

**NAVIGATION MARKS**

- Lighthouse, major, minor light
- Beacon, port, starboard
- Safe water, isolated danger
- Spar buoy, port, starboard
- Pillar buoy, port, starboard
- Moor buoy, yachting buoy
- Lead, front, rear
- Special Marks (yellow cross topmark) are not primarily to assist in navigation, but indicate special features

**LIGHT CHARACTERISTICS**

Colour of light is white unless otherwise stated

- F : Fixed
- Ri : Flashing
- R Li : Group flash
- Q : Quick flash
- LFI : Long flash
- OC : Occulting
- Is : Isophase

**CARDINAL MARKS**

- Indicates safe water to the North
- Indicates safe water to the South
- Indicates safe water to the East
- Indicates safe water to the West

**INDICATES IN NAVIGATION MARK**

- G : Green
- Y : Yellow
- s : Period in seconds
- m : Focal plane height above MHHW
- M : Luminous range in nautical miles

**Other symbols:** W : White, R : Red, Bu : Blue

AUSTRALIA - WEST COAST  
WESTERN AUSTRALIA  
**DONGARA  
PORT DENISON**  
SCALE 1 : 25 000

**DEPTHS**  
Depths are shown in metres and decimetres, reduced to Sounding Datum, which is approximately lowest water level.

**HEIGHTS**  
Heights are shown in metres. Underlined figures are drying heights above Sounding Datum. Overhead clearance heights are above Highest Astronomical Tide. All other heights are above Mean Higher High Water.

**POSITIONS**  
Positions on this chart are referenced to the Map Grid of Australia, Zone 50, based on the Geocentric Datum of Australia 1994 (GDA94). For GPS use, this approximates WGS84.

**PROJECTION**  
Universal Transverse Mercator.

**SOURCES**  
From the latest information available to Department for Planning and Infrastructure (DPI), April 2006.

**NAVIGATION MARKS**  
IALA Maritime Buoyage System - Region A (Red to Port).

**CHART AMENDMENTS**  
The information provided on this chart is correct at time of publication. As this information is subject to change, ensure the latest version of the chart is used at all times and is kept up-to-date with reference to the following:

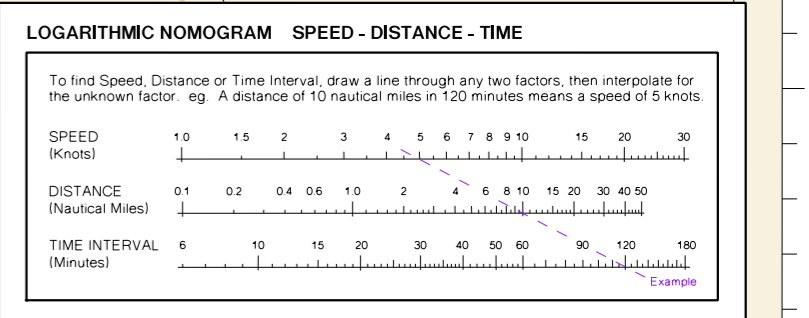
**Notices to Mariners**  
Changes of a safety or navigational nature will be reflected in Notices to Mariners. Current Notices are available from the DoT website at [www.marine.nsw.gov.au/notice.htm](http://www.marine.nsw.gov.au/notice.htm).

**Navigable Waters Regulations**  
Changes to Navigable Waters Regulations are published in the Western Australian Government Gazette. Regulations for Navigable Waters can also be found at [www.wa.gov.au/gov/legislation/regulations](http://www.wa.gov.au/gov/legislation/regulations).

**Marine Protected Areas**  
Refer to Department of Primary Industries and Regional Development (DPIRD) and Department of Biodiversity, Conservation and Attractions (DCA) publications for the latest information.

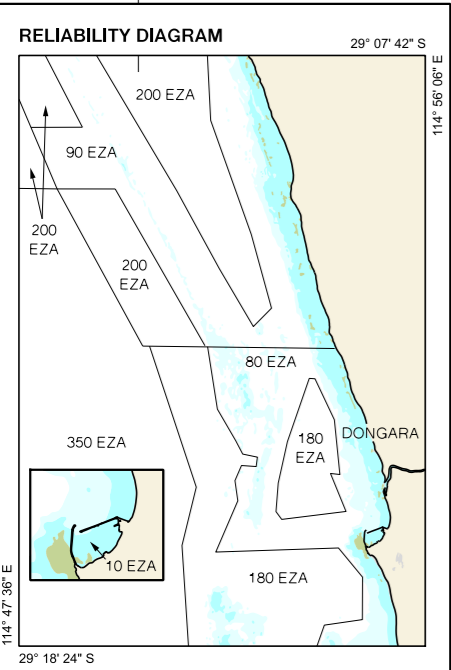
**TIDAL INFORMATION AND SOUNDING DATUM**

Place	Lat	Long	Height in metres above datum	Sounding and Tide Datum
	S	E	HA* (mean) LWSL (mean) MSL (mean) LAT	
PORT DENISON	29°13'	114°32'	1.33 0.99 0.79 0.76 0.68 0.54 0.16	899 metres below PWD BM A299



**LEGEND**

- Marsh and swampland
- Nature Reserve / National Park
- Railway, Clearance height, Bridge
- Clearance height, Overhead powerline
- River
- Major road
- Minor road
- Track
- Medical facility, Building
- Mean high water
- Mean low water
- Datum mark
- Cliff
- Rock shoreline
- Sand drift
- Anchoring prohibited
- GPS validation point, Helipad, Groyne
- Car parking, Over-beach launching
- Boat ramp, Tide gate
- Parking for boats / trailers
- Mangroves, Four ground, Marine farm
- Water, Fuel, Jolly, Safe anchorage
- Telephone, Public toilet
- Exposed wreck, Submerged wreck
- Hazardous submerged reef
- Reef which covers and uncovers
- Coral reef / outcrop, Breakers
- Rock awash, Underwater rock
- Sounding above Datum, Fish haven
- Danger line
- 1m contour
- 2m contour
- 10m contour
- Depth in metres and decimetres
- Approximate contour
- Submarine cable
- Anchorage area, No anchorage area
- No fishing, Pilot boarding location
- Water skiing boundary
- Prohibited area boundary
- Various limits
- Port Authority / Harbour boundary
- Recommended track
- Dredged area boundary
- Restricted area / Sensitive area
- Marine protected area



**KEY TO SYMBOLS**

- 400: Distance apart of main sounding lines in metres
- L: Lead Line depths
- E: Echo Sounding depths
- O: Optical position fixing
- Z: Electronic position fixing
- S: Sonar sweep
- R: Reconnaissance or incomplete survey

**Authorities**

- A: Department for Planning and Infrastructure
- B: Royal Australian Navy
- C: AUSLUG
- D: Other

**NATIONAL PARKS AND NATURE RESERVES**  
National Parks and Nature Reserves are gazetted for the Protection of Flora, Fauna and Landscape values. Dumping of rubbish, lighting of fires (including ground fires), firearms, pets, removal of rocks, soil and timber, driving off established tracks and disturbance of flora and fauna are all prohibited in National Parks and Nature Reserves. Camping is only allowed in gazetted areas of National Parks. Refer to Department of Biodiversity, Conservation and Attractions publications for further information on parks and reserves.

**LEEUEWIN CURRENT**  
The Leeuwin Current is most predominant during May to August with a surface current generally less than 1 knot. It has an average width of 30 nautical miles and extends to a depth of approximately 200 metres, carrying warm, low salinity water from the North West Shelf area along the continental shelf south to Cape Leeuwin and then east into the Great Australian Bight. For details of currents generally refer to R.A.N. Australia Pilot Vol I.

**WESTERN ROCK LOBSTER FISHERY**  
Between November and June, extensive lobster fishing takes place between latitudes 24°S and 34°S. Mariners are advised to keep well clear of lobster pot floats and submerged lines.

**FISHING**  
Fishing regulations apply throughout Western Australia. Refer to Department of Primary Industries and Regional Development publications for further information.

**ROADS AND TRACKS**  
The representation on this chart of any road or track is not necessarily evidence of a Public Right of Way.

**HISTORIC SHIPWRECKS**  
All wrecks, 75 years old or more, are protected under an Act which prohibits the removal of artefacts or willful damage of any sort. By this means, the sites will remain better preserved for divers in the future. Refer to WA Maritime Museum for further information.

