

POWER FOR
MARINE PROFESSIONALS

PRODUCT GUIDE



**VOLVO
PENTA**

AT THE LEADING EDGE IN MARINE DIESELS

Volvo Penta is a solid partner in providing marine power systems. The combined financial and technological resources provided by the Volvo Group, coupled with our tradition of innovative marine engineering, enable us to design and deliver diesel performance for a broad range of marine applications – and to provide service and support all over the world.

Prepared for future emission standards

Our focus in product development and renewal is on achieving even greater reliability, performance and fuel efficiency. Continuous progress in environmental performance ensures that our power range will meet the emission standards introduced in the future.

Engines and complete drive systems for marine professionals

- Extensive product range developed for a broad range of marine applications
- 3–16 litre diesel engines with drive, control and monitoring systems to match
- Type-approved engines delivered tested and ready for installation
- Customised parts kits and efficient parts supply through the extensive network of qualified and well-equipped service dealers

TABLE OF CONTENTS

Engine range overviews

Rating 1 engines	4
Rating 2 engines	5
Rating 3 engines	6
Rating 4(5) engines	7
Auxiliary engines 1500 rpm, 50 Hz	8
Auxiliary engines 1800 rpm, 60 Hz	9
Diesel Aquamatic	10
Volvo Penta IPS	11
Marine gensets 1500 rpm, 50 Hz	12
Marine gensets 1800 rpm, 60 Hz	13

Specifications

Propulsion & auxiliary engines	14–27
Diesel Aquamatic	28–32
Volvo Penta IPS	33–36
Marine gensets	37–46
Notes	47–49
Uptime & Cost of ownership	50–51

MARINE ENGINES

RATING 1

(Heavy Duty Commercial)

For commercial vessels with displacement hulls in heavy operation. Load and speed could be constant, and full power can be used without interruption.

RANGE MARINE ENGINES RATING 1

Engine	kW*	hp*	rpm	Regulations	Page
D5A TA	89	121	1900	4,5,6	20
D5A TA	102	139	2300	4,5,6	20
D7A TA	130	177	1900	1,4,5,6	21
D7A TA	148	201	2300	1,4,5,6	21
D7C TA	146	199	1900	1,4,5,6	22
D7C TA	166	226	2300	1,4,5,6	22
D9 MH	221	300	1800	1,4,6	23
D9 MH	261	355	1800	1,4,6	23
D9 MH	261	355	2200	1,4,6	23
D13 MH	294	400	1800	1,2,4,5,6	24
D13 MH	331	450	1800	1,2,4,5,6	24
D13 MH	368	500	1800	1,2,4,5,6	24
D16 MH	368	501	1800	1,4,5,6	26
D16 MH	405	551	1800	1,4,5,6	26
D16 MH	442	601	1800	1,2,4,5,6	26
D16 MH	479	651	1800	1,2,4,5,6	26

* Crankshaft power

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

Regulations:

- 1 IMO NOx Tier II family certificate, contact Volvo Penta for specific flag state requirements and individual certificates
- 2 EPA Tier 3 Marine Commercial compliance, contact Volvo Penta for detailed information
- 3 EPA Tier 3 Marine Leisure compliance, contact Volvo Penta for detailed information
- 4 EU IWW certificate available for propulsion (shaft or diesel electric), contact Volvo Penta for detailed information
- 5 CCNR Stage 2 certificate available, contact Volvo Penta for detailed information
- 6 Type approved. Important! Always contact Volvo Penta for detailed information
- 7 The engine is approved for life and rescue boats according to MED (SOLAS), contact Volvo Penta for detailed information

Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE ENGINES

RATING 2

(Medium Duty Commercial)

For commercial vessels with semiplaning or displacement hulls in cyclical operation. Full power could be utilized max 4 h per 12 h operation period. Between full load operation periods, engine speed should be reduced at least 10 % from the obtained full load engine speed.

RANGE MARINE ENGINES RATING 2					
Engine	kW*	hp*	rpm	Regulations	Page
D5A TA	118	160	2300	4,5,6	20
D7A TA	174	237	2300	1,4,5,6	21
D7C TA	195	265	2300	1,4,5,6	22
D9 MH	313	425	2200	1,4,6	23
D13 MH	404	550	1900	1,2,4,5,6	24
D13 MH	441	600	1900	1,2,4,5,6	24
D16 MH	552	751	1900	1,2,4,5,6	26

* Crankshaft power

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

Regulations:

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- 4 EU IWW certificate available for propulsion (shaft or diesel electric), contact Volvo Penta for detailed information
- 5 CCNR Stage 2 certificate available, contact Volvo Penta for detailed information
- 6 Type approved. Important! Always contact Volvo Penta for detailed information
- 7 The engine is approved for life and rescue boats according to MED (SOLAS), contact Volvo Penta for detailed information

Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE ENGINES

RATING 3

(Light Duty Commercial)

For commercial vessels or craft with high demands on speed and acceleration, planing or semi-planing hulls in cyclical operation. Full power could be utilized maximum 2 h per 12 h operation period. Between full load periods, engine speed should be reduced at least 10% from the obtained full load engine speed.

RANGE MARINE ENGINES RATING 3					
Engine	kW*	hp*	rpm	Regulations	Page
D9-425	313	425	2200	1,4,6	23
D13-700	515	700	2300	1,2,4,6	25

* Crankshaft power

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

Regulations:

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- 3 EPA Tier 3 Marine Leisure compliance, contact Volvo Penta for detailed information
- 4 EU IWW certificate available for propulsion (shaft or diesel electric), contact Volvo Penta for detailed information
- 5 CCNR Stage 2 certificate available, contact Volvo Penta for detailed information
- 6 Type approved. Important! Always contact Volvo Penta for detailed information
- 7 The engine is approved for life and rescue boats according to MED (SOLAS), contact Volvo Penta for detailed information

Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE ENGINES

RATING 4

(Special Light Duty Commercial)

For light planing craft in commercial operation. Recommended speed at cruising = 25 knots. Full power could be utilized max 1 h per 12 h operation period. Between full load operation periods, engine speed should be reduced at least 10% from the obtained full load engine speed.

RANGE MARINE ENGINES RATING 4 (5*)

Engine	kW**	hp**	rpm	Regulations	Page
D3-110*	81	110	3000	1,3,7	16
D3-150*	110	150	3000	1,3,7	16
D3-170*	125	170	4000	1,3,7	16
D3-200*	147	200	4000	1,3,7	16
D3-220*	162	220	4000	1,3,7	16
D4-180	132	180	2800	1,2,6,7	17
D4-225	165	225	3500	1,2,6,7	17
D4-260*	191	260	3500	1,3,6,7	17
D4-300*	221	300	3500	1,3,7	17
D6-300	221	301	3500	1,2,6,7	18
D6-330	243	330	3500	1,2,6,7	18
D6-370*	272	370	3500	1,3,7	18
D6-435WJ*	320	435	3500	1,3,7	18
D6-435*	320	435	3500	1,3,7	18
D9-500	368	500	2600	1,6	23
D9-575*	422	575	2500	1,6	23
D13-800	588	800	2300	1,2,4,6	25
D13-900*	662	900	2300	1,3	25

* **RATING 5.** This power is intended for pleasure craft applications, and can be used for high speed planing crafts in commercial applications with special limited warranty, see warranty handbook.

** Crankshaft power

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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MARINE AUXILIARY ENGINES

PRIME POWER 50 HZ 1500 RPM

(Genset and Auxiliary engines with constant speed ratings) Prime Power: ratings corresponding to ISO Standard Power for continuous operation. This relates to the supplying of electrical power at variable load with 70% load factor for an unlimited number of hours. A 10% overload capability is available with this rating..

Engine	HE		RC		KC		Regulations	Page
	kW*	hp*	kW*	hp*	kW*	hp*		
D5A T	77	105	73	99	77	105	6	20
D5A TA	92	125	-	-	92	125	5,6	20
D7A T	116	158	112	152	116	158	6	21
D7A TA	139	189	-	-	139	189	1,5,6	21
D9 MG	239	325	227	309	239	325	1,5,6	23
D13 MG	300	408	289	393	300	408	1,2,5,6	24
D13 MG	360	490	341	464	360	490	1,2,5,6	24
D16 MG	450	612	433	589	450	612	1,5,6	26

* Crankshaft power

Marine GenSet for Diesel Electric Propulsion

Application type: Vessels operating with marine gensets for power to electric propulsion systems. For an unlimited number of running hours at a load factor of < 80%. 10% overload capability is available for maximum of 1 hour per 12 hours operation for this rating. Ratings corresponding to iso standard Power for continuous operation.

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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- 7 The engine is approved for life and rescue boats according to MED (SOLAS), contact Volvo Penta for detailed information

Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE AUXILIARY ENGINES

PRIME POWER 60 HZ 1800 RPM

(Genset and Auxiliary engines with constant speed ratings) Prime Power: ratings corresponding to ISO Standard Power for continuous operation. This relates to the supplying of electrical power at variable load with 70% load factor for an unlimited number of hours. A 10% overload capability is available with this rating.

Engine	HE		RC		KC		Regulations	Page
	kW*	hp*	kW*	hp*	kW*	hp*		
D5A T	81	110	74	101	81	110	6	20
D5A TA	100	136	-	-	100	136	5,6	20
D7A T	122	166	115	156	122	166	6	21
D7A TA	148	201	-	-	148	201	1,5,6	21
D9 MG	265	360	244	332	265	360	1,5,6	23
D13 MG	360	490	349	475	360	490	1,2,5,6	24
D13 MG	400	544	381	518	400	544	1,2,5,6	24
D16 MG	500	680	470	639	500	680	1,5,6	26

* Crankshaft power

Marine Genset for Diesel Electric Propulsion

Application type: Vessels operating with marine gensets for power to electric propulsion systems. For an unlimited number of running hours at a load factor of < 80%. 10% overload capability is available for maximum of 1 hour per 12 hours operation for this rating. Ratings corresponding to ISO Standard Power for continuous operation.

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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Note: EPA Tier 2 Marine Commercial expires end of 2013

DIESEL AQUAMATIC

RATING 4

(Special Light Duty Commercial)

For light planing craft in commercial operation. Recommended speed at cruising = 25 knots. Full power could be utilized max 1 h per 12 h operation period. Between full load operation periods, engine speed should be reduced at least 10 % from the obtained full load engine speed.

RANGE DIESEL AQUAMATIC RATING 4 (5*)

Engine	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	Regulations	Page
D3-140*	103	140	4000	1,3,7	29
D3-170*	125	170	4000	1,3,7	29
D3-200*	147	200	4000	1,3,7	29
D3-220*	162	220	4000	1,3,7	29
D4-225/DPH	158/215	165/225	3500	1,2,6,7	30
D4-260/DPH*	184/250	191/260	3500	1,3,6,7	30
D4-300/DPH*	214/291	221/300	3500	1,3,7	30
D6-300/DPH	212/289	221/301	3500	1,2,6,7	31
D6-330/DPH	233/317	243/330	3500	1,2,6,7	31
D6-370/DPH*	261/355	272/370	3500	1,3,7	31
D6-400/DPH*	281/382	294/400	3500	1,3,7	31

* **RATING 5.** This power is intended for pleasure craft applications, and can be used for high speed planing crafts in commercial applications with special limited warranty, see warranty handbook.

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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Note: EPA Tier 2 Marine Commercial expires end of 2013

RATING 3

(Light Duty Commercial)

For commercial vessels or craft with high demands on speed and acceleration, planing or semi-planing hulls in cyclical operation. Full power could be utilized maximum 2 h per 12 h operation period. Between full load periods, engine speed should be reduced at least 10% from the obtained full load engine speed.

RANGE INBOARD PERFORMANCE SYSTEM

Complete Propulsion System	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	Regulations	Page
IPS 900	485/659	515/700	2250	1,2,4,6	35

RATING 4

(Special Light Duty Commercial)

For light planing craft in commercial operation. Recommended speed at cruising = 25 knots. Full power could be utilized max 1 h per 12 h operation period. Between full load operation periods, engine speed should be reduced at least 10% from the obtained full load engine speed.

RANGE INBOARD PERFORMANCE SYSTEM

Complete Propulsion System	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	Regulations	Page
IPS 400MC	217/295	228/310	3500	1,2	35
IPS 450	230/314	243/330	3500	1,2	35
IPS 800	417/567	441/600	2300	1,2	35
IPS 1050	556/756	588/800	2300	1,2,4,6	35

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Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE GENSETS

PRIME POWER 50 HZ 1500 RPM

(Gensets and Auxiliary engines with constant speed ratings) Prime Power: ratings corresponding to ISO Standard Power for continuous operation. This relates to the supplying of electrical power at variable load with 70% load factor for an unlimited number of hours. A 10% overload capability is available with this rating.

	HE	RC	KC		
Genset	kWe*	kWe*	kWe*	Regulations	Page
D5A T	62-70	62	62-70	6	39
D5A TA	86	-	86	5,6	40
D7A T	90-108	70-104	90-108	6	41
D7A TA	119-130	-	119-130	1,5,6	42
D9 MG	168-225	136-214	168-225	1,4,5,6	43
D13 MG	248-332	248-332	248-332	1,2,4,5,6	44
D16 MG	332-420	332-414	332-420	1,4,5,6	45

* Power output based on temperature rise class F and 400V for 50Hz series star connection

Marine GenSet for Diesel Electric Propulsion

Application type: Vessels operating with Marine GenSets for power to electric propulsion systems. For an unlimited number of running hours at a load factor of < 80%. 10% overload capability is available for maximum of 1 hour per 12 hours operation for this rating. Ratings corresponding to ISO Standard Power for continuous operation.

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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- 7 The engine is approved for life and rescue boats according to MED (SOLAS), contact Volvo Penta for detailed information

Note: EPA Tier 2 Marine Commercial expires end of 2013

MARINE GENSETS

PRIME POWER 60 HZ 1800 RPM

(Gensets and Auxiliary engines with constant speed ratings) Prime Power: ratings corresponding to ISO Standard Power for continuous operation. This relates to the supplying of electrical power at variable load with 70% load factor for an unlimited number of hours. A 10% overload capability is available with this rating.

	HE	RC	KC		
Genset	kWe*	kWe*	kWe*	Regulations	Page
D5A T	74	68	74	6	39
D5A TA	88-93	-	88-93	5,6	40
D7A T	105-114	88-107	105-114	6	41
D7A TA	125-139	-	125-139	1,5,6	42
D9 MG	170-250	170-230	170-250	1,4,5,6	43
D13 MG	300-380	300-360	300-380	1,2,4,5,6	44
D16 MG	390-477	390-448	390-477	1,4,5,6	45

* Power output based on temperature rise class F and 400V for 50Hz series star connection

Marine Genset for Diesel Electric Propulsion

Application type: Vessels operating with Marine Gensets for power to electric propulsion systems. For an unlimited number of running hours at a load factor of < 80%. 10% overload capability is available for maximum of 1 hour per 12 hours operation for this rating. Ratings corresponding to ISO Standard Power for continuous operation.

Technical data according to ISO 3046, fuel temp. 40°C. All data present net performance with standard accessories under the conditions of 100kPa barometric pressure, 25°C ambient temperature and 30% relative humidity. All specifications are subject to change without notice.

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PROPULSION & AUXILIARY ENGINES

Power for displacement craft

The heavy-duty range has been developed for extreme reliability. These marine diesels are designed to keep running, year in and year out.

The basic design features robust engine blocks manufactured from high-strength castings, large bearing surfaces, powerful crankshafts with all components engineered to withstand the toughest conditions.

Low fuel consumption is high priority, as are low maintenance costs, exhaust and noise emissions and simple service – properties that are vitally important for the crew as well as the environment.

Power for planing craft

Volvo Penta diesel technology delivers performance without sacrificing reliability. Whether electronically controlled or mechanically governed, all marine diesels in the range provide the necessary performance for applications requiring fast acceleration and high top speed.

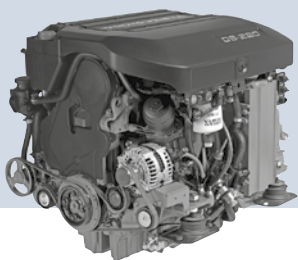
The Volvo Penta range today offers combinations of high power, low weight, low fuel consumption and emissions that were inconceivable only a few years ago.

Auxiliary engines

Diesel inboard rating 1, rating 2 and marine genset engines can be used also for various auxiliary applications.



D3 MARINE ENGINE



5-cylinder, 4-stroke, direct-injected turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 81 x 93

Displacement (l): 2.4

PROPULSION ENGINE

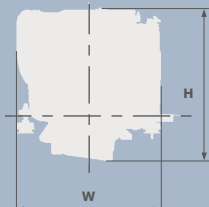
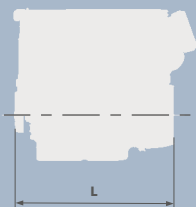
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D3-110	5	81	110	3000	219	0.355
D3-150	5	110	150	3000	221	0.358
D3-170	5	125	170	4000	241	0.39
D3-200	5	147	200	4000	235	0.381
D3-220	5	162	220	4000	239	0.387

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D3-110	702	718	750	260	573
D3-150	702	718	750	260	573
D3-170	702	718	750	260	573
D3-200	702	718	750	260	573
D3-220	702	718	750	260	573

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail engines.

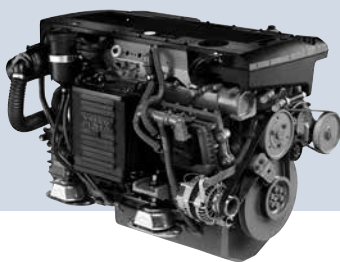


D4 MARINE ENGINE

4-cylinder, 4-stroke, direct-injected turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 103 x 110

Displacement (l): 3.67



PROPULSION ENGINE

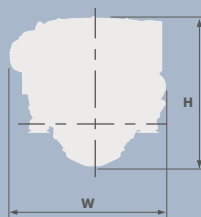
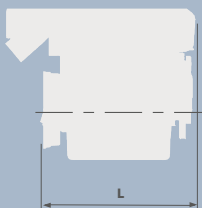
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D4-180	4	132	180	2800	220	0.356
D4-225	4	165	225	3500	232	0.376
D4-260	5	191	260	3500	230	0.373
D4-300	5	221	300	3500	221	0.358

DIMENSIONS AND WEIGHTS**

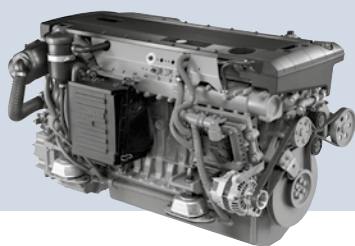
ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D4-180	784	820	780	482	1063
D4-225	784	820	780	482	1063
D4-260	784	820	780	482	1063
D4-300	784	820	780	483	1065

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail engines.



D6 MARINE ENGINE



6-cylinder, 4-stroke, direct-injected turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 103 x 110

Displacement (l): 5.5

PROPULSION ENGINE

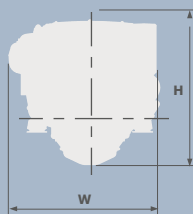
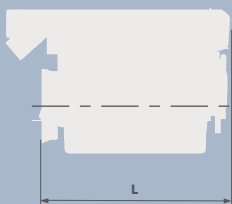
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D6-300	4	221	301	3500	242	0.392
D6-330	4	243	330	3500	235	0.381
D6-370	5	272	370	3500	236	0.382
D6-435WJ*	5	320	435	3500	220	0.356
D6-435*	5	320	435	3500	220	0.356

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D6-300	1020	820	780	580	1279
D6-330	1020	820	780	580	1279
D6-370	1020	820	780	580	1279
D6-435WJ*	1037	839	780	584	1287
D6-435*	1037	839	780	594	1310

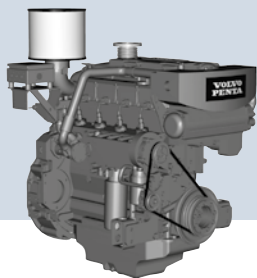
* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail engines.





D5A T/TA MARINE ENGINE



4-cylinder, 4-stroke, direct-injected, turbocharged aftercooled (TA version) marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 4.76

PROPULSION ENGINE

ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D5A TA	1	89	121	1900	207	0.335
D5A TA	1	102	139	2300	227	0.368
D5A TA	2	118	160	2300	227	0.368

AUXILIARY ENGINE

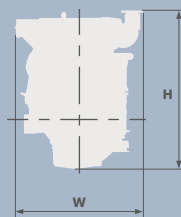
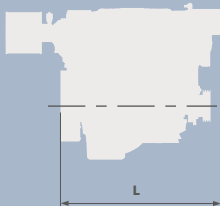
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D5A T (HE)	1	77	105	1500	222	0.360
D5A T (RC)	1	73	99	1500	222	0.360
D5A T (KC)	1	77	105	1500	222	0.360
D5A T (HE)	1	81	110	1800	222	0.360
D5A T (RC)	1	74	100	1800	222	0.360
D5A T (KC)	1	81	110	1800	222	0.360
D5A TA (HE)	1	92	125	1500	208	0.336
D5A TA (KC)	1	92	125	1500	208	0.336
D5A TA (HE)	1	100	136	1800	206	0.334
D5A TA (KC)	1	100	136	1800	206	0.334

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D5A T	1018	813	959	580	1279
D5A TA	1018	813	959	580	1279

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail heat exchanger cooled engines.



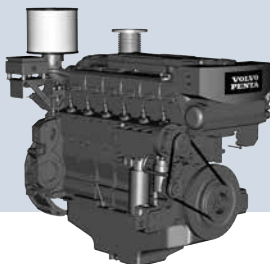
Not for installation.

D7A T/TA MARINE ENGINE

6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled (TA version) marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 7.15



PROPULSION ENGINE

ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D7A TA	1	130	177	1900	205	0.332
D7A TA	1	148	201	2300	216	0.350
D7A TA	2	174	237	2300	216	0.350

AUXILIARY ENGINE

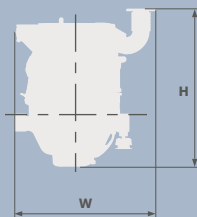
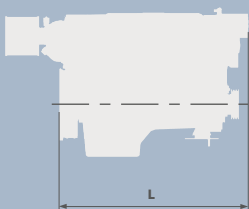
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D7A T (HE)	1	116	158	1500	219	0.355
D7A T (RC)	1	112	152	1500	215	0.348
D7A T (KC)	1	116	158	1500	219	0.355
D7A T (HE)	1	122	166	1800	215	0.348
D7A T (RC)	1	115	156	1800	215	0.348
D7A T (KC)	1	122	166	1800	215	0.348
D7A TA (HE)	1	139	189	1500	207	0.335
D7A TA (KC)	1	139	189	1500	207	0.335
D7A TA (HE)	1	148	201	1800	206	0.334
D7A TA (KC)	1	148	201	1800	206	0.334

DIMENSIONS AND WEIGHTS**

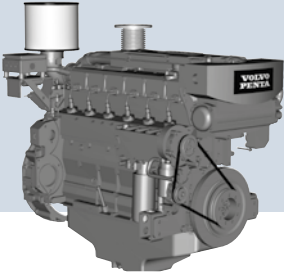
ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D7A T	1280	948	1060	760	1676
D7A TA	1280	948	1060	760	1676

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail heat exchanger cooled engines.



D7C TA MARINE ENGINE



6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 7.15

PROPULSION ENGINE

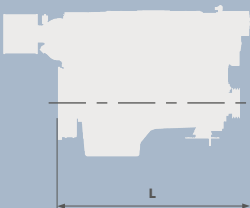
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D7C TA	1	146	199	1900	204	0.330
D7C TA	1	166	226	2300	213	0.345
D7C TA	2	195	265	2300	216	0.350

DIMENSIONS AND WEIGHTS

ENGINE	L (mm)	W (mm)	H (mm)	kg**	lb**
D7C TA	1282	929	1070	760	1676

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail heat exchanger cooled engines.



D9 MARINE ENGINE

6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 120 x 138

Displacement (l): 9.4



PROPULSION ENGINE

ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D9 MH	1	221	300	1800	205	0.332
D9 MH	1	261	355	1800	205	0.332
D9 MH	1	261	355	2200	219	0.355
D9 MH	2	313	425	2200	222	0.360
D9-425	3	313	425	2200	222	0.360
D9-500	4	368	500	2600	217	0.352
D9-575	5	422	575	2500	217	0.352

AUXILIARY ENGINE

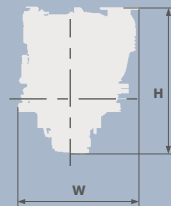
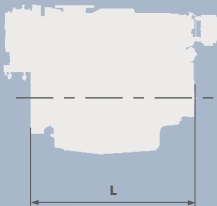
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D9 MG (HE)	1	239	325	1500	204	0.331
D9 MG (RC)	1	227	309	1500	204	0.331
D9 MG (KC)	1	239	325	1500	204	0.331
D9 MG (HE)	1	265	360	1800	206	0.334
D9 MG (RC)	1	244	332	1800	206	0.334
D9 MG (KC)	1	265	360	1800	206	0.334

DIMENSIONS AND WEIGHTS**

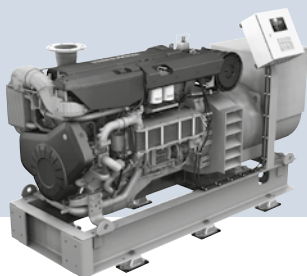
ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D9 MH	1488	1056	1035	1150	2535
D9-425	1310	948	1029	1075	2370
D9-500	1310	948	1029	1075	2370
D9-575	1310	948	1029	1075	2370

* Fuel consumption at rated power and speed (100% load).

** Dimensions and weights based on bobtail heat exchanger cooled engines (dry weight).



D13 AUXILIARY



6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 131 x 158

Displacement (l): 12.78

AUXILIARY ENGINE

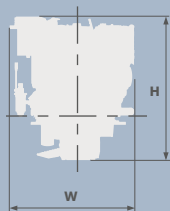
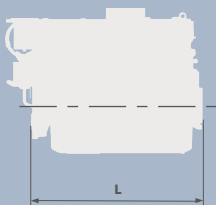
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D13 MG (HE)	1	300	408	1500	194/203	0.314/0.329
D13 MG (HE)	1	360	490	1500	191/202	0.309/0.327
D13 MG (RC)	1	289	393	1500	194/203	0.314/0.327
D13 MG (RC)	1	349	464	1500	191/196	0.309/0.317
D13 MG (KC)	1	300	408	1500	194/203	0.314/0.329
D13 MG (KC)	1	360	490	1500	191/202	0.309/0.327
D13 MG (HE)	1	360	490	1800	200/216	0.345/0.349
D13 MG (HE)	1	400	544	1800	199/209	0.322/0.339
D13 MG (RC)	1	341	345	1800	200/216	0.325/0.349
D13 MG (RC)	1	381	518	1800	199/206	0.322/0.334
D13 MG (KC)	1	360	490	1800	200/216	0.325/0.349
D13 MG (KC)	1	400	544	1800	199/209	0.322/0.339

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D13 MG	1728	1072	1501	1520	3351

* Fuel consumption at rated power and speed (IMO II / EPA Tier 3).

** Based on bobtail heat exchanger cooled engines .

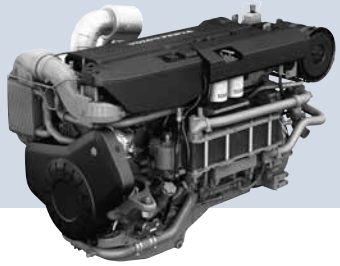


D13 PROPULSION

6-cylinder, 4-stroke, direct-injected,
Twin entry turbo charge marine
diesel engine.

Bore x Stroke (mm): 131 x 158

Displacement (l): 12.78



PROPULSION ENGINE

ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D13 MH	1	294	400	1800	200/208	0.323/0.336
D13 MH	1	331	450	1800	200/211	0.323/0.342
D13 MH	1	368	500	1800	199/212	0.322/0.343
D13 MH	2	404	550	1900	204/213	0.331/0.345
D13 MH	2	441	600	1900	205/213	0.322/0.344
D13-700	3	515	700	2300	216	0.351
D13-800 ***	4	588	800	2300	209	0.338
D13-900 ***	5	662	900	2300	208	0.338

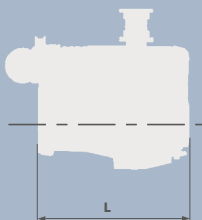
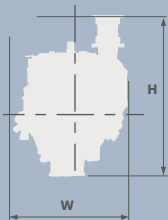
DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D13 MH	1728	1072	1501	1520	3351
D13-700	1420	1062	1053	1450	3197
D13-800 ***	1420	1089	1220	1560	3439
D13-900 ***	1420	1089	1220	1560	3439

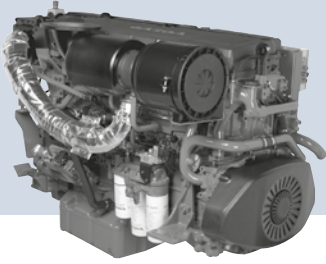
* Fuel consumption at rated power and speed (IMO II/ EPA Tier 3).

** Based on bobtail heat exchanger cooled engines.

*** D13-800 rating 4 and D13-900 rating 5 has DST (Dual Stage Turbo).



D16 MARINE ENGINE



6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 144 x 165

Displacement (l): 16.12

PROPULSION ENGINE

ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D16 MH	1	368	501	1800	209	0.338
D16 MH	1	405	551	1800	209	0.338
D16 MH	1	442	601	1800	209	0.338
D16 MH	1	478	650	1800	210	0.341
D16 MH	2	551	750	1900	215	0.348

AUXILIARY ENGINE

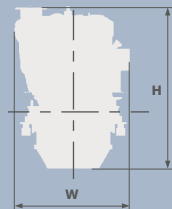
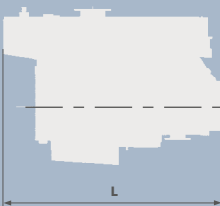
ENGINE	Rating	kW	hp	rpm	g/kWh*	lb/hph*
D16 MG (HE)	1	450	612	1500	206	0.333
D16 MG (RC)	1	433	589	1500	206	0.334
D16 MG (KC)	1	450	612	1500	206	0.333
D16 MG (HE)	1	500	680	1800	213	0.345
D16 MG (RC)	1	470	639	1800	213	0.345
D16 MG (KC)	1	500	680	1800	213	0.345

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D16 MH	1548	1117	1303	1750	3858

* Fuel consumption at rated power and speed.

** Dimensions and weights based on bobtail heat exchanger cooled engines.





DIESEL AQUAMATIC DRIVES

The Duoprop drive

Duoprop is Volvo Penta's revolutionary sterndrive that introduced a new era in marine propulsion. By placing two counter-rotating propellers on a single axis, the Duoprop technology, in combination with the D3, D4 or D6 engines, provides superior handling by eliminating the torque steer common to all single-prop systems. The counter-rotating aft prop reverses the swirl loss generated by the front propeller and converts it to additional thrust. All of which helps deliver up to 15% more power, 20% better acceleration, and 15% better fuel efficiency over single-propeller sterndrives. Duoprop also minimizes cavitation, improves handling at slow speeds, and reduces steering force, hull roll and vibration.

DPH Duoprop

Exclusively developed to handle the tremendous torque and power of the D4 and D6 diesel engines. External hydraulic steering cylinders, patented X-act steering and patented nickel-bronze-aluminium propellers give optimum driving safety and performance.

DPS Duoprop

Provides amazing driving feel and safety for the D3 engines. With hydrodynamically improved design for higher speed and better performance, lower weight and reduced maintenance need.

SX single prop

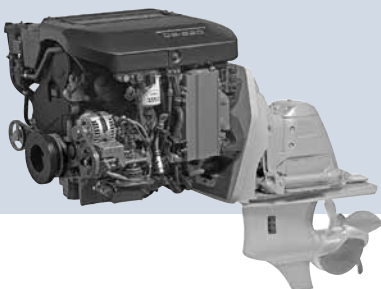
Perfect reliability and performance with all the Volvo Penta Aquamatic benefits. Hydrodynamically improved design for better speed and performance, lower weight and reduced maintenance. For the D3 engines.

D3 AQUAMATIC

5-cylinder, 4-stroke, common rail fuel injected, turbocharged, aftercooled marine diesel engine.

Bore x Stroke (mm): 81 x 93

Displacement (l): 2.4



PROPULSION

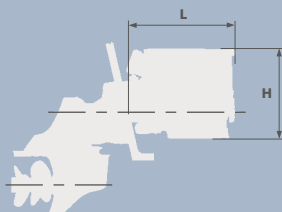
ENGINE	Rating	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	g/kWh*	lb/hph*
D3-140 SX	5	98/133	103/140	4000	238	0.386
D3-140 DPS	5	98/133	103/140	4000	238	0.386
D3-170 SX	5	119/162	125/170	4000	241	0.39
D3-170 DPS	5	119/162	125/170	4000	241	0.39
D3-200 DPS	5	140/190	147/200	4000	235	0.381
D3-220 DPS	5	154/209	162/220	4000	239	0.387

DIMENSIONS AND WEIGHTS

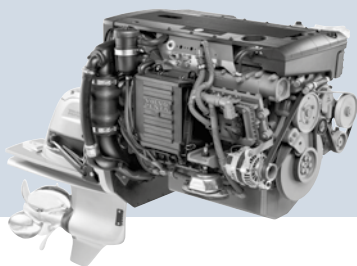
ENGINE	L (mm)	W (mm)	H (mm)	kg**	lb**
D3-140 SX	853	710	750	358	789
D3-140 DPS	853	710	750	363	800
D3-170 SX	853	710	750	358	789
D3-170 DPS	853	710	750	363	800
D3-200 DPS	853	710	750	363	800
D3-220 DPS	853	710	750	363	800

* Fuel consumption measured at rated power and speed.

** Dry weight including drive excluding propeller.



D4 AQUAMATIC



4-cylinder, 4-stroke, direct-injected, aftercooled marine diesel engine.

Bore x Stroke (mm): 103 x 110

Displacement (l): 3.7

PROPULSION

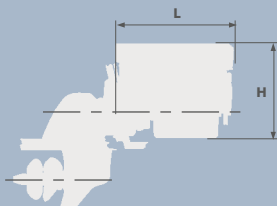
ENGINE	Rating	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	g/kWh*	lb/hph*
D4-225/DPH	4	158/215	165/225	3500	232	0.376
D4-260/DPH	5	184/250	191/260	3500	230	0.373
D4-300/DPH	5	214/291	221/300	3500	221	0.358

DIMENSIONS AND WEIGHTS

ENGINE	L (mm)	W (mm)	H (mm)	kg**	lb**
D4-225/DPH	982	845	780	644	1420
D4-260/DPH	982	845	780	660	1455
D4-300/DPH	982	845	780	663	1462

* Fuel consumption measured at rated power and speed.

** Dry weight including drive and propeller.

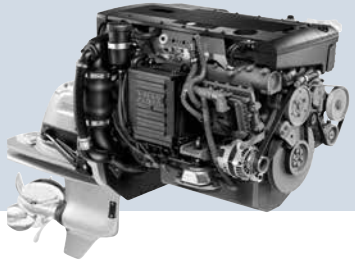


D6 AQUAMATIC

6-cylinder, 4-stroke, direct-injected, aftercooled marine diesel engine.

Bore x Stroke (mm): 103 x 110

Displacement (l): 5.5



PROPULSION

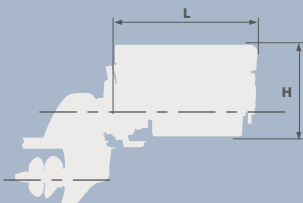
ENGINE	Rating	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm	g/kWh*	lb/hph*
D6-300/DPH	4	212/289	221/301	3500	242	0.392
D6-330/DPH	4	233/317	243/330	3500	235	0.381
D6-370/DPH	5	261/355	272/370	3500	236	0.382
D6-400/DPH	5	281/382	294/400	3500	219	0.355

DIMENSIONS AND WEIGHTS

ENGINE	L (mm)	W (mm)	H (mm)	kg**	lb**
D6-300/DPH	1218	845	780	750	1653
D6-330/DPH	1218	845	780	750	1653
D6-370/DPH	1218	845	780	770	1698
D6-400/DPH	1347	845	780	785	1731

* Fuel consumption measured at rated power and speed.

** Dry weight including drive and propeller.





VOLVO PENTA IPS

A revolutionary marine propulsion system. Volvo Penta IPS – Inboard Performance System – offers dramatically increased efficiency compared to inboard shafts. The patented, counter-rotating propellers work in undisturbed water and produce a completely horizontal thrust which results in 15% faster acceleration and 20% higher top speed. And thanks to the significantly reduced fuel consumption, cruising range is also greatly improved (30%).

Joystick manoeuvring

The new optional joystick makes docking and slow-speed manoeuvring easier than ever before. Simply move the joystick in the direction you want the boat to move, and the boat reacts to your intentions. All without the help of bow and stern thrusters!

The secret behind the amazing moves is the Volvo Penta IPS system with its individually steerable drive units. All controlled by sophisticated and specially developed software in the EVC system. The joystick is available for all Volvo Penta IPS-powered boats, also as retrofit.

Easy manoeuvring, powerful handling

Steerable propulsion units, instead of fixed propellers and rudders, means that Volvo Penta IPS turns and points the entire thrust in the desired direction. The result is 50% better turning radius and car-like manoeuvring for easy docking, as well as predictable handling at higher speeds.

Enhanced comfort

Volvo Penta IPS retains the traditional inboard benefits – such as propellers under the hull plus extensive use of bronze and stainless steel – while reducing vibrations, sound and exhaust fumes to a minimum.

Complete and integrated system

The Volvo Penta IPS has been developed and is manufactured as a complete system with everything included – engine, propulsion unit including gear box, propellers, exhaust and seawater system, steering, and controls. The system is always used in at least twin-engine installation configurations.



The buttons on the joystick put a unique combination of functions within your easy reach. Dynamic Positioning, Joystick Driving, Joystick Docking and High Mode offer easier handling, increased safety, and reliable operation.



JOYSTICK DRIVING A whole new way to maneuver with precision at all speeds. You steer comfortably with the joystick. The

integrated autopilot supports by automatically engaging after every course change.



JOYSTICK DOCKING Makes docking easy, even fun. Forget complicated maneuvers in close quarters. Just move the joystick

in any direction and your boat will follow. You can install up to six Joystick Docking stations on your boat.



DYNAMIC POSITIONING SYSTEM

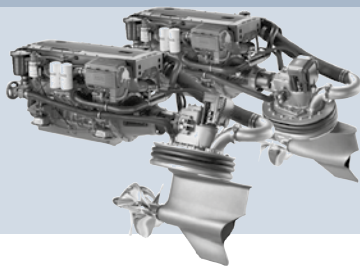
Press the button and your boat's position and heading are held within a very limited area - the EVC system transforms GPS data into steering angles, gear shifts and throttle positions.



HIGH MODE When you need extra power from the system, just press the High Mode button.



VOLVO PENTA IPS



PROPULSION SYSTEM

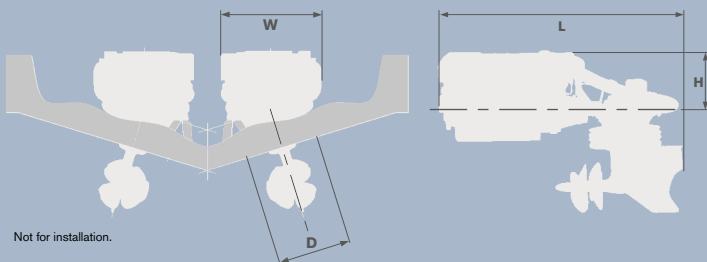
ENGINE	Rating	Prop. shaft power kW/hp	Crank shaft power kW/hp	rpm
D6-IPS400MC	4	217/295	228/310	3500
D6-IPS450	4	230/314	243/330	3500
D11-IPS 800	4	417/567	441/600	2300
D13-IPS 900	3	485/659	515/700	2250
D13-IPS 1050	4	556/756	588/800	2300

DIMENSIONS AND WEIGHTS

ENGINE	L (mm)	W (mm)	D (mm)	H (mm)	kg**	lb**
D6-IPS400	2185	760	640	518	780	1720
D6-IPS450	2185	760	640	518	863	1903
D11-IPS 800	3102	1006	737	808	1800	3968
D13-IPS 900	3103	1124	870	842	2300	5060
D13-IPS 1050	3103	1124	870	842	2300	5060

* Special limited warranty for commercial use.

** Dry weight including drive and propeller.



Not for installation.

VOLVO PENTA

D13



UNBEATABLE IN **LOAD
ACCEPTANCE AND
FUEL EFFICIENCY**

Multiple high-speed gensets, operated by efficient onboard control systems – the Volvo Penta D13 MG is your investment in uptime and a sustainable tomorrow.

**VOLVO
PENTA**

www.volvopenta.com

PREMIUM PERFORMANCE
FOR MARINE PROFESSIONALS

MARINE GENSETS

All Volvo Penta gensets are delivered complete and tested, ready for installation on board. All equipment and sets are type approved by the major classification societies and can be delivered with certification.

Compact yet easy to service

Engines and gensets that occupy less space in the engine room but still provide good service accessibility have always been a hallmark of Volvo Penta. Our range is designed for fast and trouble-free service operations and most engines support the use of computerised diagnostics tools which facilitate fault-tracing.

Fully compatible monitoring systems

Based on the Modbus protocol and equipped with a large number of hardwire contacts, the Volvo Penta control and monitoring system enables fast and safe integration with most switchboards and power management systems available on the market. The monitoring system and its range of functions – e.g. auto-start, shut-down and alarms – comply with all international standards.

Wide range of options

The range of accessories and extra equipment – including shaft generators, box coolers and sound boxes – ensures that virtually any requirement can be met.

Meeting future emission standards

Our engine range meets the current exhaust emission requirements and many of our engines already comply with the emission standards which come into effect over the next couple of years.

VOLVO PENTA

D13



UNBEATABLE
IN **TORQUE** AND **FUEL**
EFFICIENCY

Do you think that advanced, electronically controlled diesel engines are not heavy duty? Think again.

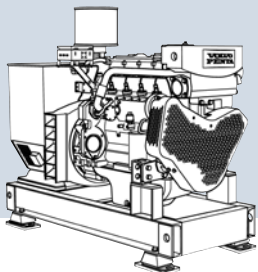
The Volvo Penta D13 MH is your investment in uptime and a sustainable tomorrow.

**VOLVO
PENTA**

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PREMIUM PERFORMANCE
FOR MARINE PROFESSIONALS

D5A T MARINE GENSET



4-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 4.76

HEAT EXCHANGER COOLED GENSETS

ENGINE/GENERATOR	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D5A T / UCM274C	78	62	93	74
D5A T / UCM274D	88	70	-	-

RADIATOR COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D5A T / UCM274C	78	62	85	68

KEEL COOLED GENSETS

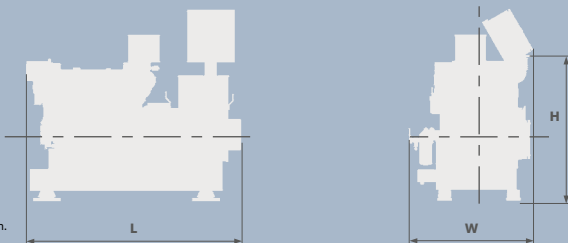
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D5A T / UCM274C	78	62	93	74
D5A T / UCM274D	88	70	-	-

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D5A T / UCM274C-1	1812	1046	1224	1195	2635
D5A T / UCM274D-1	1812	1046	1224	1215	2679

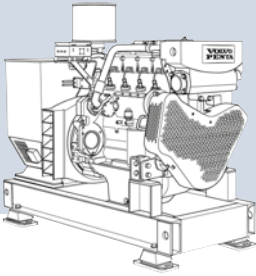
* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.



Not for installation.

D5A TA MARINE GENSET



4-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 4.76

HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D5A TA/UCM274D	-	-	110	88
D5A TA/UCM274E	107	85	116	93

KEEL COOLED GENSETS

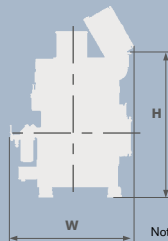
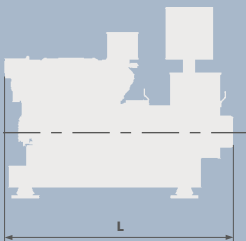
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D5A TA/UCM274D	-	-	110	88
D5A TA/UCM274E	107	85	116	93

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D5A TA/UCM274D	1812	1046	1224	1245	2745
D5A TA/UCM274E	1925	1046	1224	1310	2888

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.

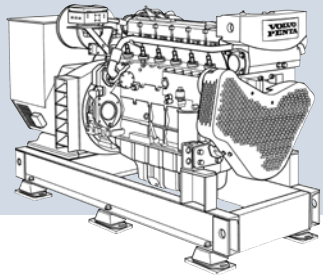


D7A T MARINE GENSET

6-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 7.15



HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D7A T/UCM274E	113	90	131	105
D7A T/UCM274F	135	108	142	114

RADIATOR COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D7A T/UCM274D	88	70	110	88
D7A T/UCM274F	130	104	134	107

KEEL COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D7A T/UCM274E	113	90	131	105
D7A T/UCM274F	135	108	142	114

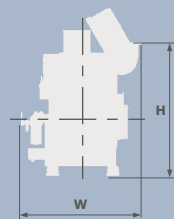
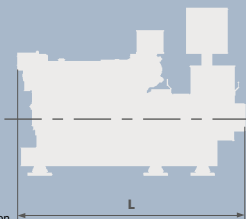
DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D7A T/UCM274D***	2410	1157	1275	1515	3340
D7A T/UCM274E	2191	1157	1275	1485	3274
D7A T/UCM274F	2191	1157	1275	1520	3357

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

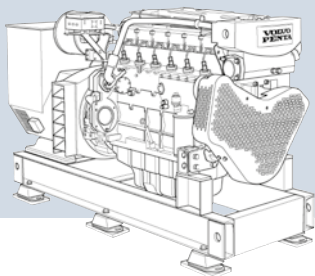
** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.

*** Dimensions and weights based on radiator cooled genset.



Not for installation.

D7A TA MARINE GENSET



6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 108 x 130

Displacement (l): 7.15

HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D7A TA/UCM274F	-	-	156	125
D7A TA/UCM274G	149	119	-	-
D7A TA/UCM274H	163	130	173	139

KEEL COOLED GENSETS

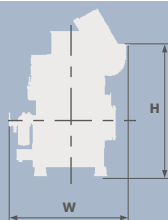
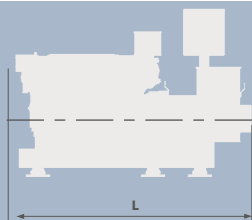
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D7A TA/UCM274F	-	-	156	125
D7A TA/UCM274G	149	119	-	-
D7A TA/UCM274H	163	130	173	139

DIMENSIONS AND WEIGHTS

ENGINE	L (mm)	W (mm)	H (mm)	kg**	lb**
D7A TA/UCM274F	2191	1157	1275	1560	3439
D7A TA/UCM274G	2239	1157	1275	1610	3549
D7A TA/UCM274H	2275	1157	1275	1660	3660

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.

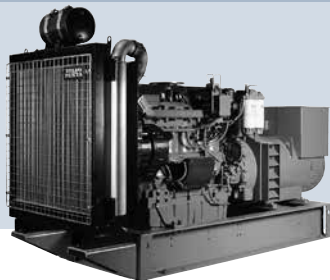


D9 MARINE GENSET

6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 121 x 140

Displacement (l): 9.6



HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D9 MG/UCM274H	-	-	213	170
D9 MG/HCM434C	210	168	245	196
D9 MG/HCM434D	230	184	270	216
D9 MG/HCM434E	275	220	312	250
D9 MG/HCM434F	281	225	-	-

RADIATOR COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D9 MG/UCM274H	170	136	213	170
D9 MG/HCM434C	210	168	245	196
D9 MG/HCM434D	230	184	270	216
D9 MG/HCM434E	268	214	288	230

KEEL COOLED GENSETS

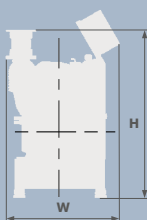
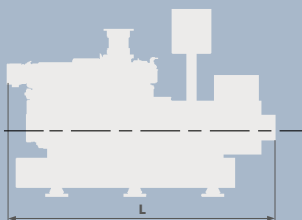
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D9 MG/UCM274H	-	-	213	170
D9 MG/HCM434C	210	168	245	196
D9 MG/HCM434D	230	184	270	216
D9 MG/HCM434E	275	220	312	250
D9 MG/HCM434F	282	225	-	-

DIMENSIONS AND WEIGHTS**

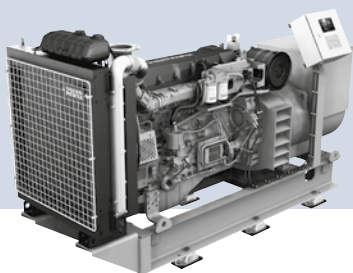
ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D9 MG/UCM274H	2492	1161	1712	2260	4982
D9 MG/HCM434C	2660	1161	1712	2480	5467
D9 MG/HCM434D	2660	1161	1712	2570	5666
D9 MG/HCM434E	2660	1161	1712	2655	5853
D9 MG/HCM434F	2660	1161	1712	2790	6151

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.



D13 MARINE GENSET



6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 131 x 158

Displacement (l): 12.78

HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D13 MG/ HCM434F	310	248	375	300
D13 MG/ HCM534C	355	284	426	341
D13 MG/ HCM534D	415	332	475	380

RADIATOR COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D13 MG/ HCM434F	310	248	375	300
D13 MG/ HCM534C	344	275	402	322
D13 MG/ HCM534D	415	332	450	360

KEEL COOLED GENSETS

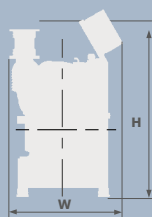
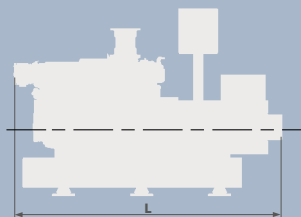
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D13 MG/ HCM434F	310	248	375	300
D13 MG/ HCM534C	355	284	426	341
D13 MG/ HCM534D	415	332	475	380

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D13 MG/ HCM434F	2739	1174	1814	3070	6768
D13 MG/ HCM534C	2817	1174	1814	3175	6999
D13 MG/ HCM534D	2817	1174	1814	3305	7286

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.

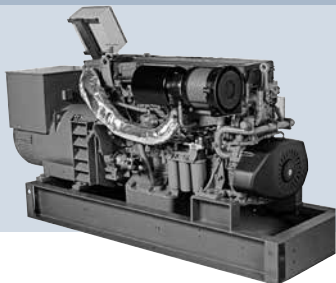


D16 MARINE GENSET

6-cylinder, 4-stroke, direct-injected, turbocharged aftercooled marine diesel engine.

Bore x Stroke (mm): 144 x 165

Displacement (l): 16.1



HEAT EXCHANGER COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D16 MG/HCM534D	415	332	488	390
D16 MG/HCM534E	490	392	588	470
D16 MG/HCM534F	525	420	596	477

RADIATOR COOLED GENSETS

ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D16 MG/HCM534D	415	332	488	390
D16 MG/HCM534E	490	392	560	448
D16 MG/HCM534F	518	414	-	-

KEEL COOLED GENSETS

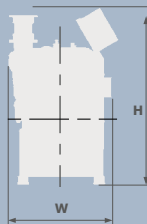
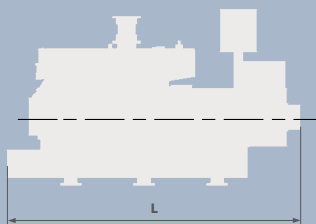
ENGINE	50 Hz 1500 rpm		60 Hz 1800 rpm	
	kVA*	kWe*	kVA*	kWe*
D16 MG/HCM534D	415	332	488	390
D16 MG/HCM534E	490	392	588	470
D16 MG/HCM534F	525	420	596	477

DIMENSIONS AND WEIGHTS**

ENGINE	L (mm)	W (mm)	H (mm)	kg	lb
D16 MG/HCM534D	3131	1192	1842	3626	7994
D16 MG/HCM534E	3131	1192	1842	3776	8325
D16 MG/HCM534F	3131	1192	1842	4034	9633

* Power output based on temperature rise class F, 400V for 50Hz and 440V for 60 Hz series star connection.

** Dimensions and weights based on heat-exchanger cooled single-bearing gensets.





IT'S ALL ABOUT COST OF O

Profit from our unique solutions – sustainable from both a business and an environmental perspective.

Start with fuel-efficient and reliable **power systems** based on the Volvo core values and on leading-edge technology and experience.

Then, add all the **service and support** you need for your operation – rapid and locally provided



OPTIMAL UPTIME

- ^ GLOBAL AFTERMARKET SERVICE & SUPPORT
- ^ GLOBAL DEALER NETWORK & PARTS LOGISTICS
- ^ PREMIUM PRODUCT QUALITY

UPTIME AND OWNERSHIP

by our global dealer and parts logistics network. The result is far more than an engine; it's the key to excellent operational economy, proved in unrivalled **uptime** and, as a consequence, **superior total cost of ownership**.

Use this unique value chain to build long-term profitability and reliability into your operations.



SUPERIOR TOTAL COST OF OWNERSHIP

UNIQUE FUEL EFFICIENCY

Fuel consumption is the single most important driver in your operational cost. That is why operators world-wide have selected Volvo Penta power system solutions – perfect for heavy-duty service in marine environments. By minimising your fuel consumption, you will also reduce your operations' environmental impact.

With Volvo Penta engines on board, uncompromising standards are built into your ship. Our comprehensive product program with engine outputs ranging from 100 to 900 hp includes propulsion and auxiliary engines as well as complete marine generator sets. Advanced installation engineering ensures optimised durability and performance, while our extensive dealer network provides the service and parts which maximise engine lifetime. Altogether, this makes Volvo Penta a leading worldwide supplier of power for marine professionals.



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