

KOSHIN

KOSHIN LTD.

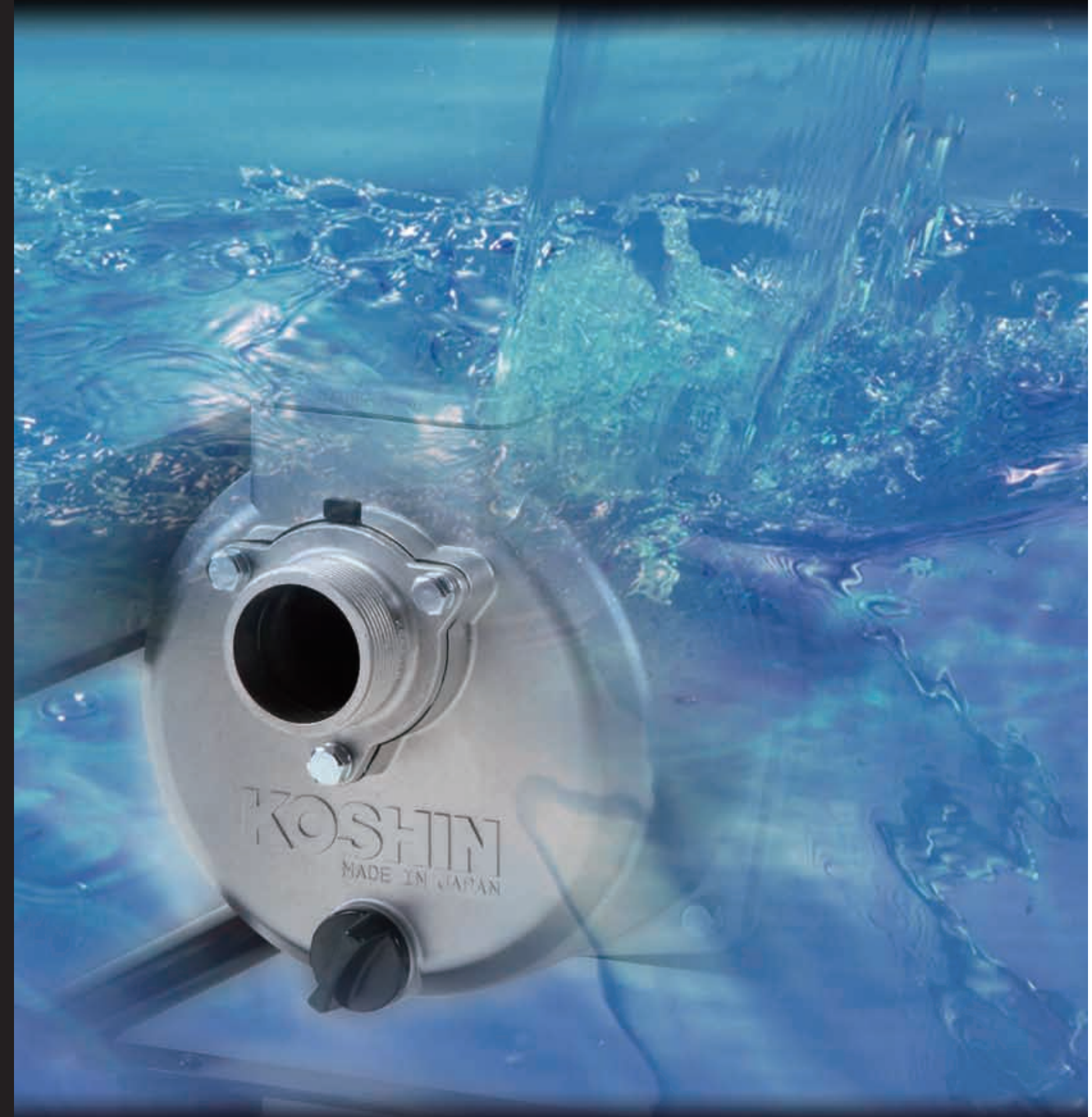
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*Design and specifications are subject to change without notice.

12-08 699705101

GENERAL CATALOG

KOSHIN



Trusted in 160 Countries for High Quality



KOSHIN EUROPE OFFICE

HEAD QUARTERS

KOSHIN LITIAN PUMP
(NINGBO) CO., LTD.
NINGBO KOSHIN MOTER CO., LTD.

KOSHIN (THAILAND)
CO.,LTD.

KOSHIN AMERICA CORP.

KOSHIN MEXICO
OFFICE

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Headquarters (Kyoto, Japan)



Koshin Litian Pump (Ningbo) Co.,Ltd.



Ningbo Koshin Moter Co.,Ltd.



Koshin (Thailand) Co.,Ltd.



We Guarantee All Specifications

▼ Explanation of pictogram

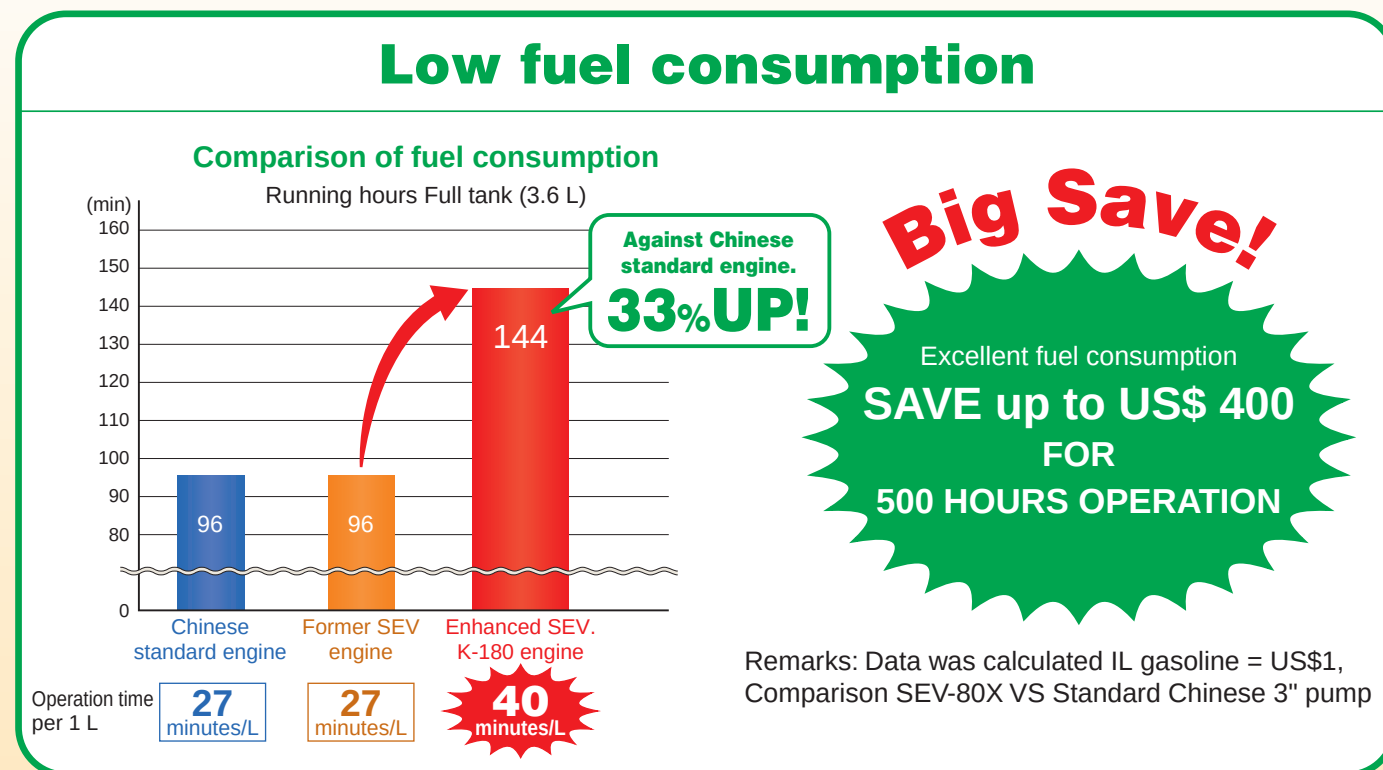
GARDENING	IRRIGATION	SPRINKLER	FIRE FIGHTING	WASHING	HIGH LIFT	FISH TANK	ON BOAT	200 L DRUM CAN	SILICON CARBIDE MECHANICAL SEAL	QUIET
CIRCULATION	CONSTRUCTION	SHALLOW WELL	FISH FARM	SEA WATER	CHEMICALS	HOME SWIMMING POOL	OIL (VISCOSITY)	RECHARGEABLE BATTERY	DRY CELL BATTERY	ENVIRONMENT



PORTABLE & POWERFUL

New! Original KOSHIN Engine High Performance & Economy

(1) Low fuel consumption. The original Koshin engine achieves the lowest fuel consumption.



(2) Low Vibration

Comfortable in use after reducing engine vibration.

(3) Guaranteed performance

Koshin guarantees 8 m suction head and specifications.

Competitive Price & Guaranteed Quality Powered by Koshin Engine

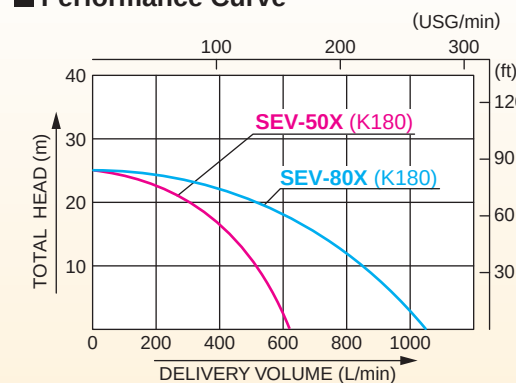
GUARANTEED

- Engine & Pump spare parts service!
- Specification & Quality!
- Sales support!!



SEV-50X

Performance Curve



SEV-80X

Specifications

Model		SEV-50X	SEV-80X
PUMP	Connection Dia	50 mm (2")	80 mm (3")
	Connection Thread	Outer Pipe Thread BSP	
	Total Head	27 m (90 ft)	
	Delivery Volume	620 L/min (163 USG/min)	1050 L/min (277 USG/min)
	Max. Suction Head	8 m (26 ft)	
ENGINE	Type	Forced Air-cooled 4-stroke Gasoline Engine	
	Model	Koshin K180	
	Exhaust Volume	179 cc	
	Rated Output	3.1 kW (4.2 PS) / 3600 rpm	
	Fuel	Automotive Unleaded Gasoline	
	Fuel Tank Capacity	3.6 L (0.95 USG)	
	Continuous Operating Time	Approx. 2.6 hrs	Approx. 2.4 hrs
	Starting Method	Recoil Starter	
	Standard Accessories	1 Strainer, 3 Hose Bands, 1 Engine Tool Set	
	Gross Weight	27.2 kg (59.9 lbs)	30.7 kg (67.6 lbs)
Dimensions L×W×H (mm)		504 × 401 × 411	543 × 426 × 458
Packing Unit		1	

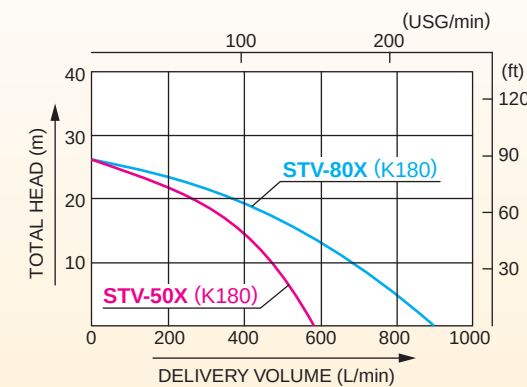
*For the purpose of improvement, specifications are subject to changes without notice.

Competitive Price & Guaranteed Quality
Powered by Koshin Engine

- **SIC**
Silicon Carbide Mechanical Seal 4-5 times more durable than standard carbon ceramic mechanical seal.
- **FCD**
Spheroidal graphite iron casting for Impeller & Volute Casing 10 times more erosion resistance than standard FC or cast iron.

- **Outstanding Features**
- Suitable for sandy and muddy water usage
 - Particles up to 8 mm can be pumped through
 - Guaranteed suction head of 8 meters
 - Long bolt assembly for easy maintenance

■ **Performance Curve**



STV-80X

■ **Specifications**

Model		STV-50X	STV-80X
PUMP	Connection Dia	50 mm (2")	80 mm (3")
	Connection Thread	Outer Pipe Thread BSP	
	Total Head	26 m (85 ft)	
	Delivery Volume	580 L/min (153 USG/min)	900 L/min (238 USG/min)
	Max. Suction Head	8 m (26 ft)	
ENGINE	Type	Forced Air-cooled 4-stroke Gasoline Engine	
	Model	Koshin K180	
	Exhaust Volume	179 cc	
	Rated Output	3.1 kW (4.2 PS) / 3600 rpm	
	Fuel	Automotive Unleaded Gasoline	
	Fuel Tank Capacity	3.6 L (0.95 USG)	
	Continuous Operating Time	Approx. 2.6 hrs	Approx. 2.4 hrs
	Starting Method	Recoil Starter	
Standard Accessories		1 Strainer, 1 Spanner, 1 Engine Tool Set, 2 Hose Couplings, 3 Hose Bands	
Gross Weight		31 kg (68.3 lbs)	32.9 kg (72.5 lbs)
Dimensions L×W×H (mm)		554 × 400 × 471	593 × 425 × 528
Packing Unit		1	

★For the purpose of improvement, specifications are subject to changes without notice.

Competitive Price & Guaranteed Quality
Powered by Koshin Engine

- Koshin Original Engine.
- All aluminum die casting pump housing, impeller and volutes for light weight and portability.
- Easy maintenance.
- High Grade carbon/ceramic mechanical seal.

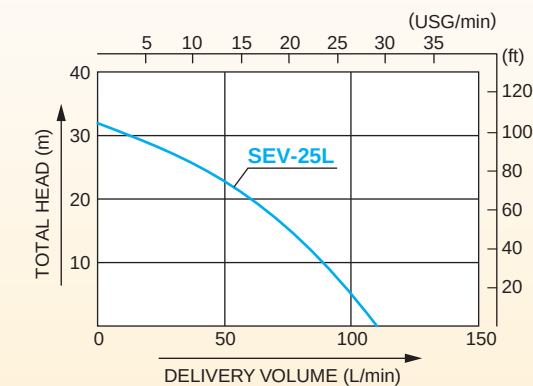


Economy and Ecology

"50:1" 2 stroke mixed fuel, friendly to the earth and your wallet!

SEV-25L is designed only for "50:1" 2 stroke mixed fuel which is environmentally-friendly in terms of exhaust. Also, you can save a half of engine oil compared with the usual "25:1" 2 stroke mixed fuel.

■ **Performance Curve**



Note: Performance ratings are guaranteed minimum, not inflated maximum.



■ **Specifications**

Model		SEV-25L
PUMP	Connection Dia	25 mm (1")
	Connection Thread	Outer Pipe Thread BSP
	Total Head	32 m (105 ft)
	Delivery Volume	110 L/min (29 USG/min)
	Max. Suction Head	8 m (26 ft)
ENGINE	Type	Forced Air-cooled 2-stroke Gasoline Engine
	Model	Koshin KC26
	Exhaust Volume	26 cc
	Rated Output	0.70 kW (0.93 PS) / 7500 rpm
	Fuel	2 Stroke Mixed Gas and Oil (50:1)
	Fuel Tank Capacity	0.6 L (0.16 USG)
	Continuous Operating Time	Approx. 50 min
	Starting Method	Recoil Starter
Standard Accessories		1 Strainer, 2 Hose Couplings, 3 Hose Bands
Gross Weight		7.7 kg (16.9 lbs)
Dimensions L×W×H (mm)		368 × 273 × 338
Packing Unit		1

★For the purpose of improvement, specifications are subject to changes without notice.

Light Weight 2 Stroke Engine Pumps



Super Light



SE-25L

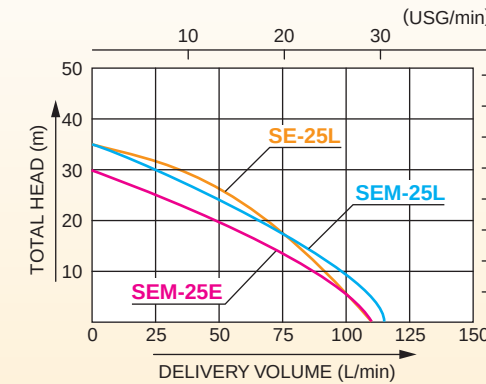


SEM-25L



SEM-25E

Performance Curve



Specifications

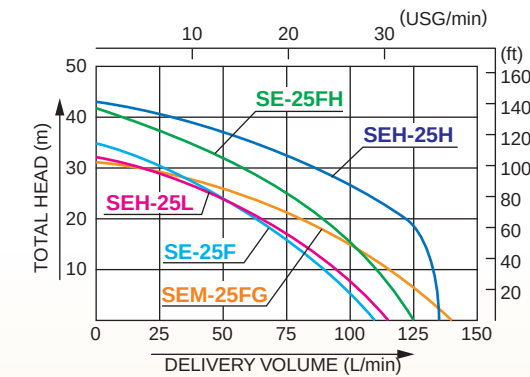
	Model	SE-25L	SEM-25L	SEM-25E
PUMP	Connection Dia	25 mm (1")		
	Connection Thread	Outer Pipe Thread BSP		
	Total Head	35 m (115 ft)	35 m (115 ft)	30 m (98 ft)
	Delivery Volume	110 L/min (29 USG/min)	115 L/min (30 USG/min)	110 L/min (29 USG/min)
	Max. Suction Head	8 m (26 ft)		
ENGINE	Type	Forced Air-cooled 2-stroke Gasoline Engine		
	Model	Subaru EC025GR	Mitsubishi TU26	Mitsubishi TLE20
	Exhaust Volume	24.5 cc	25.6 cc	19.8 cc
	Rated Output	0.55 kW (0.75 PS) / 6000 rpm	_____	_____
	Max. Output	0.88 kW (1.2 PS) / 7000 rpm	1.03 kW (1.4 PS) / 7500 rpm	0.6 kW (0.8 PS) / 7000 rpm
	Fuel	2 Stroke Mixed Gas and Oil (25:1)		
	Fuel Tank Capacity	0.6 L (0.16 USG)	0.6 L (0.16 USG)	0.45 L (0.12 USG)
	Continuous Operating Time	Approx. 50 min	Approx. 50 min	
	Starting Method	Recoil Starter		
	Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set		
Gross Weight	6.0 kg (13.2 lbs)	6.5 kg (14.3 lbs)		
Dimensions L×W×H (mm)	300 × 225 × 333	330 × 245 × 325	305 × 265 × 333	
Packing Unit	1			

Up to 50% Fuel Saving & Noise Reduction*
Double Life Span

* Fuel consumption and engine noise are half of 2 stroke engine.



Performance Curve



SE-25FH

SEH-25H

SEH-25L

Available 25 mm Hose Set

N-Type Hose Set

- Washing of agriculture & construction machinery



- 1 Delivery hose <8 m (26 ft)>
- 1 Nozzle (Jet)

R-Type Hose Set

- Washing of agriculture machinery
- Water sprinkling to the field



- 1 Delivery hose <8 m (26 ft)>
- 1 Nozzle (Jet & Mist)

New Spray Nozzle

SJ-20

- Large volume of spraying water
- 1 Coupling set <20 mm (3/4")>
- 1 Hose nipple <20 mm (3/4") × 15 mm (1/2")>



Specifications

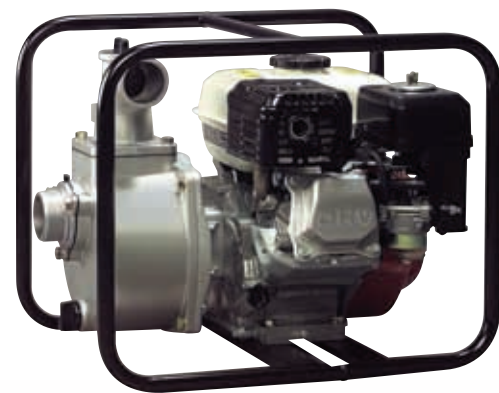
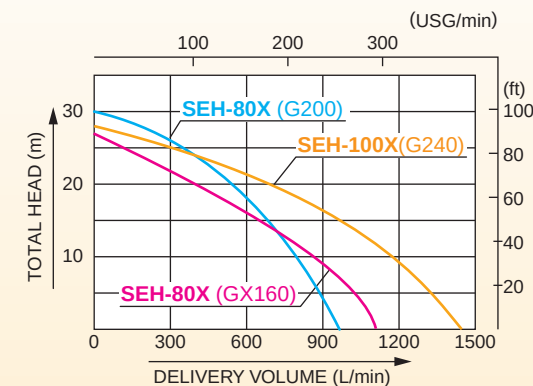
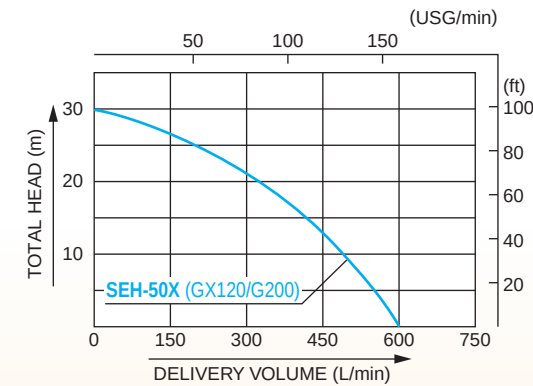
	Model	SEH-25L	SEH-25H	SE-25F	SE-25FH	SEM-25FG
PUMP	Connection Dia	25 mm (1")				
	Connection Thread	Outer Pipe Thread BSP				
	Total Head	32 m (105 ft)	43 m (141 ft)	35 m (115 ft)	42 m (138 ft)	31 m (102 ft)
	Delivery Volume	115 L/min (30 USG/min)	135 L/min (36 USG/min)	110 L/min (29 USG/min)	125 L/min (33 USG/min)	140 L/min (37 USG/min)
	Max. Suction Head	8 m (26 ft)				
ENGINE	Type	Forced Air-cooled 4-stroke Gasoline Engine				
	Model	Honda GX25	Honda GXH50	Subaru EH025	Subaru EH035	Mitsubishi GT241
	Exhaust Volume	25 cc	49 cc	24.5 cc	33.5 cc	79.6 cc
	Rated Output	——	——	0.55 kW (0.75 PS) / 7000 rpm	0.81 kW (1.1 PS) / 7000 rpm	1.3 kW (1.8 PS) / 3600 rpm
	Max. Output	0.81 kW (1.1 PS) / 7000 rpm	1.8 kW (2.5 PS) / 7000 rpm	0.81 kW (1.1 PS) / 7000 rpm	1.18 kW (1.6 PS) / 7000 rpm	1.8 kW (2.4 PS)
	Fuel	Automotive Unleaded Gasoline				
	Fuel Tank Capacity	0.55 L (0.14 USG)	0.9 L (0.24 USG)	0.5 L (0.13 USG)	0.65 L (0.17 USG)	1.6 L (0.42 USG)
	Continuous Operating Time	Approx. 1 hrs		Approx. 50 min		Approx. 2 hrs
	Starting Method	Recoil Starter				
	Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set				
Gross Weight	7 kg (15.4 lbs)	13.5 kg (29.7 lbs)	6.6 kg (14.5 lbs)	9.5 kg (20.9 lbs)	18 kg (39.7 lbs)	
Dimensions L×W×H (mm)	375 × 243 × 320	385 × 311 × 453	358 × 255 × 335	378 × 273 × 350	485 × 325 × 385	
Packing Unit	1					

Complete Range of Water Pumps
Powered by Honda Engine

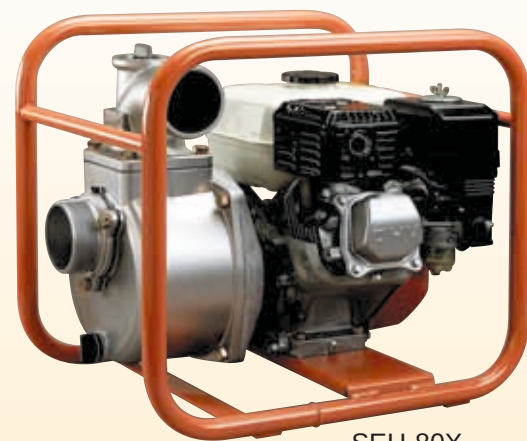
- Highly effective mechanical seal made with special carbon ceramics provides extra durability.
- Entire unit is protected by sturdy rollover pipe frame.
- Strong and lightweight die-cast aluminum pump.



■ Performance Curve



SEH-50X



SEH-80X

■ Specifications

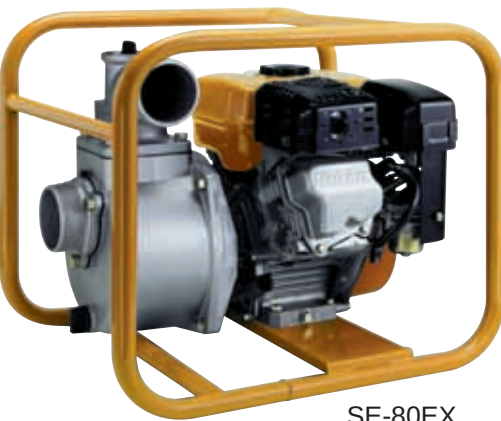
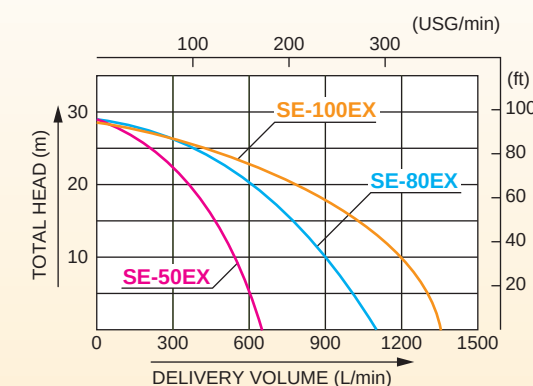
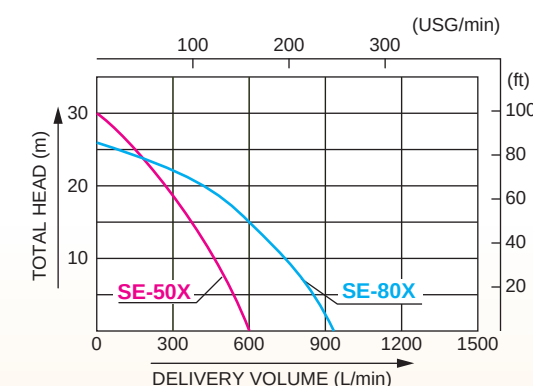
PUMP	Model	SEH-50X	SEH-80X	SEH-100X
	Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")
	Connection Thread	Outer Pipe Thread BSP		
	Total Head	30 m (98 ft)	27 m (88 ft)	28 m (92 ft)
	Delivery Volume	600 L/min (158 USG/min)	640 L/min (169 USG/min)	1100 L/min (290 USG/min)
ENGINE	Max. Suction Head	8 m (26 ft)		
	Type	Forced Air-cooled 4-stroke Gasoline Engine		
	Model	Honda GX120	Honda GX160	Honda GX240
	Exhaust Volume	118 cc	163 cc	270 cc
	Rated Output	2.1 kW (2.9 PS) / 3600 rpm	2.9 kW (3.9 PS) / 3600 rpm	4.6 kW (6.2 PS) / 3600 rpm
	Max. Output	2.6 kW (3.5 PS) / 3600 rpm	3.6 kW (4.9 PS) / 4000 rpm	5.9 kW (9.8 PS) / 3600 rpm
	Fuel	Automotive Unleaded Gasoline		
	Fuel Tank Capacity	2.0 L (0.53 USG)	3.1 L (0.8 USG)	5.3 L (1.4 USG)
	Continuous Operating Time	Approx. 2 hrs	Approx. 2 hrs	Approx. 2.5 hrs
	Starting Method	Recoil Starter		
Standard Accessories		1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set		
Gross Weight		22 kg (48.5 lbs)	27 kg (59.5 lbs)	59 kg (130 lbs)
Dimensions L×W×H (mm)		483 × 375 × 376	527 × 429 × 535	525 × 389 × 458
Packing Unit		1		

Strong & Durable Subaru Engine

- Highly effective mechanical seal made with special carbon ceramics provides extra durability.
- Entire unit is protected by sturdy rollover pipe frame.
- Strong and lightweight die-cast aluminum pump.



■ Performance Curve



SE-80EX



SE-100EX

■ Specifications

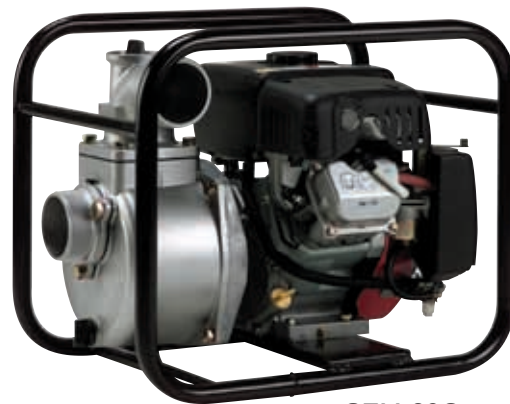
Model		SE-50X	SE-80X	SE-50EX	SE-80EX	SE-100EX
PUMP	Connection Dia	50 mm (2")	80 mm (3")	50 mm (2")	80 mm (3")	100 mm (4")
	Connection Thread	Outer Pipe Thread BSP				
	Total Head	30 m (98 ft)	26 m (85 ft)	28 m (92 ft)	28 m (92 ft)	27 m (89 ft)
	Delivery Volume	600 L/min (158 USG/min)	930 L/min (246 USG/min)	650 L/min (172 USG/min)	1100 L/min (290 USG/min)	1350 L/min (356 USG/min)
	Max. Suction Head	8 m (26 ft)				
Type	Forced Air-cooled 4-stroke Gasoline Engine					
Model	Subaru EY15-3D	Subaru EY20-3D	Subaru EX16	Subaru EX17	Subaru EX27	
Exhaust Volume	143 cc	183 cc	169 cc	169 cc	265 cc	
Rated Output	2.0 kW (2.7 PS) / 3600 rpm	2.6 kW (3.5 PS) / 3600 rpm	2.2 kW (3.0 PS) / 3600 rpm	2.9 kW (4.0 PS) / 3600 rpm	5.1 kW (7.0 PS) / 3600 rpm	
Max. Output	2.6 kW (3.5 PS) / 4000 rpm	3.7 kW (5.0 PS) / 4000 rpm	3.2 kW (4.3 PS) / 4000 rpm	4.2 kW (5.7 PS) / 4000 rpm	6.6 kW (9.0 PS) / 4000 rpm	
Fuel	Automotive Unleaded Gasoline					
Fuel Tank Capacity	2.8 L (0.74 USG)	3.8 L (1.00 USG)	3.2 L (0.84 USG)	3.2 L (0.84 USG)	5.6 L (1.48 USG)	
Continuous Operating Time	Approx. 2.8 hrs	Approx. 3 hrs	Approx. 2.5 hrs			Approx. 2.1 hrs
Starting Method	Recoil Starter					
Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set					
Gross Weight	23 kg (50.7 lbs)	35 kg (77.1 lbs)	27 kg (59.5 lbs)	33 kg (72.7 lbs)	57 kg (125 lbs)	
Dimensions L×W×H (mm)	484 × 330 × 420	525 × 370 × 472	504 × 401 × 411	530 × 405 × 465	670 × 477 × 669	
Packing Unit	1					

Powered by Durable Mitsubishi Engine

- Highly effective mechanical seal made with special carbon ceramics provides extra durability.
- Entire unit is protected by sturdy rollover pipe frame.
- Strong and lightweight die-cast aluminum pump.



SEM-40FG

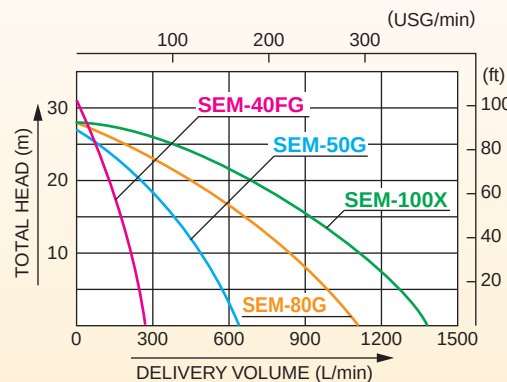


SEM-80G



SEM-100X

■ Performance Curve



■ Specifications

Model		SEM-40FG	SEM-50G	SEM-80G	SEM-100X
PUMP	Connection Dia	40 mm (1½")	50 mm (2")	80 mm (3")	100 mm (4")
	Connection Thread	Outer Pipe Thread BSP			
	Total Head	31 m (102 ft)	27 m (88 ft)	28 m (92 ft)	28 m (92 ft)
	Delivery Volume	270 L/min (71 USG/min)	640 L/min (169 USG/min)	1100 L/min (290 USG/min)	1380 L/min (364 USG/min)
	Max. Suction Head	8 m (26 ft)			
ENGINE	Type	Forced Air-cooled 4-stroke Gasoline Engine			
	Model	Mitsubishi GT241	Mitsubishi GT400	Mitsubishi GT600	Mitsubishi GM231PN
	Exhaust Volume	79.6 cc	126 cc	181 cc	215 cc
	Rated Output	1.3 kW (1.8 PS) / 3600 rpm	2.1 kW (2.8 PS) / 3600 rpm	3.3 kW (4.5 PS) / 3600 rpm	3.6 kW (5.0 PS) / 3600 rpm
	Max. Output	1.8 kW (2.4 PS)	2.9 kW (4.0 PS)	4.4 kW (6.0 PS)	5.1 kW (7.0 PS)
	Fuel	Automotive Unleaded Gasoline			
	Fuel Tank Capacity	1.6 L (0.42 USG)	2.5 L (0.66 USG)	3.8 L (1.00 USG)	4.5 L (1.19 USG)
	Continuous Operating Time	Approx. 2 hrs		Approx. 3 hrs	
	Starting Method	Recoil Starter			
	Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tools Set			
Gross Weight	21 kg (46.3 lbs)	26 kg (57.3 lbs)	33 kg (72.7 lbs)	53 kg (116.8 lbs)	
Dimensions L×W×H (mm)	450 × 330 × 397	500 × 395 × 415	525 × 420 × 488	670 × 477 × 669	
Packing Unit	1				

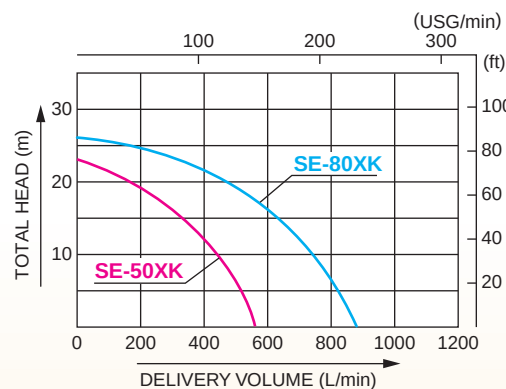
Kerosene Engine Pumps



SE-80XK



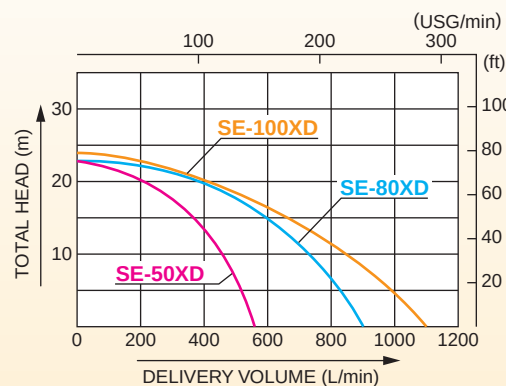
■ Performance Curve



Diesel Engine Pumps



SE-100XD



■ Specifications

PUMP	Model	SE-50XK	SE-80XK	SE-50XD	SE-80XD	SE-100XD
	Connection Dia	50 mm (2")	80 mm (3")	50 mm (2")	80 mm (3")	100 mm (4")
	Connection Thread	Outer Pipe Thread BSP				
	Total Head	23 m (75 ft)	26 m (85 ft)	23 m (75 ft)		24 m (79 ft)
	Delivery Volume	560 L/min (148 USG/min)	880 L/min (232 USG/min)	560 L/min (148 USG/min)	900 L/min (238 USG/min)	1100 L/min (290 USG/min)
ENGINE	Max. Suction Head	8 m (26 ft)				
	Type	Air-cooled 4-cycle Kerosene Engine		Air-cooled 4-cycle Diesel Engine		
	Model	Subaru EY15-3DK	Subaru EY20-3DK	Subaru DY23-2D		Subaru DY27-2D
	Exhaust Volume	143 cc	183 cc	230 cc		265 cc
	Rated Output	1.6 kW (2.2 PS) / 3600 rpm	2.3 kW (3.1 PS) / 3600 rpm	3.1 kW (4.2 PS) / 3600 rpm		3.7 kW (5.0 PS) / 3600 rpm
	Max. Output	2.4 kW (3.3 PS) / 4000 rpm	3.2 kW (4.3 PS) / 4000 rpm	3.5 kW (4.8 PS) / 3600 rpm		4.4 kW (6.0 PS) / 3600 rpm
	Fuel	Kerosene (Automotive unleaded gasoline (starting))		Diesel Light Oil		
	Fuel Tank Capacity	Kerosene: 2.6 L (0.68 USG) Gasoline: 0.13 L (0.03 USG)	Kerosene: 3.4 L (0.90 USG) Gasoline: 0.17 L (0.04 USG)	3.2 L (0.84 USG)		
	Continuous Operating Time	Approx. 2.5 hrs		Approx. 3.5 hrs	Approx. 3 hrs	Approx. 2.5 hrs
	Starting Method	Recoil Starter				
Standard Accessories		1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set				
Gross Weight		25 kg (55.1 lbs)	34 kg (74.9 lbs)	47 kg (103 lbs)	50 kg (110 lbs)	64 kg (141 lbs)
Dimensions L×W×H (mm)		479 × 352 × 420	529 × 419 × 477	573 × 413 × 500	573 × 413 × 500	664 × 445 × 698
Packing Unit		1				

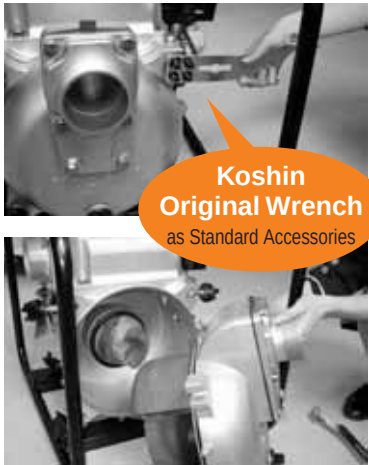


HEAVY DUTY

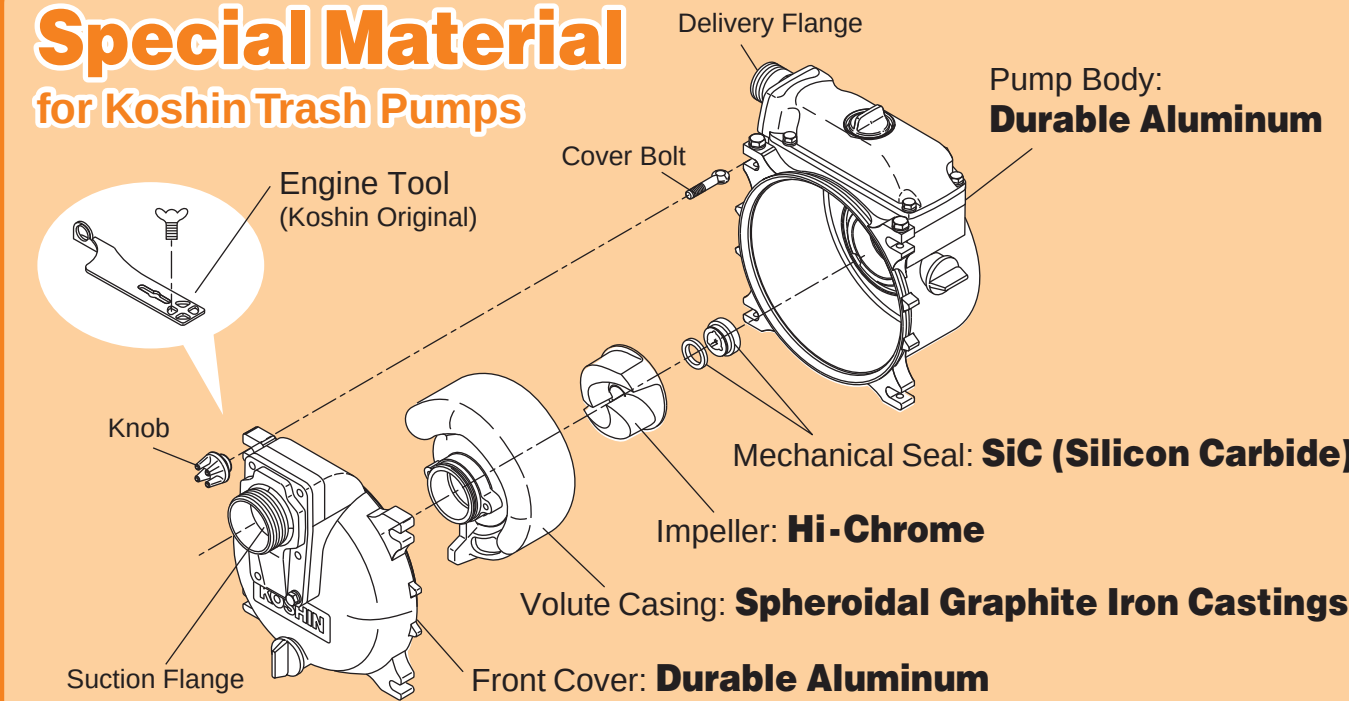
Koshin Trash Pumps

- Excellent Seal Durability**
Conventional mechanical seal using carbon ceramic is replaced by silicon carbide (SiC) seal. SiC seal is developed by Koshin and we are the first manufacturer to use such durable material in Japan.
- Thoughtful Design**
Special plug designed on impeller allows easy removal. Simply insert any rod and twist to separate impeller from its casing. No special tool required.
- Light Weight & Compact Design**
Conventional trash pumps are very bulky and heavy, some more than 100 kg in weight. KTR-100X, the largest of all, weights only 81 kg. The compact design takes up smaller space and is portable.
- High Self-priming Performance**
Special structure is designed to ensure high capacity self-priming performance. Koshin trash pumps give excellent performance and durability.

Easy & Quick Maintenance



Special Material for Koshin Trash Pumps



Heavy Duty Trash Pumps
Powered by Honda & Mitsubishi Engine

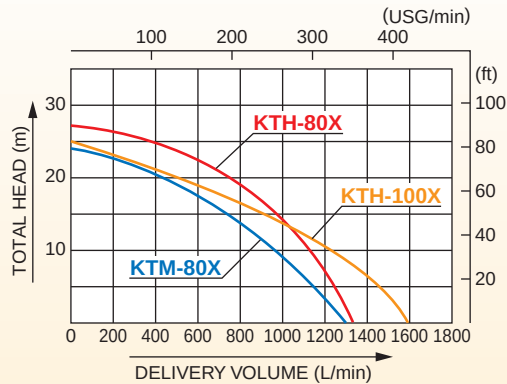
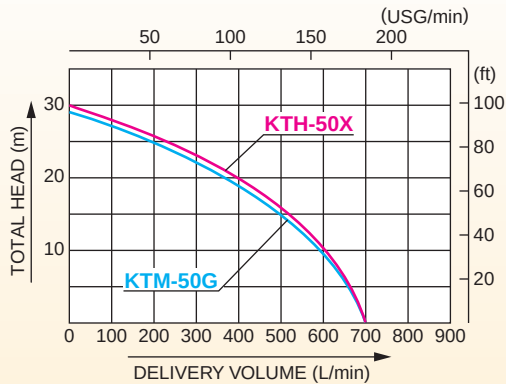


KTH-50X

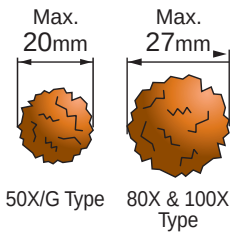


KTM-80X

Performance Curve



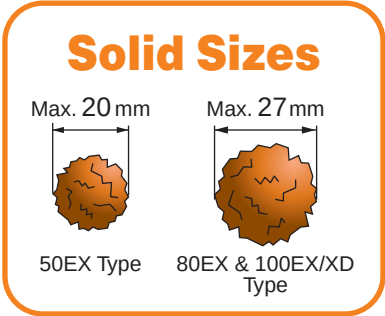
Solid Sizes



Specifications

Model	KTH-50X	KTH-80X	KTH-100X	KTM-50G	KTM-80X
Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")	50 mm (2")	80 mm (3")
Connection Thread	Outer Pipe Thread BSP				
Total Head	30 m (98 ft)	27 m (89 ft)	25 m (82 ft)	28 m (92 ft)	24 m (79 ft)
Delivery Volume	700 L/min (185 USG/min)	1340 L/min (354 USG/min)	1600 L/min (422 USG/min)	700 L/min (185 USG/min)	1300 L/min (343 USG/min)
Max. Suction Head	8 m (26 ft)				
Material for Mechanical Seal	SiC (Silicon Carbide) × SiC				
Material for Impeller	Hi-Chrome				
Material for Volute	Spheroidal Graphite Iron Castings				
Type	Forced Air-cooled 4-stroke Gasoline Engine				
Model	Honda GX160	Honda GX240	Honda GX340	Mitsubishi GT600	Mitsubishi GM291
Exhaust Volume	163 cc	270 cc	337 cc	181 cc	296 cc
Rated Output	2.9 kW (4.0 PS) / 3600 rpm	4.6 kW (6.3 PS) / 3600 rpm	5.8 kW (7.9 PS) / 3600 rpm	3.3 kW (4.5 PS) / 3600 rpm	4.4 kW (6.0 PS) / 3600 rpm
Max. Output	3.6 kW (4.9 PS) / 3600 rpm	5.9 kW (8.0 PS) / 3600 rpm	7.1 kW (9.7 PS) / 3600 rpm	4.4 kW (6.0 PS) / 4000 rpm	5.9 kW (8.0 PS) / 4000 rpm
Fuel	Automotive Unleaded Gasoline				
Fuel Tank Capacity	3.1 L (0.82 USG)	5.3 L (1.40 USG)	6.1 L (1.61 USG)	3.8 L (1.0 USG)	6.0 L (1.58 USG)
Continuous Operating Time	Approx. 2.2 hrs	Approx. 2.5 hrs	Approx. 2 hrs	Approx. 2 hrs	Approx. 3 hrs
Starting Method	Recoil Starter				
Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set				
Gross Weight	51 kg (112 lbs)	64 kg (141 lbs)	86 kg (189 lbs)	55 kg (121 lbs)	68 kg (150 lbs)
Dimensions L×W×H (mm)	646 × 488 × 509	711 × 506 × 570	780 × 570 × 652	646 × 488 × 509	721 × 536 × 582
Packing Unit	1				

Heavy Duty Trash Pumps
Powered by Robin Engine

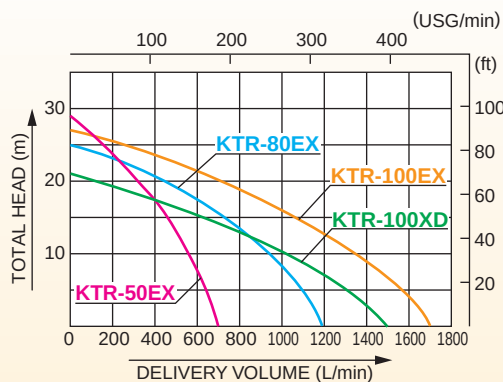


KTR-50X



KTR-80X

■ Performance Curve



■ Specifications

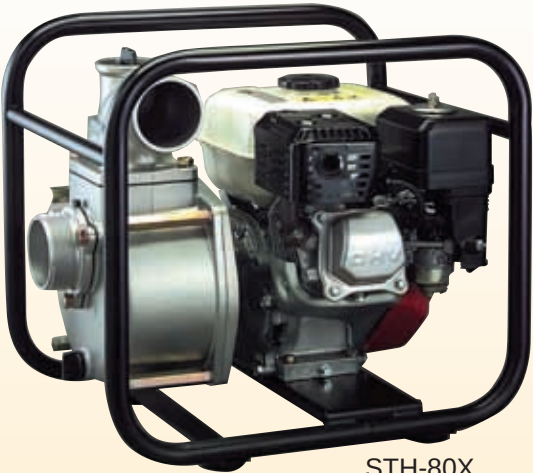
	Model			
	KTR-50EX	KTR-80EX	KTR-100EX	KTR-100XD
PUMP	Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")
	Connection Thread	Outer Pipe Thread BSP		
	Total Head	29 m (95 ft)	25 m (82 ft)	28 m (92 ft)
	Delivery Volume	700 L/min (185 USG/min)	1190 L/min (314 USG/min)	1700 L/min (449 USG/min)
	Max. Suction Head	8 m (26 ft)		
	Material for Mechanical Seal	SiC (Silicon Carbide) × SiC		
ENGINE	Material for Impeller	Hi-Chrome		
	Material for Volute	Spheroidal Graphite Iron Castings		
	Type	Forced Air-cooled 4-stroke Gasoline Engine		
	Model	Subaru EX17	Subaru EX27	Subaru EX40
	Exhaust Volume	169 cc	265 cc	404 cc
	Rated Output	2.9 kW (4.0 PS) / 3600 rpm	5.1 kW (7.0 PS) / 3600 rpm	7.0 kW (9.5 PS) / 3600 rpm
	Max. Output	4.2 kW (5.7 PS) / 4000 rpm	6.6 kW (9.0 PS) / 4000 rpm	10.3 kW (14.0 PS) / 3600 rpm
	Fuel	Automotive Unleaded Gasoline		
	Fuel Tank Capacity	3.2 L (0.84 USG)	5.6 L (1.48 USG)	6.8 L (1.79 USG)
	Continuous Operating Time	Approx. 2 hrs	Approx. 2.1 hrs	Approx. 1.6 hrs
	Starting Method	Recoil starter		
	Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set		
	Gross Weight	53 kg (117 lbs)	64 kg (141 lbs)	90 kg (198 lbs)
	Dimensions L×W×H (mm)	646 × 488 × 509	711 × 500 × 570	780 × 592 × 652
	Packing Unit	1		

Economical Trash Pumps
For Sandy & Muddy Water Applications

- Silicon Carbide Mechanical Seal (SiC).
4 to 5 times more durable than standard carbon ceramic mechanical seal.
- Spheroidal graphite iron casting for impeller and casing.
10 times more corrosion resistant than standard FC or cast iron.
- Impeller can be removed easily without special tool.
- Long bolt assembly for easy maintenance.

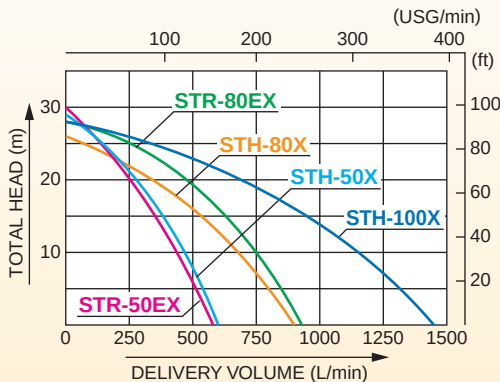


STR-50EX



STH-80X

■ Performance Curve



■ Specifications

	Model	STH-50X	STH-80X	STH-100X	STR-50EX	STR-80EX
PUMP	Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")	50 mm (2")	80 mm (3")
	Connection Thread	Outer Pipe Thread BSP				
	Total Head	29 m (95 ft)	26 m (85 ft)	28 m (92 ft)	30 m (98 ft)	28 m (92 ft)
	Delivery Volume	600 L/min (158 USG/min)	900 L/min (238 USG/min)	1450 L/min (383 USG/min)	580 L/min (153 USG/min)	930 L/min (246 USG/min)
	Max. Suction Head	8 m (26 ft)				
ENGINE	Type	Forced Air-cooled 4-stroke Gasoline Engine				
	Model	Honda GX120	Honda GX160	Honda GX240	Subaru EX16	Subaru EX17
	Exhaust Volume	118 cc	163 cc	270 cc	169 cc	169 cc
	Rated Output	2.1 kW (2.9 PS) / 3600 rpm	2.9 kW (4.0 PS) / 3600 rpm	4.6 kW (6.3 PS) / 3600 rpm	2.2 kW (3.0 PS) / 3600 rpm	2.9 kW (4.0 PS) / 3600 rpm
	Max. Output	2.6 kW (3.5 PS) / 3600 rpm	3.6 kW (4.9 PS) / 3600 rpm	5.9 kW (8.0 PS) / 3600 rpm	3.2 kW (4.3 PS) / 4000 rpm	4.2 kW (5.7 PS) / 4000 rpm
	Fuel	Automotive Unleaded Gasoline				
	Fuel Tank Capacity	2.0 L (0.53 USG)	3.1 L (0.82 USG)	5.3 L (1.40 USG)	3.6 L (0.95 USG)	3.2 L (0.84 USG)
	Continuous Operating Time	Approx. 3 hrs			Approx. 2 hrs	
	Starting Method	Recoil starter				
	Standard Accessories	1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set, 1 Spanner				
Gross Weight	25 kg (55.1 lbs)	35 kg (77.1 lbs)	64 kg (141 lbs)	28 kg (61.7 lbs)	34 kg (74.9 lbs)	
Dimensions L×W×H (mm)	500 × 395 × 415	525 × 389 × 473	665 × 472 × 655	506 × 402 × 429	530 × 405 × 405	
Packing Unit	1					



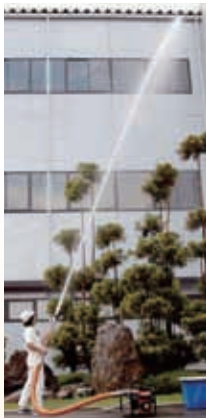
HIGH PRESSURE

Suitable for Sprinkler System & Fire Fighting

- Compact & lightweight high pressure pump
- 3 ways delivery flange [2"×1, 1"×2] (SERM-50V)



SEM-50V



SEM-50V Image

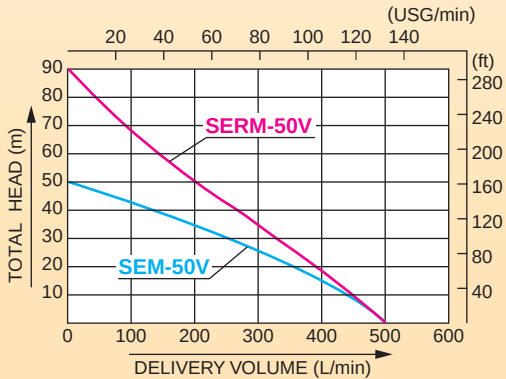
Specifications

PUMP	Model	SEM-50V	SERM-50V
	Connection Dia	50 mm (2")	Suction: 50 mm (2") Delivery: 50 mm (2") / 25 mm (1")
	Connection Thread	Outer Pipe Thread BSP	
	Total Head	50 m (164 ft)	90 m (295 ft)
	Delivery Volume	500 L/min (132 USG/min)	
ENGINE	Max. Suction Head	8 m (26 ft)	
	Type	Air-cooled 4-cycle Gasoline Engine	
	Model	Mitsubishi GM 132 Hi-Revolution	Mitsubishi GM 182 Hi-Revolution
	Exhaust Volume	126 cc	181 cc
	Rated Output	2.1 kW (2.8 PS) / 3600 rpm	3.3 kW (4.5 PS) / 3600 rpm
	Max. Output	2.9 kW (4.0 PS) / 4800 rpm	4.4 kW (6.0 PS) / 4800 rpm
	Fuel	Automotive Unleaded Gasoline	
	Fuel Tank Capacity	2.5 L (0.66 USG)	3.5 L (0.92 USG)
	Continuous Operating Time	Approx. 2 hrs	
	Starting Method	Recoil Starter	
Standard Accessories		1 Strainer 3 Hose Bands (φ 60) 1 Hose Coupling 1 Quick Coupling 1 Engine Tool	1 Strainer 3 Hose Bands (φ 60) 2 Hose Bands (φ 32) 1 Coupling Set (50 mm) 1 Closing Plate (50 mm) 2 Nipples (25 mm) 1 Quick Coupling 1 Engine Tool
Gross Weight		28 kg (61.7 lbs)	38 kg (84 lbs)
Dimensions L×W×H (mm)		510 × 402 × 440	555 × 450 × 468
Packing Unit		1	

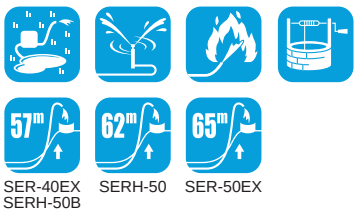


SERM-50V

Performance Curve



Pumps Suitable for Sprinkler System

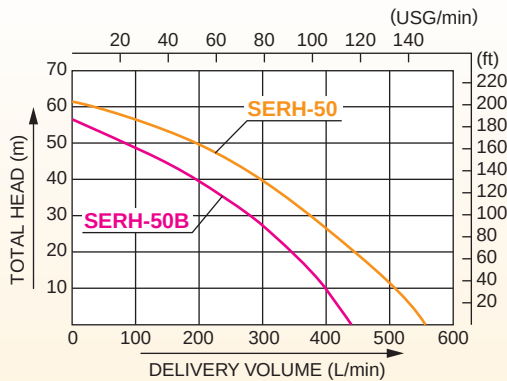
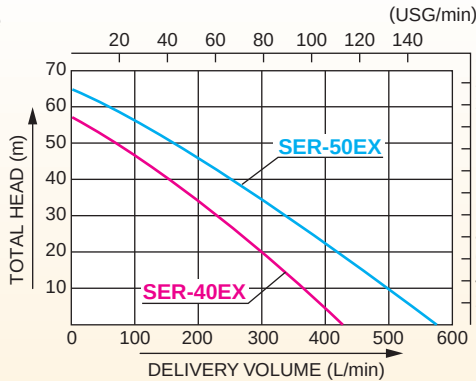


SER-50EX



SERH-50B

Performance Curve



Specifications

PUMP	Model	SER-40EX	SER-50EX	SERH-50B	SERH-50
	Connection Dia	IN 50 mm (2") OUT 40 mm (1½")	IN 65 mm (2½") OUT 50 mm (2")	IN 50 mm (2") OUT 50 mm (2")	IN 65 mm (2½") OUT 50 mm (2")
	Connection Thread	Outer Pipe Thread BSP			
	Total Head	57 m (187 ft)	65 m (213 ft)	57 m (187 ft)	62 m (203 ft)
	Delivery Volume	430 L/min (113 USG/min)	570 L/min (150 USG/min)	440 L/min (116 USG/min)	560 L/min (148 USG/min)
ENGINE	Max. Suction Head	8 m (26 ft)			
	Type	Air-cooled 4-cycle Gasoline Engine			
	Model	Subaru EX17	Subaru EX27	Honda GX160	Honda GX240
	Exhaust Volume	169 cc	265 cc	163 cc	270 cc
	Rated Output	2.9 kW (4.0 PS) / 3600 rpm	5.1 kW (7.0 PS) / 3600 rpm	2.9 kW (3.9 PS) / 3600 rpm	4.6 kW (6.3 PS) / 3600 rpm
	Max. Output	4.2 kW (5.7 PS) / 4000 rpm	6.6 kW (9.0 PS) / 4000 rpm	3.6 kW (4.9 PS) / 3600 rpm	5.9 kW (8.0 PS) / 3600 rpm
	Fuel	Automotive Unleaded Gasoline			
	Fuel Tank Capacity	3.2 L (0.84 USG)	5.6 L (1.48 USG)	3.1 L (0.82 USG)	5.3 L (1.40 USG)
	Continuous Operating Time	Approx. 2.0 hrs	Approx. 2.5 hrs	Approx. 2 hrs	Approx. 2.5 hrs
	Starting Method	Recoil Starter			
Standard Accessories		1 Coupling Set (40 mm) 1 Coupling Set (50 mm) 2 Hose Bands (φ 60) 1 Hose Band (φ 48) 1 Strainer (50 mm) 1 Engine Tool Set	1 Coupling Set (50 mm) 1 Coupling Set (65 mm) 2 Hose Bands (φ 80) 1 Hose Band (φ 60) 1 Strainer (65 mm) 1 Engine Tool Set	2 Coupling Set 3 Hose Bands (φ 60) 1 Strainer 1 Engine Tool Set	1 Coupling Set (50 mm) 1 Coupling Set (65 mm) 2 Hose Bands (φ 80) 1 Hose Band (φ 60) 1 Strainer (65 mm) 1 Engine Tool Set
Gross Weight		35 kg (77.1 lbs)	46 kg (101 lbs)	34 kg (74.9 lbs)	46 kg (101 lbs)
Dimensions L×W×H (mm)		535 × 405 × 440	600 × 485 × 530	535 × 405 × 440	568 × 482 × 518
Packing Unit		1			



POLYETHYLENE PUMP BODY

For Seawater, Chemicals

- Superior material used.
 - PET (Polyethylene Terephthalate) for pump casing, impeller and volute casing.
 - EPDM and Carbon Ceramic for mechanical seal.
 - SUS for all bolts and washers.
- Powered by strong and durable engine.



PGH-50

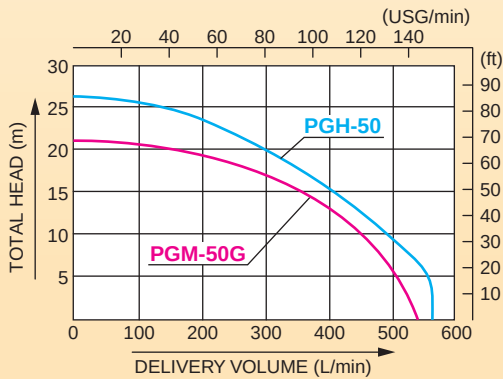


PGM-50G

Specifications

PUMP	Model	PGH-50	PGM-50G
	Connection Dia	50 mm (2")	
	Connection Thread	Outer Pipe Thread BSP	
	Total Head	26 m (85 ft)	21 m (68 ft)
	Max. Suction Head	8 m (26 ft)	
ENGINE	Delivery Volume	560 L/min (148 USG/min)	540 L/min (143 USG/min)
	Material for Mechanical Seal	Ceramic Carbon	
	Max. Pressure	0.26 MPa	0.21 MPa
	Type	Forced Air-cooled 4-stroke Gasoline Engine	
	Model	Honda GX120	Mitsubishi GT400
	Exhaust Volume	118 cc	126 cc
	Rated Output	2.1 kW (2.9 PS) / 3600 rpm	2.1 kW (2.8 PS) / 3600 rpm
	Max. Output	2.6 kW (3.5 PS) / 3600 rpm	2.9 kW (4.0 PS)
	Fuel	Automotive Unleaded Gasoline	
	Fuel Tank Capacity	2.0 L (0.53 USG)	2.5 L (0.66 USG)
	Continuous Operating Time	Approx. 2 hrs	
	Starting Method	Recoil Starter	
Standard Accessories		2 Nipples, 1 Engine Tool Set	
Gross Weight		21 kg (46.3 lbs)	23 kg (50.7 lbs)
Dimensions L×W×H (mm)		520 × 428 × 448	511 × 407 × 439
Packing Unit		1	

Performance Curve



Powerful High Pressure with 15 MPa (JCE-1510)

- For washing farm equipments
Suitable for cleaning a tractor, combine and rice planting machine.
- Easy to clean agricultural equipments after use
It can be operated in any field and endble to get water from water channel nearby.
- Double function for peeling bark off and washing (JCE-1510)
The rotary nozzle can easily to remove hard barks.



New



JCE-1107DX



JCE-1510

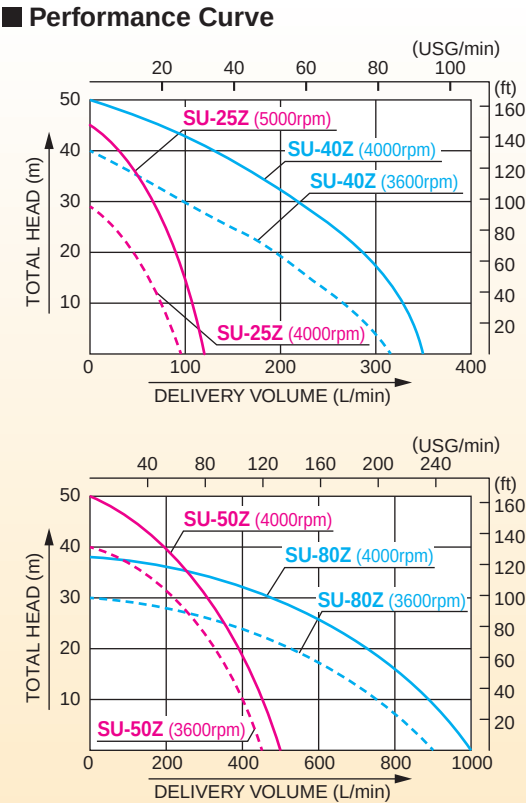
Specifications

Model	JCE-1107DX	JCE-1510
PUMP	Max. Pressure	11 MPa (110 kgf/cm²)
	Max. Volume	7 L/min
	Recommended Feed-water	Clear water at 5 – 40 °C
	Max. Suction Head	1.0 m
	Necessary Volume of Engine Oil	80 cc
ENGINE	Type	Air Forced 4 Stroke OHV Gasoline Engine
	Model	Koshin K100
	Total Exhaust Volume	98 cc
	Fuel	Automotive Unleaded Gasoline
	Fuel Tank Capacity	2.0 L
	Engine Oil	SAE 10W-30
	Necessary Volume of Engine Oil	350 cc
	Accessories	1 Gun, 1 Straight/Fan shape nozzle, 1 Delivery hose (10 m), 1 Suction hose (3m), 1 Strainer
Gross Weight		27 kg (59.5 lbs)
Dimensions L×W×H (mm)		490 × 460 × 615
Packing Unit		1



PABOOL PUMPS

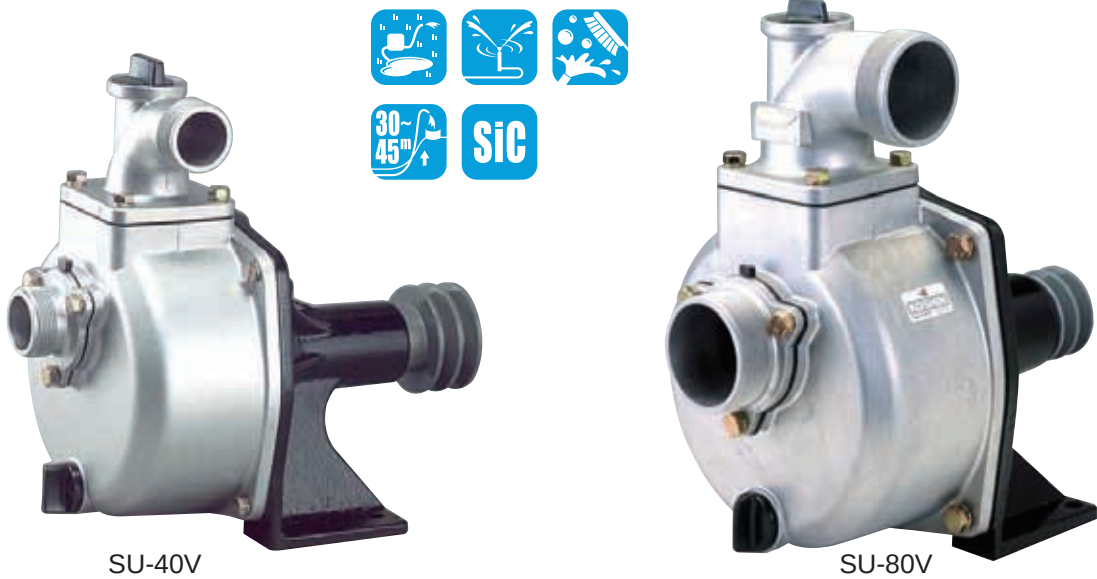
Pabool Pumps are Designed for Sprinkler System & General Irrigation



■ Specifications

Model	SU-25Z		SU-40Z		SU-50Z		SU-80Z	
Connection Dia	25 mm (1")		40 mm (1½")		50 mm (2")		80 mm (3")	
Connection Thread	Outer Pipe Thread BSP							
Revolution	4000 rpm	5000 rpm	3600 rpm	4000 rpm	3600 rpm	4000 rpm	3600 rpm	4000 rpm
Total Head	29 m (95 ft)	45 m (148 ft)	40 m (131 ft)	50 m (164 ft)	40 m (131 ft)	50 m (164 ft)	30 m (98 ft)	38 m (124 ft)
Delivery Volume	96 L/min (25 USG/min)	120 L/min (32 USG/min)	315 L/min (83 USG/min)	350 L/min (92 USG/min)	450 L/min (119 USG/min)	500 L/min (132 USG/min)	900 L/min (238 USG/min)	1000 L/min (264 USG/min)
Output	1.5 kW (2 PS)	2.2 kW (3 PS)	4.0 kW (3 PS)	3.7 kw (5 PS)	3.7 kW (5 PS)	5.5 kW (7.5 PS)	5.5 kW (7.5 PS)	7.5 kW (10 PS)
Standard Accessories	1 Strainer, 2 Couplings, 3 Hose Bands							
Gross Weight	33 kg (72.7 lbs)		24 kg (52.9 lbs)		31 kg (68.3 lbs)		36 kg (79.3 lbs)	
Dimensions L×W×H (mm)	663 × 461 × 245		384 × 469 × 284		535 × 404 × 310		535 × 437 × 453	
Packing Unit	4		2		2		2	

Powerful Pressure & Enhanced Durability



Double Life Span Durability

Standard type → **SU-V series**

Mechanical Seal → **Impeller**

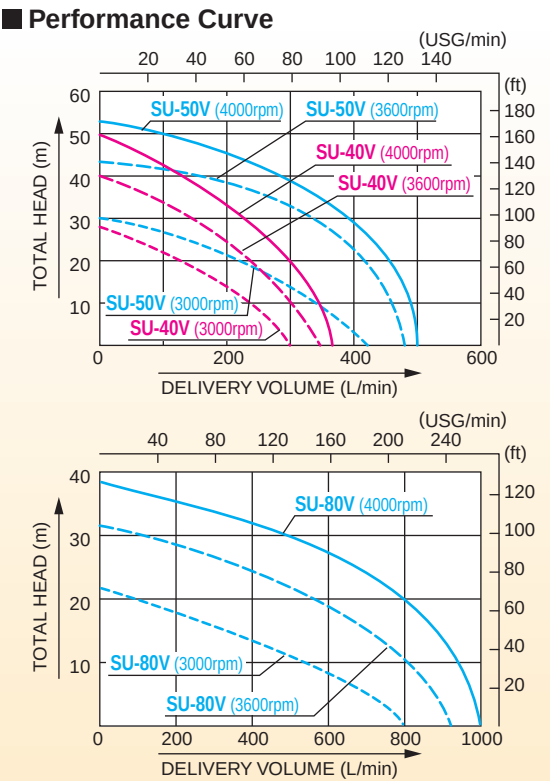
4 blades → 6 blades

■ Chart Shows Co-relation Between Motor Rotation and Pulley Diameter

Hz	Model Motor Poles (Revolution)	SU-40V · SU-50V · SU-80V					
		3000		3600		4000	
		mm	inch	mm	inch	mm	inch
50	2P (2880 rpm)	81	3½	96	4	106	4½
	4P (1430 rpm)	161	6½	191	8	211	9
	6P (960 rpm)	235	9	291	12	326	13
60	2P (2880 rpm)	66	2½	81	3½	91	3½
	4P (1430 rpm)	129	5	161	6½	91	8
	6P (960 rpm)	191	8	235	9	261	10

■ Specifications

Model	SU-40V			SU-50V			SU-80V		
Connection Dia	40 mm (1½")			50 mm (2")			80 mm (3")		
Connection Thread	Outer Pipe Thread BSP								
Revolution	3000 rpm	3600 rpm	4000 rpm	3000 rpm	3600 rpm	4000 rpm	3000 rpm	3600 rpm	4000 rpm
Total Head	28 m (91 ft)	40 m (131 ft)	50 m (164 ft)	30 m (98 ft)	42 m (137 ft)	53 m (173 ft)	21 m (68 ft)	31 m (101 ft)	38 m (124 ft)
Delivery Volume	300 L/min (79 USG/min)	350 L/min (92 USG/min)	370 L/min (98 USG/min)	430 L/min (113 USG/min)	480 L/min (127 USG/min)	500 L/min (132 USG/min)	800 L/min (211 USG/min)	920 L/min (243 USG/min)	1000 L/min (264 USG/min)
Max. Suction Head	7 m (23 ft)	8 m (26 ft)		7 m (23 ft)	8 m (26 ft)		7 m (23 ft)	8 m (26 ft)	
Output	1.5 kW (2 PS)	2.2 kW (3 PS)	3.7 kW (5 PS)	2.2 kW (3 PS)	3.7 kW (5 PS)	5.5 kW (7.5 PS)	3.7 kW (5 PS)	5.5 kW (7.5 PS)	7.5 kW (10 PS)
Standard Accessories	1 Strainer, 2 Couplings, 3 Hose Bands								
Gross Weight	13.5 kg (29.7 lbs)			16 kg (35.3 lbs)			24 kg (52.9 lbs)		
Dimensions L×W×H (mm)	360 × 212 × 240			392 × 250 × 280			434 × 277 × 378		
Packing Unit	1								





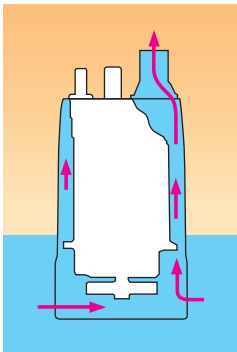
HEAVY DUTY SUBMERSIBLE PUMPS

Powerful Pumps for Heavy Duties

- Double mechanical seals in oil chamber filled with liquid paraffin prevents damage from dry running.
- Liquid paraffin is used in the shaft seal. Water is not contaminated even in case of oil leakage.
- Thermal protector cuts off circuit in case of overload during operation.

Effective Motor Cooling System

Water is channeled through the outer wall to cool the motor for maximum endurance.

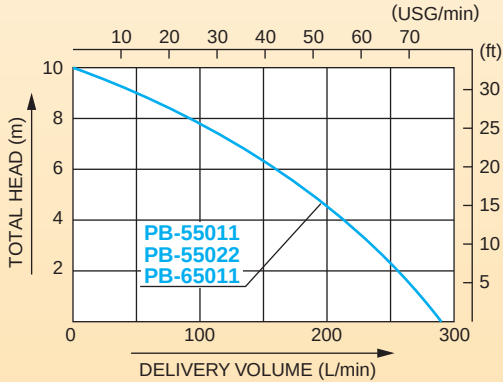


PB-55011

Specifications

	Model	PB-55011	PB-55022	PB-65011
PUMP	Connection Dia	50 mm (2")		
	Total Head	10 m (32.8 ft)		
	Delivery Volume	290 L/min (76 USG/min)		
MOTOR	Voltage	AC 110 V	AC 220 V	AC 110 V
	Frequency	50 Hz		60 Hz
	Rated Current	7.3 A	3.6 A	8.7 A
	Output	400 W		
	Consumption	760 W	680 W	750 W
	Revolution	2900 rpm		3400 rpm
	Model	Induction Motor		
	Power Cord	10 m (32.8 ft) / 6 m (10.7 ft)		6 m (10.7 ft)
Standard Accessories	1 Rope (5 m (16.4 ft)), 1 Hose Band			
Gross Weight	32 kg (70.5 lbs)	33 kg (72.7 lbs)		
Dimensions L×W×H (mm)	543 × 280 × 524			
Packing Unit	2			

Performance Curve



*Starting current is three times higher than rated current.

Great Durability



PX-55022

For Residual Water Up to 1 mm

- Designed for application in narrow access drainage especially in manhole or bottom pit.



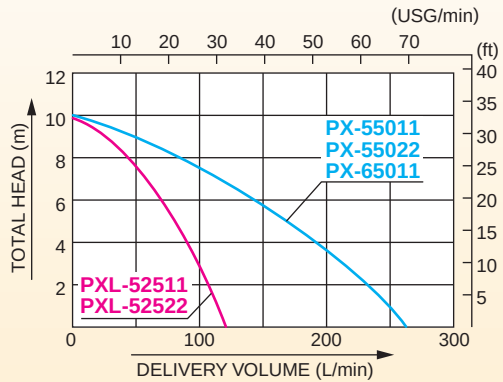
Applications

- Drainage of underground water
- Disposal of residual water from roof tank of buildings, swimming pools, etc.
- Construction site
- Pond / Aquarium usage
- Irrigation
- Home / Domestic application



PXL-52522

Performance Curve



*Starting current is three times higher than rated current.

Invertible Delivery Flange

Just 2 bolts delivery flange is inverted



PX



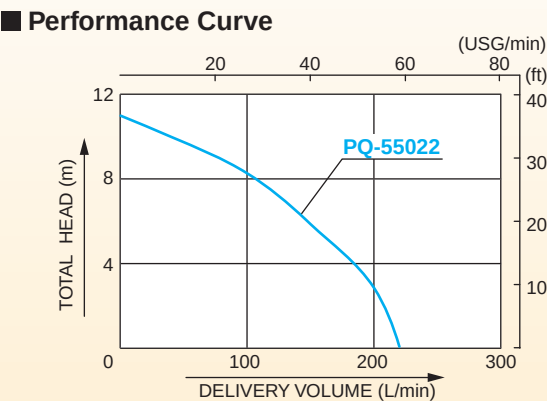
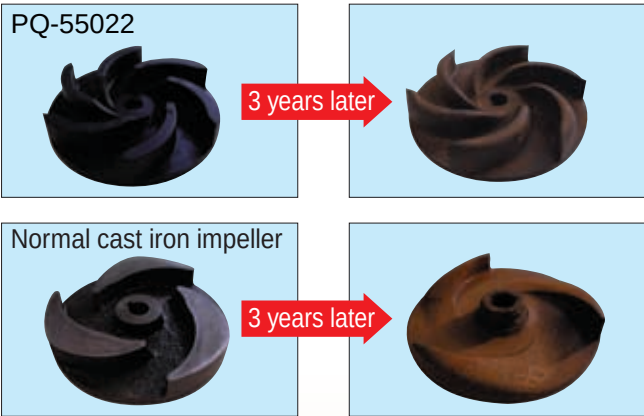
PXL

Specifications

	Model	PX-55011	PX-55022	PX-65011	PXL-52511	PXL-52522
PUMP	Connection Dia	50 mm (2")			25 mm (1")	
	Total Head	10 m (32.8 ft)				
	Delivery Volume	260 L/min (68 USG/min)			120 L/min (31 USG/min)	
MOTOR	Voltage	AC 110 V	AC 220 V	Single 110 V	AC 110 V	AC 220 V
	Frequency	50 Hz		60 Hz	50 Hz	
	Rated Current	6.5 A	3.2 A	6.5 A	6.0 A	2.9 A
	Output	400 W				
	Consumption	580 W	620 W	700 W	590 W	540 W
	Revolution	2900 rpm		3400 rpm	2900 rpm	
	Model	Condenser Induction Motor				
	Power Cord	10 m (32.8 ft)	5 m (16.4 ft)	6 m (19.7 ft)	10 m (32.8 ft)	
	Standard Accessories	1 Hose Band, 1 Rope (5 m (16.4 ft)), 1 Hose Nipple		1 Rope (5 m (16.4 ft))	1 Hose Band, 1 Hose Nipple, 1 Coupling, 1 Coupling Packing, 1 Rope (5 m (16.4 ft))	
Gross Weight	25 kg (55.1 lbs)			30 kg (66.1 lbs)		
Dimensions L×W×H (mm)	258 × 500 × 424			515 × 270 × 432		
Packing Unit	2					

Triple Life Span Impeller Compared with Former Product

•**Durable and long life time**
Impeller is manufactured from a blended rubber compound providing maximum wear resistance up to three times over cast iron. Maximal life-span and super hard mechanical seal.



■ Specifications

Model		PQ-55022
PUMP	Connection Dia	50 mm (2")
	Total Head	11 m (36.1 ft)
	Delivery Volume	220 L/min (58 USG/min)
	Voltage	AC 220 V
MOTOR	Frequency	50 Hz
	Rated Current	2.7 A
	Output	400 W
	Consumption	550 W
	Revolution	2800 rpm
	Type	Induction Motor
	Power Cord	5 m (16.4 ft)
Standard Accessories		1 Hose Band, 1 Rope (5 m (16.4 ft))
Gross Weight		12.5 kg (27.5 lbs)
Dimensions L×W×H (mm)		245 × 205 × 410
Packing Unit		1

New



PQ-55022

Light & Durable

- Double mechanical seals using silicon carbide ensure durability and shaft protection.
- Thermal protector cuts off circuit in case of overload during operation.



PS-55022



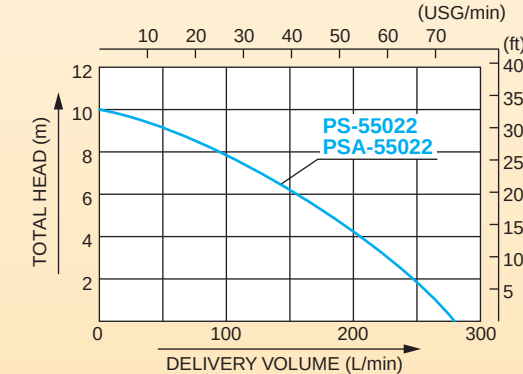
Automatic Float Switch

PSA-55022

■ Specifications

Model		PS-55022	PSA-55022
PUMP	Connection Dia	50 mm (2")	
	Total Head	10 m (32.8 ft)	
	Delivery Volume	280 L/min (74 USG/min)	
	Voltage	AC 220 V	
MOTOR	Frequency	50 Hz	
	Rated Current	3.6 A	
	Output	400 W	
	Consumption	600 W	
	Revolution	2600 rpm	
	Rating	Continuous	
	Type	Induction Motor	
Power Cord		6 m (19.7 ft)	
Standard Accessories		1 Hose Nipple 1 Hose Band 1 Rope (5 m (16.4 ft))	1 Hose Band 1 Rope (5 m (16.4 ft))
Gross Weight		58 kg (127.8 lbs)	65 kg (143.3 lbs)
Dimensions L×W×H (mm)		460 × 460 × 442	495 × 495 × 505
Packing Unit		4	

■ Performance Curve



*Starting current is three times higher than rated current.

Best for Sewage Application

- Cast iron (FC) casing ensures resistance to sewage. (PKS)
- The built-in thermal protector cuts off circuit in case of overload during operation.
- Only 3 butterfly bolts and strainer can be detached for maintenance. (PKS)

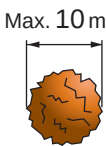


PSK-53222

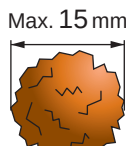


PKS-55022

Solids Sizes



PSK-53222

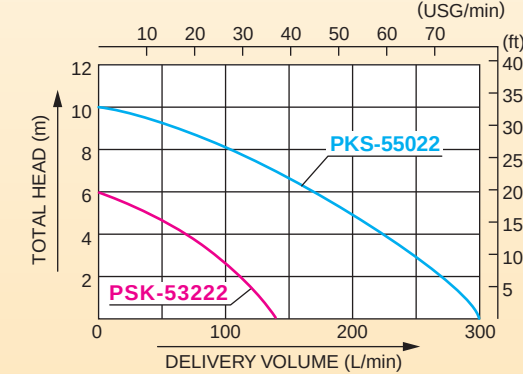


PKS-55022

Specifications

PUMP	Model	PSK-53222	PKS-55022
	Connection Dia	32 mm (1¼")	50 mm (2")
	Total Head	6 m (19.7 ft)	10 m (32.8 ft)
MOTOR	Delivery Volume	140 L/min (37 USG/min)	300 L/min (79 USG/min)
	Voltage	AC 220 V	
	Frequency	50 Hz	
MOTOR	Rated Current	1.4 A	4.0 A
	Output	150 W	400 W
	Consumption	305 W	704 W
MOTOR	Revolution	3200 rpm	2600 rpm
	Rating	Continuous	
	Type	Induction Motor	
MOTOR	Power Cord	4 m (13.1 ft)	6 m (19.7 ft)
	Standard Accessories	1 Coupling Set (φ32) 1 Hose Band (φ25) 1 Hose Band (φ32) 1 Hose Nipple (φ25)	1 Hose Band 1 Rope (5 m (16.4 ft)) 1 Hose Nipple
	Gross Weight	11 kg (25.5 lbs)	70 kg (154 lbs)
MOTOR	Dimensions L×W×H (mm)	374 × 193 × 422	509 × 509 × 532
	Packing Unit	2	4

Performance Curve



*Starting current is three times higher than rated current.

Long Life & Quiet for Home Use

- Thermal protector cuts off circuit in case of overload during operation.
- Effective motor cooling system.

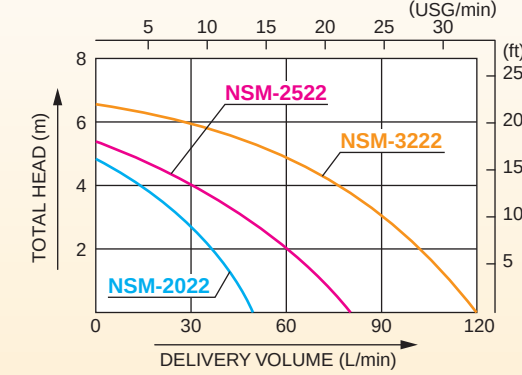


NSM-2022



NSM-2522

Performance Curve



Specifications

PUMP	Model	NSM-2022	NSM-2522	NSM-3222
	Connection Dia	20 mm (¾")	25 mm (1")	32 mm (1¼")
	Total Head	4.8 m (15.7 ft)	5.5 m (18.0 ft)	6.5 m (21.3 ft)
MOTOR	Delivery Volume	50 L/min (13 USG/min)	80 L/min (21 USG/min)	120 L/min (31 USG/min)
	Voltage	AC 220 V		
	Frequency	50 Hz		
MOTOR	Rated Current	0.7 A	1.0 A	1.2 A
	Output	48 W	100 W	150 W
	Consumption			
MOTOR	Revolution	2800 rpm (50 Hz)		
	Rating	Continuous		
	Motor Type	Condenser Induction Motor		
MOTOR	Power Cord	4 m (13.1 ft)		5 m (16.4 ft)
	Standard Accessories	1 Coupling Set (φ20) 1 Hose Nipple (φ15) 1 Hose Band (φ15) 1 Hose Band (φ20)	1 Coupling Set (φ25) 1 Hose Nipple (φ20) 1 Hose Band (φ20) 1 Hose Band (φ25)	1 Coupling Set (φ32) 1 Hose Nipple (φ25) 1 Hose Band (φ25) 1 Hose Band (φ32)
	Gross Weight	19 kg (41.8 lbs)	17 kg (37.4 lbs)	21 kg (46.3 lbs)
MOTOR	Dimensions L×W×X (mm)	435 × 298 × 340	325 × 325 × 365	355 × 355 × 363
	Packing Unit	6	4	

Great Durability
for Muddy Water & Sea Water

Strong Durability

- Sic (Silicon Carbide) Mechanical Seal
- Big Size Bearings
- Oil chamber size is 6 times bigger than our current model, NSM

Easy Maintenance

- Easy to replace Condenser and Mechanical Seal
- Strainer can be removed without any tool

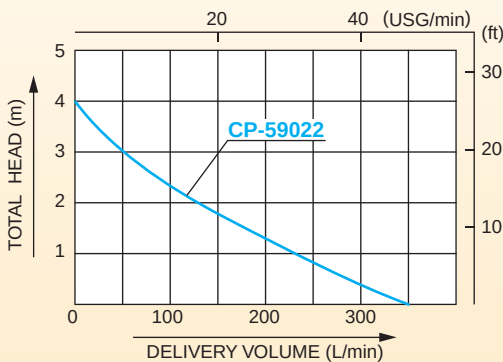


Submersible pump for circulation
Continuous Use, 1 Year!



CP-59022

Performance Curve



Specifications

Model		CP-59022
PUMP	Connection Dia	90 mm (3.5")
	Total Head	4 m (12.8 ft)
	Delivery Volume	350 L/min (21 m³/H)
	Voltage	AC 220 V
MOTOR	Frequency	50 Hz
	Rated Current	2.0 A
	Revolution	2500 rpm
	Type	Induction Motor
	Power Cord	5 m (16.0 ft)
	Standard Accessory	1 Delivery Flange
Gross Weight		5.6 kg (12.3 lbs)
Dimensions L×W×H (mm)		220 × 220 × 585
Packing Unit		1

"PONDY" & "MARINE PET"
Submersible Pump for Seawater

Applications

- Feeding or draining water in fish farms
- Washing purpose
- Draining bilge water

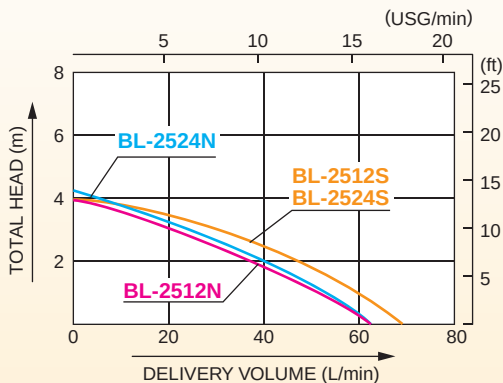
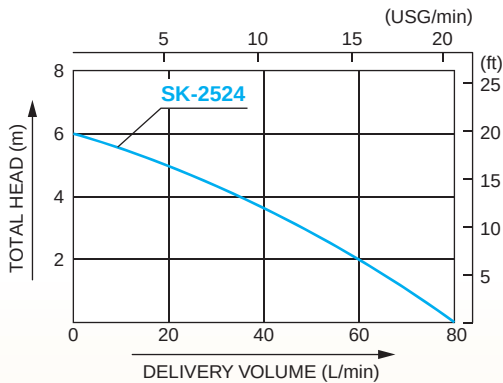


SK-2524



BL-2524N

Performance Curve



Specifications

Model		SK-2524	BL-2512S	BL-2524S	BL-2512N	BL-2524N
PUMP	Connection Dia	25 mm (1")				
	Total Head	6 m (19.6 ft)	4 m (13.1 ft)			4.2 m (13.8 ft)
	Delivery Volume	80 L/min (21 USG/min)	70 L/min (18 USG/min)	63 L/min (16 USG/min)		
	Voltage	DC 24 V	DC 12 V	DC 24 V	DC 12 V	DC 24 V
MOTOR	Frequency	—	—	—	—	—
	Rated Current	8.5 A	6.5 A	3.5 A	7.8 A	3.8 A
	Rating	Continuous				
	Output	123 W	45 W	50 W		
	Revolution	3200 rpm	5400 rpm	5800 rpm		
	Life Span	Approx. 500 hrs	Approx. 200 hrs	Approx. 500 hrs		
Power Cord		5 m (16.4 ft)	2 m (6.5 ft)	2.95 m (9.7 ft)		
Standard Accessories		1 Coupling Set (φ25) 1 Hose Nipple (φ20) 1 Hose Band (φ25) 1 Hose Band (φ20) 1 Rope (5 m (16.4 ft))	—			1 Elbow
Gross Weight		11 kg (24.2 lbs)	18.5 kg (40.7 lbs)	32 kg (70.5 lbs)		
Dimensions L×W×H (mm)		425 × 248 × 325	568 × 286 × 383	574 × 283 × 403		
Packing Unit		2	20			



FOR INDUSTRIAL APPLICATION

"GEAR PUMP" GL Series for Low Viscosity Oil

- Safety by-pass function protects pump.

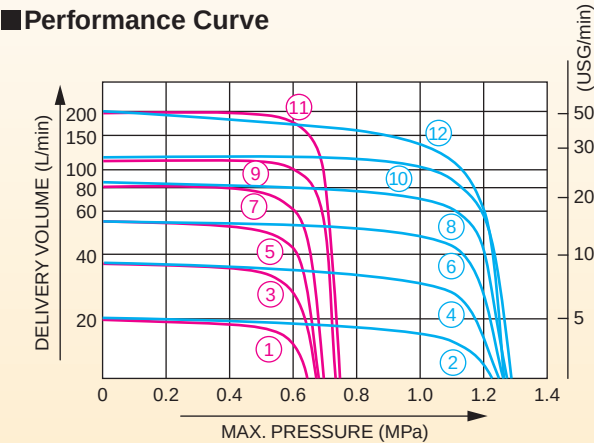
Applications

- Kerosene
- Machine oil
- Heavy oil
- Light oil



GL-25-5

Performance Curve



★ Must not be used for gasoline.

Specifications

Model		GL-13-5	GL-13-10	GL-20-5	GL-20-10	GL-25-5	GL-25-10	GL-32-5	GL-32-10	GL-40-5	GL-40-10	GL-50-5	GL-50-10	
Performance Curve No.		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	
Connection Dia		13 mm (½")		20 mm (¾")		25 mm (1")		32 mm (1¼")		40 mm (1½")		50 mm (2")		
Power		0.4 kW	0.75 kW	0.75 kW	1.5 kW	1.5 kW	2.2 kW	2.2 kW	3.7 kW	2.2 kW	5.5 kW	3.7 kW	7.5 kW	
Poles		4 P								6 P				
PUMP	Max. Pressure	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	0.5 MPa (5 kgf/cm²)	1 MPa (10 kgf/cm²)	
	Delivery Volume	60 Hz (1720 rpm)	20 L/min (5 USG/min)		35 L/min (9 USG/min)		55 L/min (14 USG/min)		85 L/min (22 USG/min)		123 L/min (32 USG/min)		200 L/min (52 USG/min)	
		50 Hz (1450 rpm)	17 L/min (4 USG/min)		29 L/min (7 USG/min)		46 L/min (12 USG/min)		71 L/min (18 USG/min)		100 L/min (26 USG/min)		165 L/min (43 USG/min)	
	Coupling		ZDC						JIS					
	Pump Shaft Dia		φ18 mm						φ22 mm					
Gross Weight		6 kg (13.2 lbs)	7 kg (15.4 lbs)	7 kg (15.4 lbs)		8 kg (17.6 lbs)		12 kg (26.4 lbs)		23 kg (50.7 lbs)		26 kg (57.3 lbs)		
Dimensions L×W×X (mm)		234 × 160 × 170		234 × 160 × 170		234 × 160 × 170		317 × 160 × 170		328 × 268 × 235		328 × 268 × 235		
Packing Unit		1												

"CHANGE MASTER" Oil Change Pumps

- Powerful pump transfers high viscosity oil. (Up to 800 cst)
- Highly recommended for motor oil change.
- Safety by-pass valve protects pump.

Applications

- Motor oil
- Machine oil
- Heavy oil
- Light oil



★ Must not be used for gasoline.

Specifications

Model	GM-2524H
Dia of Hose Inlet	25 mm (1")
Dia of Hose Outlet	20 mm (3/4")
Connection Thread	Inner Pipe Thread
Max. Delivery Pressure	0.2 MPa (2 kgf/cm²)
Delivery Volume	20 L/min (5 USG/min)
Applicable Viscosity	800 cst
Voltage	DC 24 V
Rated Current	16 A
Output	200 W
Revolution	6200 rpm
Rating	25 min
Power Cord	5 m (16 ft)
Gross Weight	10 kg (22.1 lbs)
Dimensions L×W×H (mm)	320 × 188 × 268
Packing Unit	1



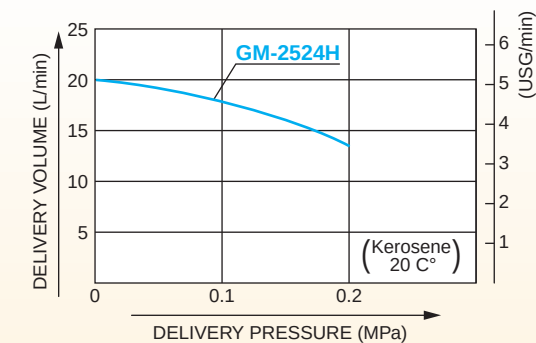
GM-2524H

E-type Hose Set for GM Pumps

- Suction Dia: 25 mm (1") × 2 m (6.5 ft)
- Delivery Dia: 20 mm (3/4") × 2 m (6.5 ft)
- 1 Nozzle, 1 Strainer, 2 Joints



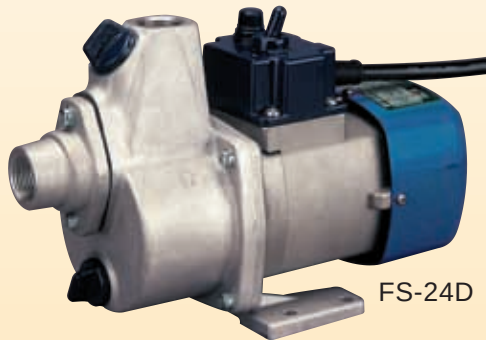
Performance Curve



"FS PUMP" Self-priming Pump for Low Viscosity Oil



★ Must not be used for gasoline.



FS-24D

Specifications

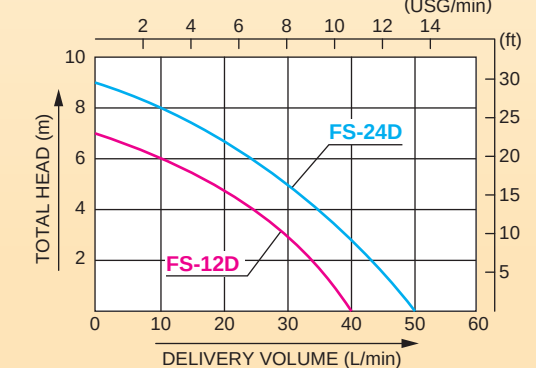
Model	FS-12D	FS-24D
Connection Dia	20 mm (3/4")	
Total Head	7 m (23 ft)	9 m (30 ft)
Delivery Volume	40 L/min (10 USG/min)	50 L/min (13 USG/min)
Voltage	DC 12 V	DC 24 V
Rated Current	15 A	8 A
Output	80 W	90 W
Revolution	7300 rpm	
Gross Weight	20 kg (44.1 lbs)	
Dimensions L×W×H (mm)	790 × 315 × 240	
Packing Unit	5	

T-type Hose Set for FS Pumps

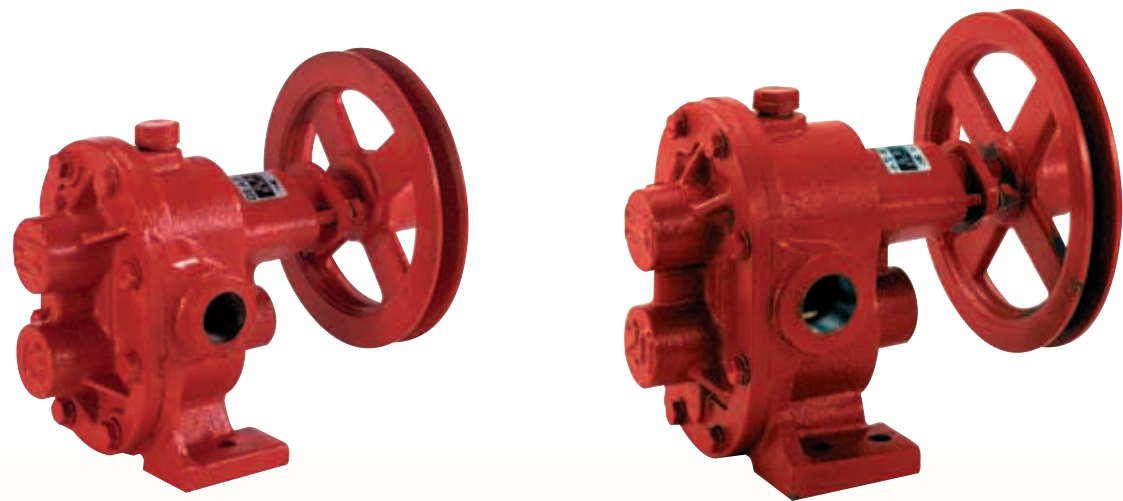
- Suction Dia: 20 mm (3/4") × 2 m (6.5 ft)
- Delivery Dia: 20 mm (3/4") × 2 m (6.5 ft)
- 1 Nozzle, 1 Strainer, 2 Joints



Performance Curve



"GEAR PUMPS"
Suitable for Water, Oil &
Various Liquids Applications



GB-13
GC-13

GB-25
GC-25

Applications (GB)

- Water
- Sea water
- Weak acids
- Various chemicals
- Coal tar

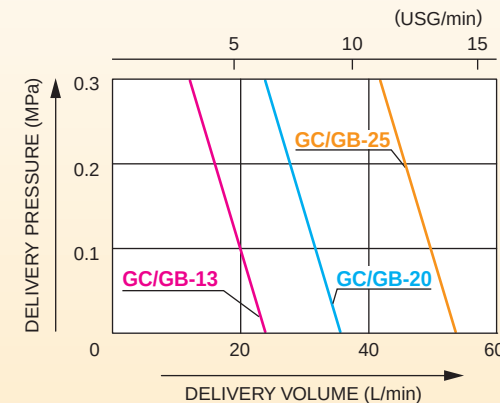


Applications (GC)

- Kerosene
- Light oil
- Machine oil
- Heavy oil



Performance Curve



Specifications

Model		GC-13	GB-13	GC-20	GB-20	GC-25	GB-25
Gear Material		GC: Cast Iron / GB: Brass					
Connection Dia		13 mm (½")		20 mm (¾")		25 mm (1")	
Delivery Volume	Revolution: 200 rpm	10 L/min (2 USG/min)		18 L/min (4 USG/min)		27 L/min (7 USG/min)	
	Revolution: 400 rpm	21 L/min (5 USG/min)		37 L/min (9 USG/min)		55 L/min (14 USG/min)	
	Revolution: 600 rpm	32 L/min (8 USG/min)		56 L/min (14 USG/min)		83 L/min (22 USG/min)	
Delivery Pressure		0.1 – 0.3 MPa (1 – 3 kg/cm²)					
Syphoning Factor		3 m (10 ft)					
Power		200 W		400 W		750 W	
Pulley		125 × A1		150 × A1		200 × A1	
Gross Weight		17.5 kg (38.6 lbs)		25 kg (55.1 lbs)		22.5 kg (49.6 lbs)	
Dimensions L×W×H (mm)		316 × 283 × 211		492 × 262 × 194		397 × 277 × 265	
Packing Unit		4				2	

Powerful "FILL PUMP"
Only 2 Minutes to Empty
200 L Drum (FR-200)

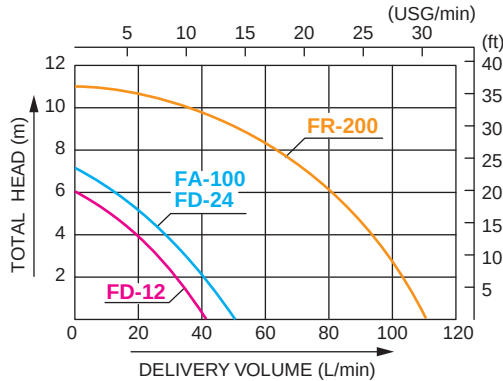
- Two stage system of axial flow vane and spiral vane result in an excellent flow rate.

Applications

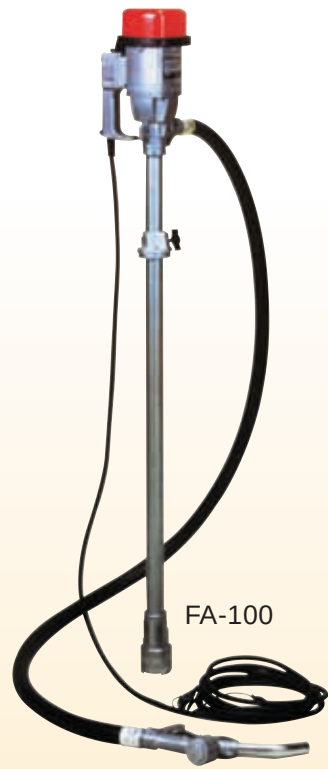
- High to low viscosity oil
- Machine oil
- Heavy fuel oil B
- Kerosene
- Diesel



Performance Curve



FD-12



FA-100



FR-200

* These pumps are not designed for use with liquids with low flash-point, such as gasoline, etc.

Specifications

Model		FD-12	FD-24	FA-100		FR-200	
PUMP	Connection Dia	20 mm (¾")				32 mm (1¼")	
	Connection Thread	Inner Pipe Thread					
	Total Head	6 m (19 ft)	7 m (23 ft)			11 m (36 ft)	
	Delivery Volume	40 L/min (10 USG/min) (Kerosene, Light Oil)	50 L/min (13 USG/min) (Kerosene, Light Oil)			110 L/min (29 USG/min) (Kerosene, Diesel)	
MOTOR	Type	Enclosed Fan-Cooled Commutator				Fan-Cooled Commutator	
	Voltage	DC 12 V	DC 24 V	AC 110 V / 130 V	AC 220 V – 240 V	AC 110 V	AC 220 V – 240 V
	Rated Current	14 A	7 A	2 A	1 A	5 A	2.5 A
	Output	80 W	90 W	100 W		200 W	
	Revolution	7000 rpm	7300 rpm	7500 rpm		6200 rpm	
	Rating	Continuous					
	Power cord	Oil-Proof Cord 5 m (16.4 ft)					
	Delivery Hose	1 Oil-Proof Rubber Hose (20 mm (¾") × 2 m)					
Gross Weight		20 kg (44.1 lbs)				30 kg (66.1 lbs)	
Dimensions L×W×H (mm)		1228 × 291 × 172				1290 × 490 × 205	
Packing Unit		2					

Suitable for Transferring
Kerosene & Diesel

- 10 minutes to empty 200 L drum.
- Easy to use gun nozzle.
- Suction pipe with mesh strainer.

■ Applications

- Kerosene
- Diesel



■ Specifications

Model	FP-25		FP-2512
Connection Dia	25 mm (1")		
Total Head	3.5 m (11 ft)		2.8 m (9 ft)
Delivery Volume	20 L/min (5.3 USG/min)		18 L/min (4.7 USG/min)
Voltage	AC 100 V	AC 220 V	DC 12 V
Frequency	50 Hz / 60 Hz		—
Power Code	4 m (13 ft)		
Delivery Hose	1.5 m (4.9 ft)		
Gross Weight	3.8 kg (8.3 lbs)		3.1 kg (6.8 lbs)
Dimensions L×W×H (mm)	1190 × 235 × 130		
Packing Unit	1		



FP-25

"HAND ROTARY PUMP"
Compact in Design & Light Weight

- Applicable for oil from high to low viscosity.

■ Applications

- Machine oil
- Heavy fuel oil A
- Kerosene
- Diesel



★Oil temperature is over 10°C

■ Specifications

Model	SB-20	SB-25
Delivery Volume	20 L (5 USG) / 105 Rotations	20 L (5 USG) / 72 Rotations
Impeller Material	PPS	
Delivery Hose (mm)	20 × 1100 (¾" × 43")	25 × 1280 (1" × 50")
Gross Weight	24 kg (52.9 lbs)	25 kg (55.1 lbs)
Dimensions L×W×H (mm)	1065 × 245 × 145	1085 × 202 × 225
Packing Unit	6	4



SB-25

For High
Viscosity Oil
(Up to 2000 cst)

- Specially designed for dispensing oil at service stations.

■ Applications

- High viscosity oil



SO-25

"HIGH LITER PUMP"
High Volume

- Delivers 1 L per rotation.
- Mesh strainer can filter fine dust.
- Applicable for low viscosity oil.

■ Applications

- Diesel
- Kerosene,
- Spindle oil
- Heavy fuel oil A

★Oil temperature is over 10°C



LP-32

■ Specifications

Model	LP-32
Delivery Volume	1 L / 1 Rotation, (Normal Use) 100 L/min (26 USG/min)
Suction Pipe	32 × 956 (1¼" × 37")
Delivery Hose (mm)	32 × 1280 (1¼" × 50")
Strainer	#60 with Mesh, Polyethylene
Gross Weight	38 kg (83.7 lbs)
Dimensions L×W×H (mm)	1137 × 252 × 295
Packing Unit	5

"BIG AUTO PUMP"
Light weight &
Economical to Use

- Made from strong plastics.

■ Applications
(PP-25)

- Dispensing small volumes of liquid
- Heavy fuel oil B
- Kerosene
- Diesel
- Water
- Wine



(PP-25C)

- Solvent



PP-25

PP-25C

■ Specifications

Model	PP-25	PP-25C
Delivery Volume	20 L/min (5 USG/min)	
Material	Polyethylene	
Pump Length	1190 mm (47")	
Suction Pipe (mm)	(Inside Dia) 22 × 875 (0.86" × 34")	
Delivery Hose (mm)	(Inside Dia) 20 × 1180 (¾" × 46")	
Gross Weight	11 kg (24.2 lbs)	
Dimensions L×W×H (mm)	1237 × 460 × 270	
Packing Unit	20	

■ PP-25C Chemical Compatibility
Rating Information

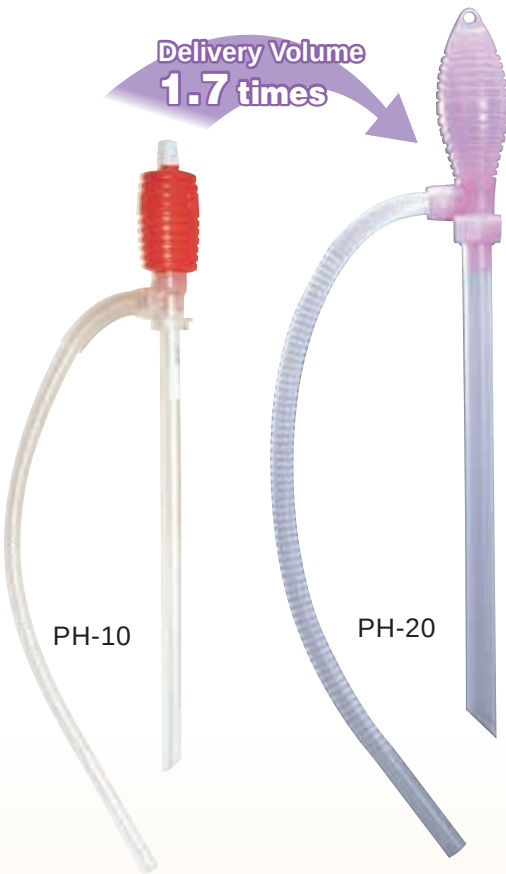
Rating Scale		
O	No Effect	
Δ	Moderate Effect	
X	Not Recommended	
N	Information Not Available	
Chemical (100% concentration unless noted)	Rating	
A Acetone		X
Ammonium Hydroxide		N
C Chlorine		O
D Deionized Water		Δ
Diesel Fuel		O
E Ethanol		O
G Gasoline		Δ
Glycol		N
H Hydrochloric Acid (20%)		O
Hydrochloric Acid (37%)		O
Hydrochloric Acid (100%)		O
I Isopropyl Alcohol		N
K Kerosene		O
L Lacquer Thinner		X
M Methanol		O
Methyl Chloride		X
Methyl Ethyl Ketone		X
Mineral Spirits		N
Motor Oil		O
N Nitric Acid (20%)		Δ
Nitric Acid (50%)		Δ
Nitric Acid (Concentrated)		Δ
O Oil, Hydraulic		O
P Paint		X
Phosphoric Acid (< 40%)		O
Phosphoric Acid (≥ 40%)		O
S Salt Water		O
Seawater		O
Sodium Hypochlorite		N
Sodium Hydroxide (20%)		N
Sodium Hydroxide (50%)		N
Sodium Hydroxide (80%)		N
Sulfuric Acid (<10%)		O
Sulfuric Acid (10–75%)		O
Sulfuric Acid (75–100%)		O
W Water		O
X Xylene		Δ

"PACO-PET"
Plastic Syphon Pumps

- Applications
- Kerosene
 - Gasoline
 - Diesel oil
 - Solvent
 - Water (Non-potable)

■ Specifications

Model	PH-10	PH-20
Delivery Volume	6.7 L/min (1 USG/min)	11.5 L/min (3 USG/min)
Pump Length	690 mm (27")	840 mm (33")
Gross Weight	11.5 kg (25.3 lbs)	10.5 kg (23.1 lbs)
Dimensions L×W×H (mm)	690 × 340 × 618	810 × 355 × 510
Packing Unit	120	60



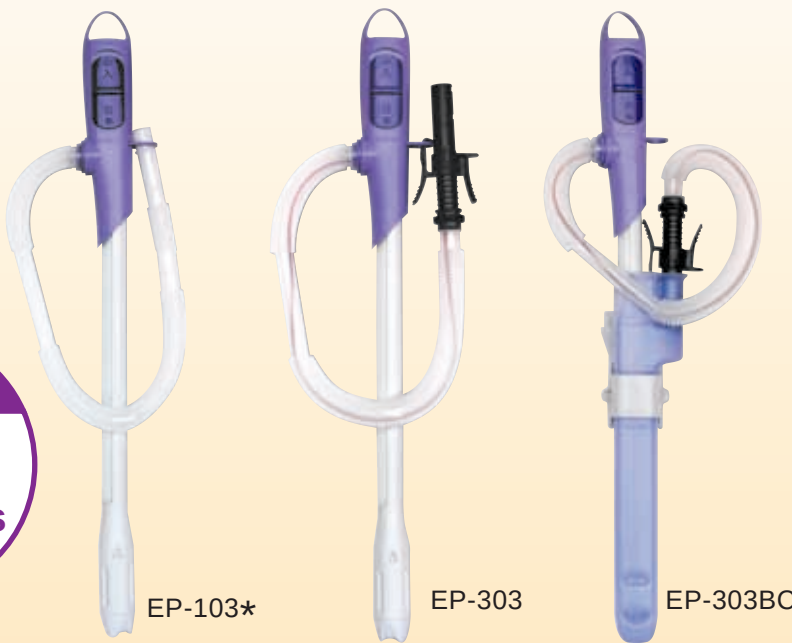
"MAMA AUTO"
Plastic Pumps Operated by Dry Cell Battery

- Applications
- Kerosene

No Overflow Trouble
(EP-303, EP-303BC)

Type AA
2 Batteries
(Not Included)

Big Switch for Easy ON/OFF Control



■ Specifications

Model	EP-103	EP-303	EP-303BC
Applications	Kerosene		
Delivery Volume	10 L/min (2 USG/min)		
Pump Length	547 mm (21")		
Case Length	—	—	435 mm (17")
Power	2 × 1.5 V AA Batteries (Not Included)		
Gross Weight	2.2 kg (4.8 lbs)	7 kg (15.4 lbs)	6 kg (13.2 lbs)
Dimensions L×W×H (mm)	310 × 305 × 600	290 × 300 × 630	—
Packing Unit	20	—	12

★EP-103 does not have auto stop function.

GARDEN SPRAYERS

"Double Piston Method"

- "One hand operation lever"
Easy operation designed for spraying continuously or intermittently.
- 2-stage extendable nozzle
630 – 1135 mm.
- Safety valve with simple pressure gauge.
- Big funnel for easy pouring.

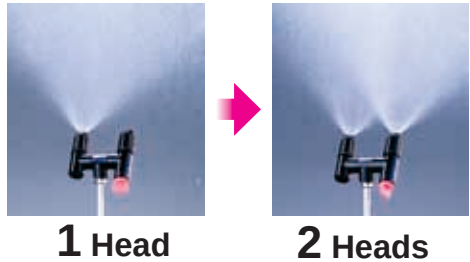


Double Piston Method



Powerful! **Light!**

Switchable Nozzle



■ Specifications

Model	HS-503W	HS-703W	HS-401C
Tank Capacity	5 L	7 L	4 L
Hose Length	5 m (16 ft)		2 m (6.5 ft)
Nozzle Type	2-Stage Extendable 2-Head		1-Head Nozzle
Total Extendable Length	63 – 113.5 cm (24" – 44")		38 cm (15")
Operating Pressure Around Safety Valve	0.4 MPa (4 kgf/cm ²)		0.3 MPa (3 kgf/cm ²)
Spraying Time	1-Head	21 min	31 min
	2-Head	10 min	15 min
Spray Area	56 – 72.7 m ²	79 – 99 m ²	46 – 59 m ²
Gross Weight	14 kg (30.8 lbs)	15 kg (33.1 lbs)	11.5 kg (25.3 lbs)
Dimensions L×W×H (mm)	420 × 420 × 665		600 × 413 × 437
Packing Unit	4		6

"Garden Master" Powered by Dry Cell Battery

- Big tank opening for easy cleaning and refilling.
- Internally sloped bottom design ensures all liquids are used up.



Specifications

Model	GT-2	GT-3	GT-5	GT-3H	GT-5H
Tank Capacity	2 L	3 L	5 L	3 L	5 L
Hose Length	1 m (3.3 ft)	1.5 m (5 ft)		1.7 m (5.6 ft)	
Nozzle Type	1-Stage, 1-Head	3-Stage Extendable, 1-Head		3-Stage Extendable, 1-Head	1-Stage 1-Head, + Extensional
Total Extendable Length	42 cm (16")	43 – 100 cm (16" – 39")		37 – 96 cm (14" – 38")	59 – 96 cm (23" – 38")
Battery	DC 1.5 V × 4 pcs			DC 1.5 V × 6 pcs	
Rating Voltage	4.8 V			7.2 V	
Battery Life	Approx. 20 L (5.3 USG) (Alkaline Battery)	Approx. 70 L (18 USG) (Alkaline Battery) Approx. 30 L (8 USG) (Manganese Battery)		1 Head: Approx. 80 L (21 USG) (Alkaline Battery) 2 Head: Approx. 80 L (21 USG) (Alkaline Battery)	
Spray Volume	Approx. 240 ml/min (Shower Spray) Approx. 400 ml/min (Sharp Spray)	Approx. 240 ml/min (Shower Spray) Approx. 400 ml/min (Sharp Spray)		1 Head: 450 ml/min (Shower Spray), 570 ml/min (Sharp Spray) 2 Head: 680 ml/min (Shower Spray), 740 ml/min (Sharp Spray)	
Shower Spraying Time	9 min	13 min	21 min	1 Head: 8 min, 2 Head: 5 min	1 Head: 13 min, 2 Head: 8 min
Spray Angle	60 °				
Jet Distance	4 m (13 ft)			1 Head: 6.5 m, 2 Head: 4.5 m	
Standard Accessories	Measurement Cup	1 Spout			
Gross Weight	3.8 kg (8.4 lbs)	8 kg (17.6 lbs)	4.5 kg (9.9 lbs)	5.1 kg (11.2 lbs)	4.4 kg (9.7 lbs)
Dimensions L×W×H (mm)	330 × 330 × 375	390 × 540 × 385	280 × 390 × 385	405 × 385 × 355	405 × 385 × 310
Packing Unit	4		2		

"GROUND MASTER" Backpack Manual Sprayer

Specifications

Model	RV-10DX	RV-15DX
Tank Capacity	10 L	15 L
Pump	Diaphragm Pump	
Max. Pressure	0.5 MPa (5 kgf/cm ²)	
Nozzle Length	60 cm (23")	
Spray Volume [Common Pressure] [0.3 MPa (3 kgf/cm ²)]	Bubble Type Herbicide Nozzle : 600 mL/min 2-Head Nozzle (Shower Spray) : 900 mL/min (Sharp Spray) : 1300 mL/min	
Spray Pressure	0.5 MPa (5 kgf/cm ²)	
Connection	G ³ / ₄ (PF ³ / ₄)	
Standard Accessories	1 Bubble Type Herbicide Nozzle with Cover, 1 2-Head Nozzle, 1 Measuring Cup, 1 Nozzle Grip, 1 Nozzle Pipe	
Net Weight	6.0 kg (13 lbs)	6.6 kg (14.5 lbs)
Dimensions L×W×H (mm)	475 × 235 × 675	475 × 285 × 675
Packing Unit	2	



Compact, Light Weight, Long-Lasting

- Enable to Recharge at any time
Lithium-ion battery does not cause a memory effect, Rechargeable any time without lowering battery life expectancy.

New



Lithium-ion battery

Standard Accessories



Bubble Type Herbicide Nozzle with Cover



2-Head Nozzle



Bubble Type Herbicide Nozzle



Measuring Cup



LS-10



LS-15

Specifications

Model	LS-10	LS-15
Tank Capacity	10 L	15 L
Pump	Ceramic Gear Pump	
Motor	DC 12 V	
Max. Pressure	0.3 MPa (3 kgf/cm ²)	
Spray Volume	2-Head Nozzle	0.7 L/min (0.18 USG/min) [Spray Pressure: 0.27 MPa (2.7 kgf/cm ²)]
	Bubble Type Herbicides Nozzle	0.5 L/min (0.13 USG/min) [Spray Pressure: 0.28 MPa (2.8 kgf/cm ²)]
	Granular Type Herbicides Nozzle	0.8 L/min (0.21 USG/min) [Spray Pressure: 0.27 MPa (2.7 kgf/cm ²)]
Operating Time	Approx. 1.5 hrs	
Current	Approx. 1.8 A	
Battery	Lithium-ion Battery, 14.4 V, 2.2 Ah	
Battery Charger	Hi-Charging AC 100 V – 240 V, 50 / 60 Hz	
Standard Rechargeable Hours	Approx. 2.5 hrs	Approx. 5 hrs
Connection	G ³ / ₄ (PF ³ / ₄)	
Fuse	5 A	
Standard Accessories	1 Battery Charger, 1 Bubble Type Herbicide Nozzle with Cover, 1 Bubble Type Herbicide Nozzle, 1 2-Head Nozzle, 1 Measuring Cup, 1 Syringe	
Gross Weight	5.8 kg (12.8 lbs)	6.4 kg (14.1 lbs)
Dimensions L×W×H (mm)	400 × 257 × 590	400 × 257 × 655
Packing Unit	1	



Double Function for Disinfection and Herbicide

- High pressure piston pump performs
Max. pressure 3.0 MPa (30 kgf/cm²)



Two kinds of nozzles are included.



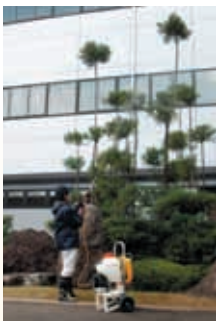
Bubble Type Herbicide Nozzle with Cover



2-Head Nozzle



New



ES-10DX



ES-15DX

■ Specification

Model		ES-10DX	ES-15DX
PUMP	Tank Capacity	10 L	15 L
	Type	Single Differential Piston Pump	
	Max. Pressure	3.0 MPa (30 kgf/cm ²)	
	Max. Suction Volume	5.2 L/min (1.37 USG/min)	
	Type	Forced Air-cooled 2-stroke Gasoline Engine	
ENGINE	Model	Koshin K25	
	Total Exhaust Volume	25.4 cc	
	Continuous Operation Time	Approx. 50 min	
	Delivery Hose	φ 6 mm × 1.3 m (4.2 ft)	
	Adjustment Of Pressure	6 Levels Changeable	
	Nozzle	Vertical 2 head Nozzle	
		Bubble Type Herbicide Nozzle	
		Herbicide Nozzle with Cover	
	Accessories	1 Measurement Cup, 1 Ball Cock, 1 Grip, 1 Nozzle Pipe (60 cm), 1 Connector, 1 2-Head Nozzle, 1 Bubble Type Herbicide Nozzle with Cover	
	Gross Weight	10.5 kg (23.1 lbs)	
	Dimensions L×W×H (mm)	400 × 440 × 575	390 × 430 × 560
	Packing Unit	1	

Fine Mist Sprayer with Tank

- Convenient hose reel attached.



KV-ER50
KV-ER100

φ 6×100m Hose

5 Level Spraying Pressure

φ 8.5×20m Hose
25L Tank

φ 6×50m Hose

50L Tank

MS-ER50
+ TK-50N

TK-50N

Convenient
Caster for
Mobility



MS-E2R25TH85

Easy & Tidy Hose Coiling



■ Specifications

Model (Hose Dia)		MS-E2R25TH85 (ϕ8.5 mm)	MS-ER50 (ϕ6 mm)	MS-ER100 (ϕ6 mm)	TK-50N
PUMP	Type	Double Piston Pump			Length:1048 mm (41") Width: 575 mm (22") Height: 846 mm (33") Tank: 50 L (30 USG)
	Max. Suction Head	8.6 L/min (2 USG/min)			
	Delivery Volume	1.2 – 5.4 L/min	1.0 – 2.9 L/min	1.0 – 2.4 L/min	
	Max. Pressure	3.0 MPa (30 kgf/cm ²)			
	Nozzle Head	Spray / Straight Shower Nozzle Adjustable Granular Type 2-Head Nozzle, Bubble Type 2-Head Nozzle Vertical	Granular Type 2-Head Nozzle Bubble Type 2-Head Nozzle Vertical		
	Delivery Hose	ϕ8.5 × 20 m (66 ft)	ϕ6 × 50 m (164 ft) (With Reel)	ϕ6 × 100 m (328 ft) (With Reel)	
ENGINE	Type	Forced Air-cooled 2-stroke Gasoline Engine	Forced Air-cooled 4-stroke Gasoline Engine		
	Model	EC025	EH025		
	Exhaust Volume	24.5 cc			
	Rated Output	0.55 kW (0.7 PS) / 6000 rpm	0.55 kW (0.7 PS) / 7000 rpm		
	Max. Output	0.88 kW (1.2 PS) / 7000 rpm	0.81 kW (1.1 PS) / 7000 rpm		
	Fuel	2 Stroke Mixed Gas and Oil (25:1)	Automotive Unleaded Gasoline		
	Fuel Tank Capacity	0.6 L (0.16 USG)	0.5 L (0.45 USG)		
	Continuous Operating Time	Approx. 40 min			
	Starting Method	Recoil Starter			
Gross Weight		25.5 kg (56.2 lbs)	25 kg (55.1 lbs)	28.5 kg (62.8 lbs)	23.5 kg (50.7 lbs)
Dimensions L×W×H (mm)		705 × 490 × 645	710 × 470 × 450		875 × 590 × 595
Packing Unit		1			



FOR FISHERY INDUSTRY

Light weight & Compact
Most Suitable for Fishing Boats

Applications

- Winding anchor for boats
- Drawing fishing net
- Towing line
- Winding up basket

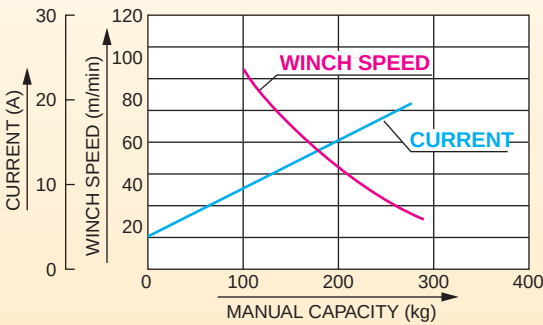


REL-2512



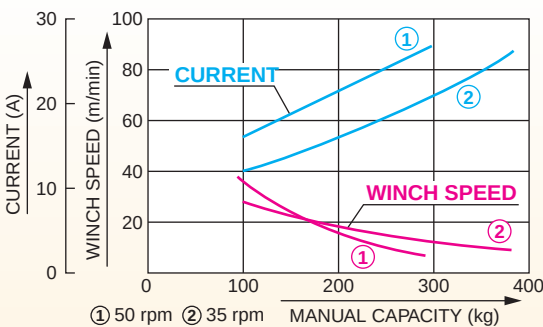
RES-2512

REL-2524 (250 W, 24 V Type)

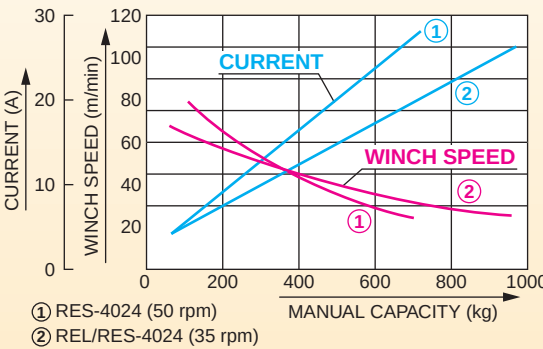


Performance Curve

RES-2512, REL-2512 (250 W, 12 V Type)



RES-4024, REL/RES-4024 (400 W, 24 V Type)



Specifications

Model		RES-2512	REL-2512	REL-2524	RES-4024	REL-4024	RES-4024L	REL-4024L
Voltage		DC 12 V		DC 24 V				
Rated Current		30 A		30 A	25 A			
Motor Output		250 W			400 W			
Rating		1 h / 30 A		1 h / 30 A	1 h / 25 A			
Roller Revolution		50 rpm (Low), 100 rpm (High)		50 rpm (Low), 100 rpm (High)	50 rpm (Low), 100 rpm (High)		35 rpm (Low), 70 rpm (High)	
Manual	Max.	280 kg (Low), 140 kg (High), (90 A)		280 kg (Low), 140 kg (High)	700 kg (Low), 350 kg (High)		900 kg (Low), 450 kg (High)	
Capacity	Rating	90 kg (Low), 45 kg (High), (30 A)		140 kg (15 A)	140 kg (Low), 70 kg (High), (25 A)		200 kg (Low), 100 kg (High), (25 A)	
Winch Speed (With 100 kg Load)		6 m/min (19 ft/min) (Low) 13 m/min (42 ft/min) (High)		23 m/min (75 ft/min)	20 m/min (65 ft/min) (Low) 33 m/min (108 ft/min) (High)		13 m/min (49 ft /min) (Low) 23 m/min (82 ft/min) (High)	
Standard Accessories		1 Cable Gland for Ship, 1 Waterproofing Plate, 1 Vertical Type Main Body Packing, 5 Crimping Terminals, 1 Connection Terminal						
Gross Weight		20 kg (44 lbs)	15 kg (33 lbs)	14.5 kg (32 lbs)	24 kg (53 lbs)	20.5 kg (45 lbs)	24 kg (53 lbs)	20.5 kg (45 lbs)
Dimensions L×W×H (mm)		570×250×285	478×245×285	478×245×285	560×240×270	478×245×285	560×240×270	478×245×285
Packing Unit		1						

High Speed & High Load Rolling Up
Max. Winch Up Power 900 kg

- Use magnet motor. Simple wiring and easy to switch direction between clockwise to counterclockwise.
- Approx. 25 % more power from usual 400 W type by high speed and high load rolling up.
- 2 stage switchable winch capacity (REL, RES).
Switch to 900 kg / 50 rpm and 450 kg / 100 rpm by gearshift.
- Motor case, Roller, etc are made of aluminum alloy.
Light, compact, sea water proof and no rust damage to FRP boat.
- Polyurethane coat protects corrosion perfectly.



REN-7524

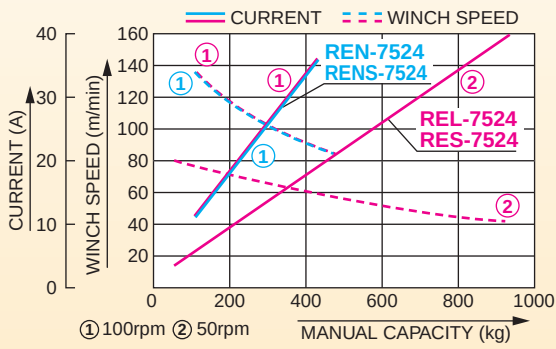


RES-7524



RENS-7524

Performance Curve



REL-7524

Specifications

Model		REN-7524	RENS-7524	REL-7524	RES-7524
Voltage		DC 24 V			
Rated Current		43 A			
Motor Output		750 W			
Rating		1 h / 43 A			
Roller Revolution		100 rpm	50 rpm (Low), 100 rpm (High)		
Manual	Max.	450 kg (150 A)	900 kg (Low), 450 kg (High), (150 A)		
Capacity	Rating	110 kg (43 A)	220 kg (Low), 110 kg (High), (43 A)		
Winch Speed		33 m/min (108 ft/min)	17 m/min (55 ft/min) (Low), 33 m/min (108 ft/min) (High)		
Standard Accessories (RES, REN Type Only)		1 Cable Gland For Ship, 1 Waterproofing Plate, 1 Vertical Type Main Body Packing, 2 Crimping Terminals			
Gross Weight		25 kg (55 lbs)	35 kg (77 lbs)	24 kg (53 lbs)	29 kg (64 lbs)
Dimensions L×W×H (mm)		510 × 280 × 290	585 × 315 × 330	520 × 280 × 270	570 × 275 × 285
Packing Unit		1			

Effective Electromagnetic Brake Model

- Motor case is made of corrosion resistance aluminum alloy to withstand seawater.
- Possible to stop instantly.

Applications

- Winding anchor for boats
- Drawing fishing net
- Towing line
- Winding up basket



REL-5524LB



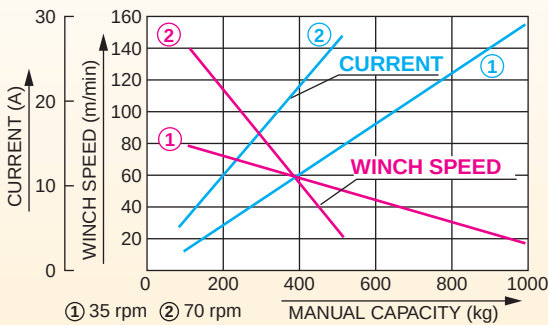
RES-5524LB

Specifications

Model		RES-5524LB	REL-5524LB
Voltage		DC 24 V	
Rated Current		31 A	
Motor Output		550 W	
Rating		1 h / 31 A	
Roller Revolution		35 rpm (Low), 70 rpm (High)	
Manual Capacity	Max.	1000 kg (Low), 500 kg (High)	
	Rating	280 kg (Low), 140 kg (High)	
Winch Speed (With 100 kg Load)		13 m/min (42.6 ft/min) (Low)	
		23 m/min (75.5 ft/min) (High)	
Electromagnetic Brake	Static Friction Torque	4 N·m (0.4 kgf·m)	
	Rated Voltage	DC 24 V	
	Rated Capacity	15 W	
Standard Accessories		1 Waterproofing Plate, 1 Vertical Type Main Body Packing, 5 Machine Screws M5×20	
Gross Weight		30 kg (66 lbs)	
Dimensions L×W×H (mm)		593 × 330 × 355	
Packing Unit		1	

Performance Curve

• RES-5524LB, REL-5524LB (550 W, 24 V Type)



ECARL BOX
Just Changing Box Makes
Your ECARL New



RES-330A
Suitable model:
• All REL model



RES-330B
with 3-button switch
Suitable model:
• All REL model



REF-300
Suitable model:
• REL-2512
• REL-2524
• REL-4024
• REL-4024L



REF-330
Suitable model:
• All REL model



3-button switch
Suitable model:
• RES-330B
• Attached to REF-330



Example:
REL+REF

"NEW BILGE KING" Necessities for Boat

- Auto-stop feature prevents dry running, increases pump performance and life.
- Easy to use starter switch. Integrated fuse and switch assembly for ease of maintenance. Separate switch can be attached anywhere you want.
- Strainer and switch are made of a special sea water and oil resistance resin for longer durability.
- Two stage system of axial flow vane and spiral vane
- Easy to clean strainer.

Applications

- Draining of water and oil/water mix from bilge



BK-12



Standard Accessories

Type S Pump for without Accessories
For Replacement "BILGE PUMP"



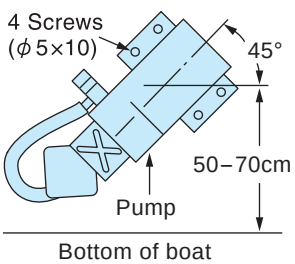
BK-12S

How to Attach Pump

Attach pump at 45 degree angle to set suction mouth and delivery mouth face upper side with 4 screws (φ5×10). (See the picture below)

In a dry place, attach pump to the side of boat about 50 to 70 cm away from the bottom of the boat.

Choose the location to set the pump by considering the length of battery and starting switch cable (3 m).



Specifications

Model	BK-12	BK-12S	BK-24	BK-24S
Suction / Delivery Dia	15 mm (½")			
Max. Delivery Volume	20 L/min (5 USG/min)			
Voltage	DC 12 V		DC 24 V	
Rated Current	10 A		5 A	
Suction Head	1 m (3 ft)			
Suction Time	2 – 5 sec (20 °C)			
Rating	80 W		90 W	
Standard Accessories (★Type S : Not Included)	1 Code with Starting Switch,	1 Strainer,	1 Delivery Nozzle,	1 Delivery Nozzle Nat,
	4 Tapping Screws (5×10),	4 Tapping Screws (4×20),	4 Tapping Screws (4×10),	1 Hose (3 m),
	4 Tapping Screws (4×16),	1 Water Proofing Connector (Only S Type)		
	1 Fuse (15 A)		1 Fuse (8 A)	
Gross Weight	18.5 kg (41 lbs)	11 kg (24 lbs)	18.5 kg (41 lbs)	11 kg (24 lbs)
Dimensions L×W×H (mm)	495 × 333 × 351	340 × 306 × 265	495 × 333 × 351	340 × 306 × 265
Packing Unit	4			

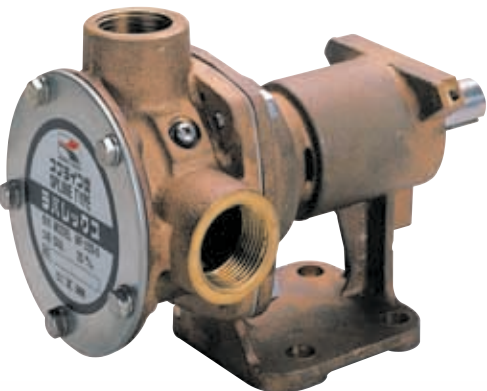
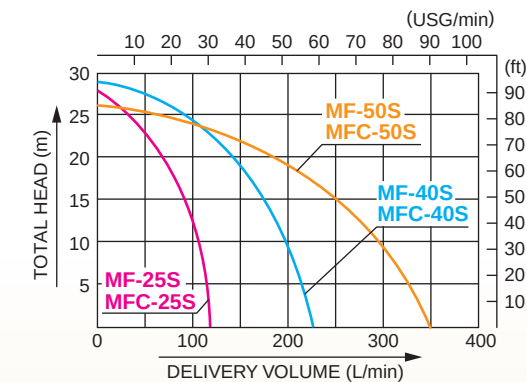
★BK-12S, BK24S is pump for replacement.

"REVOLVEX PUMPS" Flexible Rubber Impeller for Seawater

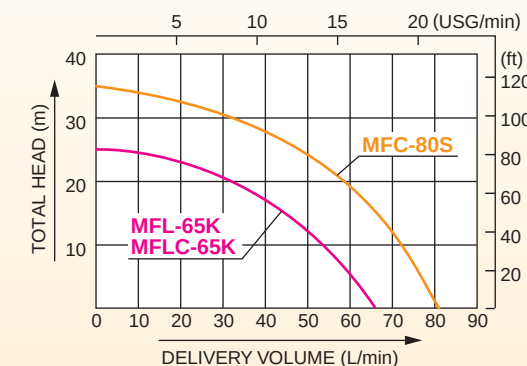


- Complete structure is manufactured from gunmetal, no rusting.
- START/STOP is easily controlled by pressing one switch. (MFC type)
- MFC type is fitted with electromagnetic clutch.
- Easy to replace rubber impeller.
- Self-priming.

■ Performance Curve



MF-25S



MFC-40S

For Seaweed Model Pumping Up Seaweed at Once, And Transferring it without Damage



- Adopted special impeller to avoid damage by seaweed.
- Special sleeve to transfer seaweed smoothly.

■ Applications

- Transfer seaweed from small boat to mother ship
- Built in for the machinery for seaweed
- Discharge of bilge water, emergency water discharge
- Washing a deck or hold



MFC-80S

■ Specifications

(★Products by order)

Model	MF-25S	MF-40S	MF-50S	MFC-80S*	MFLC-65K*	MFL-65K*
Connection Dia	25 mm (1")	40 mm (1½")	50 mm (2")	80 mm (3")	65 mm (2½")	
Connection Thread	Inner Pipe Thread					
Material	Bronze Castings (Gunmetal)					
Total Head	28 m (92 ft)	29 m (95 ft)	26 m (85 ft)	35 m (114 ft)	24 m (78 ft)	
Delivery Volume	115 L/min (30 USG/min)	215 L/min (56 USG/min)	350 L/min (92 USG/min)	820 L/min (216 USG/min)	650 L/min (171 USG/min)	
Output	1.5 kw (2.0 PS) / 1750 rpm		3.7 kw (5.0 PS) / 1750 rpm	7.5 kw (10.2 PS) / 1,750 rpm	5.5 kW (7.5 PS) / 1,750 rpm	
Number of Blades	9			13	6	
Driving Method	Belt Drive					
Revolution Direction	Anti-clockwise (Watching from Driving Shaft)					
Revolution	500 – 2300 rpm					
Shaft Dia	20 mm (¾")		25 mm (1")	Electromagnetic Clutch		25 mm (1")
Standard Accessory	Parallel Key			_____		
Gross Weight	7.5 kg (16 lbs)	9.5 kg (21 lbs)	11.5 kg (25 lbs)	35 kg (77 lbs)	25 kg (55 lbs)	20 kg (44 lbs)
Dimensions L×W×H (mm)	262 × 150 × 190	275 × 168 × 183	352 × 172 × 229	430 × 240 × 280	460 × 234 × 285	460 × 234 × 285
Packing Unit	1					

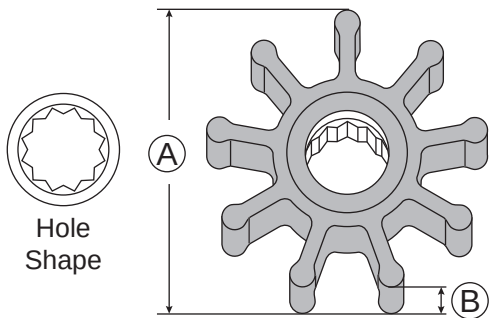
■ Electromagnetic Clutch Specifications

★In case power is supplied by general purpose engine, choose MFC series (with clutch). (Need power source for clutch.)

Model	MFC-2524S	MFC-4024S	MFC-5024S	Model	MFC-80S MFLC-65K
Pump	MF-25S	MF-40S	MF-50S		
Voltage (Clutch)	DC 24 V				
Capacity (Clutch)	43 W		36 W		
Pulley	ϕ 136.5 (B-1)		ϕ 130 (B-2)		
Net Weight (Clutch)	7.6 kg	8.8 kg	18.3 kg	Voltage	DC 24 V
Dimensions L×W×H (mm)	272 × 160 × 205	292 × 178 × 198	408 × 203 × 223	Capacity	36 W
Packing Unit	1			Pulley	ϕ 130

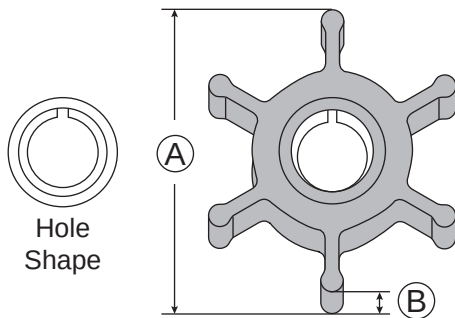
MF Series Impeller List For "REVOLVEX PUMPS" & "RUBBER MASTER"

Spline Type Impeller



MF-25SRL (For MF-25S) (For Seawater)

Key Type Impeller



MFL-65KR (For MFL-65K, MFLC-65K) (For Seawater)

Model	MF-25S MFC-25S	MF-40S MFC-40S	MF-50S MFC-50S MFC-50SX	MFC-65K	MFL-65K MFLC-65K	MFC-80S	MF-40MS	MF-2524		MF-4024X
Application	Seawater								Oil	Seawater
Impeller Model	MF-25SRL	MF-40SRL	MF-50SRL	MFC-65KR	MFL-65KR	MFC-80SR	MF-40SRL	MF-2524KR	MF-2524KN	MF-4024KR
(A) Outside Dia	80 mm	94 mm		128.5 mm		143 mm	94 mm	65 mm		90 mm
(B) Thickness	54 mm	63 mm	95 mm	102 mm		105.4 mm	63 mm	41 mm		46 mm
Number of Blades	9			11	6	13	9	8		
Shape of Shaft	Spline			Key		Spline		Key		
Material	Chloroprene Rubber (Neoprene)								Nitrile Butyl Rubber	Chloroprene Rubber (Neoprene)

Long Durability "REVOLVEX PUMP with MOTOR" & "RUBBER MASTER"

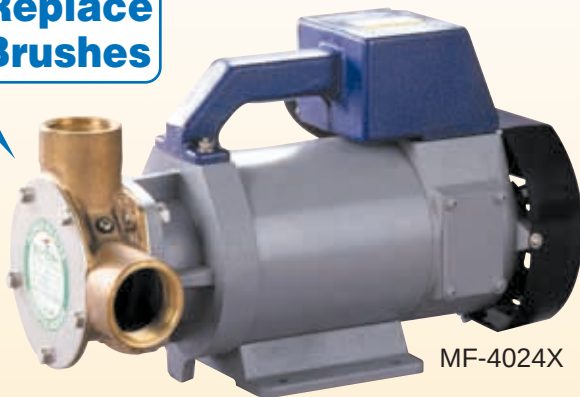
- Compact design and can be removed on the deck easily.
- Small and compact, but, large delivery volume for this class of pumps.
- They can be used continuously with motor fan.
- Dry prime pump, no need to prime with water, immediate suction.

Easy to Remove
in The Ship



MF-40MS

Easy to Replace
Carbon Brushes



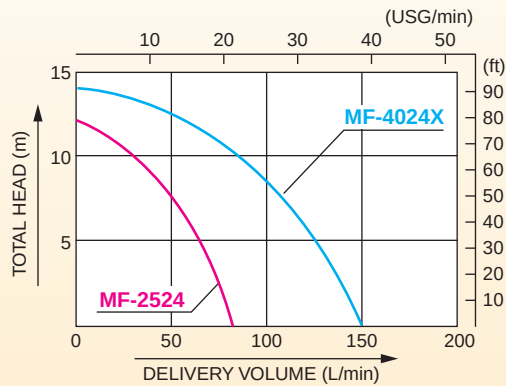
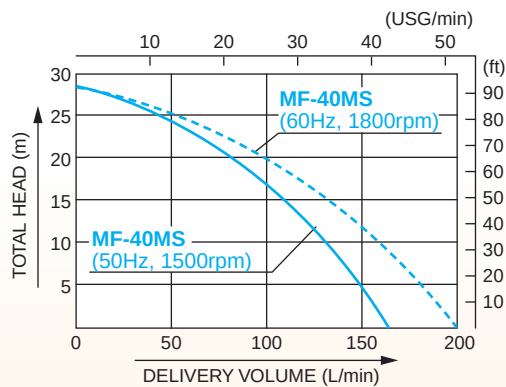
MF-4024X

★ To transfer fuel, please use special impeller for oil. (Impeller type : MF-2524KN)
Please refer to page 47.

Specifications

Model	MF-40MS	MF-2524	MF-4024X
Connection Dia	40 mm (1½")	25 mm (1")	40 mm (1½")
Connection Thread	Inner Pipe Thread		
Material	Bronze Castings (Gunmetal)		
Total Head	29 m (95 ft)	9 m (29.5 ft)	14 m (45.9 ft)
Max. Self-Priming Head	5 m (16 ft)	3.5 m (11 ft)	
Delivery Volume	60 Hz : 200 L/min (52 USG/min) 50 Hz : 170 L/min (44 USG/min)	80 L/min (21 USG/min)	150 L/min (39 USG/min)
Voltage	Three Phase 200 V		
Current	6.8 A / 50 Hz, 6.0 A / 60 Hz	12 – 15 A	22 – 30A
Output	1.5 kW	250 W	400 W
Power Cord	10 m (1.25 mm ²)	5 m (2 mm ²)	5 m (3.5 mm ²)
Standard Accessories	1 Strainer, 1 Hose Band (φ48)	1 Strainer, 2 Connecting Nipples (φ25), 3 Hose Bands (φ32)	1 Strainer, 1 Hose Band (φ48)
Gross Weight	24 kg (53 lbs)	8.8 kg (19 lbs)	22 kg (48 lbs)
Dimensions L×W×H (mm)	498 × 254 × 359	325 × 223 × 253	429 × 230 × 295
Packing Unit	1		

Performance Curve



"FS PUMPS" Marine Self-priming Pump for Seawater

- Specially designed for use with seawater.
- Pump and motor are constructed to withstand seawater and operated by a DC 24 V power source.
- 1. Seawater proof motor: These motors are specially designed for seawater applications.
- 2. Special aluminum compound for motor casing is made to withstand seawater corrosion. Moreover, this material does not add heavy weight to the pump.

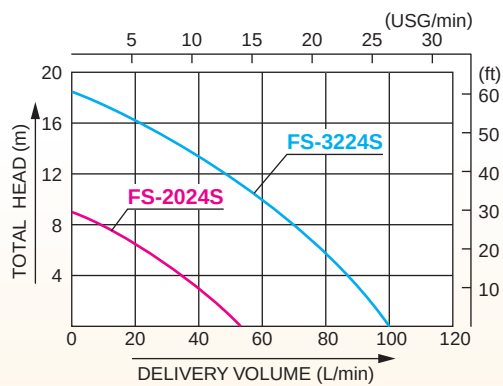


FS-3224S

Specifications

Model	FS-2024S	FS-3224S
Connection Dia	20 mm (¾")	32 mm (1¼")
Connection Thread	Inner Pipe Thread	
Total Head	9 m (30 ft)	18.5 m (60 ft)
Delivery Volume	50 L/min (13 USG/min)	100 L/min (26 USG/min)
Voltage	DC 24 V	
Rated Current	7 A	16 A
Output	90 W / 7000 rpm	200 W / 6200 rpm
Rating	Continuous	
Power Cord	3 m (10 ft)	5 m (16 ft)
Standard Accessories	1 Strainer, 2 Hose Nipples, 1 Set Carbon Brush	
Gross Weight	29 kg (64 lbs)	28 kg (62 lbs)
Dimensions L×W×H (mm)	790 × 305 × 252	565 × 395 × 340
Packing Unit	5	3

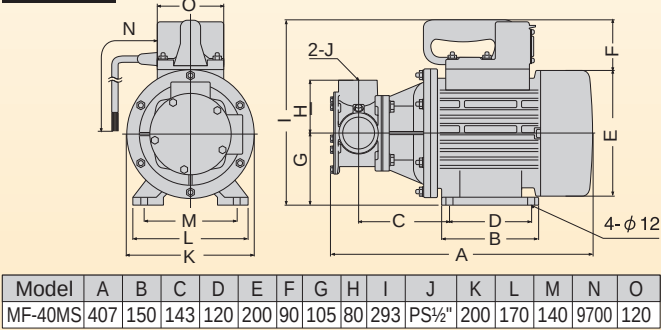
Performance Curve



OUTLINE DRAWING

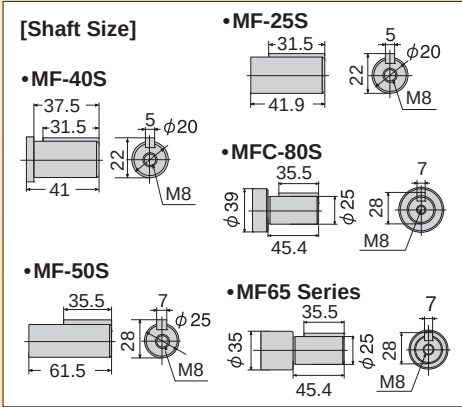
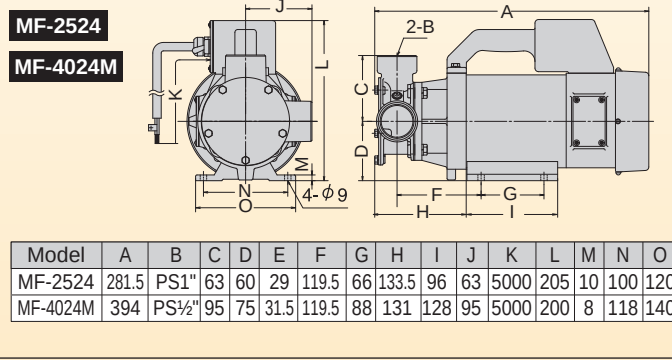
REVOLVEX PUMP

MF-40MS

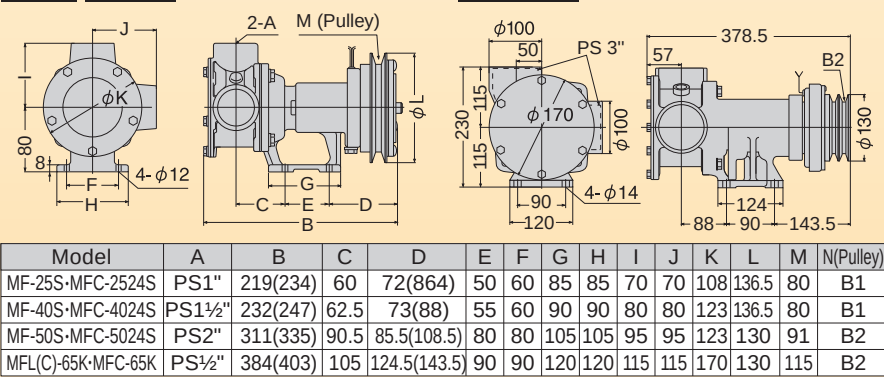


RUBBER MASTER

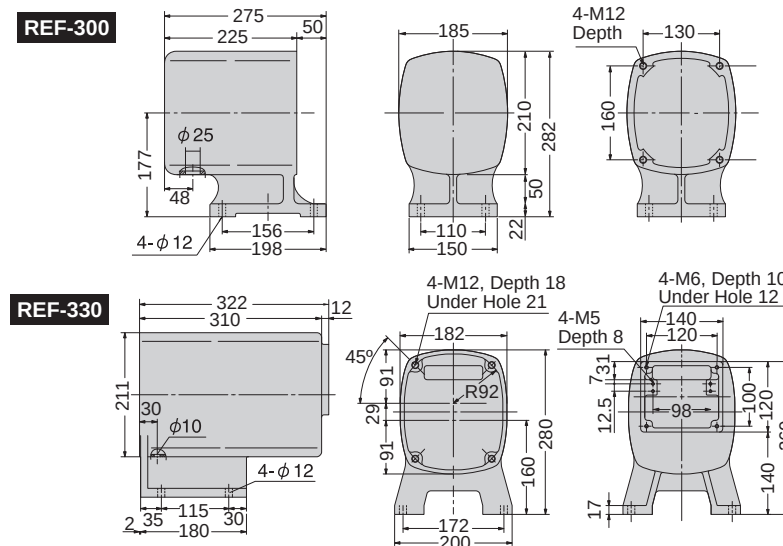
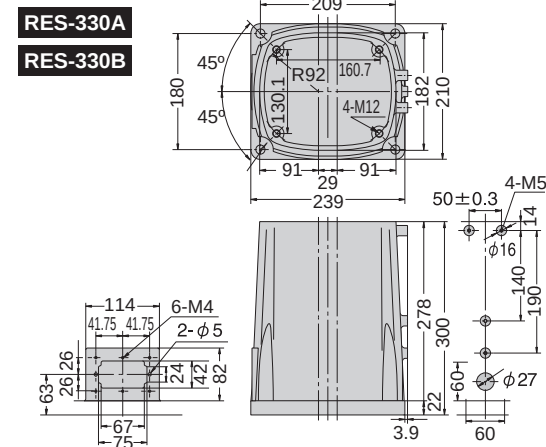
MF-2524
MF-4024M



MF— MFC—

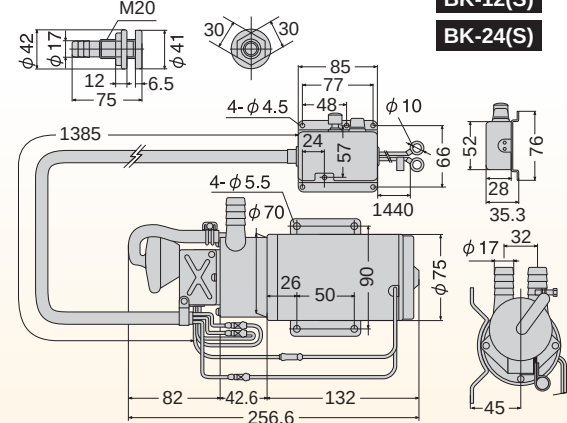


ECARL BOX

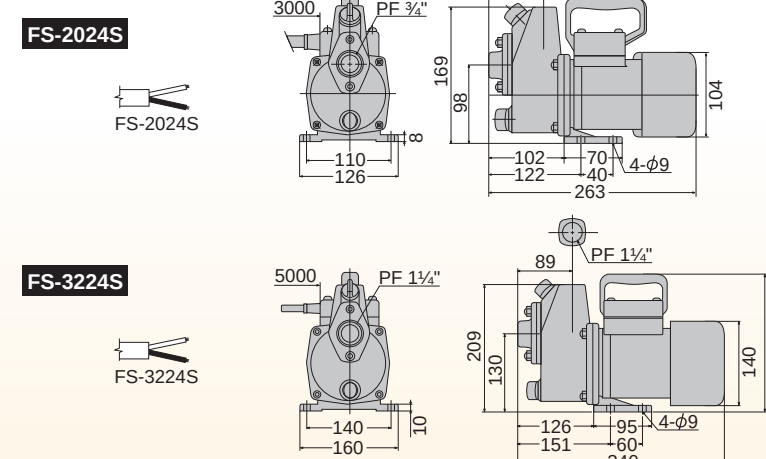
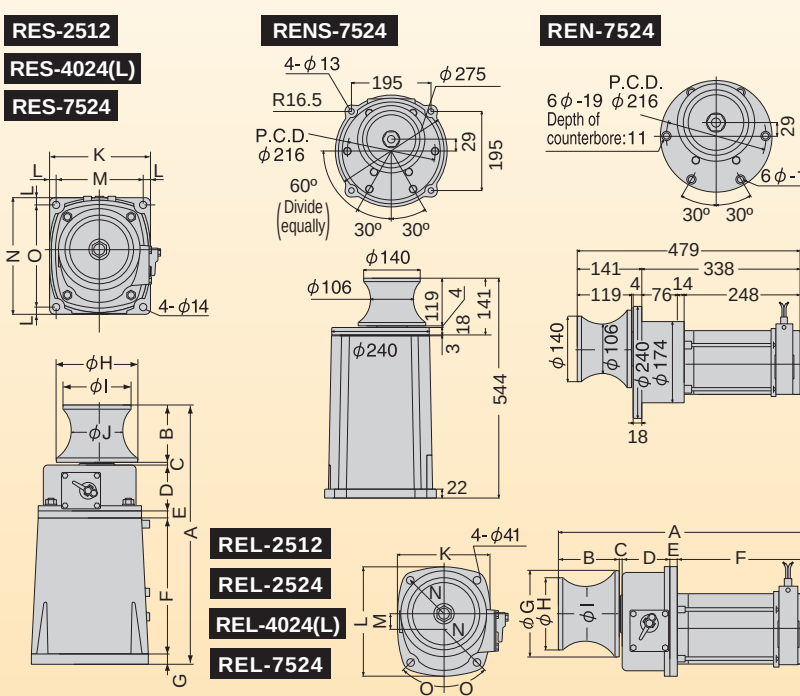
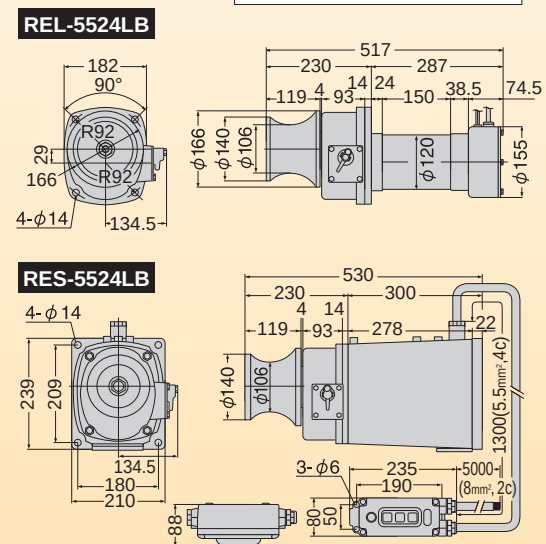
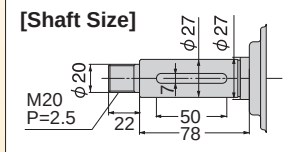


NEW BILGE KING

[Deriverly Nozzle]



FS PUMP

**ECARL**[illegible]

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
REL-2512(L)	427	119	4	93	14	197	166	140	106	113	182	211	29	R92	45
REL-2524											136				
REL-4024(L)	433		6		203	136				182					
RFI -7524	480				248										

KOSHIN LTD.

Headquarters:	Kyoto, Japan
(Mother factory)	
Established:	1948
Business:	Production and R & D, Sales of pumps, Sprayers, Winches
Employee:	190
Overseas factory:	• KOSHIN LITIAN (NINGBO) CO.,LTD. • NINGBO KOSHIN MOTER CO.,LTD. • KOSHIN THAILAND CO.,LTD.
Overseas office:	• KOSHIN AMERICA CORP. (Chicago)
Representative offices:	• EUROPE OFFICE • MEXICO OFFICE



President T. Kohara



Die-cast trimming robot



Assembling line



Head office and factory

KOSHINLITIANPUMP (NINGBO) CO.,LTD.

Address: Ningbo, China
Established: 2003
Business: Production of Submersible pumps, Sprayers,
Kerosene pumps, Siphon pumps, Bath pumps
Employee: 380



Factory facility

NINGBO KOSHIN MOTER CO., LTD.

Address :	Ningbo, China
Established:	2010
Business:	Production of Electric moters, and Submersible pumps
Employee	14



Motor factory

KOSHIN (THAILAND) CO., LTD.

Address :	Bangkok, Thailand
Established:	2006
Business:	Production of Hidels pumps, and Submersible pumps
Employee	100



Exterior