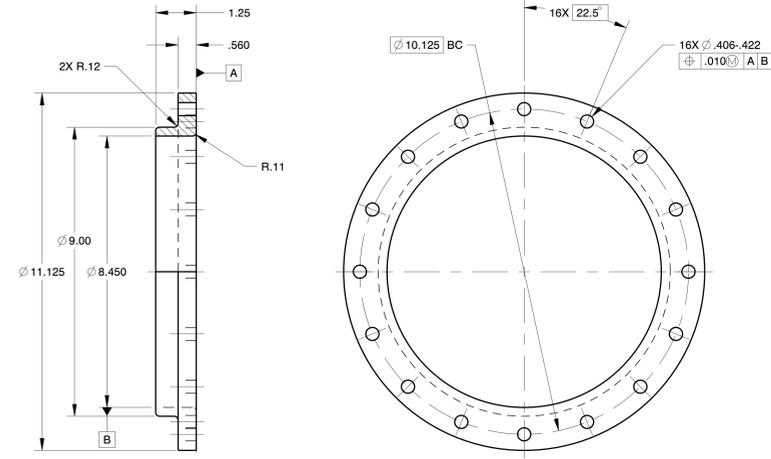


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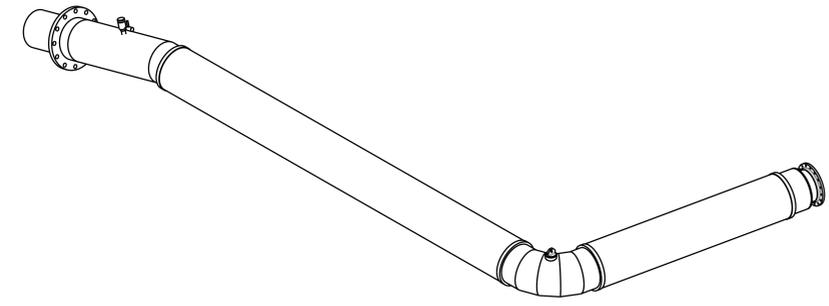
THE INFORMATION CONTAINED IN THIS DOCUMENT IS TECHNICAL IN CONTENT, BUT IS NOT TECHNICAL DATA AS DEFINED BY THE LAW FOR THE EAR AND THEREFORE IS EAR AND EXPORT CONTROL REQUIRED. GENERAL INFORMATION ON THE EAR AND EXPORT CONTROL REQUIREMENTS IS AVAILABLE AT: www.eia.gov. THE EAR AND EXPORT CONTROL REQUIREMENTS ARE SUBJECT TO CHANGE WITHOUT NOTICE AND WITHOUT NOTICE TO THE USER. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST VERSION OF THE EAR AND EXPORT CONTROL REQUIREMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST VERSION OF THE EAR AND EXPORT CONTROL REQUIREMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST VERSION OF THE EAR AND EXPORT CONTROL REQUIREMENTS.

REVISION HISTORY		
REV	DESCRIPTION	DATE

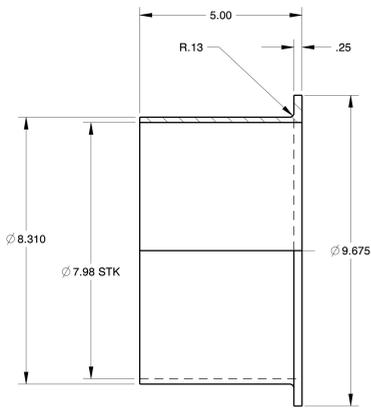
- NOTES:**
- GENERAL**
- 1A. THIS DRAWING PROVIDES THE PHYSICAL DIMENSIONS AND PARTS LIST FOR PIPE SPOOL ASSEMBLIES. REFER TO PROCUREMENTS SPECIFICATION K0000191096-SPC FOR MATERIAL, TECHNICAL, FABRICATION, TEST AND INSPECTION REQUIREMENTS.
 - 1B. FLEX HOSE REFERENCE DESIGNATOR NUMBER IS 1055.
 - 1C. MAKE FROM ASME B16.9, SCHED 10S, 90 DEGREE, LONG RADIUS ELBOW. MATERIAL SHALL BE THE SAME GRADE AS THE PIPING MATERIAL.
 - 1D. MAKE FROM ASME B16.5, CLASS 150, LAP JOINT FLANGE BLANK. MATERIAL SHALL BE 316 PER ASTM A182.
 - 1E. MAKE FROM NPS 8 SCHED 40S PIPE.
 - 1F. MAKE FROM ASME B16.9, SCHED 40S, CONCENTRICALLY SERRATED, LONG PATTERN, LAP JOINT STUB END. MATERIAL SHALL BE THE SAME GRADE AS THE PIPING MATERIAL.
 - 1G. INDICATED DIMENSIONS ARE AS MEASURED UNDER THE CONDITIONS SPECIFIED IN K00000191096-SPC PARAGRAPH 4.2.1.2.



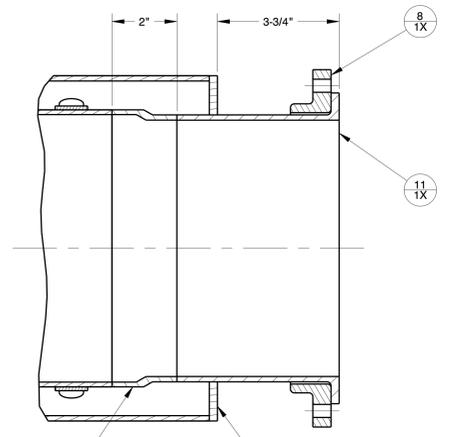
K0000067863-P007
SCALE .500



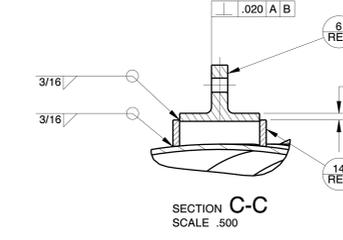
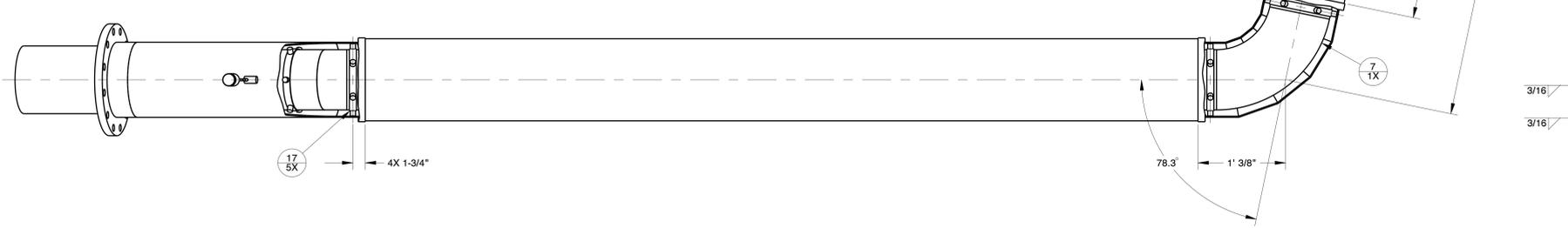
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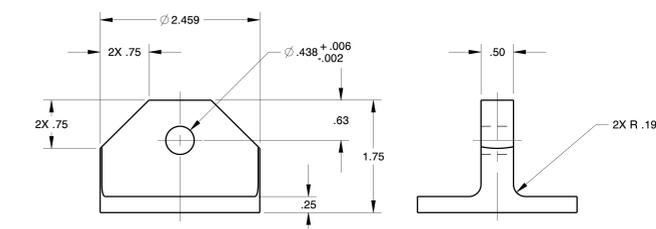
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SCALE .500



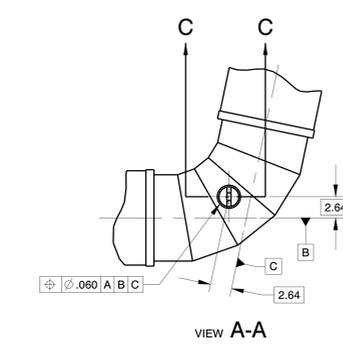
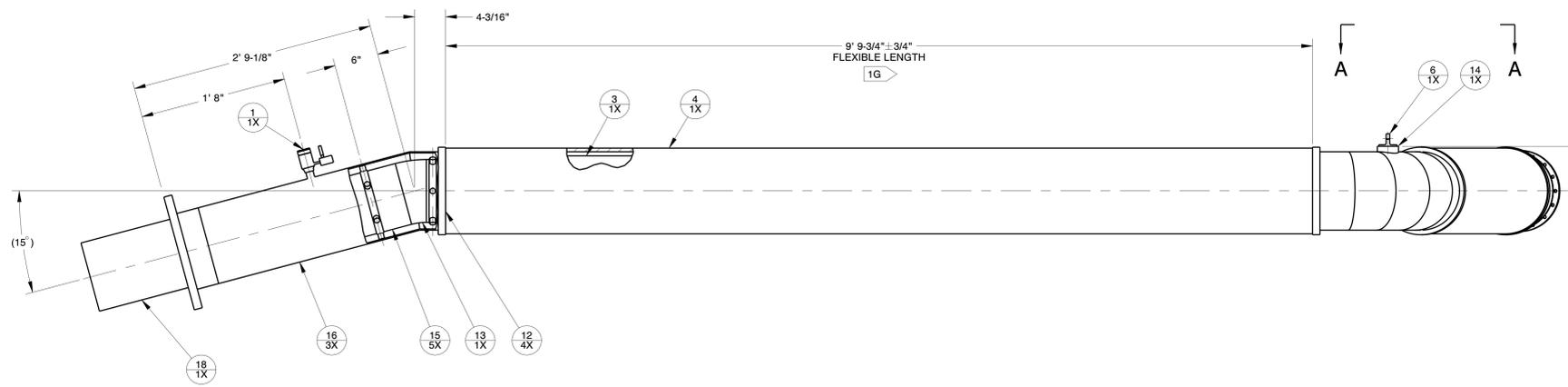
VIEW ROTATED 78.25° CW
SECTION B-B
SCALE .500



SECTION C-C
SCALE .500



K0000067863-P005
SCALE 1.000



VIEW A-A

QTY	ZONE	TRD NO OR ITEM NO	MFR CODE	PART OR STOCK NO	DESCRIPTION
1	18	22264	KT00389-08D0010D00		CRYOGENIC MALE BAYONET, FLANGED, 8X10
5	17	22264	KT00386-08D0010D00		CRYOGENIC INTERNAL SUPPORT SPACER 8X10
3	16	22264	KT00378-10D00010S4		PIPE
5	15	22264	KT00378-08D00010S4		PIPE
1	14	22264	KT00378-02D50040S4		PIPE
1	13	22264	KT00100-10SS08D00		ELBOW, 15 DEG, LONG, B16.9, SCHED 10
4	12	22264	K0000067863-P011		PIPE TO HOSE TRANSITION, 8X10
1F	1	11	22264	K0000067863-P010	STUB END, LAP JOINT
1E	1	10	22264	K0000067863-P009	ADAPTER
1	9	22264	K0000067863-P008		PLATE
1D	1	8	22264	K0000067863-P007	FLANGE, LAP JOINT
1C	1	7	22264	K0000067863-P006	ELBOW, 78.25 DEG
1	6	22264	K0000067863-P005		LUG
1	5	22264	K0000067863-P004		FLEXIBLE HOSE, 10 INCH
1	4	22264	K0000067863-P003		FLEXIBLE HOSE, 10 INCH
1	3	22264	K0000067863-P002		FLEXIBLE HOSE, 8 INCH
1	2	22264	K0000067863-P001		FLEXIBLE HOSE, 8 INCH
1	1	22264	79K14672-3		ASSEMBLY, VACUUM VALVE

PROCUREMENT CONTROL DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED ONLY BY THE DESIGN ACTIVITY.	UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES. INTERPRET DIM AND TOL PER ASME Y14.5-2009. TOLERANCES ON: DECIMALS ±.010 1/16 ±.015 3/16 ±.020	ORIGINAL DATE OF DRAWING (YYYYMMDD) 2013/05/29	DESIGNER S. A. BRYANT	CHECKER J. A. STAGI
SOFTWARE CREO PARAMETRIC 2.0	THIRD ANGLE PROJECTION	ENGINEER F. B. TRIMBOLI	CHECKER J. J. TAYLOR	
PARTNO K0000067863D		DRAWN V. J. WARD	CHECKER T. C. STEVENSON	
MATERIAL NONE	PREPARED BY K0000067859	DESIGNED BY E. L. THOMPSON	DATE 2013/05/29	
FINISH/TREATMENT NONE	USED ON NEXT ASSY	APPROVED BY T. O. ADAMS	SCALE E	
FINISH/PROTECTIVE FINISH NONE	APPLICATION	DATE 2013/05/29	SCALE .125	

JOHN F. KENNEDY SPACE CENTER, NASA KENNEDY SPACE CENTER, FLORIDA	
FLEX HOSE 8 X 10, VACUUM JACKETED, LIQUID HYDROGEN VENT	
SIZE E	SCALE .125
QTY 22264	WEIGHT 660.65
PARTNO K0000067863	SHEET 1 OF 1

K0000067863D (LIQUID HYDROGEN VENT VACUUM JACKETED FLEX HOSE 8X10 DRAWING)

Document Number: K0000067863D

Version: -

Name: LIQUID HYDROGEN VENT VACUUM JACKETED FLEX HOSE 8X10 DRAWING

Type: Drawing

Container: SLS-GSDO Cryogenic Delivery Product

State: Released

Modified By: Stuart Bryant

Modified On: Mon, Apr 7, 2014 07:19:50 EDT

Change Requests: K-CR-10466

Maturity History

Version	State	Promoted By	Promoted On
-.26	Released	wcadmin-(Site)	Thu, Apr 17, 2014 14:21:28 EDT
-.26	Completed	Stuart Bryant	Mon, Apr 7, 2014 14:36:00 EDT
-.26	Under Review	wcadmin-(Site)	Mon, Apr 7, 2014 07:22:03 EDT
-.22	In Work	Brett Lannie	Thu, Apr 3, 2014 16:58:45 EDT
-.22	Completed	Stuart Bryant	Thu, Mar 27, 2014 16:04:19 EDT
-.22	Under Review	wcadmin-(Site)	Thu, Mar 27, 2014 11:04:53 EDT
-.19	In Work	wcadmin-(Site)	Wed, Mar 26, 2014 12:48:38 EDT
-.19	Under Review	wcadmin-(Site)	Wed, Mar 12, 2014 11:34:06 EDT
-.19	In Work	wcadmin-(Site)	Wed, Mar 12, 2014 09:04:08 EDT
-.19	Under Review	wcadmin-(Site)	Sat, Mar 8, 2014 08:18:20 EST
-.19	In Work	wcadmin-(Site)	Fri, Mar 7, 2014 15:32:45 EST
-.19	Under Review	wcadmin-(Site)	Mon, Mar 3, 2014 12:55:22 EST
-.19	In Work	Stuart Bryant	Mon, Mar 3, 2014 12:51:08 EST
-.19	Under Review	wcadmin-(Site)	Mon, Mar 3, 2014 11:16:51 EST
-.1	In Work	Daniel Stanifer	Wed, May 29, 2013 15:37:05 EDT

KDDMS Routing History

CN/CT Number	Task	Assignee	Role	Events	Comment	Started	Completed
D-CN-10546	KSC Documentation Release Audit Change Notice	Nicholas Delgado	Change Admin III	Complete	released per KDP-P-2718	Thu, Apr 17, 2014 13:28:34 EDT	Thu, Apr 17, 2014 14:21:28 EDT
K-CT-10474	KSC Complete Signature Required Assignment	Brett Lannie	Assignee		routed for signature approval per KDP-P-2718	Fri, Mar 28, 2014 08:37:11 EDT	Fri, Mar 28, 2014 09:24:59 EDT
K-CT-10474	KSC Rework Required	Brett Lannie	Assignee		re-routed for signature approval per KDP-P-2718	Thu, Apr 3, 2014 14:26:29 EDT	Tue, Apr 8, 2014 11:01:42 EDT
K-CT-10474	KSC Signature Required	Alan Littlefield	Signatory	Complete	approve	Tue, Apr 8, 2014 11:01:42	Thu, Apr 17, 2014 13:28:34

						EDT	EDT
K-CT-10474	KSC Signature Required	Frank Trimboli	Signatory	Complete	I approve the flex hose drawing but I do not concur with the trolley mechanism design that will support the elbow of the hose from above. Supporting the flex hose with a table from below would be a simpler and more robust design.	Tue, Apr 8, 2014 11:01:42 EDT	Wed, Apr 16, 2014 14:46:44 EDT
K-CT-10474	KSC Signature Required	Stephen Kugelmann	Signatory	Complete	Approved	Tue, Apr 8, 2014 11:01:42 EDT	Tue, Apr 15, 2014 10:16:58 EDT
K-CT-10474	KSC Signature Required	Jason Taylor	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Thu, Apr 10, 2014 21:44:48 EDT
K-CT-10474	KSC Signature Required	Tyler Stevenson	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Wed, Apr 9, 2014 13:57:50 EDT
K-CT-10474	KSC Signature Required	Theodore Adams	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Wed, Apr 9, 2014 13:50:06 EDT
K-CT-10474	KSC Signature Required	Joseph Stagi	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Wed, Apr 9, 2014 05:24:51 EDT
K-CT-10474	KSC Signature Required	Jennie Ward	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Tue, Apr 8, 2014 13:17:45 EDT
K-CT-10474	KSC Signature Required	Edward Thompson	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Tue, Apr 8, 2014 11:12:21 EDT
K-CT-10474	KSC Signature Required	Stuart Bryant	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Tue, Apr 8, 2014 11:05:06 EDT
K-CT-10474	KSC Signature Required	Alan Littlefield	Signatory	Rework	add note indicating flex length is for pressurized hose increase length tolerance for flex segments	Tue, Apr 8, 2014 11:01:42 EDT	Thu, Apr 3, 2014 14:26:29 EDT
K-CT-10474	KSC Signature Required	Theodore Adams	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Wed, Apr 2, 2014 18:22:14 EDT
K-CT-10474	KSC Signature Required	Frank Trimboli	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Tue, Apr 1, 2014 13:33:41 EDT
K-CT-10474	KSC Signature Required	Jennie Ward	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Mon, Mar 31, 2014 14:16:54 EDT
K-CT-10474	KSC Signature Required	Tyler Stevenson	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Mon, Mar 31, 2014 11:25:49 EDT
K-CT-10474	KSC Signature Required	Stephen Kugelmann	Signatory	Complete	Approved	Tue, Apr 8, 2014 11:01:42 EDT	Fri, Mar 28, 2014 15:39:53 EDT
K-CT-	KSC Signature	Joseph	Signatory	Complete		Tue, Apr 8, 2014	Fri, Mar 28, 2014

10474	Required	Stagi				11:01:42 EDT	15:10:15 EDT
K-CT-10474	KSC Signature Required	Jason Taylor	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Fri, Mar 28, 2014 13:01:40 EDT
K-CT-10474	KSC Signature Required	Stuart Bryant	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Fri, Mar 28, 2014 09:52:12 EDT
K-CT-10474	KSC Signature Required	Edward Thompson	Signatory	Complete		Tue, Apr 8, 2014 11:01:42 EDT	Fri, Mar 28, 2014 09:43:10 EDT