



A WHOLE NEW VISION UNDERWATER

Commercial in Confidence

FarSounder, Inc.

Drawing Package for the FarSounder-1000

(F31596 Rev. 1.4.2)

FarSounder, Inc.
151 Lavan Street
Warwick, RI 02888
United States

phone: +1 401 784 6700

info@farsounder.com
www.farsounder.com

Revision Issue Date: August, 2015

© Copyright 2015 FarSounder, Inc.

All rights reserved. This document contains confidential information that is proprietary to FarSounder, Inc. This commercially sensitive information is being provided to the recipient solely for the purpose specified and shall not be reproduced, disclosed or supplied, in whole or in part, to any other person without the prior written consent of FarSounder, Inc.

Although every precaution has been taken in the preparation of this document, FarSounder, Inc. assumes no responsibility for errors or omissions. Furthermore no liability is assumed for damages resulting from the use of information contained herein.

Included Drawings

D71777 (Rev 1.1.0) – Transducer Module (flat)

D71775 (Rev 1.0.1) – Power Module (bulkhead mount)

D31598 (Rev 1.3.0) – Wiring Diagram

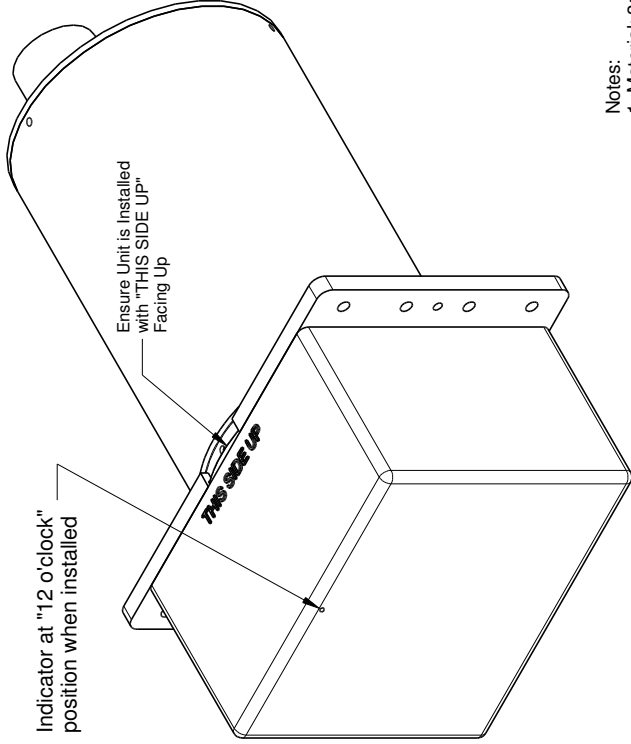
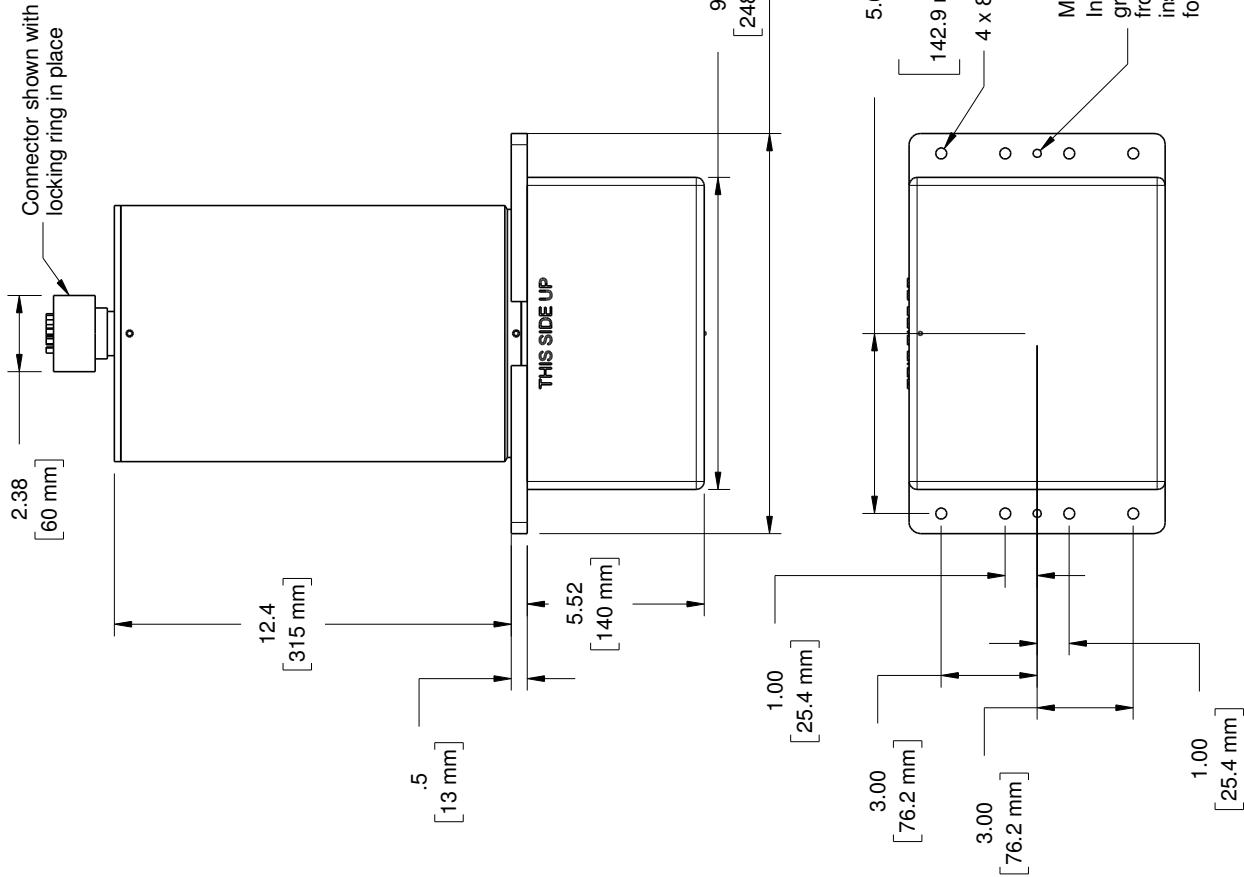
D31597 (Rev 1.2.0) – Fairing Concepts

Overview

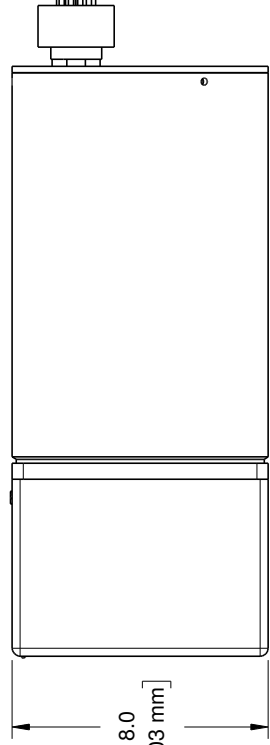
The FarSounder-1000 3D Forward Looking Obstacle Avoidance Sonar consists of a Transducer Module, Power Module, Computer, and Transducer Module Cable.

The Transducer Module is only available with a flat array face. The older, curved array face is no longer available.

The Power Module is only available as bulkhead mountable. The older, rack mount version is no longer available.



- Notes:
1. Material: 316 Stainless Steel
 2. Weight: Approximately 85 lbs (38 Kg)
 3. Leave at Least 24 Inches (610 mm) Behind Connector for Cable Bend Clearance
 4. Connector is underwater wet matable



Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED			
.X	.XX	.XXX	Angles
\pm .050	\pm .010	\pm .003	\pm .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

FarSounder, Inc.

PROJECT:
F71777 Transducer Module

DRAWING NUMBER:
D71777

PART NUMBER:
F71777

Page 1 of 1

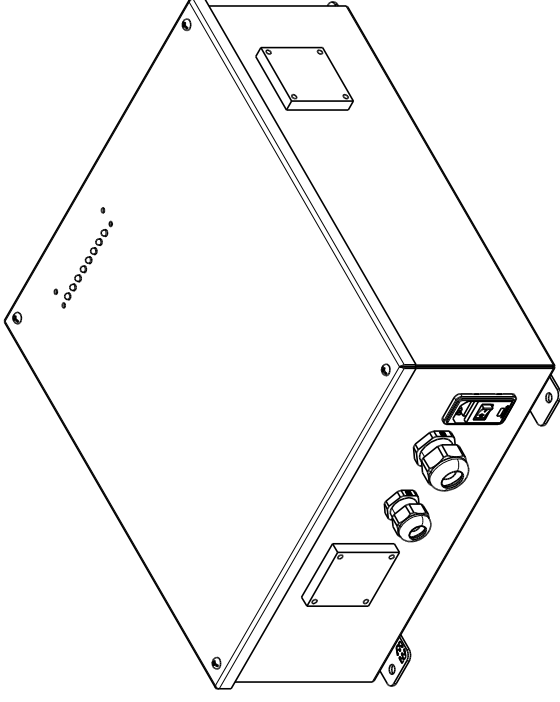
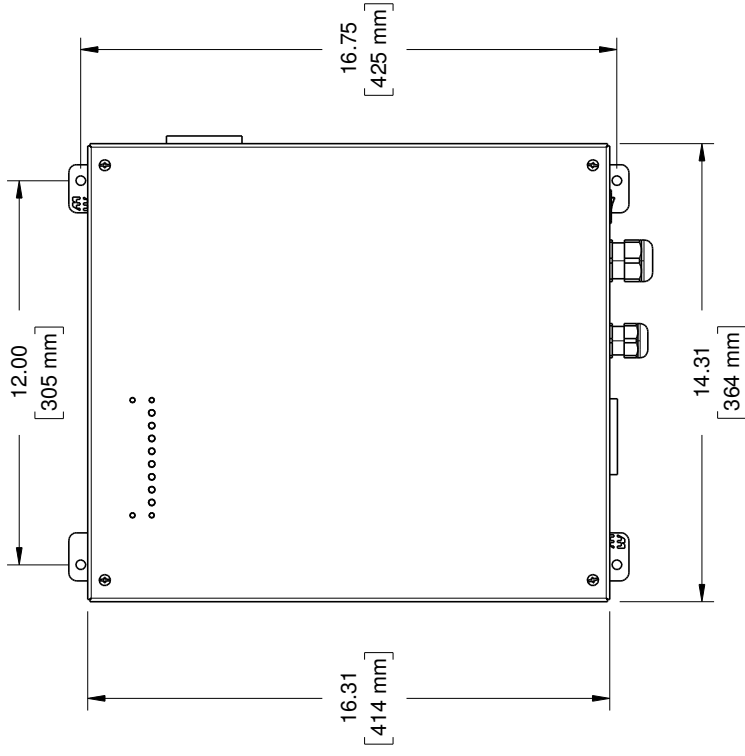
Date: 2012/08/21

Scale: n/a

REVISION: **1.1.0**

DRAWING DESCRIPTION:

Flat Transducer Module



NOTES:

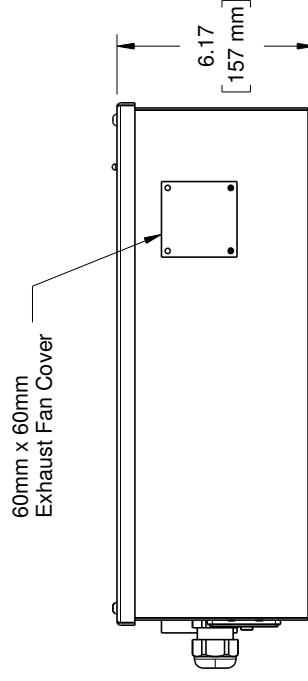
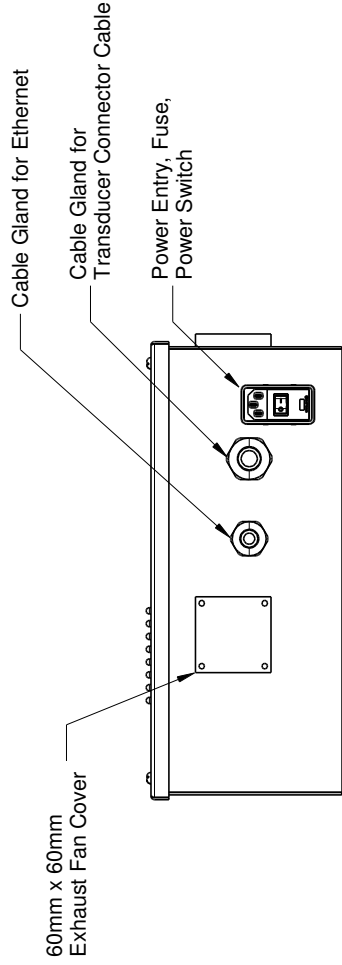
Unit NOT intended for wet or moist environment.

Powered by 110/220V 50/60Hz

Allow 8 inches (203mm) min. clearance behind unit for cable connections

Minimum bend radius of Transducer Module Connection Cable: 6 in (152mm)

Enclosure material: steel



Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED

.X	.XX	.XXX	Angles
± .050	± .010	± .003	± .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

FarSounder, Inc.

Power Module

Scale: n/a

Date: 2012/08/21

Page 1 of 1

REVISION: 1.0.1

DRAWING DESCRIPTION:

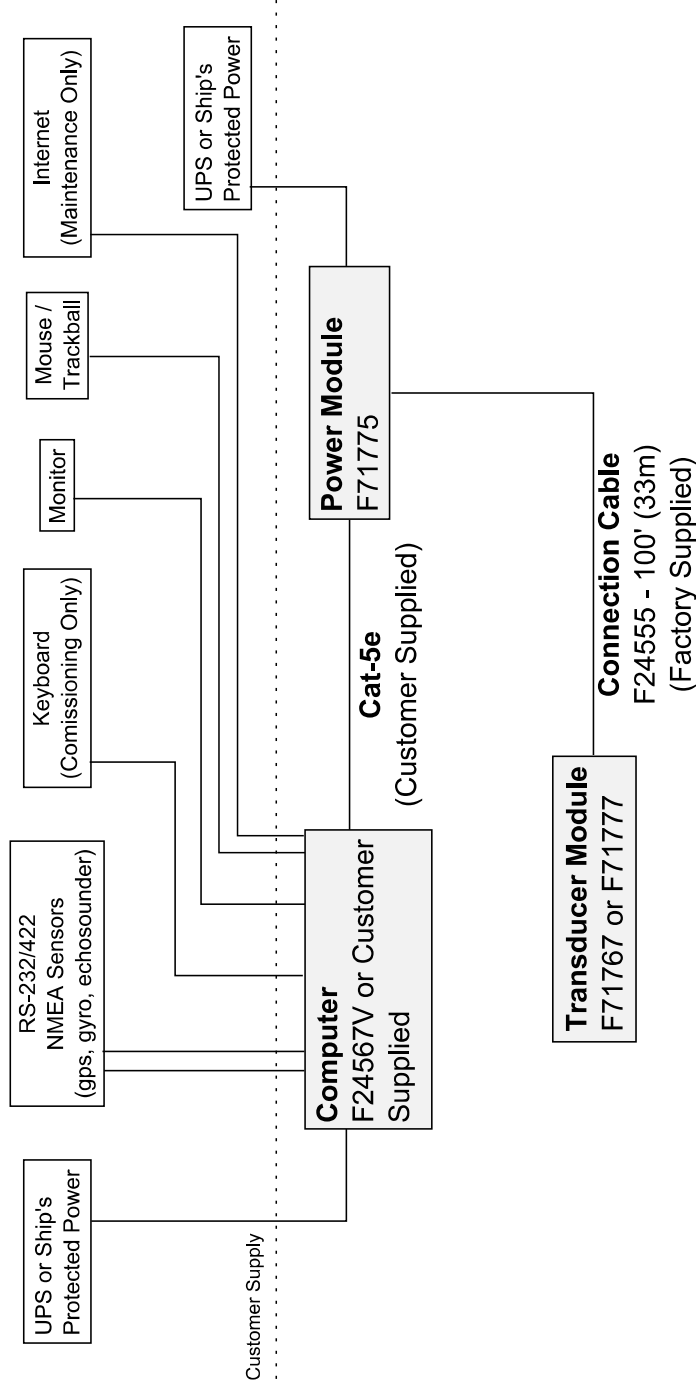
Power Module (Bulkhead Mount)

DRAWING NUMBER:

D71775

PART NUMBER:

F71775



Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED			
.X	.XX	.XXX	Angles
± .050	± .010	± .003	± .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

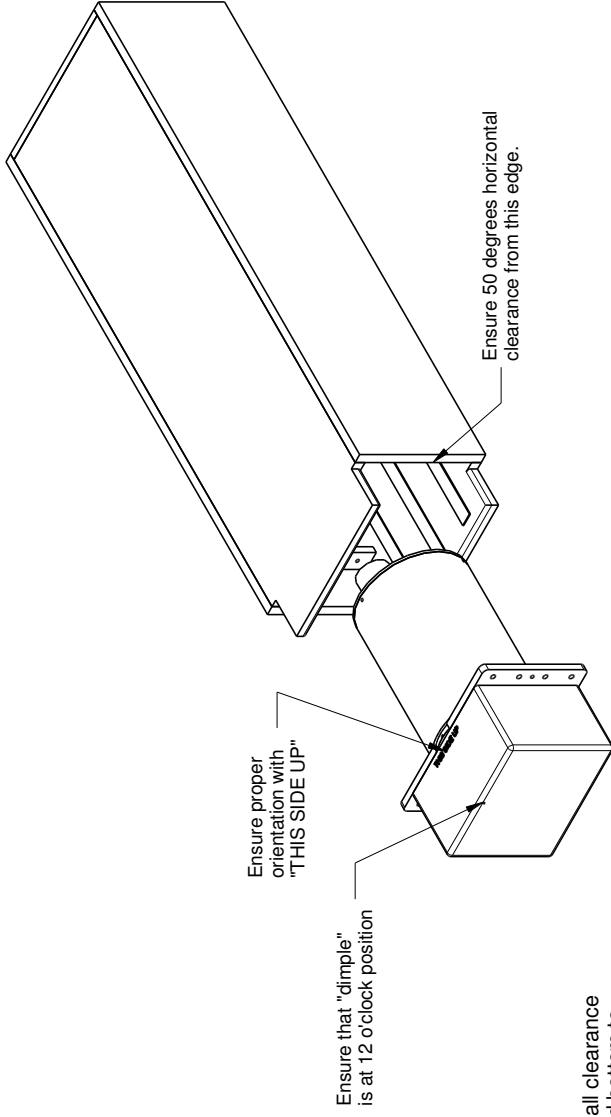
FarSounder, Inc.	
PROJECT: Navigation Sonars	
Scale: n/a	Date: 2015/08/10

DRAWING DESCRIPTION: Wiring Diagram	
DRAWING NUMBER: D31598	PART NUMBER:
Page 1 of 1	REVISION: 1.3.0

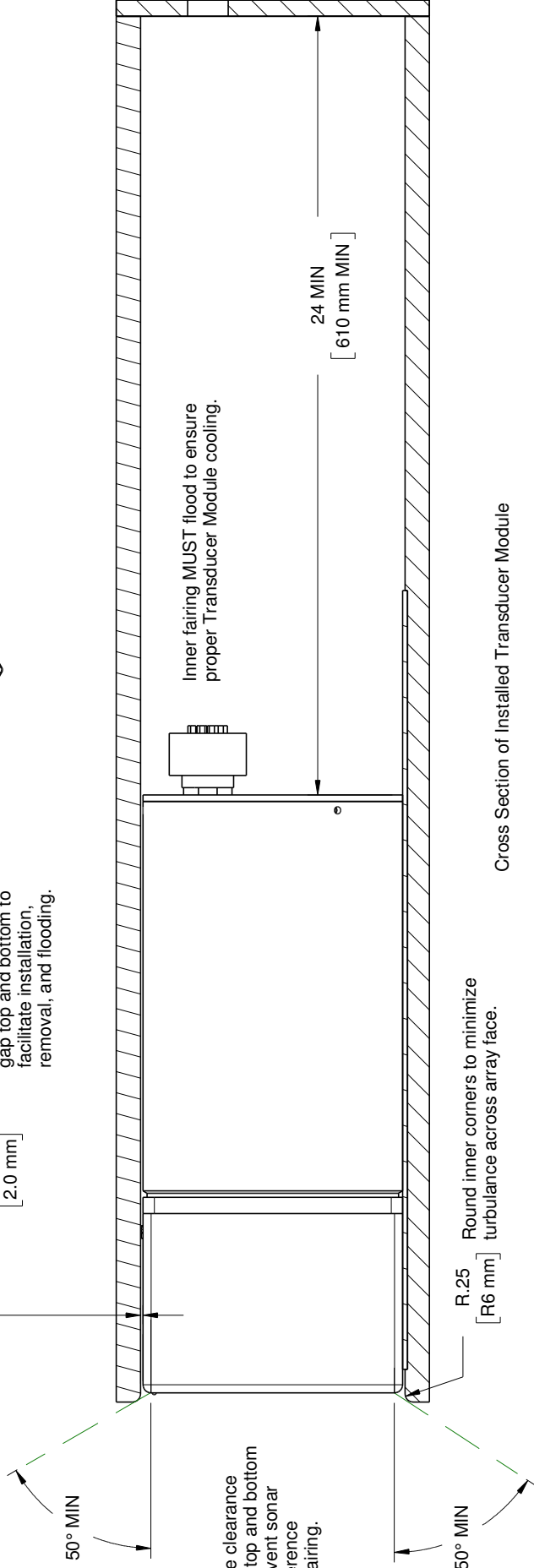
NOTES, UNLESS OTHERWISE SPECIFIED:
 1. These drawings are provided by FarSounder for reference only. Customer is responsible for ensuring proper design verification and modification for integration into ship's hull. FarSounder is not responsible for actual architectural design.

2. Fairing not provided by FarSounder.
3. Fairing can be larger but must accommodate transducer module.
4. Fairing can be longer but must ensure minimum cable clearance and bend radius.
5. All welds and plate thicknesses to naval architect's requirements.

Transducer Module is installed and bolted from outside. Can be installed underwater by diver.



Approximately .075 [2.0 mm] Ensure small clearance gap top and bottom to facilitate installation, removal, and flooding.



Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED		
.X	.XX	.XXX Angles
± .050	± .010	± .003 ± .5°
CONCENTRICITY .004 TIR		
PRIMARY UNITS ARE INCHES		

FarSounder, Inc.

PROJECT:
F71777 Transducer Module

DRAWING NUMBER:
D31597-A

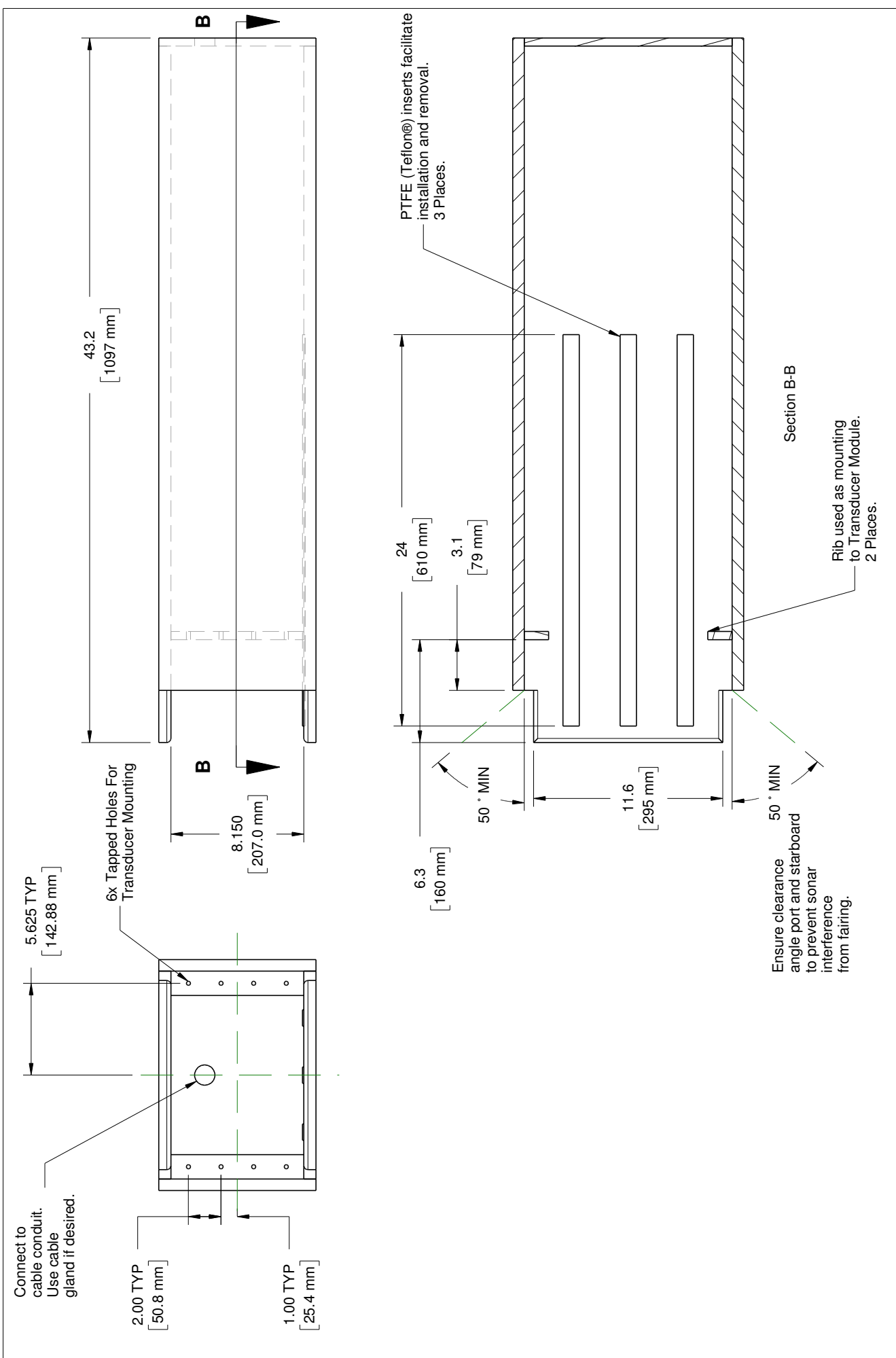
DRAWING DESCRIPTION:
Fairing Concept

Scale: n/a

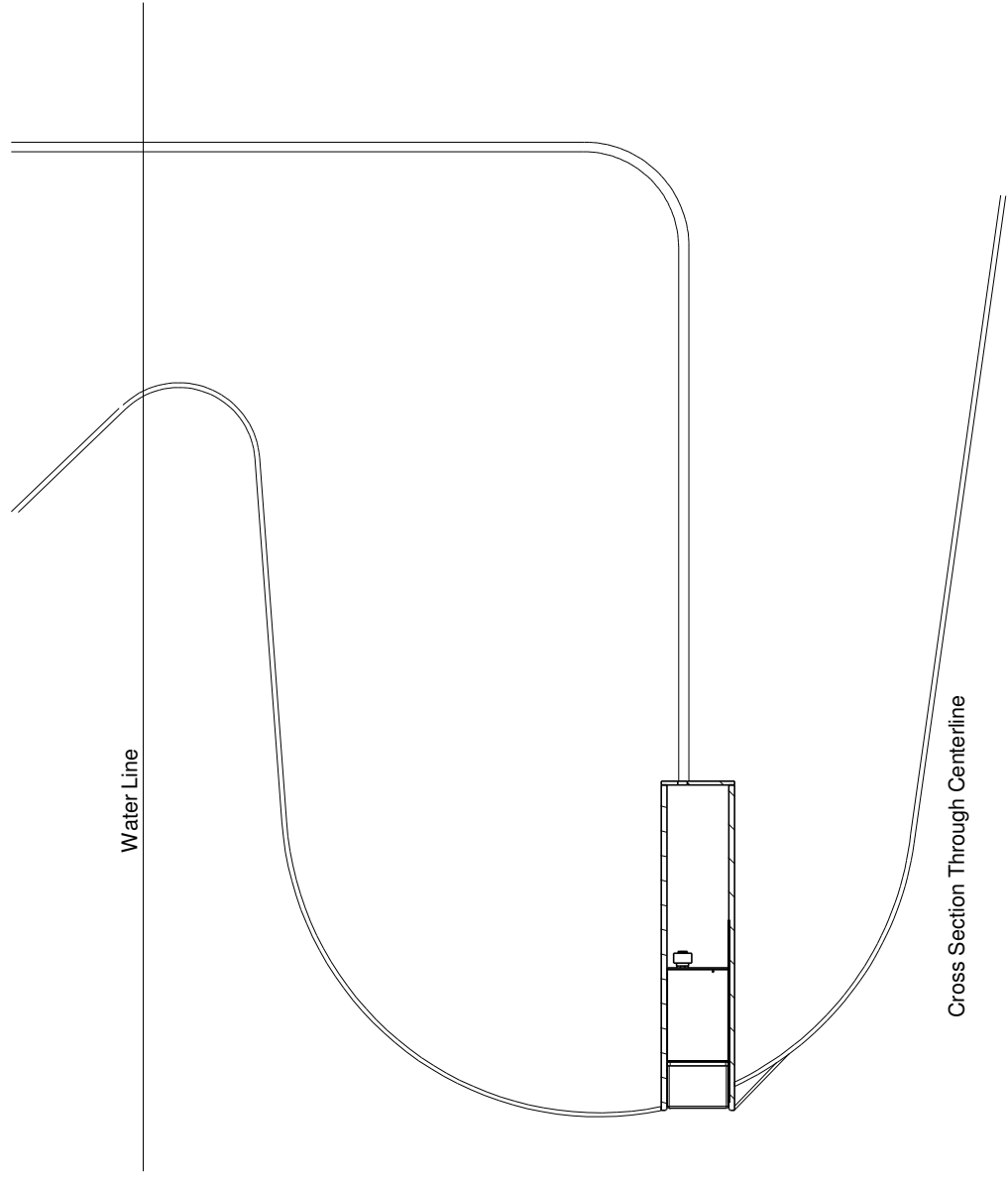
Date: 2015/08/10

Page 1 of 5

REVISION:
1.2.0



<p>Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.</p>	<p>TOLERANCES UNLESS NOTED</p> <table border="1"> <tr> <td>.X</td> <td>.XX</td> <td>.XXX</td> <td>Angles</td> </tr> <tr> <td>± .050</td> <td>± .010</td> <td>± .003</td> <td>± .5°</td> </tr> </table> <p>CONCENTRICITY .004 TIR</p>		.X	.XX	.XXX	Angles	± .050	± .010	± .003	± .5°	<p>FarSounder, Inc.</p> <p>F71777 Transducer Module</p> <p>PROJECT:</p>		<p>DRAWING DESCRIPTION:</p> <p>Fairing Concept</p>	
	.X	.XX	.XXX	Angles										
± .050	± .010	± .003	± .5°											
	<p>Scale: n/a</p> <p>Date: 2015/08/10</p>		<p>DRAWING NUMBER:</p> <p>D31597-A</p>		<p>PART NUMBER:</p> <p>D31597-A</p>									
	<p>PRIMARY UNITS ARE INCHES</p>		<p>Page 2 of 5</p>		<p>REVISION:</p> <p>1.2.0</p>									



Water Line

Plan View Through Fairing

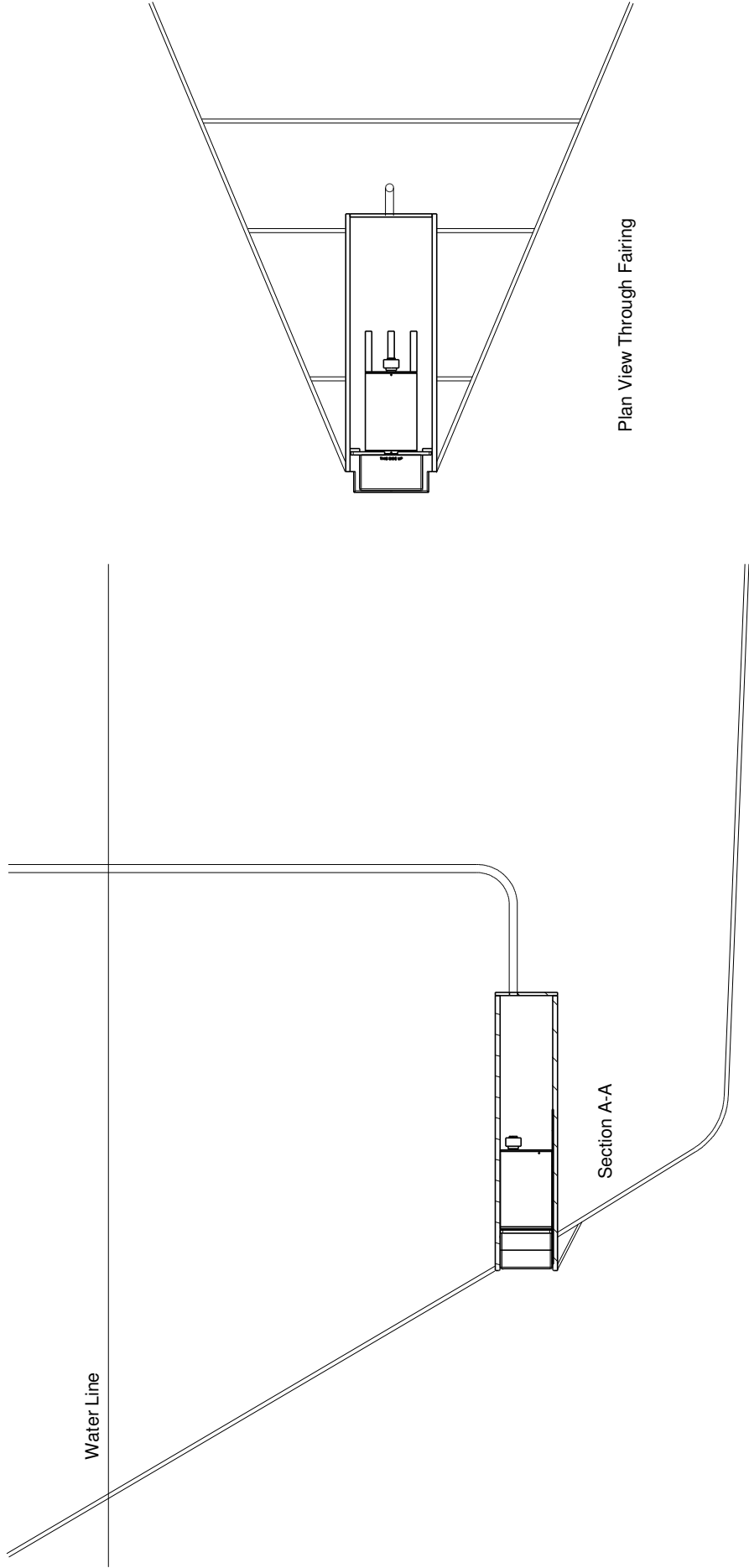
Cross Section Through Centerline

Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED			
.X	.XX	.XXX	Angles
± .050	± .010	± .003	± .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

FarSounder, Inc.	
PROJECT: F71777 Transducer Module	
Scale: n/a	Date: 2015/08/10

DRAWING DESCRIPTION: Bulb Example	
DRAWING NUMBER: D31597	PART NUMBER:
Page 3 of 5	REVISION: 1.2.0



Water Line

Section A-A

Plan View Through Fairing

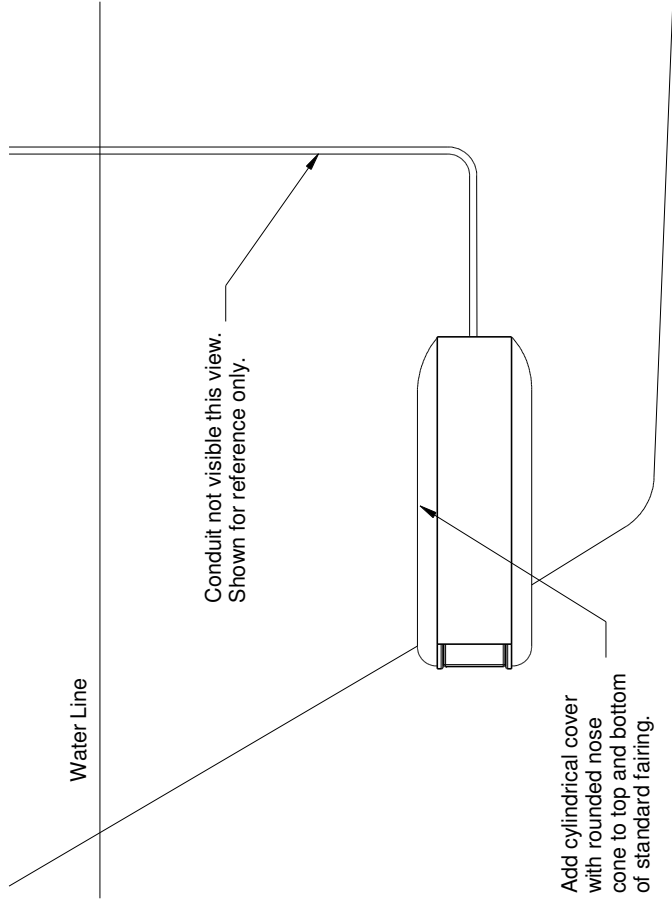
Cross Section Through Centerline

Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

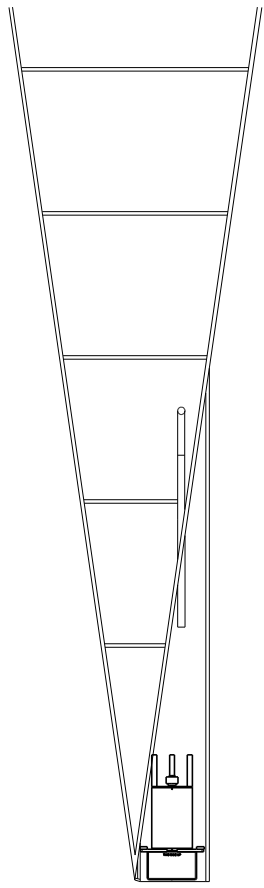
TOLERANCES UNLESS NOTED			
.X	.XX	.XXX	Angles
± .050	± .010	± .003	± .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

FarSounder, Inc.	
PROJECT: F71777 Transducer Module	
Scale: n/a	Date: 2015/08/10

DRAWING DESCRIPTION: Stem Centerline Example	
DRAWING NUMBER: D31597	PART NUMBER:
Page 3 of 5	REVISION: 1.2.0



Side View from Outside Hull



Plan View Through Fairing

Proprietary Note: All data and information contained or disclosed by this document is confidential and proprietary information of FarSounder, Inc. and all rights therein are expressly reserved. By accepting this material the recipient agrees that the material and the information therein is held in confidence and in trust and will not be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others, except to meet the specific purpose for which it was delivered.

TOLERANCES UNLESS NOTED			
.X	.XX	.XXX	Angles
± .050	± .010	± .003	± .5°
CONCENTRICITY .004 TIR			
PRIMARY UNITS ARE INCHES			

FarSounder, Inc.	
PROJECT: F71777 Transducer Module	
Scale: n/a	Date: 2015/08/10

DRAWING DESCRIPTION: Side of Stem Example	
DRAWING NUMBER: D31597	PART NUMBER:
Page 5 of 5	REVISION: 1.2.0