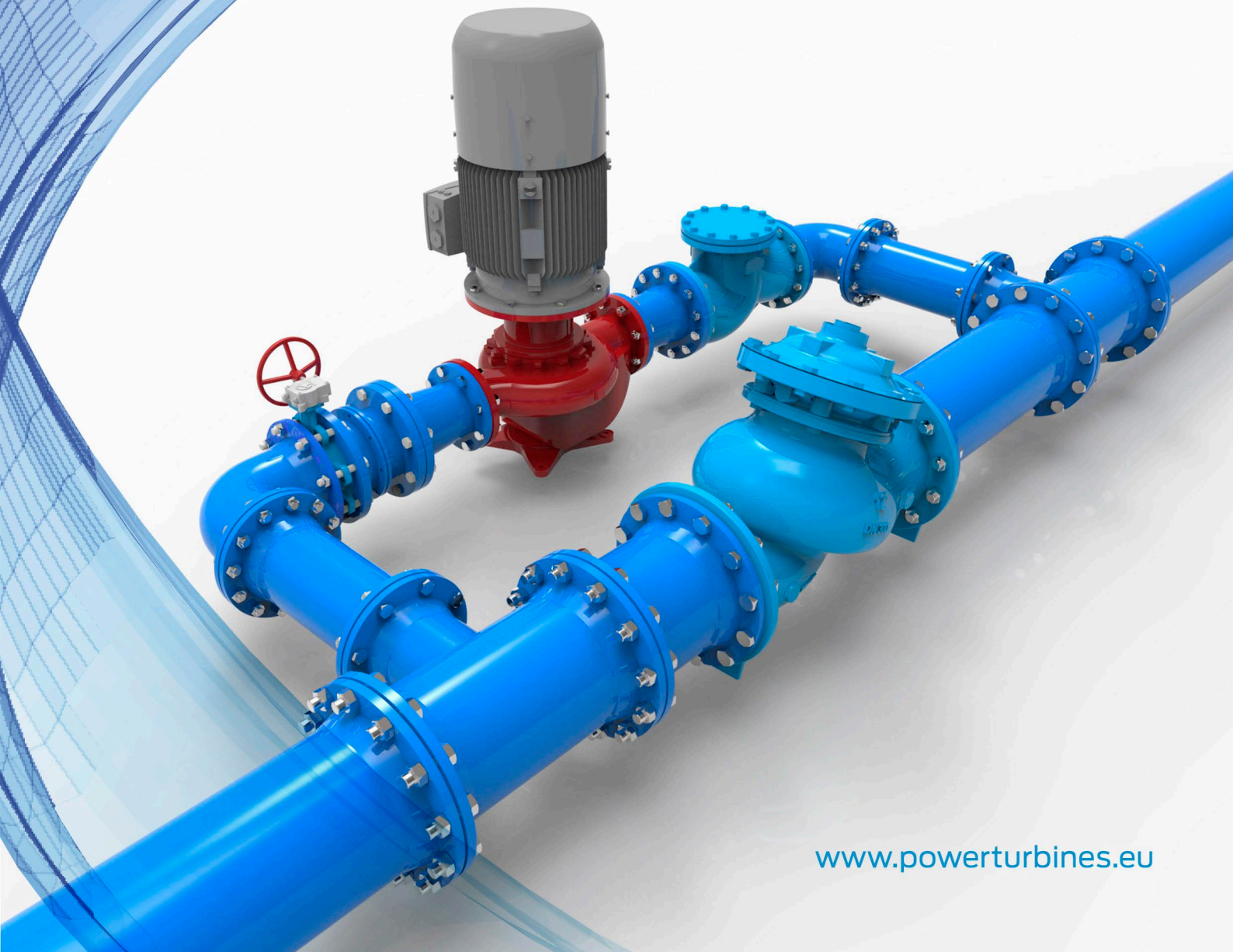
POWERTURBINES

ENERGY FROM WATER

MICROGRID SERIES



www.powerturbines.eu

POWERTURBINES
ENERGY FROM WATER

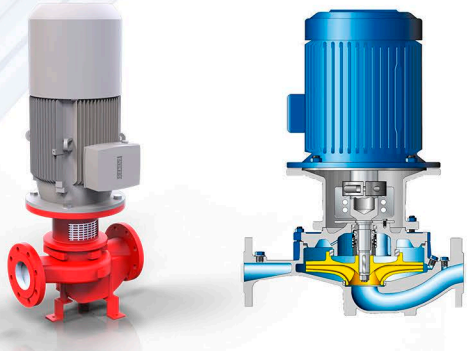
MICROGRID
TURBINE SERIES

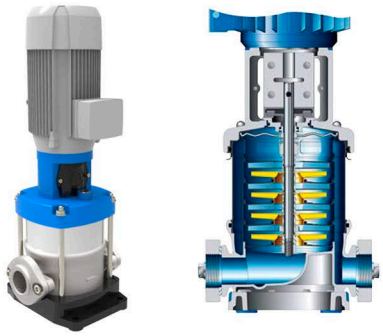
Specs

· Grid tied turbines designed for selling energy or self-consumption.
· Three phase or single phase grid connection (50 or 60Hz)
· Up to 25kw of generated power.
· Suitable for drinking water, irrigation water, dam water or raw water.
· Three phase permanent magnet generator IP55.
· Control box IP55 made of high resistance ABS plastic.
· Digital display with operating parameters.
· Equipped with an automatic valve to close in case of grid failure.
· Modbus communication line.
· Three types of hydraulic desing: Line, Line HP or Monobloc.
· Different models depending on the flow and pressure drop.

Applications

· Installation on reservoirs with pressure break.
· Installation in parallel with pressure reducing valves (PRV´s).
· Installation in dams or river reservoirs.





MICROGRID LINE

TECHNICAL DESCRIPTION
DESIGN: In line with the pipe
INSTALLATION POSITION: Vertical or horizontal shaft
CONNECTIONS: Flanged
SEALING: Mechanical seal
MAXIMUM PRESSURE: PN16
BEARINGS: Standard ball bearing
CERTIFICATES: ACS (under demand)
FLOW RANGE: 5-150 liters/second
PRESSURE DROP RANGE: 4-100 meters

MATERIALS
VOLUTE CASING: Cast iron
IMPELLER: Cast iron (bronze or stainless steel optional)
SHAFT : Tempered steel (stainless steel optional)
GENERATOR COUPLING: Cast iron

OPERATING CONDITIONS
Temperature: -20 up to 45ºC
Humidity: Up to 95%
Altitude: Up to 2000 without derrating

MICROGRID LINE HP

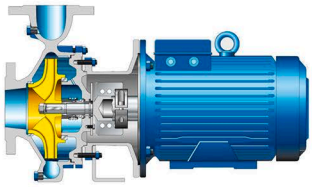
TECHNICAL DESCRIPTION
DESIGN: In line with the pipe
INSTALLATION POSITION: Vertical shaft
CONNECTIONS: Flanged or threaded (depending on model)
SEALING: Mechanical seal
MAXIMUM PRESSURE: Up to PN40 (depending on model)
BEARINGS: Standard ball bearing
CERTIFICATES: ACS & WRAS
FLOW RANGE: 2,5-30 liters/second
PRESSURE DROP RANGE: 25-400 meters

MATERIALS
VOLUTE CASING: Stainless steel
IMPELLER: Stainless steel
SHAFT : Stainless steel
GENERATOR COUPLING: Cast iron

OPERATING CONDITIONS
Temperature: -20 up to 45ºC
Humidity: Up to 95%
Altitude: Up to 2000 without derrating

POWERTURBINES
ENERGY FROM WATER

MICROGRID
TURBINE SERIES



MONOBLOC

TECHNICAL DESCRIPTION
DESIGN: In line with the pipe
INSTALLATION POSITION: Vertical or horizontal shaft
CONNECTIONS: Flanged
SEALING: Mechanical seal
MAXIMUM PRESSURE: PN16
BEARINGS: Standard ball bearing
CERTIFICATES: ACS (under demand)
FLOW RANGE: 5-150 liters/second
PRESSURE DROP RANGE: 5-160 meters

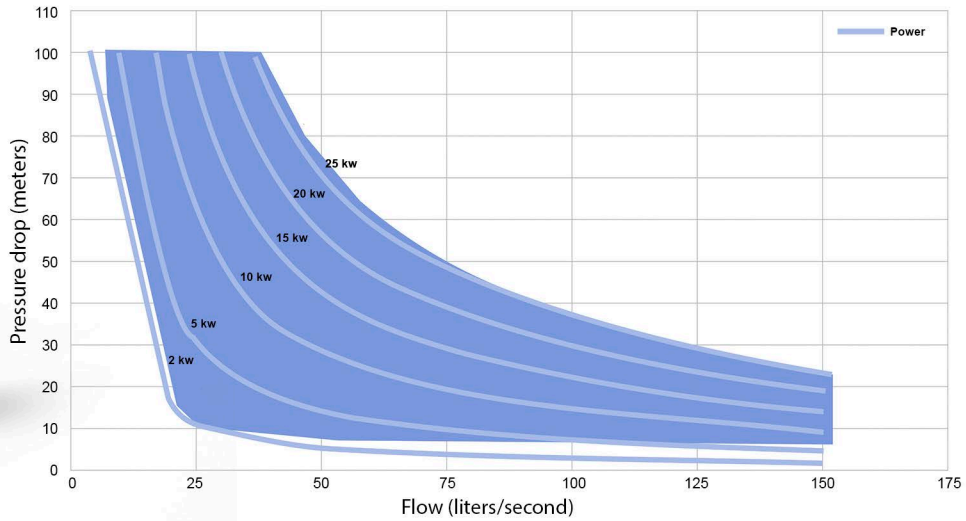
MATERIALS
VOLUTE CASING: Cast iron
IMPELLER: Cast iron (bronze or stainless steel optional)
SHAFT : Tempered steel (stainless steel optional)
GENERATOR COUPLING: Cast iron

OPERATING CONDITIONS
Temperature: -20 up to 45ºC
Humidity: Up to 95%
Altitude: Up to 2000 without derrating

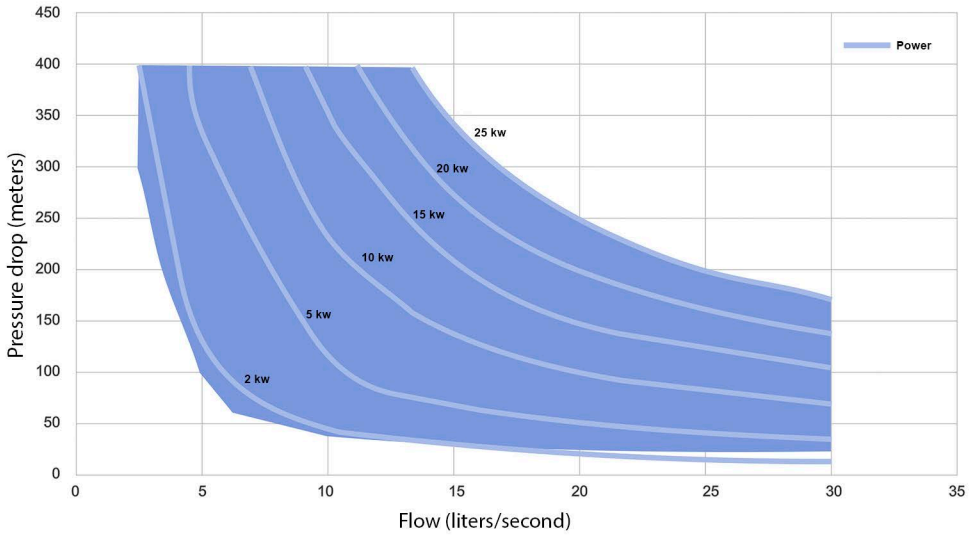
POWERTURBINES
ENERGY FROM WATER

MICROGRID
TURBINE SERIES

MICROGRID LINE



MICROGRID LINE HP



MICROGRID MONOBLOC