Meet regulations and take advantage of global fuel prices with the world’s first dual-fuel LPG marine engine.

**Benefits at a glance**
- Meet current and future SO\(_x\) regulations
- Lower total cost of operation
- Switch between HFO, MGO or LPG with no performance loss
- Efficient and reliable low speed, two-stroke engine
- Simple retrofit solution
MAN B&W ME-LGIP

Propulsion

Cylinder cover with LPG injection valve and gas block
1. LPG injection valve
2. ELGI valve (injection timing)
3. ELWI valve (fuel pressurization)

MAN B&W ME-LGIP dual-fuel engines

Comparison of fuel consumption

General
- Engine cycle: two-stroke
- Number of cylinders: 5 to 12 depending on bore size
- Bore: 500 mm to 950 mm
- Stroke/bore ratio: 3.6 to 5.0

Fuel consumption at part load optimization
- Same heat rate on fuel oil and LPG
- 80% MEP derated engine at 65% load:
  - G60ME-LGIP: 155 g/kWh
  - G50ME-LGIP: 154 g/kWh

 MEP and speed derating
- Large layout area
- G60ME-LGIP: 56% power derating possible
- Multiple choice of engine size and number of cylinders to match optimum propeller design and power

Compliance with emission regulations
- IMO Tier II
- IMO Tier III (with SCR, EGR or EcoEGR*)
  *for improved efficiency when operating in Tier II mode

Main features
- Turbocharging system
  High efficiency constant pressure turbocharging systems with MAN, ABB or MHI turbochargers as standard
- Engine automation and control
  In-house developed gas safety and control system
- Fuel oil system
  Common injection system for pilot oil and for main injection
- Gas system
  LPG injection by fuel booster injection valves (FBIV)
- Tolerant to many different LPG compositions

Auxiliary systems
- Gas supply conditions: circulation with supply at 50 +/- 2 bar and 25-55 deg. C
- MCR = Maximum Continuous Rating
- SCR = Selective Catalytic Reduction
- SFOC = Specific Fuel Oil Consumption

All data provided in this document is non-binding. This data serves informational purposes only and is not guaranteed in any way. Depending on the subsequent specific individual projects, the relevant data may be subject to changes and will be assessed and determined individually for each project. This will depend on the particular characteristics of each individual project, especially specific site and operational conditions. Copyright © MAN Energy Solutions. 3610-0370-00ppr July 2018 Printed in Germany GGKM-CPH-18071

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