



MITSUBISHI

MARINE ENGINE LINE-UP



**MITSUBISHI HEAVY INDUSTRIES
ENGINE & TURBOCHARGER, LTD.**

Our Technologies Your Tomorrow

Features



● Powerful Performance

-High torque and quickness are compatible with all applications.

● High Reliability

-We have supplied over 120 thousand of marine engines since 1916.

● Low Fuel Consumption

-Mitsubishi original fuel injection pump and turbo charger bring best combustion matching.

● Space Saving

-Compactness gives advantages for installation and running cost.

● Easy Maintenance

-Cylinder heads are individually divided by cylinder.

-Large inspection covers are available in crankcase and oilpan.

Rating Definitions

Propulsion

D-rating

Typical Operation :

Allowable Load Factor is up to 100% of Rated Power.

Allowable Cruising Speed is 100% or less of Rated Speed.

Operating hours is unlimited per year.

Typical Vessel Application :

Fishing Boats, Cargo Boats, Pusher Boats

C-rating

Typical Operation :

Allowable Load Factor is up to 83% of Rated Power.

Allowable Cruising Speed is up to 94% of Rated Speed.

100% of Rated Power is available intermittently for 8Hrs per every 24Hrs operation.

Operating hours is less than 6000Hrs per year.

Typical Vessel Application :

Bay Area Tug Boats, Working Boats, Passenger Boats, Ferry Boats

B-rating

Typical Operation :

Allowable Load Factor is up to 75% of Rated Power.

Allowable Cruising Speed is up to 91% of Rated Speed.

100% of Rated Power is available intermittently for 1Hr per every 6Hrs operation.

Operating hours is less than 3000Hrs per year.

Typical Vessel Application :

Pleasure Boats, Yachts, Patrol Boats, Fire Fighting Boats





Propulsion

Model		S6B-MTK2	S6B3-MPTK	S6B3-T2MTK2L	S6B3-T2MTK2Z
Max. output	B (LD)	400 PS / 2100 min ⁻¹	500 PS / 2000 min ⁻¹	448 kW / 600HP / 2001 min ⁻¹	
	C (MD)				378 kW / 507HP / 2001 min ⁻¹
	D (HD)				
EIAPP		NONE	NONE	IMO2	IMO2
No. of cylinder		6	6	6	6
Piston bore	mm	135	135	135	135
Piston stroke	mm	150	170	170	170
Total piston displacement	liter	12.88	14.60	14.60	14.60
Flywheel	SAE	14 inch	14 inch	14 inch	14 inch
Flywheel housing	SAE	No.1	No.1	No.1	No.1
Fuel injection pump		Bosch type	Bosch type	Bosch type	Bosch type
Governor type		Mechanical	Mechanical	Mechanical	Mechanical
Capacity of starting motor	pc-kW	1-6	1-6	1-6	1-6
Recommended battery size	AH	200	200	200	200
Lub. oil capacity (Oil pan)	liter	70	70	70	70
Fresh water capacity (Engine)	liter	65	58	58	58
Dimensions (L x W x H)	mm	1861.5 x 952 x 1331.5	1964 x 985 x 1329	1967 x 984 x 1330	1967 x 984 x 1330
Dry weight	kg	1,470	1,600	1,665	1,665

*4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

*Fuel oil : Diesel fuel oil (ISO 8217 DMX)

*Starting system : Electric motor (DC24V earth float type)

*Lubricating system : Forced lubrication by engine gear pump

*Lubricating oil : API service grade CF class

Propulsion

Model		S6A3-MPTK	S6A3-T2MPTK	S6A3-MPTK2
Max. output	B (LD)	490 kW / 657 HP / 1960 min ⁻¹		526 kW / 705 HP / 1960 min ⁻¹
	C (MD)	445 kW / 597 HP / 1900 min ⁻¹	445 kW / 597 HP / 1900 min ⁻¹	494 kW / 662 HP / 1900 min ⁻¹
	D (HD)	405 kW / 543 HP / 1840 min ⁻¹		
EIAPP		NONE & IMO1	IMO2	NONE & IMO1
No. of cylinder		6	6	6
Piston bore	mm	150	150	150
Piston stroke	mm	175	175	175
Total piston displacement	liter	18.56	18.56	18.56
Flywheel	SAE	14 inch	14 inch	14 inch
Flywheel housing	SAE	No.1	No.1	No.1
Fuel injection pump		Bosch type	Bosch type	Original PS
Governor type		Hydraulic	Mechanical	Hydraulic
Capacity of starting motor	pc-kW	1-6	1-6	1-6
Recommended battery size	AH	200	200	200
Lub. oil capacity (Oil pan)	liter	90	90	140
Fresh water capacity (Engine)	liter	55	55	55
Dimensions (L x W x H)	mm	2090 x 1019 x 1370.5	2090 x 991 x 1370.5	2189 x 1019 x 1421
Dry weight	kg	2,020	2,030	2,100

Model		S6A3-T2MTK3L	S6A3-T2MTK3M
Max. output	B (LD)	558 kW / 748 HP / 1900 min ⁻¹	
	C (MD)		502 kW / 673 HP / 1900 min ⁻¹
	D (HD)		
EIAPP		IMO2	IMO2
No. of cylinder		6	6
Piston bore	mm	150	150
Piston stroke	mm	175	175
Total piston displacement	liter	18.56	18.56
Flywheel	SAE	14 inch	14 inch
Flywheel housing	SAE	No.1	No.1
Fuel injection pump		Original PS	Original PS
Governor type		Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	1-6	1-6
Recommended battery size	AH	200	200
Lub. oil capacity (Oil pan)	liter	90	90
Fresh water capacity (Engine)	liter	60	60
Dimensions (L x W x H)	mm	2189 x 1127 x 1421	2090 x 1127 x 1421
Dry weight	kg	2,170	2,130

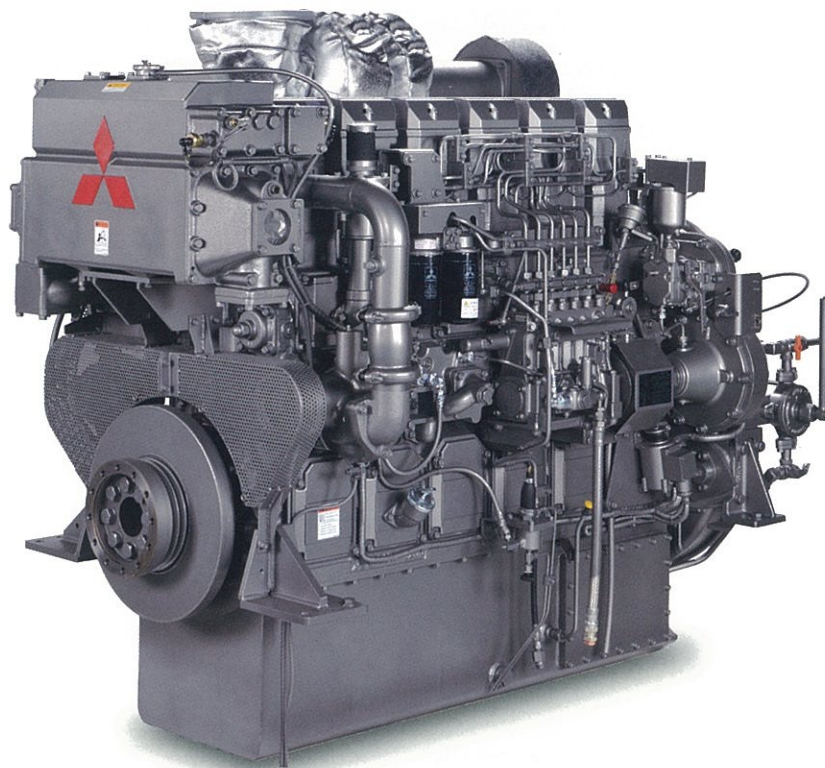
*4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

*Fuel oil : Diesel fuel oil (ISO 8217 DMX)

*Starting system : Electric motor (DC24V earth float type)

*Lubricating system : Forced lubrication by engine gear pump

*Lubricating oil : API service grade CF class



Model		S6R-MPTK	S6R-T2MPTK
Max. output	B (LD)	605 kW / 811 HP / 1800 min ⁻¹	605 kW / 811 HP / 1800 min ⁻¹
	C (MD)	520 kW / 697 HP / 1650 min ⁻¹	520kW / 697 HP / 1650 min ⁻¹
	D (HD)	470 kW / 630 HP / 1600 min ⁻¹	470kW / 637 HP / 1600 min ⁻¹
EIAPP		NONE & IMO1	IMO2
No. of cylinder		6	6
Piston bore	mm	170	170
Piston stroke	mm	180	180
Total piston displacement	liter	24.51	24.51
Flywheel	SAE	18 inch	18 inch
Flywheel housing	SAE	No.0	No.0
Fuel injection pump		Original PS	Original PS
Governor type		Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	1-7.5	1-7.5
Recommended battery size	AH	200	200
Lub. oil capacity (Oil pan)	liter	140	140
Fresh water capacity (Engine)	liter	120	120
Dimensions (L x W x H)	mm	2122 x 1201.5 x 1615	2122 x 1201.5 x 1615
Dry weight	kg	2,950	2,950

※4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

※Fuel oil : Diesel fuel oil (ISO 8217 DMX)

※Starting system : Electric motor (DC24V earth float type)

※Lubricating system : Forced lubrication by engine gear pump

※Lubricating oil : API service grade CF class

Propulsion

Model		S6R2-MPTK	S6R2-T2MPTK	S6R2-MPTK2
Max. output	B (LD)	610 kW / 818 HP / 1500 min ⁻¹	610 kW / 818 HP / 1500 min ⁻¹	691 kW / 927 HP / 1400 min ⁻¹
	C (MD)	530 kW / 710 HP / 1400 min ⁻¹	530 kW / 710 HP / 1400 min ⁻¹	622 kW / 834 HP / 1352 min ⁻¹
	D (HD)	480 kW / 643 HP / 1350 min ⁻¹	480 kW / 643 HP / 1350 min ⁻¹	
EIAPP		NONE & IMO1	IMO2	NONE & IMO1
No. of cylinder		6	6	6
Piston bore	mm	170	170	170
Piston stroke	mm	220	220	220
Total piston displacement	liter	29.96	29.96	29.96
Flywheel	SAE	18 inch	18 inch	18 inch
Flywheel housing	SAE	No.0	No.0	No.0
Fuel injection pump		Original PS	Original PS	Original PS
Governor type		Hydraulic	Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	1-7.5	1-7.5	1-7.5
Recommended battery size	AH	200	200	200
Lub. oil capacity (Oil pan)	liter	150	150	150
Fresh water capacity (Engine)	liter	120	120	120
Dimensions (L x W x H)	mm	2023 x 1160 x 1694	2023 x 1160 x 1694	2111 x 1183 x 1684.5
Dry weight	kg	3,030	3,030	3,070

Model		S6R2-MTK3L	S6R2-MTK3M	S6R2-T2MTK3L	S6R2-T2MTK3M
Max. output	B (LD)	759 kW / 1017 HP / 1406 min ⁻¹		759 kW / 1017 HP / 1406 min ⁻¹	
	C (MD)		691 kW / 926 HP / 1406 min ⁻¹		691 kW / 926 HP / 1406 min ⁻¹
	D (HD)				
EIAPP		NONE & IMO1	NONE & IMO1	IMO2	IMO2
No. of cylinder		6	6	6	6
Piston bore	mm	170	170	170	170
Piston stroke	mm	220	220	220	220
Total piston displacement	liter	29.96	29.96	29.96	29.96
Flywheel	SAE	18 inch	18 inch	18 inch	18 inch
Flywheel housing	SAE	No.0	No.0	No.0	No.0
Fuel injection pump		Original PS	Original PS	Original PS	Original PS
Governor type		Hydraulic	Hydraulic	Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	1-7.5	1-7.5	1-7.5	1-7.5
Recommended battery size	AH	200	200	200	200
Lub. oil capacity (Oil pan)	liter	150	150	150	150
Fresh water capacity (Engine)	liter	120	120	120	120
Dimensions (L x W x H)	mm	2105 x 1183 x 1695	2105 x 1183 x 1695	2105 x 1183 x 1695	2105 x 1183 x 1695
Dry weight	kg	3,130	3,130	3,130	3,130

※4 stroke cycle, Water cooled, Diesel engine. Direct injection. Turbocharged with intercooler

※Fuel oil : Diesel fuel oil (ISO 8217 DMX)

※Starting system : Electric motor (DC24V earth float type)

※Lubricating system : Forced lubrication by engine gear pump

※Lubricating oil : API service grade CF class

Propulsion

Model		S12A2-MPTK	S12A2-T2MPTK
Max. output	B (LD)	858 kW / 1150 HP / 2100 min ⁻¹	858 kW / 1150 HP / 1920 min ⁻¹
	C (MD)	776 kW / 1040 HP / 2000 min ⁻¹	776 kW / 1040 HP / 1860 min ⁻¹
	D (HD)	701 kW / 940 HP / 1940 min ⁻¹	701 kW / 940 HP / 1800 min ⁻¹
EIAPP		NONE & IMO1	IMO2
No. of cylinder		12	12
Piston bore	mm	150	150
Piston stroke	mm	160	160
Total piston displacement	liter	33.93	33.93
Flywheel	SAE	18 inch	18 inch
Flywheel housing	SAE	No.0	No.0
Fuel injection pump		Bosch type	Bosch type
Governor type		Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	2-7.5	2-7.5
Recommended battery size	AH	400	400
Lub. oil capacity (Oil pan)	liter	160	160
Fresh water capacity (Engine)	liter	152	152
Dimensions (L x W x H)	mm	2438.5 x 1482 x 1595.5	2438.5 x 1482 x 1595.5
Dry weight	kg	3,890	3,890

Model		S12R-MPTK	S12R-T2MPTK
Max. output	B (LD)	1210 kW / 1622 HP / 1800 min ⁻¹	1210 kW / 1622 HP / 1800 min ⁻¹
	C (MD)	1040 kW / 1394 HP / 1650 min ⁻¹	1040 kW / 1394 HP / 1650 min ⁻¹
	D (HD)	940 kW / 1260 HP / 1600 min ⁻¹	940 kW / 1260 HP / 1600 min ⁻¹
EIAPP		NONE & IMO1	IMO2
No. of cylinder		12	12
Piston bore	mm	170	170
Piston stroke	mm	180	180
Total piston displacement	liter	49.03	49.03
Flywheel	SAE	21 inch	21 inch
Flywheel housing	SAE	No.00	No.00
Fuel injection pump		Original PS	Original PS
Governor type		Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	2-7.5	2-7.5
Recommended battery size	AH	400	400
Lub. oil capacity (Oil pan)	liter	230	230
Fresh water capacity (Engine)	liter	227	227
Dimensions (L x W x H)	mm	2556.5 x 1622 x 1727.5	2556.5 x 1622 x 1727.5
Dry weight	kg	5,750	5,750

※4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

※Fuel oil : Diesel fuel oil (ISO 8217 DMX)

※Starting system : Electric motor (DC24V earth float type)

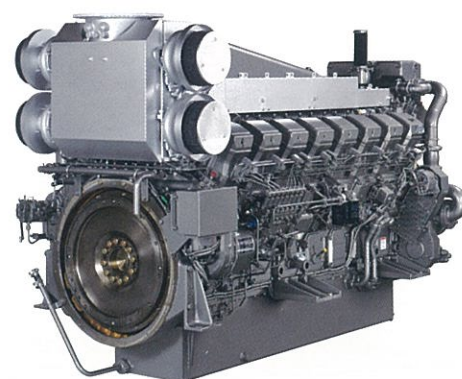
※Lubricating system : Forced lubrication by engine gear pump

※Lubricating oil : API service grade CF class

Propulsion

Model		S16R-MPTK	S16R-T2MPTK
Max. output	B (LD)	1610 kW / 2158 HP / 1800 min ⁻¹	1610 kW / 2158 HP / 1800 min ⁻¹
	C (MD)	1380 kW / 1850 HP / 1650 min ⁻¹	1380 kW / 1850 HP / 1650 min ⁻¹
	D (HD)	1250 kW / 1676 HP / 1600 min ⁻¹	1250 kW / 1676 HP / 1600 min ⁻¹
EIAPP		NONE & IMO1	IMO2
No. of cylinder		16	16
Piston bore	mm	170	170
Piston stroke	mm	180	180
Total piston displacement	liter	65.37	65.37
Flywheel	SAE	21 inch	21 inch
Flywheel housing	SAE	No.00	No.00
Fuel injection pump		Original PS	Original PS
Governer type		Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	2-7.5	2-7.5
Recommended battery size	AH	400	400
Lub. oil capacity (Oil pan)	liter	290	290
Fresh water capacity (Engine)	liter	280	280
Dimensions (L x W x H)	mm	3086 x 1622 x 1960	3086 x 1622 x 1960
Dry weight	kg	7,000	7,000

Model		S16R2-T2MPTK
Max. output	B (LD)	1885 kW / 2526 HP / 1500 min ⁻¹
	C (MD)	1600 kW / 2144 HP / 1400 min ⁻¹
	D (HD)	1450 kW / 1943 HP / 1350 min ⁻¹
EIAPP		IMO2
No. of cylinder		16
Piston bore	mm	170
Piston stroke	mm	220
Total piston displacement	liter	79.9
Flywheel	SAE	21 inch
Flywheel housing	SAE	No.00
Fuel injection pump		Original PS
Governer type		Hydraulic & Electric
Capacity of starting motor	pc-kW	2-7.5
Recommended battery size	AH	400
Lub. oil capacity (Oil pan)	liter	290
Fresh water capacity (Engine)	liter	280
Dimensions (L x W x H)	mm	2946 x 1525 x 2029
Dry weight	kg	7,910



- *4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler
- *Fuel oil : Diesel fuel oil (ISO 8217 DMX)
- *Starting system : Electric motor (DC24V earth float type)
- *Lubricating system : Forced lubrication by engine gear pump
- *Lubricating oil : API service grade CF class

Engine for Marine Generator

Model		S6R-T2MPTK	S6R2-T2MPTK	S12A2-T2MPTK
Max. output	50 Hz	545 kW / 1500 rpm	640 kW / 1500 rpm	709 kW / 1500 rpm
	60 Hz	635 kW / 1800 rpm	500 kW / 1200 rpm	828 kW / 1800 rpm
EIAPP (D2 mode)		IMO2	IMO2	IMO2
No. of cylinder		6	6	12
Piston Bore	mm	170	170	150
Piston Stroke	mm	180	220	160
Total Piston Displacement	liter	24.51	29.96	33.93
Flywheel	SAE	18 inch	18 inch	18 inch
Flywheel housing	SAE	No. 0	No. 0	No. 0
Fuel injection pump		Original PS	Original PS	Bosch type
Governor type		Hydraulic	Hydraulic	Hydraulic
Capacity of starting motor	pc-kW	1-7.5	1-7.5	2-7.5
Recommended battery size	AH	200	200	400
Lube oil capacity (Oil pan)	liter	140	150	160
Fresh water capacity (Engine)	liter	120	120	152
L x W x H	mm	2212 x 1201.5 x 1615	2111 x 1183 x 1684.5	2438.5 x 1482 x 1595.5
Dry weight	kg	2950	3100	3720

Model		S12R-T2MPTK	S16R-T2MPTK	S16R2-T2MPTK
Max. output	50 Hz	1120 kW / 1500 rpm	1500 kW / 1500 rpm	1960 kW / 1500 rpm
	60 Hz	1270 kW / 1800 rpm	1690 kW / 1800 rpm	1590 kW / 1200 rpm
EIAPP (D2 mode)		IMO2	IMO2	IMO2
No. of cylinder		12	16	16
Piston Bore	mm	170	170	170
Piston Stroke	mm	180	180	220
Total Piston Displacement	liter	49.03	65.37	79.90
Flywheel	SAE	21 inch	21 inch	21
Flywheel housing	SAE	No. 00	No. 00	No. 00
Fuel injection pump		Original PS	Original PS	Original PS
Governor type		Hydraulic	Hydraulic	Electric
Capacity of starting motor	pc-kW	2-7.5	2-7.5	2-7.5
Recommended battery size	AH	400	400	400
Lube oil capacity (Oil pan)	liter	230	290	290
Fresh water capacity (Engine)	liter	227	280	280
L x W x H	mm	2556.5 x 1622 x 1727.5	3086 x 1622 x 1960	2946 x 1525 x 2029
Dry weight	kg	5500	7000	7750

*4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

*Fuel oil : Diesel fuel oil (ISO 8217 DMX)

*Starting system : Electric motor (DC24V earth float type)

*Lubricating system : Forced lubrication by engine gear pump

*Lubricating oil : API service grade CF class

■ Propulsion (Medium Speed Engine)

Model		S6U-MPTK	S8U-MPTK	S12U-MPTK	S16U-MPTK
Max. output		1119 kW / 1100 rpm	1492 kW / 1100 rpm	2238 kW / 1100 rpm	2984 kW / 1100 rpm
EIAPP		IMO2	IMO2	IMO2	IMO2
No. of cylinder		6	8	12	16
Piston Bore	mm	240			
Piston Stroke	mm	260			
Total Piston Displacement	liter	70.6	94.1	141.2	188.2
Flywheel	SAE	21 inch	21 inch	21 inch	21 inch
Fuel injection pump		Bosch type			
Governer type		Woodward UG25 + (Electric) / UG8L (Hydraulic)			
Capacity of starting motor	pc-kW	—	—	—	—
Recommended battery size	AH	—	—	—	—
Lube oil capacity (Oil pan)	liter	370	490	520	680
Flesh water capacity (Engine)	liter	270	360	520	700
L × W × H	mm	3211 × 1403 × 2104	4065 × 1539 × 2192	3562 × 1910 × 2374	4628 × 1833 × 2473
Dry weight	kg	8350	11000	15500	20500

※4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

※Fuel oil : Diesel fuel oil (ISO 8217 DMX)

※Starting system : Electric motor (DC24V earth float type)

※Lubricating system : Forced lubrication by engine gear pump

※Lubricating oil : API service grade CF class

■ Engine for Marine Generator (Medium Speed Engine)

Model		S6U-MPTK	S8U-MPTK	S12U-MPTK	S16U-MPTK
Max. output	50Hz	1165 kW / 1000 rpm	1553 kW / 1000 rpm	2330 kW / 1000 rpm	3107 kW / 1000 rpm
	60Hz	1230 kW / 1200 rpm	1641 kW / 1200 rpm	2461 kW / 1200 rpm	3281 kW / 1200 rpm
EIAPP		IMO2	IMO2	IMO2	IMO2
No. of cylinder		6	8	12	16
Piston Bore	mm	240			
Piston Stroke	mm	260			
Total Piston Displacement	liter	70.6	94.1	141.2	188.2
Flywheel	SAE	21 inch	21 inch	21 inch	21 inch
Fuel injection pump		Bosch type			
Governer type		Woodward UG25 + (Electric) / UG8L (Hydraulic)			
Capacity of starting motor	pc-kW	—	—	—	—
Recommended battery size	AH	—	—	—	—
Lube oil capacity (Oil pan)	liter	370	490	520	680
Flesh water capacity (Engine)	liter	270	360	520	700
L × W × H	mm	3211 × 1403 × 2104	4065 × 1539 × 2192	3562 × 1910 × 2374	4628 × 1833 × 2473
Dry weight	kg	8350	11000	15500	20500

※4 stroke cycle, Water cooled, Diesel engine. Direct injection, Turbocharged with intercooler

※Fuel oil : Diesel fuel oil (ISO 8217 DMX)

※Starting system : Electric motor (DC24V earth float type)

※Lubricating system : Forced lubrication by engine gear pump

※Lubricating oil : API service grade CF class

Marine Gas Engine

Model		GS6R-MPTK	GS12R-MPTK	GS16R-MPTK	GS16R2-MPTK
Generator output	kWe	350 kWe / 1500 rpm	700 kWe / 1500 rpm	930 kWe / 1500 rpm	1500 kWe / 1500 rpm
No. of cylinder		6	12	16	16
Piston Bore	mm	170	170	170	170
Piston Stroke	mm	180	180	180	180
Total Piston Displacement	liter	24.51	49.03	65.37	79.9
Flywheel	SAE	18 inch	21 inch	21 inch	21 inch
Flywheel housing	SAE	No. 0	No. 00	No. 00	No. 00
Fuel injection pump		—	—	—	—
Governer type		Electric	Electric	Electric	Electric
Capacity of starting motor	pc-kW	1-7.5	2-7.5	2-7.5	2-7.5
Recommended battery size	AH	500	600	600	600
Lube oil capacity (Oil pan)	liter	145	200	260	340
Fresh water capacity (Engine)	liter	50	125	170	200
L × W × H	mm	1797 × 1088 × 1638	2421 × 1832 × 2137	2901 × 1899 × 2137	3423 × 2164 × 2122
Dry weight	kg	2410	5375	6770	8135