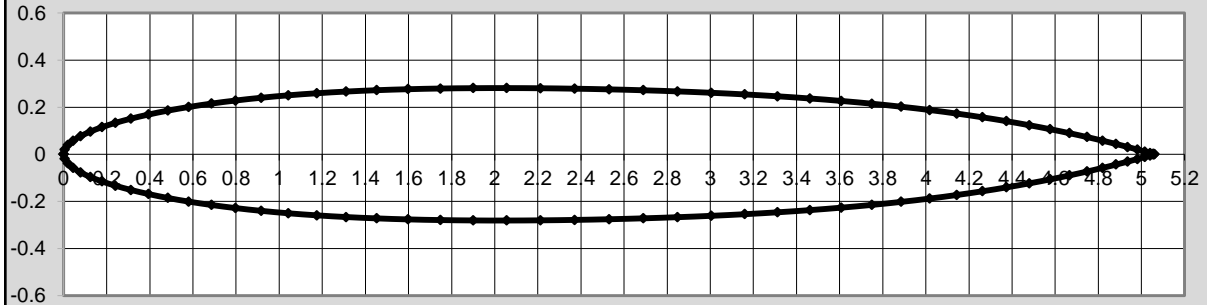


# Airship Envelope Datasheet

Identifier:	SB-587-500	Date of Design:	2020-09-20
Designed by:	Windreiter Team	Date of Production:	
Organisation:	Windreiter	Place of Production:	Windreiter HQ



Material Parameter		Gertler Shape Coefficients	
Envelope Material:	TritaX Silver	Position of max. thickness:	0.4
Surface Weight [g/m <sup>2</sup> ]:	30	Bow Radius:	0.6
Tension Strength [MPa]:	245	Stern Radius:	0
Bonding Technique:	Point Welding	Prismatic Coefficient:	0.63
Design Parameter		Lift Assumptions*	
Length to Diameter:	9.000	Lift at Sea Level He [g]:	587.96
Block Volume [m <sup>3</sup> ]:	1.600	Lift at 300 m Helium [g]:	566.42
Block Coefficient:	0.495	Lift at Sea Level H2 [g]:	633.61
Envelope Volume [l]:	791.68	Lift at 300 m H2 [g]:	610.40
Length [m]:	5.06	*The calculations assume pure lifting gas	
Diameter [m]:	0.56		
Surface Area [m <sup>2</sup> ]:	6.79		
Envelope Weight [g]:	203.72		
Number of gores	2		

Gertler 4621 Shape spreadsheet. Computes shape, volume, centre of volume, and pattern for a Series58 Model 4621 body of revolution. Copyright (C) 2019 Johannes Eissing

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