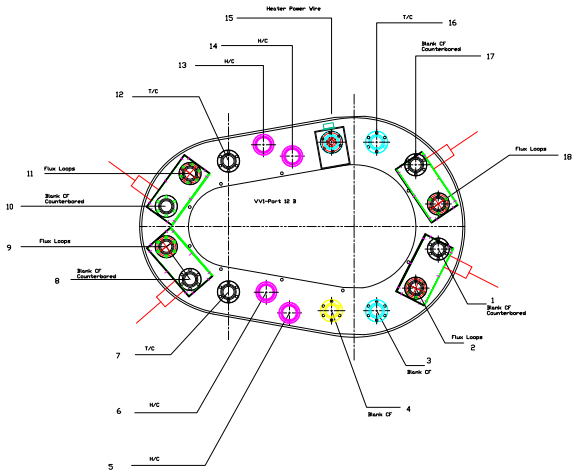
NO.	REVISION	BY	CH	SUP	APPROVED	DATE



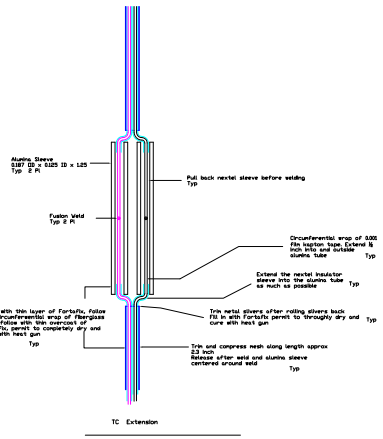
Flange No.	FUNCTION	TAG	FEEDTHROUGH	FITTINGS AND HARDWARE	TERMINATIONS
1	Flux Loops	None	None	Counterbored .675 Blind CF Flange	None
2	Flux Loops	L1, 9L, 2L, 5R, 8R	Silicone Rubber	Bolt Blind .675 CF with .625 drilled hole	Junction Box
3	None	None	None	Blind .675 CF FLANGE	None
4	None	None	None	Blind .675 CF FLANGE	None
5	Heating and Cooling Bus		.675 CF Flange	Bellows	Welded Tube
6	Heating and Cooling Bus		.675 CF Flange	Bellows	Welded Tube
7	Thermocouples		20 PC Connector Feedthrough .675 CF Flange OD	Type E Crimp-Flush Pins	MS Style Circular Connector
8	Flux Loops	None	None	Counterbored .675 Blind CF Flange	None
9	Flux Loops	9L, L1, L2, 2L, 4R, 5R, 8R, 9R, Shield, TH20-1, TH20-2	Silicone Rubber	Bolt Blind .675 CF with .625 drilled hole	Junction Box
10	Flux Loops	None	None	Counterbored .675 Blind CF Flange	None
11	Flux Loops	9L, L1, L2, 2L, 4R, 5R,8R, 9R, Shield, TH20-1	Silicone Rubber	Bolt Blind .675 CF with .625 drilled hole	Junction Box
12	Thermocouples		20 PC Connector Feedthrough .675 CF Flange OD	Type E Crimp-Flush Pins	MS Style Circular Connector
13	Heating and Cooling Bus		.675 CF Flange	Bellows	Welded Tube
14	Heating and Cooling Bus		.675 CF Flange	Bellows	Welded Tube
15	Strip Electric Heaters		Silicone Rubber	Bolt Blind .675 CF with .625 drilled hole	Junction Box with 16 Pin Aviphonic Box Receptacle
16	Thermocouples		20 PC Connector Feedthrough .675 CF Flange OD	Type E Crimp-Flush Pins	MS Style Circular Connector
17	Flux Loops	None	None	Counterbored .675 Blind CF Flange	None
18	Flux Loops	9L, 2L, 5R, 8R	Silicone Rubber	Bolt Blind .675 CF with .625 drilled hole	Junction Box

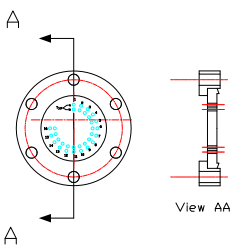
Flange No.	TAG No.	Hole Position	D Sub Connector Pin #
2	L9	1	1 and 14
	R3	2	2 and 15
	L5	3	3 and 16
	L4	4	4 and 17
	L2	5	5 and 18
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	D Sub Connector Pin #
9	R6	1	1 and 14
	L4	2	2 and 15
	L8	3	3 and 16
	R7	4	4 and 17
	R8	5	5 and 18
	R13	6	6 and 19
	R9	7	7 and 20
	D11	8	8 and 21
	TH280-1	9	9 and 22
	TH280-2	10	10 and 23
	TH280-3	11	11 and 24
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	D Sub Connector Pin #
11	9R	1	1 and 14
	L4	2	2 and 15
	L5	3	3 and 16
	L9	4	4 and 17
	L8	5	5 and 18
	R11	6	6 and 19
	L8	7	7 and 20
	L8	8	8 and 21
	TH280-4	9	9 and 22
	TH280-5	10	10 and 23
		11	
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	D Sub Connector Pin #
18	R1	1	1 and 14
	R4	2	2 and 15
	L3	3	3 and 16
	L5	4	4 and 17
	L2	5	5 and 18
	H1	6	6 and 19
	H2	7	7 and 20
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	



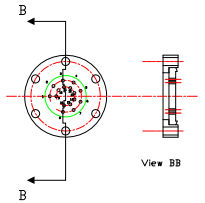


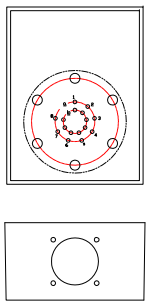
Flange # 2, 9, 11 and 18

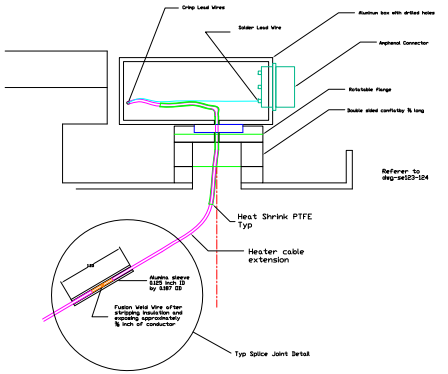
Flange No.	TAG No.	Hole Position	
15	H01-1-1	1a	
	H01-1-2	1b	
	H01-2-1	2a	#1 Spare
	H01-2-2	2b	
	H01-3-1	3a	
	H01-3-2	3b	
	H01-4-1	4a	#2 Spare
	H01-4-2	4b	
	H01-5-1	5a	
	H01-5-2	5b	
	H01-6-1	6a	#3 Spare
	H01-6-2	6b	
	H01-7-1	7a	
	H01-7-2	7b	
	H01-8-1	8a	#4 Spare
	H01-8-2	8b	

ELECTRIC HEATER STRIPS NUMBERED 1-8
1- NEAREST PORT 12 FLANGE
8- NEAREST VACUUM VESSEL

H- ELECTRIC HEATER STRIP
V, V, V
T- TOP







Flange # 15

George Labik
17 Aug 2007-Rev 0

WELDING ENGINEER

APPVD: _____ DATE _____

APPVD: _____ DATE _____

			6				
			5				
			4				
			3				
			2				
			1				
			ASSEMBLY				
03	02	01	PART NO.	NOMENCLATURE OR DESCRIPTION		DRAWING NO.	MATERIAL

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY NATIONAL COMPACT STELLARATOR EXPERIMENT
AutoCAD2000	DIMENSIONS ARE IN INCHES MACHINE SURFACES 125	PORT 12 INTERFACES VV3 TOP
DO NOT VERIFY DERIVATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	

SCALE: NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .X ±.100 0°-12° 1/16 .XX ±.030 12°-30° 1/8 .XXX ±.005 30°-120° 1/4 ANGULAR ±0°-10' OVER 120° 1/2	DN: FOM	DATE: 09/17/2008	CAGD FILE: se 123-124	
		ENG: G.LABIK	APPROVED		
		DSN: G.LABIK	CHK	SUPV	
		CHK: G.TCHILINGUIRIAN	GT	JB	SHEET 6 OF 8 REV 0

MachEditor1