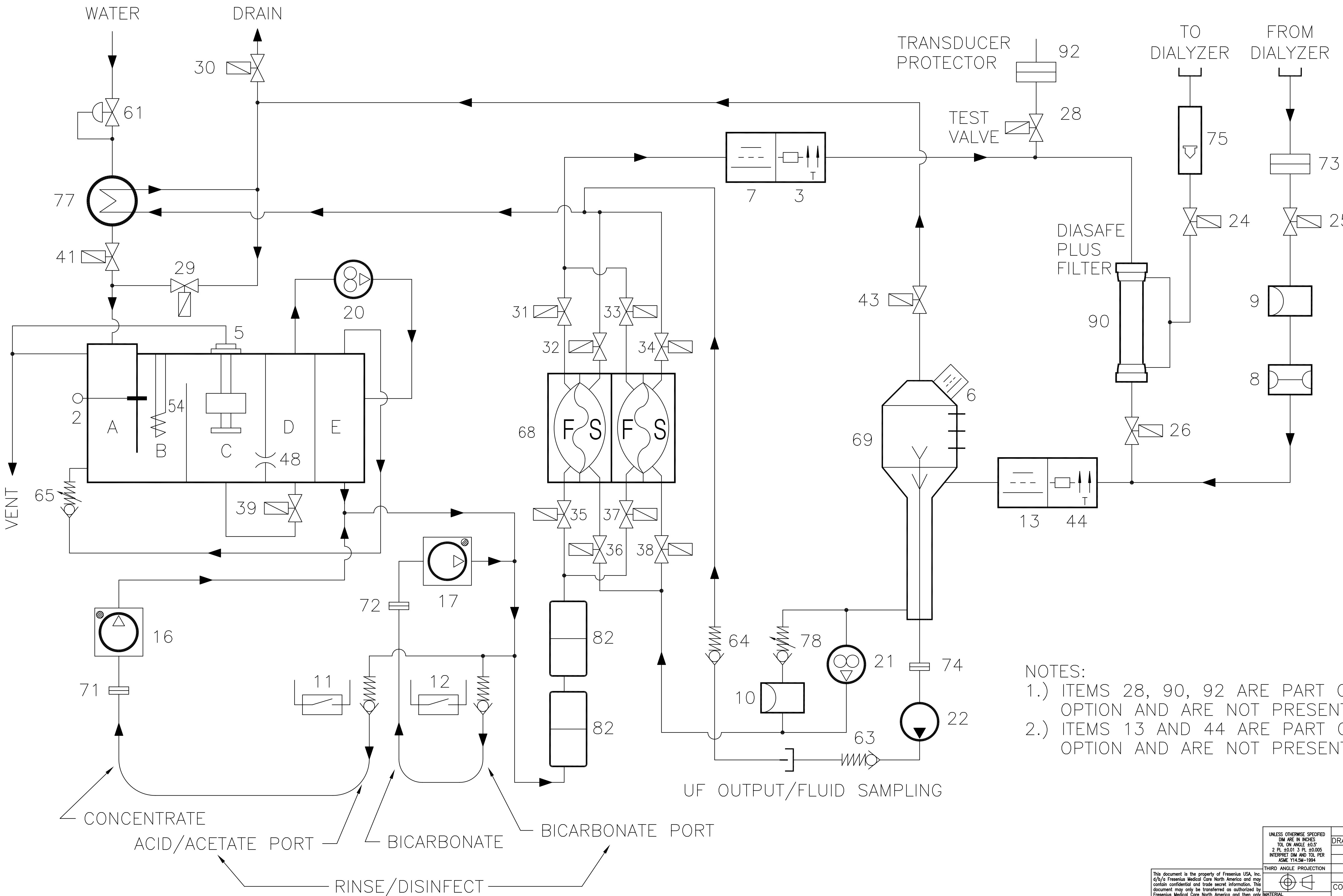


HYDRAULICS: 2008K2 WITH DIASAFE PLUS FILTER AND ONLINE CLEARANCE

REV.	RELEASE DATE	EFFECTIVE DATE	ORIGINATOR	CN#	DESCRIPTION OF CHANGES	APPROVAL
A	07/29/08	07/29/08	J. FOX	25741	RELEASE	J. FOX
B	09/02/08	09/02/08	J. FOX	26303	CORRECT ACID PUMP OUTPUT ON SHEETS 1 & 2	J. FOX
C	03/07/15	03/07/15	J. FOX	CN050550	NEW ROUTE FOR V29/CONSOLIDATE SHEETS	L. PANTOJA



COMPONENT LIST FOR FLOW DIAGRAM 2008K2

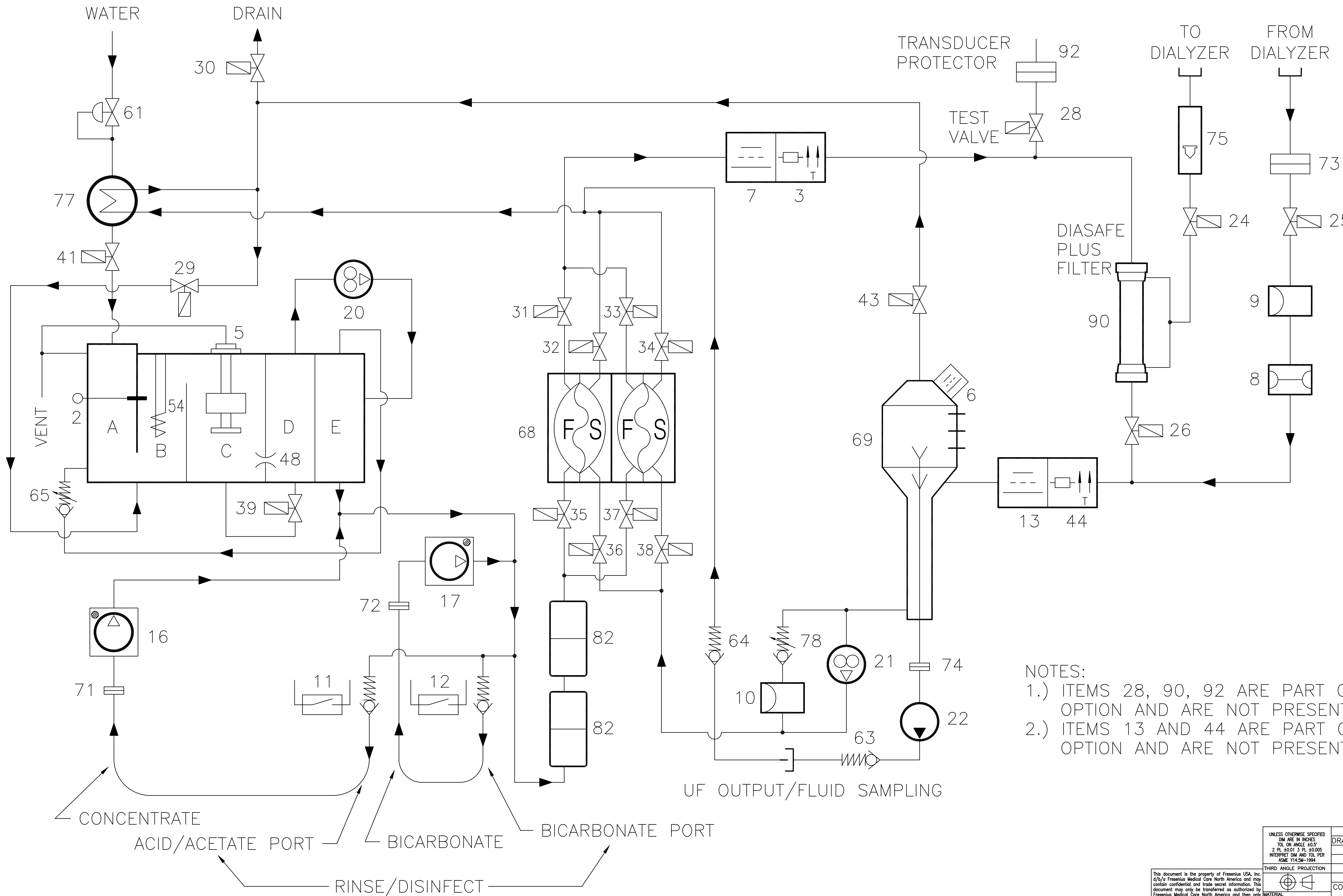
2. TEMPERATURE CONTROL THERMISTOR
3. TEMPERATURE MONITOR THERMISTOR
5. FLOAT SWITCH
6. AIR SENSOR IN AIR SEPARATOR CHAMBER.
7. CONDUCTIVITY CELL
8. BLOOD LEAK DETECTOR
9. DIALYSATE PRESSURE TRANSDUCER
10. CHAMBER FULL SWITCH
11. REED SWITCH CONCENTRATE WAND
12. REED SWITCH BICARBONATE WAND
13. POST CONDUCTIVITY CELL
16. CONCENTRATE PUMP
17. BICARBONATE PUMP
20. DEAERATION PUMP
21. FLOW PUMP
22. UF PUMP
24. DIALYZER VALVE 1
25. DIALYZER VALVE 2
26. BYPASS VALVE
28. TEST VALVE
29. RECIRCULATION VALVE
30. DRAIN VALVE
31. BALANCE CHAMBER VALVE
32. BALANCE CHAMBER VALVE
33. BALANCE CHAMBER VALVE
34. BALANCE CHAMBER VALVE
35. BALANCE CHAMBER VALVE
36. BALANCE CHAMBER VALVE
37. BALANCE CHAMBER VALVE
38. BALANCE CHAMBER VALVE
39. BYPASS VALVE FOR DEAERATION ORIFICE
41. WATER INLET VALVE
43. VENT VALVE FOR AIR SEPARATION CHAMBER
44. POST TEMPERATURE THERMISTOR
48. DEAERATION ORIFICE
54. HEATER
61. WATER INLET PRESSURE REGULATOR
63. CHECK VALVE FROM UF PUMP TO SAMPLE PORT
64. CHECK VALVE FROM SAMPLE PORT TO DRAIN
65. LOADING PRESSURE VALVE
69. AIR SEPARATION CHAMBER
71. ACID/ACETATE FILTER
72. BICARBONATE FILTER
73. FROM DIALYZER LINE FILTER
74. UF PUMP FILTER
75. DIALYSATE LINE FLOW INDICATOR
77. HEAT EXCHANGER
78. FLOW PUMP PRESSURE RELIEF VALVE
82. MIXING CHAMBER
90. DIASAFE PLUS FILTER
92. TRANSDUCER PROTECTOR

- NOTES:
- 1.) ITEMS 28, 90, 92 ARE PART OF THE DIASAFE PLUS FILTER OPTION AND ARE NOT PRESENT ON ALL MACHINES.
 - 2.) ITEMS 13 AND 44 ARE PART OF THE ONLINE CLEARANCE OPTION AND ARE NOT PRESENT ON ALL MACHINES,

UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES TOL ON ANGLE ±0.5° 2 PL. ±0.01 3 PL. ±0.005 INTERPRET DIM AND TOL PER ASME Y14.5M-1994		NAME J. FOX	DATE 05.22.08	Fresenius Medical Care
THIRD ANGLE PROJECTION		COMMENTS:		
2008K2 HYDRAULIC FLOW DIAGRAM				REV. C
SIZE D	DWG. NO. 700079	SCALE: 1:1 CAD: AUTOCAD SHEET 1 OF 2		

This document is the property of Fresenius USA, Inc. 4/9/0 Fresenius Medical Care North America and may contain confidential and trade secret information. This document may only be transferred as authorized by Fresenius Medical Care North America and then only by way of loan for limited purposes. It may not be reproduced in whole or in part and must be returned or destroyed upon request or upon completion of the purpose of the loan. ©Fresenius Medical Care North America 2008, 2015 DO NOT SCALE DRAWING

HYDRAULICS: 2008K2 WITH DIASAFE PLUS FILTER AND ONLINE CLEARANCE (ENHANCED BACKFLOW PREVENTION)



COMPONENT LIST FOR FLOW DIAGRAM 2008K2

2. TEMPERATURE CONTROL THERMISTOR
3. TEMPERATURE MONITOR THERMISTOR
5. FLOAT SWITCH
6. AIR SENSOR IN AIR SEPARATOR CHAMBER.
7. CONDUCTIVITY CELL
8. BLOOD LEAK DETECTOR
9. DIALYSATE PRESSURE TRANSDUCER
10. CHAMBER FULL SWITCH
11. REED SWITCH CONCENTRATE WAND
12. REED SWITCH BICARBONATE WAND
13. POST CONDUCTIVITY CELL
16. CONCENTRATE PUMP
17. BICARBONATE PUMP
20. DEAERATION PUMP
21. FLOW PUMP
22. UF PUMP
24. DIALYZER VALVE 1
25. DIALYZER VALVE 2
26. BYPASS VALVE
28. TEST VALVE
29. RECIRCULATION VALVE
30. DRAIN VALVE
31. BALANCE CHAMBER VALVE
32. BALANCE CHAMBER VALVE
33. BALANCE CHAMBER VALVE
34. BALANCE CHAMBER VALVE
35. BALANCE CHAMBER VALVE
36. BALANCE CHAMBER VALVE
37. BALANCE CHAMBER VALVE
38. BALANCE CHAMBER VALVE
39. BYPASS VALVE FOR DEAERATION ORIFICE
41. WATER INLET VALVE
43. VENT VALVE FOR AIR SEPARATION CHAMBER
44. POST TEMPERATURE THERMISTOR
48. DEAERATION ORIFICE
54. HEATER
61. WATER INLET PRESSURE REGULATOR
63. CHECK VALVE FROM UF PUMP TO SAMPLE PORT
64. CHECK VALVE FROM SAMPLE PORT TO DRAIN
65. LOADING PRESSURE VALVE
69. AIR SEPARATION CHAMBER
71. ACID/ACETATE FILTER
72. BICARBONATE FILTER
73. FROM DIALYZER LINE FILTER
74. UF PUMP FILTER
75. DIALYSATE LINE FLOW INDICATOR
77. HEAT EXCHANGER
78. FLOW PUMP PRESSURE RELIEF VALVE
82. MIXING CHAMBER
90. DIASAFE PLUS FILTER
92. TRANSDUCER PROTECTOR

- NOTES:
- 1.) ITEMS 28, 90, 92 ARE PART OF THE DIASAFE PLUS FILTER OPTION AND ARE NOT PRESENT ON ALL MACHINES.
 - 2.) ITEMS 13 AND 44 ARE PART OF THE ONLINE CLEARANCE OPTION AND ARE NOT PRESENT ON ALL MACHINES,

UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES TOL ON ANGLE ±0.5° 2 PL 50.01 3 PL 50.005 INTERPRET DIM AND TOL PER ASME Y14.5M-1994		NAME	DATE		
THIRD ANGLE PROJECTION MATERIAL		DRAWN J. FOX	05.22.08		
2008K2 HYDRAULIC FLOW DIAGRAM				SIZE	REV.
				D	C
				DWG. NO.	CAD:
				700079	AUTOCAD
				SCALE: 1:1	SHEET 2 OF 2