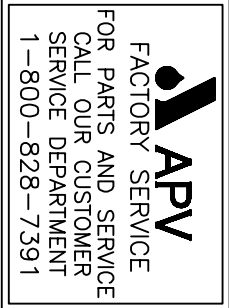


G		F
MATERIALS OF CONSTRUCTION		
ITEM NO.	DESCRIPTION	MATERIAL
1	HEAD	SA516 GR70
2	FOLLOWER	SA516GR70
3	END SUPPORT	A36
4	TOP BAR	A36 W/ 304SS. COVER
5	BOTTOM BAR	C1018
6	M36 DIA. TIE BAR	SA193 GRB7
7	TIE BAR HEX NUTS	SA194 GR2H ZINC PLATED
8	HEAT TRANSFER PLATES	SA230 GR316
9	NOZZLES	316L STAINLESS STEEL
10	FLANGES	CARBON STEEL GALVANIZED

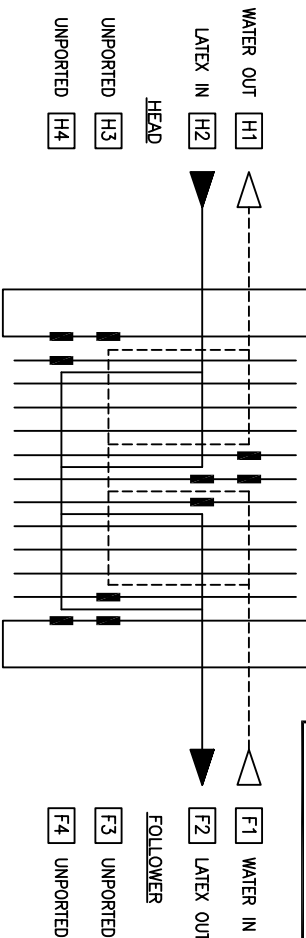


PLATES MUST BE ARRANGED ALTERNATELY LEFT AND RIGHT. FOR CONVENIENCE ON THIS DRAWING, WHERE BLOCKS OF R1234 AND L1234 PLATES OCCUR, THE TOTAL NUMBER OF EACH IS GIVEN.

GASKETS FACE THE HEAD

L1200	00K
L1230	00
L1234	00
L1234	00
L1234	00
R0234	00
L0034	00
R1034	00
L1234	00
L1234	00
L1204	00
L1200	00

THE CONVENTIONS USED TO SHOW THE PLATE ARRANGEMENT HAVE CHANGED AS FOLLOWS:
1. THE HEAD (FIXED COVER) IS NOW SHOWN ON THE LEFT OF BOTH THE ARRANGEMENT AND THE SIDE VIEW OF THE FRAME.
2. THE PLATE PUNCH CODE IS SIMPLIFIED. SEE THE PLATE IDENTIFICATION KEY FOR DETAILS.

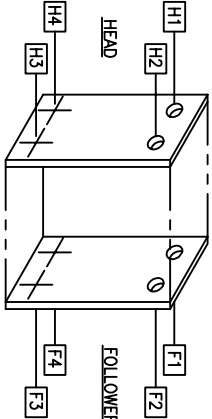


20 5/16" MIN.
[516]
20 13/16" MAX.
[529]

PASSES
LATEX - 2 OF 21
WATER - 2 OF 21

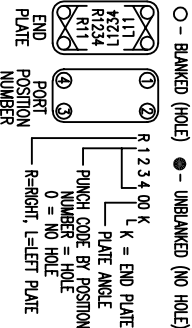
NOTES

1. THE INSTALLATION, OPERATION AND MAINTENANCE OF THIS HEAT EXCHANGER SHALL BE IN ACCORDANCE WITH THE APV PARAFLOW PLATE HEAT EXCHANGER INSTRUCTION MANUAL.
2. THIS MODEL HEAT EXCHANGER IS TIGHTENED USING A WRENCH ON THE TIE BAR HEX NUTS AT THE HEAD (FIXED COVER) END ONLY. CLEAN AND LUBRICATE THE THREADS BEFORE OPENING OR CLOSING USING A LUBRICANT COMPATIBLE WITH CARBON STEEL. APV RECOMMENDS NEVER-SEIZ® REGULAR GRADE. DO NOT USE COMMON GREASES. THE PLATE PACK IS TO BE TIGHTENED IN ACCORDANCE WITH THE INSTRUCTION MANUAL SUPPLIED. DO NOT TIGHTEN BELOW THE MINIMUM DIMENSION SHOWN.
3. THE CUSTOMER IS RESPONSIBLE FOR PROVIDING:
 - ANCHOR BOLTS PER ASTM A36 MINIMUM WITH A RECOMMENDED DIAMETER OF 3/4".
 - PROTECTION AGAINST START UP OR OPERATING PRESSURES EXCEEDING THE MAXIMUM ALLOWABLE WORKING PRESSURE.
 - PIPING TO THE FOLLOWER OR CONNECTOR GRIDS THAT ALLOWS FOR FREE MOVEMENT WHEN THE UNIT IS OPENED FOR SERVICE AND PROVIDES FLEXIBILITY FOR THE VARIATION OF THE COMPRESSED PLATAGE DIMENSIONS.
4. NOZZLES ARE PROVIDED WITH A SMOOTH RAISED FACE FINISH.
5. BOLT HOLES STRADDLE CENTRELINES SHOWN.
6. DIMENSIONS ARE SHOWN IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS.
7. STANDARD TOLERANCES:
FRAME AND FOUNDATION BOLT LOCATIONS: ±1/4 INCH [6mm]
NOZZLE CENTRELINE AND FACE DIMENSIONS: ±1/8 INCH [3mm]



VIEWED FROM GASKETED SIDE OF PLATE

(L11) R1234 (R11)	(L12) R1234 (R12)	(L13) R1234 (R13)	(L14) R1234 (R14)	(L15) R1234 (R15)	(L16) R1234 (R16)
(L21) R1234 (R21)	(L22) R1234 (R22)	(L23) R1234 (R23)	(L24) R1234 (R24)	(L25) R1234 (R25)	(L26) R1234 (R26)
(L31) R1234 (R31)	(L32) R1234 (R32)	(L33) R1234 (R33)	(L34) R1234 (R34)	(L35) R1234 (R35)	(L36) R1234 (R36)
(L41) R1234 (R41)	(L42) R1234 (R42)	(L43) R1234 (R43)	(L44) R1234 (R44)	(L45) R1234 (R45)	(L46) R1234 (R46)



B		A
DESIGN SPECIFICATIONS		
DESIGN CODE	ASME SECTION VIII DIV 1 1995 EDITION, 1996 ADDENDA	
MAX. ALLOWABLE WORKING PRESSURE	200 PSIG. [13.8 BAR]	
MINIMUM DESIGN METAL TEMPERATURE	-20 °F. @ 200 PSIG. [-29°C. @ 13.8 BAR]	
HYDROTEST PRESSURE	300 PSIG. [20.7 BAR]	
MINIMUM OPERATING TEMPERATURE	5°F. [-13°C.]	
MAXIMUM OPERATING TEMPERATURE	275 °F. [257°C.]	
SERIAL NUMBER	33981.1 & 33981.2	
HEAT TRANSFER AREA	464.8 SQ. FT. [43.2 SQ. M.]	
FRAME SIZE	NO. 2-1	
MAXIMUM FRAME CAPACITY	156 PLATES	
DRY WEIGHT	3,115 LBS. [1,413 KG]	
FLOODED (OPERATING) WEIGHT	3,620 LBS. [1,642 KG]	
TOTAL LIQUID VOLUME	60.6 GALS. [229.4 L]	
FINISH	APV STANDARD PAINT 3196	
ACCESSORIES SUPPLIED		

OPERATING CONDITIONS			
	LIQUID	FLOW RATE	TEMP. °C. ΔP (BAR)
LATEX		18,818 kg/hr	60° → 35° 1.03
WATER		32,736 kg/hr	27° → 37.7° 0.17

NOZZLE SCHEDULE			
PORT	SIZE	TYPE	CLASS SERVICE
H1	4"	SOH. 10S 316L S.S. STUB END W/ 150# C.S. LAP JT. FLG. (SEE NOTE 4)	ANSI B16.5 WATER OUT
H2	4"	SOH. 10S 316L S.S. STUB END W/ 150# C.S. LAP JT. FLG. (SEE NOTE 4)	ANSI B16.5 LATEX IN
F1	4"	SOH. 10S 316L S.S. STUB END W/ 150# C.S. LAP JT. FLG. (SEE NOTE 4)	ANSI B16.5 WATER IN
F2	4"	SOH. 10S 316L S.S. STUB END W/ 150# C.S. LAP JT. FLG. (SEE NOTE 4)	ANSI B16.5 LATEX OUT

PLATES AND GASKETS	
85 - R5 III/300 316 STAINLESS STEEL PLATES.	
84 - R5, PARAFLO GLUE-IN GASKETS.	
1 - R5, PARAFLO GLUE-IN END GASKET.	
4 - R5, PARAFLO PORT RING GASKET.	
TOTAL "L" PLATES - 43	TOTAL "R" PLATES - 42

40 : L1234 00	38 : R1234 00
1 : L1200 00	1 : R1204 00
1 : L0034 00	1 : R0234 00
1 : L1200 00K	1 : R1230 00
:	1 : R1034 00

Customer:

DOW CHEMICAL U.S.A.
GALES FERRY, CT
(2) LATEX COOLERS
TAG NO.: E-715A & E-3715
W.O. NO. : 33981

P.O. NO. : 63191724	SALES ORDER NO. 710606
APV Heat Transfer Technologies 395 Fillmore Avenue Tonawanda, N.Y. 14150 (716) 692-3000/Fax: (716) 692-1715	

DESCRIPTION: MODEL R5 MGS-16 PLATE HEAT EXCHANGER

Checked: Date:	Supervised: Scale: N.T.S.	Sheet: 1 OF 1
Approved: Date: 2/9/98	Drawn: DU NEFF	Drawing No.: 33981D0001