

## BEAUFORT SCALE

The Beaufort scale was devised by Francis Beaufort in 1805 and provides a simple 0 to 12 reference to describe the conditions in the marine environment. Whilst the scale references wind speed range in knots, it also provides information on the likely sea state as there is a direct relationship to wind. It also enables a Beaufort force to be understood by just looking at the sea conditions.

Number / Name		Wind speed	Wave height	Sea conditions	
0	Calm	<  knot	0m	T	Sea like a mirror
	Light air	I - 3knots	0 - 0.3m		Ripples with appearance of scales are formed, without foam crests
2	Light breeze	4 - 6knots	0.3 - 0.6m		Small wavelets still short but more pronounced; crests have a glassy appearance but do not break
3	Gentle breeze	7 - 10knots	0.6 - 1.2m		Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses
4	Moderate breeze	II - I6knots	I - 2m		Small waves becoming longer; fairly frequent white horses
5	Fresh breeze	17 - 21knots	2 - 3m		Moderate waves taking a more pronounced long form; many white horses are formed; chance of some spray
6	Strong breeze	22 - 27knots	3 - 4m	· ·	Large waves begin to form; the white foam crests are more extensive everywhere; probably some spray
7	High wind, near gale	28 - 33knots	4 - 5.5m	100	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind; spindrift begins to be seen
8	Gale, fresh gale	34- 40knots	5.5 - 7.5m		Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well-marked streaks along the direction of the wind
9	Strong/ severe gale	41- 47knots	7 - 10m		High waves; dense streaks of foam along the direction of the wind; sea begins to roll; spray affects visibility
10	Storm, whole gale	48- 55knots	9 - 12.5m		Very high waves with long overhanging crests; resulting foam in great patches is blown in dense white streaks along the direction of the wind;
	Violent storm	56- 63knots	11.5 - 16m	١	Exceptionally high waves; small- and medium- sized ships might be for a long time lost to view behind the waves; sea is covered with long white patches of foam
12	Hurricane	> 64knots	≥  4m		The air is filled with foam and spray; sea is completely white with driving spray; visibility very seriously affected