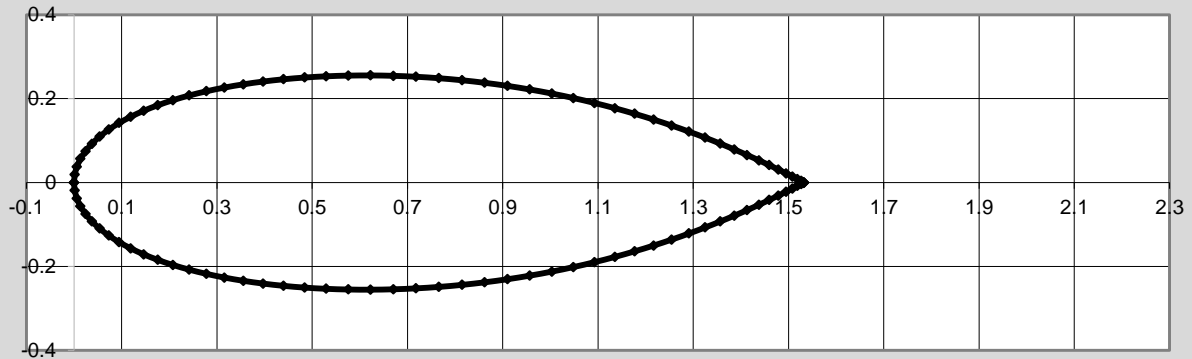


Airship Envelope Datasheet

Identifier:	SB-129-150	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:	3.000	Lift at Sea Level He [g]:	129.02
Block Volume [m ³]:	0.400	Lift at 300 m Helium [g]:	124.30
Block Coefficient:	0.471	Lift at Sea Level H2 [g]:	139.04
Envelope Volume [l]:	188.50	Lift at 300 m H2 [g]:	133.95
Length [m]:	1.53	*The calculations assume pure lifting gas	
Diameter [m]:	0.51		
Surface Area [m ²]:	1.98		
Envelope Weight [g]:	59.47		
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

Customized Envelope Production Services by the Windreiter Team
 Single envelopes to large numbers
www.windreiter.de

