



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		(N1)		(N2)	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-183-4E4	72 5/8	1845	36 5/8	930	21 3/4	552	38	965	10	254	4	102
WS-184-4E4	84 5/8	2149	48 5/8	1235	33 3/4	857	50	1270	10	254	4	102
WS-185-4E4	96 5/8	2454	60 5/8	1540	45 3/4	1162	62	1575	10	254	4	102
WS-186-4E4	108 5/8	2759	72 5/8	1845	57 3/4	1467	74	1880	10	254	4	102
WS-187-4E4	120 5/8	3064	84 5/8	2149	69 3/4	1772	86	2184	10	254	4	102
WS-188-4E4	132 5/8	3369	96 5/8	2454	81 3/4	2076	98	2489	10	254	4	102
WS-189-4E4	144 5/8	3673	108 5/8	2759	93 3/4	2381	110	2794	10	254	4	102
WS-1810-4E4	156 5/8	3978	120 5/8	3064	105 3/4	2686	122	3099	10	254	4	102
WS-1811-4E4	168 5/8	4283	132 5/8	3369	117 3/4	2991	134	3404	10	254	4	102
WS-1812-4E4	180 5/8	4588	144 5/8	3673	129 3/4	3296	146	3708	10	254	4	102
WS-1813-4E4	192 5/8	4893	156 5/8	3978	141 3/4	3600	158	4013	10	254	4	102
WS-1814-4E4	204 5/8	5197	168 5/8	4283	153 3/4	3905	170	4318	10	254	4	102
WS-1815-4E4	216 5/8	5502	180 5/8	4588	165 3/4	4210	182	4623	10	254	4	102

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	(N1)	AS PER TABLE	(N5)	4 (102) FLG
OUTLET	(N2)	AS PER TABLE	(N6)	4 (102) FLG
DRAIN	(N3)	3/4 (19) NPT	(N7)	1/2 (13) NPT
VENT	(N4)	3/4 (19) NPT		

NOTES: 1. SUPPORTS SUPPLIED ONLY IF SPECIFIED ON ORDER.  
 2. NOZZLE SIZES SHOWN ARE RECOMMENDED FOR MAXIMUM EXCHANGER LIFE.  
 3. FABRICATED TO ASME CODE SECTION VIII DIVISION 1 AND LATEST ADDENDA.  
 4. DRAWING IS NOT TO SCALE.  
 5. ALL DIMN'S  $\pm 1/8$  (3) UNLESS OTHERWISE SHOWN.

DESIGN CONDITIONS				
	SHELL		TUBES	
DESIGN PRESSURE	150 PSIG	1034 KPa	150 PSIG	1034 KPa
DESIGN TEMPERATURE	375 °F	191 °C	375 °F	191 °C
MIN. DESIGN METAL TEMP.	40 °F	4.4 °C	40 °F	4.4 °C
HYDRO. TEST PRESSURE	225 PSIG	1551 KPa	225 PSIG	1551 KPa
CONTENTS	STEAM		WATER	

CUSTOMER:  
 LOCATION:  
 ENGINEER:  
 ORDER No.:  
 PROJECT/JOB:  
 LOCATION:  
 TAG: (QUOTE # )

TITLE	G.A. 150 LB. WS SERIES HEAT EXCHANGERS	A R M S T R O N G				NUMBER	WS-18-4P-E4	REV.
DATE:	12/01/94	BY:	D.C.R.	TORONTO - CANADA	MONTREAL - CANADA	BUFFALO - N. Y.	COLCHESTER - U.K.	
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