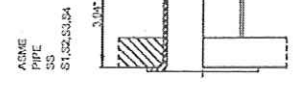
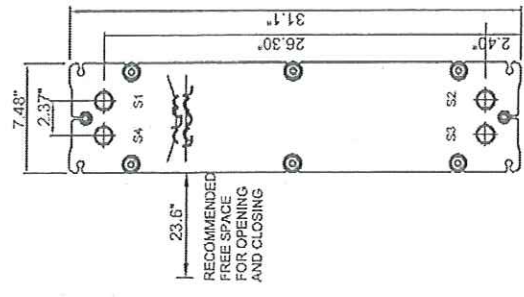


# 108629

Designed constructed and stamped in accordance with 2010 ASME Code and latest Addendum. This is a general drawing. Additional parts, if required, like protection sheets, inspection covers, etc. are not displayed.

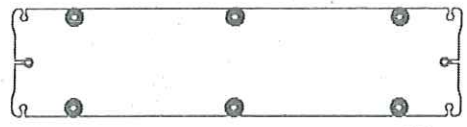
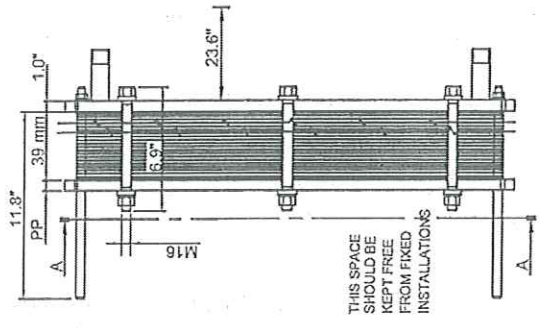
**FRAME PLATE**  
(FIXED)



**FOR APPROVAL**  
 Approved as Submitted  
 Approved as Noted  
 Not Approved  
 Name JPK Date 5/31/11

*- need physical properties used.*

**PRESSURE PLATE**  
(MOVABLE)  
SECTION A-A  
PP = 0.98"



REMARKS:	SIDE 1	SIDE 2
DESIGN PRESSURE	150 psi	150 psi
TEST PRESSURE	195 psi	195 psi
MAX TEMPERATURE	300 °F	300 °F
MIN TEMPERATURE	32 °F	32 °F
MAWP	150 psi	150 psi
MDMT	-20 °F	-20 °F

GASKET	NBRP CLIP-ON
PLATE MATERIAL	ALLOY 316
PLATE THICKNESS	0.50 mm
HEATING SURFACE	6.7 ft²
PLATE GROUPING	1*5MH/1*5ML
WEIGHT WITH WATER	155 lb
NETWEIGHT	150 lb

*datasheet calls for glued in*

TOTAL LENGTH 15.9"  
 TOTAL WIDTH 7.5"  
 TOTAL HEIGHT 31.1"

PRESSURE DROP	LIQUID VOL.
0.4153 psi	0.04 ft³
1.314 psi	0.04 ft³

FLOW RATE 1961 lb/h  
 3574 lb/h

TEMP. 60.0 °F  
 55.0 °F

OUTLET S3  
 S1

TEMP. 80.0 °F  
 45.0 °F

INLET S4  
 S2

ALL DIMENSIONS IN INCHES

SIDE	MEDIA
1	UV Water
2	Water

SUPPLIER	REF. 43507-30	ITEM NO. HP-2301
AGENT / REF. / 774610		
CUSTOMER NAME / REF. NO. University Of Florida / 1100113912		
SIGN. CFN		RISK CATEGORY N/A

PLATE HEAT EXCHANGER  
**TL3-PFG**  
 ASME

SERIAL NUMBER	30113-89816
DATE	2011-05-13
REV NO.	0

#108629

30113-89816

Alfa Laval, Plate Heat Exchanger  
Channel Plate Installation Description

2011-05-13

Customer: University Of Florida SU Order No: 43507-30  
 Model : TL3-PFG Serial No: 30113-89816  
 Customer PO: 1100113912 Item No: HP-2301

Plate material and Thickness: ALLOY 316 0.50 mm

A Dimension: 39 mm

	Hot side	Cold side
Grouping:	1*5MH	1*5ML
Sealing material:	NBRP CLIP-ON	NBRP CLIP-ON
Port Locations:	S4 -> S3	S2 -> S1

Connection material: Stainless steel Stainless steel

Port hole with flow on the gasketed side: U

Port hole sealed with O-ring: O

Plates are assembled with the gasket side facing the frame plate.

Plate no.	Plate code no.	Plate Pattern		Punched corner of the plate				Flow direction on the gasket side of the plate
				upper left	lower left	lower right	upper right	
				S1	S2	S3	S4	
				==<=	=>=	=>=	==<=	
	FRAME PLATE							
1	39508594 83	TL3 P2	B	O	O	O	O	
2	39508594 03	TL3 P2	A	O	O	U --<---	U	Down
3	39508593 03	TL3 P1	B	U --<---	U	O	O	Up
4	39508594 03	TL3 P2	A	O	O	U --<---	U	Down
5	39508593 03	TL3 P1	B	U --<---	U	O	O	Up
6	39508594 03	TL3 P2	A	O	O	U --<---	U	Down
7	39508593 03	TL3 P1	B	U --<---	U	O	O	Up
8	39508594 03	TL3 P2	A	O	O	U --<---	U	Down
9	39508593 03	TL3 P1	B	U --<---	U	O	O	Up
10	39508594 03	TL3 P2	A	O	O	U --<---	U	Down
11	39508594 76	TL3 P2	B	--<---				Up
	PRESSURE PLATE							
				T1	T2	T3	T4	

Article No:	Quantity:
39508594 83	1
39508594 03	5
39508593 03	4
39508594 76	1

# Plate Heat Exchanger

#108629



## FOR APPROVAL

- Approved as Submitted
- Approved as Noted
- Not Approved

Name TTC Date 6/22/11

### Technical Specification

Customer :  
 Model : TL3-PFG  
 Project : FB&D Univ Of FL  
 Item : HP-2301

Date: 9/21/2010

		Hot Side	Cold side
Fluid		UV Water	Water
Density	lb/ft <sup>3</sup>	62.34	62.43
Specific heat capacity	Btu/lb,°F	0.91	1.00
Thermal conductivity	Btu/ft,h,°F	0.344	0.339
Viscosity inlet	cP	0.880	1.42
Viscosity outlet	cP	1.13	1.21
Mass flow rate	lb/h	1961	3574
Inlet temperature	°F	80.0	45.0
Outlet temperature	°F	60.0	55.0
Pressure drop	psi	0.415	1.31
Heat Exchanged	kBtu/h	35.88	
L.M.T.D.	°F	19.6	
O.H.T.C service	Btu/ft <sup>2</sup> ,h,°F	274.5	
Heat transfer area	ft <sup>2</sup>	6.7	
Relative directions of fluids		Countercurrent	
Number of plates		11	
effective plates		9	
Number of passes		1	1
Extension capacity			5
Plate material / thickness		ALLOY 316 / 0.50 mm	
Sealing material		NBRP CLIP-ON	NBRP CLIP-ON
Connection material		Stainless steel	Stainless steel
Connection diameter		See drawing	See drawing
Nozzle orientation		S4 -> S3	S1 <- S2
Pressure vessel code		ASME	
Flange rating		ASME	
Design pressure	psi	150.0	150.0
Test pressure	psi	195.0	195.0
Design temperature	°F	300.0	300.0
Overall length x width x height	in	16 x 7 x 31	
Liquid volume	ft <sup>3</sup>	0.0	0.0
Net weight, empty / operating	lb	150 / 155	
Packed weight( OCEAN LYING )	lb	183	
Internal volume	ft <sup>3</sup>	4.9	
length x width x height	in	35 x 10 x 23	

*Fouling Resist.?*

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