ben marine

ORION
econometer

The ORION Econometer permits constant evaluation of the vessel's fuel efficiency level.

Gain, damping, dimmer adjustments and help to repairing are accessible through keyboard.

Orion accepts all worldwide currencies.

Orion displays the consumption directly on the screen:

▸ in litre
▸ in euro

standard version consists of:

▸ one Main Cabinet (PVBEN420)
▸ two fuel flow meters with oval gears

Main features

Two LCD displays:

▸ Top LCD displays:
  ‣ Instantaneous speed (knot)
  ‣ Instantaneous consumption (litre/hour and €uro/hour)
  ‣ Average consumption (litre/hour and €uro/hour).
▸ Bottom LCD displays:
  ‣ Total distance (mile)
  ‣ Daily distance (mile)
  ‣ Total consumption (litre and euro)
  ‣ Daily consumption (litre and euro)
  ‣ Efficiency factor.

Bull
atos technologies

Main cabinet specifications

Dimensions	114 x 114 x 28 mm
Power supply	12 Vdc to 24 Vdc
Inputs:	200 ppnm log speed Or NMEAO183 speed frames RMA, RMC, VHW, VLW, VTG with RS422 or RS232 protocol.
Outputs	Total consumption (litre) dry contact Or serial RS422 NMEAO183 format Or serial RS232 NMEAO183 format Power supply for sensors.

Options

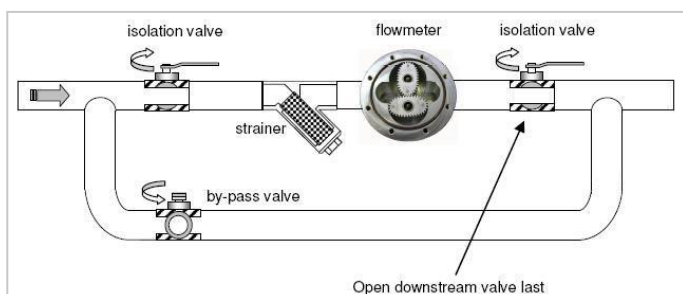| |
|---|
| It is possible to install a filter 40 microns (PVBEN484) or 100 microns (PVBEN485) before each sensor. |
| Heavy fuel or other flows, please contact AMESYS International/BEN. |

Installation

Install main cabinet in wheel house
Install first sensor before injection pump
Install second sensor after engine
Install 40 microns (PVBEN484) or 100 microns (PVBEN485) filter before first sen.
sorInstall a by-pass device on each sensor for question of security.

isolation valve   flowmeter   isolation valve

strainer

by-pass valve

Open downstream valve last

Sensor specifications

	PVBEN484	PVBEN485
Nominal size	15mm (1/2")	25mm (1")
Process connections	BSP female threaded	BSP female threaded
Liquid	Fuel	Fuel
Body material	Aluminium	Aluminium
Rotor material	Aluminium	Aluminium
Bearing type	Hardened steel roller bearings	Hardened steel roller bearings
O-ring material	Viton	Viton
Accuracy	± 0.5%	± 0.5%
Repeatability	± 0.03%	± 0.03%
Pressure drop	0.5 bar at 2400 L/h	0.5 bar at 9000 L/h
Flow range (L/h)	60 à 2400	600 à 9000
Flow range (USGM)	0.26 à 10.6	2.6 à 40
Maximum pressure	68 bar (1000 psi)	68 bar (1000 psi)
Hall effect	166 T/litre	107 T/litre
Cable entries	3 à 6 mm²	3 à 6 mm²
Protection class	IP67	IP67
Power supply	5 to 24Vdc	5 to 24Vdc
Wire size	0.5 mm²	0.5 mm²
Temperature	-4°F to 250°F	-4°F to 250°F

This data sheet is subject to alteration without notice

Your business technologists. **Powering progress**

www.benmarine.fr