

# SIGMA-345

Fluxgate Compass set



## SIGMA:

The SIGMA line is a complete modular range of reliable equipment for inland shipping and inland fishery. Unique is the combination of digital technology and an analog readout.

## Sensors:

The SIGMA-345 indicator operates with a P-347 fluxgate sensor. The working mechanism of the P-347 is mounted on the middle of the gimbals suspension, making the SIGMA-345 extremely stable on pitching, rolling and heaving vessels.

## Dimming:

The SIGMA-345 display unit is fitted with a dimming system. This unit can be dimmed synchronized with the rest of the Radio Zeeland DMP system.

## Colored lighting:

The indicator of the SIGMA-345 display unit is illuminated with LED- backlighting. The color of the lighting can be set to three different colors, Red, Yellow or Blue, creating a night view adjustable to personal preferences.

## True Heading:

With the use of a GPS signal, the SIGMA-345 is the only fluxgate compass on the market that can indicate true heading. The magnetic heading is corrected with an internal table and the position information of the GPS, into a true heading.

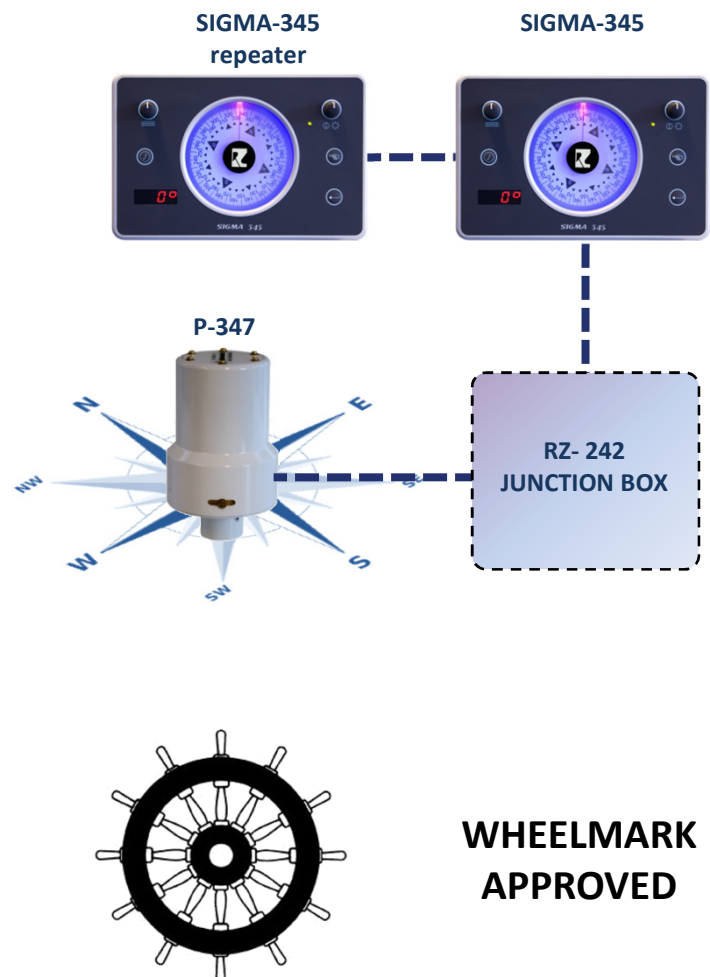
The combination of true heading and an analogue readout is a unique characteristic.

The SIGMA-345 is wheelmark approved under MED1300001.

## SIGMA-345

The SIGMA-345 is an electromagnetic compass and consists of the RZ242 junction box and the P-347 fluxgate compass sensor. The display unit can also be connected to a SIGMA-550 autopilot that has a compass sensor connected. An additional option is to connect the display unit to an NMEA signal with heading information.

This Fluxgate compass is extremely stable on pitching, rolling and heaving vessels.



# Technical specifications

## Display unit housing specifications

Housing	Clear anodized aluminum
Size	236 x 154 x 80 mm
Weight	Net weight 1,3kg
Protection	IP-50
Temperature	0 to + 55°C,
Humidity	0 to 90% non-condensing

## Electrical specifications

Main power supply	24 Vdc -20% or +30%.
Backup power supply	24 Vdc -20% or +30%.
Amperage	< 1A (without repeaters)
Power consumption	< 1,5A

## Optical specifications

Accuracy	Better than 1°
Indicator	0 - 360°
Dimming range	5 - 100%
Illumination color	Red / Blue / Yellow

## Inputs

- Extern on / off 15VDC
- NMEA in IEC 61162 (HDM or HDT or HDG and VTG)

## Outputs

External dimmer 15VDC PWM with a maximum of 150mA  
NMEA out IEC 61162 (HDT)

## Declaration of conformity

- EC (Module B) Certificate no. MED130001 plus,
- EC (Module D) Conformity no. MED1150146
- IEC 60945:2002 incl. Corrigendum 1:2008
- IEC 61162 series
- IEC 62288 (2008)
- ISO 22090-2 (2004)incl. Corrigendum 2005

## P-347 Sensor specifications

Measuring range of fluxgate sensor, horizontal:

- Sensitivity 3-100  $\mu$ T
- Accuracy better than +/-1°

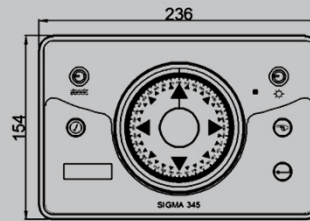
Measuring range of fluxgate sensor, vertical:

- Sensitivity -200 to +200 $\mu$ T
- Temperature range -30°C to +70°C
- Impact resistance is more than adequate for use in ships
- Damping of the sensor is critically linear
- A-fault compensation +/-10°

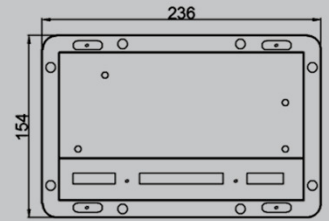
## Scope of supply

- The SIGMA-345 Manual
- Display unit SIGMA-345
- P-347 Fluxgate sensor
- P-347 Manual
- Junctionbox RZ242
- Junctionbox RZ242 manual
- Assembly set

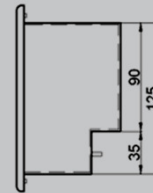
## Dimensions in mm:



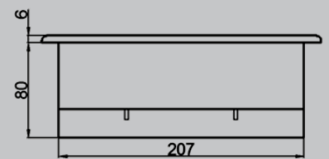
FRONT



BACK

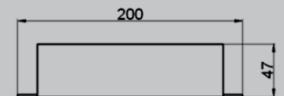
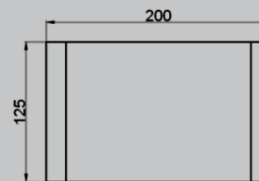


SIDE

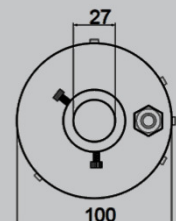
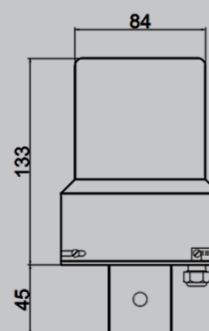


BOTTOM

## P-347 Sensor



## P-345 Sensor



Product is subject to change without notice.