

## NAVIGAT 100



NAVIGAT 100 is the advancement of the Northrop Grumman Sperry Marine spinning mass gyrocompass.

The NAVIGAT 100 fully integrates the benefits of the NAVIGAT family of products within a single unit.

### Features

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- CompassNet single unit
- 180° heading offset function for shuttle vessels
- Built-in test equipment
- Automatic North Speed Error Correction
- HSC Approved
- Low lifecycle costs
- Short installation time
- High-speed follow-up system 100°/sec
- High resolution ROT output

The NAVIGAT 100 is type approved in compliance with:

- 96/98/EC Marine Equipment Directive 2015/559 April 2015 (wheelmark)
- IMO A.424(XI), A.694(17) A.526(13) (Rate of Turn), MSC.191(79), A.821(19)-(HSC), MSC.36(63)-(1994 HSC Code), MSC.97(73)-(2000 HSC Code), ISO 16328. Compliant with the requirements of DNV GL Rules for Ships Pt.6 Ch.3 (INS)
- IEC 61162, IEC 62288 Ed 2.0

# Performance, Specifications and I/O Signals

## Performance

Linear mean settle point error (RMS)	≤ 0.1° Secant latitude
Static error (RMS)	≤ 0.1° Secant latitude
Dynamic error	≤ 0.4° Secant latitude
Heading Resolution	0.1
Rate of Turn Resolution	≤ 0.5 ± 5% °/min
Freedom of Roll & Pitch	± 40°
Settling Time	2.9h
Follow-Up rate	100°/sec
MTBF	120,000
North stabilization at power interruption	~3min

## Operations

Power Supply	DC 24V AC 115/230V (ext ps)
Power Consumption	
Start-Up	96W
Operations	64W
Analogue Repeater	+7W per Repeater
Universal Digital Repeater	+5W per Repeater
Temperature range	
Operation	-10°C to +55°C
Storage	-25°C to +70°C

Power Failure Alarm Visible, audible and potential no contact

Protection Grade IP 23 as per IEC/EN 60529

## Environmental Req & EMC

<i>In accordance with</i>	
Magnetic Clearance to:	EN60945 (IEC 945 +1)
Standard Magnetic Compass	0.5m
Steering Magnetic Compass	0.35m
Reduced Magnetic Clearance to:	
Standard Magnetic Compass	0.3m
Steering Magnetic Compass	0.3m

## I/O signals

Main	24	→
Backup	24 VDC	→
4 x	IEC61162-1/2	←
	24 VDC	←
5 x Sensor	IEC61162-1/2	←
NAV. Printer or Sensor	IEC61162-1/2	←
2 x Alarm Relay		←
		↔
Central Alarm Monitor	IEC61162-1/2	→
1 x Speed Log	IEC61162-1/2	→
1 x GPS	IEC61162-1/2	→
1 x Magn. Heading	IEC61162-1/2	→
Status AUTO/Status		→
		→



## Accessories



Bearing repeater compass with 360° card in a stand with azimuth device



Bearing Repeater Compass with 360° card in bulwark console



Prismatic Azimuth Device PV 23



Repeater compass steering, console, bulk-head

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BR-01/EXP-KK-JUN-16

