M-LINE MARINE DIESEL ENGINES



Equipment selection table for M-Line series



Engine model	M2.13		M2.18		M3.29		M4.35		M4.45		M4.56		
Gearbox reduction	2:1	2.6:1	2:1	2.6:1	2:1	2.6:1	2:1	2.5:1	2:1	2.5:1	2:1	2,47:1	
VETUS water lubricated propeller shaft syste	em												
* Shaft diam., Remanit 4462			25					30		35	30	35	
VETUS manganese bronze propeller for displ	acement bo	ats											
* 3-blade, P3B, diameter in inches	13"	15"	13"	15"	14"	16	5"	18	3"	20"	18"	20"	
* 4-blade, P4E, diameter in inches						on re	quest						
Flexfold NiAlBz folding propellers for sailing	boats can ex	clusively be p	ourchased th	rough the Fle	exofold ne	twork (look at:	www.flexo	fold.com)					
2-blade, FoF folding propeller	13"	15"	13"	15"	15"				n.a.				
3-blade, FoF folding propeller			n.a.			15″	16″	17″	17″	18″	18″	20″	
4-blade, FoF folding propeller						on re	quest						
VETUS flexible couplings													
* Bullflex type		01		0	2			04		08	04	08	
* Uniflex type					13					16	13	16	
* Combiflex type					12					n.a.	12	n.a.	
VETUS water strainer													
* hose connection diam.(mm)						20						25	
* water strainer, type FTR470 or FTR330:					330	or 470/19					330 or 47	0/25 / CWS	
* water strainer kit, type					Wk	UT33019					WKIT	33025	
VETUS water separator / fuel filter													
* hose connection suction/return in mm						8	-8						
* water separator / fuel filter, type:						(75)330VTE	B or WS18	30					
VETUS water-injected exhaust systems													
* exhaust hose, diam. (mm)				40				5	60			60	
* waterlock, type		NLP(3)40/LP40 NLP40HD						50/L50R/S 250HD		NLP(3)60/LP60 NLP60HD			
* combi waterlock/muffler, type		NLPH40		.PH40			NLF			PH50		n.a.	
* muffler, type			N	1P40				M	P50		М	P60	
* gooseneck, type		LT40		.T40		Ľ		T50		LT60			
* combi muffler/gooseneck, type		NLPG40		.PG40			NLPG50		n.a.				
* transom exhaust connection, type TRC			40R /	PV or SV				50R / F	V or SV		60R /	PV or SV	
* anti-siphon, type AIRVENT or ASD						Vo	or H						
VETUS engine remote controls													
* to be selected					SICO, SIS	CO, AFSTZIJ, RO	TOPB, RCT	TOPS, AFSTTO	Р				
VETUS maintenance free batteries													
* voltage						1	2						
* starter battery, min. Ah				E	55					1	108		
* service battery, Ah.						to be s	elected						
VETUS louvered air suction vents													
* per engine, type ASV, SSV or SSVL	1	x 25	2	x 20		2 x 25		: 40 or x 20		50 or x 30	4)	60 or < 30/ x 40	

Complementary services

A VETUS engine brings with it 50 years of experience in producing reliable and compact marine engines, ensuring safe and continuous boating pleasure for all customers. We believe that our customers deserve the best when choosing VETUS, therefore all our engines come with a 5-year warranty in accordance with the VETUS Guarantee and Service conditions. Furthermore, all our customers can rely on the VETUS dealer network, which provides service, spare parts, and a specialised point of contact worldwide. For more information check the VETUS waranty conditions on www.vetus.com





M-LINE MARINE DIESEL ENGINES



VETUS offers a complete range of M-Line marine diesel engines, suitable for many different types of boats including launches, sailing yachts, canal boats and small cabin cruisers. Over the course of many years of steady development these engines have proven both their quality and reliability.

- VETUS M-Line engines are quiet running and highly fuel-efficient
- The M-Line engines are very reliable and offer high power and torque output
- Including water cooled top cover for noise and engine room temperature reduction
- The fuel system is automatically self-bleeding which is convenient after a fuel filter replacement
- Standard supplied with an electric fuel pump, actuated by the ignition switch
- High output marine alternator
- Service parts are easily accessible for maitenance
- Meets the RCD2013/53/EU emission regulations
- 5 years warranty in accordance with the VETUS Guarantee and Service conditions
- In case the engine is equipped with VETUS equipment the whole package has a 5 year warranty term



M-LINE MARINE DIESEL ENGINES



INNOVATION

Engine space temperature reduction

VETUS has developed an elegant yet efficient solution to reduce heat build-up in the engine compartment by fitting a water-cooled aluminium top cover. Located directly above the cylinder head, this huge cooling element absorbs radiant heat coming from the engine. This innovative concept results in a significant temperature reduction of up to 15°C - a 20% reduction! In turn, the cooler ambient temperature provides a more fuel-efficient air supply to the engine and better combustion. To the best of our knowledge, no other marine engine manufacturer uses such an incorporated cooling element to reduce ambient temperature in the engine space. A truly unique solution developed by VETUS.

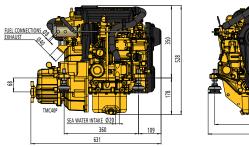


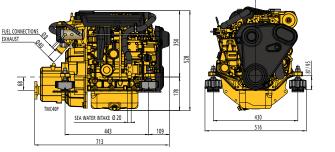
Engine sound reduction

People often go boating to enjoy the peace and quiet of the water. VETUS likes to add to this experience by creating a propulsion system that performs as quietly as possible.

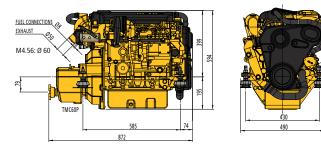
The sturdy, aluminium top cover also significantly reduces the noise level. When combined with the newly designed air filter housing, tests show a sound reduction of approximately 5 dB(A) and 'near silent' operation at a cruising speeds of around 2200 rpm. Those present at the test sites have all enthusiastically described the engine sound as being incredibly more pleasant to the ear.

Dimensions





М3



M4

M2

Options

- Bobtail, gearbox and saildrive version
- Keelcooling
- Mechanical trolling valve
- Calorifier kit
- Volvo Penta saildrive kit for saildrives type 110S, 120S or 120SB
- Front mounted oil and fuel filter including a bracket
- 2nd alternator for M4 engines
- Different instrument panels and cables
- Powerpack or hydraulic propulsion
- SOLAS certificates for M3 and M4 engines

TECHNICAL SPECIFICATIONS

Supplied as standard with:

• 1 Instrument panel type MP10B12 (M2) / MPA22SB2 (M3 / M4)

• 4 Flexible engine mounts

Engine model	M2.13	M2.18	M3.29
*Max. output at flywheel (ISO 3046-1)	8.8 kW (12 hp)	11.8 kW (16 hp)	20 kW (27 hp)
*Max. output at propeller shaft (ISO 3046-1)	8.7 kW (11.8 hp)	11.6 kW (15.8 hp)	19.3 kW (26.2
Maximum rpm	3000	3600	3600
Max. torque	32.7 Nm / 1600 rpm	35.1 Nm / 2000 rpm	60.2 Nm / 2500
Bore x stroke	76 mm x 70 mm	76 mm x 70 mm	76 mm x 70 mn
Displacement	635 cm ³	635 cm ³	952 cm ³
Number of cylinders	2 in line	2 in line	3 in line
Combustion system	indirect injection	indirect injection	indirect injection
Compression ratio	23:1	23:1	22:1
Firing order	1-2	1-2	1-3-2
Intake	naturally aspirated	naturally aspirated	naturally aspirat
Electrical system	12 Volt - 75 Amps.	12 Volt - 75 Amps.	12 Volt - 75 Am
Cooling system (standard)	indirect cooling (keel cooling optional)	indirect cooling (keel cooling optional)	indirect cooling (keel cooling optional)
Gearbox, standard	TMC40P (2 / 2.60:1)	TMC40P (2 / 2.60:1)	TMC40P (2 / 2.
Gearbox options	ZF12M 2.14 / 2.63:1 ZF15MIV 2.13 / 2.99:1 TMC60A 2 / 2.5:1	ZF12M 2.14 / 2.63:1 ZF15MIV 2.13 / 2.99:1 TMC60A 2 / 2.5:1	ZF12M 2.14 / 2 ZF15MIV 2.13 / 2.99:1 TMC60A 2 / 2.5
Saildrive	SP60 2.15 / 2.38:1 SD10 2.23 / 2.49:1	SP60 2.15 / 2.38:1 SD10 2.23 / 2.49:1	SP60 2.15 / 2.3 SD10 2.23 / 2.4
Dry weight (incl. std. gearbox)	107 kg	107 kg	134 kg
Fuel consumption at 2500 rpm	268 g / kW.h (196 g / hp.h)	268 g / kW.h (196 g / hp.h)	270 g / kW.h (199 g / hp.h)
Max. backwards installation angle	15°	15°	15°
Max. lateral inclination angle;			
Continuously	25°	25°	25°
5 minutes max.	30°	30°	30°
Suction height of fuel lift pump	1.5 m	1.5 m	1.5 m
Calorifier connection kit	optional	optional	optional
Instrument panel (standard)	MP10B12	MP10B12	MPA22BS2
Warning lights and audible alarm	oil pressure, temperature (coolant and exhaust), charging current	oil pressure, temperature (coolant and exhaust), charging current	oil pressure, temperature (coolant and exhaust), chargi current
Control light for	pre-heating/glow plugs	pre-heating/glow plugs	pre-heating/glo plugs
Electric circuit protection	fuse 10 Amps.	fuse 10 Amps.	fuse 10 Amps.
Certifications	EU-RCD II, BSO II	EU-RCD II, BSO II	EU-RCD II, BSO

* In accordance with ISO 8665





9.3 kW (26.2 hp)
500
0.2 Nm / 2500 rpm
6 mm x 70 mm
52 cm ³
in line
direct injection

aturally aspirated 2 Volt - 75 Amps. direct cooling eel cooling otional) MC40P (2 / 2.60:1)

15MIV 2.13 / 99:1 MC60A 2 / 2.5:1 260 2.15 / 2.38:1 010 2.23 / 2.49:1 34 kg 70 g / kW.h

5 m otional PA22BS2 pressure, mperature polant and haust), charging rrent e-heating/glow se 10 Amps.

-RCD II, BSO II, SOLAS

24.3 kW (33 hp) 23.6 kW (32.1 hp) 3000 78 mm x 92 mm 1758 cm³ 4 in line indirect injection 22:1

M4.35

1-3-4-2 naturally aspirated 12 Volt - 110 Amps. indirect cooling (keel cooling optional) TMC60P (2 / 2.5 / 2.94.1TMC60A 2 / 2.5:1

SP60 2.15 / 2.38:1 SD10 2.23 / 2.49:1 199 kg 252 g / kW.h (185 g / hp.h) 15°

25° 30° 1.5 m

optional MPA22BS2 oil pressure, temperature (coolant and exhaust), charging current pre-heating/glow plugs fuse 10 Amps. EU-RCD II, BSO II, SOLAS

30 kW (40.8 hp) 3000 83.8 Nm / 1700 rpm 106.4 Nm / 1750 rpm 78 mm x 92 mm 1758 cm³ 4 in line indirect injection 22:1

1-3-4-2

M4.45

30.9 kW (42 hp)

naturally aspirated 12 Volt - 110 Amps. indirect cooling (keel cooling optional) TMC60P (2 / 2.5 / 2.94:1) 12M 2.14 / 2.63:1 ZF12M 2.14 / 2.63:1 ZF12M 2.14 / 2.63:1 TMC60A 2 / 2.5:1 TMC60A 2 / 2.5:1

SP60 2.15 / 2.38:1 SD10 2.23 / 2.49:1 199 kg 252 g / kW.h (185 g / hp.h) 15°

25° 30° 1.5 m

optional MPA22BS2 oil pressure, temperature (coolant and exhaust), charging current pre-heating/glow plugs fuse 10 Amps. EU-RCD II, BSO II, SOLAS

38.3 kW (52 hp) 37.1 kW (51 hp) 3000 127 Nm / 2000 rpm 78 mm x 92 mm 1758 cm³ 4 in line indirect injection 22:1

M4.56

1-3-4-2 turbo charged 12 Volt - 110 Amps. indirect cooling (keel cooling optional) TM345(A) (2 / 2.47:1) ZF12M 2.14:1 ZF15MIV 2.13 / 2.99:1 TMC60P 2 / 2.5:1 SP60 2.15 / 2.38:1 SD10 2.23 / 2.49:1 206 kg 244 g / kW.h (179 g / hp.h) 15°

25° 30° 1.5 m

optional MPA22BS2

oil pressure, temperature (coolant and exhaust), charging current pre-heating/glow plugs fuse 10 Amps. EU-RCD II, SOLAS