

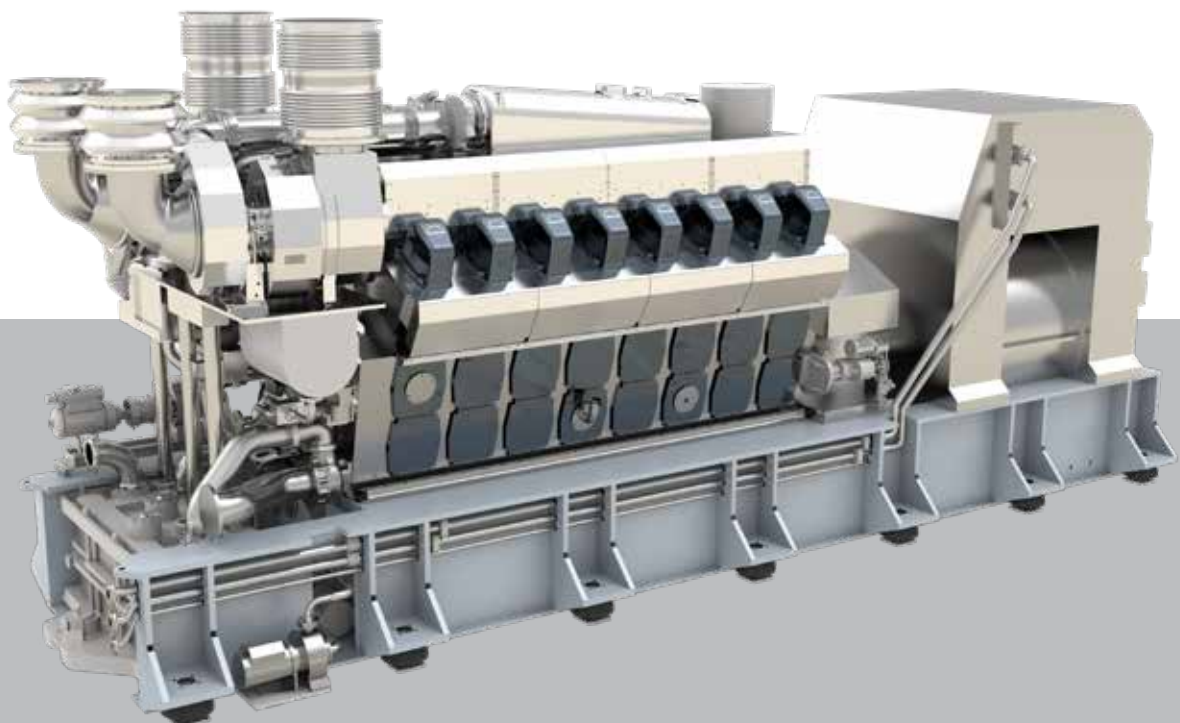
S.E.M.T. Pielstick PA6 B Navy

GenSet

The Pielstick PA6 is the most widely used engine for military ships: nearly 900 PA6 engines were installed worldwide for the propulsion of military ships (mainly 1st rank vessels like frigates, aircraft carriers), making this engine the No. 1 choice of 23 navies among similar bore engines.

Benefits at a glance

- High reliability
- High operating efficiency across the full power range
- Designed to meet Military specifications: shock, optical, IR and acoustic signature
- Easy to operate
- **Best in class** power/weight ratio



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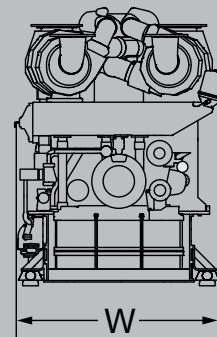
Output

Bore 280 mm, Stroke 330 mm	12V	16V	18V	20V
Rated power output (kW)	4,200-4,440	5,600-5,920	6,300-6,660	7,000-7,400
Electric power	4,074-4,307	5,432-5,742	6,111-6,460	6,790-7,178
rpm	900-1,000	900-1,000	900-1,000	900-1,000
Frequency (Hz)	60-50	60-50	60-50	60-50

Specific fuel oil consumption (SFOC) to ISO conditions

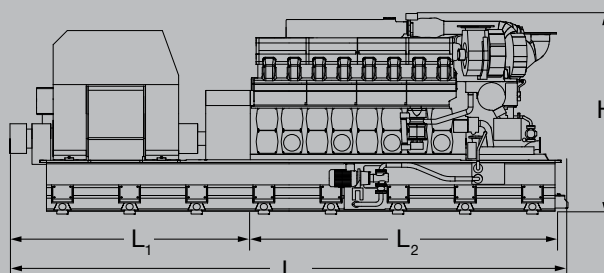
Engine rating	MCR 100%	MCR 85%
Frequency 50 Hz	200 g/kWh	198 g/kWh
Frequency 60 Hz	199 g/kWh	197 g/kWh

Figures on theoretical at constant speed for distillates according to ISO 8217 DMA, with all driven pumps. ICFN, 1 hour every 12 operating hours



Dimensions

Cyl. No.	12V	16V	18V	20V
L (mm)	9,287	10,583	11,048	11,547
L ₁ (mm)	4,370	4,727	4,732	4,770
L ₂ (mm)	4,600	5,637	6,097	6,557
H (mm)	3,695	3,695	3,695	3,695
W (mm)	2,670	2,670	2,670	2,670
W ₁ (mm)	2,818	2,818	2,818	2,818
Dry mass (t)	60	72	80	85



General

- Four-stroke sea-proven engine
- Conservative Brake Mean Effective Pressure (BMEP) resulting in a low mechanical stress fatigue and consequently a high reliability factor and long TBO: 32 000 Hrs
- Engine base qualified for nuclear applications

weight compatible with vessel structure

- Compact design to reduce engine room size
- Low levels of noise emissions and vibrations
- Ability to cope with load increase and low load operation
- Reliability >99% for start-up test and loading condition
- Long maintenance intervals

Military specific features

- Shock resistant (real test)
- Full blackout capability (no electrical supply)
- Low airborne & structure borne noise
- Low Heat emission (IR signature)
- Driven fuel pump with black start capability

Main features

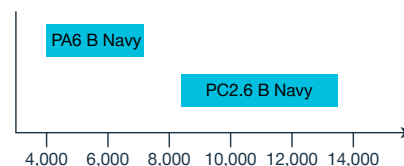
- Conventional reliable fuel injection
- Seawater, LT and HT integrated driven pumps
- Integrated lubrication system
- Built-on combined cooler for oil and cooling water
- Air start
- MAN control system
- IMO Tier II compliant EPA
- On-board DG set with integrated solutions:
 - Easy to install
 - High power density and reduced

Fuel & Lube oil

Distillate marine fuels according to ISO 8217:

- DMX, DMA, DMZ and DMB
 - NATO F-76 & F-75
 - Biodiesel B20, B30
- Lube oil:
- SAE 40
 - MC30 (code NATO O-278)

Rated power output (kW)



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