KOSHIN



GENERAL CATALOG Vol.5



Trusted in 160 Countries for



▼ Explanation of pictogram





















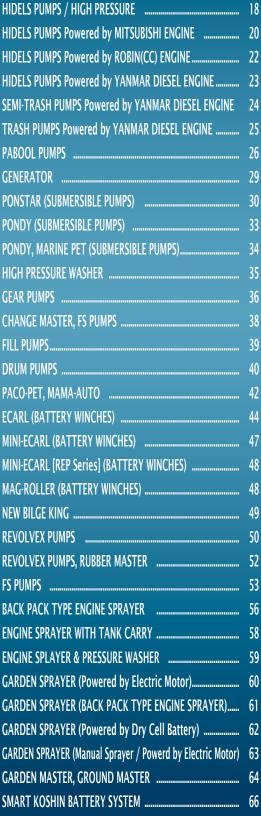






High Quality





HIDELS PUMPS Powered by KOSHIN ENGINE...... 4

TRASH PUMPS Powered by KOSHIN ENGINE 8 HIDELS PUMPS Powered by HONDA ENGINE...... 11













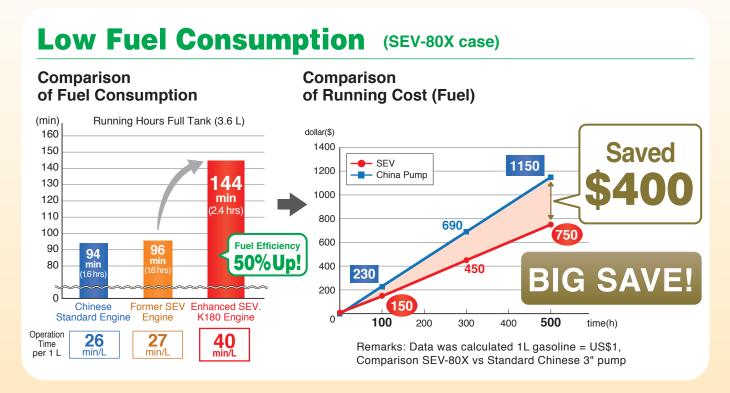






KOSHIN Engine Competitive Price & Guaranteed Quality

(1) Low fuel consumption. The 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 lift and specifications.

Clear Water Pumps











■ Performance Curve (USG/min) 300 200 (ft) 40 **SEV-80X (K180)** 120 TOTAL HEAD (m) SEV-50X (K180) 30 90 SEV-40X (K180) 20 60 30 200 400 600 800 1000 DELIVERY VOLUME (L/min)



	Model	SEV-40X*		SEV-50X	SEV-80X		
	Connection Dia	40 mm (1½")		50 mm (2")	80 mm (3")		
	Connection Thread						
₽	Total Head	33 m (108 ft)		27 m	(88 ft)		
P	Delivery Volume	340 L/min (90 USG/min)		620 L/min (163 USG/min)	1050 L/min (277 USG/min)		
	Max. Suction Lift			8 m (26 ft)			
	Туре		Forc	ed Air-cooled 4-stroke Gasoline Er	gine		
	Model	Koshin K180					
ш	Displacement	179 cc					
Z	Rated Output	3.1 kW (4.2 PS) / 3600 rpm					
NGIN	Max. Output			3.5 kW (4.8 PS) / 3600 rpm	/ 3600 rpm		
Ш	Fuel			Automotive Unleaded Gasoline	nleaded Gasoline		
	Fuel Tank Capacity			3.6 L (0.95 USG)			
	Continuous Operating Time	Арр	orox.	2.6 hrs	Approx. 2.4 hrs		
	Starting Method			Recoil Starter			
St	andard Accessories	1 Strainer, 2	2 Ho	se Couplings, 3 Hose Bands, 1 I	Engine Tool Set		
Ne	et Weight	26.5 kg (58.4 lbs)		25.2 kg (55.5 lbs)	28.7 kg (63.2 lbs)		
G	ross Weight	29.0 kg (63.9 lbs)		27.2 kg (59.9 lbs)	30.7 kg (67.6 lbs)		
Di	mensions L×W×H (mm)	554 × 406 × 424		504 × 405 × 411	543 × 425 × 460		
Packing Unit				1			

^{*}Japanese Domestic Model

Clear Water Pumps









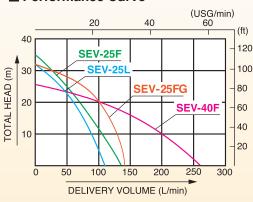


ULTRALIGHT 4-STROKE ENGINE

- EASIER STARTING!
- **LESS NOISE!**
- Environmentally friendly 4-stroke engine
- · Cleaner exhaust emissions
- Less the CO and NOx emissions compared with 2-stroke engine

■ Performance Curve

STRŌKE





	■ Specification					
	Model	SEV-25L	SEV-25F	SEV-25FG*	SEV-40F	
	Connection Dia		25 mm (1")		40 mm (1½")	
UMP	Connection Thread		Outer Pipe Thread BSP or NPT			
	Total Head	32 m (105 ft)	35 m (115 ft)	32 m (105 ft)	26 m (85 ft)	
Д	Delivery Volume	110 L/min (29 USG/min)	135 L/min (35 USG/min)	140 L/min (32 USG/min)	260 L/min (68 USG/min)	
	Max. Suction Lift		8 m (26 ft)		
	Туре	Forced Air-cooled 2-stroke Gasoline Engine	Forced	Air-cooled 4-stroke Gasolin	ne Engine	
	Model	Koshin KC26	Koshin K35	Koshin K100		
	Displacement	26 cc	35.2 cc	98 cc		
벌				1.6 kW (2.2 PS) / 3600 rpm		
FNG	Max. Output	0.75 kW (1.0 PS) / 8000 rpm	0.81 kW (1.1 PS) / 6500 rpm	1.8 kW (2.4 PS) / 3600 rpm		
Щ	Fuel	2-stroke Mixed Gas and Oil (50:1) Automotive Unleaded Gasoline				
	Fuel Tank Capacity	0.6 L (0.16 USG)	0.73 L (0.19 USG)	1.8 L ((0.47 USG)	
	Continuous Operating Time	Approx. 50 min	Approx. 55 min	Арр	orox. 2 hrs	
	Starting Method		Recoil Starter			
S	tandard Accessories	1 Strai	iner, 2 Hose Couplings, 3	Hose Bands, 1 Engine To	ol Set	
Ν	et Weight	5.5 kg (12.1 lbs)	7.4 kg (16.3 lbs)	18 kg (39.7 lbs)	18 kg (39.7 lbs)	
G	ross Weight	6.8 kg (15 lbs)	8.5 kg (18.7 lbs)	20.5 kg (45.2 lbs)	22 kg (48.5 lbs)	
Dimensions L×W×H (mm) Packing Unit		$358 \times 263 \times 323$	403 × 266 × 348	490 × 330 × 397	450 × 330 × 397	
			1			

For Sandy and Muddy Water

· 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 6.5 times more erosion resistance than Standard Cast Iron (FC200)







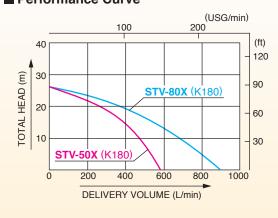




■ Outstanding Features

- Suitable for Sandy and Muddy Water usage
- Particles up to 9 mm can be pumped through
- · Guaranteed 8 meters suction lift
- · Long bolt assembly for easy maintenance

■ Performance Curve





	Model	STV-50X		STV-80X		
	Connection Dia	50 mm (2")		80 mm (3")		
Д	Connection Thread	Outer Pipe Thread BSP or NPT				
N	Total Head	26 m (85 ft)				
Д	Delivery Volume	580 L/min (153 USG/min)	900 L/min (238 USG/min)		
	Max. Suction Lift		8 m ((26 ft)		
	Туре	Forced	d Air-cooled 4-st	troke Gasoline Engine		
	Model	Koshin K180				
	Displacement	179 cc				
빌	Rated Output	3.1 kW (4.2 PS) / 3600 rpm				
S	Max. Output	3.5 kW (4.8 PS) / 3600 rpm				
Ш	Fuel	Automotive Unleaded Gasoline				
	Fuel Tank Capacity	3.6 L (0.95 USG)				
	Continuous Operating Time	Approx. 2 hrs		Approx. 1.6 hrs		
	Starting Method		Recoil	Starter		
St	andard Accessories	1 Strainer, 2 Hose Coup	olings, 3 Hose	Bands, 1 Engine Tool Set, 1 Spanner		
Ne	et Weight	29 kg (63 lbs)		30.9 kg (68.1 lbs)		
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	1		



Koshin Trash Pumps

·Reasonable price

About 30% less price compared to same quality trash pumps. The most affordable price ever.

Excellent Quality

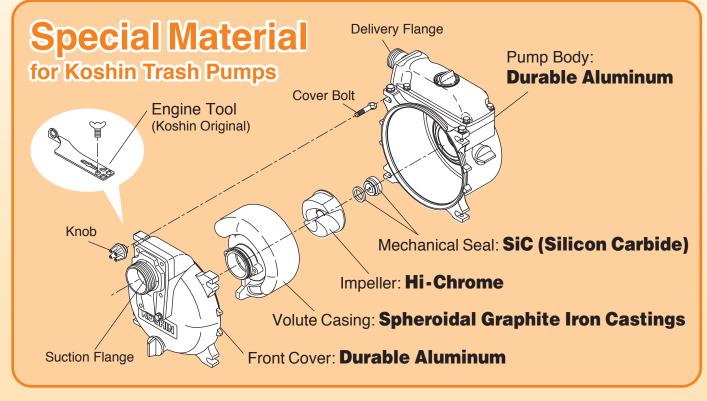
Provides powerful performance and long durability with New KOSHIN engine and enhanced pump.

· Easy maintenance

Thoughtful flame for easy replacement of carburetor.

You can clear inside of pump by simply removing pump casing with only one tool.

Easy & Quick Maintenance Koshin Original Wrench as Standard Accessories



Heavy Duty Trash Pumps









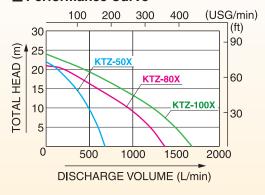






KTZ-100X

■ Performance Curve





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	Model	KTZ-50X	KTZ-80X	KTZ-100X			
	Connection Dia	50 mm(2")	80 mm(3")	100 mm(4")			
	Connection Thread		Outer Pipe Thread BSP or NPT				
	Total Head	22 m (72 ft)	21 m (68 ft)	24 m (78 ft)			
A	Delivery Volume	680 L/min (179 USG/min)	1370 L/min (361 USG/min)	1680 L/min (443 USG/min)			
P	Max.Suction Lift		8 m (26 ft)				
	Material for Mechanical Seal		Sic (Silicon Carbide) × Sic				
	Material for Impeller	Hi-Chrome					
	Material for Volute	FCD 450					
	Type	Ford	ced Air-Cooled 4-stroke Gasoline Eng	gine			
	Model	Koshin K180	Koshin K300	Koshin K420			
	Displacement	179 cc	301 cc	420 cc			
当	Rated Output	3.1 kW (4.2PS) / 3600 rpm	5.0 kW (6.8 PS) / 3600 rpm	7.2 kW (9.8 PS) / 3600 rpm			
ENGINE	Max. Output	3.5 kW (4.8PS) / 3600 rpm	6.0 kW (8.2 PS) / 3600 rpm	8.6 kW (11.7 PS) / 3600 rpm			
EN N	Fuel		Automotive Unleaded Gasoline				
	Fuel Tank Capacity	3.6 L (0.95 USG)	5.9 L (1.5 USG)	5.9 L (1.5 USG)			
	Continuous Operating Time	Approx.	2.0 hrs	Approx. 1.5 hrs			
	Starting Method	Recoil Starter					
St	andard Accessories	1 Strainer, 3 Hose Bands, 1 E	ngine Tool Set, 1 Multi Tool Wrench (BSP Type: 2 Hose Couplings)			
N	et Weight	48.1 kg (106.0 lbs)	61.6 kg (135.8 lbs)	78.2 kg (172.4 lbs)			
G	ross Weight	54 kg (119 lbs)	68.4 kg (150.8 lbs)	88.0 kg (194.0 lbs)			
D	mensions L×W×H (mm)	$703 \times 579 \times 542$	$726 \times 579 \times 603$	816 × 621 × 632			
Packing Unit		1					

New Design with Easy Maintenance

Powered by KOSHIN K300 & K420

- The front cover can be removed easily without removing hoses
- · Handles on the front cover can be installed in vertical or horizontal position
- · Easy removal of knobs
- New Impeller design with hexagon boss for easy installation and removal















■ Performance Curve





Specification	1				
Model		KTZ-80S	KTZ-100S		
Connection Dia	a	80 mm(3")	100 mm(4")		
Connection Th	read	Outer Pipe Thread BSP or NPT			
Total Head		22 m (72 ft)	25 m (82 ft)		
Delivery Volum Max.Suction Li	ne	1420 L/min (375 USG/min)	1980 L/min (523 USG/min)		
	ift	8m (2	26 ft)		
Material for Mech	anical Seal	Sic (Silicon C	Carbide) × Sic		
Material for Im	peller	Hi-Chrome			
Material for Vo	lute	FCD450			
Type		Forced Air-Cooled 4-s	oke Gasoline Engine		
Model		Koshin K300	Koshin K420		
Displacement		301cc	420cc		
및 Rated Output		5.0 kW (6.8 PS) / 3600 rpm	7.2 kW (9.8 PS) / 3600 rpm		
Rated Output Max. Output Fuel		6.0 kW (8.2 PS) / 3600 rpm	8.6 kW (11.7 PS) / 3600 rpm		
ш Fuel		Automotive Unleaded Gasoline			
Fuel Tank Cap	acity	5.9L (1.	5 USG)		
Continuous Oper	ating Time	Approx. 2 hrs	Approx. 1.5 hrs		
Starting Metho	d	Recoil	Starter		
Standard Accesso	ories	1 Strainer, 3 Hose Bands, 1 Engine Tool Set, 1 M	Multi Tool wrench (BSP Type: 2 Hose Couplings)		
Net Weight		65.3 kg (144.0 lbs)	81.2 kg (179.0 lbs)		
Gross Weight		72.6 kg (160.1 lbs)	90.5 kg (199.5 lbs)		
Dimensions L×W×H (mm)		729 × 589 × 602	800 × 621 × 624		
Packing Unit		f	1		

Environment Friendly Low Noise

* Engine noise are half of 2-stroke engine.



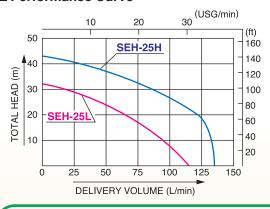








■ Performance Curve





SEH-25L

Available 25 mm Hose Set

N-Type Hose Set

· Washing of agriculture & construction machinery



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

R-Type Hose Set

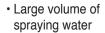
- Washing of agriculture machinery
- · Water sprinkling to the field



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

New Spray Nozzle







1 Hose nipple <20 mm (¾") × 15 mm (½")>



	Model	SEH-25L	SEH-25H	SEH-40H			
	Connection Dia	25 n	mm (1")	40 mm (1½")			
Д	Connection Thread		Outer Pipe Thread BSP or NPT				
M	Total Head	32 m (105 ft)	43 m (141 ft)	43 m (141 ft)			
Д	Delivery Volume	115 L/min (30 USG/min)	135 L/min (36 USG/min)	280 L/min (73 USG/min)			
	Max. Suction Lift		8 m (26 ft)				
	Туре	Ford	ed Air-cooled 4-stroke Gasoline Engine				
	Model	Honda GX25	Honda	GXH50			
빌	Displacement	25 cc	49.4	ł cc			
	Rated Output						
GINE	Max. Output	0.72 kW (1.0 PS) / 7000 rpm	1.6 kW (2.2 PS) / 7000 rpm	1.8 kW (2.4 PS) / 7000 rpm			
EN	Fuel		Automotive Unleaded Gasoline				
	Fuel Tank Capacity	0.53 L (0.14 USG)	0.77 L (0	0.20 USG)			
	Continuous Operating Time	Approx	x. 1 hr	Approx. 2 hrs			
	Starting Method	Recoil Starter					
St	andard Accessories	1 Strainer, 2	Hose Couplings, 3 Hose Bands, 1 E	ngine Tool Set			
Net Weight		5.5 kg (12.1 lbs)	11.5 kg (25.4 lbs)			
Gross Weight		7 kg (15.4 lbs)	13.5 kg (29.7 lbs)				
Dir	mensions L×W×H (mm)	$375 \times 243 \times 320$	455 × 30	2 × 447			
Packing Unit			1				

Complete Range of Water Pumps Powered by Honda Engine



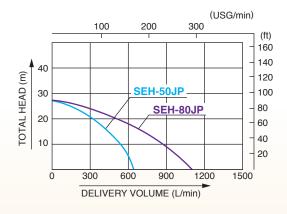








■ Performance Curve







	•					
	Model	SEH-50JP	SEH-80JP			
	Connection Dia	50 mm (2")	80 mm (3")			
۵	Connection Thread	Outer Pipe Thread BSP				
UMP	Total Head	27 m (88 ft)				
۵	Delivery Volume	640 L/min (169 USG/min)	1100 L/min (290 USG/min)			
	Max. Suction Lift	8 m (26 ft)			
	Туре	Forced Air-cooled 4-st	troke Gasoline Engine			
	Model	Honda GP160				
	Displacement	163 cc				
当	Rated Output	2.9 kW (3.9 PS) / 3600 rpm				
ENGINE	Max. Output	3.6 kW (4.9 PS) / 3600 rpm				
EN	Fuel	Automotive Unleaded Gasoline				
	Fuel Tank Capacity	3.1 L (0.8 USG)				
	Continuous Operating Time	Approx. 2.5 hrs	Approx. 2.2 hrs			
	Starting Method	Recoil Starter				
St	andard Accessories	1 Strainer, 2 Hose Couplings, 3	Hose Bands, 1 Engine Tool Set			
N	et Weight	24 kg (52.9 lbs)	27.3 kg (60.2 lbs)			
G	ross Weight	26 kg (57.3 lbs)	30 kg (66.0 lbs)			
Di	mensions L×W×H (mm)	504 × 401 × 406	525 × 389 × 458			
Packing Unit			1			

Complete Range of Water Pumps Powered by Honda Engine



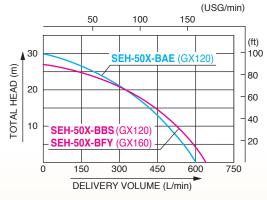








■ Performance Curve









•						
Model	SEH-50X-BAE	SEH-50X-BBS	SEH-50X-BFY	SEH-80X-BBU	SEH-80X-BAC	SEH-100X
Connection Dia	50 mm (2")			80 mm (3")		100 mm (4")
Connection Thread			Outer Pipe	Thread BSP or NPT		
Total Head	30 m (98 ft)	27 m	(88 ft)	26 m (85 ft)	27 m (88 ft)	28 m (92 ft)
Delivery Volume	600 L/min (158 USG/min)	640 L/min (1	69 USG/min)	930 L/min (246 USG/min)	1100 L/min (290 USG/min)	1450 L/min (383 USG/min)
Max. Suction Lift			8 m (26 ft)		
Impeller			FC	200		
Volute Casing	ADC12	FC	200	ADC12	FC2	200
Туре	Fo		rced Air-cooled 4-stroke Gasoline Engine			
Model	Honda GX120		Honda GX160			Honda GX240
Displacement	122 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 (6.3 PS) / 3600 rpm
Max. Output	2.4 kW (3.3 PS) / 3600 rpm		3.6 kW (4.9 PS) / 3600 rpm			5.9 kW (8.0 PS) / 3600 rpm
Fuel			Automotive Unleaded Gasoline			
Fuel Tank Capacity	2.0 L(0.5	53 USG)	3.1 L (0.82 USG)			5.3 L (1.4 USG)
Continuous Operating Time			Approx. 2 hrs			Approx. 2.5 hrs
Starting Method	Recoil Starter					
andard Accessories		1 Straine	r, 2 Hose Coupling	s, 3 Hose Bands,	1 Engine Tool Set	
et Weight	21 kg (46.3 lbs)	21 kg (46.3 lbs)	25.2 kg (56.2 lbs)	27 kg (59.5 lbs)	28 kg (61.7 lbs)	54 kg (119 lbs)
ross Weight	22 kg (48.5 lbs)	23 kg (50.7 lbs)	27.2 kg (59.9 lbs)	30 kg (6	6.0 lbs)	59 kg (130 lbs)
mensions L×W×H (mm)	483 × 37	′5 × 376	504 × 401 × 406	$525 \times 389 \times 458$	525 × 389 × 463	$680 \times 490 \times 675$
acking Unit			•	1		
	Connection Dia Connection Thread Total Head Delivery Volume Max. Suction Lift Impeller Volute Casing Type Model Displacement Rated Output Max. Output Fuel Fuel Tank Capacity Continuous Operating Time	Connection Dia Connection Thread Total Head 30 m (98 ft) Delivery Volume 600 L/min (158 USG/min) Max. Suction Lift Impeller Volute Casing ADC12 Type Model Honda Displacement 122 Rated Output 2.1 kW (2.9 F Max. Output 2.4 kW (3.3 F Fuel Fuel Tank Capacity 2.0 L(0.9 F Starting Method Landard Accessories Let Weight 21 kg (46.3 lbs) Toss Weight 22 kg (48.5 lbs) Toss Weight 483 x 37	Connection Dia 50 mm (2") Connection Thread 30 m (98 ft) 27 m Delivery Volume 600 L/min (158 USG/min) 640 L/min (1 Max. Suction Lift Impeller Volute Casing ADC12 FC Type FO Model Honda GX120 Displacement 122 cc Rated Output 2.1 kW (2.9 PS) / 3600 rpm Max. Output 2.4 kW (3.3 PS) / 3600 rpm Fuel Fuel Tank Capacity Continuous Operating Time Starting Method tandard Accessories 1 Straine et Weight 21 kg (46.3 lbs) 21 kg (46.3 lbs) ross Weight 22 kg (48.5 lbs) 23 kg (50.7 lbs) mensions LxWxH (mm) 483 x 375 x 376	Connection Dia 50 mm (2") Connection Thread Outer Pipe Total Head 30 m (98 ft) 27 m (88 ft) Delivery Volume 600 L/min (158 USG/min) 640 L/min (169 USG/min) Max. Suction Lift 8 m (Impeller FC: Volute Casing ADC12 FC200 Type Forced Air-cooled 4-st Model Honda GX120 Displacement 122 cc Rated Output 2.1 kW (2.9 PS) / 3600 rpm 2 Max. Output 2.4 kW (3.3 PS) / 3600 rpm 3 Fuel Automotive Unl Fuel Tank Capacity 2.0 L(0.53 USG) Continuous Operating Time Approx. 2 hrs Starting Method Recoil Iandard Accessories 1 Strainer, 2 Hose Coupling et Weight 21 kg (46.3 lbs) 21 kg (46.3 lbs) 25.2 kg (56.2 lbs) ross Weight 22 kg (48.5 lbs) 23 kg (50.7 lbs) 27.2 kg (59.9 lbs) mensions LxWxH (mm) 483 x 375 x 376 504 x 401 x 406	Connection Dia 50 mm (2") 80 mm Connection Thread Outer Pipe Thread BSP or NP Total Head 30 m (98 ft) 27 m (88 ft) 26 m (85 ft) Delivery Volume 600 L/min (158 USG/min) 640 L/min (169 USG/min) 930 L/min (246 USG/min) Max. Suction Lift 8 m (26 ft) Impeller FC200 ADC12 Volute Casing ADC12 FC200 ADC12 Type Forced Air-cooled 4-stroke Gasoline Eng Model Honda GX120 Honda GX160 Displacement 122 cc 163 cc Rated Output 2.1 kW (2.9 PS) / 3600 rpm 2.9 kW (3.9 PS) / 3600 Max. Output 2.4 kW (3.3 PS) / 3600 rpm 3.6 kW (4.9 PS) / 3600 Fuel Automotive Unleaded Gasoline Fuel Tank Capacity 2.0 L(0.53 USG) 3.1 L (0.82 USG Continuous Operating Time Approx. 2 hrs Starting Method 1 Strainer, 2 Hose Couplings, 3 Hose Bands, et Weight 21 kg (46.3 lbs) 21 kg (46.3 lbs) 25.2 kg (56.2 lbs) 27 kg (59.5 lbs) ross Weight 22 kg (48.5 lbs) 23 kg (50.7 lbs) <t< td=""><td>Connection Dia 50 mm (2") 80 mm (3") Connection Thread Outer Pipe Thread BSP or NPT Total Head 30 m (98 ft) 27 m (88 ft) 26 m (85 ft) 27 m (88 ft) Delivery Volume 600 L/min (158 USG/min) 640 L/min (169 USG/min) 930 L/min (246 USG/min) 1100 L/min (290 USG/min) Max. Suction Lift 8 m (26 ft) FC200 Volute Casing ADC12 FC200 ADC12 FC2 Type Forced Air-cooled 4-stroke Gasoline Engine FC200 Model Honda GX120 Honda GX160 Displacement 122 cc 163 cc Rated Output 2.1 kW (2.9 PS) / 3600 rpm 2.9 kW (3.9 PS) / 3600 rpm Ak (4.9 PS) / 3600 rpm Fuel Tank Capacity Automotive Unleaded Gasoline Fuel Tank Capacity Approx. 2 hrs Approx. 2 hrs Starting Method Recoil Starter Starting Method Recoil Starter Starting Method Propertion of Starter Approx. 2 kg (56.2 lbs) 27 kg (59.5 lbs) 28 kg (61.7 lbs) 28 kg (61.7 lbs) 28 kg (61.7 lbs) 29 kg (59.5 lbs) 30 kg (66.0 lbs)</td></t<>	Connection Dia 50 mm (2") 80 mm (3") Connection Thread Outer Pipe Thread BSP or NPT Total Head 30 m (98 ft) 27 m (88 ft) 26 m (85 ft) 27 m (88 ft) Delivery Volume 600 L/min (158 USG/min) 640 L/min (169 USG/min) 930 L/min (246 USG/min) 1100 L/min (290 USG/min) Max. Suction Lift 8 m (26 ft) FC200 Volute Casing ADC12 FC200 ADC12 FC2 Type Forced Air-cooled 4-stroke Gasoline Engine FC200 Model Honda GX120 Honda GX160 Displacement 122 cc 163 cc Rated Output 2.1 kW (2.9 PS) / 3600 rpm 2.9 kW (3.9 PS) / 3600 rpm Ak (4.9 PS) / 3600 rpm Fuel Tank Capacity Automotive Unleaded Gasoline Fuel Tank Capacity Approx. 2 hrs Approx. 2 hrs Starting Method Recoil Starter Starting Method Recoil Starter Starting Method Propertion of Starter Approx. 2 kg (56.2 lbs) 27 kg (59.5 lbs) 28 kg (61.7 lbs) 28 kg (61.7 lbs) 28 kg (61.7 lbs) 29 kg (59.5 lbs) 30 kg (66.0 lbs)

Economical Trash Pumps For Sandy & Muddy Water

- · Silicon Carbide Mechanical Seal (SiC).
 - 4 to 5 times more durable than standard Carbon Ceramic Mechanical Seal.
- Spheroidal graphite iron casting (FCD 450) for Impeller and Casing. 6.5 times more corrosion resistant than standard FC or Cast Iron.
- Impeller can be removed easily without special tool.
- · Long bolt assembly for easy maintenance.















STH-50X

■Performance Curve



Specification						
	Model	STH-50X	STH-80X	STH-100X		
Д.	Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")		
	Connection Thread		Outer Pipe Thread BSP or NPT			
UMP	Total Head	29 m (95 ft)	26 m (85 ft)	28 m (92 ft)		
۵	Delivery Volume	600 L/min (158 USG/min)	900 L/min (238 USG/min)	1450 L/min (383 USG/min)		
	Max. Suction Lift		8 m (26 ft)			
	Type	For	ced Air-cooled 4-stroke Gasoline Eng	gine		
	Model	Honda GX120	Honda GX160	Honda GX240		
	Displacement 122 cc		163 cc	270 cc		
当	Rated Output	2.1 kW (2.9 PS) / 3600 rpm	2.9 kW (3.9 PS) / 3600 rpm	4.6 kW (6.3 PS) / 3600 rpm		
ENGINE	Max. Output	2.4 kW (3.3 PS) / 3600 rpm	3.6 kW (4.9 PS) / 3600 rpm	5.9 kW (8.0 PS) / 3600 rpm		
H	Fuel					
	Fuel Tank Capacity	2.0 L (0.53 USG)	3.1 L (0.82 USG)	5.3 L (1.40 USG)		
	Continuous Operating Time	Approx	c. 2 hrs	Approx. 2.5 hrs		
	Starting Method	Recoil starter				
S	andard Accessories	1 Strainer, 2 Hose C	ouplings, 3 Hose Bands, 1 Engine	Tool Set, 1 Spanner		
Ν	et Weight	23 kg (51 lbs)	29 kg (64 lbs)	56 kg (123 lbs)		
G	ross Weight	25 kg (55.1 lbs)	35 kg (77.1 lbs)	64 kg (141 lbs)		
D	mensions L×W×H (mm)	500 × 395 × 415	525 × 389 × 473	680 × 490 × 675		
Packing Unit		1				

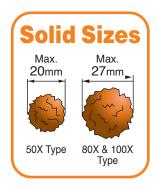
Heavy Duty Trash Pumps





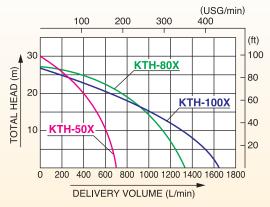








■ Performance Curve





	Specification					
	Model	KTH-50X	KTH-80X	KTH-100X		
	Connection Dia	50 mm (2")	80 mm (3")	100 mm (4")		
	Connection Thread		Outer Pipe Thread BSP or NPT			
	Total Head	30 m (98 ft)	27 m (88 ft)	26 m (85 ft)		
₩ H	Delivery Volume	700 L/min (185 USG/min)	1340 L/min (354 USG/min)	1650 L/min (435 USG/min)		
PUMP	Max. Suction Lift		8 m (26 ft)			
	Material for Mechanical Seal		SiC (Silicon Carbide) × SiC			
	Material for Impeller		Hi-Chrome			
	Material for Volute	Spheroidal Graphite Iron Castings (FCD 450)				
	Type	For	ced Air-cooled 4-stroke Gasoline Eng	gine		
	Model	Honda GX160 Honda GX240		Honda GX340		
	Displacement	163 cc	270 cc	389 cc		
当	Rated Output	2.9 kW (3.9 PS) / 3600 rpm	4.6 kW (6.2 PS) / 3600 rpm	6.3 kW (8.6 PS) / 3600 rpm		
ENGINE	Max. Output	3.6 kW (4.9 PS) / 3600 rpm	5.9 kW (7.9 PS) / 3600 rpm	8.0 kW (10.9 PS) / 3600 rpm		
H	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)		
	Continuous Operating Time	Approx. 2.2 hrs	Approx. 2.5 hrs	Approx. 2 hrs		
	Starting Method	Recoil Starter				
St	andard Accessories	1 Strainer, 2 H	Hose Couplings, 3 Hose Bands, 1 I	Engine Tool Set		
Ne	et Weight	47 kg (104 lbs)	59 kg (130 lbs)	78 kg (172 lbs)		
G	ross Weight	50 kg (110.2 lbs)	62 kg (136.7 lbs)	84.5 kg (186.3 lbs)		
Di	mensions LxWxH (mm)	646 × 488 × 509	711 × 506 × 570	780 × 570 × 652		
Pa	acking Unit		1			

New Design for Easy Maintenance

Powered by Honda GX270 & GX390 with oil alart

- The cleanout cover can be removed easily without removing hoses
- Handles on the cleanout cover can be installed in vertical or horizontal position
- · Easy removal of knobs
- New Impeller design with hexagon boss for easy installation and removal



















■ Performance Curve *Performance ratings are guaranteed minimum, not inflated maximum. 500 600 (USG/min) 100 (ft) 90 80 70 60 KTH-100S(GX390) 50 40 TOTAL 30 20 10 DELIVERY VOLUME (L/min)

	Specification				
	Model	KTH-80S	KTH-100S		
	Connection Dia 80 mm (3")		100 mm (4")		
	Connection Thread	Outer Pipe Thread BSP or NPT			
	Total Head	27 m (88 ft)	30 m (98 ft)		
₽ F	Delivery Volume	1450 L/min (383 USG/min)	2050 L/min (542 USG/min)		
PUMP	Max. Suction Lift	8 m	(26 ft)		
	Material for Mechanical Seal	SiC (Silicon C	Carbide) × SiC		
	Material for Impeller	Hi-Cl	nrome		
	Material for Volute	Spheroidal Graphite Iron Castings (FCD 450)			
	Туре	Forced Air-Cooled 4-s	troke Gasoline Engine		
	Model	Honda GX270	Honda GX390		
	Displacement	270 cc	389 cc		
끶	Rated Output	5.1 kW (6.9 PS) / 3600 rpm	7.0 kW (9.5 PS) / 3600 rpm		
ENGINE	Max. Output	6.0 kW (8.2 PS) / 3600 rpm	8.7 kW (11.8 PS) / 3600 rpm		
回	Fuel	Automotive Unleaded Gasoline			
	Fuel Tank Capacity	5.3 L (1.40 USG)	6.1 L (1.61 USG)		
	Continuous Operating Time		x. 2 hrs		
	Starting Method		Starter		
A	ccessories	1 Strainer, 2 Hose Couplings,	3 Hose Bands, 1 Engine Tool Set		
	et Weight	65 kg (143.3 lbs)	79.5 kg (175.3 lbs)		
	ross Weight	71 kg (156.5 lbs)	86.5 kg (190.6 lbs)		
	imensions L×W×H (mm)	730 × 530 × 600	785 × 565 × 630		
P	acking Unit		1		



For Seawater, Fertilizer

- · 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.







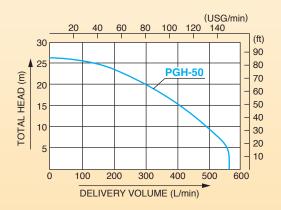




Specification

Specification				
	Model	PGH-50		
	Connection Dia	50 mm (2")		
	Connection Thread	Inner Pipe Thread BSP		
₽	Total Head	26 m (85 ft)		
PUMP	Max. Suction Lift	8 m (26 ft)		
	Delivery Volume	560 L/min (148 USG/min)		
	Material for Mechanical Seal	Ceramic Carbon		
	Туре	Forced Air-cooled 4-stroke Gasoline		
	Model	Honda GX120		
	Displacement	122 cc		
빌	Rated Output	2.1 kW (2.9 PS) / 3600 rpm		
ENGINE	Max. Output	2.4 kW (3.3 PS) / 3600 rpm		
	Fuel	Automotive Unleaded Gasoline		
	Fuel Tank Capacity	2.0 L (0.52 USG)		
	Continuous Operating Time	Approx. 2 hrs		
	Starting Method	Recoil Starter		
Q+	andard Accessories	1 Strainer, 3 Hose Nipples, 1 Elbow		
Si	andard Accessories	2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set		
Ne	et Weight	23 kg (50.7 lbs)		
Gr	oss Weight	24 kg (52.9 lbs)		
Di	mensions L×W×H (mm)	510 × 418 × 418		
Packing Unit		1		

■ Performance Curve





New

Suitable for **Sprinkler System** & Fire Fighting

- · Compact & lightweight high pressure pump
- 3 ways discharge flange [2"×1, 1"×2]

















■ Specification

	Mod	lel	SERH-50V	SERH-50Z				
	Connection	Suction	50 mr	n (2")				
PUMP	Dia	Discharge	50 mm (2") / 2	25 mm (1") × 2				
	Connect	ion Thread	Outer Pipe Thread BSP or NPT*1					
	Total He	ad	80 m (262 ft)	90 m (295 ft)				
	Delivery	Volume	430 L/min (114 USG/min)	500 L/min (132 USG/min)				
	Max. Su	ction Lift	8 m (2	26 ft)				
	Type		Forced Air-cooled 4-st	roke Gasoline Engine				
	Model		Honda GX160 High rpm	Honda GX200 High rpm				
111	Displace	ment	163cc	196cc				
Z	Rated O	utput	3.2 kW (4.4 PS) / 4300 rpm	3.7 kW (5.0 PS) / 3600 rpm				
ENGINE	Max. Output		3.9 kW (5.3 PS) / 4500 rpm	4.5 kW (6.1 PS) / 4000 rpm				
"	Fuel		Automotive Unleaded Gasoline					
	Fuel Tank Capacity		3.1L (0.82 USG)					
	Continuous	Operating Time	Approx. 2 hrs					
	Starting	Method	Recoil Starter					
			1 Stra	ainer ϕ				
			3 Hose Ba	nds (ϕ 60)				
			2 Hose Ba	nds (ϕ 32)				
S	tandard A	ccessories	1 Coupling S	Set (50 mm)				
			1 Closing Pla	ate (50 mm)				
			2 Nipples	(25 mm)				
			1 Quick Coupling (25 n	nm) (*BSP model only)				
			1 Engir	ne Tool				
Ν	let Weight		34 kg (75 lbs)	34.6 kg (76 lbs)				
G	iross Weig	ht	37 kg (82 lbs)	37.6 kg (83 lbs)				
D	imensions I	L×W×H (mm)	$555 \times 450 \times 468$	570 × 450 × 468				
P	acking Un	it	1					



SERH-50Z

■ Performance Curve



Suitable for Sprinkler (System) &

General Irrigation

















■ Performance Curve





	Mod	lel	SERH-50B	SERH-50	SERH-50F					
	Connection	Suction	50 mm (2")	65 mm (2½")	50 mm (2")					
PUMP	Dia	Discharge	50 mm (2")	50 mm (2")	50 mm (2") / 25mm (1") × 2					
	Connection	on Thread	Outer Pipe Thread BSP or NPT							
	Total Head		57 m (187 ft)	62 m (203 ft)	57m (187 ft)					
	Delivery \	Volume	440 L/min(116 USG/min)	560 L/min (148 USG/min)	440 L/min (116USG/min)					
	Max. Su	ction Lift		8 m (26 ft)						
	Туре		F	orced Air-cooled 4-stroke Gasoline Engine	e					
	Model		Honda GX160	Honda GX240	Honda GX160					
	Displacer	ment	163 cc	270 cc	163cc					
R	Rated Ou	tput	2.9 kW (3.9 PS) / 3600 rpm	4.6 kW (6.3 PS) / 3600 rpm	2.9 kW (3.9 PS) / 3600 rpm					
ENG	Max. Out	Max. Output 3.6 kW (4.9 PS) / 3600 rpm		5.9 kW (8.0 PS) / 3600 rpm	3.6 kW (4.9 PS) / 3600 rpm					
Ш	Fuel			Automotive Unleaded Gasoline						
	Fuel Tank	Fuel Tank Capacity 3.1 L (0.82 USG)		5.3 L (1.40 USG)	3.1L (0.82 USG)					
	Continuous Operating Time		Approx. 2 hrs							
	Starting N	/lethod	Recoil Starter							
				1 Coupling Set (50 mm)	1 Coupling Set (50mm)					
			2 Coupling Set	1 Coupling Set (65 mm)	1 Check Plate (50mm)					
			3 Hose Bands (ϕ 60)	2 Hose Bands (ϕ 80)	2 Check Coupling Set (25mm)					
St	andard Ac	cessories	1 Strainer	1 Hose Band (ϕ 60)	2 Hose Nipple (φ 25)					
			1 Engine Tool Set	1 Strainer (65 mm)	1 Engine Tool Set					
				1 Engine Tool Set						
N	et Weight		31 kg (68.3 lbs)	44 kg (97 lbs)	31 kg (68 lbs)					
G	ross Weigh	nt	34 kg (74.9 lbs)	46 kg (101 lbs)	34 kg (74.9 lbs)					
Di	mensions L>	«W×H (mm)	$535 \times 405 \times 440$	568 × 482 × 518	535 × 405 × 455					
Pa	acking Unit	t		1						

Suitable for Washing & **Light Irrigation**





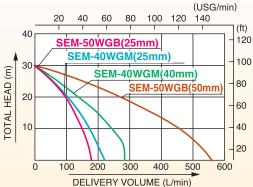






■ Performance Curve











	Model	SEM-25L	SEM-25FGM*	SEM-40WGM*	SEM-50WGB*
	Connection Dia	05	- (411)	Suction:40 mm (1½")	Suction:50 mm (2")
	Connection Dia	25 mm	1 (1")	Discharge:40 mm (11/2")/25 mm (1")	Discharge:50 mm (2")/25 mm (1")
Д	Connection Thread		Outer Pipe		
PUM	Total Head	35 m (115 ft)	29 m (95 ft)	30 m (98 ft)	28 m (92 ft)
	Delivery Volume	115 L/min (30 USG/min)	135 L/min (35 USG/min)	40mm:270 L/min (61 USG/min)	50mm:560 L/min (148 USG/min)
	Delivery volume	113 E/IIIII (30 030/IIIII)	100 E/IIIII (00 000/IIIIII)	25mm:210 L/min (55 USG/min)	25mm:185 L/min (49 USG/min)
	Max. Suction Lift		8 m	(26 ft)	
	Type Forced Air-cooled 2-stroke Gasoline Eng		Forced	e Engine	
	Model	Mitsubishi TU26	Mitsubis	Mitsubishi GB13G	
	Displacement	25.6 cc	79.	181 cc	
빌	Rated Output	_	1.3 kW (1.8 F	PS) / 3600 rpm	3.4 kW (4.7 PS) / 3600 rpm
ENGI	Max. Output	1.03 kW (1.4 PS) / 7500 rpm	1.7 kW (2.4 F	PS) / 3600 rpm	4.6 kW (6.3 PS) / 4000 rpm
ш	Fuel	2 Stroke Mixed Gas and Oil (25:1)	Automotive U	nleaded Gasoline	
	Fuel Tank Capacity	0.6 L (0.16 USG)	1.4 L (0.	.37 USG)	3.4 L (0.89 USG)
	Continuous Operating Time	Approx. 1 hrs	Approx	. 1.5 hrs	Approx. 1.9 hrs
	Starting Method		Recoil	Starter	
St	andard Accessories	1 Stra	niner, 2 Hose Couplings, 3	3 Hose Bands, 1 Engine Too	ol Set
Ne	et Weight	5.0 kg (11.0 lbs)	17.2 kg (37.9 lbs)	20 kg (44.11 lbs)	27 kg (59.5 lbs)
Gı	oss Weight	6.5 kg (14.3 lbs)	19.2 kg (42.3 lbs)	22 kg (48.5 lbs)	30 kg (66.1 lbs)
Di	mensions L×W×H (mm)	330 × 245 × 325	485 × 325 × 385		510 × 418 × 446
Packing Unit				1	

HIDELS PUMPS Powered by 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.





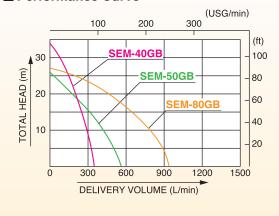








■ Performance Curve





	Model	SEM-40GB*	SEM-50GB*	SEM-80GB*				
UMP	Connection Dia	40 mm (1½")	50 mm (2")	80 mm (3")				
	Connection Thread		Outer Pipe Thread BSP					
	Total Head	34 m (111 ft)	26 m (85 ft)	27 m (88 ft)				
₽	Delivery Volume	350 L/min (92 USG/min)	560 L/min (148 USG/min)	940 L/min (248 USG/min)				
	Max. Suction Lift							
	Type	For	ced Air-cooled 4-stroke Gasoline En	gine				
	Model	Mitsubisl	Mitsubishi GB18G					
	Displacement							
끶	Rated Output	3.4 kW (4.7 F	3.4 kW (4.7 PS) / 3600 rpm					
ENGINE	Max. Output	4.6 kW (6.3 PS) / 4000 rpm						
	Fuel							
	Fuel Tank Capacity		3.4 L (0.89 USG)					
	Continuous Operating Time	Approx	x. 2 hrs	Approx. 1.7 hrs				
	Starting Method		Recoil Starter					
St	andard Accessories	1 Strainer, 2 H	lose Couplings, 3 Hose Bands, 1	Engine Tools Set				
N	et Weight	27.1 kg (59.7 lbs)	25.9 kg (57.1 lbs)	30.9 kg (68.1 lbs)				
G	ross Weight	29.1 kg (64.1 lbs)	28.9 kg (63.7 lbs)	35.9 kg (79.1 lbs)				
D	mensions L×W×H (mm)	510 × 418 × 446	510 × 418 × 446	529 × 419 × 492				
Pa	acking Unit		1					

[★]Japanese Domestic Model

Strong & Durable Robin(CC) 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



Model Connection Dia Connection Thread Total Head Delivery Volume Max. Suction Lift Type Model Model Displacement SE-80X 80mm(3") Outer Pipe Thread BSP 24 m (78 ft) 860 L/min (227 USG/min) 8m (26 ft) Forced Air-Cooled 4-stroke Gasoline Engine Robin (CC) EY20 183 cc
Connection Thread Total Head Delivery Volume Max.Suction Lift Type Model Model Displacement Connection Thread Outer Pipe Thread BSP 24 m (78 ft) 860 L/min (227 USG/min) 8m (26 ft) Forced Air-Cooled 4-stroke Gasoline Engine Robin (CC) EY20 183 cc
Total Head 24 m (78 ft) Delivery Volume 860 L/min (227 USG/min) 8m (26 ft) Type Forced Air-Cooled 4-stroke Gasoline Engine Model Robin (CC) EY20 Displacement 183 cc
Delivery Volume Max.Suction Lift Type Model Displacement 860 L/min (227 USG/min) 8m (26 ft) Forced Air-Cooled 4-stroke Gasoline Engine Robin (CC) EY20 183 cc
Max.Suction Lift Type Forced Air-Cooled 4-stroke Gasoline Engine Model Robin (CC) EY20 Displacement 183 cc
Type Forced Air-Cooled 4-stroke Gasoline Engine Model Robin (CC) EY20 Displacement 183 cc
Model Robin (CC) EY20 Displacement 183 cc
Displacement 183 cc
Rated Output 2.6 kW (3.5PS) / 3600 rpm
Rated Output 2.6 kW (3.5PS) / 3600 rpm Max. Output 3.7 kW (5.0PS) / 4000 rpm
Fuel Automotive Unleaded Gasoline
Fuel Tank Capacity 3.8 L (1.1USG)
Continuous Operating Time Approx. 3 hrs
Starting Method Recoil Starter
Accessories 1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 Engine Tool Set
Net Weight 28 kg (61.7 lbs)
Gross Weight 30.1 kg (66.4 lbs)
Dimensions L×W×H (mm) $525 \times 370 \times 472$
Packing Unit 1

Yanmar Diesel Clear Water Pumps

- Long operating time with large fuel tank.
- Suitable for mining, shipboard, fire-fighting and construction.













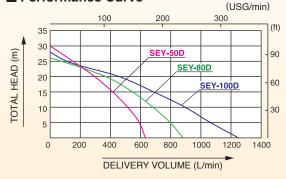






SEY-100D

■ Performance Curve



Model	SEY-50D	SEY-80D	SEY-100D				
Connection Dia	50mm(2")	80mm(3")	100mm(4")				
Connection Thread		Outer Pipe Thread BSP					
Total Head	30 m (98 ft)	26 m (85 ft)	28 m (91 ft)				
Delivery Volume	630 L/min (166 USG/min)	880 L/min (232 USG/min)	1250 L/min (330 USG/min)				
Max. Suction Lift		8 m (26 ft)	8 m (26 ft)				
Туре	Fo	rced Air-Cooled 4-stroke Diesel Engi	ne				
Model	Yanmar	L48N6	Yanmar L70N6				
Displacement	219	Эсс	320cc				
Rated Output	3.1 kW (4.2F	4.4 kW (6.0PS) / 3600 rpm					
Max. Output	3.5 kW (4.7)	4.9 kW (6.7PS) / 3600 rpm					
Fuel							
Fuel Tank Capacity		11L (2.9 USG)					
Continuous Operating Time	Approx.	10.6 hrs	Approx. 7.7 hrs				
Starting Method		Recoil Starter					
tandard Accessories	1 Strainer, 2 l	Hose Couplings, 3 Hose Bands, 1 En	gine Tool Set				
et Weight	44.7 kg (98.5 lbs)	46.7 kg (103 lbs)	67 kg (145 lbs)				
ross Weight	49.3 kg (108.7 lbs)	51.7 kg (114 lbs)	75.8 kg (167 lbs)				
imensions L×W×H (mm)	548 × 513 × 698	548 × 513 × 698	668 × 513 × 788				
acking Unit	1						
	Model Connection Dia Connection Thread Total Head Delivery Volume Max. Suction Lift Type Model Displacement Rated Output Max. Output Fuel Fuel Tank Capacity Continuous Operating Time	Connection Dia Connection Thread Total Head Delivery Volume Max. Suction Lift Type Model Displacement Rated Output Max. Output Fuel Fuel Tank Capacity Continuous Operating Time Starting Method tandard Accessories et Weight Total Head 30 m (98 ft) 630 L/min (166 USG/min) 640 L/min (166 USG/min	Model SEY-50D SEY-80D Connection Dia 50mm(2") 80mm(3") Connection Thread Outer Pipe Thread BSP Total Head 30 m (98 ft) 26 m (85 ft) Delivery Volume 630 L/min (166 USG/min) 880 L/min (232 USG/min) Max. Suction Lift 8 m (26 ft) Type Forced Air-Cooled 4-stroke Diesel Enging Model Yanmar L48N6 Displacement 219cc Rated Output 3.1 kW (4.2PS) / 3600 rpm Max. Output 3.5 kW (4.7PS) / 3600 rpm Fuel Diesel fuel Fuel Tank Capacity 11L (2.9 USG) Continuous Operating Time Approx. 10.6 hrs Starting Method Recoil Starter tandard Accessories 1 Strainer, 2 Hose Couplings, 3 Hose Bands, 1 English et Weight 44.7 kg (98.5 lbs) 46.7 kg (103 lbs) ross Weight 49.3 kg (108.7 lbs) 51.7 kg (114 lbs) imensions L×W×H (mm) 548 x 513 x 698 548 x 513 x 698				

For Sandy and Muddy Water

- Long operation time with large fuel tank.
- · Suitable for mining and construction site.











· 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 6.5 times more erosion resistance than Standard FC or Cast Iron.

■ Outstanding Features

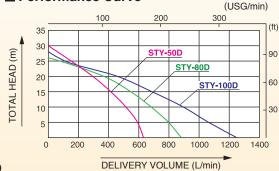
- Suitable for Sandy and Muddy Water usage
- Particles up to 9 mm can be pumped through
- · Guaranteed suction lift of 8 meters
- · Long bolt assembly for easy maintenance







■ Performance Curve



_ 0,000.	- Opening at on								
	Model	STY-50D	STY-80D	STY-100D					
Conne	ection Dia	50 mm (2")	80 mm (3")	100mm (4")					
Conne	Connection Thread		Outer Pipe Thread BSP						
Total F	Head	30 m (98 ft)	26 m (85 ft)	28 m (91 ft)					
	ry Volume	630 L/min (166 USG/min)	880 L/min (232 USG/min)	1250 L/min (330 USG/min)					
Max. S	Suction Lift		8 m (26 ft)						
Type		Fo	rced Air-Cooled 4-stroke Diesel Engi	ne					
Model		Yanmar	Yanmar L70N6						
Displa	cement	219	СС	320 cc					
யு Rated	Output	3.1 kW (4.2F	4.4 kW (6.0PS) / 3600 rpm						
Max. C	Output	3.5 kW (4.7F	PS) / 3600 rpm	4.9 kW (6.7PS) / 3600 rpm					
Z Fuel									
Fuel Ta	ank Capacity		11 L (2.9USG)						
Continu	uous Operating Time	Approx.	10.6 hrs	Approx. 7.7 hrs					
Startin	ng Method		Recoil Starter						
Standard	Accessories	1 Strainer, 2 I	Hose Couplings, 3 Hose Bands, 1 En	gine Tool Set					
Net Weig	ht	45.1 kg (99.4 lbs)	47.7 kg (105 lbs)	68.6 kg (151 lbs)					
Gross We	eight	50.3 kg (111 lbs)	53.3 kg (118 lbs)	77.5 kg (171 lbs)					
Dimensio	ns L×W×H (mm)	548 × 513 × 698	548 × 513 × 698	668 × 513 × 788					
Packing Unit		1							
Continu Startin Standard Net Weigl Gross We Dimensio	uous Operating Time ng Method Accessories ht eight ns L×W×H (mm)	1 Strainer, 2 I 45.1 kg (99.4 lbs) 50.3 kg (111 lbs)	10.6 hrs Recoil Starter Hose Couplings, 3 Hose Bands, 1 En 47.7 kg (105 lbs) 53.3 kg (118 lbs)	gine Tool Set 68.6 kg (151 lbs) 77.5 kg (171 lbs)					

Heavy Duty Trash Pumps

- Long operation time with large fuel tank.
- Suitable for mining and construction site.











■ Outstanding Features

- Excellent Seal Durability
- · Thoughtful Design
- · Light Weight & Compact Design
- High Self-priming Performance





■ Performance Curve



Specification								
	Model	KTY-50D	KTY-80D	KTY-100D				
	Connection Dia	50mm (2")	80mm (3")	100mm (4")				
_	Connection Thread		Outer Pipe Thread BSP					
UMP	Total Head	24 m (79 ft)	23 m (75 ft)	27 m (89 ft)				
₫	Delivery Volume	650 L/min (171 USG/min)	1250 L/min (330 USG/min)	1600 L/min (422 USG/min)				
	Max. Suction Lift		8 m (26 ft)					
	Туре	Fo	rced Air-Cooled 4-stroke Diesel Engi	ine				
	Model	Yanmar L48N6	Yanmar L70N6	Yanmar L100N6				
	Displacement	219cc	320cc	435cc				
끶	Rated Output	3.1 kW (4.2 PS) / 3600 rpm	4.4 kW (6.0 PS) / 3600 rpm	6.6 kW (9.0PS) / 3600 rpm				
ENGINE	Max. Output	3.5 kW (4.7 PS) / 3600 rpm	4.9 kW (6.7 PS) / 3600 rpm	7.4 kW (10 PS) / 3600 rpm				
	Fuel		Diesel fuel					
	Fuel Tank Capacity	Tank size	e: 13L (3.4USG) / Usage level: 11L (2.9USG)				
	Continuous Operating Time	Approx. 10.6 hrs	Approx. 7.7 hrs	Approx. 5.0 hrs				
	Starting Method		Recoil Starter					
St	andard Accessories	1 Strainer, 2 H	Hose Couplings, 3 Hose Bands, 1 Er	ngine Tool Set				
N	et Weight 63.4 kg (139.8 lbs)		82.4 kg (181.7 lbs)	108.5 kg (239.2 lbs)				
G	ross Weight	70.1 kg (154.5 lbs)	90.3 kg (199.1 lbs)	118.4 kg (261 lbs)				
Di	mensions L×W×H (mm)	708 × 513 × 713	723 × 523 × 768	758 × 548 × 778				
Pa	acking Unit	1						

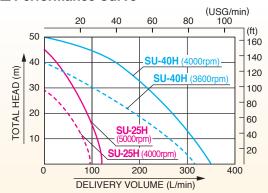


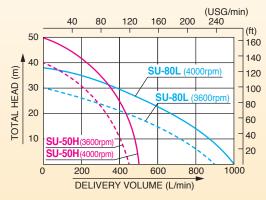
Pabool Pumps are Designed for Sprinkler System & General Irrigation



SU-50H

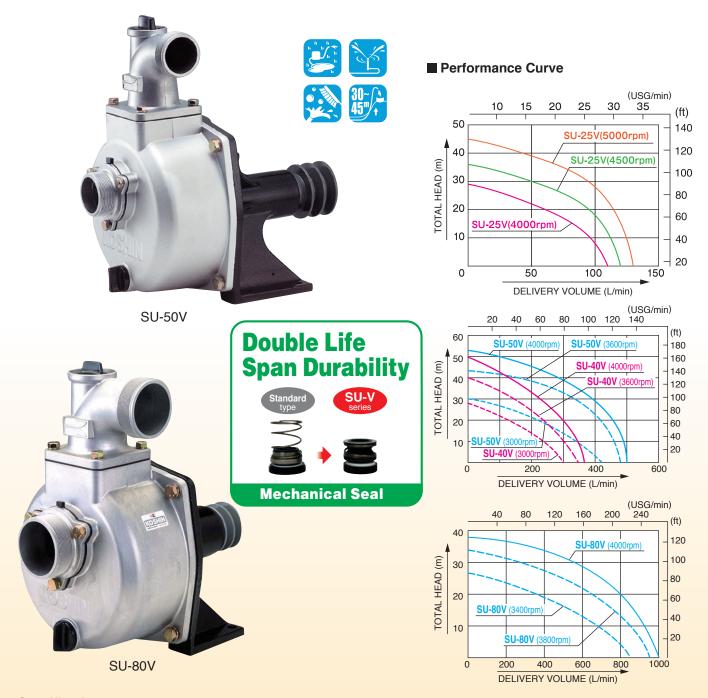
■ Performance Curve



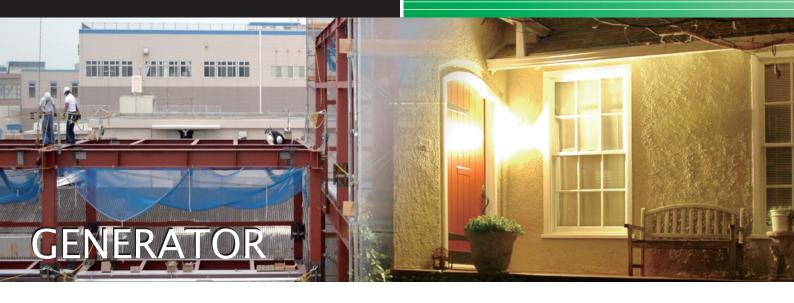


Model	SU-	25H	SU-	40H	SU-50H		SU-80L		
Connection Dia	25 mi	m (1")	40 mm	40 mm (1½")		50 mm (2")		80 mm (3")	
Connection Thread				Outer Pipe	Thread BSP				
Revolution	4000 rpm	5000 rpm	3600 rpm	4000 rpm	3600 rpm	4000 rpm	3600 rpm	4000 rpm	
Total Head	29 m (95 ft)	45 m (147 ft)	40 m (131 ft)	50 m (164 ft)	40 m (131 ft)	50 m (164 ft)	30 m (98 ft)	38 m (124 ft)	
Max. Suction Lift				8 m (2.6ft)					
Delivery Volume	96 L/min (25 USG/min)	120 L/min (31 USG/min)	315 L/min (83 USG/min)	350 L/min (92 USG/min)	450 L/min (118 USG/min)	500 L/min (132 USG/min)	900 L/min (237 USG/min)	1000 L/min (264 USG/min)	
Output	1.5 kW (2 PS)	2.2 kW (3 PS)	2.2 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 Straine	1 Strainer, 2 Coupling Sets, 3 Hose Bands					
Net Weight	8.5 kg (19.9	9 lbs)(1unit)	11 kg (26.5	b lbs)(1unit)	14 kg (3	3.1 lbs)	19.5 kg (19.5 lbs)		
Gross Weight	35 kg (77.1 lbs)(4units)		24 kg (52.9	lbs)(2units)	15 kg (33.0 lbs)		20.5 kg (45.1 lbs)		
Dimensions L×W×H (mm)	615 × 449 × 235		449 × 35	59 × 259	$382 \times 250 \times 266$		414 × 277 × 305		
Packing Unit	4	1	2						

Powerful Pressure & Enhanced Durability



Specification												
Model		SU-25V			SU-40V			SU-50V			SU-80V	
Connection Dia	25 mm (1")			4	0 mm (1½	ź")		50 mm (2")	80 mm (3")		
Connection Thread					0	uter Pipe	Thread BS	SP				
Revolution	4000 rpm	4500 rpm	5000 rpm	3000 rpm	3600 rpm	4000 rpm	3000 rpm	3600 rpm	4000 rpm	3400 rpm	3800 rpm	4000 rpm
Total Head	29 m (95 ft)	36 m (118 ft)	45 m (147 ft)	28 m (91 ft)	40 m (131 ft)	50 m (164 ft)	30 m (98 ft)	42 m (137 ft)	53 m (173 ft)	27 m (88 ft)	34 m (111 ft)	38 m (124 ft)
Delivery Volume	110 L/min (29 USG/min)		130 L/min (34 USG/min)		350 L/min (92 USG/min)			480 L/min (127 USG/min)				
Max. Suction Lift	7 m (23 ft)	8 m (26 ft)	8 m (26 ft)	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)	2.2 kW (3 PS)	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)			8.6 kW (11.5 PS)
Standard Accessories				1 S	trainer, 2	2 Coupling	g Sets, 3	B Hose Ba	nds			
Net Weight	Net Weight 7.5 kg (16.5 lbs)		12.	5 kg (27.6	lbs)	15 kg (33.1 lbs)		22 kg (48.4 lbs)				
Gross Weight	8.5 kg (18.7 lbs)		13.	5 kg (29.7	lbs)	16 kg (35.3 lbs)		24 kg (52.9 lbs)				
Dimensions LxWxH (mm)	335 × 195 × 210 360 × 212		0 × 212 × 1	× 240 392 × 250 × 280		434 × 277 × 378						
Packing Unit							1					



Durable and High Performance Generator

- ·High Fuel Efficiency
- •Ultimate Durability
 100% Copper Wire for Alternator
 Anti-Rusty fuel tank
 Full roll cage for ultimate protection

·Less Vibration & Quiet Operation









·All models have oil alert function.





GV-7600S

	Model	GV-3000	GV-7000S	GV-3200	GV-7600S				
	Phase		Sin	gle					
	Voltage Regulation	AVR							
	Rated Output	2 kVA	5 kVA	2.3 kVA	5.5 kVA				
	Maximum Output	2.2 kVA	5.5 kVA	2.5 kVA	6 kVA				
	AC Rated Frequency	5	0 Hz	60	Hz				
	Rated Voltage		220) V					
	Rated Ampere	9.1A	22.7 A	10.5 A	25 A				
~	DC Output		12 V/8	8.3 A					
Ö	Continuous Running Time rated load	9.5 h	7.5 h	6.3 h	5 h				
Æ	Tank Capacity	12.6 L	22.6 L	12.6 L	22.6 L				
GENERATOR	Receptacle	European socket, CEE 7/4, 2pcs	European socket, CEE 7/4, 1pc NEMA L6-30 Socket, 1pc	BS1363, 2pcs OR CEE 7/4, 2pcs	BS1363, 2pcs OR CEE NEMA 7/4 L6-30				
	Model	Koshin K210	Koshin K420	Koshin K210	Koshin K420				
岁	Туре		Air-cooled, 4-stroke,	OHV, single cylinder					
ENGINE	Displacement	212 cc	420 cc	212 cc	420 cc				
回	Oil Alert System		Stand	dard					
	Starting system	Recoil	Recoil/Electric starter	Recoil	Recoil/Electric starter				
В	attery	_	Maintenance-free type	_	Maintenance-free type				
W	/heel Kit	_	Standard	_	Standard				
N	et Weigh	42 kg (93 lbs)	85 kg (187 lbs)	42.6 kg (94 lbs)	85 kg (187 lbs)				
G	ross Weigh	44 kg (97 lbs)	87 kg (192 lbs)	45 kg (99 lbs)	89 kg (196 lbs)				
D	imensions L×W×H (mm)	615 × 445 × 457	$695 \times 534 \times 547$	615 × 445 × 457	$695 \times 534 \times 547$				
Pa	acking Unit		1						

^{*}GV-7000S/GV-7600S without battery

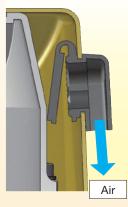


POWERFUL PERFOMANCE! **PONSTAR PBX Series**



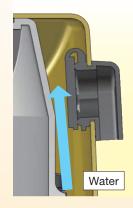
Trouble free operation, even in low water or dry-run situations!

With air valve function



The PBX dry-run capability

When the PBX pump is running dry (without water), the motor is cooled by air, forced through the pump by the impeller and exiting the pump via the air valve. Preventing the motor from overheating.



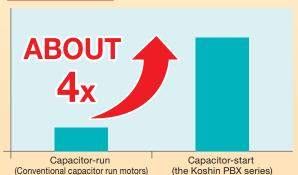
Pump operating and discharging water

When the pump operates normally, the air valves will be closed by the water pressure inside the pump.

Extra Powerful Startup Torque!

The Koshin centrifugal force switch

Starting torque



(Conventional capacitor run motors)

Designed specifically for use in muddy and sandy water, using strong and durable materials





Optional parts

Float switch

When fitted with a (separately available) float switch, the pump can operate fully automatic.

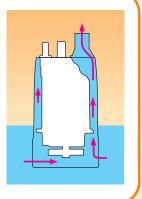




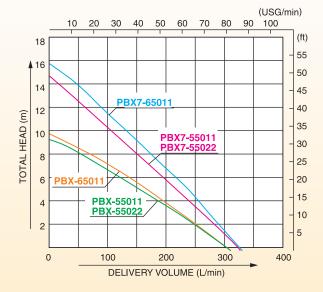


Effective Motor Cooling System

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



■ Performance Curve



	Model	PBX-55022	PBX-55011	PBX-65011	PBX7-55022	PBX7-55011	PBX7-65011		
PUMP	Connection Dia			50 mi	m (2")	m (2")			
	Total Head	9.5 m	(31 ft)	10 m (32.8 ft)	15 m	(50 ft)	16 m (54 ft)		
	Delivery Volume	31	10 L/min (4,870 GPI	H)	33	30 L/min (5,240 GPI	n (5,240 GPH)		
	Voltage	AC 220 V	AC 11	0 V	AC 220 V	AC 1	110 V		
~	Frequency	50 H	łz	60 Hz	50	Hz	60 Hz		
Ö	Rated Current	4.2 A	8.1 A	8.7 A	6.0 V		12.0 V		
МОТО	Output		400 W	750 W					
_	Consumption	680 W	690 W	750 W	1,250 W				
	Revolution	2800	rpm	3200 rpm	2800 rpm 3200 rpm				
	Туре			Condenser In	duction Motor				
	Power Cord			6 m (19.7 ft) o	r 10 m (32.8 ft)				
Ne	et Weight	15 kg (33 lbs)	15.5 kg (34 lbs)	15 kg (33 lbs)	15.5 kg (34 lbs)	15.5 kg (34 lbs)	16.5 kg (36 lbs)		
Gross Weigh		16 kg (35 lbs)	16.5 kg (36 lbs)	16 kg (35 lbs)	16.5 kg (36 lbs)	16.5 kg (36 lbs)	17.5 kg (37 lbs)		
Dir	mensions L×W×H (mm)			245 × 24	45 × 450				
Pa	cking Unit				1				

Great Durability

- · Pump up to 20mm water level
- · Easy maintenance









PX-55022

For Residual Water Up to 1 mm water level

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









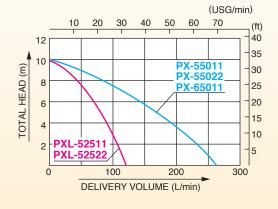
■ Applications

- 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
- *For clear water only



PXL-52522

■ Performance Curve



Invertible Delivery Flange

Just 2 bolts delivery flange is inverted





_									
	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	26	60 L/min (68 USG/mi	n)	1 USG/min)				
	Voltage	AC 110 V	AC 220 V	AC 1	10 V	AC 220 V			
	Frequency	50	Hz	60 Hz	50	Hz			
~	Rated Current*1	6.5 A	3.2 A	6.5 A	6.0 A	2.9 A			
Ϊ́	Output			400 W					
Q	Consumption	580 W	620 W	700 W	590 W	540 W			
_	Revolution	2900	rpm	3400 rpm	2900 rpm				
	Туре		Co	ndenser Induction Mo	otor				
	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 Ro 1 Hose		1 Rope (5 m (16.4 ft))	1 Hose Band, 1 Hose Nipple, 1 Coupling 1 Coupling Packing, 1 Rope (5 m (16.4ft)				
Net Weight		1	1 kg (24.2 lbs) (1 uni	12.7 kg (28 lbs) (1 unit)					
Gross Weight		25	5 kg (55.1 lbs) (2 unit	30 kg (66.1 lbs) (2 units)					
Dimensions L×W×H (mm)		490 × 248 × 409	490 × 248 × 409	508 × 259 × 380	505 × 260 × 417				
Packing Unit		2							

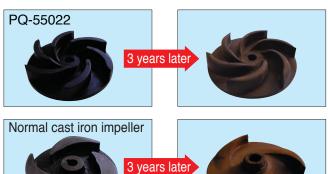
^{*1} Starting current is three times higher than rated current.

Triple Life span Compared with Cast Iron Impeller

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.













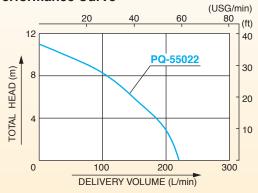






PQ-55022

■ Performance Curve



	•						
	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					
	Frequency	50 Hz					
~	Rated Current	2.7 A					
MOTOR	Output	400 W					
Q	Consumption	550 W					
2	Revolution	2800 rpm					
	Туре	Condenser Induction Motor					
	Power Cord	5 m (16.4 ft)					
St	tandard Accessories	1 Hose Band, 1 Rope (5 m (16.4 ft))					
Net Weight		11.5 kg (24.5 lbs)					
G	ross Weight	12.5 kg (27.5 lbs)					
D	imensions L×W×H (mm)	245 × 205 × 410					
P	acking Unit	1.					

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

■ Applications

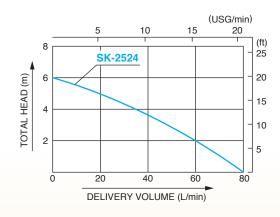
- Feeding or draining water in fish farms
- · Washing purpose
- · Draining bilge water

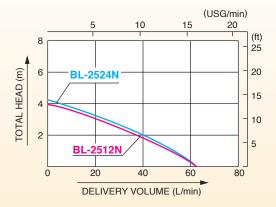




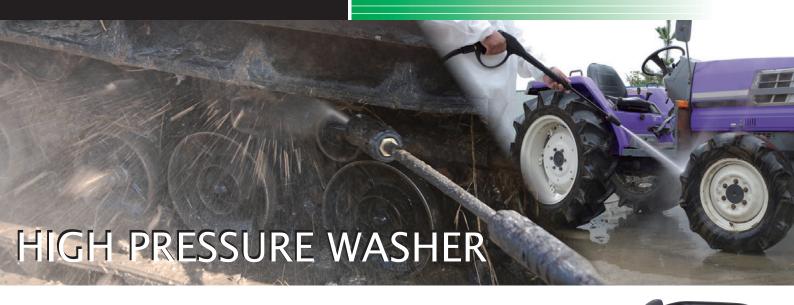


■Performance Curve





	•							
	Model	SK-2524	BL-2512N	BL-2524N				
_	Connection Dia		25 mm (1")					
PUMP	Total Head	6 m (19.6 ft)	4 m (13.1 ft)	4.2 m (13.8 ft)				
P	Delivery Volume	80 L/min (21 USG/min)	63 L/min (16 USG/min)					
	Voltage	DC 24 V	DC 12 V	DC 24 V				
	Frequency							
Œ	Rated Current	8.5 A	7.8 A	3.8 A				
Ö	Rating		Continuous	Continuous				
MOTO	Output	123 W	50 W					
_	Revolution	3000 rpm	5800 rpm					
	Life Span	Approx. 500 hrs	Approx. 500 hrs					
	Power Cord	5 m (16.4 ft)	2.95 m	(9.7 ft)				
St	andard Accessories	1 Coupling Set (ϕ 25) 1 Hose Nipple (ϕ 20) 1 Hose Band (ϕ 25) 1 Hose Band (ϕ 20) 1 Rope (5 m (16.4 ft))	1 Elbow					
N	t Weight 5.5 kg (12.2 lbs) (1 unit)		1.3 kg (2.2 lbs) (1 unit)					
G	ross Weight	11 kg (24.2 lbs) (2 units)	32 kg (70.5 lbs) (20 units)					
Di	mensions L×W×H (mm)	415 × 238 × 300	564 × 273 × 408					
Pa	acking Unit	2	2	0				



High Pressure Washer Powered by Koshin Engine

- 1.5M Self Priming Guarantee (vartically 1.5M)
 Self priming pump system capable of pumping up water from any water source
- Powered by Reliable Koshin Engine
 Koshin K180 and K210 engine for quiet, reliable performance
- Quick Couple Nozzle Set as Standard Accessory





















JCE-1510UK

Model		JCE-1408U	JCE-1408UDX	JCE-1510UK				
	Max. Pressure	14 /	15 MPa					
۵	Max. Volume	8 L/	10 L/min					
UMP	Recommended Feed-water	Clear water at 5 - 40 °C						
Ф	Max. Suction Lift	1.5 m						
	Necessary Volume of Engine Oil	120	450 cc					
	Туре	Forced Air-Cooled 4-stroke OHV Gasoline Engine						
	Model	Koshir	Koshin K210					
岁	Displacement	179	212 cc					
ENGINE	Fuel	Automotive Unleaded Gasoline						
Ш	Fuel Tank Capacity	3.6 L						
	Engine Oil	SAE 10W-30						
	Necessary Volume of Engine Oil	600 cc						
Ad	ccessories	1 Gun Nozzle (screw attachement type), 1 Straight/Fan shape nozzle, 1 Delivery hose (screw attachement type) (10 m), 2 Suction hoses (3m), 1 Strainer	1 Gun Nozzle (quick attachment type), 1 Delivery hose (quick attachment type) (10 m), 2 Suction hose (3m), 1 Strainer 5 Interchangeable nozzle: (1) 15° (2) 25° (3) 40° (4) point-blank (5) Detergent nozzle	1 Gun Nozzle (quick attachment type), 1 Delivery hose (quick attachment type) (10 m), 1 Strainer, 2 Suction hoses (3 m) 6 Interchangeable nozzle: (1) 15° (2) 25° (3) 40° (4) point-blank (5) Detergent nozzle (6) Rortary nozzle				
N	et Weight	25 kg (55 lbs)	32.5 kg (72 lbs)	36 kg (79 lbs)				
G	ross Weight	34.5 kg (76.0 lbs)	42.5 kg (93.7 lbs)	46.0 kg (101 lbs)				
Di	mensions L×W×H (mm)	540 × 435 × 525	710 × 400 × 530					
Pa	acking Unit	1						

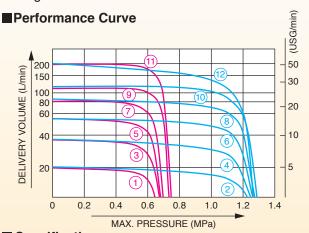


"GEAR PUMP" GL Series for Low Viscosity Oil

- · Safety by-pass function protects pump.
- · For oil transfer

■ Applications

- Kerosene
- Machine oil
- Heavy oil
- · Light oil





* Gasoline must not be used.

	Ороонно														
	Мо	del	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 mi	13 mm (½") 20 mm (¾")		25 mm (1") 32		32 mr	32 mm (11/4")		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					
	Max. Pressure	MPa	0.5	1	0.5	1	0.5	1	0.5	1		0.5	1	0.5	1
₽		kgf/cm ²	5	10	5	10	5	10	5	10		5	10	5	10
UMP	Delivery Volume	60 Hz	20 L	_/min	35 L	/min			80	80 L/min		123 L/min		200 L/min	
Δ.		(1800 rpm)	(5 US	G/min)	(9 US	G/min)	(14 USG/min)		(21 USG/min)		(1200 rpm)	(32 USG/min) ((52 USG/min)	
		50 Hz	17 L	_/min	29 L/min		46 L/min 6		66	66 L/min 50 Hz		100 L/min		165 L/min	
		(1500 rpm)	(4 US	G/min)	(7 USG/min)		(12 US	SG/min) (17 USG/min)		(1000 rpm)	(26 USG/min) (43 USG/m			min)	
	Material of Housing			ADC FC											
	Coupling			ZDC JIS							JIS				
	Pump Sha	ft Dia				φ 1	ϕ 18 mm				φ22 mm				
N	Net Weight		4.4	kg	4.6	kg	5 kg	8 kg	8.5	kg		22.5 kg	24 kg	26 kg	28.5 kg
IN			(10	lbs)	(10	lbs)	(11 lbs)	(16 lbs)	(19	lbs)		(50 lbs)	(53 lbs)	(57 lbs)	(63 lbs)
0	Gross Weight		4.8	kg	5.0	kg	5.6 kg	8.5 kg	9	kg		23.5 kg	25 kg	27 kg	29.5 kg
G			(11	lbs)	(11	bs)	(13 lbs)	(19 lbs)	(20	lbs)		(52 lbs)	(55 lbs)	(60 lbs)	(65 lbs)
D	Dimensions L×W×H (mm)		224 × 1	224 × 150 × 155 224 × 150 × 155 224×150×155 307×150×155 307 × 150 × 155 318 × 258 × 220 318 × 258 × 220							58 × 220				
Р	acking Unit								1						
G	(1500 rpm) Material of Housing Coupling Pump Shaft Dia Net Weight Gross Weight Dimensions LxWxH (mm)		4.4 (10 4.8 (11	kg lbs) kg lbs)	ADC ZDC 4.6 (10) 5.0 (11)	φ 1/kg lbs) kg lbs)	8 mm 5 kg (11 lbs) 5.6 kg (13 lbs)	8 kg (16 lbs) 8.5 kg (19 lbs)	8.5 (19 9 (20	kg lbs) kg lbs)	(1000 rpm)	22.5 kg (50 lbs) 23.5 kg (52 lbs)	FC JI \$\phi\$22 24 kg (53 lbs) 25 kg (55 lbs)	1S mm 26 kg (57 lbs) 27 kg (60 lbs)	28 (63 29 (65

"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)

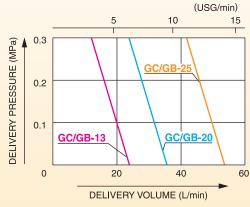
- Kerosene
- Light oil
- Machine oil
- Heavy oil
- Water





OIL Transfer

■ Performance Curve



Model	GC-13	GB-13	GC-20	GB-20	GC-25	GB-25
Gear Material			GC: Cast Iron / G	B: Brass		
Connection Dia	13 mr	n (½")	20 mr	n (¾")	25 mm (1")	
Delivery Volume (400 rpm)	21 L/min (5	USG/min)	37 L/min(9	USG/min)	55 L/min (14 USG/min)	
Delivery Pressure	0 - 0.3 MPa (0 - 3 kg/cm²)					
Max. Suction Lift	Max. 4 m (13.1 ft)					
Power	200	W	400) W	750) W
Pulley	5" (125n	nm) × A1	6" (150m	nm) × A1	8" (200m	nm) × A1
Net Weight	4 kg (8.8 ll	os) (1 unit)	6 kg (13.2	bs) (1 unit)	11 kg (24.3	lbs) (1 unit)
Gross Weight	17.5 kg (38.6	lbs) (4 units)	25 kg (55.1	bs) (4 units)	22.5 kg (49.6	lbs) (2 units)
Dimensions L×W×H (mm)	391 × 20	36 × 167	482 × 25	52 × 179	402 × 26	67 × 250
Packing Unit	4		2	2		

"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



*Gasoline must not be used.

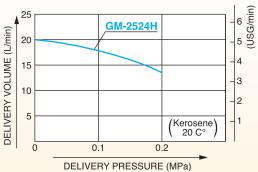
■ Specification

Model		GM-2524H	
	Dia of Hose Inlet	25 mm (1")	
	Dia of Hose Outlet	20 mm (¾")	
PUMP	Connection Thread	Inner Pipe Thread	
PU	Max. Delivery Pressure	0.2 MPa (2 kgf/cm ²)	
	Delivery Volume	20 L/min (5 USG/min)	
	Applicable Viscosity	800 cst	
	Voltage	DC 24 V	
)R	Rated Current	16 A	
MOTOR	Output	200 W	
ĭ	Revolution	6200 rpm	
	Rating	25 min	
Po	wer Cord	5 m (16 ft)	
Ne	et Weight	8.5 kg (19 lbs)	
Gr	oss Weight	9.2 kg (21 lbs)	
Di	mensions L×W×H (mm)	310 × 178 × 253	
Packing Unit		1	



E-type Hose Set for GM Pumps Suction Dia: 25 mm (1") × 2 m (6.5 ft) · Discharge Dia: 20 mm (¾") × 2 m (6.5 ft) 1 Nozzle, 1 Strainer, 2 Joints

■Performance Curve



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







* Gasoline must not be used.



■ Specification

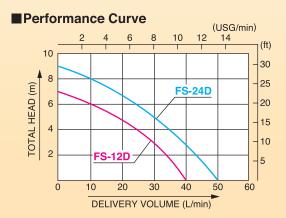
Model	FS-12D	FS-24D	
Connection Dia	20 mr	n (¾")	
Total Head	7 m (23 ft)	9 m (30 ft)	
Delivery Volume	40 L/min (10 USG/min)	50 L/min (13 USG/min)	
Max. Suction Lift	3 m (9.8 ft)	
Voltage	DC 12 V	DC 24 V	
Rated Current	15 A	8 A	
Output	80 W	90 W	
Revolution	7300) rpm	
Net Weight	4.5 kg (10	lbs) (1 unit)	
Gross Weight	25 kg (55 lbs) (5 units)		
Dimensions L×W×H (mm)	780 × 305 × 227		
Packing Unit	5		

T-type Hose Set for FS Pumps Suction Dia: 20 mm (¾") ×

2 m (6.5 ft) · Discharge Dia:

20 mm (¾") × 2 m (6.5 ft)

• 1 Nozzle, 1 Strainer, 2 Joints



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

- Low viscosity oil
- Heavy fuel oil A
- Kerosene
- DieselLight oil

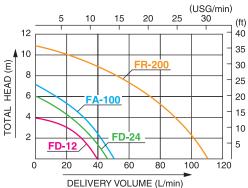














★ These pumps are not designed for use with liquids with low flash-point, such as gasoline, etc.

	Model	FD-12	FD-24	FA-	100		FR-200	
	Connection Dia		20 mm ((3/4")		32	2 mm (1¼")	
₽	Connection Thread			Inner Pipe TI	hread			
PUMP	Total Head	4 m (13 ft)	6 m (19 ft)	7 m (23 ft)	1	1 m (36 ft)	
_	Delivery Volume	40 L/min (10 USG/min)	45 L/min (12 USG/min)	50 L/min (1	3 USG/min)	110 L/min	(29 USG/min)	
	Туре		En	closed Fan-Cooled	closed 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	
<u>ب</u>	Rated Current	14 A	7 A	2.7 A	1 A	5 A	2.5 A	
MOTOR	Output	utput 80 W 90 W 120 W		200 W				
ž	Revolution	6000 rpm	6700 rpm	7350) rpm	6200 rpm		
	Rating			Continuo	ous			
	Power cord			Oil-Proof Co	ord 5 m			
S	uction Pipe		920)mm			922mm	
D	elivery Hose	1 Oil-Proof Rubber Hose (ϕ 20 mm (ϕ 3/4") × 2 m)		1 Oil-Proof Rubber Hose (ϕ 32 mm(ϕ 1¼") × 2 m)				
Ν	et Weight	Weight 8 kg (17.6 lbs) (1 unit		lbs) (1 unit)		12.5 kg	(27.6 lbs) (1 unit)	
G	ross Weight	ght 20 kg (44.1 lk		lbs) (2 units)		30 kg (66.1 lbs) (2 units)	
D	mensions L×W×H (mm)	1218 × 281		81 × 157		121	8 × 281 × 157	
Р	acking 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

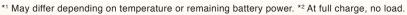
- Kerosene
- Diesel



* Gasoline must not be used.

■ Specification

Model	FP-25	FP-2512	SFP-2518*3
Connection Dia		25 mm (1")	
Total Head	3.5 m (11 ft)	2.8 m (9 ft)	3.5m (11 ft)
Delivery Volume	20 L/min (5.3 USG/min)	18 L/min (4.7 USG/min)	20 L/min (5.3 USG/min)
Voltage	AC 100 V AC 220 V	DC 12 V	DC-18V 2.0Ah (Li-ion)
Frequency	50 Hz	/ 60 Hz	
Charging time *1	_	_	Approx. 70 min
Operating time *2	_		Approx. 90 min
Power Code	4 m (13 ft)	
Suction Pipe		950 mm	
Delivery Hose		φ25 mm × 1.5 m	
Net Weight	2.7 kg (6.1 lbs)	2 kg (2.2 lbs)	1.8kg (3.9lbs)
Gross Weight	3.8 kg (8.3 lbs)	3.1 kg (6.8 lbs)	3.4kg (7.4lbs)
Dimensions LxWxH (mm)	1180 × 225 × 115		1155 × 220 × 120
Packing Unit	1		



SO-25

For High

Viscosity Oil

(Up to 2000 cst)

· Specially designed for dispensing oil at

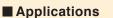
service stations.

"HIGH LITER PUMP" **High Volume**

· Delivers 1 L per rotation.

· Mesh strainer can filter fine dust.

· Applicable for low viscosity oil.



· High viscosity oil





■ Applications

- Diesel
- Kerosene
- · Heavy fuel oil A



⋆Oil temperature is over 10°C

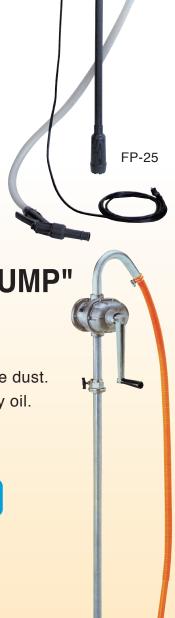


■ Specification	
Model	LP-32
Delivery Volume	1 L / 1 Rotation, (Normal Use) 100 L/min (26 USG/min)
Suction Pipe	ϕ 32 × 956 mm
Delivery Hose	ϕ 32 × 1280 mm
Strainer	#60 with Mesh, Polyethylene
Net Weight	8 kg (17.6 lbs) (1 unit)
Gross Weight	33.5 kg (73.8 lbs) (5 units)
Dimensions L×W×H (mm)	1127 × 242 × 280
Packing Unit	5

LP-32



- Specification	
Model	SO-25
Delivery Volume	0.5 L/Stroke (0.1 USG/Stroke)
Suction Pipe	1038 mm
Net Weight	5.1 kg (11.2 lbs) (1 unit)
Gross Weight	35 kg (77 lbs) (5 units)
Dimensions L×W×H (mm)	1420 × 300 × 165
Packing Unit	5

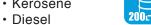


"HAND ROTARY PUMP" **Compact in Design & Light Weight**

· Applicable for low viscosity.

■ Applications

- Heavy fuel oil A
- Kerosene



*Oil temperature is over 10°C



■ Specification

Model	SB-20	SB-25	
Delivery Volume	20 L (5 USG) / 105 Rotations	20 L (5 USG) / 72 Rotations	
Impeller Material	PPS		
Suction Pipe	1001 mm	1038 mm	
Delivery Hose	φ 20 × 1100	ϕ 25 × 1280	
Net Weight	3.8 kg (8.4 lbs) (1 unit)	5.8 kg (12.8 lbs) (1 unit)	
Gross Weight	24 kg (52.9 lbs) (6 units)	25 kg (55.1 lbs) (4 units)	
Dimensions LxWxH (mm)	1050 × 235 × 130	1075 × 192 × 205	
Packing Unit	6	4	



"BIG AUTO PUMP" Light weight & **Economical to Use**

Made of strong plastics.

Applications (PP-25)

- · Dispensing small volumes of liquid
- · Heavy fuel oil A
- Kerosene
- Diesel
- Water

(PP-25C) Solvent

Wine







■ Specification

PP-25	PP-25C		
20 L/min (5 USG/min)			
Polyethylene			
1190 mm			
878 mm			
φ 25 × 1162 mm			
0.4 kg (0.9 lbs) (1 unit)			
11 kg (24.2 lbs) (20 units)			
1225 × 450 × 255			
20			
	20 L/min (5 Polyeti 1190 878 \$\phi 25 \times 1 0.4 kg (0.9) 11 kg (24.2 lk 1225 \times 4		

■ PP-25C Chemical Compatibility Rating Information

riading information		
Rating Scale		
0	No Effect	
△ Moderate Effect		
×	Not Recommended	
NI	Information Not Available	

_ N	Information Not Available	
	Chemical	Detino
(100	% concentration unless noted)	Rating
Α	Acetone	×
	Ammonium Hydroxide	N
С	Chlorine	0
D	Deionized Water	Δ
	Diesel Fuel	0
Е	Ethanol	0
G	Gasoline	Δ
	Glycol	N
Н	Hydrochloric Acid (20%)	0
	Hydrochloric Acid (37%)	0
	Hydrochloric Acid (100%)	0
ı	Isopropyl Alcohol	N
K	Kerosene	0
L	Lacquer Thinner	×
M	Methanol	0
	Methyl Chloride	×
	Methyl Ethyl Ketone	X
	Mineral Spirits	N
	Motor Oil	0
N	Nitric Acid (20%)	Δ
	Nitric Acid (50%)	Δ
	Nitric Acid (Concentrated)	Δ
0	Oil, Hydraulic	0
Р	Paint	×
	Phosphoric Acid (< 40%)	0
	Phosphoric Acid (≥ 40%)	0
S	Salt Water	0
	Seawater	0
	Sodium Hypochlorite	N
	Sodium Hydroxide (20%)	N
	Sodium Hydroxide (50%)	N
	Sodium Hydroxide (80%)	N
	Sulfuric Acid (<10%)	0
	Sulfuric Acid (10-75%)	0
	Sulfuric Acid (75-100%)	0
W	Water	0
Х	Xylene	Δ

PP-25C

PP-25

"PACO-PET" Plastic Syphon Pumps

■ Applications

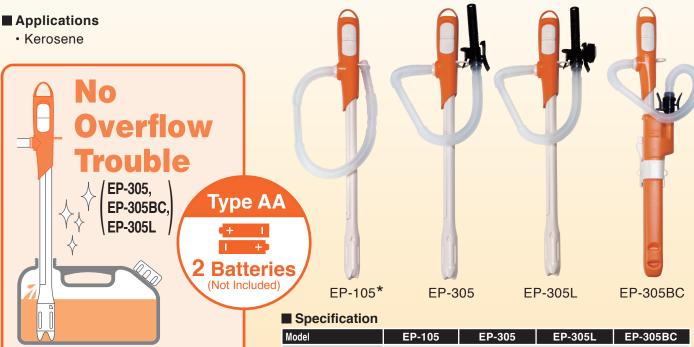
- Kerosene
- Gasoline
- · Diesel oil
- Solvent
- Water (Non-potable)

■ Specification

Model	PH-10	PH-20
Delivery Volume	6.7 L/min (1 USG/min)	11.5 L/min (3 USG/min)
Pump Length	517 mm (20")	613 mm (24")
Suction Pipe	385 mm	410mm
Delivery Hose	545 mm	572 mm
Gross Weight	11.5 kg (25 lbs) (120 units)	10.5 kg (23 lbs) (60 units)
Dimensions L×W×H (mm)	$685 \times 355 \times 608$	$800 \times 345 \times 495$
Packing Unit	120	60



"MAMA AUTO" Plastic Pumps Operated by Dry Cell Battery

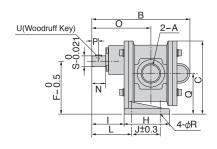


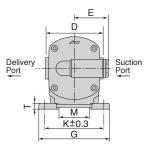


Specification								
Model	EP-105	EP-305	EP-305L	EP-305BC				
Delivery Volume		12 L/min (3	USG/min)					
Pump Length		547 mm (21")						
Suction Pipe		343 mm						
Delivery Hose	590 mm							
Stop Sensor		\circ	\circ	0				
Accessories			Night Light	Case				
Case Length				333 mm (13")				
Power	2 ×	1.5 V AA Batte	ries (Not Include	ed)				
Gross Weight	5.4 kg (12 lbs) (20 units)	5.9 kg (13 lbs)(20 units)	6.2 kg (14 lbs)(20 units)	5.1 kg (11 lbs)(12 units)				
Dimensions LxWxH (mm)	3	5	290 × 280 × 615					
Packing Unit		20		12				

GEAR PUMP

GL—



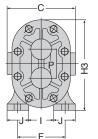


Type	Α	В	С	D	Е	F	G	Н	- 1	J	K	L	M
GL-13-□	G1/2"	189	131	108	64.5	95	138	73	71	40	116	87	58
GL-20-□	G¾"	196	131	108	64.5	95	138	73	71	40	116	87	58
GL-25-□	G1"	208	131	108	64.5	95	138	73	71	40	116	87	58
GL-32-□	G1/4"	222	131	108	64.5	95	138	73	71	40	116	87	58
GL-40-□	G1/2"	265	189	148	89.5	136	184	112	86	70	156	111	100
GL-50-□	G2"	290	189	148	89.5	136	184	112	86	70	156	111	100

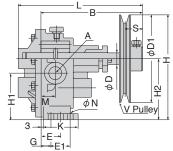
11 18

18 12

	V	W	Χ	
GL-13-				
GL-20-□	69	55	/	
GL-25-5			/	
GL-25-10	02	125	50	
GL-32-□	93	123	50	
GL-40-5	93	125	50	
GL-40-10	100	140	63	
GL-50-5	103	140	03	
00 .0				



GB— GC—



Type	Α	L	В	С	D	D1	Н	H1	H2	Н3
GC-13/GB-13										
GC-20/GB-20	G3/4"	201	165	130	20	152	179	78	103	153
GC-25/GB-25	G1"	247	204	142	22	203	230	91	129	191

F	J	-	K	Е	G	E1	N	М	Р	S	Pulley
70	32	36	51	33	_	_	9	21	41	25	A1
											A1
114	38	65	75		30	34	10	33	63	24	A1

GL-13-□, GL-20-□, GL-25-5



Ν 0 Р Q R S

30

30

30

30

113 15

130 15

122

117 | 15 | 75

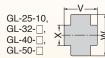
15

75 11 18 12

75 11

75 11 18 12

40 | 158 | 19 | 106 | 11 | 22 | 16 | 5×22



12

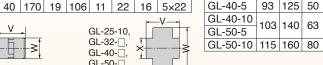
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4×19

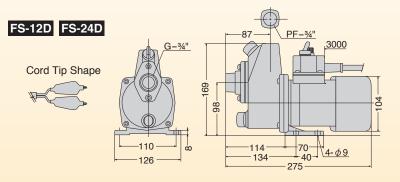
4×19

4×19

4×19

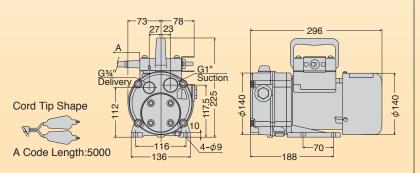


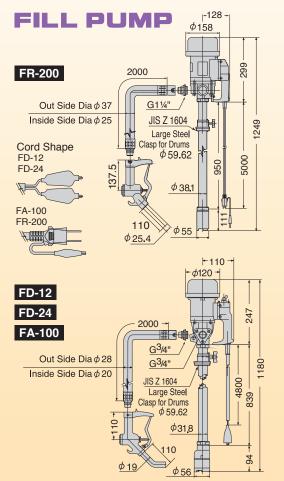
FS PUMP

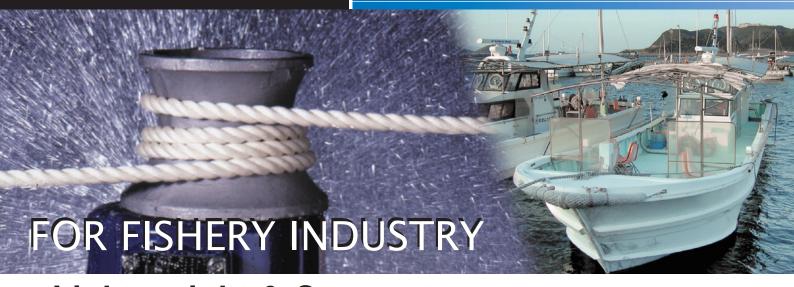


CHANGE-MASTER

GM-2524H







Light weight & Compact Most Suitable for Fishing Boats

■ Applications

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



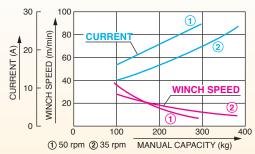
REL-2512



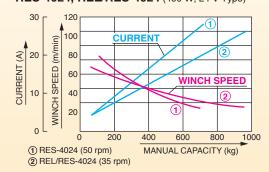
RES-2512

■ Performance Curve

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



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



	Model	RES-2512	REL-2512	RES-4024	REL-4024	RES-4024L	REL-4024L		
Voltage		DC	12 V		DC 24 V				
Rated Cur	Rated Current 30 A			25 A					
Motor Out	Motor Output 250 W				400) W			
Rating		1 h / 30 A			1 h /	25 A			
Roller Rev	olution	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)	700 kg (Low),	350 kg (High)	900 kg (Low),	450 kg (High)		
Capacity	Rating	90 kg (Low), 45	kg (High), (30 A)	140 kg (Low), 70	kg (High), (25 A)	200 kg (Low), 100	kg (High), (25 A)		
Winch Spe (With 100 I		,	ft/min) (Low) ft/min) (High)	,	ft/min) (Low) ft/min) (High)	13 m/min (49 ft /min) (Low) 23 m/min (82 ft/min) (High)			
Standard /	Accessories	1 Cable	• •		1 Waterproofing Plate, 1 Vertical Type Main Body Packing, mping Terminals, 1 Connection Terminal				
Net Weigh	it	15.5 kg (34.1 lbs)	14.6 kg (32.1 lbs)	21.5 kg (47.3 lbs)	18.9 kg (41.6 lbs)	24.6 kg (54.2 lbs)	19.2 kg (42.3 lbs)		
Gross Wei	ight	18.5 kg (40.7 lbs)	15 kg (33 lbs)	24.2 kg (53.3 lbs)	20.0 kg (44.0 lbs)	26.4 kg (58.2 lbs)	20.5 kg (45 lbs)		
Dimension	ns L×W×H (mm)	560 × 240 × 280	468 × 235 × 270	560 × 240 × 280	469 × 237 × 255	560 × 265 × 270	469 × 237 × 255		
Packing U	nit				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.

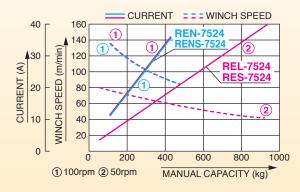






RENS-7524

■ Performance Curve



RES-7524

REL-7524

N	lodel	REN-7524	RENS-7524	REL-7524	RES-7524		
Voltage				DC 24 V			
Rated Curr	ent			43 A			
Motor Outp	out			750 W			
Rating				1 h / 43 A			
Roller Revo	evolution 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 Spe	ed	33 m/min (108 ft/min)	17 m/min (55 ft/min) (Low), 33 m/min (108 ft/min) (High)			
Standard A (RES, REN	ccessories I Type Only)	1 Cable Gland For Ship, 1 Waterproofing Plate, 1 Vertical Type Main Body Packing, 2 Crimping Term					
Net Weight		20.5 kg (45 lbs)	30.5 kg (67 lbs)	19.5 kg (43 lbs)	25 kg (55 lbs)		
Gross Weig	ght	25 kg (55 lbs)	35 kg (77 lbs)	24 kg (53 lbs)	30.5 kg (67 lbs)		
Dimensions	s L×W×H (mm)	500 × 270 × 275	575 × 305 × 315	510 × 270 × 255	560 × 265 × 270		
Packing Ur	nit			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





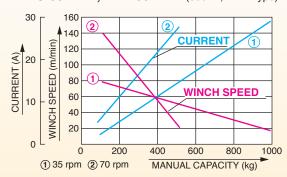
■ Specification

N	/lodel	RES-5524LB	REL-5524LB				
Voltage		DC :	24 V				
Rated Current		31 A					
Motor Output		550) W				
Rating		1 h /	31 A				
Roller Revoluti	ion	35 rpm (Low),	70 rpm (High)				
Manual	Max.	1000 kg (Low),	500 kg (High)				
Capacity	Rating	280 kg (Low),	140 kg (High)				
Winch Speed (With 100 kg L	Winch Speed (With 100 kg Load)		13 m/min (42 ft/min) (Low) 23 m/min (75 ft/min) (High)				
F	Static Friction Torque	4 N·m (0	.4 kgf·m)				
Electromagnetic Brake	Rated Voltage	DC 24 V					
Diake	Rated Capacity	15	W				
Standard Acce	Standard Accessories		ofing Plate, ain Body Packing, crews M5×20				
Net Weight		29.8 kg (65.6 lbs)	20.8 kg (45.8 lbs)				
Gross Weight		32.2 kg (70.9 lbs)	22.4 kg (49.3 lbs)				
Dimensions Lx	«W×H (mm)	583 × 320 × 340	540 × 248 × 278				
Packing Unit		1					

RES-5524LB

■ 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 Suitable model: All REL model

with 3-button switch



REF-300 Suitable model:

- REL-2512 • REL-2524
- REL-4024 REL-4024L

Example: **REL+REF**

REF-330 Suitable model: All REL model





3-button switch Suitable model:

- RES-330B
- Attached to REF-330

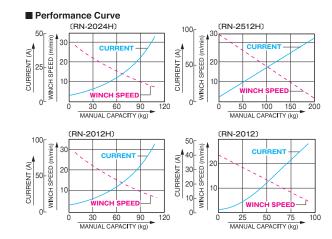
Long Life Span with Titan Boron Alloy

■ Features

- · Compact and light
- The switch is installed on the back or side of the main body.
- Both right-handed and left-handed can be used.
- · Only one switch for start and stop.
- Alumite coating for high durability anti-rusting







■ Specification

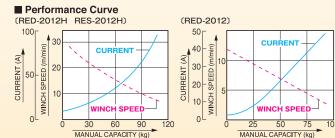
	RN-2012 RN-2012H		RN-2024H	RN-2512H		
	DC ·	12 V	DC 24 V	DC 12 V		
	15 A	24 A 13 A		30 A		
	140 W	200	W	250 W		
	1 h / 15 A	1 h / 24 A	1 h / 13 A	1 h / 30 A		
on	11	100 rpm (No Load)				
Max.	50 kg (45A)	120 kg (85A)	120 kg (40A)	200 kg (110A)		
Rating	35 kg (15A)	50 kg (24A)	50 kg (130A)	60 kg (30A)		
	27 m/min (88 ft/min) 32 m/min (105 ft/mi					
	15 A	30 A 20 A		30 A		
	1 Waterproofing Plate,					
ssories	1	Vertical Type Ma	ain Body Packin	ıg,		
		5 Machine So	crews M5×20			
	11.5 kg (25.3 lbs)	16.2 kg (35.7 lbs)	16.9 kg (37.2 lbs)		
	12.5 kg (27.5 lbs)	17.3 kg (38.1 lbs)	18.0 kg (39.6 lbs)		
×H (mm)	$425\times260\times285$	445 × 270 × 290 ——		450 × 270 × 290		
		1	1			
	Max. Rating ssories	DC - 15 A 140 W 1 h / 15 A on 1 max. 50 kg (45A) Rating 35 kg (15A) 15 A ssories 1 1.5 kg (25.3 lbs) 12.5 kg (27.5 lbs) 425 × 260 × 285	DC 12 V 15 A 24 A 140 W 200 1 h / 15 A 1 h / 24 A on 100 rpm (No Load Max. 50 kg (45A) 120 kg (85A) Rating 35 kg (15A) 50 kg (24A) 27 m/min 15 A 30 A 1 Waterpro 1 Vertical Type M 5 Machine Sc 11.5 kg (25.3 lbs) 16.2 kg (12.5 kg (27.5 lbs) 17.3 kg (445 × 260 × 285 445 × 270 × 290	DC 12 V DC 24 V 15 A 24 A 13 A 140 W 200 W 1 h / 15 A 1 h / 24 A 1 h / 13 A on 100 rpm (No Load) Max. 50 kg (45A) 120 kg (85A) 120 kg (40A) Rating 35 kg (15A) 50 kg (24A) 50 kg (130A) 27 m/min (88 ft/min) 15 A 30 A 20 A 1 Waterproofing Plate, 1 Vertical Type Main Body Packin 5 Machine Screws M5×20 11.5 kg (25.3 lbs) 16.2 kg (35.7 lbs) 12.5 kg (27.5 lbs) 17.3 kg (38.1 lbs) 445 × 260 × 285 445 × 270 × 290 —		

*Set the anchor and rope weight less than half as a manual capacity.

For pulling up the anchors of leisure and motor boats Performance Curve (RED-2012H RES-2012H) (RED-4

■ Features

- · Easy to pull up the anchor with a single switch
- · Right-handed, left-handed free installation
- · Easy to use. Just need to wire to the battery.
- · High anti-discoloration with denatured epoxy paint







■ Specification

Specifical	1011					
Mod	el	RED-2012H	RES-2012H	RED-2012		
Voltage			DC 12 V			
Rated Current		24	15 A			
Motor Output		200) W	140 W		
Rating		1 h /	24 A	1 h / 15 A		
Roller Revolution		100 rpm (No Load)	50 rpm (No Load)		
Manual Max.		120 kg	(85 A)	100 kg (45 A)		
Capacity	Rating	50 kg	(24 A)	40 kg (15 A)		
Winch Speed		27 m/min	11.5 m/min (37 ft/min)			
Breaker		30	30 A			
		1 Waterproofing Plate,				
Standard Acce	essories	1 Ver	tical Type Main Body	Packing,		
			5 Machine Screws	M5×20		
Net Weight		13.5 kg (29.7 lbs)			
Gross Weight		14.0 kg (30.8 lbs)	8.5 kg (18.7 lbs)		
Dimensions L>	«W×H (mm)	440 × 23	5 × 280	$349 \times 235 \times 275$		
Packing Unit		1				

*Set the anchor and rope weight less than half as a manual capacity.

Compact Built-in Type

■ Features

- REP type allows to work while standing.
- For anchoring, recommend to use anchor davit (optional) together.



REP-2512H

■ Performance Curve (REP·RSB-2012H) (REP-2512H) 100 CUR CURR CURRENT (A) CURRENT (A) 20 WINCH SPEED WINCH SPEED 50 50 10 WINCH 0_L 30 60 50 100 150 MANUAL CAPACITY (kg) MANUAL CAPACITY (kg)

■ Specification

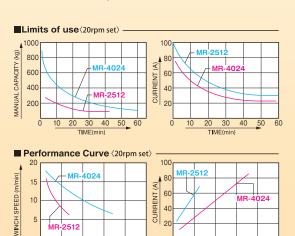
Mod	el	REP-2012H	REP-2512H			
Voltage		DC	12 V			
Rated Current		24 A	30 A			
Motor Output		200 W	250 W			
Rated Current		1 h / 24 A	1 h / 30 A			
Roller Revolut	ion	100 rpm (No Load)	120 rpm (No Load)			
Manual	Max.	120 kg (85 A)	200 kg (110 A)			
Capacity	Rating	50 kg (24 A)	60 kg (30 A)			
Winch Speed		27 m/min (88ft/min) 32 m/min (105ft/min)				
Breaker		30 A 30 A				
Standard Acce	onorion	1 Breaker, 1 Power cord (5.5mmx 10mx 2 cores), 2 Nut (M4),				
Standard Acce	5501165	1 Packing, 2 Screws (Ma	4x8), 4 Soldress Terminals			
Net Weight						
Gross Weight						
Dimensions Lx	«WxH (mm)					
Packing Unit			1			

^{*}Set the weight of the anchor + rope with a weight that is less than half of the hoisting capacity (normal use) as a guide.

Rolling Up Smoothly Without Damage to Net

■ Features

- Dual-speed roller revolution (No load):
 20-30 rpm and 40-60 rpm.
- With 2-stage-switch and free revolution (20-60 rpm).
- For use, just connect to batterry and after use, easy to take off.
- · Roller itself and stand have a handle.
- · Possible to set roller to any direction.
- Traverse switch makes it possible to do wide variety of work.



MANUAL CAPACITY (kg







MR-120



_	_							
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	-	UE	-			a Li	u	н

	Model		MR-2512	MR-4024	
Voltage			DC-12V	DC-24V	
Rated Cu	rrent		30A	25A	
Motor Out	put		250W	400W	
Rating			1h/30A	1h/25A	
Roller Revo	lution	20 rpm, Low	20~3	0rpm	
(No Load)		40rpm, High	40~6	0rpm	
	Max.	20 rpm, Low	250kg	900kg	
Manual	(2min)	40rpm, High	125kg	450kg	
Capacity	Rating	20 rpm, Low	80kg	200kg	
	(1hr)	40rpm, High	40kg	100kg	
Winch Sp	eed	20 rpm, Low	12m/min (39ft/min)	16m/min (52ft/min)	
William Op	oou	40rpm, High	22m/min (72ft/min)	30m/min (98ft/ min)	
Net Weight			36 kg (79.3 lbs)	38 kg (83.7 lbs)	
Gross Weight			44.2 kg (97.4 lbs) 47.7 kg (105.1 lbs		
Dimensions LxWxH (mm)			685 × 588 × 308		

Pollers (Options)

Packing Unit

*Set the weight of the anchor + rope with a weight that is less than half of the hoisting capacity (normal use) as a guide.

"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 specially made for sea water and oil resistible resin for long 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





Type S is Pump only without Accessories Replacement for "BILGE PUMP"



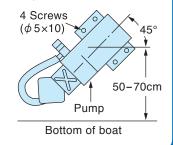
BK-12S

How to Attach Pump

Attach pump at 45 degree angle to set suction mouth and delivery mouth face upper side with 4 screws $(\phi 5 \times 10)$. (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).



Model	BK-12	BK-12S	BK-24	BK-24S	
Suction / Delivery Dia		15 mr	n (½")		
Max. Delivery Volume		20 L/min (5	USG/min)		
Voltage	DC ·	12 V	DC 2	24 V	
Rated Current	10	A	5	A	
Suction Lift		1 m	(3 ft)		
Suction Time		2 - 5 se	c (20 °C)		
Rating	80	W	90	W	
Standard Accessories (*Type S : Not Included)	1 Code with Starting Swit 4 Tapping Screws (5×10) 4 Tapping Screws (4×16)	, 4 Tapping Screws (4×	20), 4 Tapping Screws	. , , , , , , , , , , , , , , , , , , ,	
	1 Fuse	(15 A)	1 Fuse (8 A)		
Net Weight	3.6 kg (7.9 lbs) (1 unit)	2.3 kg (5.1 lbs) (1 unit)	3.6 kg (7.9 lbs) (1 unit)	2.3 kg (5.1 lbs) (1 unit)	
Gross Weight	18.5 kg (41 lbs) (4 units)	10 kg (22 lbs) (4 units)	18.5 kg (41 lbs) (4 units)	10 kg (22 lbs) (4 units)	
Dimensions L×W×H (mm)	485 × 323 × 346	$330 \times 296 \times 250$	485 × 323 × 346	$330 \times 296 \times 250$	
Packing Unit		4	1		

^{*}BK-12S, BK-24S is pump for replacement.

"REVOLVEX PUMPS"

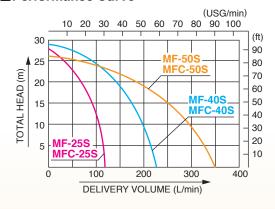




Flexible Rubber Impeller for Seawater

- 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









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



■ Specification (*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 Casting	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 (171 US			
Output	1.5 kw (2.0 P	S) / 1750 rpm	3.7 kw (5.0 PS) / 1750 rpm	7.5 kW (10.2 PS) / 1,750 rpm	5.5 kW (7.5 P	S) / 1,750 rpm		
Number of Blades		9		13	6			
Driving Method			Belt	Drive				
Revolution Direction			Anti-clockwise (Watch	ing from Driving Shaft)				
Revolution			500 - 2	300 rpm				
Shaft Dia	20 mr	n (¾")	25 mm (1")	Electromag	netic Clutch	25 mm (1")		
Standard Accessory		Parallel Key						
Net Weight	4.7 kg (10.3 lbs) 5.7 kg (12.5 lbs)		8.7 kg (19.1 lbs)		23.5 kg (51.8 lbs)	18.5 kg (40.7 lbs)		
Gross Weight			9.1 kg (21 lbs)		25 kg (55 lbs)	20 kg (44 lbs)		
Dimensions LxWxH (mm)	240 × 142 × 183	260 × 158 × 191	342 × 162 × 214	420 × 230 × 265	$450\times224\times270$	450 × 224 × 270		
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.)

*12V Clutch is available as option

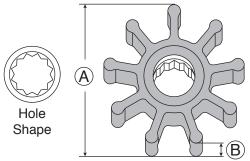
Model	MFC-25S	MFC-40S	MFC-50S		
Pump	MF-25S	MF-40S	MF-50S		
Voltage (Clutch)		DC 24 V			
Capacity (Clutch)	43	43 W			
Pulley	φ 136.5	5 (B-1)	φ 130 (B-2)		
Net Weight (Clutch)	7.6 kg (16.7 lbs)	8.8 kg (19.4 lbs)	15.9 kg (35.0 lbs)		
Gross Weight		9.5 kg (20.9 lbs)	18.3 kg (40.3 lbs)		
Dimensions L×W×H (mm)	262 × 150 × 190	282 × 168 × 183	364 × 192 × 214		
Packing Unit		1			

Model	MFC-80S MFLC-65K
Voltage	DC 24 V
Capacity	36 W
Pulley	φ 130

MF Series Impeller List

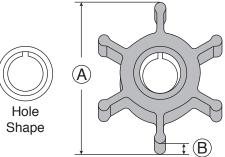
For "REVOLVEX PUMPS" & "RUBBER MASTER"

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				Seav	water				Oil	Seawater
Impeller Model	MF-25SRL	MF-40SRL	MF-50SRL	MF-65KR	MFL-65KR	MF-80SR	MF-40SRL	MF-2524KR	MF-2524KN	MF-4024KR
A Outside Dia	80 mm	94 ו	mm	128.5	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				Chloropre (Neop	ne Rubber orene)				Nitrile Butyl Rubber	Chloroprene Rubber (Neoprene)

Long Durability "REVOLVEX PUMP"

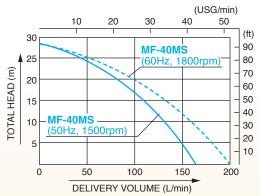
- · Compact design and can be removed on the deck easily.
- Small and compact, but, large delivery volume for this class of pumps.
- Continuous running is available with motor fun.
- Dry prime pump, no need to prime with water, immediate suction.

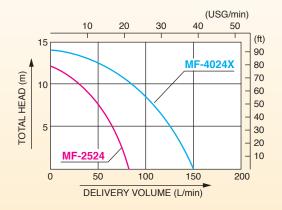




★ To transfer fuel, please use special impeller for oil. (Impeller type: MF-2524KN) Please refer to page 51.

■Performance Curve





	Specification				
	Model	MF-4	OMS	MF-2524	MF-4024X
	Connection Dia	40 mm	1 (1½")	25 mm (1")	40 mm (1½")
	Connection Thread			Inner Pipe Thread	
ᇫ	Material		I	Bronze Castings (Gunmetal)	
UMP	Total Head	29 m	(95 ft)	9 m (29.5 ft)	14 m (45.9 ft)
<u>Ф</u>	Max. Suction Lift	5 m (16 ft)	3.5 m (11 ft)	
	Delivery Volume	60 Hz : 200 L/m 50 Hz : 170 L/m	in (52 USG/min) in (44 USG/min)	80 L/min (21 USG/min)	150 L/min (39 USG/min)
m	_ Voltage		DC 24V		
Ö	Current	6.8 A / 50 Hz	6.0 A / 60 Hz	12 – 15 A	22 - 30A
MOTOI	Output	1.5	kW	250 W	400 W
2	Power Cord	10 m (1.	25 mm²)	5 m (2 mm²)	5 m (3.5 mm ²)
St	andard Accessories	1 Strainer, 1 Hose Band (φ48)		1 Strainer, 2 Connecting Nipples (ϕ 25), 3 Hose Bands (ϕ 32)	1 Strainer, 1 Hose Band (ϕ 48)
Net Weight Gross Weight Dimensions L×W×H (mm)		29.8 kg	(66 lbs)	8.3 kg (18 lbs)	22 kg (49 lbs)
		34.2 kg	(75 lbs)	8.8 kg (19.4 lbs)	22.7 kg (50 lbs)
		488 × 24	14 × 344	315 × 213 × 238	420 × 220 × 280
Packing Unit				1	

"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 DC 24V 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.

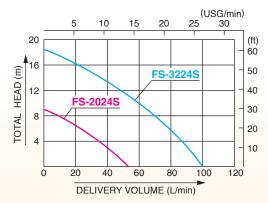


FS-3224S

■ Specification

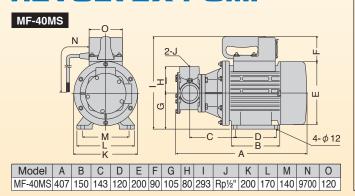
	Model	FS-2024S	FS-3224S			
	Connection Dia	20 mm (¾")	32 mm (11/4")			
PUMP	Connection Thread	Inner Pipe Thread				
PU	Total Head	9 m (30 ft)	18.5 m (60 ft)			
	Delivery Volume	50 L/min (13 USG/min)	100 L/min (26 USG/min)			
	Voltage	DC 2	24 V			
H	Rated Current	7 A	16 A			
MOTOR	Output	90 W / 7000 rpm	200 W / 6200 rpm			
ĭ	Rating	Contin	nuous			
	Power Cord	3 m (10 ft)	5 m (16 ft)			
St	andard Accessories	1 Strainer, 2 Hose Nippl	es, 1 Set Carbon Brush			
Ne	et Weight	4.5 kg (10 lbs)(1 unit)	7.8 kg (17 lbs)(1 unit)			
Gı	ross Weight	28.5 kg (62.8 lbs)(5 units)	28 kg (62 lbs)(3 units)			
Dir	mensions L×W×H (mm)	780 × 295 × 237	555 × 385 × 325			
Packing Unit		5	3			

■Performance Curve

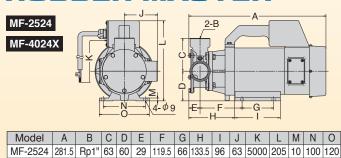


OUTLINE DRAWING

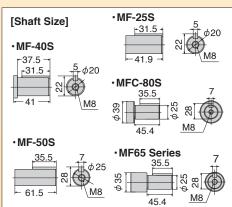
REVOLVEX PUMP

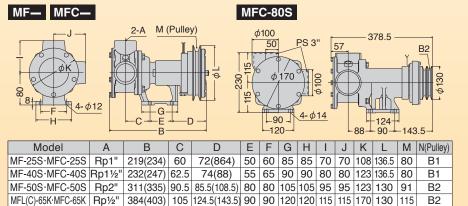


RUBBER MASTER

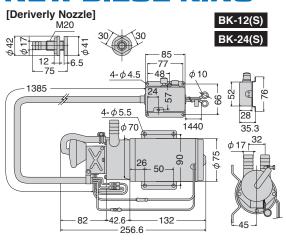


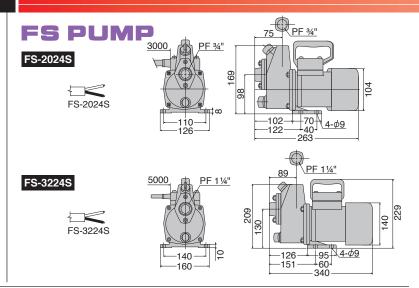
MF-4024X 386 Rp1/2" 95 83 31.5 118.5 88 129 128 95 5000 226.5 8 118 140



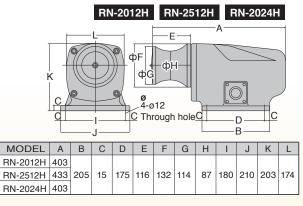


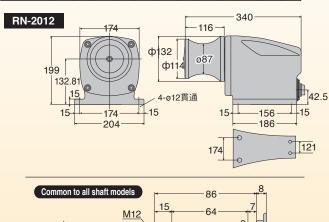
NEW BILGE KING

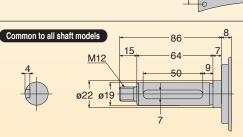




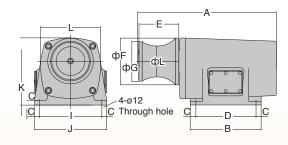
MINI ECARL



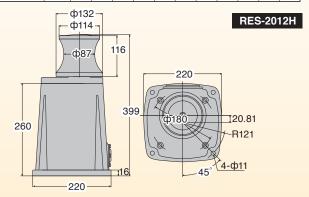




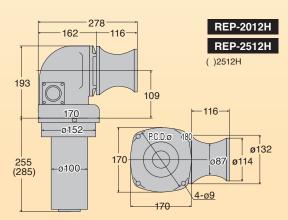
RED-2012H RED-2024H RED-2012

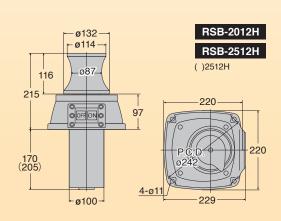


MODEL	Α	В	С	D	Е	F	G	Н	I	J	K	L
RED-2012H	402.5	005	15	175	110	100	444	07	100	010	100	171
RED-2012	335.5	205	15	1/5	116	132	114	87	180	210	192	1/4

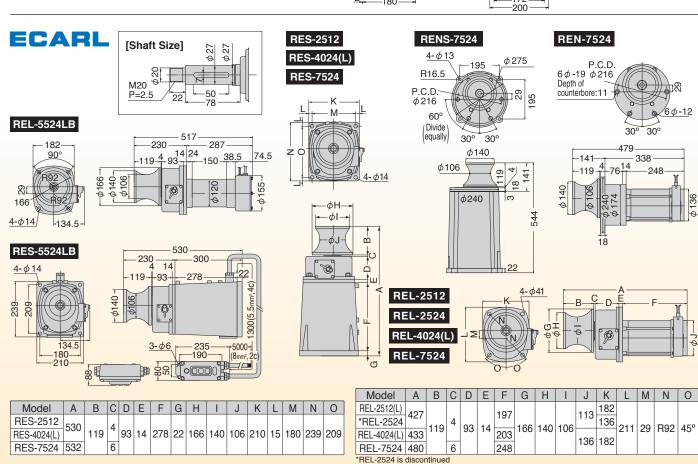


MINI ECARL



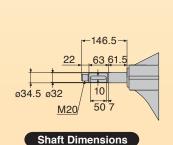


4-M12 275 **ECARL BOX REF-300** 50 Depth -130 225 209 RES-330A 210 9 RES-330B 282 459 φ25 160.7 `R92 8 177 Ø130 4-M12 45 48 -156 -110 - $4-\phi 12$ 29 239 50±0.3 4-M12, Depth 18 Under Hole 21 4-M6, Depth 10 Under Hole 12 - 322 310 **REF-330** 12 4-M5 140 120 -182 Depth 8 45° _278 -_300 --114 41.75 41.75 2- φ 5 9 R92 211 <u>2-φ5</u> 30 53 -98--<u>φ10</u> 280 260 12 2 8 9 4-φ12 -67 -75 3.9 60 2 35 115 30



MAG ROLLER





580 ø450 ø256 238 9650 106 -140 369.5 ø89 210 (t=3)MODEL В Α С 4-ø14 MR-120 210 110 689.5 10 MR-240 328 228 807.5 240 240 MR-360 446 346 925.5 300 300



BACK PACK TYPE ENGINE SPRAYER



Suitable for weeding *Cascade type
Super light!



ES-10CDX

Herbiciede for big farm (20L Tank)



Easy engine start with carrying the sprayer on your back. (*only 10CDX and 15CDX. ES-20C does not have this function)





With plug for preventing frozen fertilizer

Nozzle length 60cm Nozzle connection screw type G 1/4



Vertical 2-head nozzle for disinfection



Bubble type herbicide nozzle with cover (*only 10CDX and 15CDX) for herbicide.



Bubble type herbicide nozzle (*only ES-20C) for herbicide.

	Model	ES-10CDX*	ES-15CDX*	ES-20C*					
	Tank Capacity	10 L 15 L 20 L							
MP	Туре	Cascade type							
P	Max. Pressure (At closing)		0.8 MPa (8 kgf/cm²)						
	Max. Suction Volume		6 L/min (1.58 USG/min)						
	Spray Volume	Vertical 2-head Nozzle, : 2	2 L/min Bubble Type Herbicide Noz	zle (with Cover): 0.6 L/min					
ш	Nozzle	Bubble Type Herbicide Nozzle with Cover • Vertical 2-head Nozzle Bubble Type Herbicide Nozzle, Vertical 2-head Nozzle							
ENGINI	Туре	Forced Air-cooled 2-stroke Gasoline Engine							
N	Model		Koshin KC 22-C						
ш.	Total Displacement Volume		22.6 cc						
	Continuous Operation Time		Approx. 50 min						
N	et Weight	5.7 kg (12.5 lbs)	5.9 kg (13 lbs)	6.3 kg (14 lbs)					
Gross Weight Dimensions L×W×H (mm)		8.0 kg (18 lbs) 8.5 kg (18.7 lbs) 9.0 kg (20 ll							
		420 × 410 × 480	420 × 410 × 545	450 × 390 × 567					
Pa	acking Unit	1							

High Pressure Single Piston Type



Nozzle length 60cm

Nozzle connection screw type G 1/4



Vertical 2-head nozzle for disinfection



Bubble type herbicie nozzle with cover (*only 20PDX and 15PDX) for herbicide.

■Specification

ES-10PDX

	Model	ES-10PDX*	ES-15PDX*	ES-20PDX*					
	Tank Capacity	10 L	10 L 15 L						
MP	Туре	Single piston type							
PU	Max. Pressure (At closing)	3.0 Mpa (30kgf/m²)							
	Max. Suction Volume		5.2 L/min (1.37 USG/min)						
	Spray Volume	3.5 L/min : Vertical 2-head (High pre	ssure mode), 0.63 L/min : Bubble Typ	e Herbicide Nozzle (Herbiside mode)					
ш	Nozzle	Bubble Type Herbicide Vertical 2-head Nozzle Vertical 2-head Nozzle, Babble Type Herbicide Nozzle with Cover							
ENGIN	Туре	Forced Air-cooled 2-stroke Gasoline Engine							
ž	Model	Koshin KC 22-D							
_	Total Displacement Volume		22.6 cc						
	Continuous Operation Time		Approx. 50 min						
Ne	et Weight	6.9 kg (15 lbs)	7.1 kg (15.6 lbs)	7.3 kg (16 lbs)					
Gross Weight Dimensions L×W×H (mm)		9.3 kg (20.5 lbs)	9.6 kg (21 lbs)	9.9 kg (22 lbs)					
		427 × 400 × 505	427 × 400 × 560	440 × 427 × 582					
Pa	acking Unit	1							

Easy Carry

Optional parts (Common)

Carry for ES series



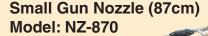
Model: ESC-1

For ES-P series, ES series, ES-C series Size: 450 x 430 x 900 (LxWxH (mm))

Hose: ϕ 6 x 20m

Connection Thread: G 1/4 *Not for 20L tank.

Optional parts



For ES-P series, ES series

Hole Diameter: ϕ 1.2mm, Thread Diameter: G 1/4



^{*}Japanese Domestic Model

Twin Piston Type

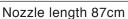
·Suitable for spraying wide & tall tree (High Pressure : Twin piston type)





























Vertical 2-head nozzle for



Bubble type herbicide nozzle for herbicide.





a specification									
	Model	MS-ERH50T*2	MS-ERH50TH85*2	MS-ERH25TH85*2					
_	Туре		Twin Piston Type						
	Max. Suction Volume								
	Spray Volume	1.0 ~ 2.9 L/min	1.1 ~ 4.8 L/min	1.2 ~ 5.4 L/min					
PUM	Max. Pressure (at Closing)		3.0 MPa (30 kgf/m³)						
₫.	Nozzlo	Bubble Type Herbicide Double Nozzle,	Bubble Type Herbicide Double Nozzle,	Spray & Point Blank Adjust Type					
	Nozzle	Vertical Type Double nozzle	Vertical Type Double nozzle, Single Nozzle	Opray a Form Blank Adjust Typo					
	Delivery Hose ϕ 6 x 50 m		ф8.5 x 50 m	ф8.5 x 20 m					
	Туре	Forced Air-cooled 4-stroke Gasoline Engine Honda GX25							
	Displacement		25 cc						
IN IN	Max. Rated Output/ rpm		0.7 kW (1.0 PS)/ 7000 rpm						
ENGI	Fuel		Automotive Unleaded Gasoline						
回	Fuel Tank Capacity		Approx. 0.55 L						
	Starting Method		Recoil Starter						
	Opetating Time								
Ne	et Weight	35 kg (77 lbs)	40 kg (88 lbs)	22 kg (49 lbs)					
Gross Weight		40 kg (88 lbs)	45 kg (99 lbs)	26 kg (57 lbs)					
Dimensions L×W×H (mm)		865 × 580 × 880	865 × 580 × 880	695 × 480 × 640					
Packing Unit		1							
*Sustion/ delibery/ remaining water have exterior and here hand are included as standard acceptains, *2 language Demostic Model									

^{*}Suction/ delibery/ remaining water hose, strainer and hose band are included as standard accessories. *2Japanese Domestic Model



ENGINE SPLAYER & PRESSURE WASHER







Nozzle length 62~109cm



Vertical 2-head nozzle for disinfection

Bubble type herbicide nozzle with cover for herbicide.



Nozzle connection







MS-ERH50 (Φ6×50mHose)

■Specification

	Model	MS-ERH50* (Φ6 x 50m Hose)	MS-ERH100* (Φ6 x 100m Hose)	MS-ERH50H85* (Φ8.5 x 50m Hose)		
	Туре		Twin Piston Type			
	Max. Suction Volume		8.6L/min			
PUMP	Spray Volume	1.0 ~ 2.9 L/min	1.0 ~ 2.4 L/min	1.1 ~ 4.8 L/min		
	Max. Pressure (at Closing)		3.0 MPa (30 kgf/m³)			
	Nozzle	Bubble Type Herbicide 2-head No	ozzle, Vertical Type 2-head Nozzle	Bubble Type Herbicide 2-head Nozzle, Vertical Type 2-head Nozzle, Single Nozzle		
	Delivery Hose	φ6 x 50 m (with Reel)	φ6 x100 m (with Reel)	φ8.5 x 50 m (with Reel)		
	Туре	Forced Air-cooled 4-stroke Gasoline Engine Honda GX25				
	Displacement	25 cc				
N	Max. Rated Output/ rpm	0.7 kW (1.0 PS) / 7000 rpm				
ENG	Fuel	Automotive Unleaded Gasoline				
Ш	Fuel Tank Capacity	Approx. 0.55 L				
	Starting Method		Recoil Starter			
	Opetating Time					
Ne	et Weight	18 kg (40 lbs)	21.5 kg (47 lbs)	23 kg (51 lbs)		
Gı	oss Weight	25.5 kg (56 lbs)	29.5 kg (65 lbs)	30.5 kg (67 lbs)		
Di	mensions L×W×H (mm)	$730 \times 460 \times 435$	730 × 460 × 435	700 × 460 × 435		
Pa	cking Unit	1				
	ccessories	1 Strainer, 2 Suction Hose φ10 x 2.5 m, 1 Remaining water Hose φ8 x 2.5 m, Extendable 2-head Nozzle (62 ~ 109 cm)				

^{*}Japanese Domestic Model

Engine Pressure Washer

Double role for washing & weed removal



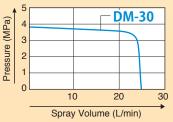
8m direct spray

For stuck dirt

4m spray

For washing mud

■ Performance Curve





Spray Gun 76cm

	Model	DM-30*		
	Max. Pressure (at Closing)	3.8 MPa (38 kgf/m²)		
	Max. Suction Volume	25 L/min		
Д	Spray Volume	19 L/min : In case of using		
$\overline{\mathbb{Z}}$	Opray Volume	*Spray gun (accessory)		
Ф	Suction Head	3 m		
	Rotations	620 rpm		
	Engine	Mitsubishi GB131 LN		
Net Gro Din Pac	Туре	Air-cooled 4-stroke Gasoline Engine		
	Displacement	126 cc		
	Max. Rated Output	3.0 kW (4.2 PS)		
	Fuel	Automotive Unleaded Gasoline		
	Fuel Tank Capacity	Approx. 2.5 L		
	Starting Method	Recoil starter		
	Opetating Time	Approx. 2 hrs		
		1 Strainer (with Hose band),		
		1 Suction Hose 3 m (G1)		
Ac	cessories	1 Delivery Hose 10 m,		
		1 Remaining Water Hose 3 m		
		(G1/2)		
Ne	et Weight	41.5 kg (91 lbs)		
Gr	oss Weight	52.5 kg (116 lbs)		
Dii	mensions L×W×H (mm)	$715 \times 700 \times 540$		
Pa	cking Unit	1		
*Jap	panese Domestic Model			

Suitable for house garden.

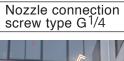


























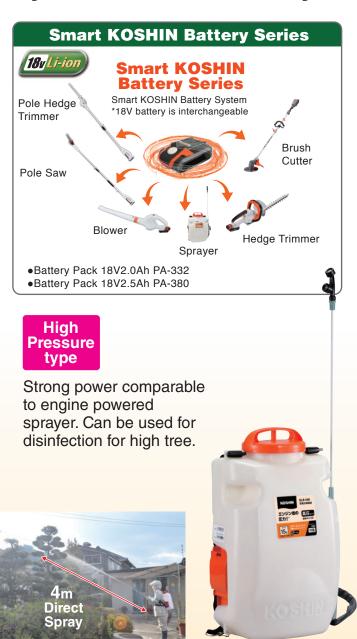




	Model		MS-252RT25* (With 25L Tank, carry)	MS-252R* (With reel)	MS-252CL* (With case)			
	Pump Type		Single Piston					
	Max. Suction Volume		50 Hz: 3.2 L/min 60Hz: 4.0 L/min					
0	Spray Volume	50Hz	2.2 L/min (spray) ~ 2.5 L/min (shot)					
PUMP		60Hz		2.7 L/min (spray) ~ 2.9 L/min (shot)				
P	Max. Pressure (a	at Closing)		3.5 MPa (35 kgf/cm ²)				
	Nozzle			Spray · Shot Adjustable				
	Delivery Hose		Ф6 x 20 M	(with Reel)	Ф6 x 20 M			
	Motor Type		Single Phase Motor					
	Voltage		AC100 V					
	Frequency		50 / 60 Hz					
OR	Power Consum	ption	50 Hz : 350 W 60 Hz : 370 W					
MOT	Output		250 W					
Σ	Max. Current		50 Hz :6.1 A 60 Hz : 5.3 A					
	Insulation Type							
	Breaker / Fuse		8 A (Manual)					
	Power Cord			5 M				
Ac	cessories		1 Strainer, 1 Suction Hose Φ10 x 2.5 M, 1 Remaining Water Hose Φ7 x 2.5 M, 1 Delivery Hose Φ6 x 20 M					
Ne	Net Weight		23.5 kg (52 lbs)	15.5 kg (34 lbs)	9.5 kg (21 lbs)			
Gr	oss Weight		28 kg (62 lbs)	19.0 kg (42 lbs)	15 kg (33 lbs)			
Di	mensions L×W×I	H (mm)	645 × 480 × 610	585 × 370 × 440	300 × 430 × 261			
Pa	cking Unit			1				

Gargen Sprayer Powered by Lithium ion Battery.





SLS-15H

■Specification

Model	SLS	S-7*	SLS	-10*	SLS	-15*		SI S	-15H*	
Tank Capacity		L				15 L				
Battery				Lithium-ic	n Battery 18	V 2.0 Ah				
Recharging time for Battery					70 min					
Pump				D	iaphragm Pui	тр				
Max. Pressure (at Closing)				0.3	B MPa (3 kgf/d	cm²)	1	I.0 MPa (1	10 kgf/cm ²))
Operating Time			Approx. 2.5 hrs			(High mode) Approx. 50 min (Low mode) Approx. 4.5 hrs				
Type Model	Vertical Type 2-head Nozzle	Bubble Type Herbicide	Vertical Type 2-head Nozzle	Bubble Type Herbicide	Vertical Type 2-head Nozzle	Bubble Type Herbicide		2-head Nozzle nfection	Single I	Nozzle
Total Exhaust	for disinfection	Nozzle	for disinfection	Nozzle	for disinfection	Nozzle	Spray (high)	Spray (low)	Spray (high)	Shot (high)
Suction Volume	0.67 L/min	0.5 L/min	0.67 L/min	0.5 L/min	0.67 L/min	0.5 L/min	1.1 L/min	0.52 L/min	0.7 L/min	1.2 L/min
Pressure	0.26 MPa	0.28 MPa	0.26 MPa	0.28 MPa	0.26 MPa	0.28 MPa	0.75 MPa	0.20 MPa	0.8 MPa	0.7 MPa
Net Weight	3.3 kg (7 lbs)		3.5 kg (8 lbs)		3.6 kg (8 lbs)		3.8 kg (8 lbs)			
Gross Weight	4.4 kg	(9 lbs)	5.0 kg ((11 lbs)	5.1 kg ((11 lbs)	5.4 kg (12 lbs)			
Dimensions LxWxH(mm)	365 × 22	25 × 475	370 × 24	7 × 575	370 × 24	17 × 640		370 × 24	47 × 640	
Packing Unit					1					

*Japanese Domestic Model

DK-7D

Application for herbicide. Shower type nozzle attached.



With Diaphragm Pump

Long life span. It's hard to stick the chemical





■Specification

Model **DK-7D*** Tank Capacity 10 L 7 L Pump Diaphragm Pump Impeller Pump Motor DC 7.2 V Motor DC6 V Motor Nozzle **Bubble Type Bubble Type** For Standard For Small Amount 2-head Nozzle 2-head Nozzle Herbicide Nozzle Herbicide Nozzle Spray with Cover Spray Volume One Head Nozzle 2-head Nozzle One Head Nozzle 2-head Nozzle 0.55 L/min 0.55 L/min 0.7 L/min 2 0 I /min 0.68 L/min : 0.45 L/min 0.68 L/min : 0.45 L/min 0.22 MPa Spray Pressure 0.26 MPa 0.16 MPa 0.22 MPa 0.26 MPa 0.16 MPa 0.015 MPa(0.15 kgf/cm²) Spray Volume per battery 100 L 160 L 130 L 100 L 160 L 130 L 540 L 190 L **Operating Time** Approx: 4 hrs *Alkaline Battery Approx. 6 hrs *Alkaline Battery Dry Cell Battery D Type Dry Cell Battery D Type Dry Cell Battery 6 Units (Sold separately) 4 Units (sold separately) Net Weight 3 kg (6 lbs) 3.3 kg (7 lbs) 3 kg (6 lbs) **Gross Weight** 4 kg (9 lbs) 4.7 kg (10 lbs) 4 kg (9 lbs) Dimensions L×W×H (mm) $365 \times 223 \times 435$ $390 \times 247 \times 565$ 365 × 225 × 535 Packing Unit

Back Pack Type Manual Sprayer

Stable with two belts on chest and weist

Super light



RW-10DX

Specification

	Model	RW-10DX*	RW-15DX*		
	Tank Capacity	10 L	15 L		
	Pump	Diaphrag	ım Pump		
	Nozzle	2-head Nozzle 0.9 L/min Bubble Type Herbicide Nozzle with Cover 0.6 L/min			
	Max. Pressure	0.4 MPa (4 kgf/cm²) (at Closing)			
	Spray Volume	0.3 MPa (3 kgf/cm ²)		
	Net Weight	3.3 kg (7 lbs)	3.7 kg (8 lbs)		
,	Gross Weight	4.5 kg (10 lbs)	5.0 kg (11 lbs)		
	Dimensions LxWxH (mm)	465 × 225 × 555 465 × 275 × 555			
	Packing Unit	1			

*Japanese Domestic Model

For Herbicide. Shower Type Nozzle Equipped Attached nozzle For Herbicide

■ Specification

Model	JR-20*
Tank Capacity	20 L
Net Weight	1.7 kg (4 lbs)
Gross Weight	2.5 kg (5 lbs)
Dimensions LxWxH (mm)	$365 \times 235 \times 530$
Packing Unit	1

*Japanese Domestic Model

Back Pack Type Manual Sprayer Made of Stainless Steel

スタラレスS D 長島南島 TE KOSIN

Lighten the burden when carried on back



Back board equipped

It makes the gap between a body and a tank then make it breathable

■Specification

	Model	SS-	10*	SS-15*				
Tank Capacity		10) L	15 L				
	Pump		Diaphragm Pump					
	Max. Pressure	0.3	0.35 MPa (3.5 kgf/cm ²) *at Closing					
PUMP	Nozzle Spray Volume	Vertical 2-head nozzle	Bubble Type Herbicide Nozzle with Cover	Vertical 2-head nozzle	Bubble Type Herbicide Nozzle with Cover			
₫.	Spray Pressure	0.8 L/min (0.2 MPa)	0.5 L/min (0.2 MPa)	0.8 L/min (0.2 MPa)	0.5 L/min (0.2 MPa)			
Ne	et Weight	4.6 kg (10 lbs)		4.9 kg (11 lbs)				
Gross Weight		6.3 kg (14 lbs)		6.8 kg (15 lbs)				
Dimensions LxWxH (mm)		440 × 245 × 565		440 × 245 × 635				
Pa	acking Unit		1					

^{*}Japanese Domestic Model

Manual Sprayer with shoulder belt

Gargen Sprayer Made of Stainless Steel

■Specification

Model	SS-4DX*	SS-9DX*			
Tank Capacity	4 L	9 L			
Nozzle	3 Stage Extendable Nozzle *1 Head				
Nozzle Length	30.5 ~ 73 cm	44 ~ 111 cm			
Hose Length	1	m			
Net Weight	1.6 kg (3 lbs)(1 unit)	2.4 kg (5 lbs)(1 unit)			
Gross Weight	16.9 kg (37 lbs)(10 units)	12.7 kg (28 lbs)(5 units)			
Dimensions LxWxH(mm)	$640\times500\times380$	810 × 300 × 500			
Packing Unit	10	5			
*.lananese Dome	stic Model				

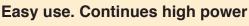
^{*}Japanese Domestic Model

■ Specification

Model	SS-5P*			
Tank Capacity	5 L			
Safety Valve Working Pressure	Approx. 0.4 MPa (4 kgf /cm2)			
Nozzle	2 head nozzle (one head switchable) (shot, spray switchable)			
Spray Volume	0.6 L/min with 0,3 MPa (2 head nozzle)			
Nozzle	0.3 L/min with 0.3 MPa (one head nozle)			
Connection	M 16			
Net Weight	1.7 kg (3.7 lbs)			
Gross Weight	2.5 kg (5.5 lbs)			
Dimensions LxWxH(mm)	$365 \times 235 \times 530$			
Packing Unit	1			

^{*}Japanese Domestic Model

Powered by electric motor







■ Specification Model

Model	GT-5V*		GT-10V*		
Tank Capacity	5	L	10 L		
Pump		Gear	Pump		
Max. Pressure	*Approx	c. 0.26 MPa (2	.6 kgf/cm ²) *at	Closing	
Nozzle	One Hea	d Nozzle	2-head	Nozzle	
	Spray	Shot	Spray	Shot	
Spray Volume	0.45 L/min 0.57 L/min		0.68 L/min	0.74 L/min	
Spray Pressure	0.26 MPa	0.26 MPa 0,23 MPa		0.15 MPa	
Spray Range	Approx. 0.6 m Approx. 4 m *45 degrees angle		Approx. 0.6 m	Approx. 2.5 m *45 degrees angle	
Power Supply	AC100	V (50 Hz,60 H	lz), Power Co	rd 2.5 M	
Net Weight	1.9 kg	(4 lbs)	2.4 kg (5 lbs)		
Gross Weight	3.7 kg (8 lbs)		4.4 kg (9.7 lbs)		
Dimensions L×W×H(mm)	200 × 43	30 × 490	240 × 430 × 490		
Packing Unit			1		

^{*}Japanese Domestic Model



"Mister AUTO" Manual Pressure Sprayer

- "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 Thick Thin piston piston Powerful! Light! **Switchable Nozzle** 2 Heads 1 Head



■ Specification

•			
Model	HS-503W*	HS-707W*	HS-401E*
Tank Capacity	5 L	7 L	4 L
Hose Length	5 m (2 m (6.5 ft)	
Nozzle Type	2-Stage Extendable 2-Head	4-Stage Extendable 2-Head	1-Head Nozzle
Total Extendable Length	63 - 113.5 cm (24" - 44")	63 - 201 cm (24" - 79")	38 cm (15")
Operating Pressure Around Safety Valve	0.4 MPa (0.2 MPa (2 kgf/cm ²)	
Spray Area	56 - 72.7 m ²	79 – 99 m²	46 – 59 m ²
Net Weight	2.7 kg (5.9 lbs) (1 unit)	2.8 kg (6.17 lbs) (1 unit)	0.96 kg (2.1 lbs) (1 unit)
Gross Weight	13.4 kg (29.5 lbs) (4 units)	14.8 kg (32.6 lbs) (4 units)	8.5 kg (18.7 lbs) (4 units)
Dimensions L×W×H (mm)	441 × 441 × 653	411 × 411 × 653	610 × 410 × 410
Packing Unit	4	1	6

*Japanese Domestic Model

"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.











GT-3S GT-3HS ■ Specification

Model	OT 00*	OT 00*	OT 50*	OT SUC	OT SUC	
Model	GT-2S*	GT-3S*	GT-5S*	GT-3HS*	GT-5HS*	
Tank Capacity	2 L	3 L	5 L	3 L	5 L	
Hose Length	1 m (3.3 ft)	1.5 m	ı (5 ft)	1.7 m (5.6 ft)		
Nozzle Type	1-Stage, 1-Head	3-Stage Exten	dable, 1-Head	3-Stage Extendable, 1-Head	1-Stage 1-Head, + Extensional	
Total Extendable Length	42 cm (16")	43 - 100 cn	n (16" – 39")	37 - 96 cm (14" - 38")	59 - 96 cm (23" - 38")	
Battery		DC 1.5 V x 4 pcs		DC 1.5 \	/ x 6 pcs	
Rating Voltage		4.8 V		7.2	2 V	
Battery Life	Approx. 20 L (5.3 USG) (Alkaline Battery)	Approx. 70 L (18 USG Approx. 30 L (8 USG	i) (Alkaline Battery) i) (Manganese Battery)		I USG) (Alkaline Battery) I USG) (Alkaline Battery)	
Spray Volume	Approx. 240 ml/min (Shower Spray) Approx. 400 ml/min (Sharp Spray)	Approx. 240 ml/m Approx. 400 ml/m	in (Shower Spray) in (Sharp Spray)	1 Head: 450 ml/min (Shower Sp 2 Head: 680 ml/min (Shower Sp	oray), 570 ml/min (Sharp Spray) oray), 740 ml/min (Sharp Spray)	
Shower Spraying Time (Full Tank)	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 S	pout		
Net Weight	0.62 kg (1.3 lbs) (1 unit)	1.2 kg (2.6 lbs) (1 unit)	1.4 kg (3.8 lbs) (1 unit)	1.3 kg (2.8 lbs) (1 unit)	1.5 kg (3.3 lbs) (1 unit)	
Gross Weight	3.8 kg (8.4 lbs) (4 units)	8 kg (17.6 lbs) (4 units)	4.5 kg (9.9 lbs) (2 units)	4.4 kg (9.7 lbs) (2 units)	5.1 kg (11.2 lbs) (2 units)	
Dimensions L×W×H (mm)	320 × 320 × 360	540 × 385 × 375	400 × 270 × 375	405 × 385 × 310	405 × 385 × 355	
Packing Unit	4	1		2		

*Japanese Domestic Model

Spreader for Fertilizer

Granule Applicator



Spreading amount can be adjustable from small amount to large amount (1~15kg / 10a)

■ Specification

Model	HD-20
Capacity	20 L
Net Weight	1.9 kg (4.1 lbs)(1 unit)
Gross Weight	8.8 kg (19.4 lbs)(3 units)
Dimensions L×W×H(mm)	$380 \times 160 \times 570$
Packing Unit	3

■ Specification

Model	HD-8	
Tank Capacity	8 L	
Spraying width	$5\sim7~\mathrm{m}$	
Net Weight	1.9 kg (4.1 lbs)	
Gross Weight	2.8 kg (6.1 lbs)	
Dimensions LxWxH (mm)	470 × 300 × 280	
Packing Unit	1	

Manual Granule Applicator for Fertilizer



- opcomoducii	
Model	HD-5
Tank Capacity	4.6 L
Spraying amount	400 g/min
adjusting shutter full open	400 g/IIIII
Net Weight*	2.5 kg (5.5 lbs)
Gross Weight	3.0 kg (6.6 lbs)
Dimensions L×W×H (mm)	$300\times270\times370$
Packing Unit	1



Smart KOSHIN Battery System

Battery-powered, user-friendly and very quiet.

Cordless and lightweight.

The Smart KOSHIN series is a collection of cordless products that have been designed with ease of use as the top priority.

They are lightweight, have long battery life and use lithium-ion batteries to endure repeated recharges.

The Smart KOSHIN series products can all be used with one battery.



| Easy operation with one button | Safe and easy to use/maintain | Powerful and economical | No exhaust gas and very quiet

Smart KOSHIN line-up						
			Model	Battery voltage	Battery capacity	Page
Washer		Washer	SJC-3625	36v Li-ion	2.5Ah	P68
her	SJC-3625 SJC-3650	Wasiici	SJC-3650	36v Li-ion	5.0Ah	P68
	SPH-1820/18N	Pole hedge trimmer	SPH-1820/18N	18v Li-ion	2.0Ah	P69
		Hedge trimmer	SHT-1820/18N	18vLi-ion	2.0Ah	P69
	SPS-1820/18N	Pole chainsaw	SPS-1820/18N	18vLi-ion	2.0Ah	P70
	SHT-1820/18N	Chainsaw	SCS-3625	36v Li-ion	2.5Ah	P70
	L L	Blower	SBL-1820/18N	18vLi-ion	2.0Ah	P71
	SBC-3650 SBC-1825 SBC-1825 SBC-1825 SBC-3650L SBC-1825L SBC-3650L SBC-1825L	Brush cutter	SBC-3650	36v Li-ion	5.0Ah	P73
Garc			SBC-3650L	36v Li-ion	5.0Ah	P73
Garden tool			SBC-1825	18vLi-ion	2.5Ah	P73
00			SBC-1825L	18vLi-ion	2.5Ah	P73
			SGR-1820	18vLi-ion	2.0Ah	P73
			SBC-3625C	36v Li-ion	2.5Ah	P74
			SLS-7	18vLi-ion	2.0Ah	P61
			SLS-10	18vLi-ion	2.0Ah	P61
		Sprayer	SLS-15	18vLi-ion	2.0Ah	P61
			SLS-15H	18vLi-ion	2.0Ah	P61
For	SFP-2518 SLS-15 SLS-15H	Drum pump	SFP-2518	18vLi-ion	2.0Ah	P40

Smart KOSHIN series optional parts



- Battery pack 18V2.0Ah PA-332
- Battery pack 18V2.5Ah PA-380



- Battery pack 36V2.5Ah PA-334
- Battery pack 36V5.0Ah PA-413

Quick charger specs

Fast charger specs		PA-333(18V)	PA-335(36V)
For	Model	PA-332(Capacity2.0Ah)	PA-334(Capacity2.5Ah)
lithium-ion	name	PA-380(Capacity2.5Ah)	PA-413(Capacity5.0Ah)
battery	Voltage	DC18V	DC36V

Caution

[•] All products can share the same battery as long as the voltage (V) is the same. However, when using a battery with a different capacity (Ah) from the standard battery included, operating time and charging time may differ.

Battery-powered high-pressure washer



User-friendly, easy to store and quiet Cordless and easy to use anywhere!

So quiet, your neighbors will never notice Ranks No. 1 in lowest sound level rate (60 dB in low mode)









Easy-to-use SJC-3625

Cordless and easy to use anywhere

With the water tank, you can use this washer anywhere without water supply or power supply.

(self-priming up to 30 cm)

The washer can also be used directly connected to a water supply. (* Water tank sold separately)





<Accessories>

- Lithium-ion battery
 36V/2.5Ah [PA-334](SJC-3625)
 36V/5.0Ah [PA-413](SJC-3650)
- 36 V charger [PA335]
- 10 meter high-pressure hose (one touch coupler on both sides)
- Gun Long lance Mist nozzle
- Spin nozzle
- Coupling (on body)
- * Equipped with inlet water filter

■ Specification

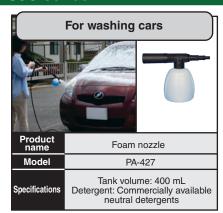
Model	SJC-3625 *3	SJC-3650 *3
Motor	Brushless motor	
Battery type	Lithiu	m-ion
Voltage	DC :	36 V
Battery capacity	2.5 Ah	5.0 Ah
Charging time *1	Approx. 90 min	Approx. 180 min
Operating time *2	Low mode: approx. 15 min /	Low mode: approx. 30 min /
	high mode: approx. 10 min	high mode: approx. 20 min
Maximum pressure	7.0 MPa	
Maximum water volume	3.3 L/min (198 L/hr.)	
Water supply	Tap water at room tem	perature (under 50°C)
Sound level	(low mode) 60 dB /	(high mode) 63 dB
High-pressure hose length	10	m
Body size (W x L x H)	300 × 30	00 × 400
Net Weight	7.8 kg (17.1 lbs)	8.3 kg (18.2 lbs)
Gross Weight	9.1 kg (20.0 lbs)	9.6 kg (21.1 lbs)
Dimensions LxWxH (mm)	425 × 310 × 420	425 × 310 × 420
Packing Unit	1	

- *1 May differ depending on temperature or remaining battery power.
- *2 At full charge, no load. *3 Japanese Domestic Model

Battery-powered washer optional parts for SJC series







Battery-powered extendable pole hedge trimmer

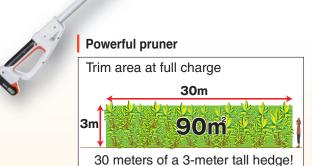


Reach high spots without a ladder for easy pruning

Easily trim high branches







Check product information by video



■ Specification

Model	SPH-1820 *4	SPH-18N *4
Motor	Brushless motor	
Battery type	Lithiu	m-ion
Voltage	DC	18V
Battery capacity	2.0	Ah
Charging time *1	Approx.	. 70 min
Operating time *2	Approx.	. 50 min
Trim width	300	mm
Stroke per minute	1200	rpm*1
Max trimmable diameter (wood)	18 mm	
Head angle	0-90° (5 steps) (w	rhen folded: -180°)
Body size	1,700~2,200	× 120 × 130
Accessories	Blade, bl	ade case
Battery, charger	18 V battery, fast charger	*3
Net Weight	3.0 kg (6.6 lbs)	2.6 kg (5.7 lbs)
Gross Weight	4.3 kg (9.4 lbs)	3.5 kg (7.7 lbs)
Dimensions LxWxH (mm)	1230 × 145 × 180	1230 × 145 × 180
Packing Unit	1	

*¹ May differ depending on temperature or remaining battery power. *² At full charge, no load. *³ Battery and charger sold separately: Battery pack 18 V 2.0 Ah (PA-332), Fast charger 18 V (PA-333) *⁴ Japanese Domestic Model

Battery-powered hedge trimmer



Cordless and easy to use anywhere! No need to worry about accidentally cutting the cord.





Check product information by video



Powerful pruner

Trim area at full charge		
100m		
100 meters of a 1-meter tall hedge!		

Model	SHT-1820 *4	SHT-18N *4
Motor	Brushless motor	
Battery type	Lithiu	m-ion
Voltage	DC 18V	
Battery capacity	2.0	Ah
Charging time *1	Approx.	. 70 min
Operating time *2	Approx.	. 50 min
Trim width	350 mm	
Stroke per minute	1200 rpm*1	
Max trimmable diameter (wood)	18 mm	
Body size	805 × 18	35 × 180
Accessories	Blade, bl	ade case
Battery, charger	18 V battery, fast charger	*3
Net Weight	2.7 kg (5.9 lbs)	2.7 kg (5.9 lbs)
Gross Weight	4.0 kg (8.8 lbs)	3.2 kg (7.0 lbs)
Dimensions L×W×H (mm)	785 × 195 × 195	785 × 195 × 195
Packing Unit	1	

^{*1} May differ depending on temperature or remaining battery power. *2 At full charge, no load.

^{*3} Battery and charger sold separately: Battery pack 18 V 2.0 Ah (PA-332), Fast charger 18 V (PA-333) *4 Japanese Domestic Model

Battery-powered extendable pole chainsaw



Cut tall trees safely and easily without a ladder!

Cutting tall trees is a breeze!







■ Specification

Model	SPS-1820 *4	SPS-18N *4
Motor	Brushless motor	
Battery type	Lithiu	m-ion
Voltage	DC ·	18 V
Battery capacity	2.0	Ah
Charging time *1	Approx.	70 min
Operating time *2	Approx.	30 min
Guide bar length	200	mm
Chain speed	2.5 m/s	
Head angle	Fixed at 15° 1,720–2,300 mm (adjustable extension)	
Adjustable length		
Body size	1,720 × 1	00 × 150
Accessories	Saw chain, guide	bar, chain case,
	chain oil (80 ml)	, shoulder strap
Battery, charger	18 V battery, fast charger	*3
Net Weight	3.3 kg (7.2 lbs)	2.9 kg (6.3 lbs)
Gross Weight	4.7 kg (10.3 lbs)	3.9 kg (8.5 lbs)
Dimensions L×W×H (mm)	1630 × 170 × 145	1520 × 170 × 145
Packing Unit	1	
*1 M 4 1:66 1 1: 4		

Can cut approx. 160

branches 38 mm in diameter.

Battery-powered chainsaw

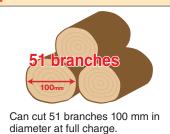


Easy to operate and quiet battery-powered





Number of branches cut at full charge





Can cut 300 pieces of lumber sized 40 x 50 mm at full charge.

Model	SCS-3625 *3	
Motor	Brushless motor	
Battery type	Lithium-ion	
Voltage	DC 36 V	
Battery capacity	2.5 Ah	
Charging time *1	Approx. 90 min	
Operating time *2	Approx. 40 min	
Guide bar length	300 mm	
Chain speed	8 m/s	
Body size	662 × 235 × 274	
Accessories	Saw chain, guide bar, chain	
	case, chainsaw oil (115 ml),	
	battery, fast charger	
Net Weight	4.5 kg (9.9 lbs)	
Gross Weight	6.4 kg (14.1 lbs)	
Dimensions L×W×H (mm)	410 × 260 × 290	
Packing Unit	1	
*1 May differ depending on temperature or remaining bettery power		

- May differ depending on temperature or remaining battery power.
- *2 At full charge, no load. *3 Japanese Domestic Model

 $^{^{\}star 1}$ May differ depending on temperature or remaining battery power. $^{\star 2}$ At full charge, no load. $^{\star 3}$ Battery and charger sold separately: Battery pack 18 V 2.0 Ah (PA-332), Fast charger 18 V (PA-333) $^{\star 4}$ Japanese Domestic Model

Battery-powered blower



Multiple uses in one product. Super convenient!



• Clean agricultural machinery

• Blow-dry cars after washing





■ Specification

Model	SBL-1820 *4	SBL-18N *4	
Motor	Brushless motor		
Battery type	Lithium-ion		
Voltage	DC 1	18 V	
Battery capacity	2.0	Ah	
Charging time *1	Approx.	70 min	
Operating time *2	10 min (high)	/ 20 min (low)	
Maximum air speed	50m/s (high)	/ 30m/s (low)	
Maximum air flow	2.6 m³/min (high) / 1.6 m³/min (low) 923 × 152 × 195 Nozzle		
Body size			
Accessories			
Battery, charger	18 V battery, fast charger	*3	
Net Weight	1.5 kg (3.3 lbs)	1.5 kg (3.3 lbs)	
Gross Weight	2.6 kg (5.7 lbs)	1.8 kg (1.8 lbs)	
Dimensions LxWxH (mm)	520 × 185 × 215	520 × 185 × 215	
Packing Unit	1		

*¹ May differ depending on temperature or remaining battery power. *² At full charge, no load.
*³ Battery and charger sold separately: Battery pack 18 V 2.0 Ah (PA-332), Fast charger 18 V (PA-333)
*⁴ Japanese Domestic Model

(Pole) hedge trimmer and (pole) chainsaw optional parts **Photo** Product name Blade Blade Saw chain Saw chain PA-410 PA-411 PA-418 PA-417 Model SCS-3625 **SPH Series SHT Series SPS Series** Compatible models 300mm 350mm 91PX-33E 90PX-45E

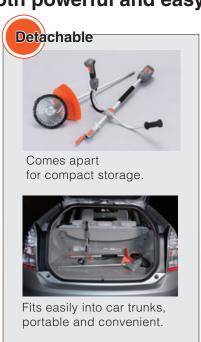
Battery-powered brush cutter





Chip saw type, from gardening to agricultural use

Both powerful and easy to use





Chip saw & Resin blade (2 type of blades)

Two different blades for different conditions



[Chip saw] For overgrown grass or weeds with thick stems



[Resin blade] For lawns, soft grass and edges



Chip saw type (SBC series)

U handle type Loop handle type Detachable New Detachable **High capacity battery** 5 hours on for longer operating time (Compared to former model SBC-3625) full charge *! * No load, low mode SBC-1825L SBC-3650 New Chip saw & resin blade **Check product** information (2 types of blades) Chip saw type by video **SGR-1820** (SBC series)

Specific	Jation							,			
Model		SBC-3650 *4 SBC-3650L *4		SBC-1825 *4 SBC-1825L *4		SGR-1820	*4				
Motor			Brushless r	notor					DC motor		
Battery type		Lithium-ion									
Voltage		DC 36 V				DC 18 V					
Charging time *1		Approx. 70 min			Approx. 90 min			Approx. 60	min		
Operating	High mode	Approx. 100 min				Approx. 30 min			Approx. 35	min	
time *2	Low mode		Approx.	x. 300 min		Approx. 50 min		Approx. 35	min		
Battery capa	acity		5.0	Ah			2.	5 Ah		2.0 Ah	
Number of revolutions		3000 ~ 6000 rpm		3000 ~ 5000 rpm		(Chip saw) 6300 rpm (Blade) 6600 rpm					
Cutting type	s	Mowing Chip saw					2 types (chip saw, resin blade)				
Trim diamet	er	blade *3 230 mm diamete			neter (9 ir	eter (9 inch)			Both type:160 mm dia	ameter	
Handle		U handle		Loop handle		U	handle	Loop handle		Loop handle	Э
Shaft		Detachable						Extendable	,		
Body size		$1,880 \times 660 \times 420$		$1,880 \times 280$	0×250	1,850 >	660 × 400	1,8	$50 \times 280 \times 250$	1,100~1,400	0
	Battery side	990 × 6	660×350	990 × 225	× 180	950 ×	660 × 330	95	$0 \times 225 \times 125$	(Extendable))
	Motor side	$980 \times 280 \times 240$		980 × 280	× 240	950 ×	280 × 240	98	$0 \times 280 \times 240$	× 170× 230)
Net Weight		5.3kg	(11.6 lbs)	5.1kg (11.	2 lbs)	4.5kg	(9.9 lbs)	4	.2kg (9.2 lbs)	1.7kg (3.7 lbs	s)
Gross Weig	ht	8.0kg (17.6 lbs) 7.7kg (16.9 lbs)		6.7kg (14.7 lbs) 6.4kg (14.1 lbs)		3.0kg (3.0 lbs)					
Dimensions I	-×W×H (mm)	1070 ×	290 × 185 1070 × 290 × 185		1010 × 290 × 185		$1040 \times 220 \times 100$				
Packing Uni	t	1									
Accessories		Cha	ırger	1	Chip sav	v (blade)	1			Chip saw (blade Battery pack Charger) 1 1 1
			ery pack	1	Nut drive	er	1			Resin blade 5 bl	•
		Sho	oulder strap	1	Nut wren	nch	1			Nut driver Nut wrench	1 1

^{*1} May differ depending on temperature or remaining battery power. *2 At full charge, no load. Operating time may change depending on the brush cutting conditions.

^{*3 255} mm (10 inch) blades cannot be used. *4 Japanese Domestic Model

Hand carry type battery-powered brush cutter



Less tiring! Easy to use! Very quiet and perfect for residential neighborhoods!

Easy to store!

The handles and tires fold up, making the model easily stored in a car.



Mowing edge is OK with nylon string

No worries to damage edgestone and garden







■ Specification

Model		SBC-3625C *3		
Motor		Brushless motor		
Battery type		Lithium-ion		
Voltage		DC 36 V		
Battery capacity		2.5 Ah		
Charging time *1		Approx. 90 min		
Operating time *2	High mode	Approx. 30 min		
Guide bar length	Low mode	Approx. 140 min		
Number of revolut	ions	3,000~5,300 rpm		
Cutting method		Nylon cutter (nylon cutter + nylon string)		
Trim width		360 mm		
Nylon string		Cross section: Twisted square (2.4 mm diagonal)		
		Length: 170 mm (including rivet)		
Net Weight		7.6 kg (16.7 lbs)		
Gross Weight		12 kg (26.4 lbs)		
Dimensions L×W>	(H (mm)	860 × 600 × 265		
Packing Unit		1		



Check product

- *1 May differ depending on temperature or remaining battery power.
- *2 At full charge, no load. Run time varies depending on the brush cutting conditions.
- *3 Japanese Domestic Model

Hand carry type engine brush cutter

Equipped with super-lightweight 4-stroke engine Fuel efficient and easy to maintain

Easy to start, quiet and user-friendly operation.

Nylon string manual roll-up system

The string length is adjustable, so no need to replace it.



Easier to use and less tiring!

Equipped with a 4-stroke engine



■ Specification

Model	EBC-35C*2		
Engine model	KOSHIN K 35		
Displacement	35 cc		
Engine type	Air cooled 4-stroke gasoline engine		
Fuel type	Automotive unleaded gasoline		
Fuel tank capacity	Approx. 0.7 L		
Continuous operating time	Approx. 50 min		
Maximum output	0.81 kW(1.1 PS) / 6500 rpm		
Cutting method	Nylon cutter (nylon cutter + nylon string)		
Trim width	420 mm		
Nylon string	Cross section: square (2.4 mm diagonal)		
	Length: 4 m		
Net Weight	10.1 kg (22.2 lbs)		
Gross Weight	13.2 kg (29.1 lbs)		
Dimensions LxWxH (mm)	895 × 590 × 260		
Packing Unit	Í.		



Don't get tired after long hours of mowing anymore!



■ Specification					
Model	EBC-26C*2				
Engine model	KOSHIN KC 26				
Displacement	26 cc				
Engine type	Air cooled 2-stroke gasoline engine				
Fuel type	2-stroke premix fuel 50:1 (JASO FC or higher)				
Fuel tank capacity	Approx. 0.6 L				
Continuous operating time	Approx. 35 min				
	(Differs depending on operational conditions)				
Maximum output	0.7 kW(0.93 PS) / 7500 rpm				
Cutting method	Nylon cutter (nylon cutter + nylon string)				
Trim width	420 mm				
Nylon string	Cross section: Round shape(3.0 mm diameter)				
	Length: 207 mm (including rivet)				
Net Weight	8.9 kg (19.6 lbs)				
Gross Weight	12.3 kg (27.1 lbs)				
Dimensions LxWxH (mm)	895 × 590 × 260				
Packing Unit	1				

^{*} Differs depending on operational conditions. *2 Japanese Domestic Model

^{*} Differs depending on operational conditions.

^{*2} Japanese Domestic Model

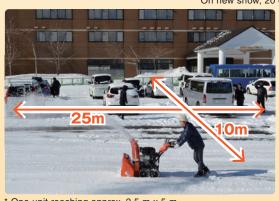


Engine Snow Blower

Compact but, powerful 11 horsepower snow blower







Works well at slow speeds, making it perfect for femal and senior citizens

Rotating function for tight turns

Simply grip the lever in the direction you wish to turn. This rotation function is not available on competitor snow blowers in this price range.



Moves as slowly as needed!

Equipped with an HST (hydraulic stepless transmission) for smooth and stepless speed control with a single lever.



Throw snow near or far!

The snow throwing chute angle is adjustable with a lever. (two angles)



Adjust auger height with a single button!

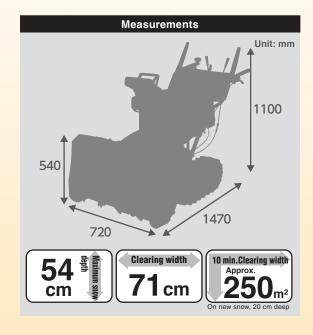
The auger height can easily be adjusted according to snow depth with a button near the handles.



Mounts maintenance-free battery

Model		ESB-1170*			
Clearing capacity		60 t/h			
Sr	ow throwing direction (left/right)	180° (stepless adjusting)			
Sr	ow throwing angle (up/down)	100° (8 stages)			
	Name	Koshin K420DS			
	Type	Air-cooled 4-cycle gasoline engine			
	Start type	Starter motor (electric), recoil starter			
		(manual)			
	Displacement	420 cm ²			
Ш	Maximum capacity	8.6 kW (11.7 PS) / 3600 rpm			
Engine	Fuel type	Automobile unleaded gasoline			
Ō	Run time guideline	Approx. 5 hrs. (no load), approx. 2.5 hrs			
	(at full tank)	(with load)			
	Fuel tank capacity	5.2 L			
	Oil type	Engine oil (SE or higher) SAE5W-30			
	Oil capacity	1.1 L			
В	ody dimensions	1470 × 720 × 1100 mm			
N	et Weight	135 kg (297.6 lbs)			
G	ross Weight	165 kg (363.7 lbs)			
Di	mensions L×W×H (mm)	1500 × 805 × 1140			
Pa	acking Unit	1			
* la	nanese Domestic Model				

Comes with self-priming pump for when the engine does not start



^{*} Japanese Domestic Model

Optional parts for ESB-1170									
	For off-season storage To cut through deep snow Repair parts								
Product name	Cover	Side cutter	CovAuger sherboltser	Blower sherbolts	Paint for repairs (orange)	Paint for repairs (black)			
Model	PA-419	PA-423	PA-420	PA-421	PA-422	PA-428			

Battery-powered Snow Remover







It was more powerful than I expected. It is very easy to use and very handy. Matsumoto City, Nagano



Reviews from our customers

Where it used to take three hours, I can now clear snow in an hour. Kitahiroshima City, Hokkaido



I am very satisfied because it is quiet and I don't have to bug the neighbors. Azumino City, Nagano

Perfect for sole proprietors!

Suited to businesses with many female workers, including convenience stores, beauty salons, mobile phone shops, etc.

An easy-to-use, battery-powered blade snow remover. Say goodbye to shoveling snow.

Battery-powered yet powerful!

Compact and battery-powered, yet as powerful as an engine snow remover.



60 cm wide and easily clears narrow spaces!

Oscar's blade is 60 cm, the same as the crawler. It keeps a straight line without wavering for smooth clearing.



Easy to use and three times as effective!

It advances at a slow walking speed for effective and complete clearing of snow. The lightweight and compact body makes for smooth turns and stable operation.



Low noise for peace of mind!

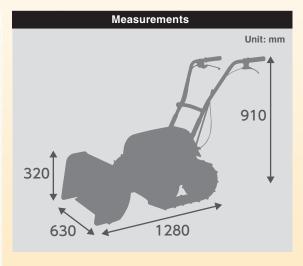
This snow remover is very quiet so you can work early mornings or weekends without bothering neighbors. The low engine displacement keeps the air clean, perfect for those with small children.



Super easy operation!

Removable and rechargeable battery

Model		SR-350 *2		
Clearing v	vidth	600 mm		
Blade hei	ght	320 mm		
Motor		DC motor		
Gear shift	type	Gears (1 forward speed, neutral, 1 reverse speed)		
Vehicle sp	eed	Forward speed 2.0 km/h, reverse speed 1.5 km/h		
Battery		Sealed lead-acid battery		
Voltage/Capacity		24 V/20 Ah		
Charging method		Via recharge socket on body and removable battery		
Charger	Power	AC10 0V(50-60 Hz)		
	Charging time	Approx. 12 hrs. *1 (At 25°C±5°C room temperature)		
Operating	time	Approx. 1 hr. *1 (At 0°C temperature)		
Body dime	ensions	1280 × 630 × 910 mm (Fully assembled size)		
Net Weight		54.0 kg (119.0 lbs)		
Gross Weight		61.0 kg (134.4 lbs)		
Dimension	ns L×W×H (mm)	975 × 665 × 630		
Packing U	Init	1		



Optional	parts	for	SR-350

	Protects clearing ground	Lifts from clearing ground	Convenient for continuous operation	For off-season storage
Produc name	Dubbor coronor	Side rollers	Battery	Cover
Mode	PA-382	PA-383	PA-379	PA-381

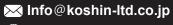
^{*1} Varies under different conditions

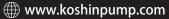
^{*2} Japanese Domestic Model

KOSHIN

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★Design and specifications are subject to change without notice. 20-09 699705105