



DAE-A PUMP CO., LTD.
www.daea-pump.com

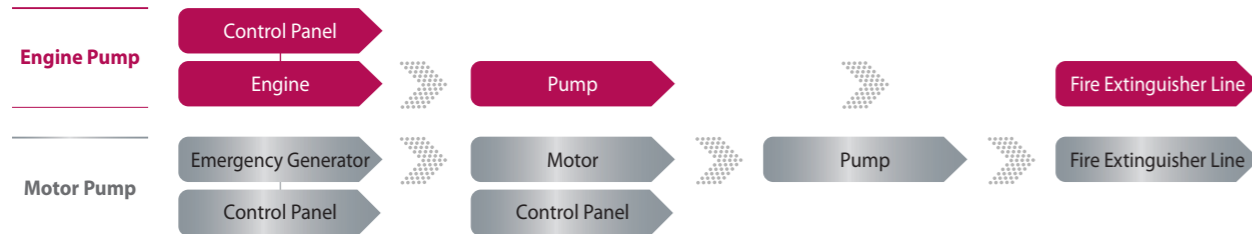
DAE-A PUMP **DEP** Series

Engine Pump

DAE-A Engine Pump

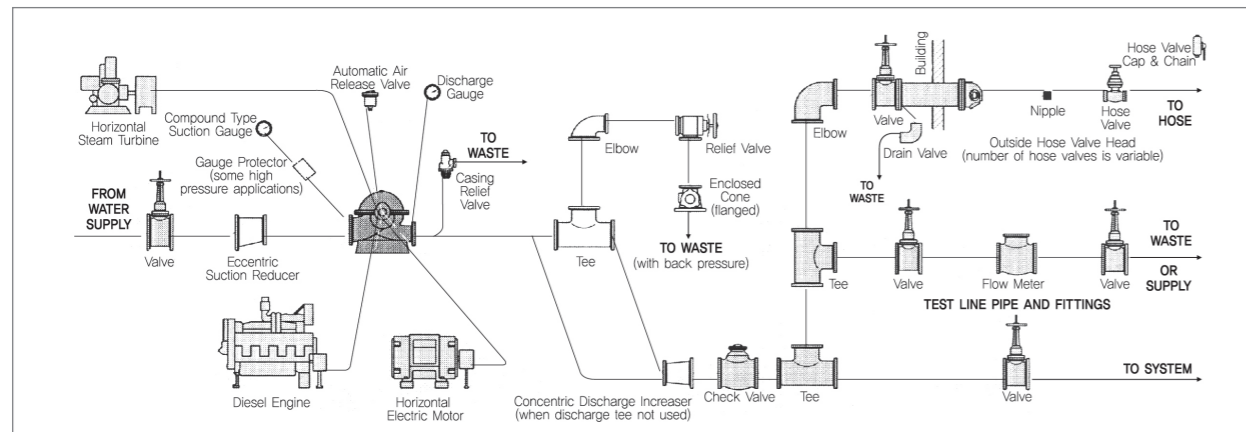
- Pump system designed to extinguish fire as soon as possible through the automatic operation of an engine pump.
- Automatic fire-extinguishing pump that satisfies the domestic fire service law(KFSL) and the related standards as well as NFPA 20.
- Compact design that contributes to more convenient installation and operation than the existing fire-extinguishing (motor) pumps and the reduction of system costs.
- No change of dimensions required in spite of capacity increase (Adjustment of water lifting amount by RPM control)

COMPONENTS | Engine, Battery, Fuel Tank, Pump and Control Panel |



NEPA 20 System

To meet the recommendations of the standards of the National Fire Protection Association as published in their Pamphlet 20, current edition, certain accessories are required for all fire pump installations. They will vary, however, to fit the needs of each individual installation and the requirements of the local insurance authorities. Sterling provides a wide range of fire pump fittings which include: concentric discharge increaser, casing relief valve, eccentric suction reducer, increasing discharge tee, overflow cone, hose valve head, hose valves, hose valve caps and chains, suction and discharge gauges, relief valve, automatic air release valve, flowmeter, and ball drip valve. No matter what the requirements, Sterling has a complete line of accessories available and can satisfy the requirements of each installation. The charts reproduced below graphically illustrate the many accessories as well as the optional drives that are available with all Peerless fire pumps and packaged systems.



STANDARD SPECIFICATION

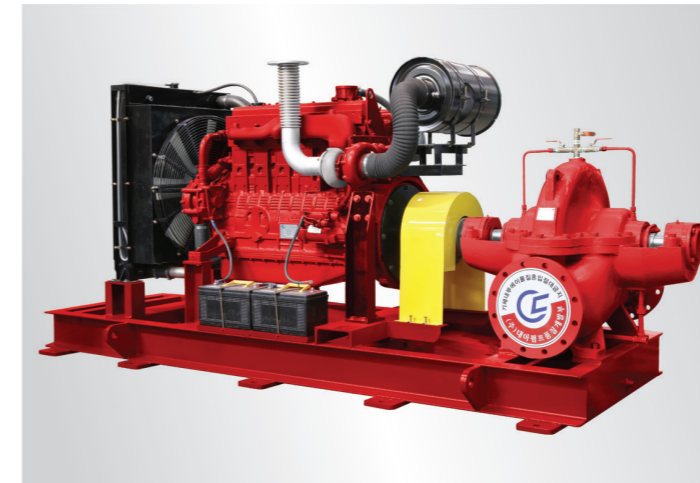
Type	Horizontal centrifugal pumps with appropriate fittings for providing water supply to fire protection systems in buildings, plants and yards. Types DMT, DDV, DH, DNSV
Capacities	57 to 2,400m ³ /hr
Head	28 to 192 meter
Pressure	Up to 45kg/cm ³ , 4,414 kPa
Horsepower	Up to 1347 hp
Drives	Diesel Engines
Liquids Pumped	Water
Temperature	Ambient within the limits for satisfactory equipment operation
Materials of Construction	Cast iron, bronze fitted as standard. Optional materials available for sea water applications

APPLICATIONS

- Fire Extinguishing Only, Sea Sailing, Emergency Plant Water Supplying or Emergency Fish Farming

DESIGN AND CONSTRUCTION FEATURES

- Easy installation in a small space
- High-flow and high-lift system suitable for emergency use
- Automatic and remote control supported



NOTE

- NFPA 20-Applied Fire Engine Pump A fire engine pump that applies the specifications such as scaling relief valves, positioning jack screws, vent and drain piping with valves, manifolded, supported and terminated at the skid edge and lifting lugs.



NOTE

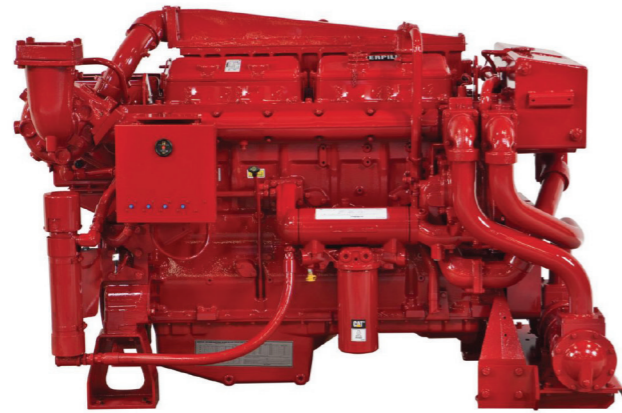
- With Sound Encloser



NOTE

- KR-class certification issued water-cooled marine diesel engine for ship fire protecting, sea sailing and emergency fish farming

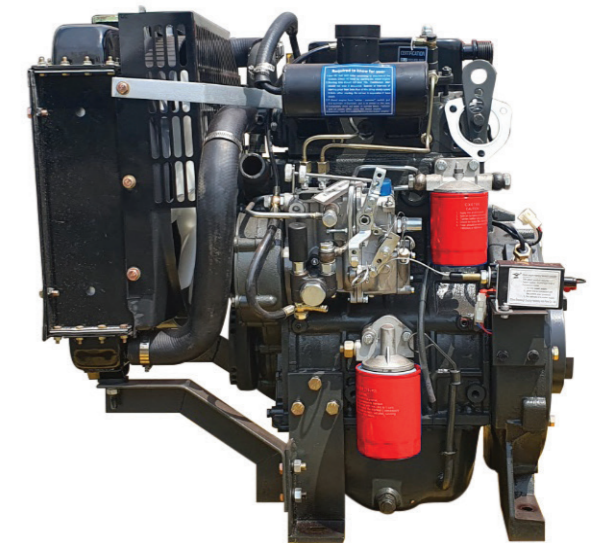
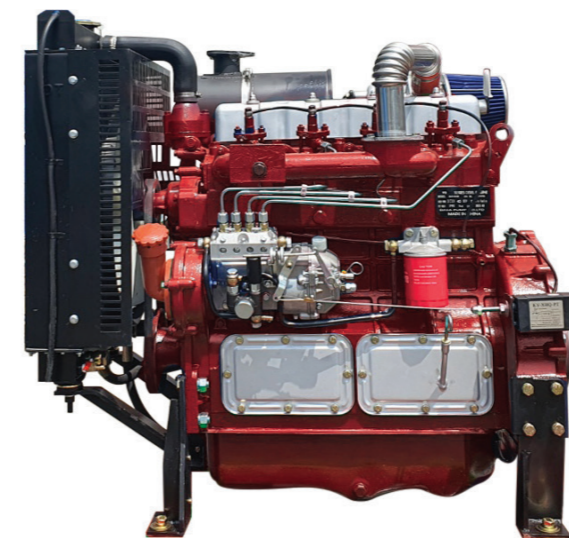
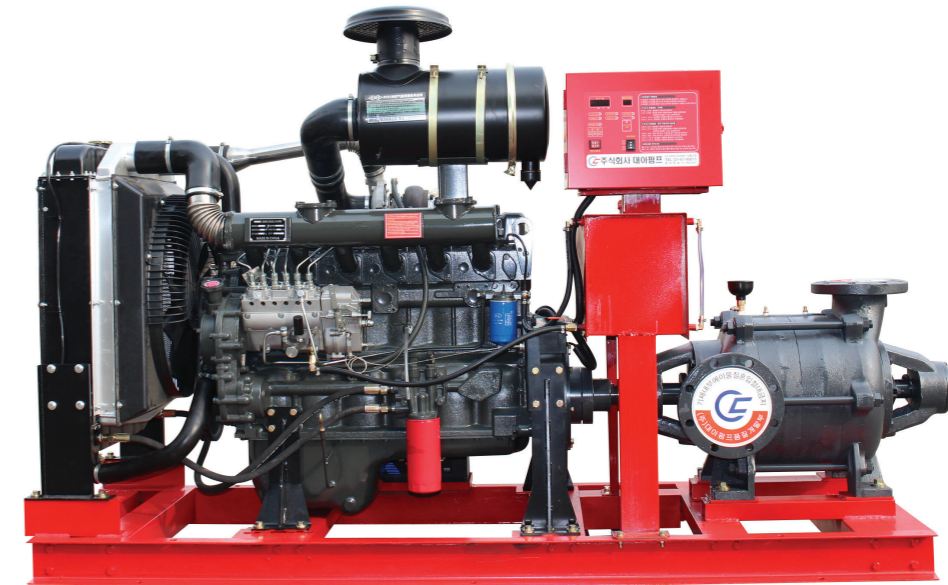
Industrial Diesel Engine Maker : Cummins - UL FM Approved



CUMMINS FIRE POWER PRODUCTS

Model	RPM(HP)						EPA Tier Level	UL	FM	U.S / Int'l Install
	1470	1760	1900	2100	2350	2600				
CFP7E-F10	153	175	162	171	172	174	T3	Y	Y	U.S / Int'l
CFP7E-F20	166	190	176	185	187	189	T3	Y	Y	U.S / Int'l
CFP7E-F30	179	205	190	200	201	204	T3	Y	Y	U.S / Int'l
CFP7E-F40	192	220	204	215	216	219	T3	Y	Y	U.S / Int'l
CFP7E-F50	205	235	218	229	231	234	T3	Y	Y	U.S / Int'l
CFP7E-F60	218	250	232	244	245	249	T3	Y	Y	U.S / Int'l
CFP83-F10	176	202	-	-	-	-	T1	Y	Y	Int'l
CFP83-F20	197	227	-	-	-	-	T1	Y	Y	Int'l
CFP83-F30	216	252	-	-	-	-	T1	Y	Y	Int'l
CFP83-F40	247	288	-	-	-	-	T2	Y	Y	Int'l
CFP9E-F10	212	260	275	246	212	-	T3	Y	Y	U.S / Int'l
CFP9E-F20	230	282	299	268	230	-	T3	Y	Y	U.S / Int'l
CFP9E-F30	248	305	323	289	248	-	T3	Y	Y	U.S / Int'l
CFP9E-F40	271	327	347	311	267	-	T3	Y	Y	U.S / Int'l
CFP9E-F50	289	350	371	332	285	-	T3	Y	Y	U.S / Int'l
CFP9E-F60	305	359	389	355	304	-	T3	Y	Y	U.S / Int'l
CFP11E-F10	320	373	-	331	-	-	T2	Y	Y	Int'l
CFP11E-F20	364	424	-	360	-	-	T2	Y	Y	Int'l
CFP15E-F10	382	460	488	488	380	-	T3	Y	Y	U.S / Int'l
CFP15E-F20	411	494	525	525	409	-	T3	Y	Y	U.S / Int'l
CFP15E-F30	450	542	575	575	448	-	T3	Y	Y	U.S / Int'l
CFP15E-F40	477	575	610	610	475	-	T3	Y	Y	U.S / Int'l
CFP15E-F50	-	610	-	-	-	-	T2	Y	Y	Int'l
CFP15E-F60	-	650	-	-	-	-	T2	Y	Y	Int'l
CFP15E-F70	-	686	-	-	-	-	T2	Y	Y	Int'l
CFP15E-F70NT	-	755	-	-	-	-	T2	N	N	U.S / Int'l
CFP23E-F10	630	697	722	751	617	-	T2	N	N	Int'l
CFP23E-F20	381	753	781	812	666	-	T2	N	N	U.S / Int'l
CFP23E-F30	724	801	830	864	709	-	T2	N	N	U.S / Int'l
CFP23E-F40	747	850	-	-	-	-	T2	N	N	U.S / Int'l
CFP23E-F50	777	925	-	-	-	-	T2	N	N	U.S / Int'l
CFP23E-F60	817	1000	-	-	-	-	T2	N	N	U.S / Int'l
CFP23E-F70	852	1075	-	-	-	-	T2	N	N	U.S / Int'l
CFP30E-F10	935	1064	1077	984	-	-	T2	N	N	U.S / Int'l
CFP30E-F20	1017	1158	1173	1071	-	-	T2	N	N	U.S / Int'l
CFP30E-F30	1100	1253	1268	1158	-	-	T2	N	N	U.S / Int'l
CFP30E-F40	1183	1347	1364	1245	-	-	T2	N	N	U.S / Int'l

Industrial Diesel Engine Maker : DAE-A



Model	D4100D	D4105ZD	D6105ZD	D6105AZLD	D6105IZLD
Type	Vertical in-line, Water Cooling, 4-Stroke				
Aspiration	Natural aspiration	Turbocharged		Turbocharged Intercooling	
Combustion Method	Direct Injection				
Bore x Stroke	4-100x115	4-105x125	6-105x125	6-105x130	6-105x135
Displacement (L)	3.61	4.33	6.49	6.75	6.75
Rated Output(kW)(ps)/r/min	30.1/1800	56/1800	84/1800	110/1800	132/1800
Cooling Method	Forced water cooling				
Starting Method	Electrical Start				

Industrial Diesel Engine

Maker : DOOSAN (WEICHAI)



Model	WP2.1D21E201	WP2.3D32E201	WP2.3D47E201	WP4.1D54E201	WP4.1D70E201	WP4.1D80E201
Emergency Power(ps/kW)	33 / 24	43 / 32	63 / 47	80 / 60	95 / 70	107 / 80
Commercial Power(ps/kW)	28 / 21	39 / 29	57 / 43	72 / 54	87 / 64	97 / 72
Engine Type	4-stroke, water cooling, vertical straightway					
Suction Type	Natural Suction		Turbo-Charged			
Rotating Direction(fly wheel side)	Counterclockwise					
Number of Cylinders-BorexStroke	4-85x92mm	4-89x92mm	4-89x92mm	4-89x92mm	4-89x92mm	4-105x118mm
Explosion Sequence	1 - 3 - 4 - 2					
Displacement(cc)	2,080	2,300				4,090
Compression Rati	18 : 1					17.5:1
Fuel injection pump type	IN - LINE					
Governor Type	Mechanical	Electronic				
Lubricating oil capacity()	8			13		
Cooling water capacity()	20			30		
Alternator	14V - 350W					
Starting moter	12V - 2.5kW	12V-3kW		24V-4.5kW		
Fly wheel housing spec	SAE No. 4			SAE No. 3		
Fly wheel spec	71/2(PDC : 222.25mm / 8.75inch)			10(PDC : 295.28mm / 11.625inch)		
Gear teeth	104			128		
Engine size	Length(mm)	1560	1560	1560	1900	1900
	Width(mm)	660	714	714	864	864
	Height(mm)	1068	1064	1064	1218	1218
	Dry weight(kg)	320	398	398	642	642

Classification	Unit	SP344C	DE12T	P086TI-1	P086TI	P126TI-3	P126TI	P126TI- II	P158LE-2	P158LE-1
Emergency Power	50Hz(ps/kW)	81/111	226/166	223/164	270/199	343/252	370/272	400/294	437/321	492/362
	60Hz(ps/kW)	92/125	270/199	260/191	303/223	375/276	405/298	465/342	510/375	546/402
Normal Power	50Hz(ps/kW)	73/100	205/151	203/149	204/177	304/223	328/241	360/265	399/293	444/327
	60Hz(ps/kW)	83/113	245/180	237/174	279/205	343/252	378/278	418/307	470/346	498/366
Number of Cylinders	EA	4	6	←	←	←	←	←	8	←
BorexStroke	mm	98x113	123x155	111x139	←	123x155	←	←	128x142	←
Displacement	cc	3,400	11,051	8,071	←	11,051	←	←	14,618	←
Governor		Electronic		Mechanical						
Suction Type		Turbo Inter - Cooler	Turbo-Charged	Turbo Inter - Cooler						
Fuel Consumption (Commercial 100%)	50Hz(ps/kW)	20.6	38.2	35.4	43.1	52.3	58.1	63.1	70.2	78.7
	60Hz(ps/kW)	24.7	45.8	42.4	50.6	63.3	70.3	73.8	85.6	91.3
Alternator	V-A	12-110	24-45	←	←	←	←	←	←	←
Starting Motor	V/kW	12-2.5	24-6.0	←	←	←	←	←	24-7.0	←
Fly wheel Housing spec	SAE No.	3	1	←	←	←	←	←	←	←
FAN LOSS	PS	7	10.0	7.0		10.0			22.0	

Classification	Unit	P158LE	P158LE-S	P158FE	P158FE-III	P180LE	P180LE-S	P180FE	P180FE- II	P222LE	P222LE-S	P222LE- II	P222FE	P222FE- II
Emergency Power	50Hz(ps/kW)	563/414	600/441	600/441	-	647/496	647/496	675/496	-	781/574	820/603	886/652	832/612	-
	60Hz(ps/kW)	623/458	654/481	669/492	690/507	734/540	771/567	770/566	827/608	898/660	927/682	1000/736	967/711	1115/820
Normal Power	50Hz(ps/kW)	494/363	546/402	546/402	-	602/443	615/452	615/452	-	723/532	750/552	-	774/569	-
	60Hz(ps/kW)	547/402	600/441	600/441	625/460	676/497	705/519	-	761/560	803/591	850/625	906/666	896/659	998/733
Number of Cylinders	EA	8	←	←	←	10	←	←	←	12	←	←	←	←
BorexStroke	mm	128x142	←	←	←	←	←	←	←	←	←	←	←	←
Displacement	cc	14,168	←	←	←	18,273	←	←	←	21,927	←	←	←	←
Governor		Mechanical												
Suction Type		Turbo Inter - Cooler												
Fuel Consumption (Commercial 100%)	50Hz(ps/kW)	89.3	99.5	105.1	-	111.6	108.9	120.3	-	134.0	130.0	153.9	148.5	-
	60Hz(ps/kW)	102.5	111.5	119.3	113.0	128.2	132.1	-	135.4	153.9	151.6	178.3	175.1	183.6
Alternator	V-A	24-45	←	←	X	24-45	24-45	←	X	←	←	X	24-45	←
Starting Motor	V/kW	24-7.0	←	←	←	←	←	←	←	←	←	←	←	←
Fly wheel Housing spec	SAE No.	1	←	←	←	←	←	←	←	←	←	←	←	←
FAN LOSS	PS	22.0												50

- Power is in W/O FAN status.
- Alternator Loss : 3ps (for all types)

DEFINITION OF DIESEL ENGINE POWER TYPES

- Commercial power : Power applied to load-variation generators to replace the main power (1S08528 PRP)
- Emergency power : Power applied to emergency generators used temporarily in case of main power failure. (1S08528 PRP)