

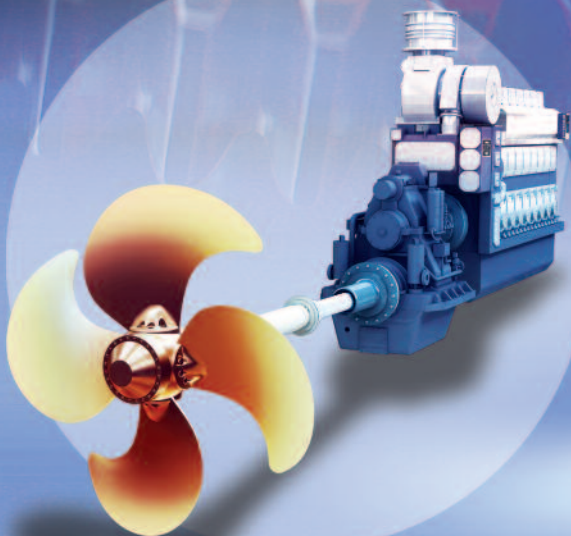
Marine Propulsion System

Power Range

H21/32P	1,200~1,800 kW
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H25/33P	1,740~2,610 kW
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H32/40P	2,880~4,320 kW / FPP
	3,000~4,500 kW / CPP



Long Term Commitment...

To provide the market with reliable, cost effective and earth-friendly solution

Optimized Matching of HiMSEN Propulsion Package

- HiMSEN H21 / 32P, H25 / 33P and H32 / 40P engine
- C.P. / F.P. propeller with shafting
- Pitch and speed control
- Load control
- Reduction gear
- Shaft generator
- Auxiliary machinery

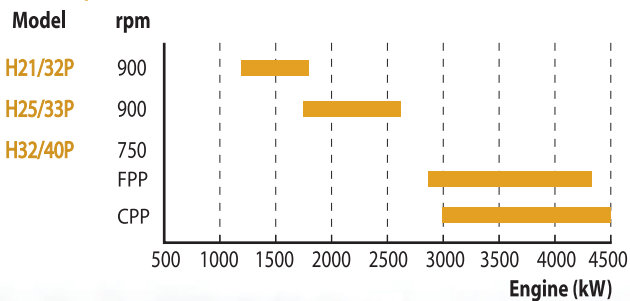
Application

- Controllable pitch propulsion
- Fixed pitch propulsion
- Azimuth thruster propulsion
- Pump drive

Excellent Performance of HiMSEN Propulsion Engine

- Improved transient operation with pulse charging turbocharger
- Invisible smoke with pulse charging turbocharger by part load matching
- Lower thermal load engine with lower exhaust gas temperature
- Low fuel consumption
- Low NOx emission

Marine Propulsion



Marine Propulsion System

HYUNDAI-HIMSEN

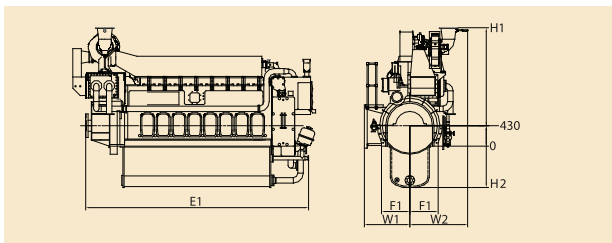
Bore: 210 mm, Stroke: 320 mm

Controllable Pitch Propeller

Permit high skew angles to minimize noise and vibration.

Fixed Pitch Propeller

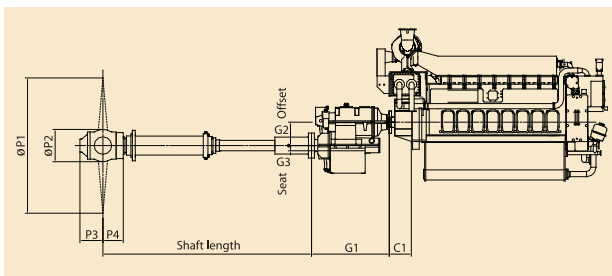
Guarantee optimum thrust, minimal noise and vibration level.



Dimensions

900 rpm	Cyl.	Rated Output at Engine(kW)	Engine dimension(mm) & dry weight(ton)						
			E1	H1	H2	F1	W1	W2	Dry Weight
	6	1,200	3,904	2,287	1,120	595	955	1,126	18.0
	8	1,600	4,634	2,541	1,300	595	955	1,214	21.0
	9	1,800	4,994	2,541	1,300	595	955	1,214	23.0

Specific Fuel Oil Consumption at 100 % Engine Load: 183 g/kWh



HYUNDAI-HIMSEN

Marine Propulsion System

Bore: 210 mm, Stroke: 320 mm

Engine Type	CPP Package System	Gear ratio (i:1)	Propeller speed (rpm)	Propeller Diameter (without nozzle) P1(mm)		
	Type			Optim.	Min	Max
6H21/32P 900 rpm 1200 kW	ACG 52/450	3.22	279.5	2,300	2,200	2,400
	ACG 52/450	3.38	258.6	2,400	2,300	2,500
	ACG 56/450	3.76	239.4	2,500	2,400	2,600
	ACG 56/450	4.03	223.3	2,550	2,450	2,650
	ACG 56/450	4.17	215.8	2,600	2,500	2,700
8H21/32P 900 rpm 1600 kW	ACG 56/450	3.22	279.5	2,450	2,350	2,550
	ACG 56/450	3.48	258.6	2,550	2,450	2,650
	ACG 62/450	3.76	239.4	2,650	2,550	2,750
	ACG 62/525	3.95	227.8	2,750	2,650	2,850
	ACG 62/525	4.22	213.3	2,800	2,700	2,900
9H21/32P 900 rpm 1800 kW	ACG 62/525	3.16	284.8	2,450	2,350	2,550
	ACG 62/525	3.40	264.7	2,600	2,500	2,700
	ACG 62/525	3.66	245.9	2,700	2,600	2,800
	ACG 62/525	3.95	277.85	2,800	2,700	2,900
	ACG 62/525	4.22	213.27	2,900	2,800	3,000

Engine Type	Hub Dimension (mm)			Gear box & coupling dimension(mm) & dry weight(kg)				
	P2	P3	P4	G1	G2	G3	C1	DryWeight
6H21/32P 900 rpm 1200 kW	520	367	327	1,493	450	100	396	3,284
	520	367	327	1,493	450	100	396	3,284
	560	410	228	1,493	450	100	396	3,284
	560	410	228	1,493	450	100	396	3,284
	560	410	228	1,493	450	100	396	3,284
8H21/32P 900 rpm 1600 kW	560	410	228	1,493	450	100	420	3,321
	560	410	228	1,493	450	100	420	3,321
	620	441	254	1,493	450	100	420	3,321
	620	441	254	1,727	525	105	420	4,521
	620	441	254	1,727	525	105	420	4,521
9H21/32P 900 rpm 1800 kW	620	441	254	1,727	525	105	470	4,582
	620	441	254	1,727	525	105	470	4,582
	620	441	254	1,727	525	105	470	4,582
	620	441	254	1,727	525	105	470	4,582
	620	441	254	1,727	525	105	470	4,582

Remarks: Typical ship parameters, Speed: 16.0 knots

Marine Propulsion System

HYUNDAI-HIMSEN

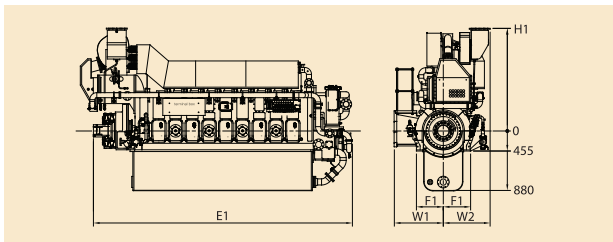
Bore: 250 mm, Stroke: 330 mm

Controllable Pitch Propeller

Permit high skew angles to minimize noise and vibration.

Fixed Pitch Propeller

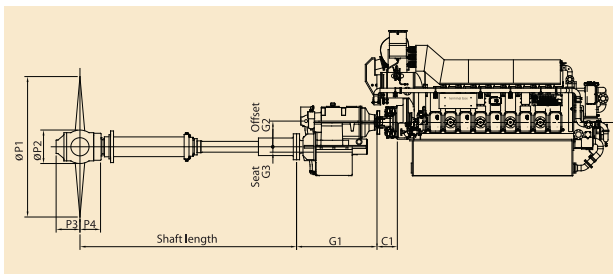
Guarantee optimum thrust, minimal noise and vibration level.



Dimensions

900 rpm	Cyl.	Rated Output at Engine(kW)	Engine dimension(mm) & dry weight(ton)					Dry Weight
			E1	H1	F1	W1	W2	
	6	1,740	3,830	1,924	610	1,035	1,073	23.0
	8	2,320	4,590	2,331	610	1,035	1,073	26.9
	9	2,610	4,970	2,331	610	1,035	1,073	29.3

Specific Fuel Oil Consumption at 100 % Engine Load: 181 g/kWh



HYUNDAI-HIMSEN

Marine Propulsion System

Bore: 250 mm, Stroke: 330 mm

Engine Type	CPP Package System	Gear ratio (i:1)	Propeller speed (rpm)	Propeller Diameter (without nozzle) P1(mm)		
	Type			Optim.	Min	Max
6H25/33P 900 rpm 1740 kW	ACG 56/450	3.15	286	2,450	2,350	2,550
	ACG 62/450	3.49	258	2,600	2,500	2,700
	ACG 62/450	3.65	247	2,650	2,550	2,750
	ACG 62/525	3.95	228	2,750	2,650	2,850
	ACG 62/525	4.22	213	2,850	2,750	2,950
8H25/33P 900 rpm 2320 kW	ACG 62/525	3.16	285	2,600	2,500	2,700
	ACG 68/525	3.40	265	2,700	2,600	2,800
	ACG 68/525	3.66	246	2,850	2,750	2,950
	ACG 68/600	3.95	228	2,950	2,850	3,050
	ACG 68/600	4.24	212	3,050	2,950	3,150
9H25/33P 900 rpm 2610 kW	ACG 68/525	3.16	285	2,650	2,550	2,750
	ACG 68/525	3.40	265	2,800	2,700	2,900
	ACG 68/600	3.65	247	2,900	2,800	3,000
	ACG 75/600	3.95	228	3,050	2,950	3,150
	ACG 75/600	4.24	212	3,150	3,050	3,250

Engine Type	Hub Dimension (mm)			Gear box & coupling dimension(mm) & dry weight(kg)				
	P2	P3	P4	G1	G2	G3	C1	DryWeight
6H25/33P 900 rpm 1740 kW	560	410	228	1,493	450	100	470	3,382
	620	441	254	1,493	450	100	470	3,382
	620	441	254	1,493	450	100	470	3,382
	620	441	254	1,727	525	105	470	4,582
	620	441	254	1,727	525	105	470	4,582
8H25/33P 900 rpm 2320 kW	620	441	254	1,727	525	105	500	4,658
	695	530	442	1,727	525	105	500	4,658
	695	530	442	1,727	525	105	500	4,658
	695	530	442	1,970	600	200	500	6,858
	695	530	442	1,970	600	200	500	6,858
9H25/33P 900 rpm 2610 kW	695	530	442	1,727	525	105	500	4,658
	695	530	442	1,727	525	105	500	4,658
	695	530	442	1,970	600	200	500	6,858
	765	580	478	1,970	600	200	500	6,858
	765	580	478	1,970	600	200	500	6,858

Remarks: Typical ship parameters, Speed: 16.0 knots

Marine Propulsion System

HYUNDAI-HIMSEN

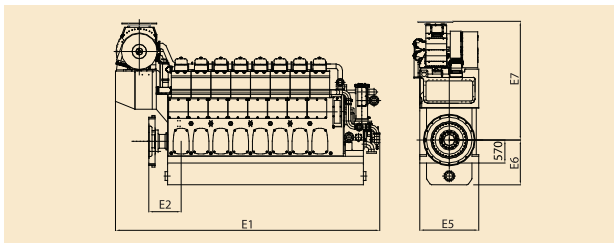
Bore: 320 mm, Stroke: 400 mm

Controllable Pitch Propeller

Permit high skew angles to minimize noise and vibration.

Fixed Pitch Propeller

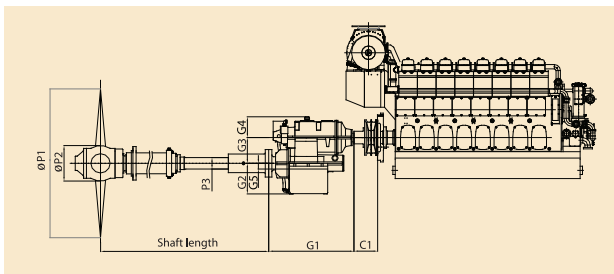
Guarantee optimum thrust, minimal noise and vibration level.



Dimensions

750 rpm	Cyl.	Engine dimension(mm) & dry weight(ton)					Dry Weight
		E1	E2	E3	E4	E5	
	6	5,515	800	1,460	1,110	3,295	35.7
	8	6,545	800	1,460	1,110	3,495	43.5
	9	7,085	800	1,460	1,110	3,495	46.6

Specific Fuel Oil Consumption at 100 % Engine Load: 181 g/kWh



HYUNDAI-HIMSEN

Marine Propulsion System

Bore: 320 mm, Stroke: 400 mm

Engine Type Rated Output at Engine(kW)	CPP Package System		Gear ratio n: 1	Propeller speed rpm	Propeller & Hub Dimension(mm)		
	Gear box model vertical offset	Hub model			P1	P2	P3
6H32/40P 750 rpm 2,880 kW / FPP 3,000 kW / CPP	ACG750	ECP85	4.65	155	3,900	865	280
8H32/40P 750 rpm 3,840 kW / FPP 4,000 kW / CPP	ACG950	ECP105	5.33	135	4,400	1,065	330
9H32/40P 750 rpm 4,320 kW / FPP 4,500 kW / CPP	ACG950	ECP105	5.76	125	4,800	1,065	330

Engine Type Rated Output at Engine(kW)	Gear box & coupling dimension(mm) & dry weight(kg)							Typical Vessel(DWT)
	G1	G2	G3	G4	G5	C1	Gear Dry weight	14 knots
6H32/40P 750 rpm 2,880 kW / FPP 3,000 kW / CPP	2,710	850	750	540	220	622	13,000	7,000 ton Tanker
8H32/40P 750 rpm 3,840 kW / FPP 4,000 kW / CPP	2,710	1,030	950	540	220	622	16,500	9,000 ton Tanker
9H32/40P 750 rpm 4,320 kW / FPP 4,500 kW / CPP	2,710	1,030	950	540	220	690	16,500	10,000 ton Tanker

Remarks: Typical ship parameters, Speed: 14.0 knots

