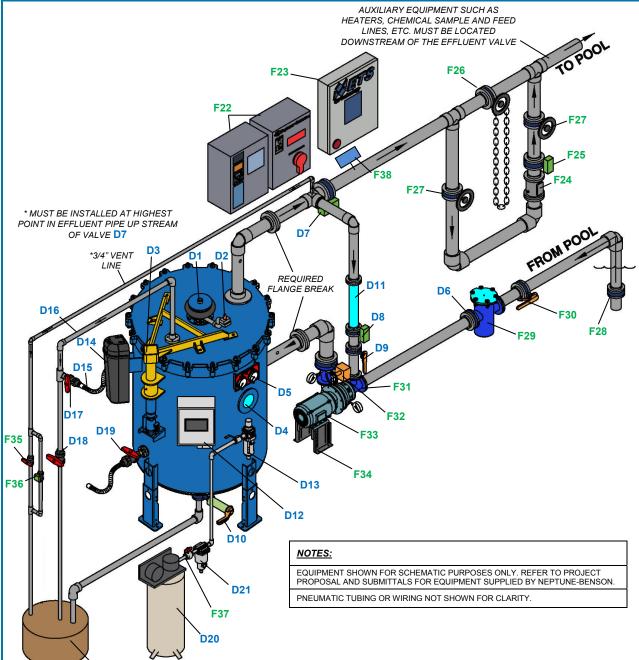
## **FILTERS**

## **Defender® Filter Schematic - Automatic**



DEFENDER FILTER COMPONENTS - INCLUDED IN DEFENDER PACKAGE		
MARK	REFERENCE	NOTES
D1	PNEUMATIC BUMPING ASSEMBLY	
D2	QUICK EXHAUST VALVE	
D3	LIFTING DAVIT	NONE
D4	VIEWING WINDOW	
D5	GAUGE PANEL	
D6	INFLUENT CHECK VALVE	
D7	EFFLUENT VALVE	AIR OPERATED BUTTERFLY VALVE, NORMALLY OPEN. INSTALL EFFLUENT VALVE DIRECTLY ON PRECOAT TEE. LOCATE ACTUATOR WHERE VALVE POSITION CAN BE VIEWED FROM FLOOR.
D8	PRECOAT VALVE	AIR OPERATED BUTTERFLY VALVE, NORMALLY CLOSED. INSTALL PRECOAT VALVE AS CLOSE AS POSSIBLE TO THE PUMP SUCTION PIPING. PRECOAT LINE 2 PIPE DIAMETERS SMALLER THAN EFFLUENT PIPE DIAMETER. (NO LESS THAN 2')
D9	SYSTEM FILL	MANUALLY OPERATED BUTTERFLY VALVE, NORMALLY OPEN.
D10	DRAIN VALVE	MANUALLY OPERATED BUTTERFLY VALVE, NORMALLY CLOSED, WITH EXTENSION. BOLTED DIRECTLY TO TANK BOTTOM (MEDIA DUMP / RINSE) DRAIN LINE MUST BE PLUMBED INDEPENDENTLY TO WASTE. (AUTOMATED OPTION AVAILABLE)
D11	IN-LINE SIGHT GLASS	INSTALL IN-LINE SIGHT GLASS ON THE PRECOAT LINE SO THAT IT CAN BE VIEWED WHILE STANDING AT THE FILTER CONTROL PANEL
D12	RMF CONTROL PANEL	
D13	FILTER REGULATOR	NOVE
D14	VACUUM TRANSFER UNIT	NONE
D15	VACUUM TRANSFER HOSE	7
D16	VACUUM TRANSFER PIPING & FITTINGS	SCH80 PVC FITTINGS & PIPE 1.5"
D17	VACUUM TRANSFER VALVE	BALL VALVE 1.5" TRUE UNION, NORMALLY CLOSED.
D18	VACUUM VENT VALVE	BALL VALVE 1.5" TRUE UNION, NORMALLY CLOSED. VACUUM DRAIN LINE MUST BE PLUMBED INDEPENDENTLY TO WASTE
D19	VACUUM HOSE VALVE WITH HOSE	BALL VALVE 1.5" TRUE UNION, NORMALLY CLOSED.
D20	AIR COMPRESSOR	OPTIONAL
D21	WATER SEPARATOR	OFTIONAL

	FILTER ACCESSORY COMPONENTS - AVAILABLE UPON REQUEST		
MARK	REFERENCE	NOTES	
F22	GREEN DRIVE VFD	WITH BY-PASS	
F23	ETS UV TREATMENT SYSTEM CONTROLLER	THIS IS A PACKAGE	
F24	ETS UV TREATMENT SYSTEM		
F25	ETS UV EZ STRAINER	SHOWN WITH AUTOMATED OPTION	
F26	ETS UV BYPASS	GEAR OPERATED BUTTERFLY VALVE, NORMALLY CLOSED.	
F27	ETS UV ISOLATION	GEAR OR LEVER OPERATED BUTTERFLY VALVE, NORMALLY OPEN. (2) REQUIRED	
F28	CHECK VALVE	FOR SELF PRIMING PUMPS, CHECK VALVE MUST BE INSTALLED ON SUCTION PIPE BELOW WATER LEVEL.	
F29	GUARDIAN™ STRAINER	HAIR & LINT STRAINER	
F30	STRAINER ISOLATION	LEVER OR GEAR OPERATED BUTTERFLY VALVE, NORMALLY OPEN.	
F31	PRECOAT REDUCING TEE	NONE	
F32	PUMP THROTTLE VALVE	GEAR OPERATED BUTTERFLY VALVE, NORMALLY OPEN.	
F33	RECIRCULATING PUMP	NONE	
F34	PUMP BASE		
F35	3/4" PRECOAT LINE VENT VALVE	NORMALLY CLOSED, PRECOAT LINE MUST BE PLUMBED INDEPENDENTLY TO WASTE.	
F36	3/4" PRECOAT LINE VENT VALVE	SHOWN WITH AUTOMATED OPTION	
F37	1/2" SHUT OFF VALVE	NONE	
F38	FLOW METER	4-20 ma OUTPUT	



R-3/18/16

WASTE PIT - MINIMUM 300 GPM CAPACITY