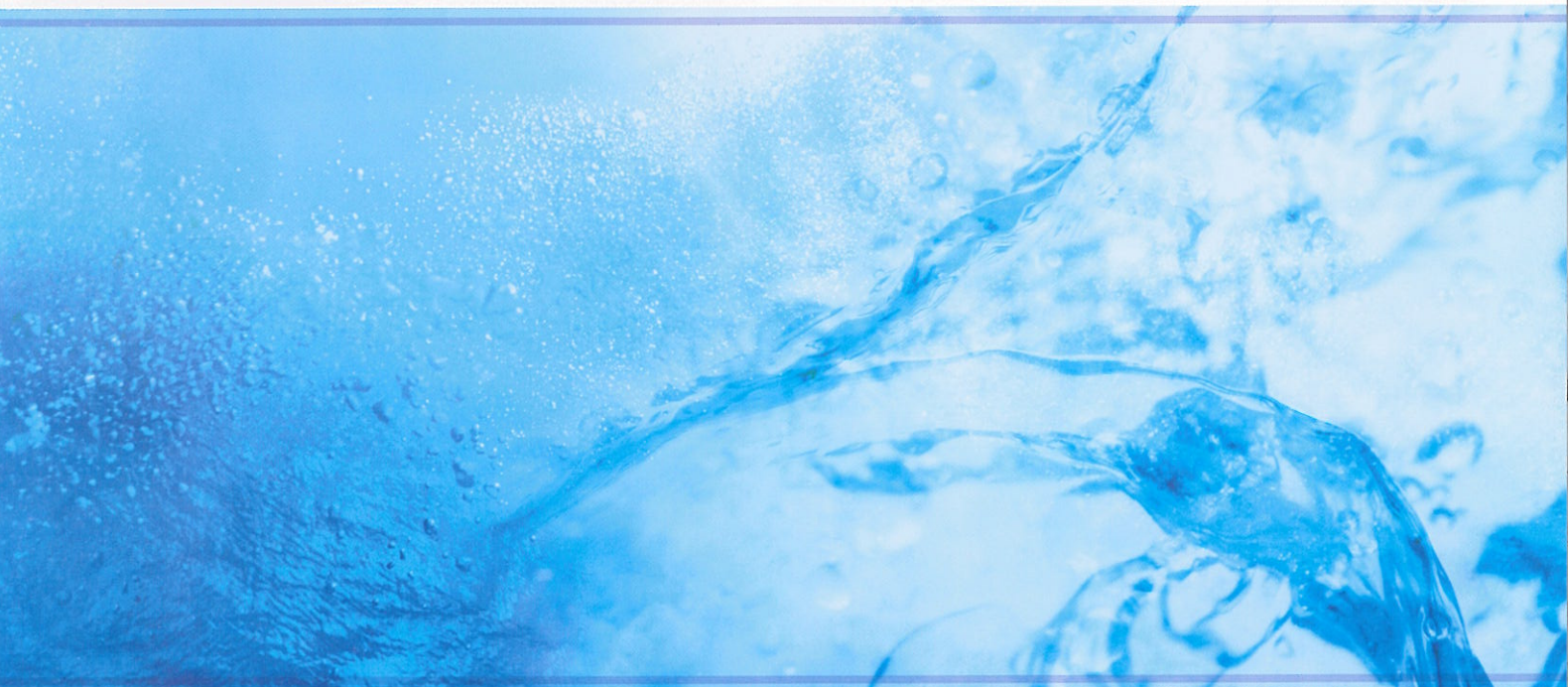




SUBMERSIBLE PUMPS



PRODUCT GUIDE

ISO 9001 Certificate



EIM ELECTRIC CO.,LTD.

Energy

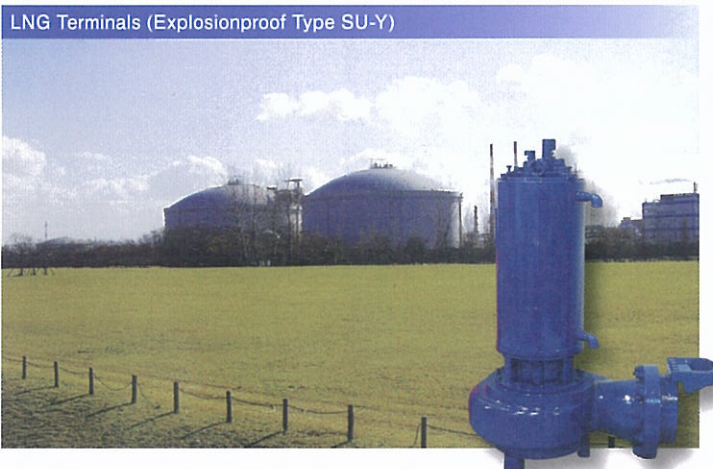
Coal Power Plant (SU & CSP)



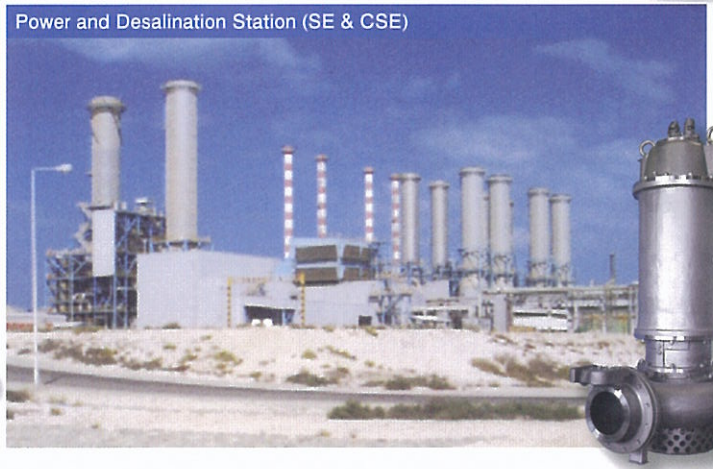
Coal Power Plant (Explosionproof Type EH-Y)



LNG Terminals (Explosionproof Type SU-Y)



Power and Desalination Station (SE & CSE)



Geothermal (Hot Water Type)



Hydraulic Power Plant (KHT)



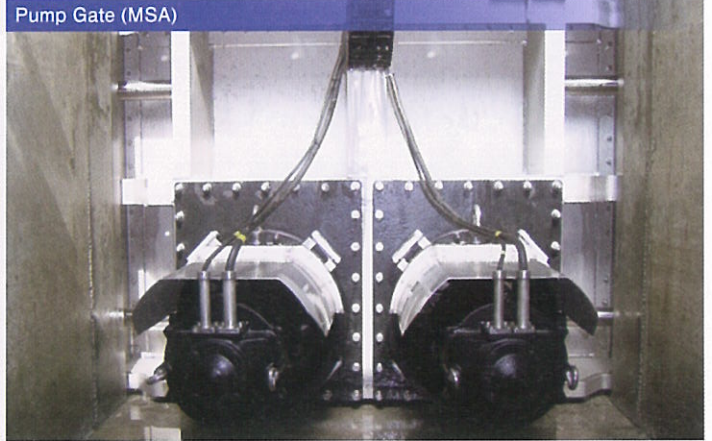
		Power Plant					Gas	Page
		Coal	LNG	Oil	Hydraulic	Geothermal		
Rainwater	SE	●	●	●			●	08
Wastewater	SU	●	●	●			●	08
Sewage Transfer	CSP	●						16
Seawater (Corrosion-Resistant Stainless Steel Type)	CSE	●		●				11
	CSU	●		●				11
Explosionproof Type	EL-Y		●				●	16
	CS-Y		●				●	16
Boiler Wastewater (Hot Water Type)		●	●	●		●		14
Super-High Head	KHT				●	●		14
	KH				●	●		14

Sewage Treatment Plant, Agricultural, Flood Control, Irrigation

Sewage Treatment Plant (NSUY)



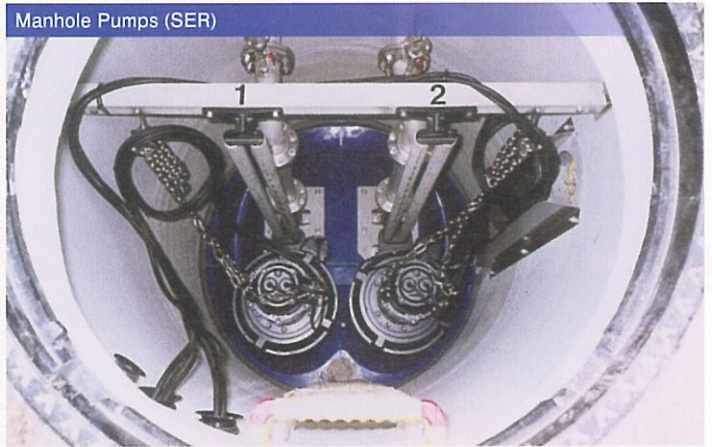
Pump Gate (MSA)



Irrigation Pumps (MSA)



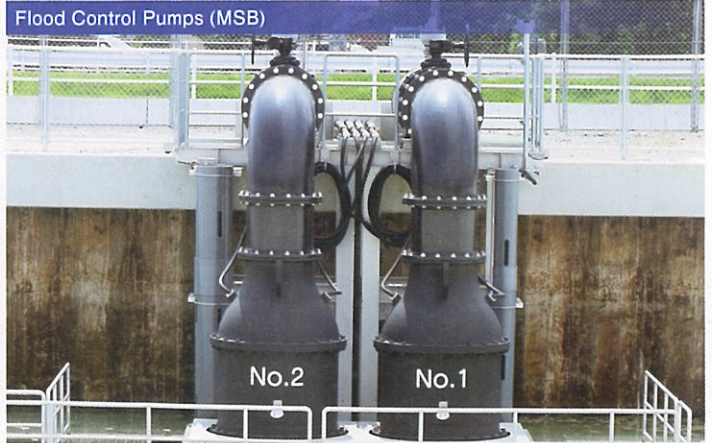
Manhole Pumps (SER)



Sewage Transfer Pumps (SUK)



Flood Control Pumps (MSB)



			Sewage Treatment Plant				Agricultural	Flood Control	Irrigation	Page
			Sewage	Sludge	Rainwater	Manhole				
Sewage and Wastewater		SE	●							08
		SU	●	●	●		●	●	●	08
	Solid Sewage	SUR/SER	●			●				09
		SEC	●			●				09
		SL	●	●		●				08
		SH	●	●		●				08
Large Capacity Type	Axial Flow Type	MSA					●	●	●	12
	Mixed Flow Type	MSB					●	●	●	12

Industrial Water, Commercial Wastewater, Refuse Disposal Facility

Building (CSE, CSU)



Hotel (SH)



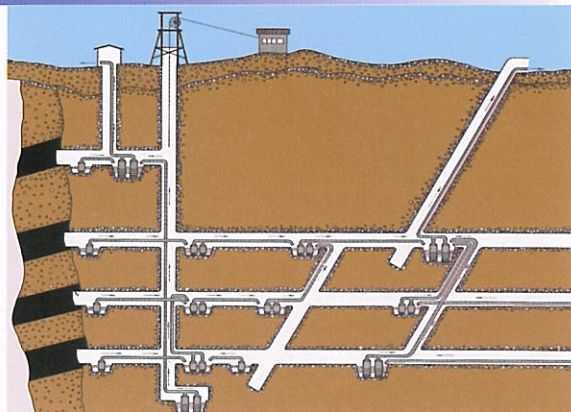
Refuse disposal (SU)



		Industrial Water			Commercial	Refuse disposal Facility	Page
		Intake	Supply	Drainage			
General Drainage	V, KM	●	●	●			13
	EL, EH	●	●	●			13
Sewage and Wastewater	SE			●	●		08
	SU			●	●		08
	SL			●	●		08
	SH			●	●		08
Corrosion-resistant Stainless Steel Type	CSE					●	11
	CSU					●	11

Mining / General Construction Works

Model Diagram Underground Mines



Coal Mine (X, EL, EH)



Mineral & Shale Gas (KHT, KH, SPL)



General Construction Works (V, KM, EL, EH)



		Coal Mine	Mineral	Shale Gas	Construction	Page
General Drainage	V, KM	●	●		●	13
	EL, EH	●	●		●	13
Explosionproof Type	EL-X	●		●		16
Sand and Slurry	SPL	●		●		15
	SV, HS	●	●			15
Super-High head	KHT	●	●			14
	KH	●	●			14

Coolant Pump (SU)



Shipyard_Drydock (SU)



Rain Water (SU)



Brewing Process (AP)



		Automobile Bearing	Pulp	Food	Shipyard	Petrochemistry	Pharmaceutical	Page
General Drainage	V, KM	●	●	●		●	●	13
	EL, EH	●	●	●		●	●	13
Coolant Pump	SU	●						08
Sewage and Wastewater	SE	●	●	●		●	●	08
	SU	●	●	●	●	●	●	08
Slurry	AP			●		●	●	17
Explosionproof Type	EL-Y					●	●	16
	CS-Y					●	●	16

Steel Works



Replaced by Submersible Pump (MSB)



Vertical Shaft Pump

Submersible Pump



Drainage (SU)



Thickener (APCR)



		Scale Pit	Cooling Water Circulation	Rainwater	Drainage	Sludge Withdrawal	Settling Basin	Page
General Drainage	V, KM				●			13
	EL, EH	●	●	●	●			13
Sewage and Wastewater	SE				●			08
	SU			●	●			08
Sand and Slurry	CSP	●	●				●	15
Slurry (surface pump)	AP					●		17

Submersible Motor

EM, MS

Submersible Motor

Powerful submersible motor for simplification and rationalization of various drive-system

EM: with Mechanical Seal

MS: without Mechanical Seal

[Application]

Driving of submersible pumps, aerators, mixers

Output	1.5 to 450 kW
Voltage	200 to 600V
Motor Housing	FC250
Shaft	SUS403



CEM, CMS

Stainless Steel Submersible Motor

Powerful submersible motor for simplification and rationalization of various drive-system

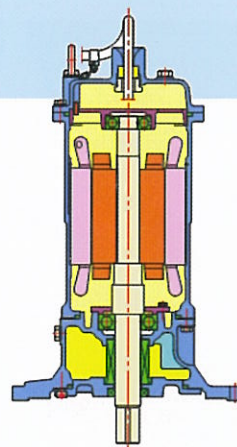
CEM: with Mechanical Seal

CMS: without Mechanical Seal

[Application]

Driving of submersible pumps, aerators, mixers

Output	1.5 to 450 kW
Voltage	200 to 600V
Motor Housing	SCS14
Shaft	SUS316



EMQY

Explosionproof Submersible Motor

Investigated, tested and approved by FM.

Rated Class I, Division 1, groups C & D hazardous locations

[Application]

Driving of submersible pumps, aerators, mixers in wet well where flammable gases exit.

Non FM type are also available on request

Output	1.5 to 90 kW
Voltage	200 to 600V
Motor Housing	FC250
Shaft	SUS420J2



EMJY

Explosionproof Submersible Motor (Jacketed, CLC-Motors)

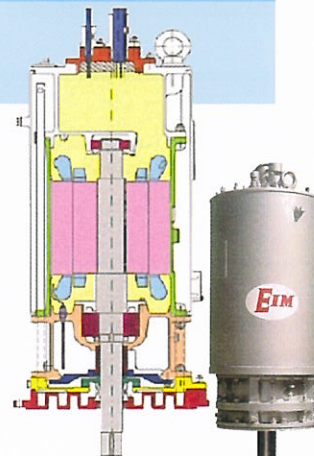
Heat exchanger is provided into the bottom of motor, and this has superior performance in the cooling effect

[Application]

Driving of submersible pumps, aerators, mixers in wet well where flammable gases exit.

Non FM type are also available on request

Output	7.5 to 90 kW
Voltage	200 to 600V
Motor Housing	FC250
Shaft	SUS420J2



Submersible Pump for Sewage and Wastewater

SE

Wastewater Effluent, High Head Type (2 Pole)

Non-clogging Impeller provides wider space which can cope with solid handling without a choking problem.

[Application]

Sewage, sump drainage, dewatering
wastewater removal and transfer
flood control emergency

Nominal Dia.	50 to 100mm
Output	0.25 to 11kW
Total Head	5 to 40m
Discharge	0.15 to 1.8m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SU

Sewage and Wastewater Type (4 Pole~)

Non-clogging Impeller provides wider space which can cope with solid handling without a choking problem.

[Application]

Sewage, sump drainage, dewatering
wastewater removal and transfer
flood control emergency

Nominal Dia.	50 to 700mm
Output	0.75 to 370 kW
Total Head	5 to 38m
Discharge	0.21 to 60m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SL

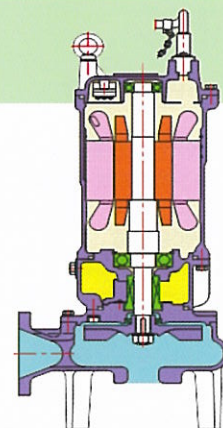
Solid Handling, Vortex Impeller Type (2 Pole)

Large solids and string matters can be pumped up smoothly due to its vortex shaped impeller.

[Application]

Sewage lift stations, treated sewage system,
wastewater transfer, dewatering,
general industrial service

Nominal Dia.	50 to 80mm
Output	0.75 to 7.5kW
Total Head	12 to 30m
Discharge	0.1 to 0.3m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SH

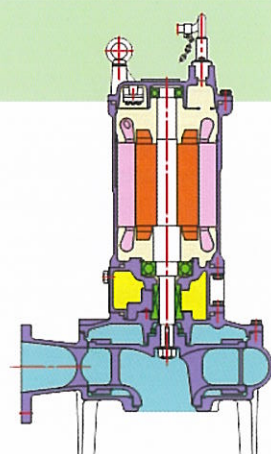
Heavy Duty Solid Handling Type (4 Pole)

Large solids and string matters can be pumped up smoothly due to its specially non-clogging impeller.
Max Solid Passage 75 mm

[Application]

Sewage lift stations, treated sewage system,
wastewater transfer, dewatering,
general industrial service

Nominal Dia.	80 to 150mm
Output	2.2 to 15kW
Total Head	7 to 34m
Discharge	1.0 to 3.0m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



Submersible Pump for Solid Sewage

SUV

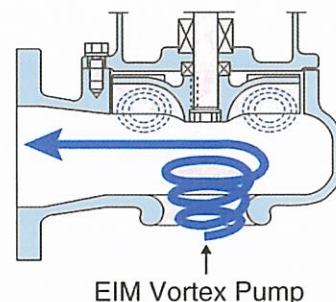
Vortex Type (2 Pole)

Specially designed to achieve maximum solid handling capability. 100% equivalent to the suction port diameter

[Application]

Manhole pumps, septic tanks, sludge, sewage treatment plants, factory pit draining.

Nominal Dia.	50 to 80mm
Output	0.5 to 3.7 kW
Total Head	6 to 20 m
Discharge	0.06 to 0.2 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SUR, SER

Vortex Type (4 Pole)

Large solids and string matters can be pumped up smoothly due to its specially shaped impeller.

[Application]

Manhole pumps, sumps, kitchen drains, draining from underground walkways and basements

Nominal Dia.	50 to 100 mm
Output	0.4 to 11 kW
Total Head	2 to 15 m
Discharge	0.12 to 1.5 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SEC

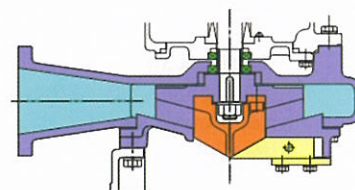
Cutter Type

Impeller with cutter in the suction part end with wide passage allows the large solid handling capacity.

[Application]

Drainage for solid sewage of wastewater tank, purification tank, kitchen in buildings, schools, hospitals, and factories

Nominal Dia.	50 to 80 mm
Output	0.75 to 7.5 kW
Total Head	4 to 35 m
Discharge	0.4 to 1.1 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SUN

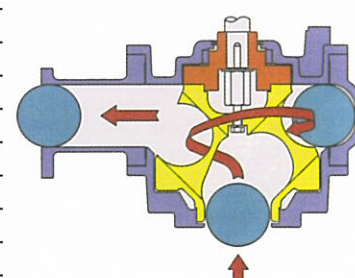
Spiral Vane Impeller Type

Special high efficiency 100% equivalent to the suction port diameter 20% higher efficiency than vortex type

[Application]

Sewage pumping pits and stations, Sewage treatment plants, septic tanks Storm flooding and emergency

Nominal Dia.	65 to 100 mm
Output	0.75 to 7.5 kW
Total Head	4.7 to 18.6 m
Discharge	0.5 to 1.0 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



Submersible Pump for Continuous Dry Operation

SUK

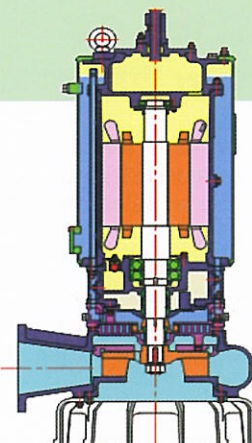
Water Recirculation Closed Loop Cooling System

The cooling system prevents overheating from continuous operation in dry running conditions

[Application]

Sewage, wastewater and storm water.
Sludge in sewage treatment plants,
industrial wastewater, building wastewater

Nominal Dia.	80 to 700 mm
Output	5.5 to 315 kW
Total Head	6 to 30 m
Discharge	0.6 to 60 m ³ /min
Voltage	200 to 600 V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SUA

Oversized Frames for Conventional Motors

The cooling system prevents overheating from continuous operation in dry running conditions

[Application]

Sewage, wastewater and storm water.
Sludge in sewage treatment plants,
industrial wastewater, building wastewater

Nominal Dia.	80 to 350 mm
Output	1.5 to 37 kW
Total Head	6 to 26 m
Discharge	0.5 to 14 m ³ /min
Voltage	200 to 600 V
Casing	FC250
Impeller	FC250
Shaft	SUS403



SUJ

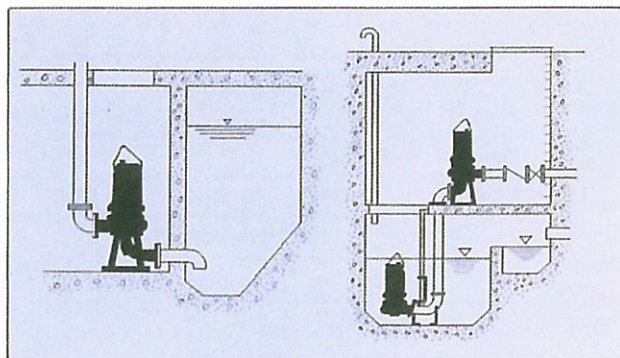
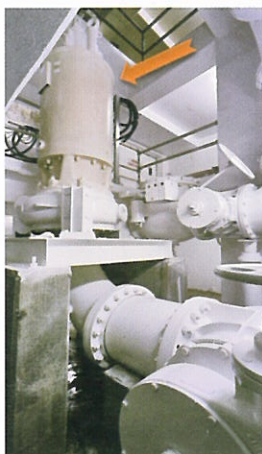
Bypass Cooling System

Utilizes the pumped fluid as cooling medium forcing it to circulate through the by-pass.

[Application]

Sewage, wastewater and storm water.
Sludge in sewage treatment plants,
industrial wastewater, building wastewater

Nominal Dia.	80 to 300 mm
Output	1.5 to 45 kW
Total Head	5 to 30 m
Discharge	0.55 to 10 m ³ /min
Voltage	200 to 600 V
Casing	FC250
Impeller	FC250
Shaft	SUS403



Dry pit pump also available

This pump is suitable for effective operations even when the motors are being operated in non-submerged conditions or in dry conditions.



Submersible Pump for Corrosion-resistant Stainless Steel Type

CSE

Water Effluent for Corrosive Water (2Pole)

All surfaces which directly come in contact with liquid are stainless steel casting which protects from corrosion due to acidic or alkaline conditions.

[Application]

Sewage, sump drainage, dewatering
wastewater removal and transfer
flood control emergency

Nominal Dia.	50 to 100mm
Output	0.25 to 11kW
Total Head	5 to 40m
Discharge	0.15 to 1.8m ³ /min
Voltage	200 to 600 V
Casing	SCS14
Impeller	SCS14
Shaft	SUS316



CSU

Sewage and Wastewater for Corrosive water (4 Pole~)

All surfaces which directly come in contact with liquid are stainless steel casting which protects from corrosion due to acidic or alkaline conditions.

[Application]

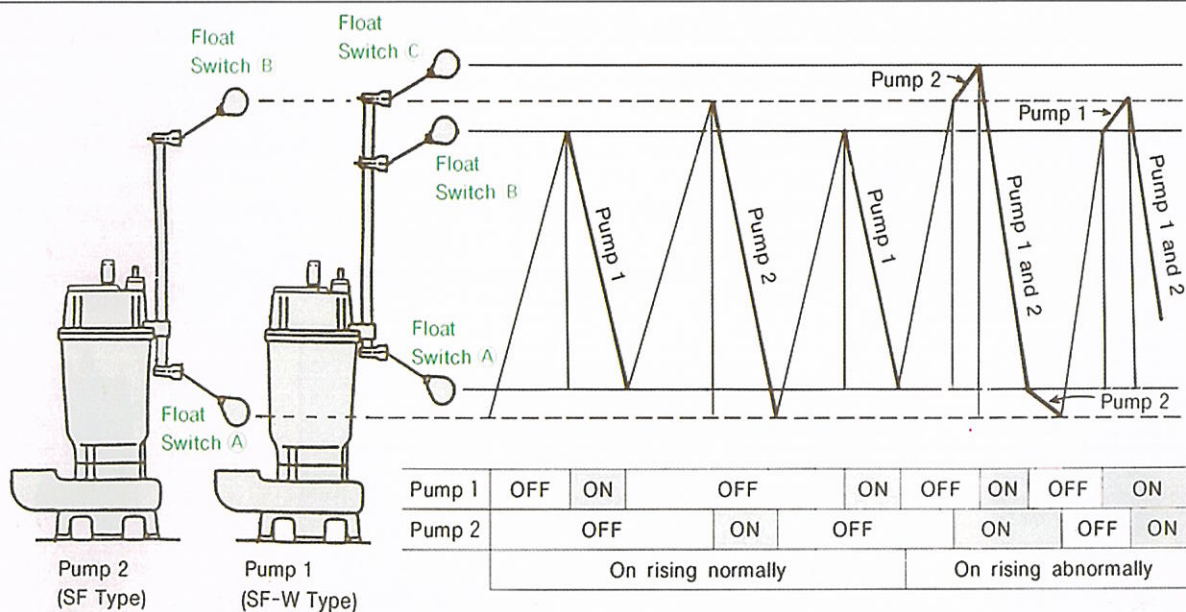
Sewage, sump drainage, dewatering
wastewater removal and transfer
flood control emergency

Nominal Dia.	50 to 600mm
Output	0.75 to 275kW
Total Head	4 to 38m
Discharge	0.21 to 60m ³ /min
Voltage	200 to 600 V
Casing	SCS14
Impeller	SCS14
Shaft	SUS316



Automatic Operation Type

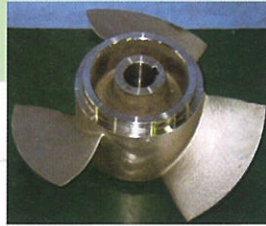
W (SE, CSE type : W2, W4)



Submersible Pump for Large Capacity Type

MSA

Axial Flow Pump



[Application]

Storm water & flood control, agricultural, irrigation
fire protection, industrial water and drainage process

Nominal Dia.	400 to 1200mm
Output	11 to 230kW
Total Head	1.5 to 6m
Discharge	15 to 240m ³ /min
Voltage	200 to 1100 V
Casing	FC250
Impeller	SCS13



MSB

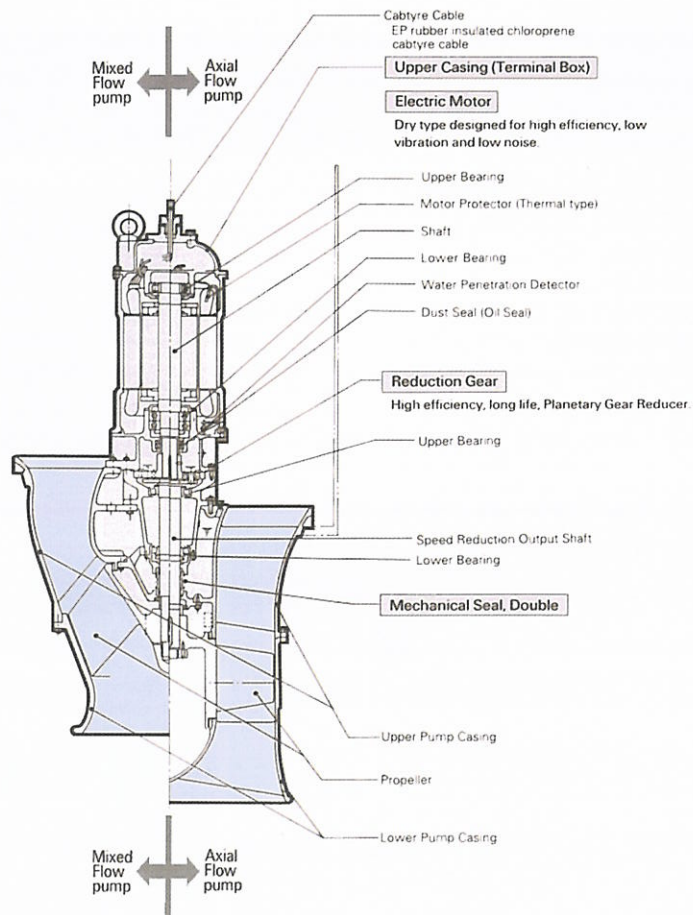
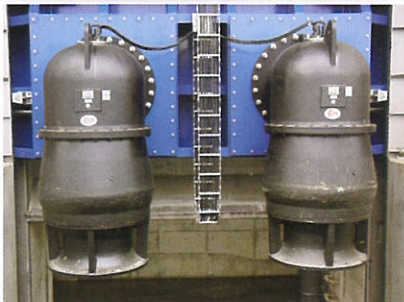
Mixed Flow Pump



[Application]

River water intake and lifting/drainage of water canals.
Water level regulation of reservoirs,
seawater intake, fish farming

Nominal Dia.	400 to 1200mm
Output	11 to 230kW
Total Head	2 to 15m
Discharge	15 to 220m ³ /min
Voltage	200 to 1100 V
Casing	FC250
Impeller	SCS13



General Purpose Submersible Pump for General Drainage

V, KM

Semi-Vortex Solid Handling Type

Solves drainage problems dealing with draining at construction work sites

[Application]

Irrigation and fire protection, bilge, fire fighting, and wash down

Nominal Dia.	50 to 100mm
Output	0.4 to 3.7kW
Total Head	8 to 15m
Discharge	0.12 to 0.9m ³ /min
Voltage	200 to 600V
Casing	V : FCD450 KM : FC250
Impeller	V : FCD450 KM : Hi-Chrome
Shaft	S35C



EL

General Type (Low head)

Designed for rugged handling, economical operation and long life

[Application]

Waste water removal, sump, pit manhole, basement, emergency water removal and industrial processing water

Nominal Dia.	80 to 250 mm
Output	2.2 to 37 kW
Total Head	15 to 20 m
Discharge	0.5 to 6.5 m ³ /min
Voltage	200 to 1100V
Casing	FC250
Impeller	Hi-Chrome
Shaft	S35C



EH

General Type (High head)

High head, large capacity pumping with low power construction

[Application]

Sump, pit, plumbing, manhole, elevator pit emergency, storm water removal

Nominal Dia.	100 to 200 mm
Output	7.5 to 110 kW
Total Head	25 to 30 m
Discharge	0.8 to 4.5 m ³ /min
Voltage	200 to 1100V
Casing	FC250
Impeller	Hi-Chrome
Shaft	S35C



General Purpose Submersible Pump for Super-High Head

KHT

2 Pole

Especially for high head of over 60m
2pole motor , single stage
miniaturization and light weighting

[Application]

Drainage for mining, contractor, factories, industries.
Water supply, open pit dewatering

Nominal Dia.	80 to 150mm
Output	22 to 110kW
Total Head	60 to 160m
Discharge	0.6 to 2.0m ³ /min
Voltage	200 to 1100V
Casing	FCD450
Impeller	Hi-Chrome
Shaft	S35C



KH

4 Pole

Especially for high head of up to 250m

[Application]

Drainage for mining, contractor, factories, industries.
Water supply, open pit dewatering

Nominal Dia.	150 to 200mm
Output	37 to 190kW
Total Head	60 to 200m
Discharge	1.5 to 3.3m ³ /min
Voltage	200 to 1100V
Casing	FCD450
Impeller	Hi-Chrome
Shaft	S35C



F · V · VV

Hot Water Type

Heat-resistent main parts; delivers hot water safely

F : 40 to 65 degC

V : 65 to 80 degC

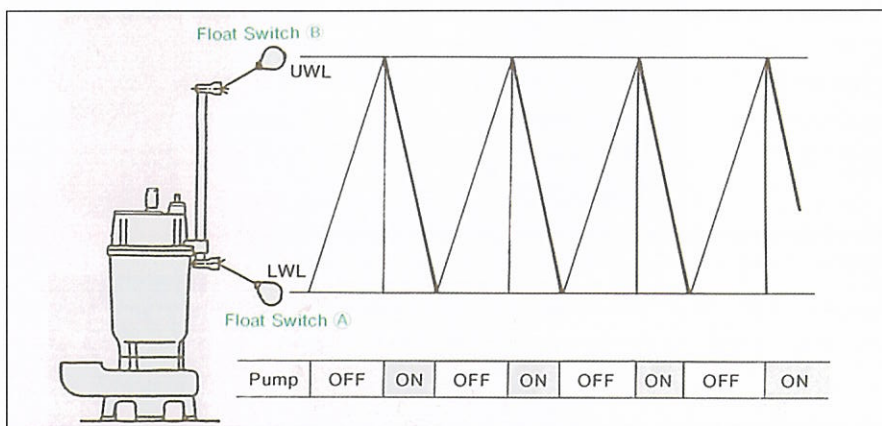
VV: 80 to 100 degC (Forced Cooing)

Nominal Dia.	50 to 250 mm
Output	0.75 to 45kW
Total Head	10 to 35m
Discharge	0.18 to 4.8m ³ /min
Voltage	200 to 600V



Auto-Alternating Operation Type

W (SF)



Special Purpose Submersible Pump for Explosionproof Type

Y

General Industries Type

Safe operation guaranteed in combustible gas and ignitable vapor atmosphere

[Application]

Drainage water from oil industrial complexes, gas refineries, and thermal power plant

Nominal Dia.	50 to 150mm
Output	1.5 to 22 kW
Total Head	15 to 30m
Discharge	0.2 to 2.0 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	Hi-Chrome
Shaft	SUS403



X

Coal & Shale Mine Type

Safe operation guaranteed in methane and coal dust atmosphere

[Application]

Pits where combustible gas containing methane as main component or explosive coal dust.

Nominal Dia.	50 to 200mm
Output	1.5 to 150 kW
Total Head	12 to 120m
Discharge	0.2 to 5.0 m ³ /min
Voltage	200 to 1100V
Casing	FC250
Impeller	Hi-Chrome
Shaft	SUS403



CS-Y

Corrosion Resistant Stainless Steel Type

For explosionproof corrosion resistant use

[Application]

Drainage water from work sites where corrosive liquids are handled.

Draining underground reservoirs or deep tanks.

Nominal Dia.	50 to 100mm
Output	0.75 to 37 kW
Total Head	10 to 80m
Discharge	0.055 to 1.0 m ³ /min
Voltage	200 to 600V
Casing	SCS14
Impeller	SCS14
Shaft	SUS316



CWP-Y

Corrosion Resistant Deep Well Type

Highly efficient draining for corrosive deep well liquids

[Application]

Draining water from plants where explosive liquids are handled

Nominal Dia.	32 to 100mm
Output	1.5 to 37 kW
Total Head	42 to 80m
Discharge	0.055 to 1.0 m ³ /min
Voltage	200 to 600V
Casing	SCS14
Impeller	SCS14
Shaft	SUS316



Explosionproof Approved Countries

U.S.A. (M.S.H.A.)
Canada (E.M.R.)
South Africa (S.A.B.S.)
Australia (Simtars)



Submersible Pump for Sand and Sludge

SPL

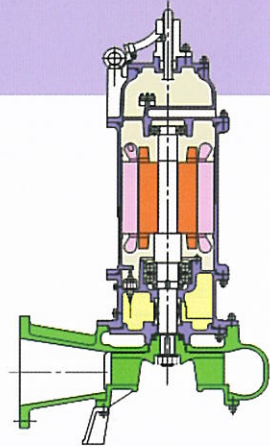
Slurry Type

High chrome wet end design provides with long life in slurry and other abrasive application.

[Application]

Drainage for mining, mineral processing, aggregate, iron and steel production, power generation.

Nominal Dia.	80 to 200mm
Output	1.5 to 110kW
Total Head	6 to 60m
Discharge	0.55 to 6m ³ /min
Voltage	200 to 600V
Casing	Hi-Chrome
Impeller	Hi-Chrome
Shaft	SUS403



CSP

Heavy Duty Abrasive Type

A mighty pump for rigid solids like iron scale, gravel, various types of slurry and sludge

[Application]

Gravel collecting, mud dredging, coal, material mines, sludge treatment, slurry drainage

Nominal Dia.	50 to 500mm
Output	2.2 to 450kW
Total Head	8 to 40m
Discharge	0.25 to 60m ³ /min
Voltage	200 to 1100V
Casing	FC250
Impeller	Hi-Chrome
Shaft	S45C



SV

Horizontal type (Vortex)

Optimum use for sump pump which provides wider passage space for large solid handling

[Application]

Disposal of wastewater containing scales or sludge. Pumping up and transfer of slurry and sludge from earthworks and construction work.

Nominal Dia.	100mm
Output	5.5 to 22kW
Total Head	10 to 20m
Discharge	0.9 to 2.0m ³ /min
Voltage	200 to 1100V
Casing	FCD450
Impeller	FCD450
Shaft	SUS403



HS

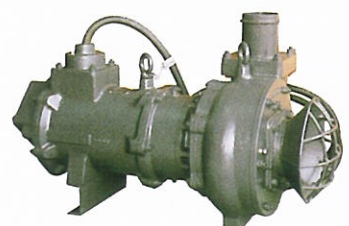
Horizontal type (Non Clogging)

Heavy duty purpose for slurry, sludge and sand. Available for operation in very low water level.

[Application]

Discharge of mud and sludge from foundation boring, earthworks, tunneling, shield work. High coefficient of viscosity

Nominal Dia.	100 to 150mm
Output	11 to 22 kW
Total Head	12 to 18m
Discharge	3.0 to 4.0 m ³ /min
Voltage	200 to 1100 V
Casing	FC250
Impeller	Hi-Chrome
Shaft	SUS420J2



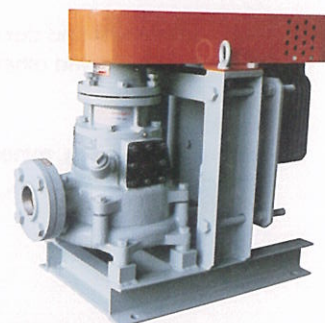
AP

For Slurry and Semi-Solid Concentrated Liquid
Non Submersible Pump

[Application]

Used for broad applications such as chemical, petroleum, steel, metal, cement, paper making, power plant, mining and food as well as waterworks

Nominal Dia.	25 to 125 mm
Output	3.7 to 55 kW
Total Head	1.0 to 100 m
Discharge	0.02 to 3.5 m ³ /min
Voltage	200 to 600 V
Casing Impeller	FC, Hi-Chrome, SCS14, Rubber Lining
Shaft	S35C



AK

Jet Flow

High solution rate of oxygen in comparison with other aeration method

[Application]

Sewage treatment plant, sludge treatment, septic tank, factory wastewater treatment, food processing, fish farming

Air Suction Dia.	25 to 50 mm
Output	0.4 to 7.5 kW
Airflow rate	5.6 to 106 Nm ³ /h
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



WM

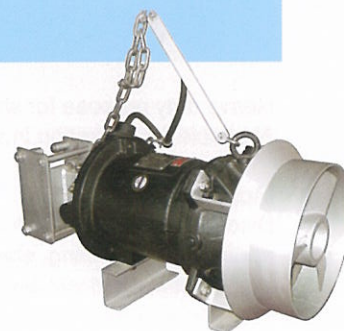
Submersible Mixer

Gives superior stir-effect with strong jet flow; mounting height and direction of jet flow can be freely adjusted

[Application]

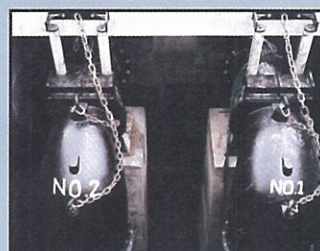
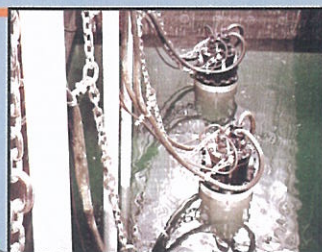
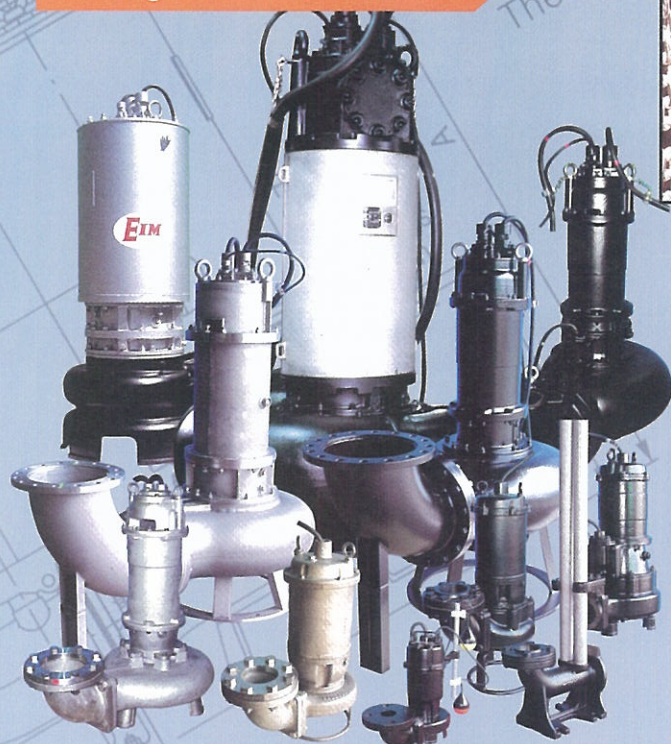
Sewage treatment plant, sludge treatment, septic tank, factory wastewater treatment, fish farming

Propeller Dia.	220 to 500mm
Output	2.2 to 7.5 kW
Mixing Flo	9 to 41 m ³ /min
Voltage	200 to 600V
Casing	FC250
Impeller	FC250
Shaft	SUS403



Submersible Solutions from E.I.M. matching your requirements

Sewage and Wastewater



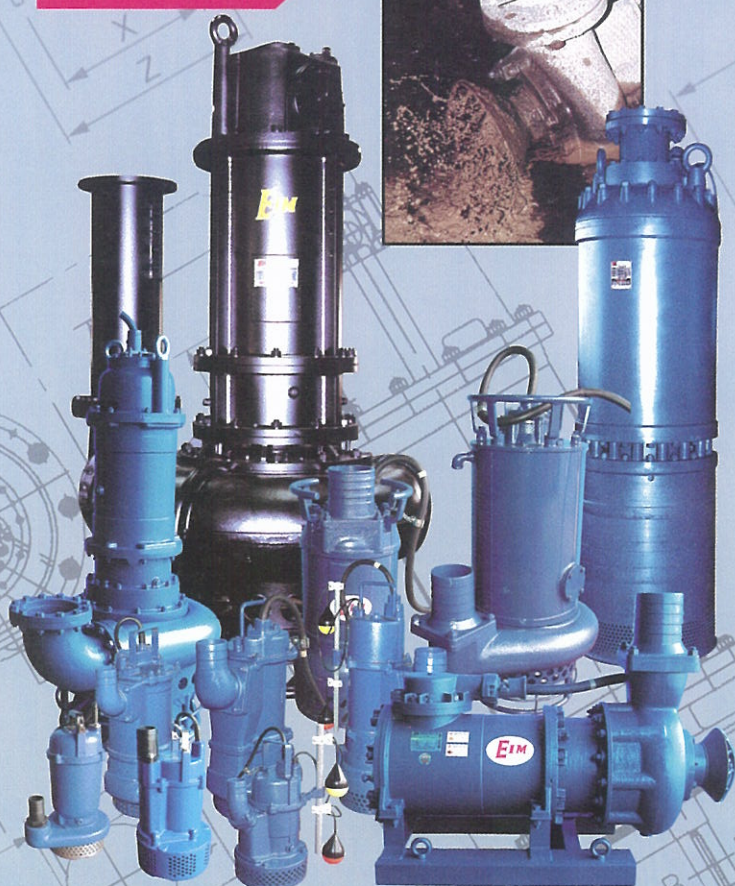
Submersible Motor

Irrigation/Flood Control

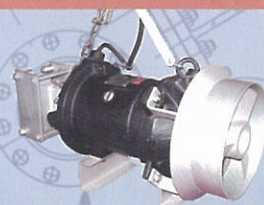


Flameproof

Construction



Water Treatment Equipment



Submersible Mixer



Super Vacuum Sweeper



Aerator

Slurry Pump
(Non-submersible)



E I M ELECTRIC CO., LTD.

www.EIMPUMP.com



EIM ELECTRIC CO.,LTD.

Pumprite, Inc.

sales@Pumprite.com

630-9: 1-7867

www.pumprite.com

www.EIMPUMP.com