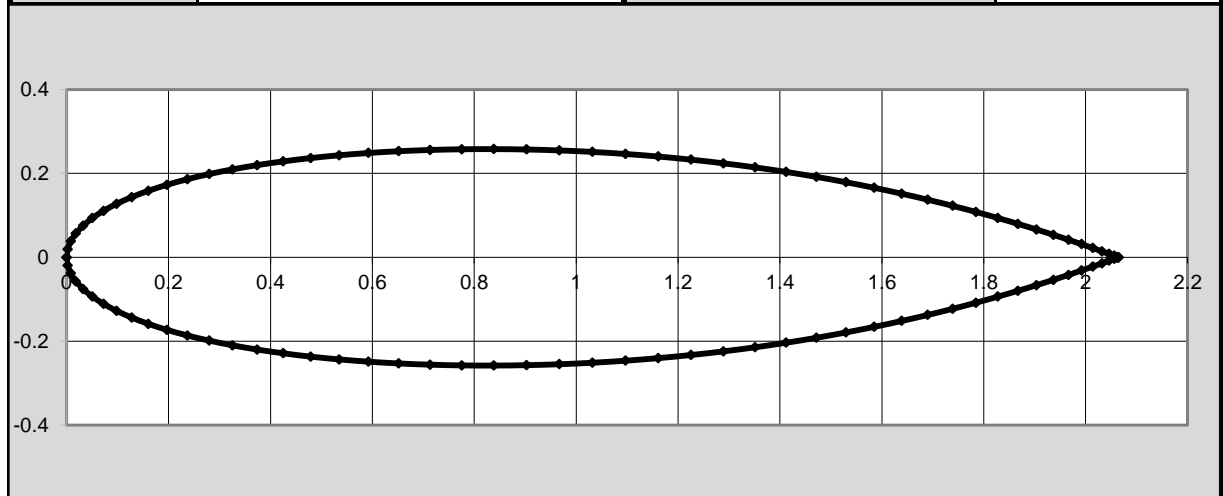


Airship Envelope Datasheet

Identifier:	SB-181-200	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 ²]:	30	Bow Radius:	0.7
Tension Strength [MPa]:	245	Stern Radius:	0
Bonding Technique:	Point Welding	Prismatic Coefficient:	0.6
Design Parameter		Lift Assumptions*	
Length to Diameter:	4.000	Lift at Sea Level He [g]:	181.51
Block Volume [m ³]:	0.550	Lift at 300 m Helium [g]:	174.86
Block Coefficient:	0.471	Lift at Sea Level H2 [g]:	195.60
Envelope Volume [l]:	259.18	Lift at 300 m H2 [g]:	188.44
Length [m]:	2.06	*The calculations assume pure lifting gas	
Diameter [m]:	0.52		
Surface Area [m ²]:	2.59		
Envelope Weight [g]:	77.67		
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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