ZULU MARINER DATA CARD

21 NUMBERS TO KNOW

Conversions and quick figures for the boat and the ship.

DISTANCE AND SPEED

1 nautical mile	1,852 m
1 cable	185 m
1 knot	1.852 km/h
1 knot	0.514 m/s
1 statute mile	0.869 nm
1 km	0.54 nm

DEPTH AND LENGTH

1 fathom	1.829 m
1 m	3.281 ft
1 ft	0.305 m
1 shackle of cable	27.4 m (15 fathoms)

WEIGHT AND VOLUME

Fresh water	1.000 t/m³
Sea water	1.025 t/m³
Diesel	about 0.84 kg/L
Petrol	about 0.74 kg/L
1 L	0.001 m³
1 US gallon	3.785 L
1 imperial gallon	4.546 L

PRESSURE

Standard atmosphere	1013.25 hPa
1 bar	1000 hPa
10 m of sea water	about 1 bar

TIME AND ARC

1 hour	15° of longitude
4 minutes	1° of longitude
1° of latitude	60 nm
AEST	UTC + 10
AEDT (NSW summer)	UTC + 11
Queensland	no daylight saving

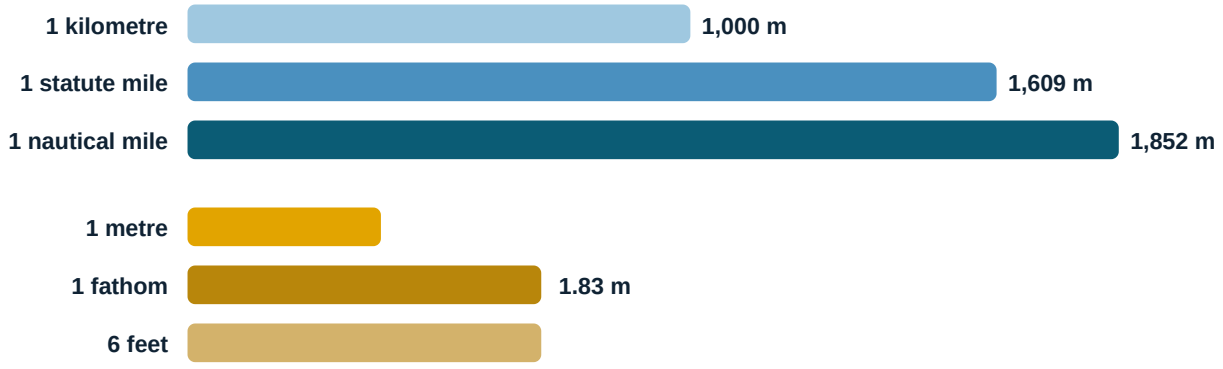
POWER

1 kW	1.341 hp
1 hp	0.746 kW
Bollard pull	roughly 1.5 t per 100 kW for a modern ASD tug; use the certificate

QUICK SUMS

- Fuel range = (litres ÷ L/h) × knots.
- Time to run = distance ÷ speed. 6 minutes is 0.1 of an hour.
- Height of eye 2 m: horizon about 2.9 nm. 9 m: about 6.2 nm.
- Temperature: °F = °C × 1.8 + 32.

SEE THE SIZES



The nautical mile is one minute of latitude, which is why it is longer than a land mile.

Study aid only. Not for navigation.
Check the current official rules. Card 21 · v1.7 · © Nautical Bridge