

Point 1:  
supports & radius  
B1/A2 modified

TN-097-02

Only circular projection is valid for accessories orientation

According to PED 97/23/EC:

- Category: 3
- Module: H
- Notified Body: APAVE

Calculation according to AD-2000, Ed 07/2003:

N.D.E and other tests requirements:

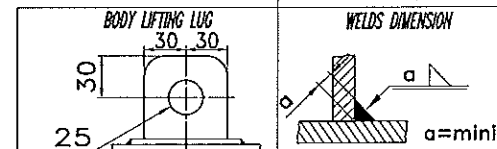
- Corrosion: Shell= 0mm  
Cover= 1mm
- Pneumatic test under water
- Hydraulic test (each side independently)

Customer and Alfa Laval requirements:

- X ray= None
- Pickling= Bath
- Dye penetrant test= None
- Helium test= None
- Heat treatment= None
- PMI= None
- Painting= Std AL point system on covers
- Ultrasonic test= None
- Insulation= None

TOTAL WEIGHT  
(empty) 650Kg  
(full of water) 730Kg

COVER WEIGHT  
1 45Kg



CONNECTIONS SIZES - TYPES - MATERIAL

Item	Rep.	ND	Flange type	Flanges	Collars
A1		50	EN 1092-1 01-A PN16	1.4404	
A2		50	EN 1092-1 01-A PN16	1.4404	
A3		1/2"	BSP	1.4404	
B1		50	EN 1092-1 01-A PN16	1.4404	
B2		50	EN 1092-1 01-A PN16	1.4404	
B3		1/2"	BSP	1.4404	

Detail drawing No.	Rev.	Size	General dwg. Rev.	MATERIAL	Shell-Heat. surf.	1.4404
N° 23788DETAILDWG-1	0	A3	C		Covers	P 265 GH
N° 23788DETAILDWG-2	0	A4	C		Hookbolts	SA193 B7
N°					Gaskets	A : Nitrile bonded fiber B : Nitrile bonded fiber

FLUID	Spacing mm	Temperature °C			Pressure Barg			
		Working	Design	Working	M.A.W.P. P.M.S.	Design	Test	
Inner channel A Pied colonne s	5	In 62.5 Out 50.4	150	5	5	5	7.2	
Outer channel B Reflux sortie	5	In 30.0 Out 59.0	150	5	5	5	7.2	

Customer SANOFI CHIMIE Order N° 7HES23787  
Serial N° 23788 Item N° 102-S5 A.L. M.C. Order N° 6515781-2:3

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Tolerances :  
Dimensions: NE.RD.TOL.01  
Form and position: ISO 1101  
Burr removed

Incline of the flange facing with regard to theoretical plane 1/2°

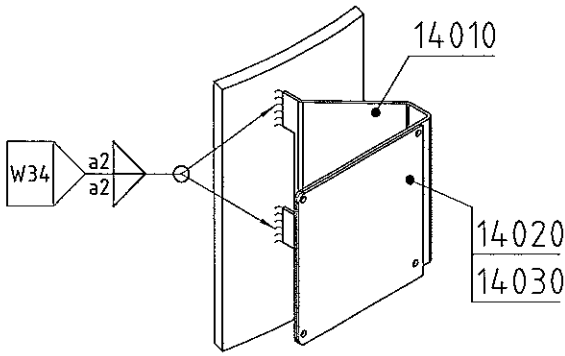
Localisation of the flange axis  
⊙⊘10

Rev.No	Modification	Date	Name	Dwg No	23788GENERALDWG	Rev.	C	Scale	1/14
E				Draw					
D				Checked					
C	Detail drawings added, see point 1	05/12/07	CRISPIN.N						
B	Temperature channel B	26/11/07	CRISPIN.N						
A	Modification SHE	20/11/07	CRISPIN.N						
O	Dimension sketch / plan dimensionnel	13/11/07	CRISPIN.N						

Alfa Laval Spiral snc  
NEVERS - FRANCE

S.H.E. TYPE 1H-L-1T / 14.7m<sup>2</sup>





Equipement title	SPIRAL HEAT EXCHANGER		Type 1H-L-1T
Code	AD2000		
Serial n°	23788	Item n° 102-S5	
	Channel A		Channel B
Fluid groupe	1	1	
Fluid	Pied colonne s	Reflux sortie	
Volume	40	Lit.	40 Lit.
Design pressure	5	barg	5 barg
MAWP	5	barg	5 barg
Test pressure	7.2	barg	7.2 barg
Gasket mat /Thick	Nitrile bonded fiber / 2mm		Nitrile bonded fiber / 2 mm
Material	1.4404	Manufacturing year: 2008	
Weight empty	650	kg	Test date:
Design mini/max temp	0 / 150	°C	
Bolts per cover	16		
Size	M20 x 145		
Maximum torque	450	m.N	
Alfa Laval Spiral snc, Nevers, FRANCE			
Service enquiries <a href="http://www.alfalaval.com">www.alfalaval.com</a>			

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F						
E						
D						
C						
B						
A						
O	First Issue / Emission originale	04/12/07	N.CRESPIN			
Rev.No	Modification	Date	Name/Nom	23788DETAILDWG-2.dwg	Dwg No	23788DETAILDWG-2
					Rev.	0