### Engines | Power Units



Compact Diesel Engines - 7.4 up to 138 kW LE/SL/SQ/SS/SK/CJ/EG/FRC-series

- Built to last
- Easy to maintain
- Highly compact engine design
- Ideal for a wide range of applications



## Advanced technology

Your reliable engine partner for construction, agriculture and material handling applications.



### **Global Reach**

As a globally operating company with subsidiaries in all parts of the world, our goal is to assist you all the way. Our engines are made to perform even under the toughest conditions and are known for their durability and reliability.

### Small reliable engines

The size of our engines makes us highly esteemed by customers for over 100 years. Minimizing the size of our engines makes it easier for you to install them in your applications. This combined with a relentless focus on Japanese product quality and production management makes us a reliable partner for our OEM's.

### Easy maintenance

Our engines are designed with ease of maintenance in mind and have easy access points to key components.

### **Application engineering**

A dedicated application engineer with vast knowledge of our engines and your needs will offer support in your design process from beginning to end to help choose and implement the right engine. We believe in personal attention in order to find the most suitable solution for you.

### Logistic

For OEM's logistic efficiency is vital. We work with our OEM's in various ways to find the best possible logistic setups in order to ensure a smooth and cost efficient production flow fitting your personal needs.



Our line up of engines consist of both non emission and emission regulated engines (EU Stage 3A, 3B, EPA Tier4). All are water-cooled for efficient cooling.

For non emission areas we typically deliver mechanical engines ensure extra reliability and ease of maintenance.

For emission areas we deliver both mechanical and electronic engines using industry standard common rail solutions for easy maintenance.



LE-series



SL-series



SQ-series



SS-series



CJ-series



EG-series

Compact Industrial Diesel Engines: 7.4 up to 138 kW					
25 kW	50 kW	75 kW	100 kW	125 kW	150 kW
7.4 <b>LE-SERIES</b> 20					
18 SL-SERIES	37				
28 <b>SQ-SE</b>	RIES 37				
	37 SS-SERIES	57			
		70	SK-SERIES	120	
27	CJ-SERIES	55			
	45	EG-SERIES	74		
				120 FRC	SERIES 138

UNIT: KW

COMPACT ENGINES



## technical information

# LE- & SL-series

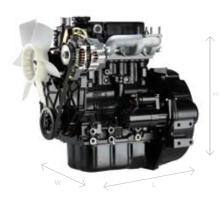
	L2E	L3E	S3L2	S4L2	S4L2-T
Туре	4-cycle, water-cooled, diesel engine				
Aspiration	Natural-aspirated	Natural-aspirated	Natural-aspirated	Natural-aspirated	Turbocharged
Number of cylinders	2	3	3	4	4
Bore and stroke mm	76x70	76x70	78x92	78x92	78x92
Displacement cc	635	952	1318	1758	1758
Combustion system	Swirl chamber				
Max. gross output (ISO 3046) kW/rpm	11.3 / 3600	17.0 / 3600	21.2 / 3000	28.8 / 3000	36.8 / 3000
Fuel system	In-line type (PFR)				
Charging alternator $V - A$	12 - 40	12 - 40	12 - 50	12 - 50	12 - 50
Starting system V – kW	12 - 1.2	12 - 1.7	12 - 1.7	12 - 2.0	12 - 2.0
Fuel	Diesel fuel (ASTM No.2-D)				
Dry weight (1500/1800 rpm. spec.) $kg$	71	75	135	155	174
Flywheel	SAE #6.5	SAE #6.5	SAE #7.5	SAE #7.5	SAE #7.5
Flywheel Housing	SAE #5	SAE #5	SAE #5w	SAE #5w	SAE #5w
Emission compliance			EU Stage 3A	EU Stage 3A	EU Stage 3A
<b>Dimensions</b> $mm \perp x W x H$	419 x 418 x 500	527 x 418 x 500	548 x 427 x 573	637 x 427 x 573	637 x 505 x 631







LE-series



SL-series



## SQ-, SS- & SK- series

	S4Q2	\$4\$	S4S-DT	S6S*	S6K
Туре	4-cycle, water-cooled, diesel engine				
Aspiration	Natural-aspirated	Natural-aspirated	Turbocharged	Natural-aspirated	Turbocharged
Number of cylinders	4	4	4	6	6
Bore and stroke mm	88x103	94x120	94x120	94x120	102x130
Displacement cc	2505	3331	3331	4996	6373
Combustion system	Swirl chamber	Swirl chamber	Direct Injection	Swirl chamber	Direct injection
Max. gross output (ISO 3046) kW/min <sup>-1</sup>	34.6 / 2500	47 / 2500	55 / 2500	57.4 / 2500	120 / 2000
Fuel system	Distributor type	Distributor type	Distributor type	Distributor type	In-line type
Charging alternator $V-A$	12 - 50	12 - 50	12 - 50	12 - 50	24 - 50
Starting system V – kW	12 - 2.0	12 - 2.2	12 - 2.2	12 - 3.0	24 - 5.0
Fuel	Diesel fuel (ASTM No.2-D)				
<b>Dry weight (1500/1800 min</b> <sup>-1</sup> <b>spec.)</b> <i>kg</i>	195	245	250	345	500
Flywheel	SAE #7.5	SAE #11.5	SAE #11.5	SAE #11.5	MHI Standard
Flywheel Housing	SAE #4	SAE #3	SAE #3	SAE #3	SAE #3
Emission compliance	EU Stage 3A				
<b>Dimensions</b> $mm \perp x W x H$	707 x 593 x 710	781 x 559 x 715	781 x 568 x 822	1044 x 622 x 749	1487 x 743 x 974

<sup>\*</sup> Also available in DT-version



Turbocharger



SQ-series



SS-series

### technical information

# CJ-, EG- & FRC-series

	3CJ	4CJ	4EG	6FRC
Туре	4-cycle, water-cooled diesel engine			
Aspiration	Turbocharged	Turbocharged	Turbocharged	Turbocharged
Number of cylinders	3	4	4	6
Bore and stroke mm	86 x 95	86 x 95	94 x 120	102x130
Displacement cc	1655	2207	3331	6400
Combustion system	Direct injection	Direct injection	Direct injection	Direct injection
Max. gross output (ISO 3046) kW/rpm	36 / 2500	44 / 2500	74 / 2000	138 / 2100
Fuel system	Common rail system	Common rail system	Common rail system	Common rail system
Charging alternator <i>V</i> – <i>A</i>	12 - 50	12 - 50	24 - 50	24 - 50
Starting system V – kW	12 - 2,0	12 - 2,0	24 - 3,2	24 - 6,5
Fuel	Diesel fuel EN 590			
Dry weight kg	235	270	360	560
Flywheel	SAE # 4	SAE # 4	SAE#3	SAE # 3
Flywheel Housing	SAE # 7,5	SAE # 7,5	SAE # 11,5	SAE # 11,5
After treatment	DOC / DPF	DOC / DPF	DOC / DPF / SCR	DOC / DPF / SCR
Emission compliance	EU stage 3B / EPA TIER 4	EU stage 3B / EPA TIER 4	EU stage 3B / EPA TIER 4	EU Stage 3B
<b>Dimensions</b> <i>mm</i> L x W x H	534 x 505 x 651	631 x 505 x 651	715 x 625 x 750	1131 x 746 x 1037







CJ-series



EG-series



## Application areas





#### Construction

Clearing, dredging, excavating and land grading. Construction machines power the project execution. The right reason to choose our high performance engines for your equipment.



### **Pump compressor**

Compact pump compressors due to a highly resilient built in engine to handle all your heavy and less strenuous cleaning.



#### **Agriculture**

Cultivating the ground, including the harvesting of crops, and the rearing and management of live stock; tillage; husbandry are just a small portion of areas for which we provide a growing range of high performance engines.



#### Lawn & garden

Reliable engines optimized, with ease of maintenance for all greenery-related work.

Opting for quality means opting for us.



### **Material handling**

Moving, transporting, delivering of your material forms no issue. Our engines make material handling seem effortless.



#### Mini ca

Being mobile and getting to where you want. Highly dependable engines assure you mobility with great ease.



### **Forestry**

A rough and demanding working area where workers depend on their machinery. Reliability and power make the difference.



### **General equipment**

Ready for the job - our broad range, compact power units supplies you top performance for a variety of applications.

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# Your loyal, reliable partner since 1917

In 1917, Mitsubishi Heavy Industries (MHI) became the first Japanese company to develop and build a diesel engine, and since then has steadfastly pioneered technologies for the reciprocating engine. MHI offers a broad line-up, ranging from construction machinery and marine engines to engines for power generation. In recent years, the company has been involved in the general development of advanced gas turbines, rocket engines, and other types of internal combustion engines, even as it continues to look at the true significance and its decades-long quest to further refine the reciprocating engine.







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