

Kyma Shaft Power Meter



K Y M A

Kyma Shaft Power Meter

– continuous
measurement of
torque, power and
revolutions.

- Measurement of
 - Torque
 - Power
 - RPM
 - Thrust (option)
 - PDF possibilities of reports
such as voyage reports, sea trial etc.

Kyma a.s

Asamyrane 88 B

N-5116 Ulset

Bergen, Norway

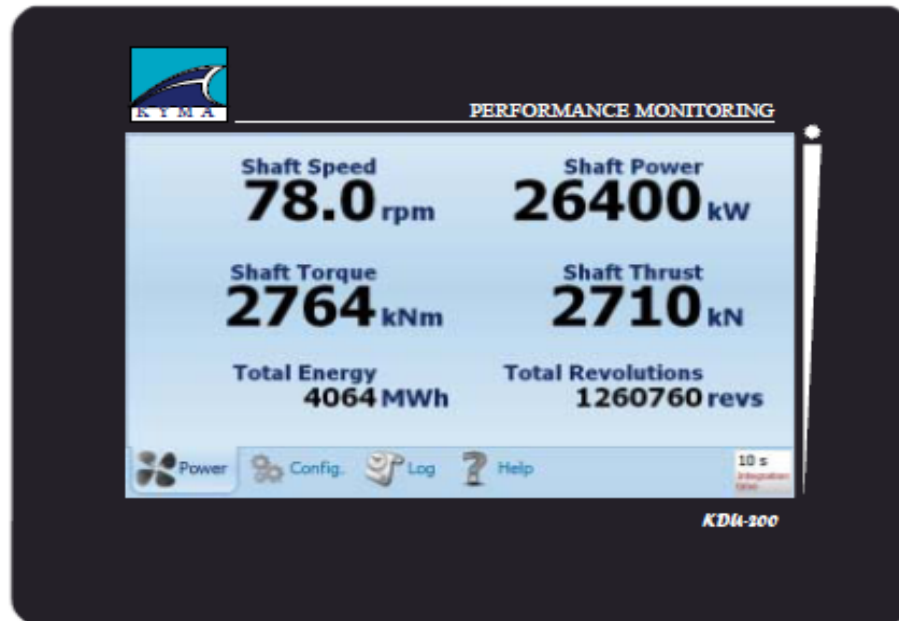
Tel. +47 55530014

Fax. +47 55530017

E-mail: mail@kyma.no

Web: www.kyma.no

Kyma Shaft Power Meter KPM.P



General Description

Kyma Shaft Power meter (KPM) is an instrument for continuous measurement of torque, thrust, revolutions and power on a rotating shaft. The instrument is primarily designed for marine applications.

The Shaft Power Sensor measures shaft torque and thrust using strain gauge technique. The instrument consists of an aluminum ring clamped on to the shaft, a stationary unit located next to the shaft and a terminal junction box for signal and power connection.

The signals are transferred as frequency modulated signals to the stationary unit through contact free transmission. Shaft revolutions are measured by sensing of magnets on the shaft ring.

The Kyma Display Unit consists of a flat LCD screen module and a processing unit that can be flush mounted in the ECR console or installed in brackets on the top of the console.

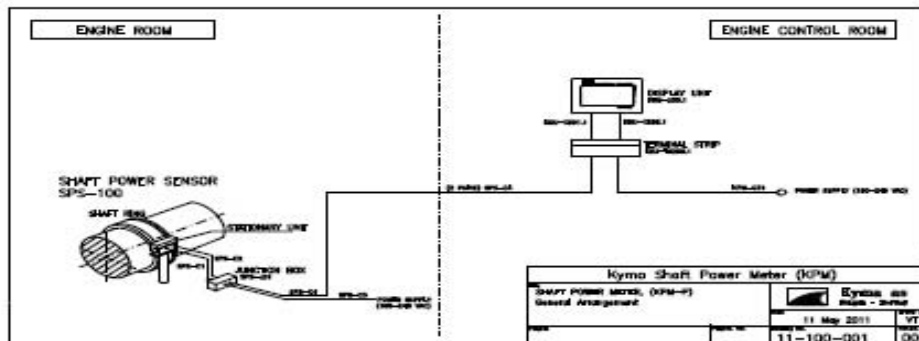
Operator can change the units of measurements between Metric and SI.

The following propulsion data are recorded by the Shaft Power Sensor and presented on the Kyma Display Unit:

Rpm, Torque, Thrust, Total Energy Power, Total revolutions

The instrument meets following accuracy:

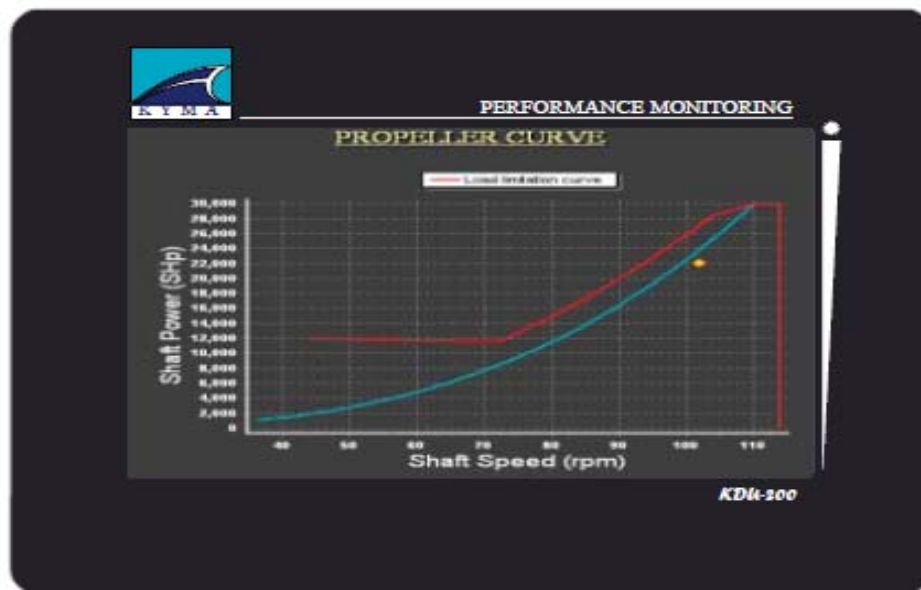
	Absolute:	Relative:
- Torque	< ± 0.5%	< ± 0.5%
- Revolution	< ± 0.1%	< ± 0.1%
- Power	< ± 0.5%	< ± 0.5%
- Thrust	< ± 5.0%	< ± 2.0%



The system is maintenance free and designed for the vessels life time. A zero calibration is the only recommended action to be done by the ship staff. It is an easy operation that takes approx 10 minutes and it should be done approx every 6 months.

There are several advantages with the Kyma systems:

- High repeatability and accuracy
- Available for multi-shaft installations
- No mechanical wear
- Not affected by any pollution in the engine room.
- Option for Thrust measurement
- Design for use in hazardous areas
- Easy to upgrade to Kyma Ship Performance
- Kyma Shaft Power Meter is easy to install both on new vessels and on vessels in operation. The ring is suitable for all shafts above 235mm.



The Kyma Performance systems are well proven with currently more than 3500 systems. Many of these vessels were installed more than 25 years ago and are still in operation.

Kyma systems have been chosen by many Naval projects world wide.



Kyma Shaft Power Meter: Voyage Report

Vessel: MV Kyma Test Voyage Voyage 231, Brest-Manchester

Report period : 13.Nov.2010 08:30:54 to 14.Nov.2010 10:55:26 (local time)

Voyage duration: 26 hours and 24 mins.

Accumulated values

Total Shaft Energy	792792	SHph
Total Shaft Revolutions	162518	revs.

Average values

Shaft Power	30030	SHp
Shaft Revolutions	102.6	rpm
Shaft Torque	250	Tm
Shaft Thrust	145	Ton



Report printed : 14/11/2010 10:55:27