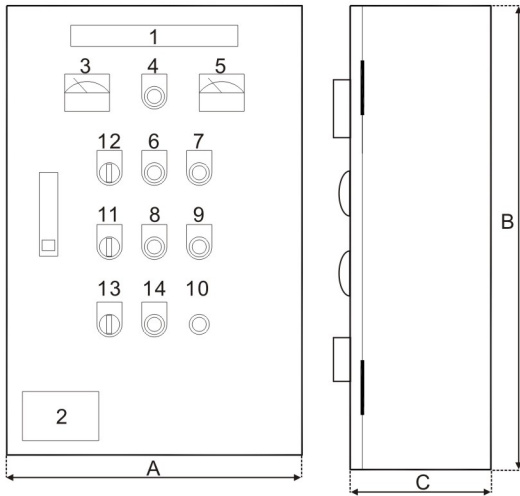
⑩ Jockey Pump (Optional)

- 10.1 Vertical multi-stage centrifugal pump is designed for fire jockey pump.
- 10.2 Output range: 1.5~11KW; Rated head: 38~200M; Capacity: 100~200L/min.



Jockey Pump

Control Panel



Dimensions Of Control Panel

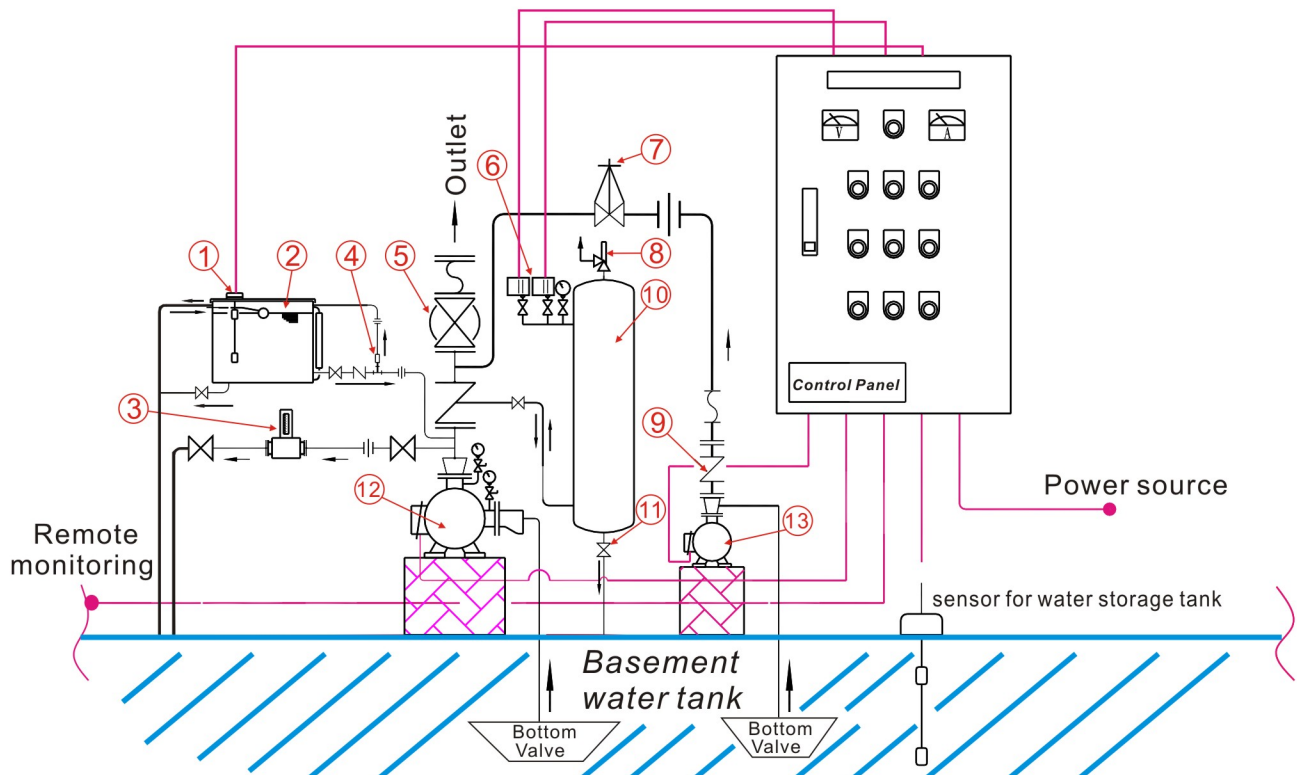
Voltage and start method		Output ranges(HP)	A	B	C
3 ϕ 220V	Direct start	7.5~10	365	480	190
		15~25	405	640	220
	Y- Δ	30~60	505	800	240
		75~100	605	1050	270
3 ϕ 380V 3 ϕ 440V 3 ϕ 660V	Direct start	7.5~10	365	480	190
	Y- Δ	15~40	405	640	220
		50~100	505	800	240

● Above 100HP specifications are available upon request.

Instruction Chart

No.	Name	No.	Name
1	Name plate(application)	8	Stop lamp(green)
2	Name plate(specification)	9	Water shortage lamp(orange)
3	Voltmeter	10	Buzzer
4	Power supply lamp(white)	11	Buzzer reset switch(on/off)
5	Ammeter	12	Auto/manual/stop switch(Main pump)
6	Running lamp(red)	13	Jockey pump running lamp
7	Motor overload lamp(orange)	14	Auto/manual/stop switch(Jockey pump)

System Diagram



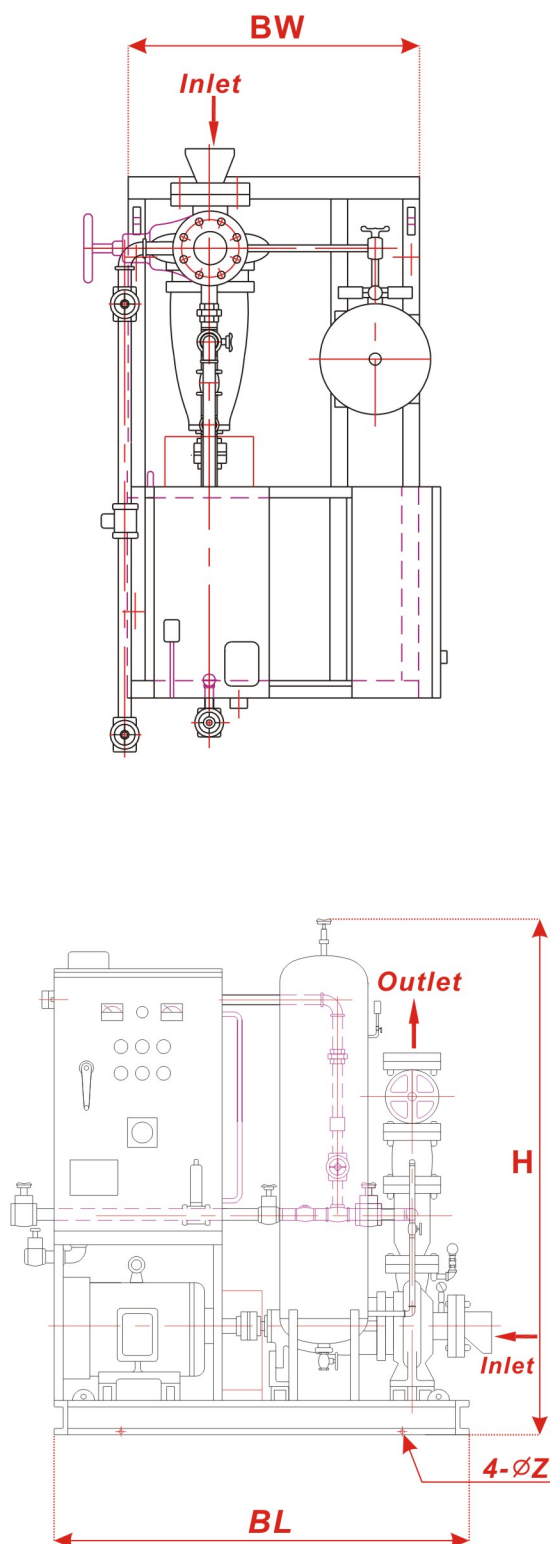
- | | | |
|----------------------|--------------------|---------------------------|
| 1. Float sensor | 6. Pressure switch | 11. Pressure relief valve |
| 2. Storage tank | 7. Ball valve | 12. Main pump |
| 3. Flowmeter | 8. Safety valve | 13. Jockey pump |
| 4. Temp. check valve | 9. Check valve | |
| 5. Gate valve | 10. Pressure tank | |
- : Power supply wiring
—: Pipelines

Specification & Performance Table

Model	Output	Inlet	Outlet	Impeller dia.	Max. Head		Rated Head		Rated Capacity	
	HP	Inch	Inch	MM	M	Ft	M	Ft	L/min	Gal/min
FF80-XA3216-25.5	7.5	3"	3"	174	56	184	52	171	300	79
FF80(100)-XA3220-27.5	10	3"(4")	3"(4")	192	66	217	61~64	200~210	300~150	79~39.5
FF80(100)-XA3220-211	15	3"(4")	3"(4")	214	95	312	86~92	282~302	300~150	79~39.5
FF100-XA4020-211	15	4"	4"	192	75	246	65	213	460	121.5
FF100-XA5016-211	15	4"	4"	155	47	154	40	131	800	211.5
FF100-XA4020-215	20	4"	4"	214	91	299	86~88	282~289	460~300	121.5~79
FF100-XA3226-215	20	4"	4"	230	104	341	99~100	325~328	320~300	84.5~79
FF100-XA6516-215	20	4"	4"	160	51	167	42~43	138~141	1100~1200	291~317
FF100-XA5020-215	20	4"	4"	190	71	233	56~67	184~220	1000~630	264~167
FF80(100)-XA4026-218	25	3"(4")	3"(4")	240	96	315	92	302	460	121.5
FF100-XA5020-218	25	4"	4"	205	83	272	75~80	246~262	1000~630	264~167
FF100-XA6520-218	25	4"	4"	176	58	190	53~55	174~180	1460~1100	386~291
FF150-XA8016-218	25	6"	6"	145	37	121	30	98	2200	581
FF80(100)-XA4026-222	30	3"(4")	3"(4")	243	116	381	105~112	345~367	500~300	132~79
FF100-XA5020-222	30	4"	4"	210	90	295	78~80	256~262	920~850	243~225
FF100-XA5020A-222	30	4"	4"	205	85	279	73~76	240~249	1050~900	278~238
FF100-XA5026-222	30	4"	4"	216	98	322	84~90	276~295	850~630	225~167
FF100-XA6520-222	30	4"	4"	190	76	249	68~71	223~233	1350~1100	357~291
FF150-XA8016-222	30	6"	6"	156	41	135	37	121	2200	581
FF100-XA5026-230	40	4"	4"	230	107	351	84~93	276~305	1050~900	278~238
FF100-XA5026A-230	40	4"	4"	235	113	371	92~104	302~341	980~840	259~222
FF100-XA6520-230	40	6"	4"	202	86	282	77~82	253~269	1460~1100	386~291
FF100-XA6520A-230	40	6"	4"	196	79	259	69~72	226~236	1700~1480	449~391
FF150-XA8016-230	40	6"	6"	169	51	167	46	151	2200	581
FF100-XA5026-237	50	4"	4"	244	127	417	118	387	750	198
FF100-XA6520-237	50	6"	4"	214	100	328	88~91	289~299	1450~1680	383~444
FF100-XA6526-237	50	4"	4"	225	104	341	94~100	308~328	1460~1100	386~291
FF150-XA8026-237	50	6"	6"	195	82	269	62~74	203~243	2200~1470	581~388
FF150-XA12532-437	50	8"	6"	320	49	161	45	148	3300	872
FF100-XA6526-245	60	6"	4"	231	115	377	103~112	338~367	1550~1080	409~285
FF100-XA6526A-245	60	4"	4"	226	103	338	99	325	1450	383
FF150-XA8026-245	60	6"	6"	212	91	299	78~80	256~262	2400~2200	634~581
FF150-XA10020-245	60	6"	6"	188	69	226	60~64	197~210	2900~2700	766~713
FF150-XA12540-445	60	8"	6"	335	57	187	48	157	3300	872
FF150-XA12532-445	60	8"	6"	329	57	187	45~47	148~154	3800~3300	1001~872
FF100-XA6526-255	75	6"	4"	250	130	427	125~127	410~417	1350~1200	357~317
FF150-XA8026-255	75	6"	6"	225	104	341	80~99	262~325	2700~1820	713~481
FF150-XA8026A-255	75	6"	6"	225	90	295	75~82	246~269	3000~2400	792~634
FF150-XA8026B-255	75	6"	6"	238	116	381	113	371	1600	423
FF150-XA12540-455	75	8"	6"	366	68	223	59~60	194~197	3800~3300	1001~872
FF150-XA6526-275	100	6"	6"	264	145	476	142	466	1350	357
FF150-XA8026-275	100	8"	6"	240	115	377	100~105	328~345	2700~2400	713~634
FF150-XA8026A-275	100	6"	6"	246	128	420	115~120	377~394	2200~1700	581~449
FF150-XA10026-275	100	6"	6"	223	101	331	95	312	2700	713
FF150-XA12540-475	100	8"	6"	385	76	249	71~74	233~243	3800~3300	1001~872
FF150-XA12540A-475	100	8"	6"	405	83	272	78~81	256~266	3600~3300	951~872

● Above 100HP specifications and special performance requirement are available upon request.

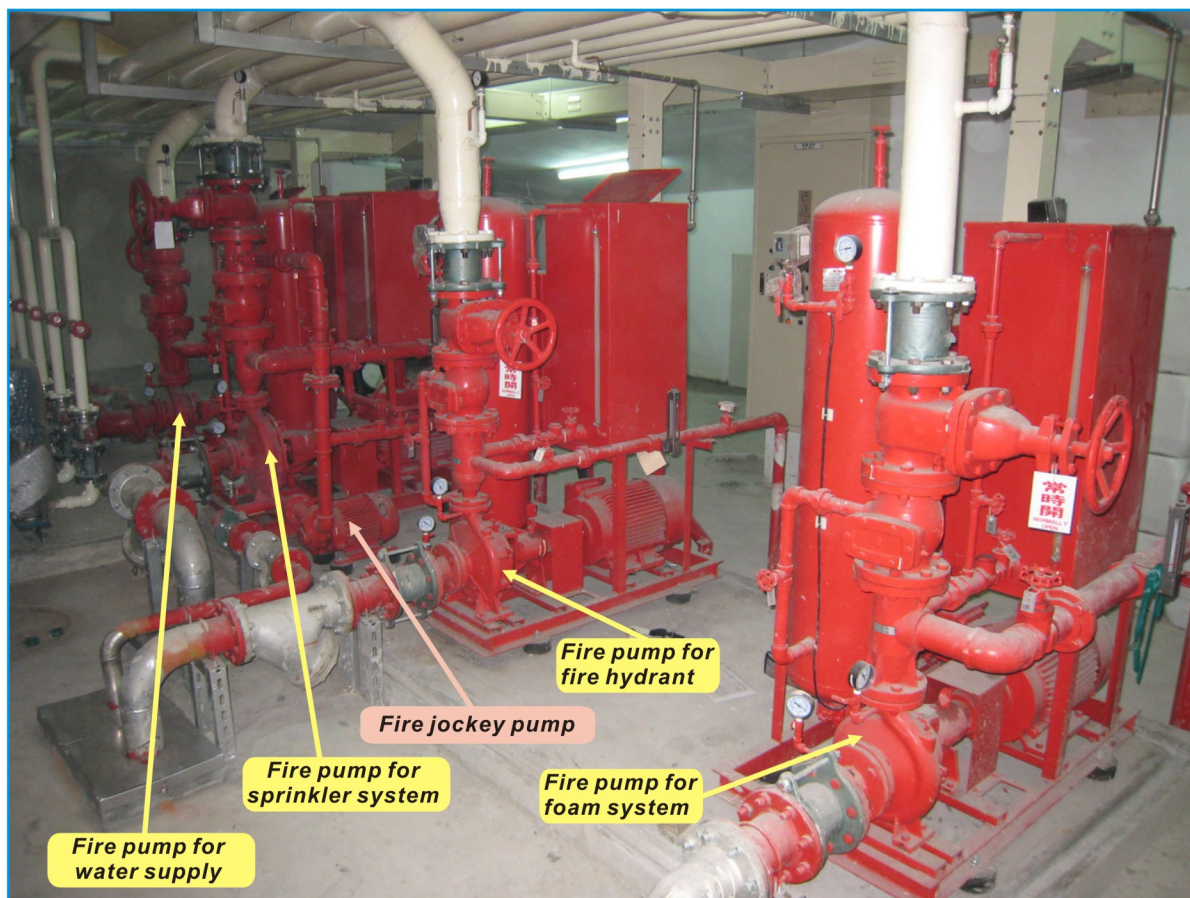
Dimension



Model	Output	Pole	Dimensions (unit:mm)				N.W
	HP	P	H	BL	BW	ØZ	KG
FF80-XA3216-25.5	7.5	2	1760	980	620	15	385
FF80(100)-XA3220-27.5	10	2	1760	980	620	15	405
FF80(100)-XA3220-211	15	2	1760	1220	670	15	440
FF100-XA4020-211	15	2	1760	1220	670	15	485
FF100-XA5016-211	15	2	1760	1220	670	15	500
FF100-XA4020-215	20	2	1760	1220	670	15	580
FF100-XA3226-215	20	2	1760	1220	670	15	570
FF100-XA6516-215	20	2	1760	1220	670	15	575
FF100-XA5020-215	20	2	1760	1220	670	15	590
FF80(100)-XA4026-218	25	2	1760	1220	670	15	615
FF100-XA5020-218	25	2	1760	1220	670	15	615
FF100-XA6520-218	25	2	1760	1220	670	15	625
FF150-XA8016-218	25	2	1760	1220	670	15	820
FF80(100)-XA4026-222	30	2	1760	1220	670	15	650
FF100-XA5020-222	30	2	1760	1220	670	15	680
FF100-XA5020A-222	30	2	1760	1220	670	15	680
FF100-XA5026-222	30	2	1760	1220	670	15	685
FF100-XA6520-222	30	2	1760	1220	670	15	790
FF150-XA8016-222	30	2	1760	1220	670	15	810
FF100-XA5026-230	40	2	1760	1220	670	15	720
FF100-XA5026A-230	40	2	1760	1220	670	15	720
FF100-XA6520-230	40	2	1760	1220	670	15	730
FF100-XA6520A-230	40	2	1760	1220	670	15	730
FF150-XA8016-230	40	2	1760	1220	670	15	795
FF100-XA5026-237	50	2	1760	1400	755	19	850
FF100-XA6520-237	50	2	1760	1400	755	19	870
FF100-XA6526-237	50	2	1760	1400	755	19	920
FF150-XA8026-237	50	2	1760	1400	755	19	940
FF150-XA12532-437	50	4	1830	1500	925	19	1020
FF100-XA6526-245	60	2	1760	1400	755	19	880
FF100-XA6526A-245	60	2	1760	1400	755	19	880
FF150-XA8026-245	60	2	1760	1400	755	19	940
FF150-XA10020-245	60	2	1760	1400	755	19	935
FF150-XA12540-445	60	4	1830	1500	925	19	1045
FF150-XA12532-445	60	4	1830	1500	925	19	1030
FF100-XA6526-255	75	2	1760	1400	805	19	1000
FF150-XA8026-255	75	2	1760	1400	805	19	1060
FF150-XA8026A-255	75	2	1760	1400	805	19	1060
FF150-XA8026B-255	75	2	1760	1400	805	19	1060
FF150-XA12540-455	75	4	1830	1500	925	19	1150
FF150-XA6526-275	100	2	1780	1500	925	19	1220
FF150-XA8026-275	100	2	1780	1500	925	19	1230
FF150-XA8026A-275	100	2	1780	1500	925	19	1230
FF150-XA10026-275	100	2	1780	1500	925	19	1240
FF150-XA12540-475	100	4	2025	1650	960	19	1350
FF150-XA12540A-475	100	4	2025	1650	960	19	1350

● Above 100HP or special specifications are available upon request.

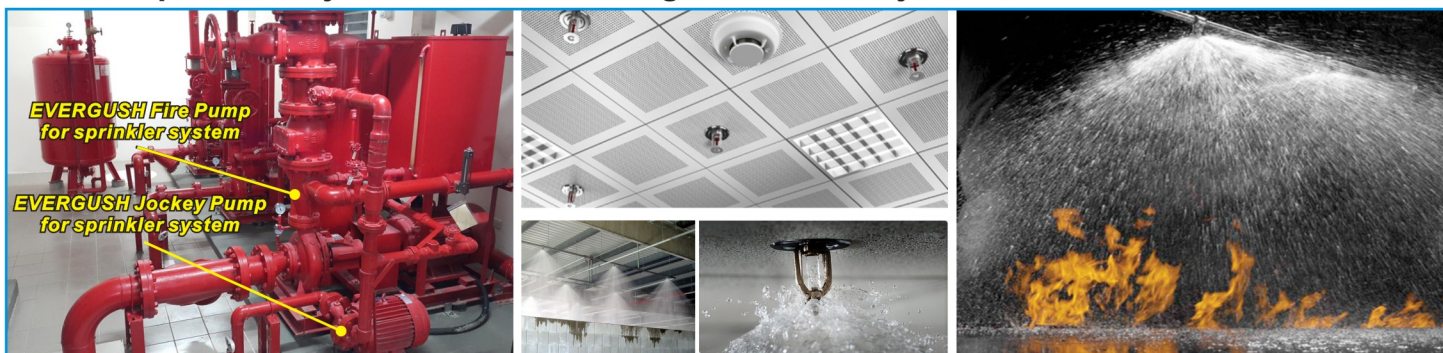
▲ Main applications of EVERGUSH Fire-fighting pump



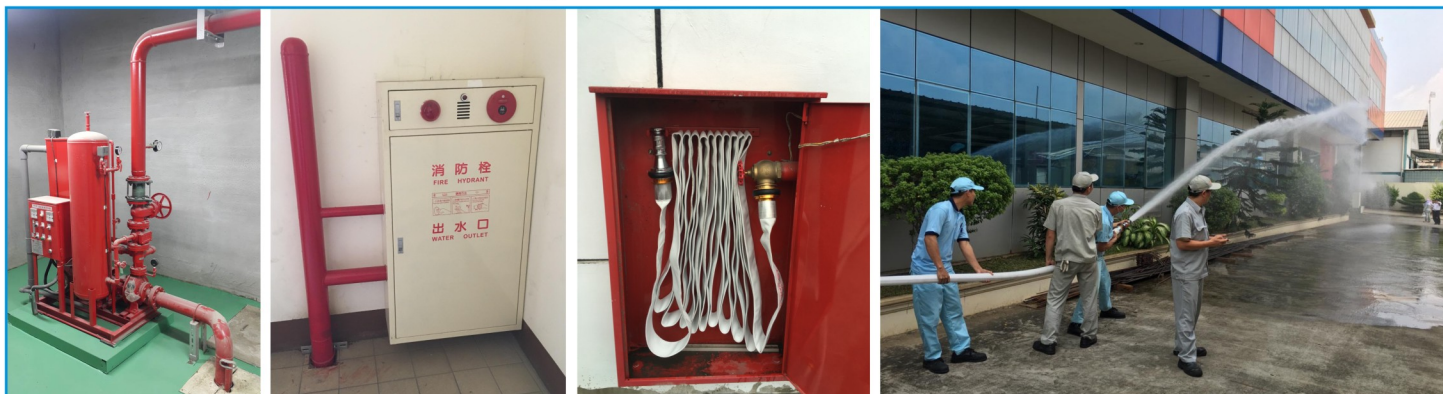
- For foam sprinkler system in parking lot of building
Water mixed with foam for extinguishing fire with some gasoline in parking lot



- For sprinkler system in the building, hotel, factory, mall, etc.



For **Fire hydrant** in the building, factory, hotel, school, ..etc.



Emergency water supply from sprinkler outlet installed outside of the building.



Installed **EVERGUSH** Fire-fighting pump sets in **high-rise building**. Separate into 2 groups, one is installed in intermediate floors, another is installed in engine room of basement.



Remarkable Sales Records in Taiwan

- Taipei MRT (Mass Rapid Transit) Stations.
- Kaohsiung (Mass Rapid Transit) Stations.
- Taiwan High Speed Rail Stations.
- Taiwan Railway Stations.
- Fo Guan Shan Buddha Memorial Center.
- Taipei Arena.
- Taoyuan International Airport.
- Taichung International Airport.
- Kaohsiung International Airport.
- Kaohsiung Software Technology Park.
- Hsinchu Science Park.
- Taichung Science Park.
- Tainan Science Park.
- Formosa Plastics Corporation Plant.
- The plant of Chinese Petroleum Corp.
- The plant of China Steel Corp.
- The plant of China Shipbuilding Corp.
- National Taiwan University.
- National Chiao Tung University.
- National Tsin Hua University.
- National Cheng Kung University.
- Taichung Metropolitan Opera House.
- Cable car stations of Sun Moon Lake.
- Taipei Maokong cable car stations.
- Kaohsiung E-DA World Park.
- Janfusun Fancyworld Theme Park.
- Taiwan Freeway Rest Area.
- Hualien Farglory Ocean Park.
- Formosa Aboriginal Culture Village.
- National Museum of Marine Biology & Aquarium.
- KINMEN Liquor Plant.
- Department stores of SOGO, Hanshin, Talee, Far East, Shin Kong Mitsukoshi..etc.
- The plant of Taiwan Power Corp.
- Taiwan Carrefour shopping malls.
- Taiwan TESCO shopping malls.
- Taiwan COSCO shopping malls.
- Hospitals of Tzu Chi and Chang Gung,..etc.
- National Taiwan University Hospital.
- Royal Motel Chains.
- Beach Resort Hotels of Chateau, Howard,..etc.



Fo Guan Shan Buddha Memorial Center



Kaohsiung E-DA World Park



Taichung High Speed Rail Station



Kaohsiung Mass Rapid Transit Station



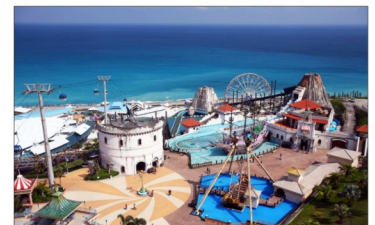
Taipei Arena



The plant of China Steel Corp.



KINMEN Kaoliang Liquor Plant



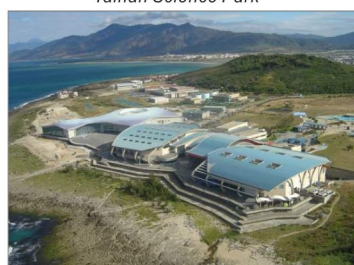
Hualien Farglory Ocean Park



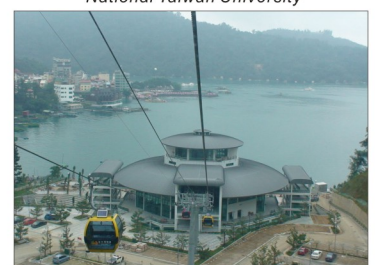
Tainan Science Park



National Taiwan University



National Museum of Marine Biology & Aquarium



Cable car station of Sun Moon Lake



EVERGUSH Fire-fighting pumps



EVERGUSH Fire-fighting pumps