



Standard Fire-fighting pump set
(Electric motor)



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

Main Pump Selection

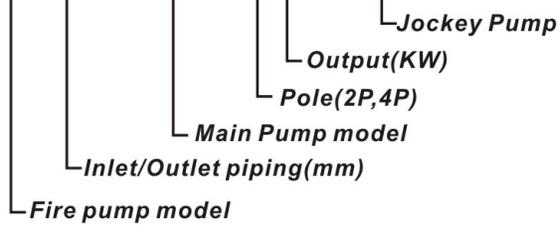
XA-series (DIN24255)
End suction centrifugal pump



- Output range : 7.5HP~125HP
- Pump inlet: 2"~5"
- Pump outlet: 1 1/4"~4"
- Head range: 37~97M
- Capacity: 300~4800L/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.

Jockey Pump Selection



Function:

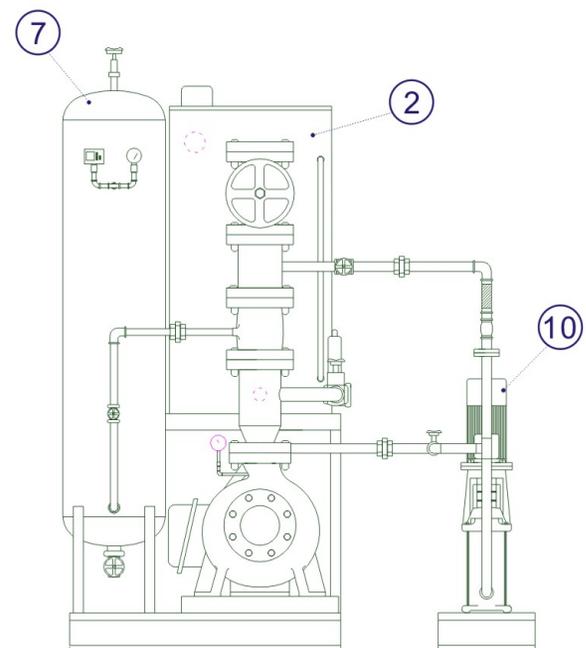
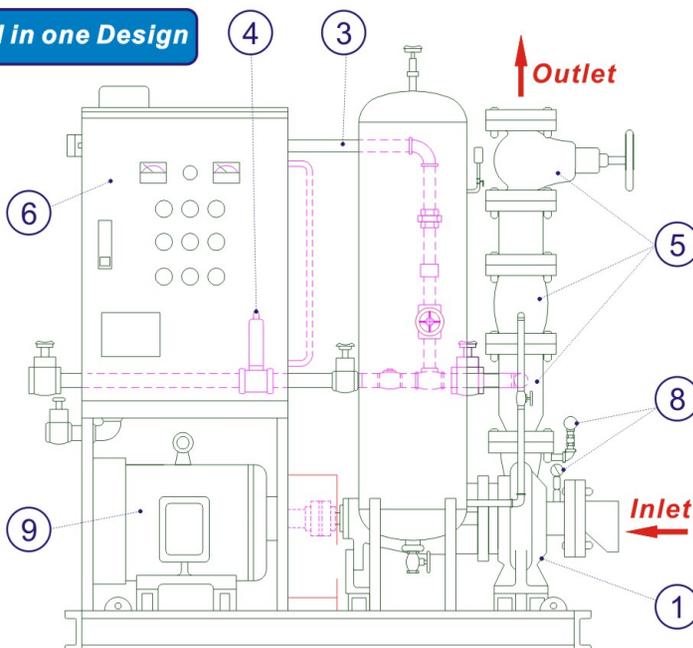
In order to avoid frequent running of main pump due to minor water leakage or small water volume required, the mounting of jockey pump is purposed to take care of the water leakage or small water volume in this regard, that is, jockey pump will be started/ stopped when there is an occurrence of water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

Specification:

Output range: 1.5~11KW
Pole: 2P; HZ: 50 ; Speed: 2900rpm
Pump Inlet /Outlet: 1 1/2"~2"
Rated head range: 38~200M
Rated capacity range: 100~200 L/min

Structure

All in one Design



▲ 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

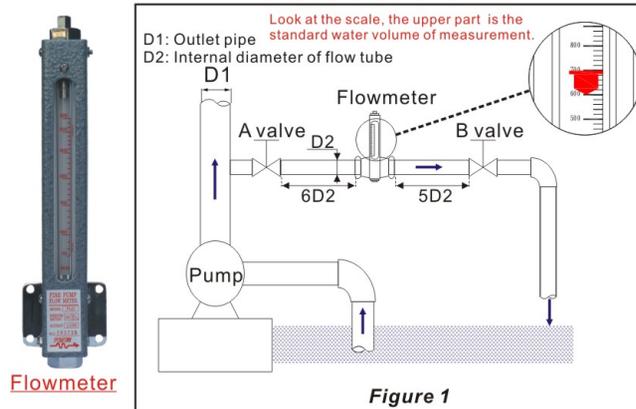
- 8.1 Pressure gauge and vacuum meter with a precision above 1.5 Level.

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)

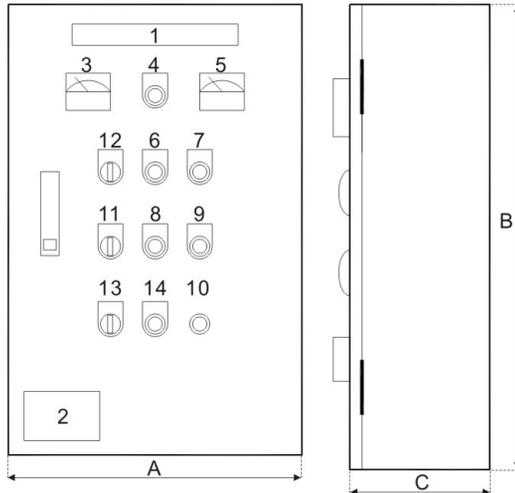
- 10.1 Vertical multi-stage centrifugal pump is designed for fire jockey pump.
- 10.2 Output range: 1.5~11KW ; Rated head: 38~200M; Capacity: 100~200L/min.



Flowmeter



Control Panel



Dimensions Of Control Panel

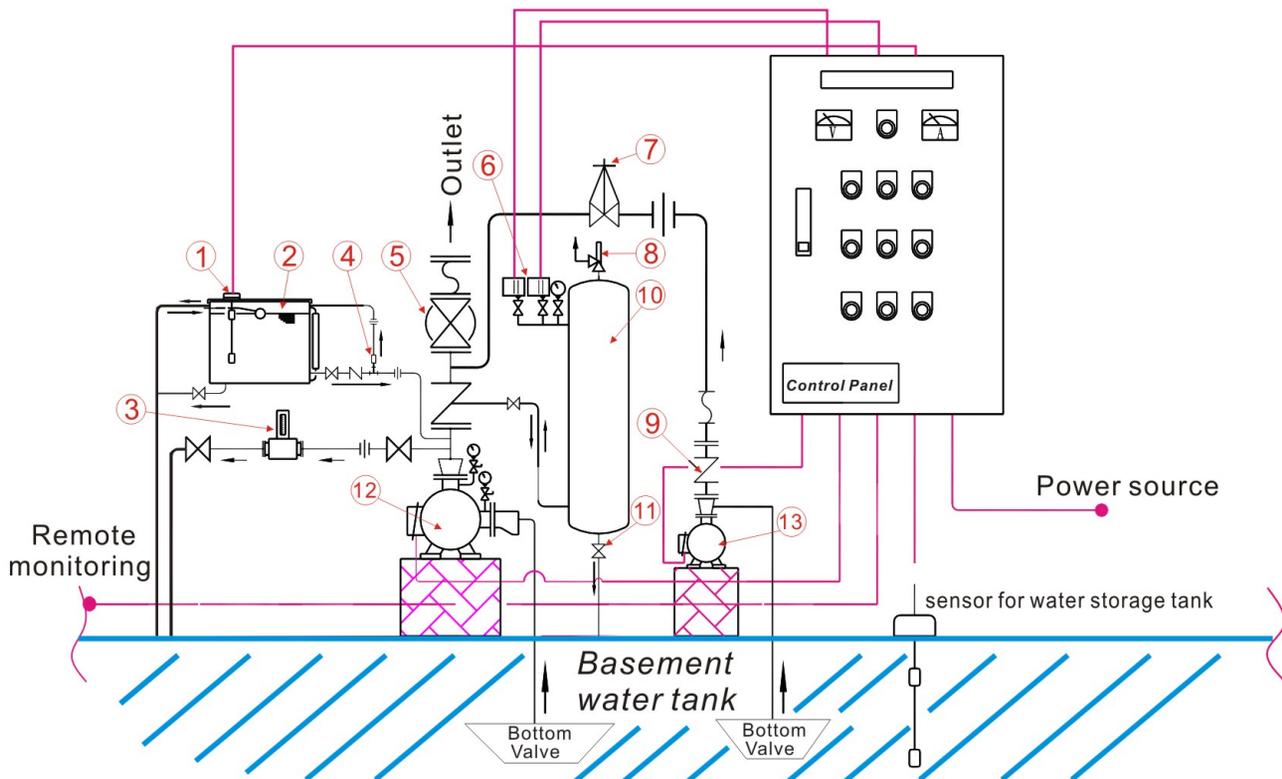
Voltage and start method		Output ranges(HP)	A	B	C
3 ϕ 220V	Direct start	7.5~10	365	480	190
		15~25	405	640	220
	Y- Δ	30~60	505	800	240
		75~100	605	1050	270
3 ϕ 380V 3 ϕ 440V 3 ϕ 660V	Direct start	7.5~10	365	480	190
	Y- Δ	15~40	405	640	220
		50~125	505	800	240

● Above 125HP 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



▲ Specifications & Performance Table

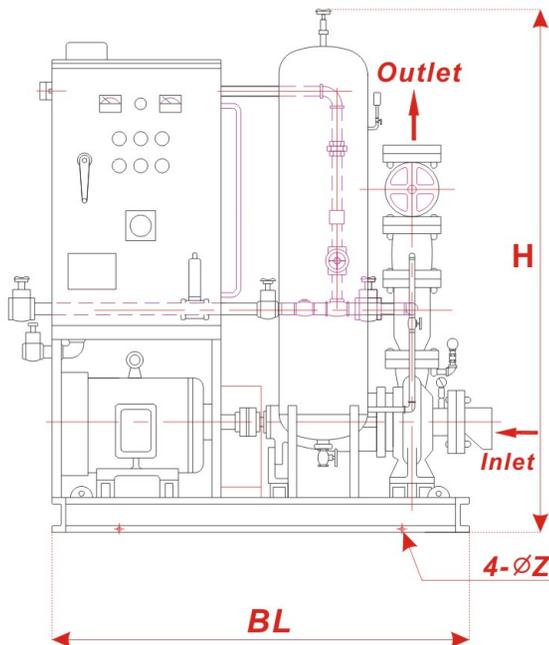
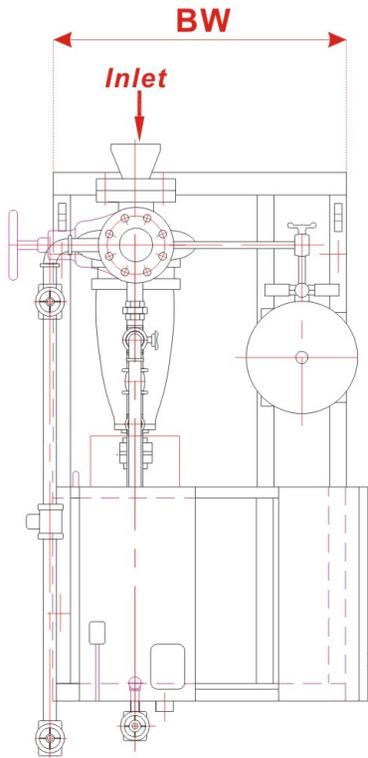
Model	Output		Pole	Inlet	Outlet	Impeller dia.	Max. Head	Rated Head	Rated Capacity	
	KW	HP	P	Inch	Inch	MM	M	M	L/min	M ³ /hr
FF80-XA3216-25.5	5.5	7.5	2	3"	3"	174	41	37~39	300~240	18~14.4
FF80-XA3220-27.5	7.5	10	2	3"	3"	214	64	59~61	300~240	18~14.4
FF80-XA4016-27.5	7.5	10	2	3"	3"	174	40.5	34~38.5	540~360	32.4~19.6
FF80-XA4020-211	11	15	2	3"	3"	214	64	56~62	540~360	32.4~19.6
FF100-XA5016-211	11	15	2	4"	4"	174	42	36.5~39.5	1200~960	72~57.6
FF100-XA5020-215	15	20	2	4"	4"	214	63	50~57	1200~960	72~57.6
FF80-XA3226-215	15	20	2	3"	3"	264	101	95~97	360~300	19.6~18
FF80-XA4026B-215	15	20	2	3"	3"	245	83	77~80	540~420	32.4~25.2
FF100-XA6516-215	15	20	2	4"	4"	174	41	35~38	1680~1200	100.8~72
FF80-XA4026-218	18.5	25	2	3"	3"	264	98	90~94	600~480	36~28.8
FF100-XA6520C-218	18.5	25	2	4"	4"	185	47	41~45	1680~1200	100.8~72
FF150-XA8016A-218	18.5	25	2	4"	4"	195	36	32~33	2400~2100	144~126
FF100-XA5026B-222	22	30	2	4"	4"	245	88	79~84	960~720	57.6~43.2
FF100-XA6520A-222	22	30	2	4"	4"	205	58	52~56	1680~1200	100.8~72
FF150-XA8016-222	22	30	2	6"	6"	174	40	36.5~37.5	2400~2100	144~126
FF100-XA5026-230	30	40	2	4"	4"	264	102	94~97	960~840	57.6~50.4
FF100-XA6520-230	30	40	2	4"	4"	214	64	59~61	1680~1440	100.8~86.4
FF100-XA6526C-230	30	40	2	4"	4"	235	78	70~73	1680~1440	100.8~86.4
FF150-XA8020A-230	30	40	2	6"	6"	205	57	52~53	2700~2400	162~144
FF150-XA10016-230	30	40	2	8"	6"	174	34.5	27~30	4200~3600	252~216
FF100-XA6526A-237	37	50	2	4"	4"	255	92	86~88	1680~1440	100.8~86.4
FF150-XA8020-237	37	50	2	6"	6"	214	62	58~59	2700~2400	162~144
FF150-XA10020C-237	37	50	2	8"	6"	185	43	36~39	4200~3600	252~216
FF100-XA6526-245	45	60	2	6"	4"	264	100	90~95	1920~1440	115.2~86.4
FF150-XA8026C-245	45	60	2	6"	6"	235	77	69~71	2700~2400	162~144
FF150-XA10020A-245	45	60	2	8"	6"	205	54	48~51	4200~3600	252~216
FF150-XA8026A-255	55	75	2	6"	6"	255	91	83~86	2700~2400	162~144
FF150-XA10020-255	55	75	2	8"	6"	214	60	55~57	4200~3600	252~216
FF150-XA8026-275	75	100	2	6"	6"	264	98	90~93	2700~2400	162~144
FF150-XA10026C-275	75	100	2	8"	6"	235	79	67~72	4200~3600	252~216
FF150-XA10026-290	90	125	2	8"	6"	264	102	86~95	4800~3600	288~216

Special Customized Specifications

Model	Output		Pole	Inlet	Outlet	Impeller dia.	Max. Head	Rated Head	Rated Capacity	
	KW	HP	P	Inch	Inch	MM	M	M	L/min	M ³ /hr

● Above 125HP specifications and special performance requirement are available upon request.

▲ Dimensions



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-XA3220-27.5	10	2	1760	980	620	15	405
FF80-XA4016-27.5	10	2	1760	980	620	15	440
FF80-XA4020-211	15	2	1760	1220	670	15	480
FF100-XA5016-211	15	2	1760	1220	670	15	500
FF100-XA5020-215	20	2	1760	1220	670	15	590
FF80-XA3226-215	20	2	1760	1220	670	15	570
FF80-XA4026B-215	20	2	1760	1220	670	15	615
FF100-XA6516-215	20	2	1760	1220	670	15	590
FF80-XA4026-218	25	2	1760	1220	670	15	615
FF100-XA6520C-218	25	2	1760	1220	670	15	625
FF150-XA8016A-218	25	2	1760	1220	670	15	820
FF100-XA5026B-222	30	2	1760	1220	670	15	685
FF100-XA6520A-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-XA6520-230	40	2	1760	1220	670	15	730
FF100-XA6526C-230	40	2	1760	1220	670	15	741
FF150-XA8020A-230	40	2	1760	1220	670	15	847
FF150-XA10016-230	40	2	1760	1220	670	15	1200
FF100-XA6526A-237	50	2	1760	1400	755	19	920
FF150-XA8020-237	50	2	1760	1400	755	19	847
FF150-XA10020C-237	50	2	1760	1400	755	19	1220
FF100-XA6526-245	60	2	1760	1400	755	19	741
FF150-XA8026C-245	60	2	1760	1400	755	19	880
FF150-XA10020A-245	60	2	1760	1400	755	19	1220
FF150-XA8026A-255	75	2	1760	1400	805	19	880
FF150-XA10020-255	75	2	1760	1400	805	19	1260
FF150-XA8026-275	100	4	2025	1650	960	19	880
FF150-XA10026C-275	100	2	1780	1500	925	19	1240
FF150-XA10026-290	125	2	1880	1500	925	19	1240

Special Customized Specification

Model	Output	Pole	Dimensions (unit:mm)				N.W
	HP	P	H	BL	BW	ØZ	KG

● Above 125HP specifications are available upon request.

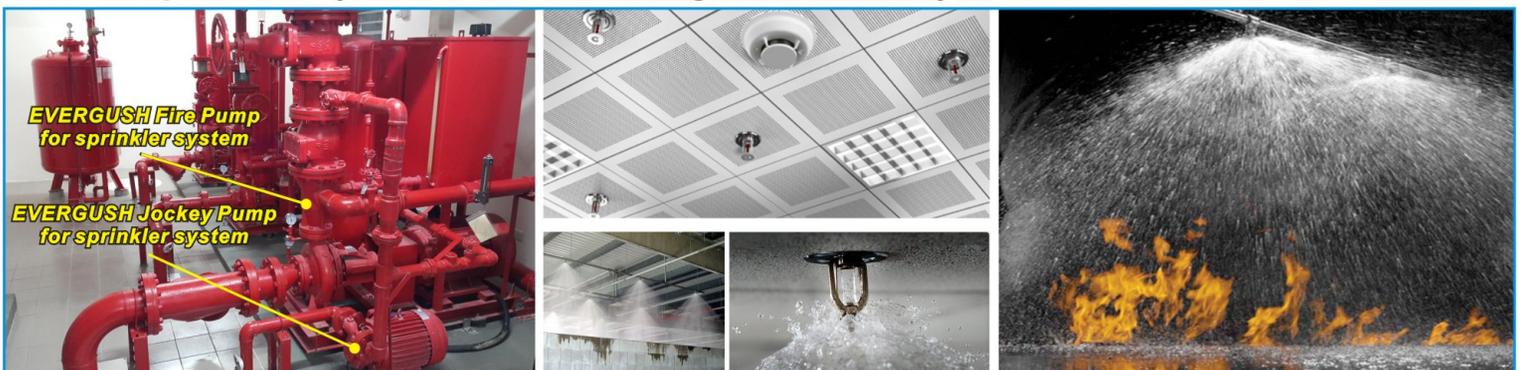
▲ Main applications of EVERGUSH Fire-fighting pump



● 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.



FF-series

50HZ

Fire-fighting Pump Set



EVERGUSH®

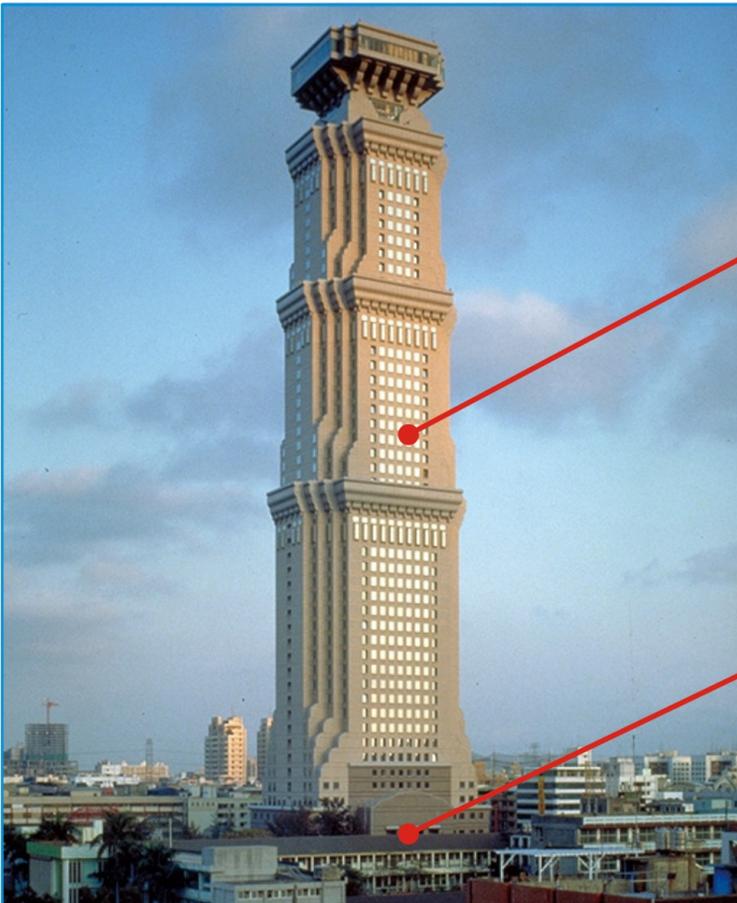
For **Fire hydrant** in the building, factory, hotel, school, ..etc.



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



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