FUSO INDUSTRIAL ENGINES

M-Series / V-Series

FUSO

Advanced engine technology only Mitsubishi Fuso can deliver to develop a myriad of industries.

At Mitsubishi Fuso, we've built our reputation by delivering high-quality trucks and buses with outstanding performance to customers around the world. The reliability and expertise learned over our decades of commercial vehicle industry success are now available to you in our exceptional industrial engines.

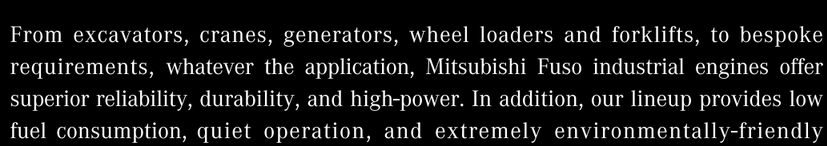
From excavators, cranes, generators, wheel loaders and forklifts, to bespoke requirements, whatever the application, Mitsubishi Fuso industrial engines offer superior reliability, durability, and high-power. In addition, our lineup provides low fuel consumption, quiet operation, and extremely environmentally-friendly solutions for your powertrain needs.

Enhanced performance in even the smallest detail.

We achieve unparalleled reliability and durability through crankshafts and conrods of enhanced rigidity and a robust gear driven crankshaft system. Fuel efficiency of our emission regulation compliant engines has been increased using advanced technologies such as increased precision air intake throttles, airflow sensors, and a common rail fuel injection system that generates highpressure injection. This, coupled with a highly reliable turbo charger, ensures that Mitsubishi Fuso engines are all-round performers delivering superior load carrying capabilities, high power and low fuel consumption, every time.

Certified environmental-friendliness.

Most engines will comply with upcoming off-road diesel engine emission regulations in the EU, US, and China combining advanced environmental compliance.



Engine Lineup

☆ Applicable for excavators only Please note actual size of the engine may slightly differ from the specs below 4V2 is under development and the actual spec may slightly differ from the spec below

Model				4D33	4D34-T	4D34-TL	6D16	6D16-T	6D16-TL	6D24	6D24-T	6D24-TC	4M50-TL	6M60-TL	6M60-TL☆	4D37-TL☆	4V2-TL
Type				–	Turbocharged	Turbocharged, intercooled	–	Turbocharged	Turbocharged, intercooled	–	Turbocharged	Turbocharged, intercooled (water)	Turbocharged, intercooled	Turbocharged, intercooled		Turbocharged, intercooled	Turbocharged, intercooled
				In-line 4 OHV, gear driven camshaft			In-line 6 OHV, gear driven camshaft			In-line 6 OHV, gear driven camshaft			In-line 4 DOHC, gear driven camshaft	In-line 6 OHC, gear driven camshaft		In-line 4 OHV, gear driven camshaft	In-line 4 OHV, gear driven camshaft
Combustion chamber type				Direct Injection			Direct Injection			Direct Injection			Direct Injection	Direct Injection		Direct Injection	Direct Injection
Bore×stroke (mm)				108×115	104×115		118×115			130×150			114×120	118×115		104×115	104×115
Displacement (ℓ)				4.214	3.907		7.545			11.945			4.899	7.545		3.907	3.907
Compression ratio				18	16.5	18.2	19	16	17.5 19 (Power generator)	19.5	16.5		17.5	17.5		17	17
Variable speed use	Output kW JIS D0006-1994	–	1500min⁻¹	–	–	63	71	104	108	114	163	182	–	–	–	–	–
			1800min⁻¹	–	–	79/1900	84	124	122	136	191	207	–	–	–	–	–
			2000min⁻¹	–	–	81	93	134	132	144	201	217	118	–	–	70	84
			2100min⁻¹	–	–	–	–	–	–	–	–	–	–	160, 145, 129, and 110	–	–	–
			2150min⁻¹	–	–	–	–	–	–	–	–	–	–	188	188	–	–
			2200min⁻¹	–	–	83	101	140	141	151	206	228	129	–	–	–	–
			2500min⁻¹	–	–	–	110	145	157	–	–	–	–	–	–	–	100
			2600min⁻¹	–	–	–	112	146	161	–	–	–	–	200	–	–	–
			2700min⁻¹	–	–	–	–	–	165	–	–	–	129	–	–	–	–
			2800min⁻¹	–	–	–	113	147	–	–	–	–	–	–	–	–	–
	Output kW JIS D8018-1989	Continuously use (10 hours) (Overload 10%)	1500min⁻¹	–	–	57	64	95	98	104	148	165	–	–	–	–	–
			1800min⁻¹	–	–	71/1900	76	113	117	124	174	188	–	–	–	–	–
			2000min⁻¹	–	–	73	84	121	120	131	182	197	–	–	–	–	–
			2200min⁻¹	–	–	75	91	128	128	137	187	207	–	–	–	–	–
			2500min⁻¹	–	–	–	99	132	134	–	–	–	–	–	–	–	–
			2600min⁻¹	–	–	–	101	132	150/2700	–	–	–	–	–	–	–	–
			2800min⁻¹	–	–	–	103	134	–	–	–	–	–	–	–	–	–
Power generator use Output kW JIS D8018-1989	EMERGENCY	Ordinary	1500min⁻¹	45	54	–	70	115	124	123	180	198	–	–	–	–	–
			1800min⁻¹	51	67	–	83	132	149	143	206	230	–	–	–	–	–
		Longer use (Overload 10%)	1500min⁻¹	41	49	–	63	104	113	112	164	180	–	–	–	–	–
			1800min⁻¹	46	61	–	75	120	135	130	187	209	–	–	–	–	–
	Portable (Overload 10%)		1500min⁻¹	41	49	–	63	104	113	112	164	180	–	–	–	–	–
			1800min⁻¹	46	61	–	75	120	135	130	187	209	–	–	–	–	–
	Continuous use (Overload 10%)		1500min⁻¹	37	44	–	63	94	107	102	149	164	–	–	–	–	–
			1800min⁻¹	42	55	–	75	110	122	118	170	190	–	–	–	–	–
Industrial maximum torque N·m/min⁻¹				284/1400	362/1800	400/1600	461/1400	686/1600	696/1300	750/1600	1039/1500	1156/1500	620/1500	785/1400 610, 700, 740, 775/1600	853/1800	370/1600	420/1500
Dimensions (with fan, No air cleaner)	Length (mm)			843	865	893	1245	1308	1526	1473			1114	1297	1359	893	–
	width (mm)			666		659	731		733	866	881		775	801	826	745	–
	Height (mm)			791	774	848	815	830	1085	1058	1169	1209	990	970	1105	965	–
Dry weight (kg)				325	335	360	500	550	575	905	930	960	521	625	683	370	–
Standard cooling fan diameter (mm)				540		545	600			650	700		620	600	620	545	–
Starter (V-kW)				24-5.0			24-5.0			24-5.5			24-5.0	24-5.0		24-5.0	24-5.0
Alternator (V-A)				24-50			24-50			24-50			24-50	24-50		24-50	24-50
Cooling water capacity (ℓ)				8			13			22		24	11	13		8	8
Lubricating oil category				CC (API)	CC (API)		CC (API)	CD (API)		CD (API)			CD (API)/Above DH-2	CD (API)		CD (API)	Above DH-2
Lubricating oil (ℓ)				9		17	13.5			31			11/17	11	28	15	15
Battery capacity V-Ah×quantities (Reference)				12-100×2			12-120×2			12-150×2			12-120×2	12-120×2		12-100×2	12-100×2
Fuel injection equipment				Mechanical, in-line pump			Mechanical, in-line pump			Mechanical, in-line pump			Electrical, CRS	Electrical, CRS		Electrical, CRS	Electrical, CRS

End of Production
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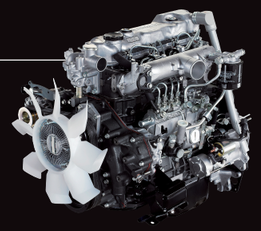
D-SERIES

4D33
4D34-T
4D34-TL
4D37-TL*

~~6D16 6D24~~
~~6D16-T 6D24-T~~
~~6D16-TL 6D24-TC~~



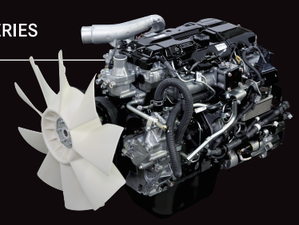
* 4D37 uses Common rail system

D series features

- Simple and robust
- Mechanical, in-line pump
- Applicable for non-emission standard markets

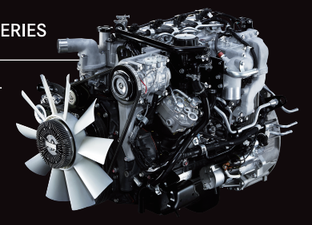
M-SERIES

4M50-TL
6M60-TL



V-SERIES

4V2-TL



M and V series features

- Advanced technology
- Common rail system
- Applicable for emission standard markets

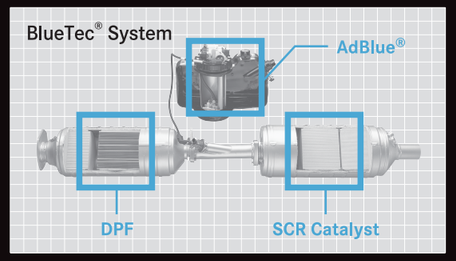
BlueTec® System

Future proof your equipment, specify a Mitsubishi Fuso Engine.

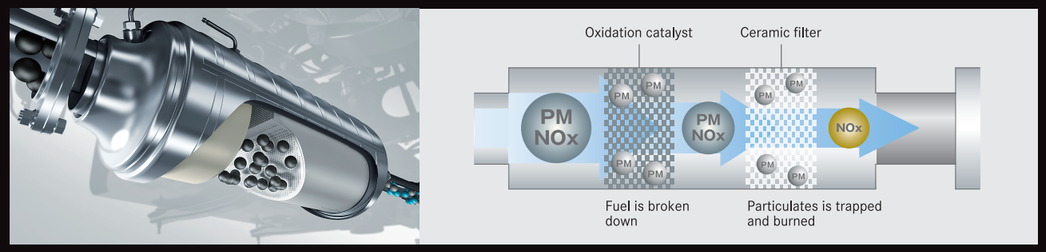
Originating from our extensive proven experience in trucks and buses, many of our industrial engines will feature BlueTec® enhancement in the near-future depending on emission regulations, meaning improved regulation compliance down the track without major specification and design changes to your equipment.

Advanced environmental technology, BlueTec® System.

BlueTec® System is an advanced environmental technology consisting of automatically regenerated DPF and BlueTec® Exhaust Gas After-treatment system. It drastically reduces both PM and NOx to achieve cleaner exhaust gas.



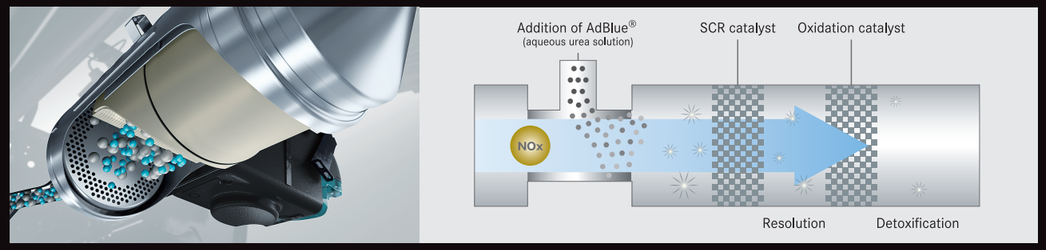
Diesel Particulate Filter



The automatically regenerated DPF significantly reduces PM. The DPF system is composed of a robust oxidation catalyst for continuous cleansing of PM and a ceramic filter for trapping and burning the remaining particulates. Mitsubishi Fuso's diesel particulate filter (DPF) system uses silicon carbide, offering better fuel economy and reliability over cordierite systems.

* The figure is emphasized for ease of explanation. * Image for illustration purpose only.

BlueTec® Exhaust Gas After-treatment System



The BlueTec® Exhaust Gas After-treatment System is reliable for reducing NOx from the engine. To detoxify NOx, the Urea SCR catalyst resolves NOx into nitrogen and water with the use of AdBlue® (aqueous urea solution). BlueTec® also contributes to reduction of fuel consumption with NOx reduction.

* "Urea SCR" (selective catalytic reduction for NOx), an environmental technology aimed at clean and effective use of diesel engines was named BlueTec® by the truck division of Daimler.
* AdBlue® is a registered trademark of the German Automotive Industry Association. * The figure is emphasized for ease of explanation. * Image for illustration purpose only.

FUSO Genuine Parts

Enhance superior engine performance and retain it for longer. Reliable quality and performance with FUSO Genuine Parts.

Engineered by Mitsubishi Fuso with passion and precision to give you the best in quality and reliability. With Fuso Genuine Parts you can rely on increased longevity, availability, safety and enhanced resale value of your equipment. We understand that availability of parts minimizes your downtime, so turn to your Mitsubishi Fuso dealer for quick supply of the genuine parts needed to keep your engine running.

Air Filter

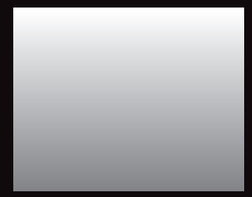
Quality air filters play a key role in sustained performance and ensuring the longevity of your engine by removing harmful impurities such as sand, metal particles, dirt and dust.

Fuel Filter

Correct fuel filters ensure reliability by trapping impurities such as paint chips, dirt and rust particles caused by moisture in the fuel tank while still maintaining adequate fuel flow.

Oil Filter

Our high-performance oil filters trap impurities from engine oil to extend engine life and maintain smooth engine operation.



Fan Belt

Often overlooked, the right fan belt provides high-power transmission and a smooth and quiet driving experience.

FUSO Brand

Mitsubishi Fuso's philosophy is simple – deliver highly reliable, quality products to our customers worldwide.

The Mitsubishi Fuso brand is renowned worldwide for its trusted high-quality, economic efficiency, functional design, and value-added service. Their industrial engines are developed and produced based on the same philosophy and include a myriad of innovative technologies while still delivering exceptional reliability. Fuso's advanced engineering, and the expertise to obsess over even the smallest detail, are further enhanced by Daimler's development management process, Commercial Vehicle Development System (CVDS). Thousands of satisfied customers worldwide are a testament to the resulting superior product and performance.

Mitsubishi Fuso's philosophy for industrial engine manufacturing will continue to remain the same.

MITSUBISHI FUSO TRUCK & BUS CORPORATION
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