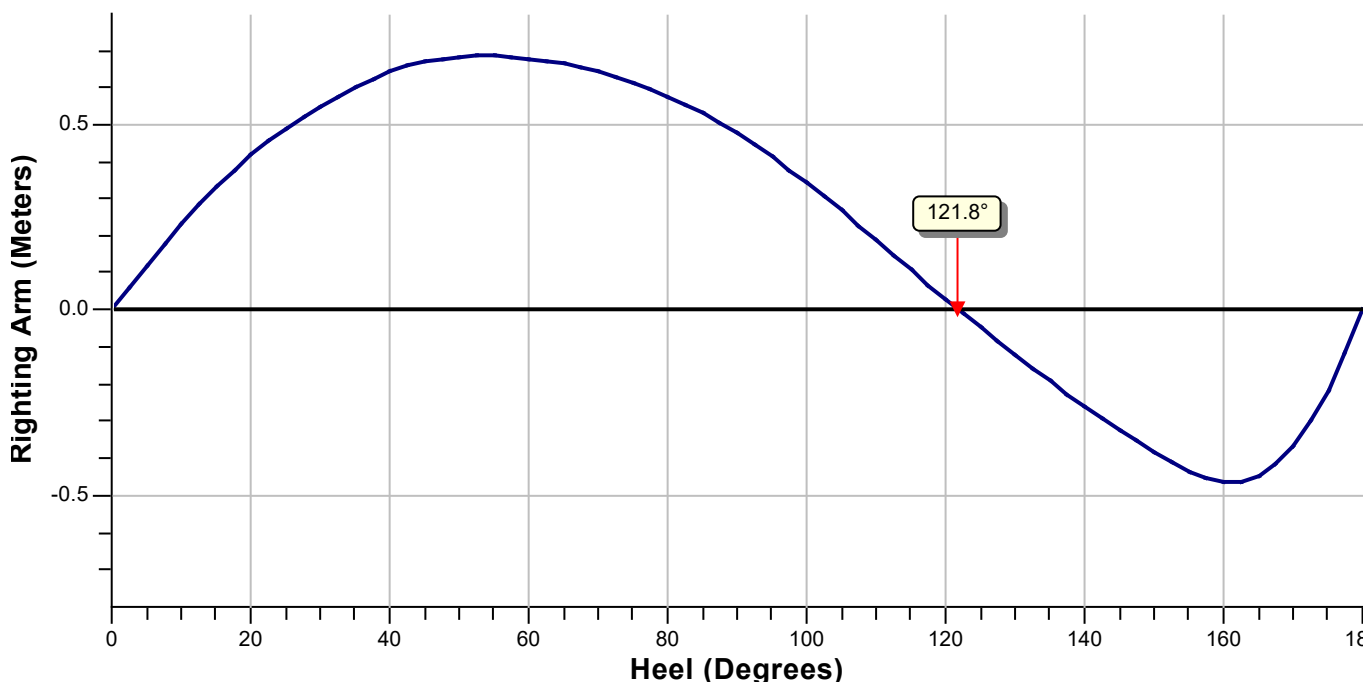


# STABILITY AND HYDROSTATICS DATASHEET

© Offshore Racing Congress 2019  
www.orc.org



STABILITY CURVE														
Righting Moment at 1°	<b>129.5k</b>	Stability Curve Positive Area	<b>54.949</b>	Stability Curve Ratio	<b>3.3208</b>	Stability Index	<b>121.3</b>							
Limit of positive stability	<b>121.8°</b>	Stability Curve Negative Area	<b>16.547</b>					BLR Index	<b>0.0000</b>					
Righting Arm (meters)														
		±0°	±2°	±10°	±20°	±25°	±30°	±40°	±60°	±90°	±120°	±150°	±165°	±180°
Default Crew Weight	<b>682kg</b>	0.000	0.049	0.233	0.418	0.490	0.549	0.644	0.679	0.477	0.029	-0.383	-0.447	0.000
Declared Crew Weight	<b>780kg</b>	0.000	0.048	0.231	0.414	0.484	0.543	0.637	0.667	0.462	0.017	-0.388	-0.446	0.000
		0.000												

BOAT	
Name	<b>DARK &amp; STORMY</b>
Sail Number	<b>SM69</b>
Class	<b>Murray 37</b>
Designer	<b>Ian MURRAY</b>
Builder	<b>PACESETTER</b>
Age Date	<b>12/1993</b>
Measured	<b>07/10/2019</b>
Measurer	<b>John Duffin</b>
Issued On	<b>23/10/2019 - VPP 2019 1.01</b>

HULL CHARACTERISTICS (MEASUREMENT TRIM)			
Length Overall	<b>11.560m</b>		
Max. Beam	<b>3.446m</b>	Max. Beam Station	<b>7.400m</b>
Draft	<b>2.735m</b>	Max. Draft Station	<b>6.095m</b>
Moment Unit Trim	<b>9.1kg•m/mm</b>		
Displacement Unit Immersion	<b>18.99kg/mm</b>		
Block Coefficient	<b>0.3883</b>	Prismatic Coefficient	<b>0.5391</b>

**Rating Office**  
Australian Sailing Ltd  
Locked Bag 806  
Milsons Point  
NSW 1565



FLOTATION (MEASUREMENT TRIM)	
Forward Freeboard at 0.300m	<b>1.215m</b>
Freeboard at mast at 4.290m	<b>1.095m</b>
Aft Freeboard at 10.850m	<b>1.017m</b>
Overhang Forward	<b>0.464m</b>
Overhang Aft	<b>1.006m</b>
Length Waterline	<b>9.914m</b>

HYDROSTATIC DATA			
	Trim	Measurement	Sailing
Displacement		<b>4,685kg</b>	<b>5,601kg</b>
Wetted Area		<b>25.89m²</b>	<b>27.71m²</b>
Water Plane Area		<b>18.17m²</b>	<b>19.60m²</b>
Water Plane Beam		<b>2.717m</b>	<b>2.803m</b>
Longitud. Centre of Flotation		<b>6.241m</b>	<b>6.398m</b>
Longitud. Centre of Buoyancy		<b>5.949m</b>	<b>6.073m</b>
Vertical Centre of Gravity		<b>-0.104m</b>	<b>0.056m</b>
Max. Section Area		<b>1.03m²</b>	<b>1.15m²</b>
Max. Section Area Station		<b>5.686m</b>	<b>5.686m</b>

**Owner**  
**DONTSCHUK/KOURTIS/ME**

**16 CLONAIG STREET**  
**EAST BRIGHTON**  
**VIC 3187**

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

MOVABLE BALLAST	
Arm	Canting Keel Angle
Weight	List Angle

Sail Area Upwind	<b>83.02m²</b>
Sail Plan Centre of Effort Height	<b>7.748m</b>