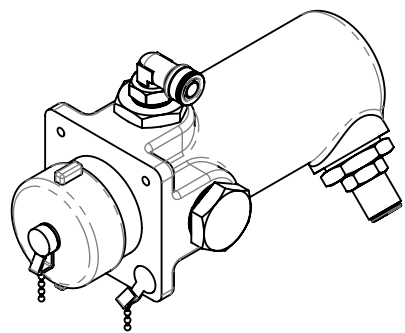
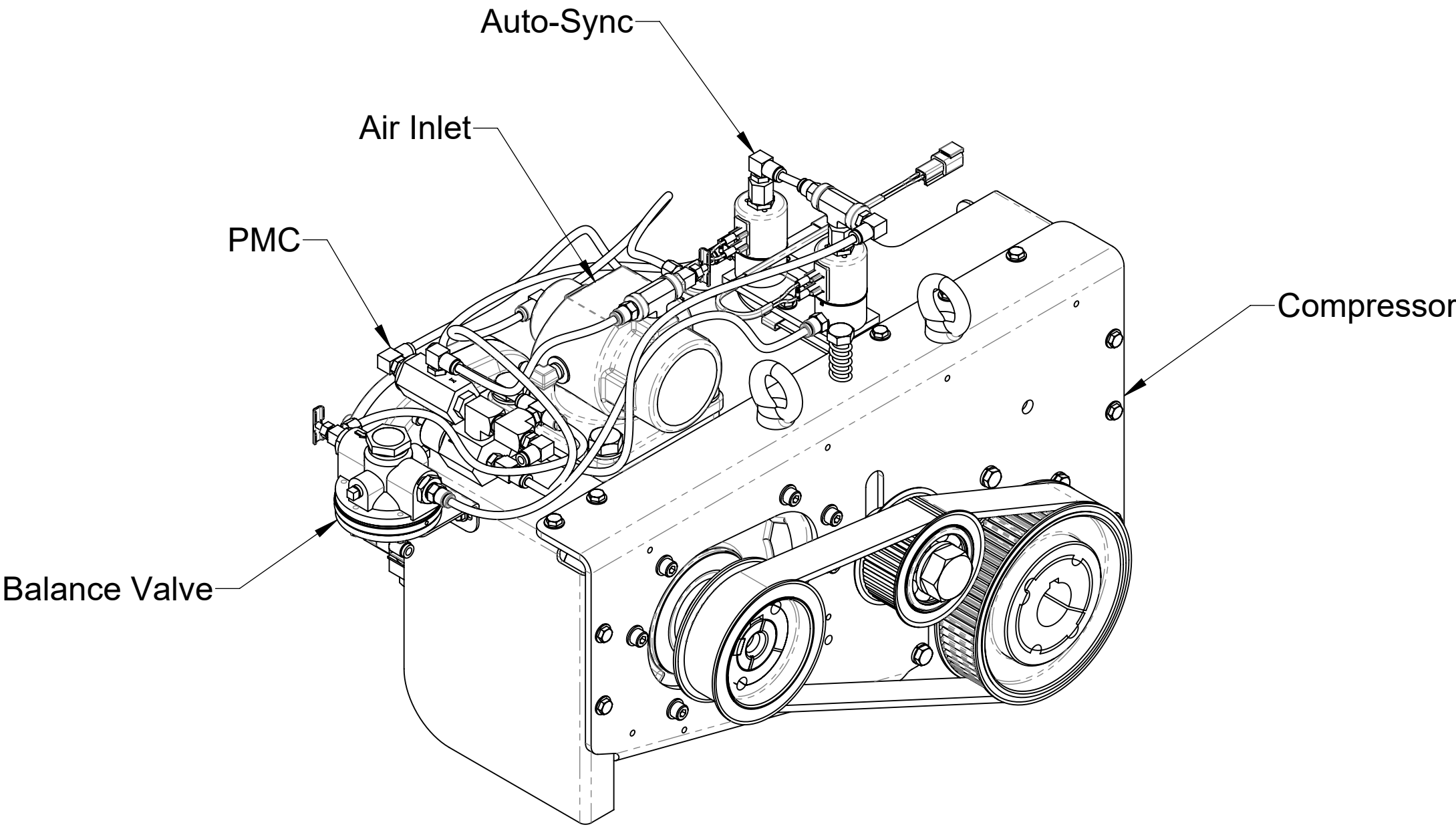
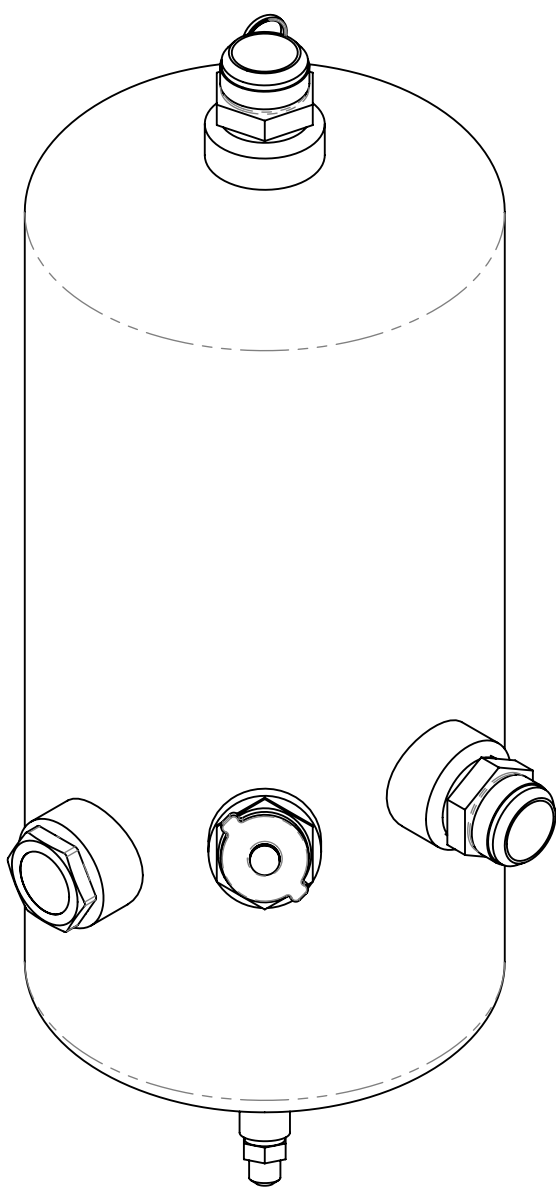


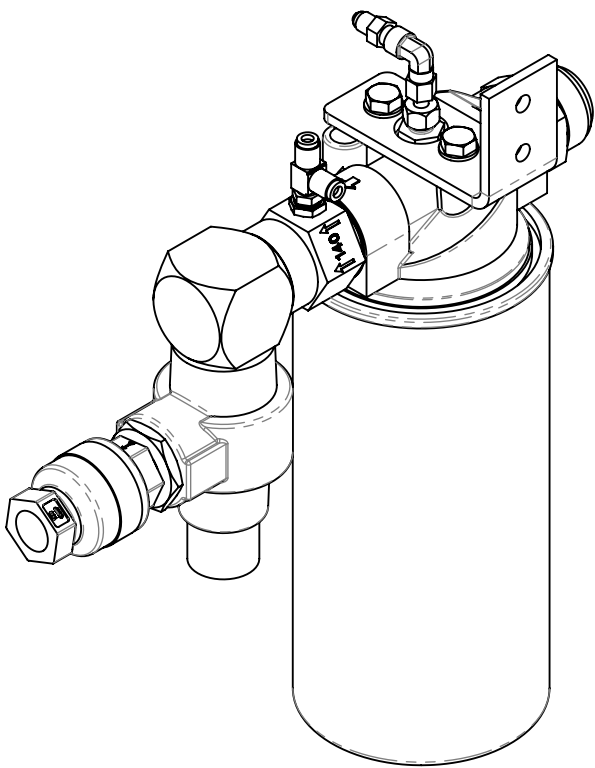
Model 150-ESD CAFS as used with TC22 Series PTO's



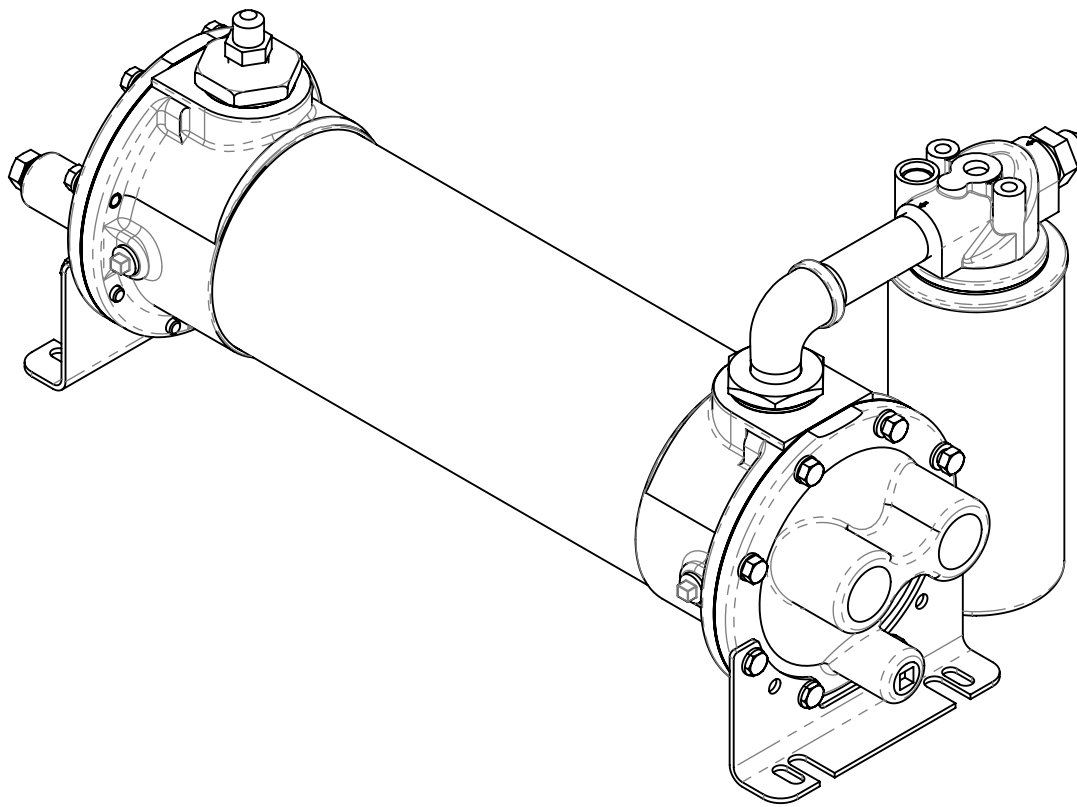
Optional Panel Strainer



Sump



Separator Filter

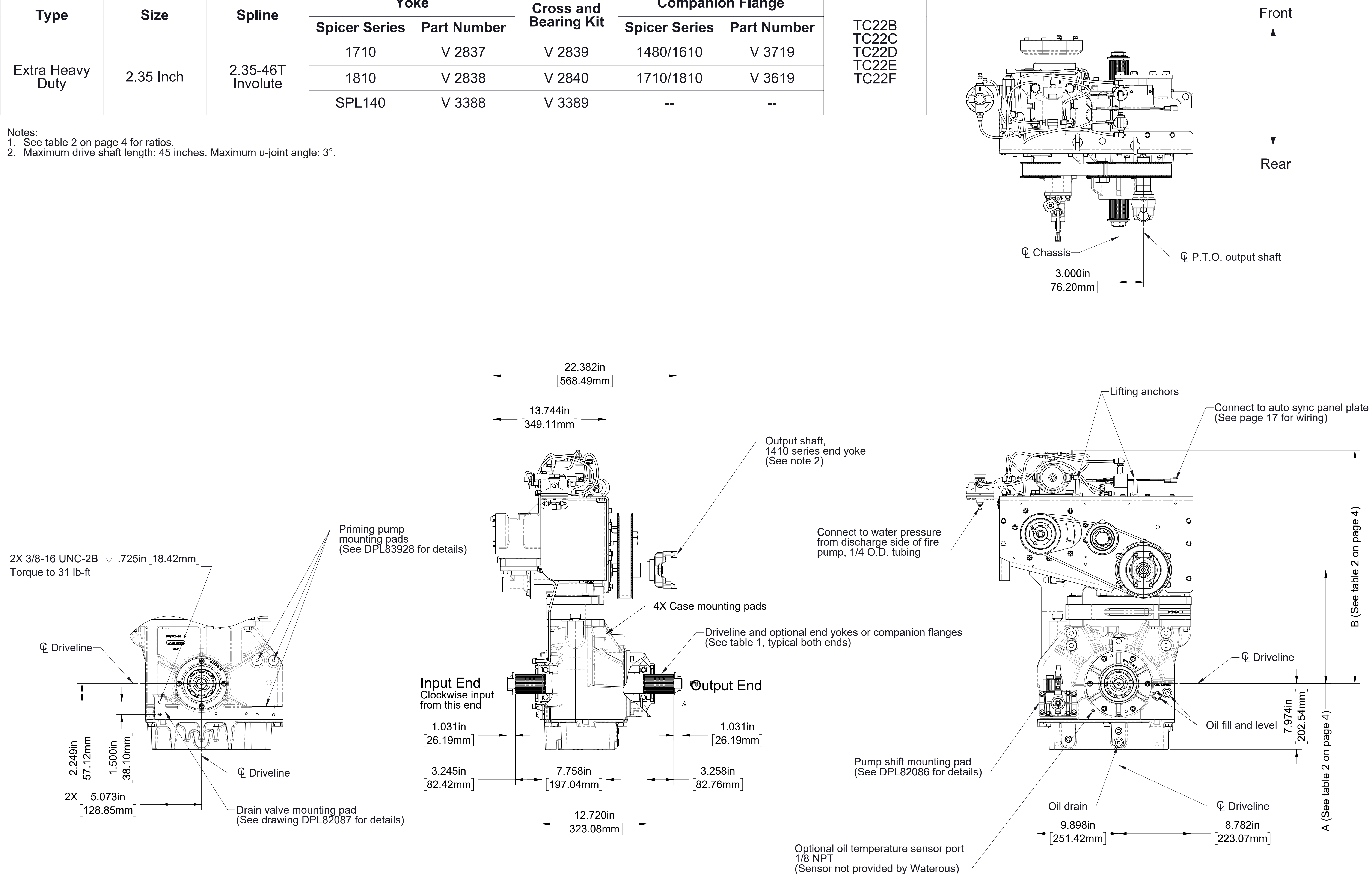


Oil Cooler/Filter

Standard Components:	Page
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Table 1 - Available Drivelines / Models								
Driveline			Optional End Yokes and Companion Flanges Available from Waterous (See DPL83861 for Dimensions)				PTO Models	
Type	Size	Spline	Yoke		Cross and Bearing Kit	Companion Flange		TC22B TC22C TC22D TC22E TC22F
			Spicer Series	Part Number		Spicer Series	Part Number	
Extra Heavy Duty	2.35 Inch	2.35-46T Involute	1710	V 2837	V 2839	1480/1610	V 3719	
			1810	V 2838	V 2840	1710/1810	V 3619	
			SPL140	V 3388	V 3389	--	--	

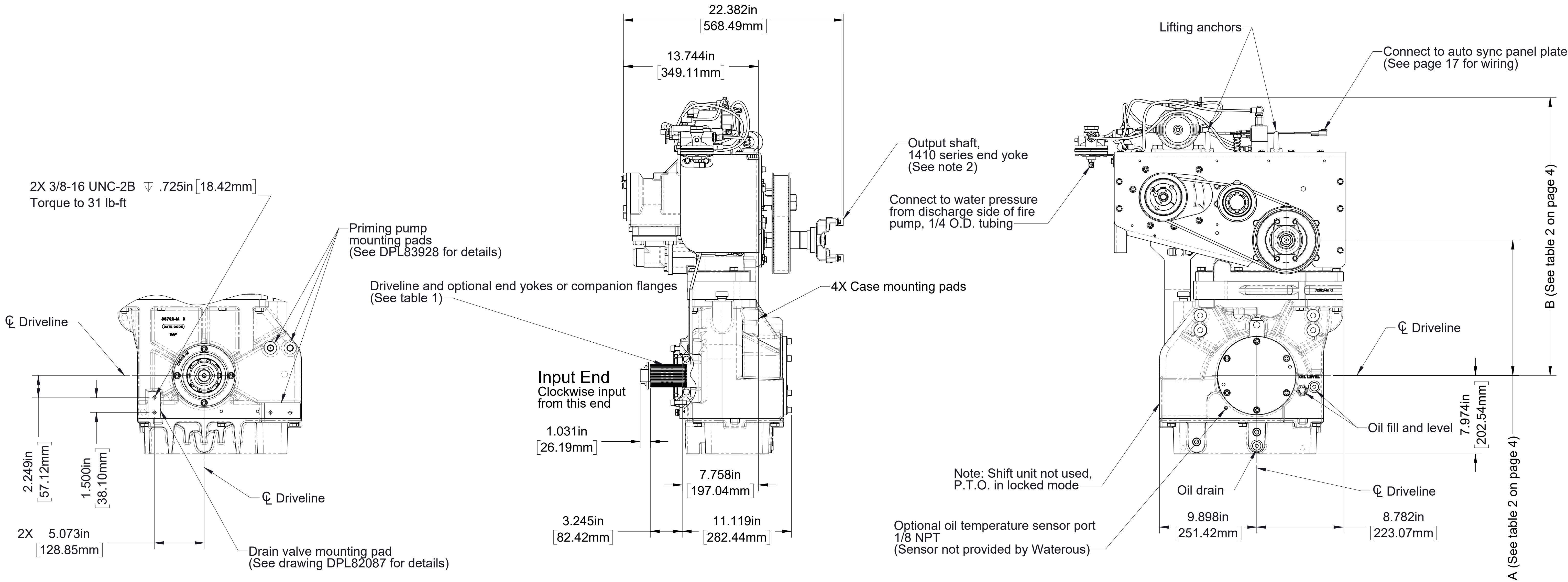
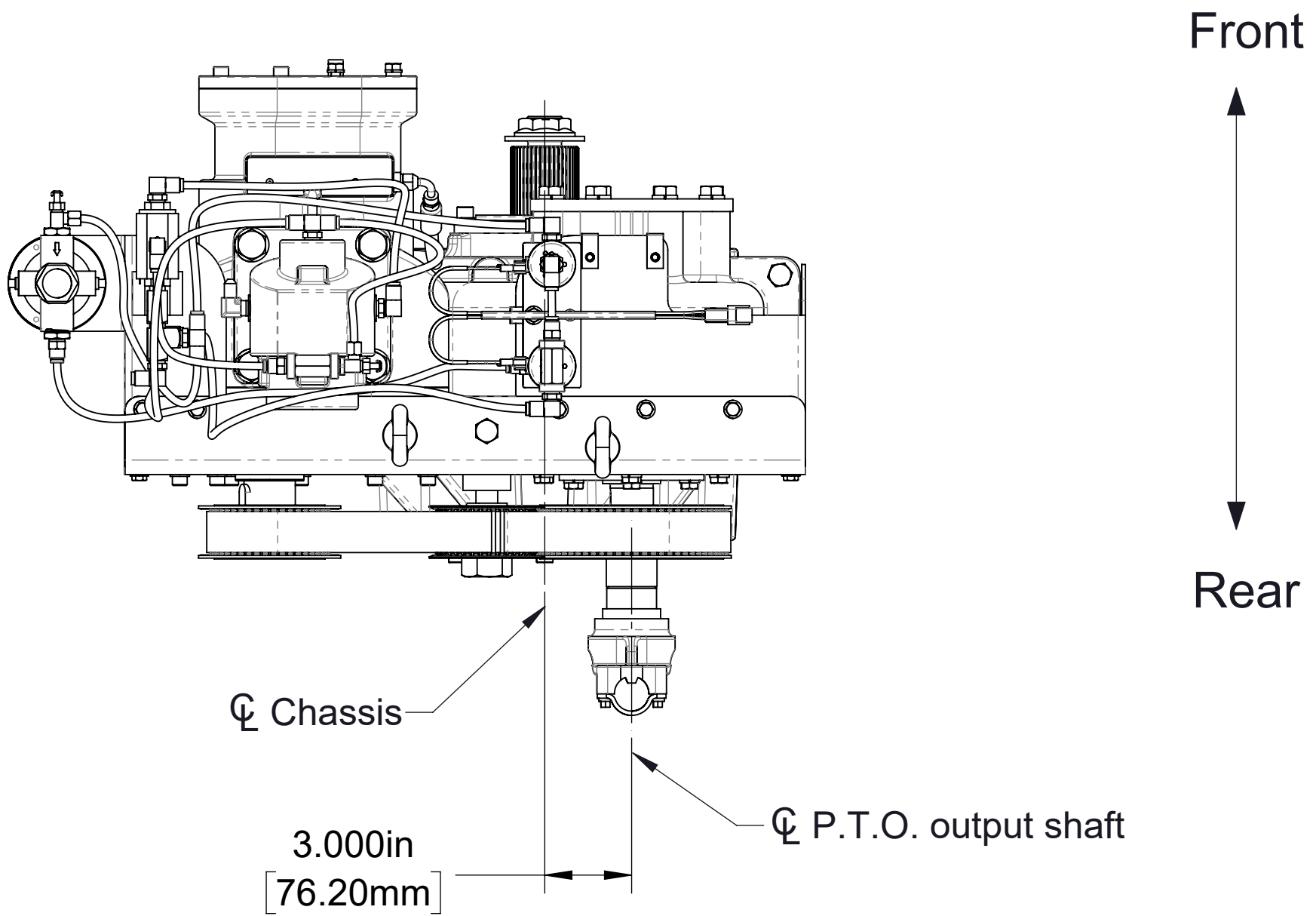
Notes:
1. See table 2 on page 4 for ratios.
2. Maximum drive shaft length: 45 inches. Maximum u-joint angle: 3°.



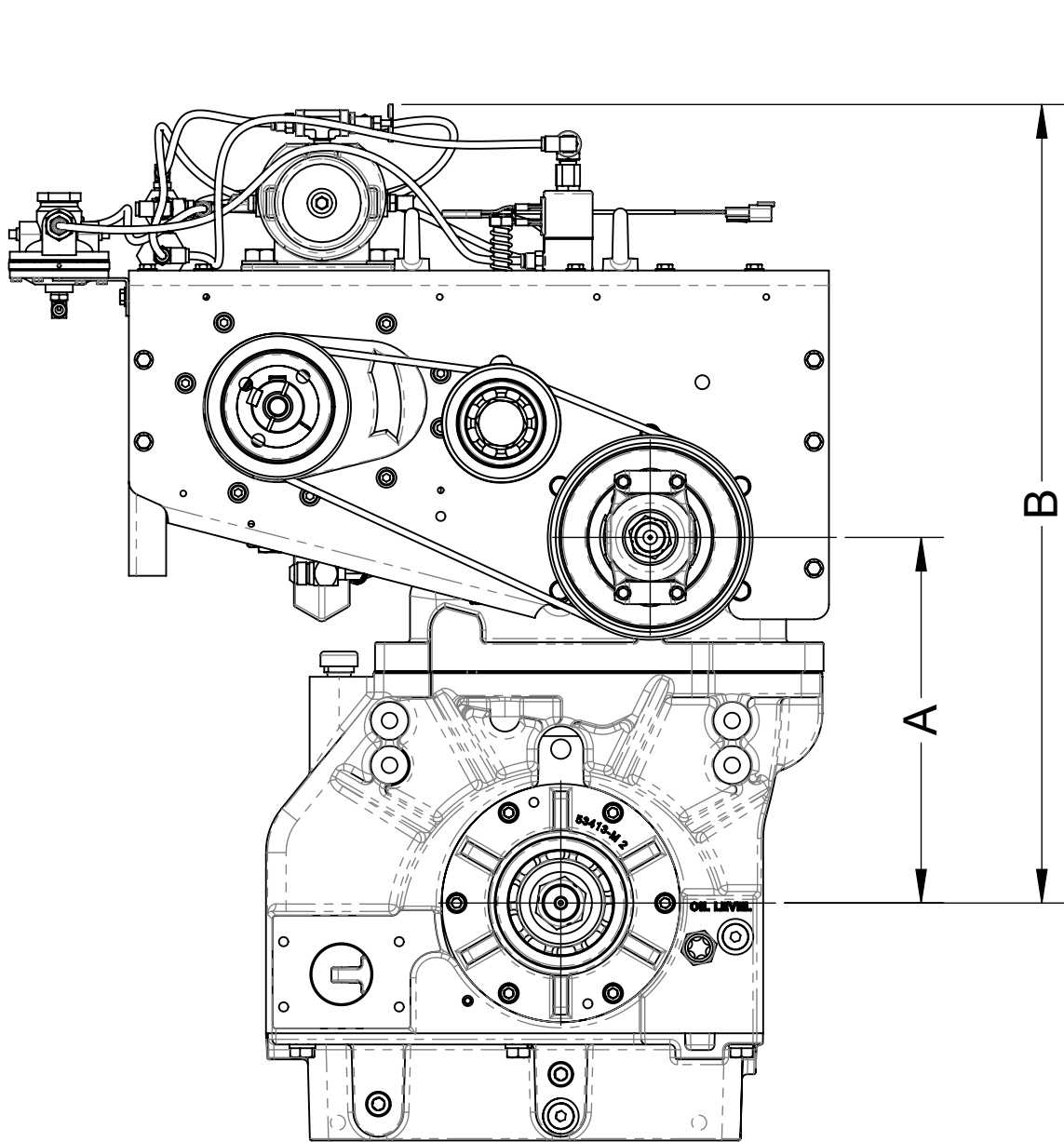
Input and Output Shaft Driveline

Table 1 - Available Drivelines / Models								
Driveline			Optional End Yokes and Companion Flanges Available from Waterous (See DPL83861 for Dimensions)				PTO Models	
Type	Size	Spline	Yoke		Cross and Bearing Kit	Companion Flange		TC22B TC22C TC22D TC22E TC22F
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			1810	V 2838	V 2840	1710/1810	V 3619	
			SPL140	V 3388	V 3389	--	--	

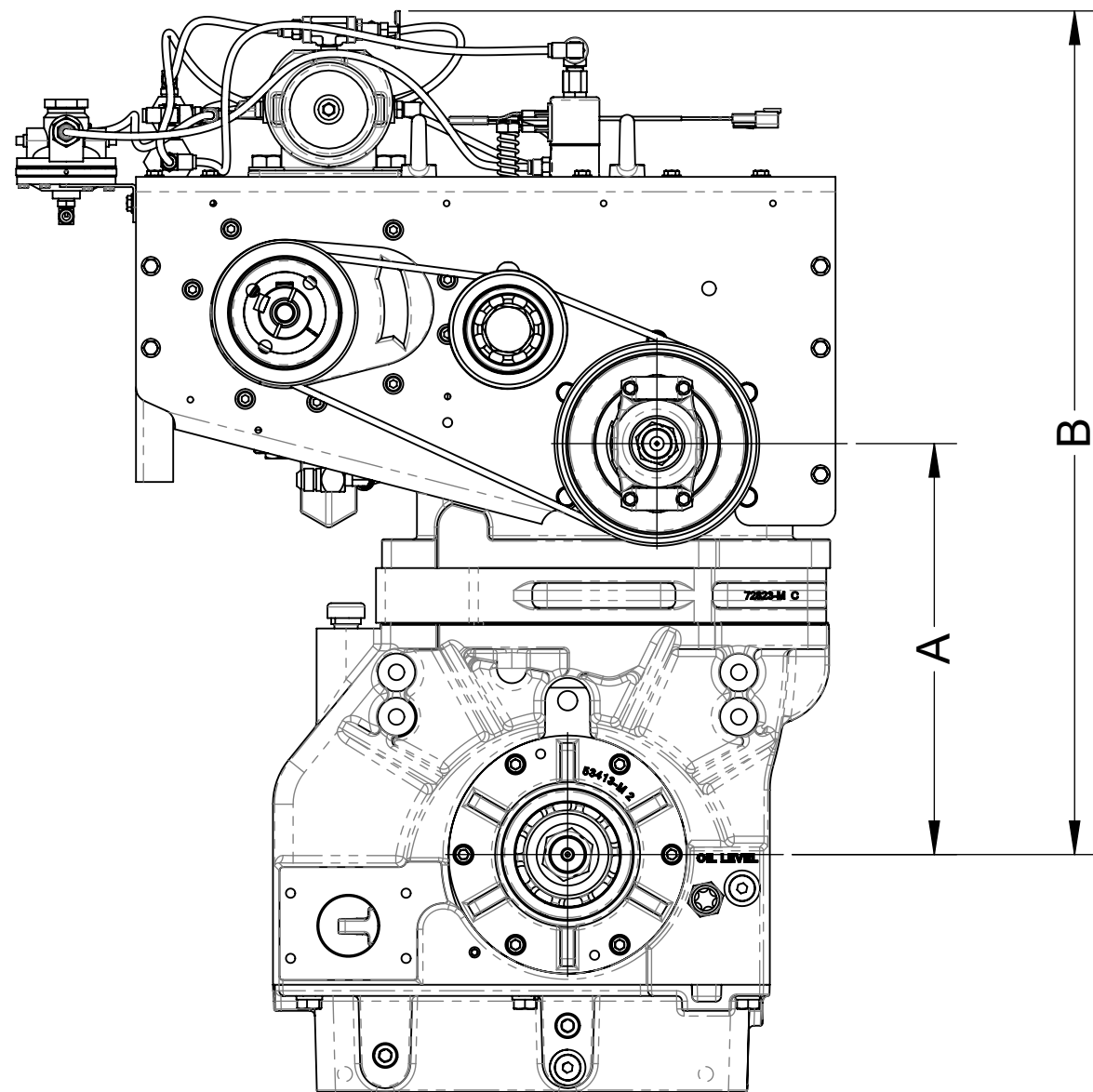
Notes:
1. See table 2 on page 4 for ratios.
2. Maximum drive shaft length: 45 inches. Maximum u-joint angle: 3°.



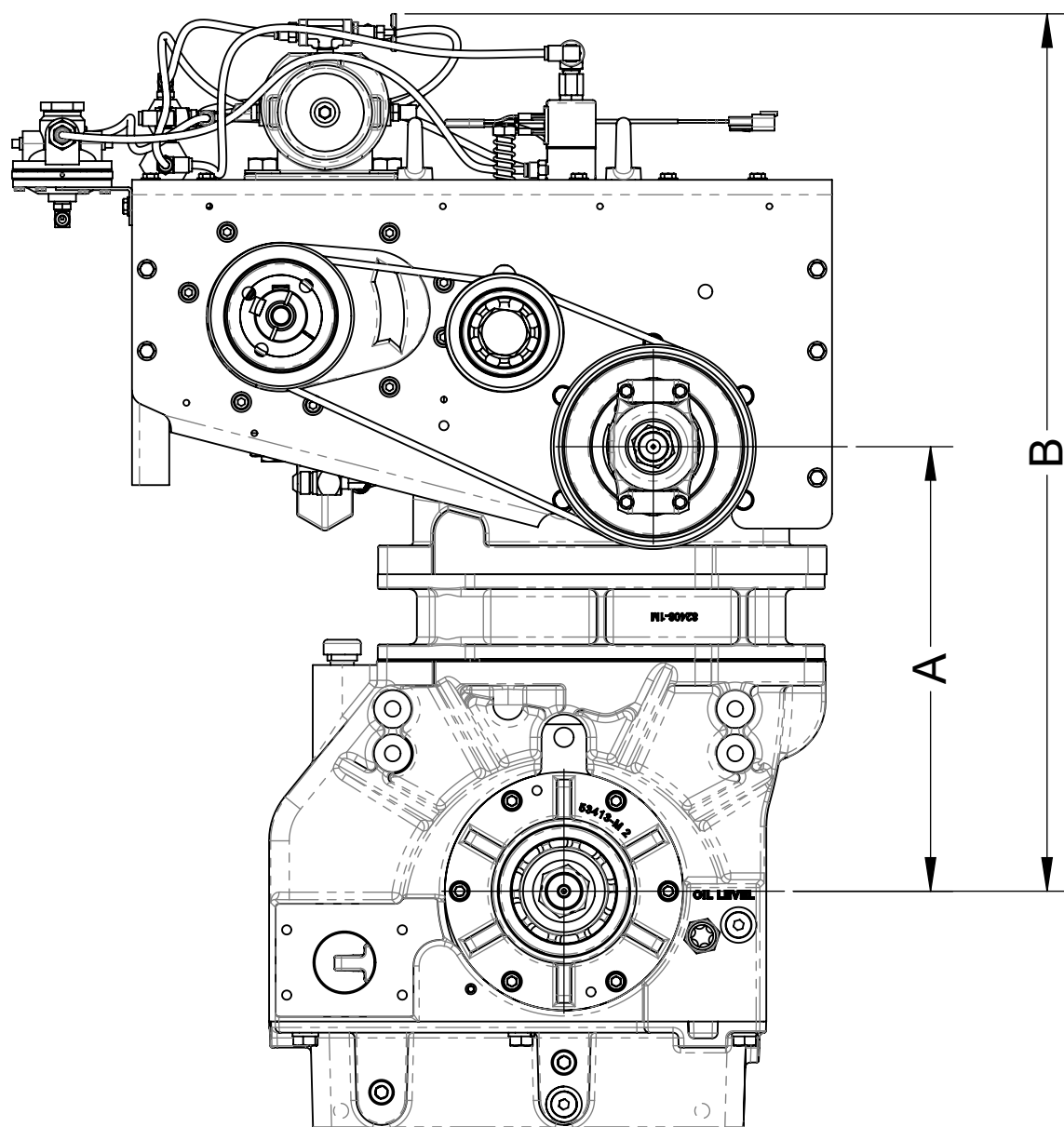
Input Shaft Only Driveline



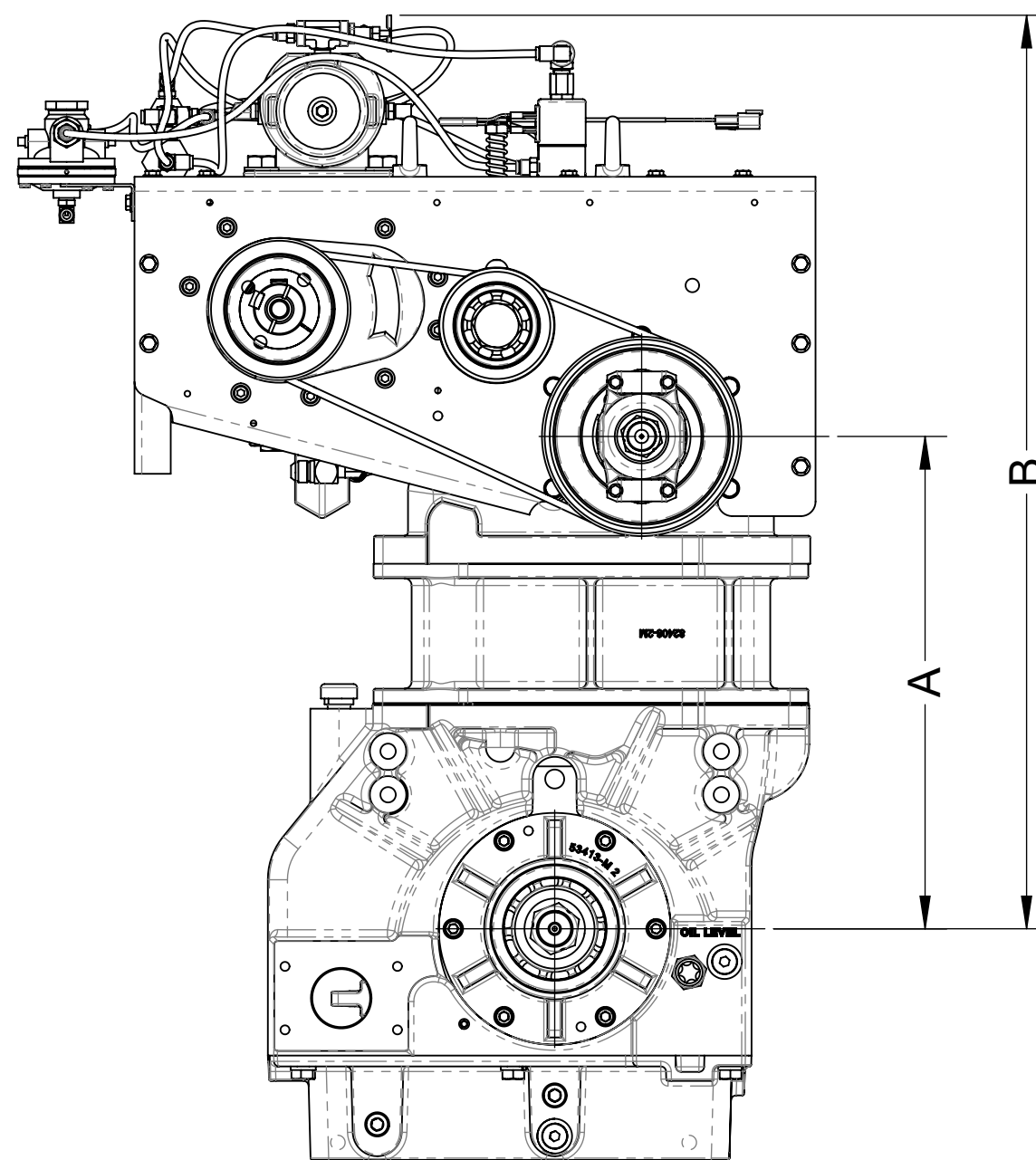
TC22B Model
(2.27 ratio shown)



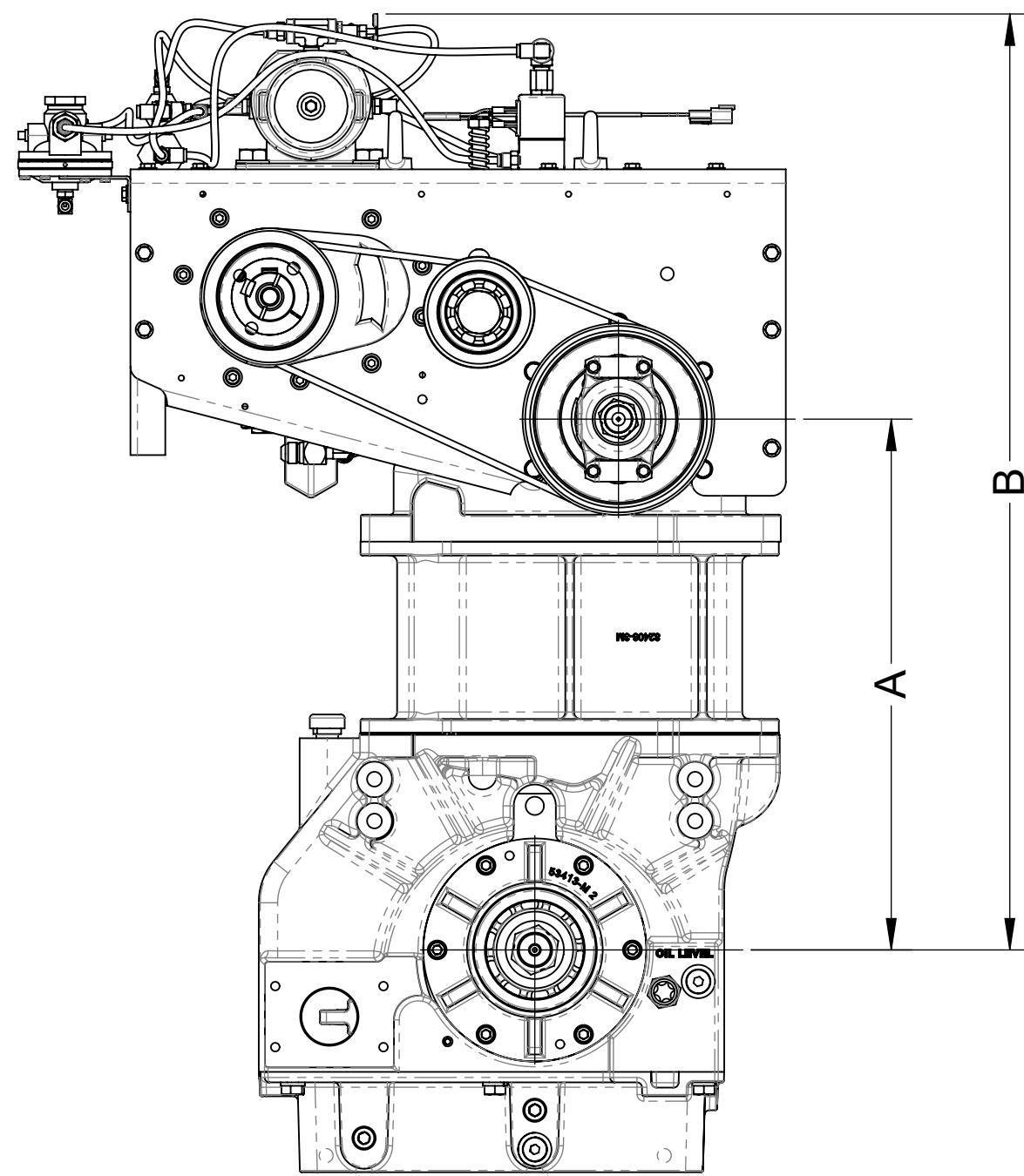
TC22C Model
(2.27 ratio shown)



TC22D Model
(2.27 ratio shown)



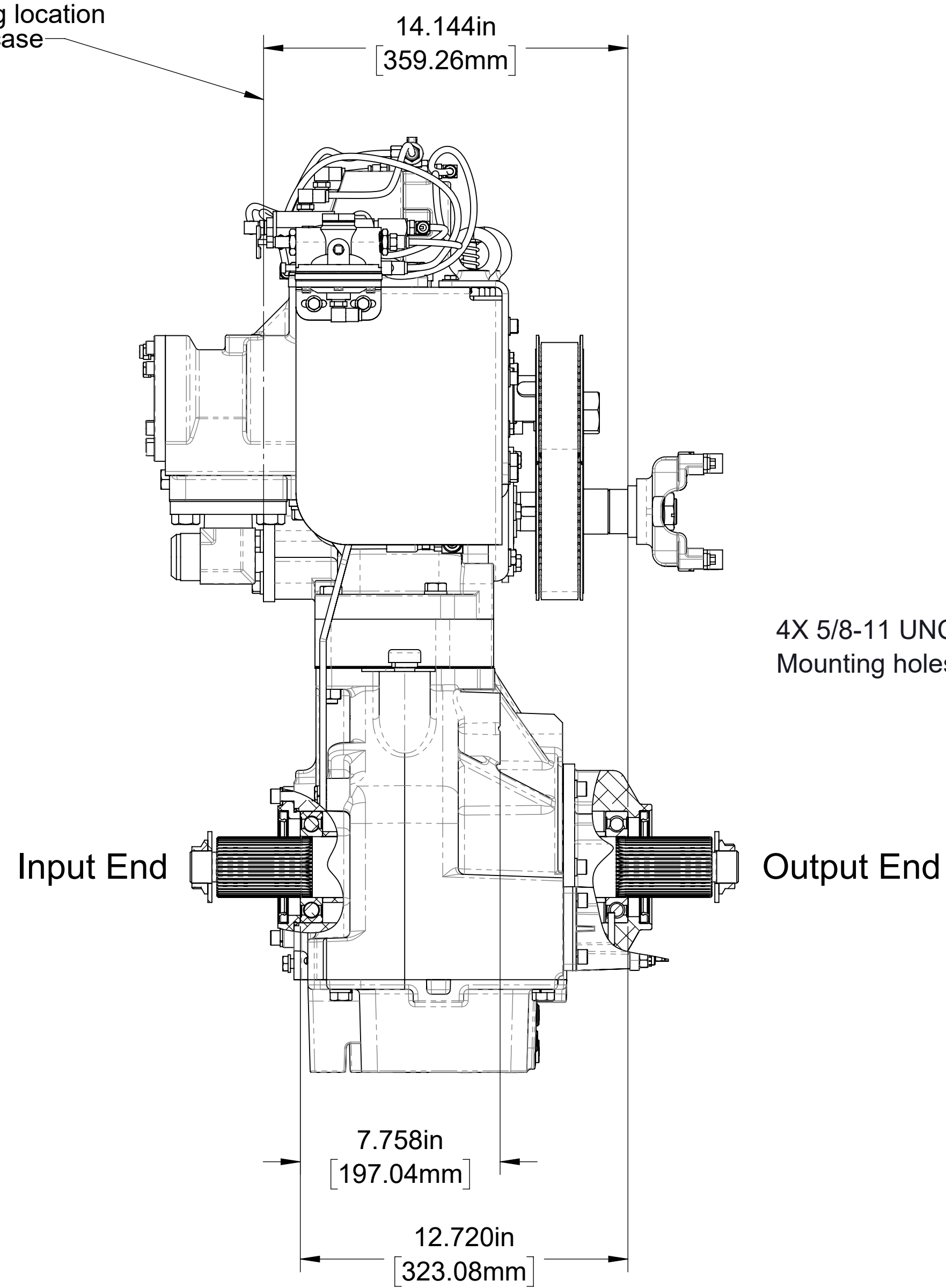
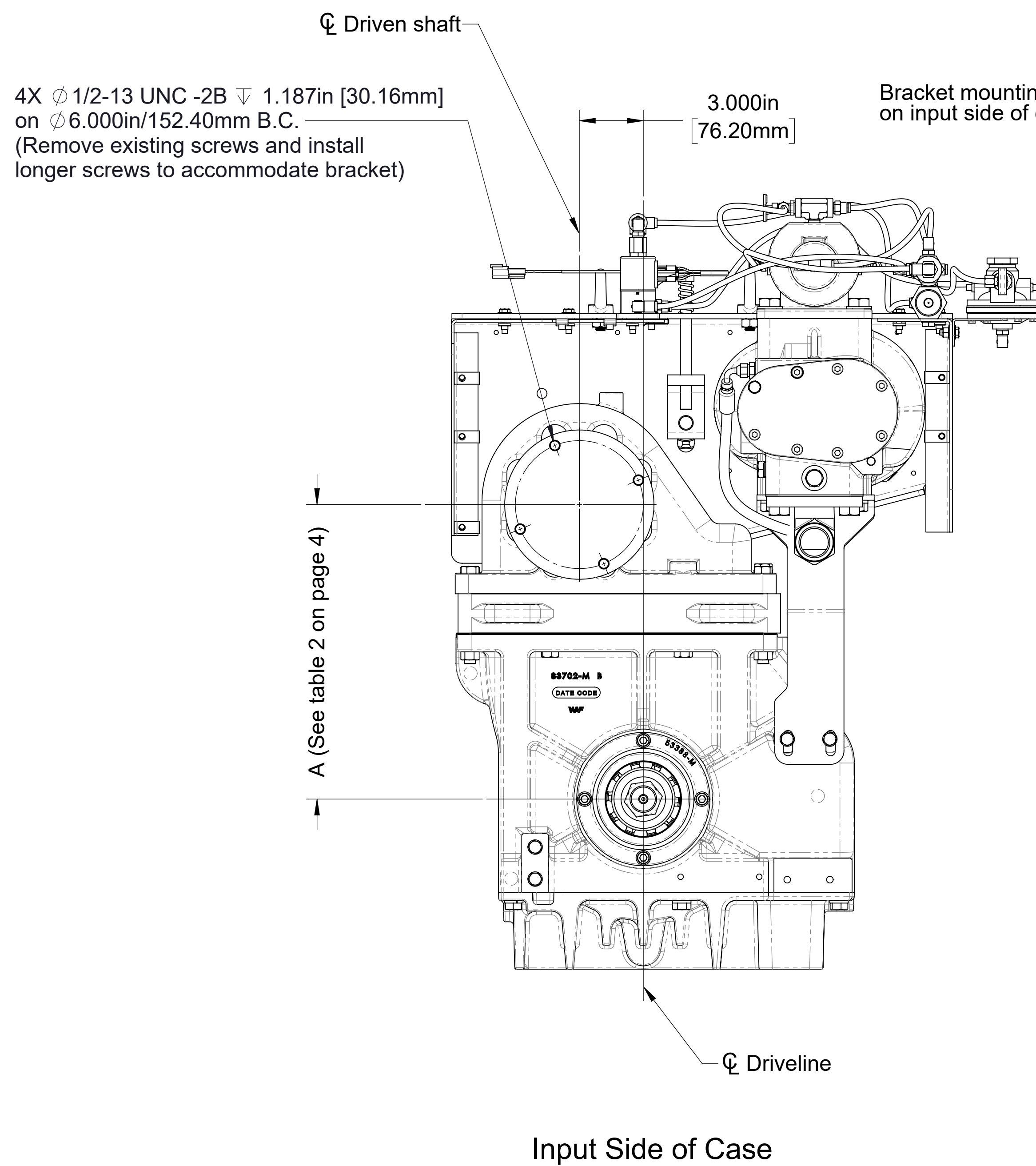
TC22E Model
(2.27 ratio shown)



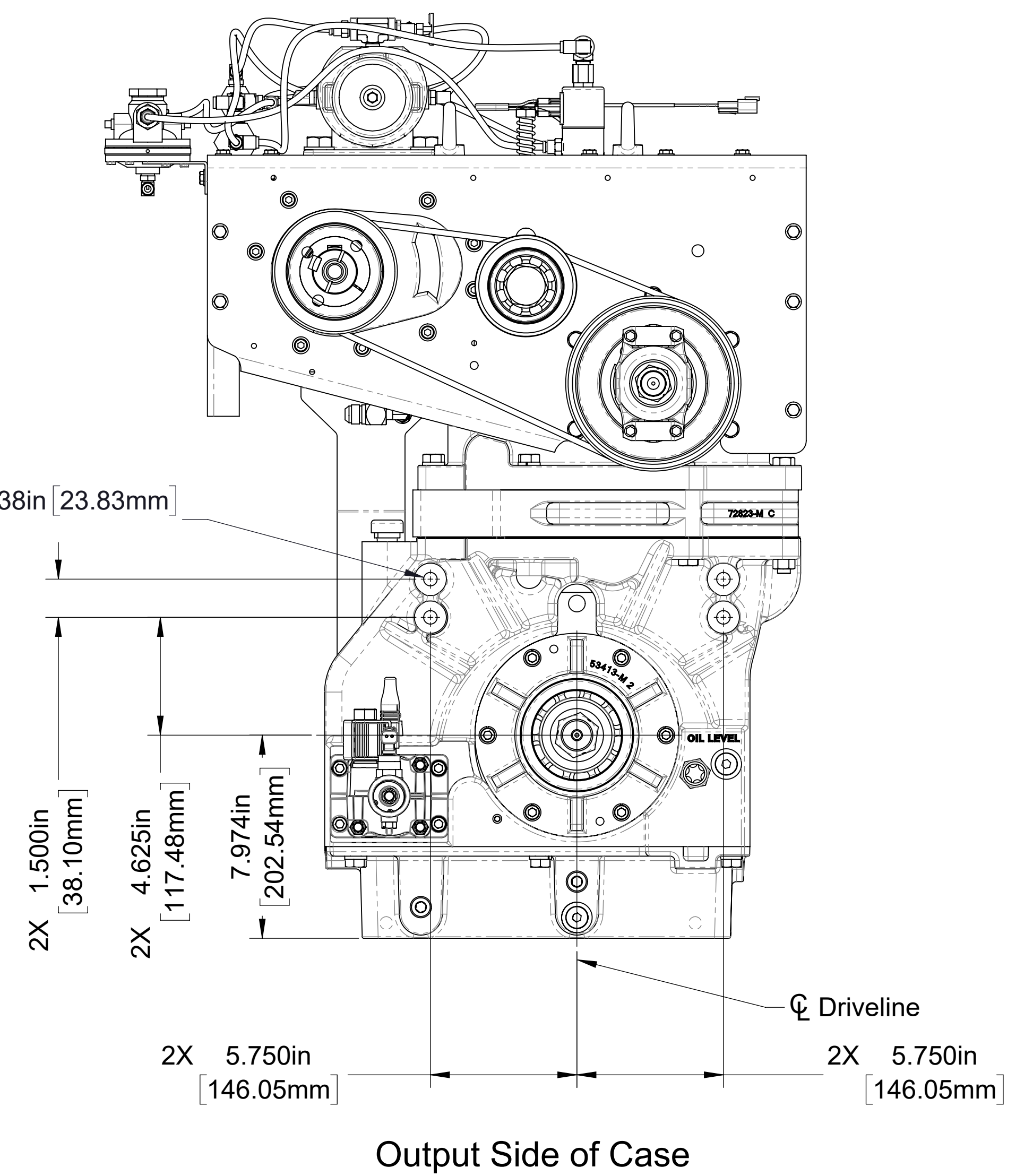
TC22F Model
(2.27 ratio shown)

Table 2 - Available Ratios										
Drive to Driven Ratio	TC22B		TC22C		TC22D		TC22E		TC22F	
	Dimension A	Dimension B	Dimension A	Dimension B	Dimension A	Dimension B	Dimension A	Dimension B	Dimension A	Dimension B
1.14	11.875/301.63	25.576/649.63	13.929/353.80	28.630/727.20	14.959/379.96	29.660/753.36	16.995/431.67	31.696/805.08	19.027/483.29	33.728/856.69
1.27	12.250/311.15	26.951/684.56	14.312/363.52	29.013/736.93	14.825/376.56	29.526/749.96	16.861/428.27	31.562/801.67	18.892/479.86	33.593/853.26
1.41	11.840/300.74	26.541/674.14	13.899/353.03	28.600/726.44	14.931/379.25	29.632/752.65	16.971/431.06	31.672/804.47	19.002/482.65	33.703/856.06
1.48	12.326/313.08	27.027/686.49	13.878/352.50	28.579/725.91	14.907/378.64	29.608/752.04	16.951/430.56	31.652/803.96	18.981/482.12	33.682/855.52
1.58	12.205/310.01	26.906/683.41	13.756/349.40	28.457/722.81	14.788/375.62	29.489/749.02	16.830/427.48	31.531/800.89	18.861/479.07	33.562/852.47
1.69	12.290/312.17	26.991/685.57	13.839/351.51	28.540/724.92	14.876/377.85	29.577/751.26	16.932/429.84	31.624/803.25	18.961/481.61	33.662/855.01
1.79	11.958/303.73	26.659/677.14	14.045/356.74	28.746/730.15	15.072/382.83	29.773/756.23	17.127/435.03	31.828/808.43	19.168/468.87	33.869/860.27
1.88	12.129/308.08	26.830/681.48	13.690/347.73	28.391/721.13	14.717/373.81	29.418/747.22	16.773/426.03	31.474/799.44	18.809/477.75	33.510/851.15
1.97	12.306/312.57	27.007/685.98	13.870/352.30	28.571/725.70	14.912/378.76	29.613/752.17	16.970/431.04	31.671/804.44	19.012/482.90	33.713/856.31
2.03	11.896/302.16	26.597/675.56	13.984/355.19	28.685/728.60	15.028/381.71	29.729/755.12	17.086/433.98	31.787/807.39	19.132/485.95	33.833/859.36
2.27	12.240/310.90	26.941/684.30	13.811/350.80	28.512/724.20	14.856/377.34	29.557/750.75	16.920/429.77	31.621/803.17	18.971/481.86	33.672/855.27
2.46	11.941/303.30	26.642/676.71	14.057/357.05	28.758/730.45	15.087/383.21	29.788/756.62	17.154/435.71	31.855/809.12	19.205/487.81	33.906/861.21
2.68	12.169/309.09	26.870/682.50	13.746/349.15	28.447/722.55	14.793/375.74	29.494/749.15	16.865/428.37	31.566/801.78	18.923/480.64	33.624/854.05

All dimensions shown as inch/millimeter

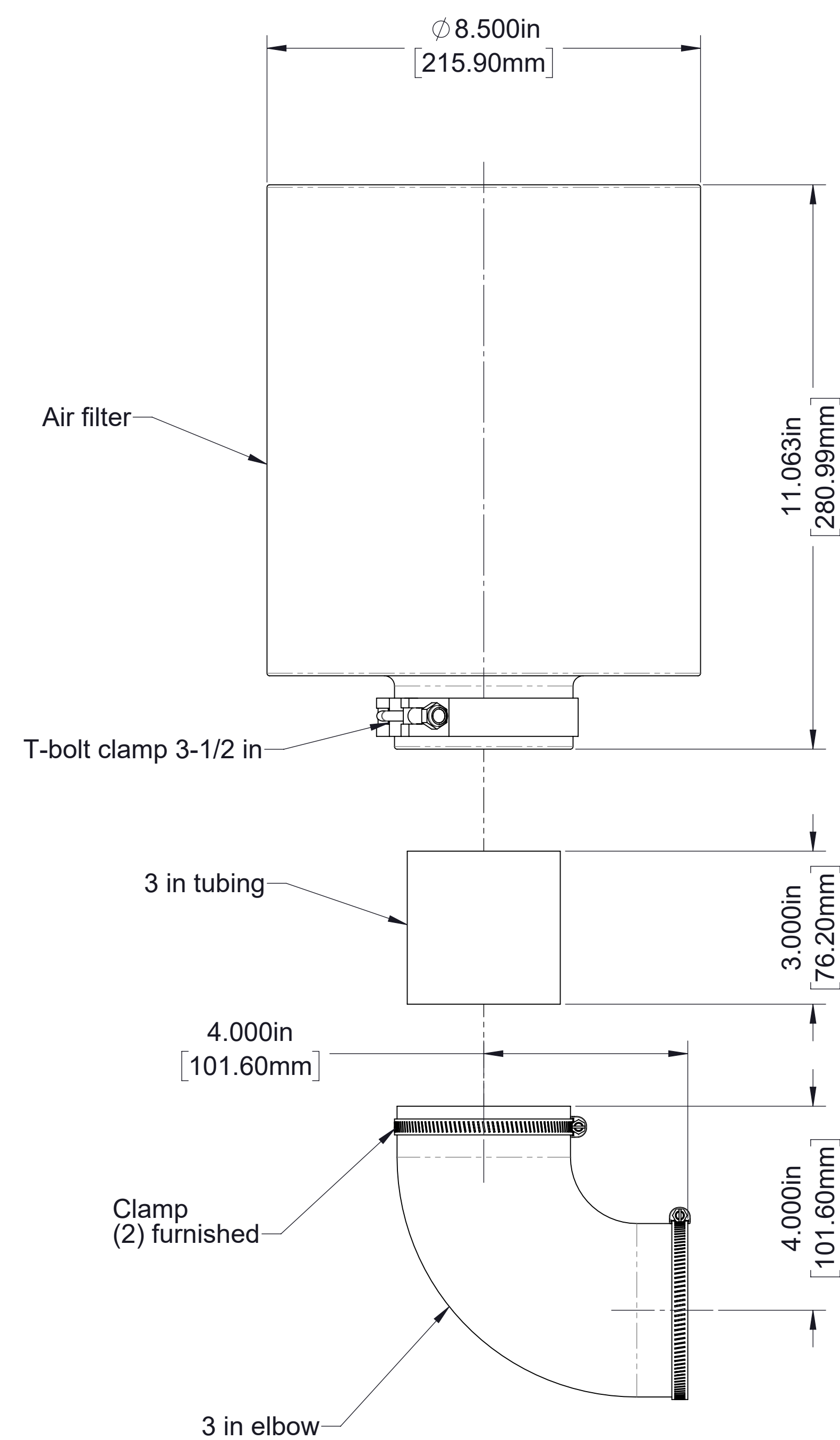


4X 5/8-11 UNC-2B ∇ .938in [23.83mm]
Mounting holes

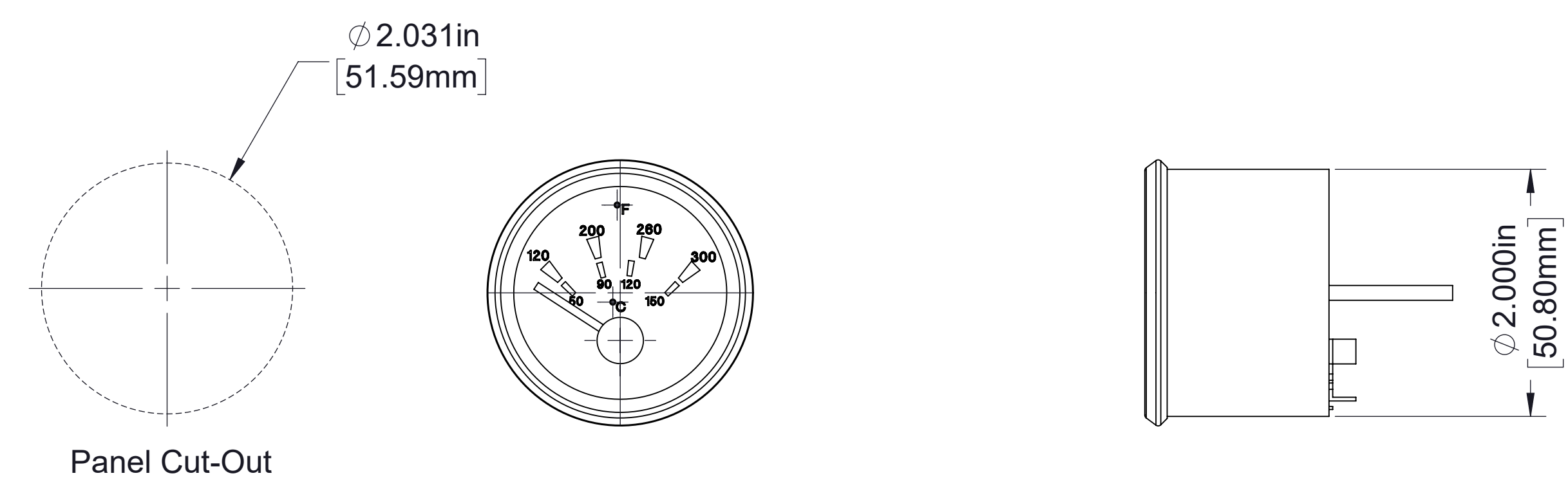


Mounting Bracket Attachment Locations

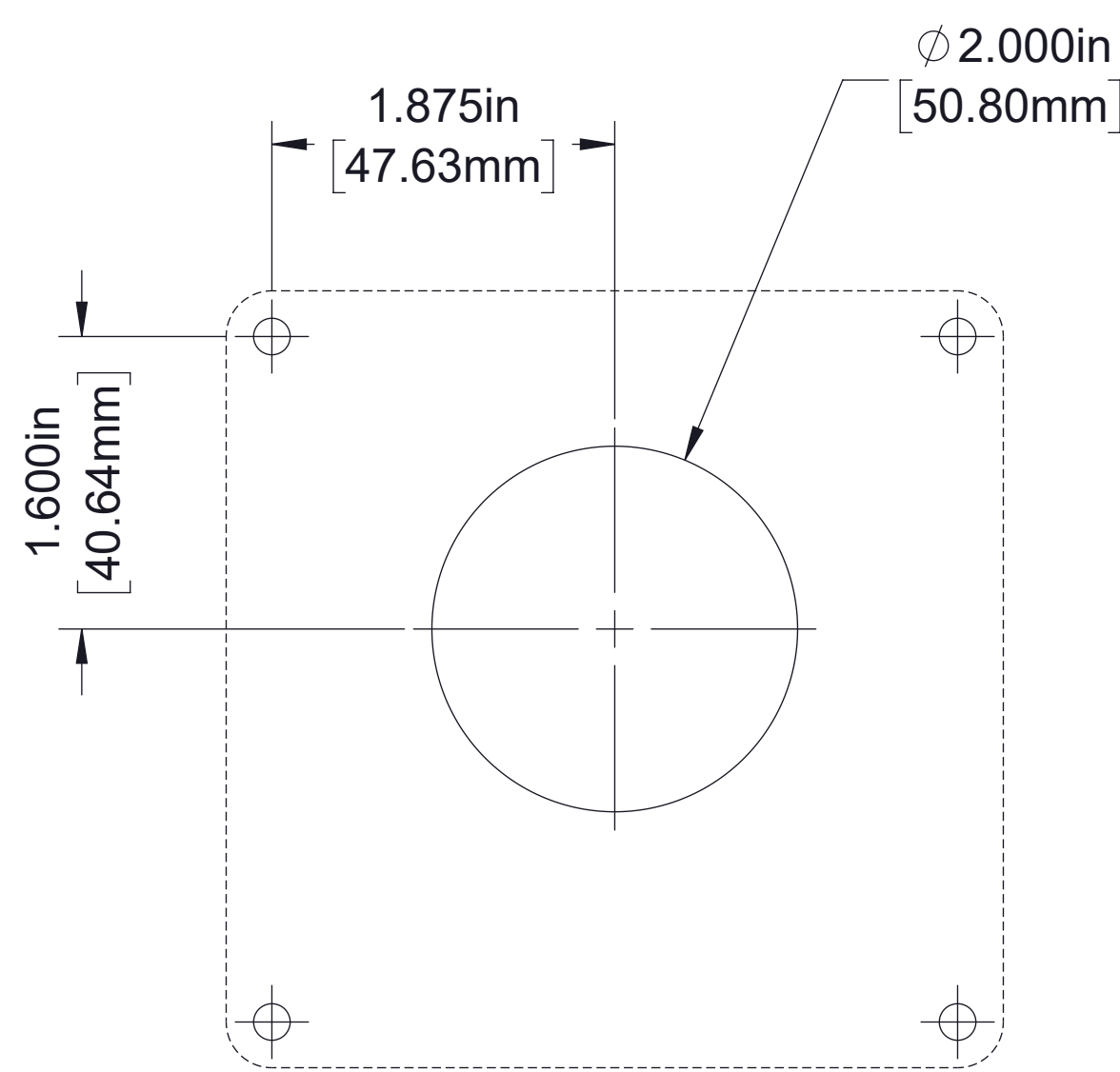
Brackets not furnished by Waterous



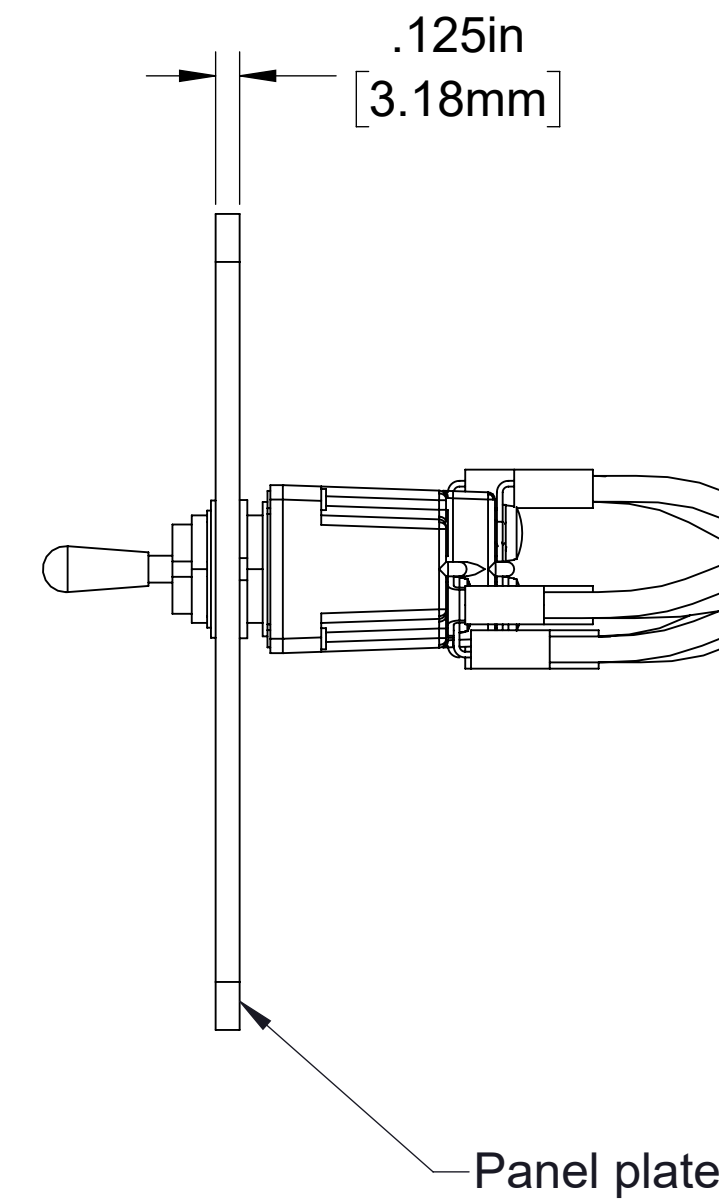
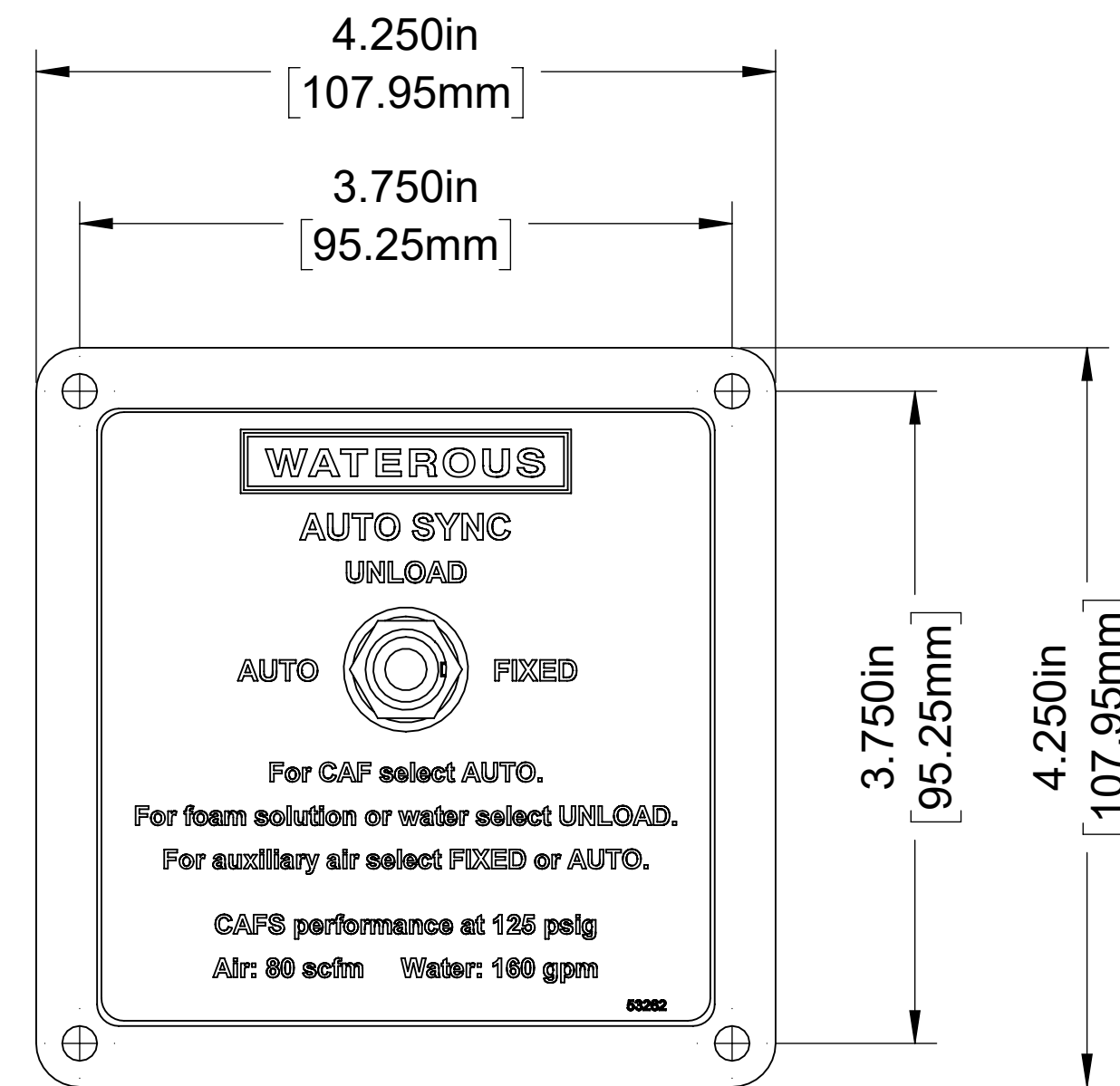
Air Filter



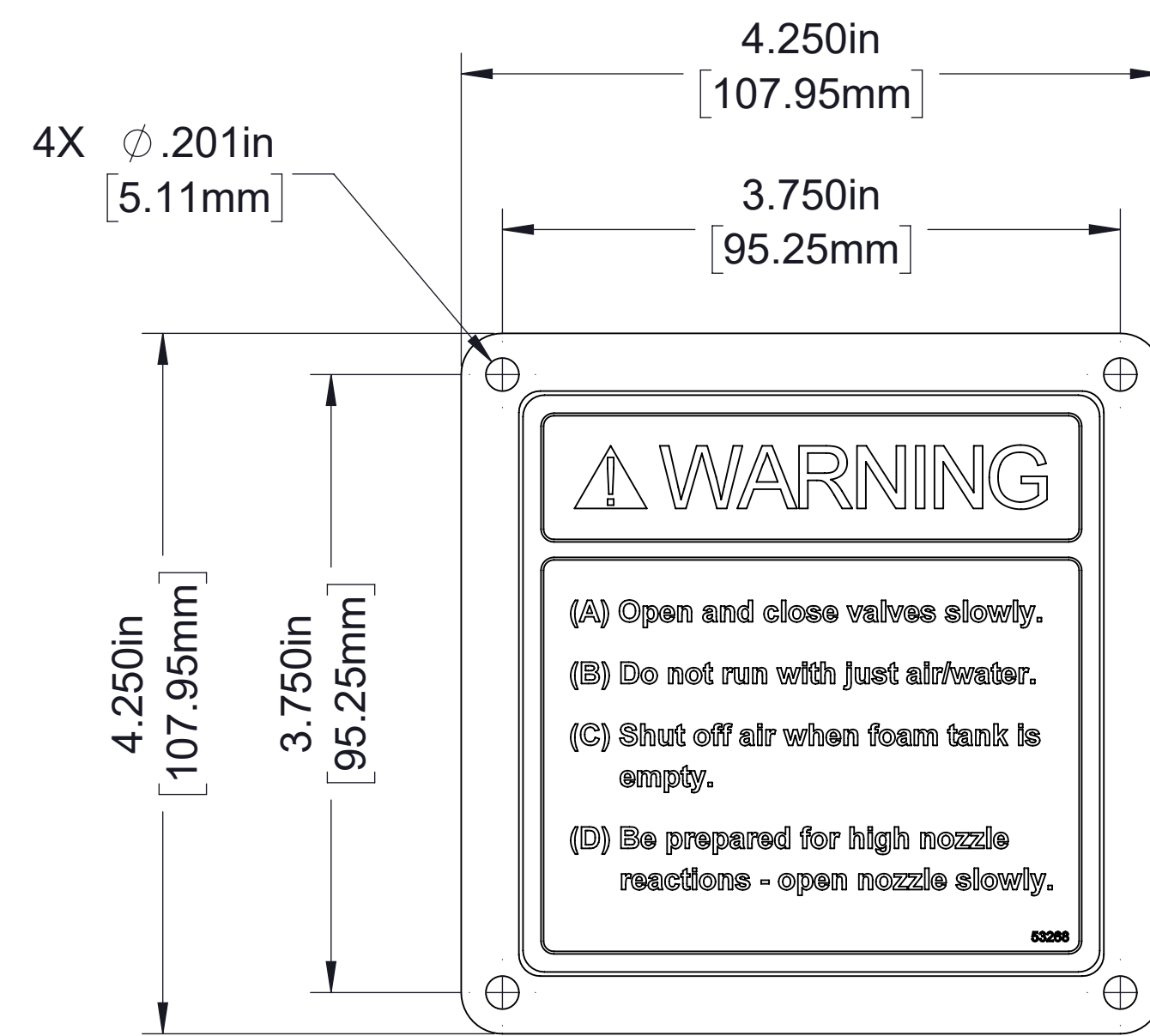
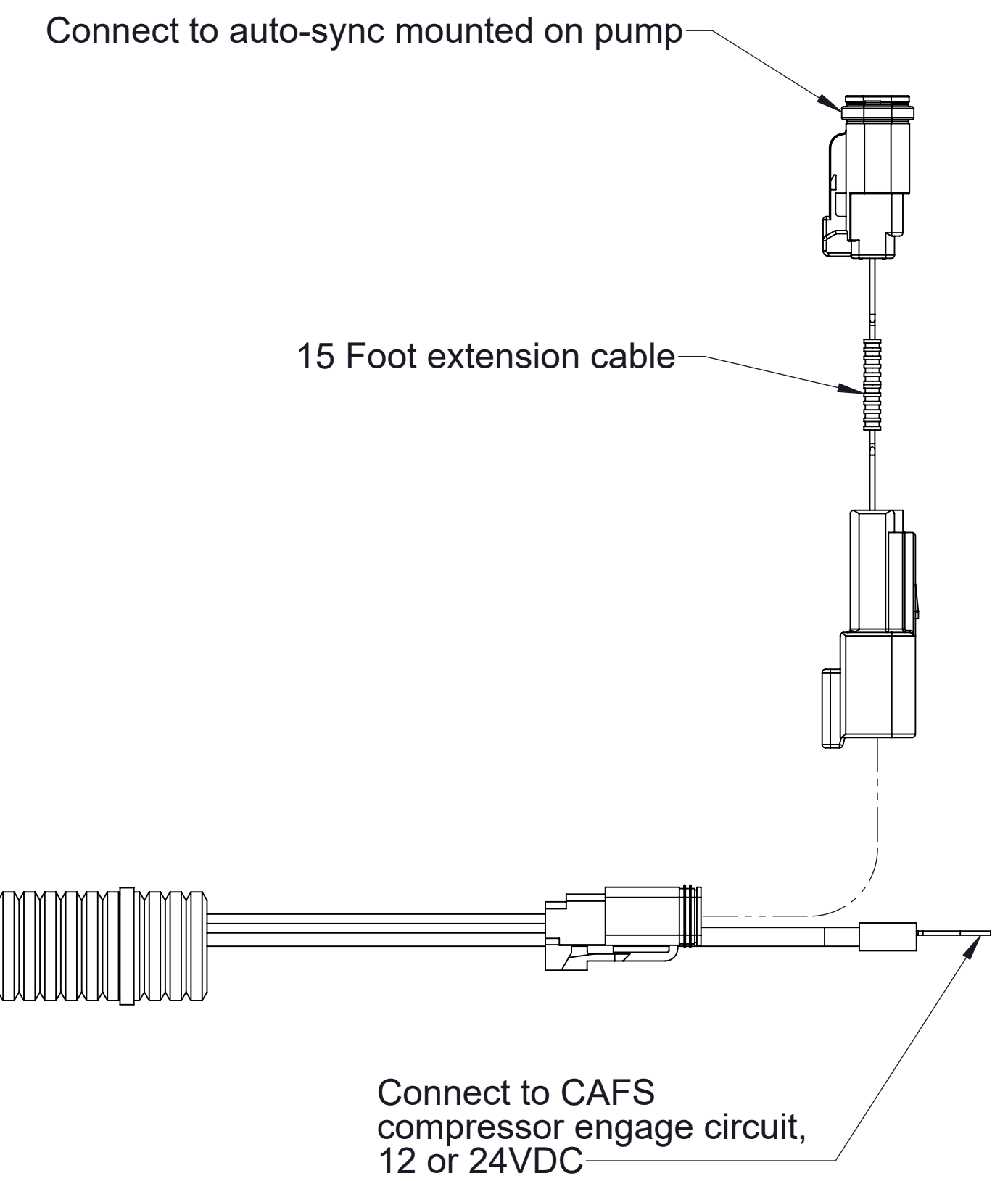
Oil Temperature Gauge
(Wiring to sump temperature sender not furnished by Waterous)



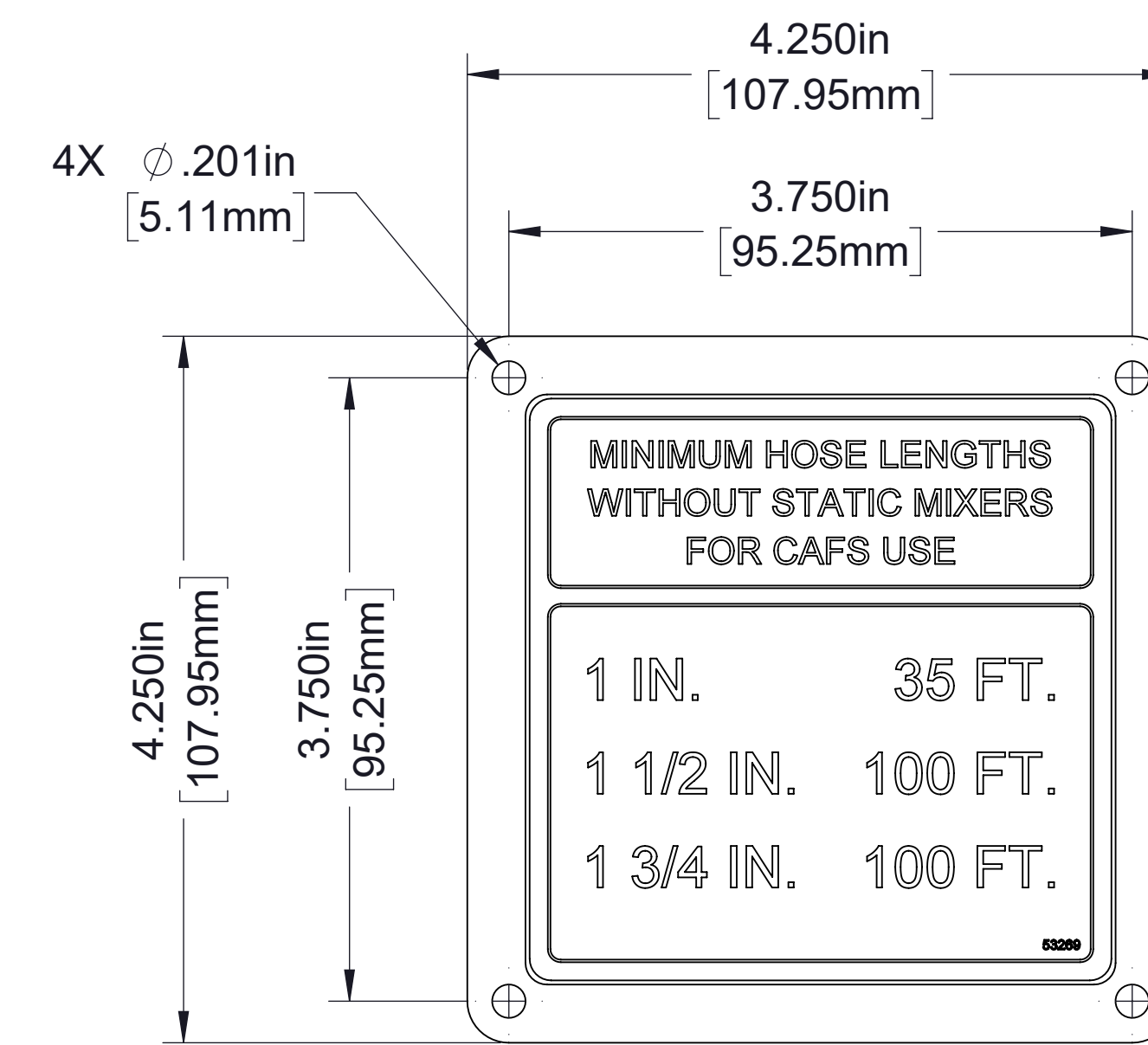
Panel Cut-Out



Auto-Sync

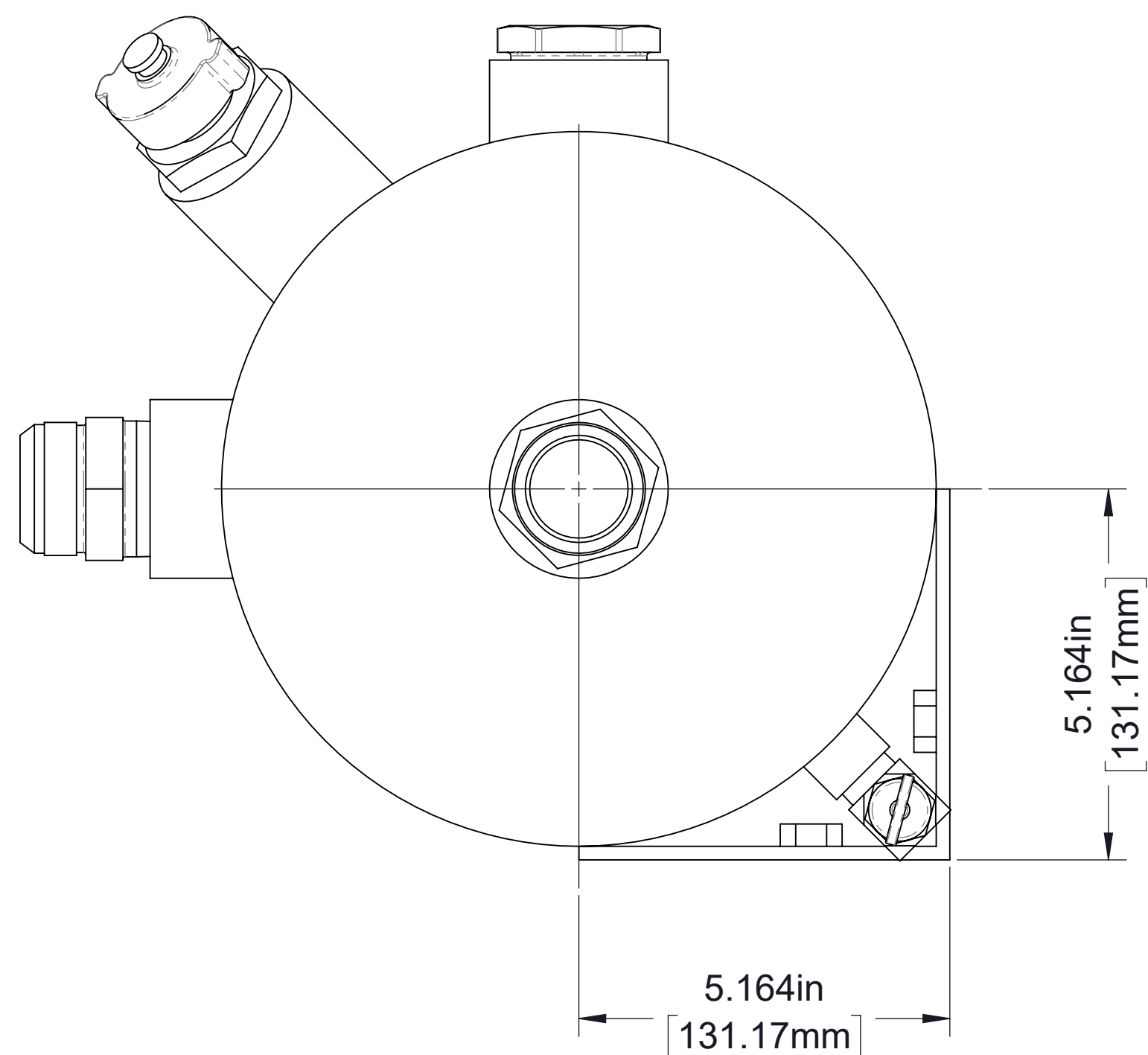


CAFS Warning

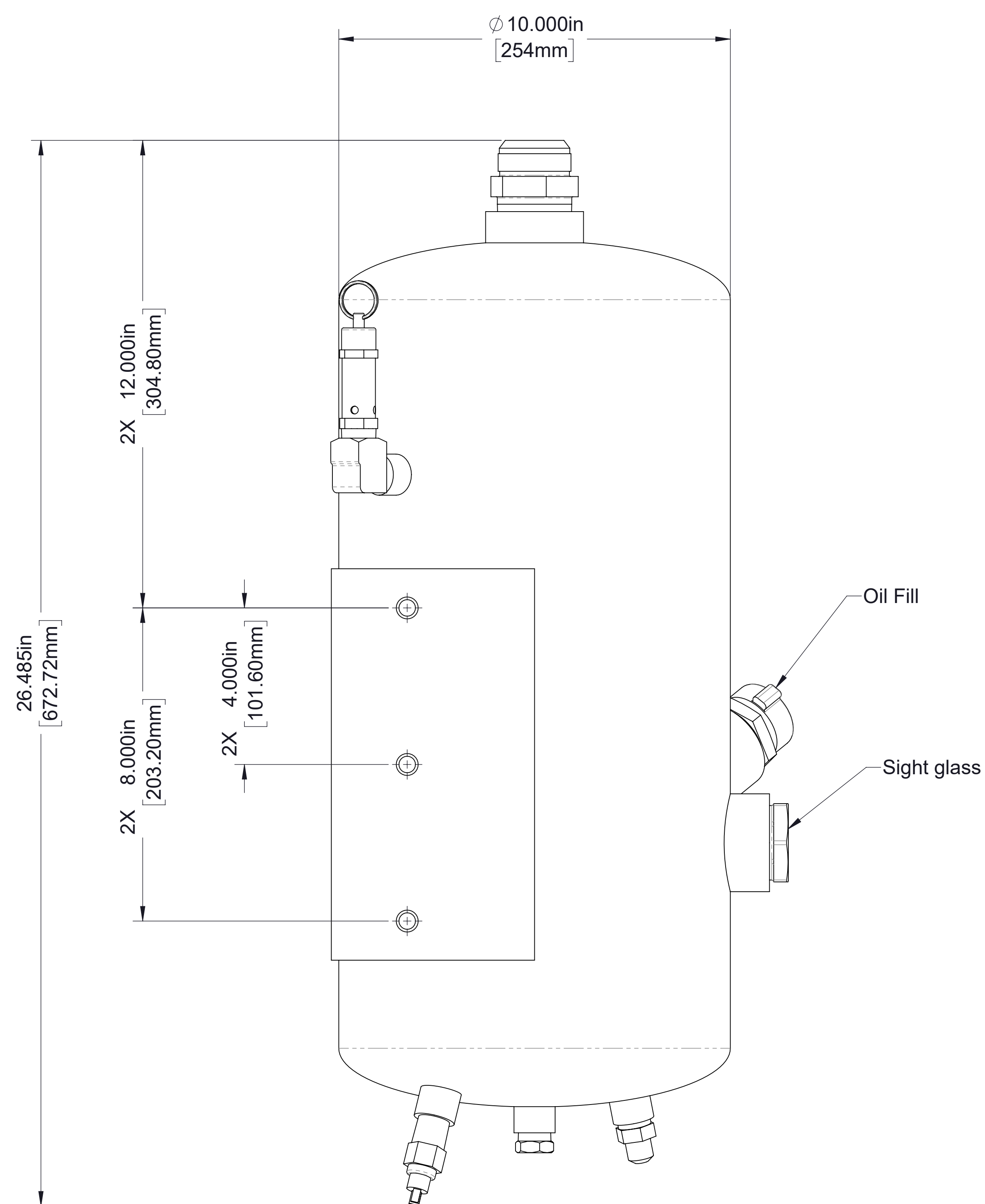
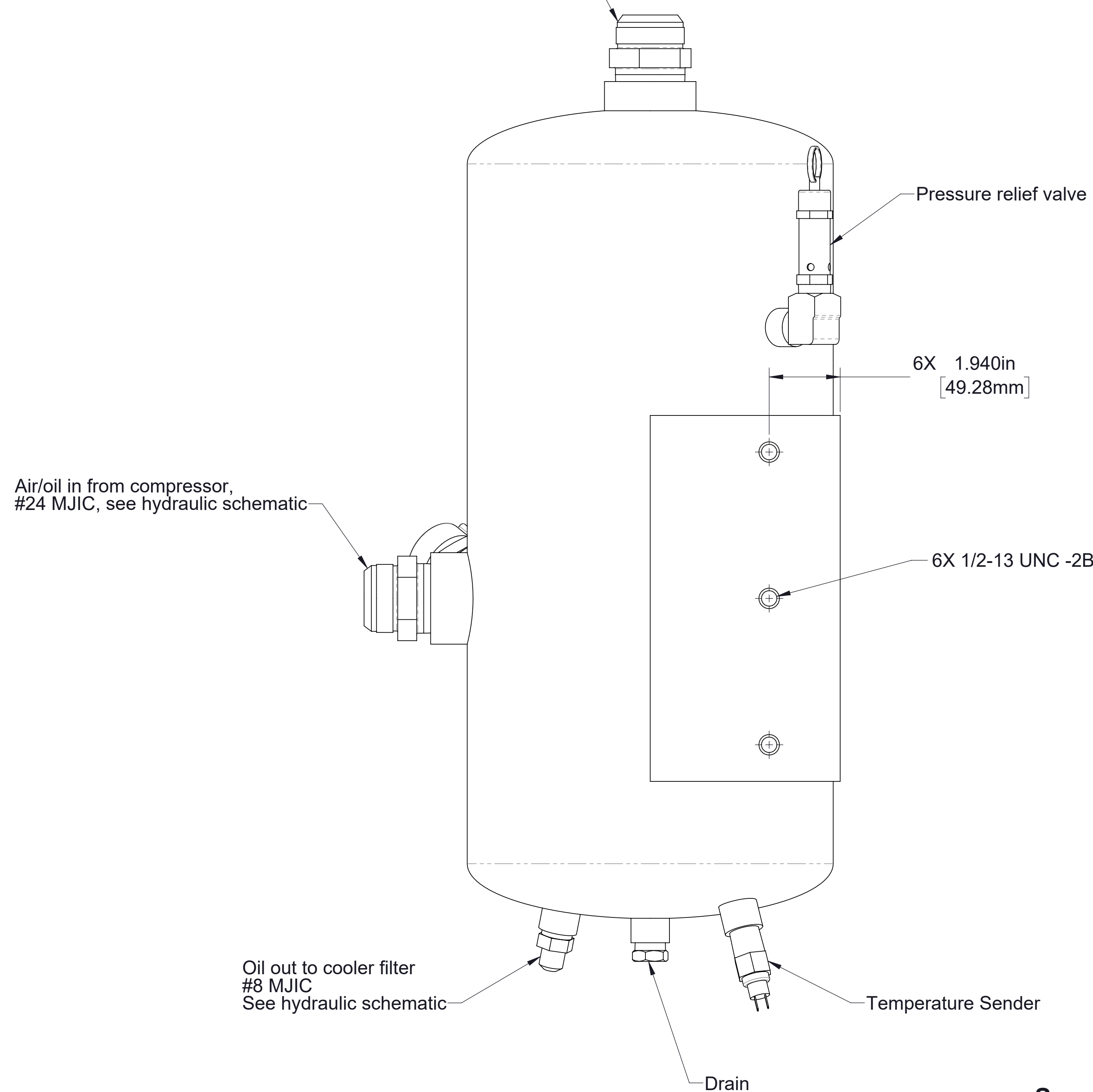


Hose Length

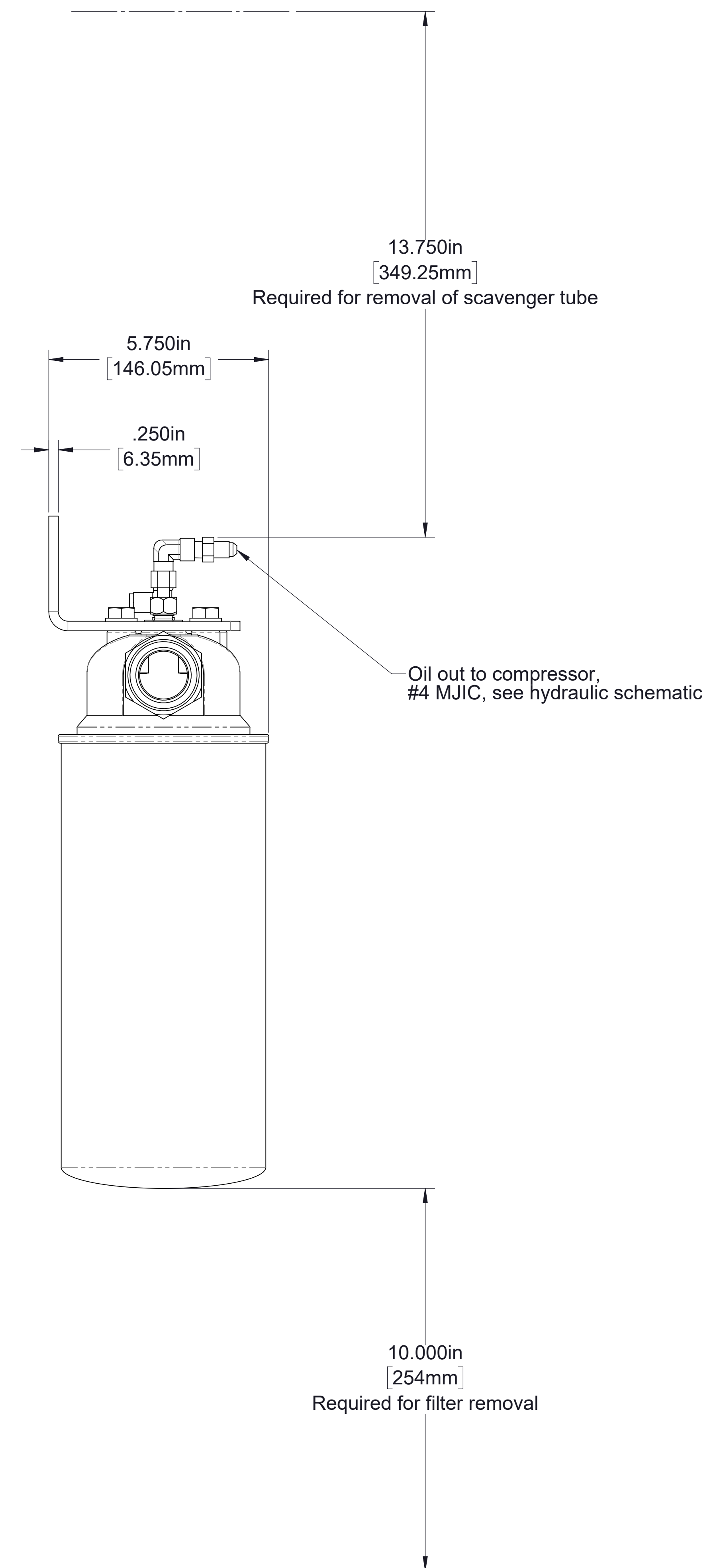
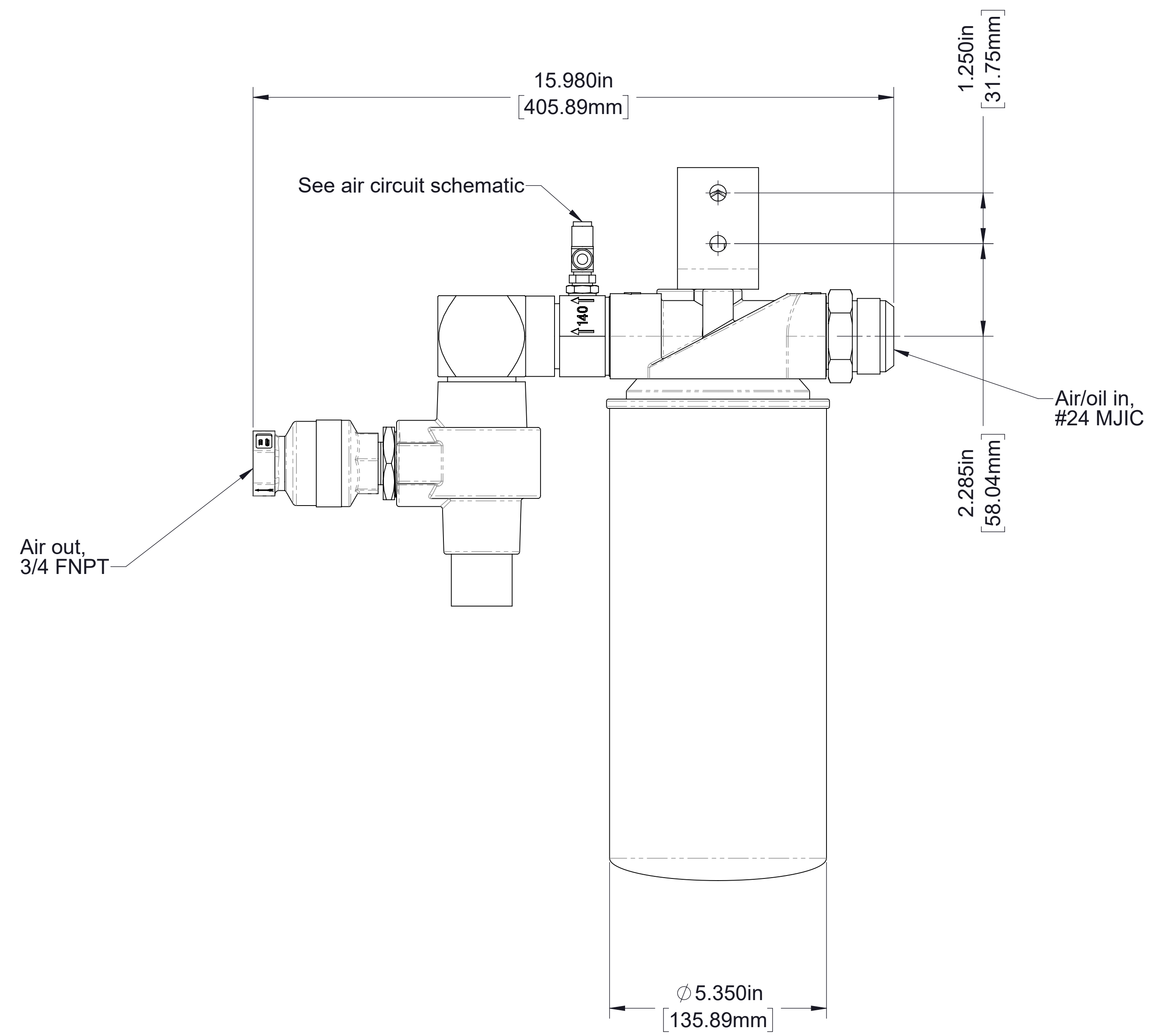
Panel Plates



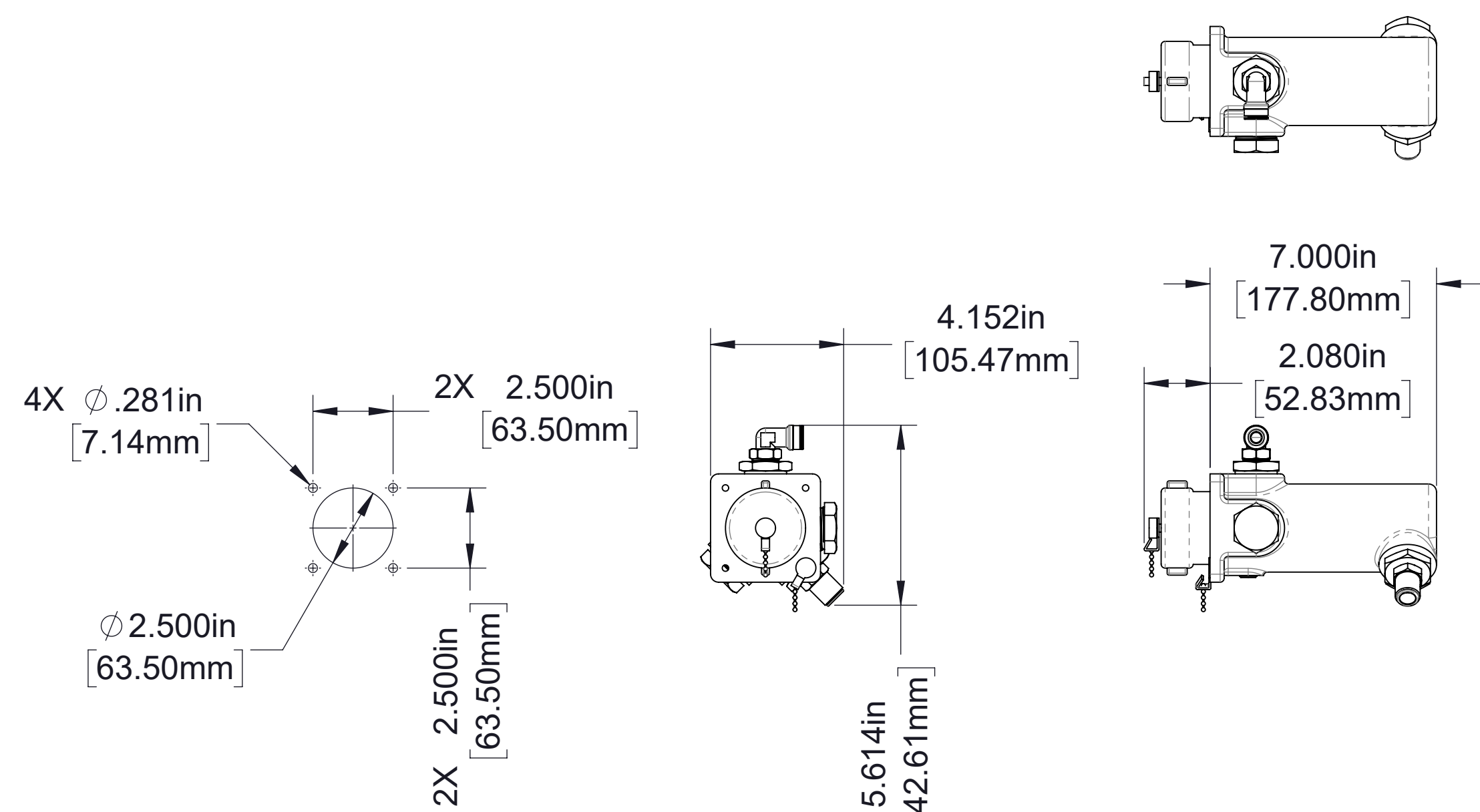
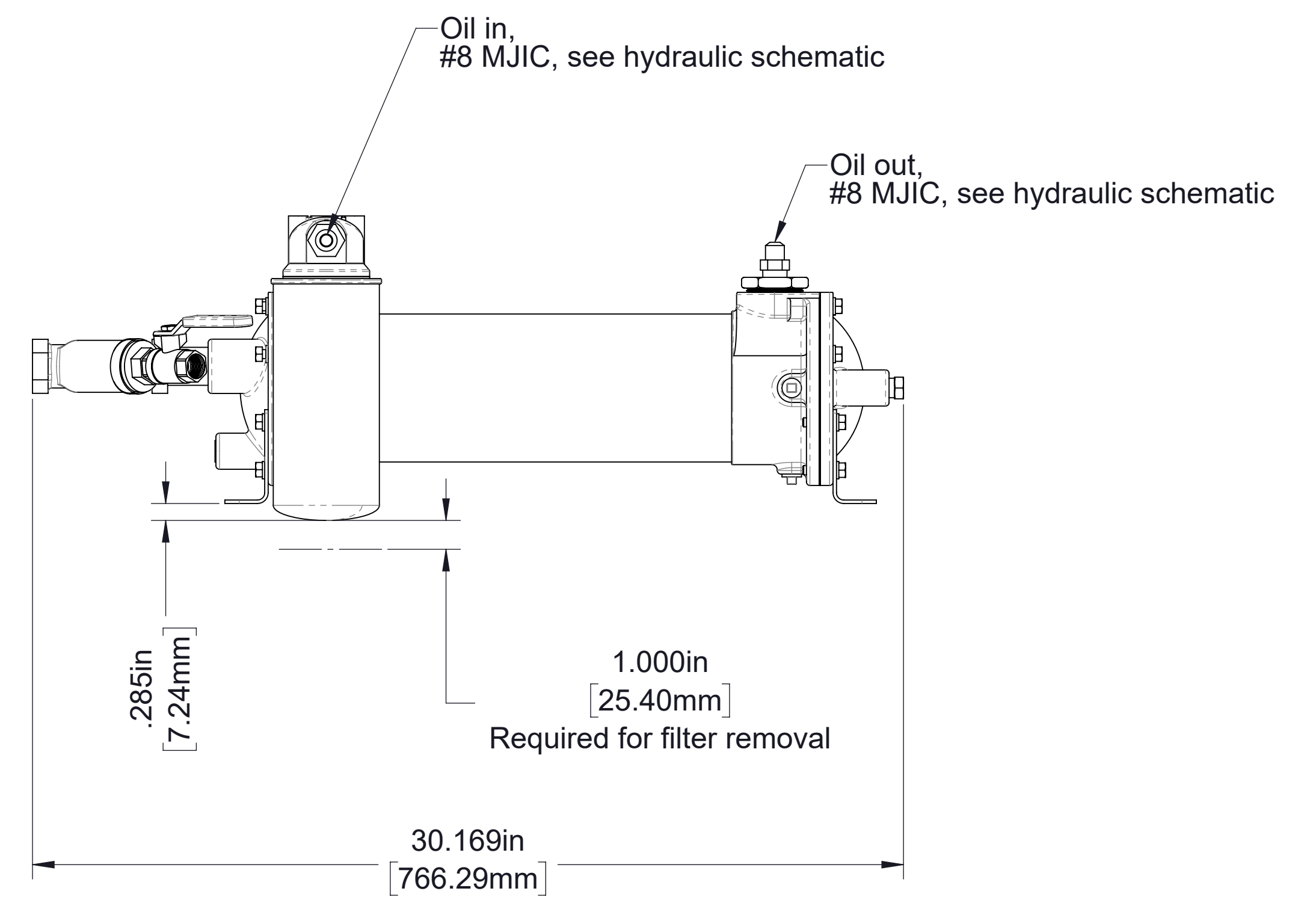
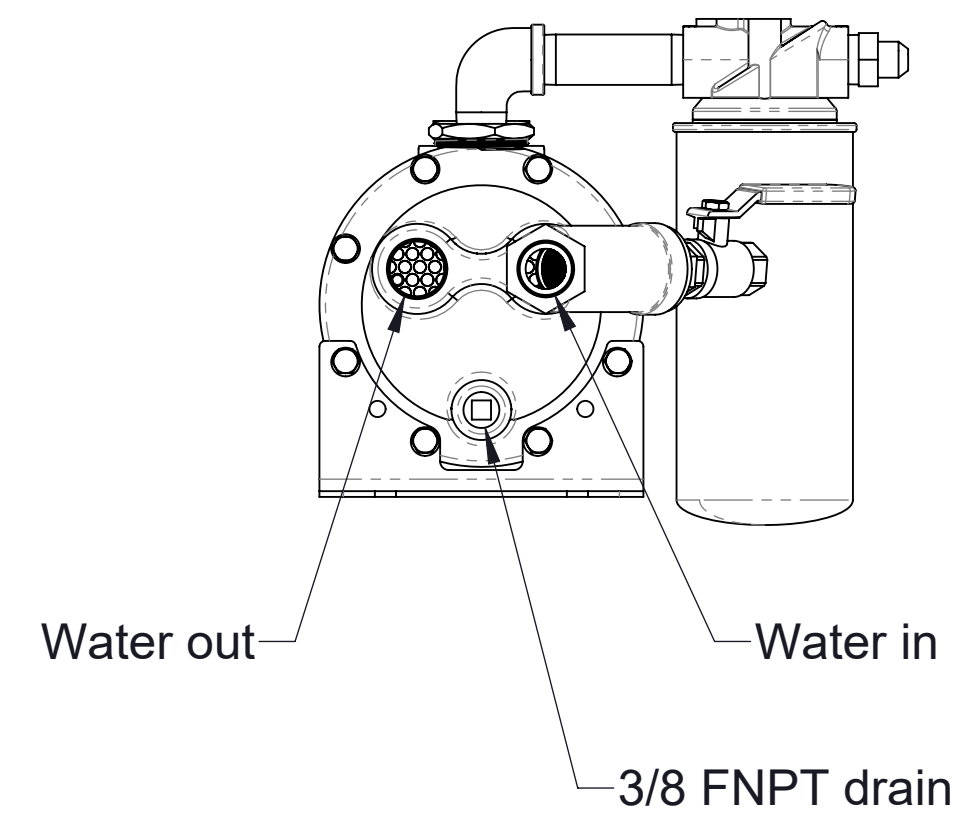
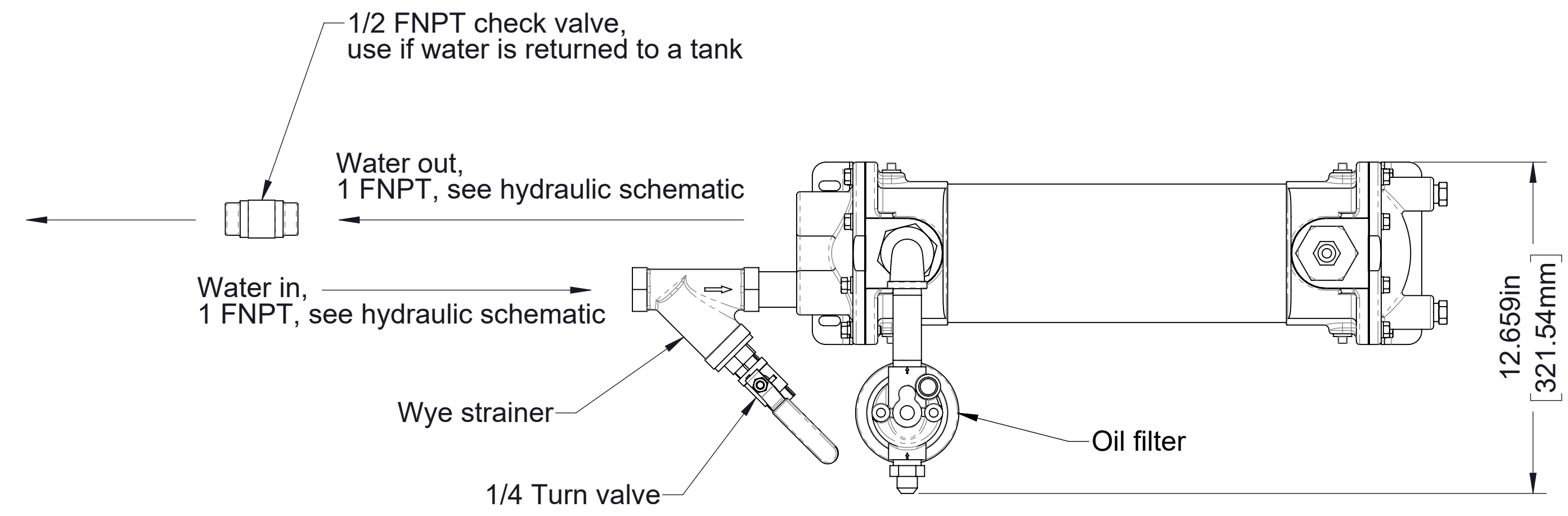
Air out to separator filter,
#24 MJIC, see hydraulic schematic
(Sump must be mounted with the #24 MJIC fitting facing up)



Sump (Oil Reservoir)

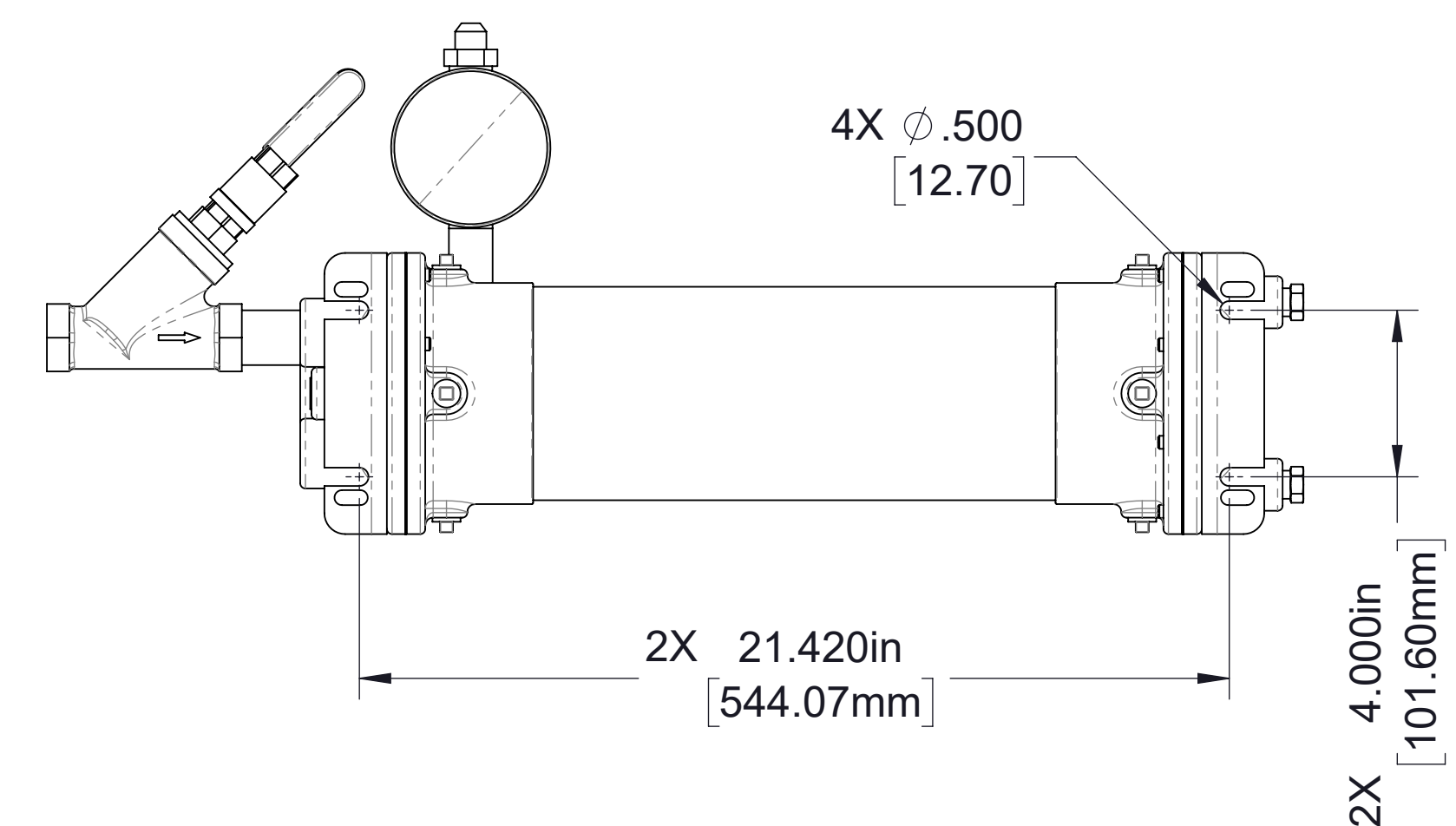


Separator Filter

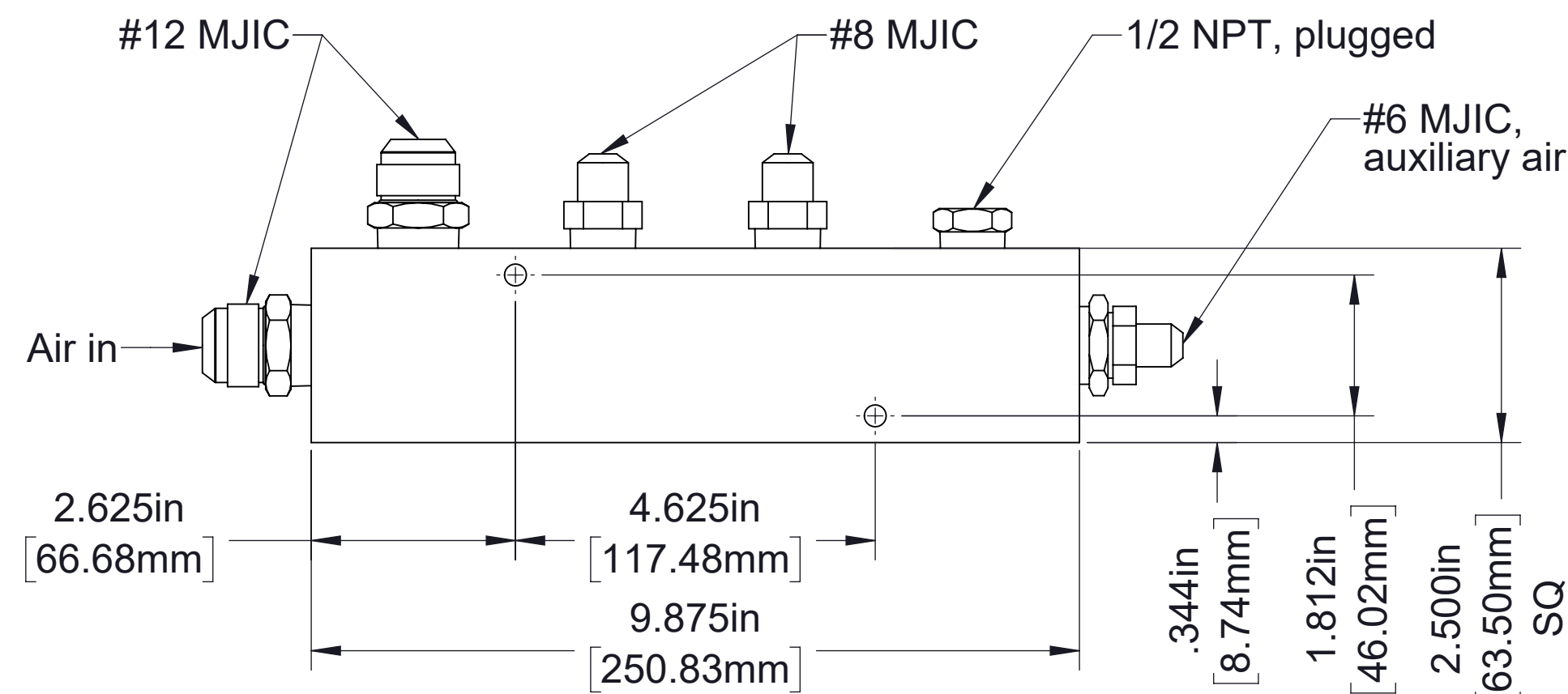
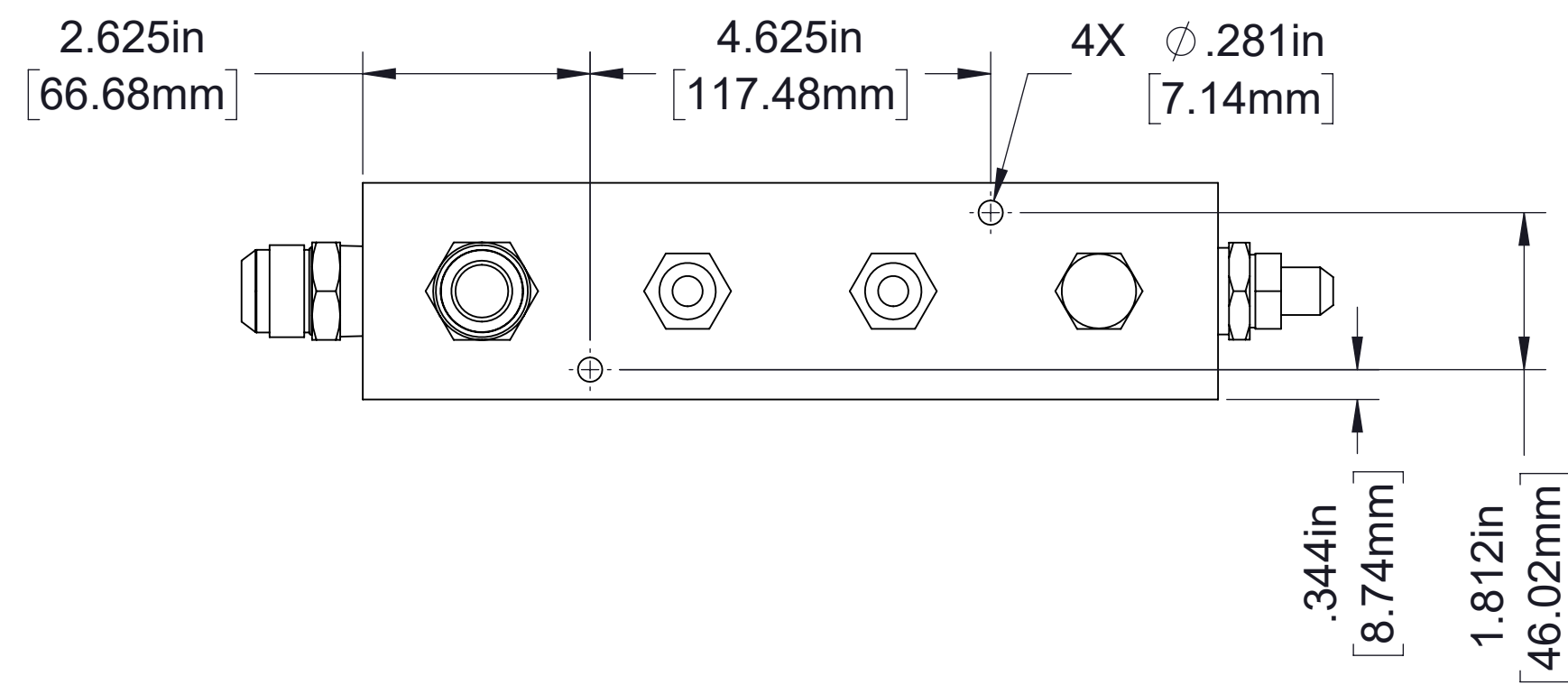


Panel Cut-Out

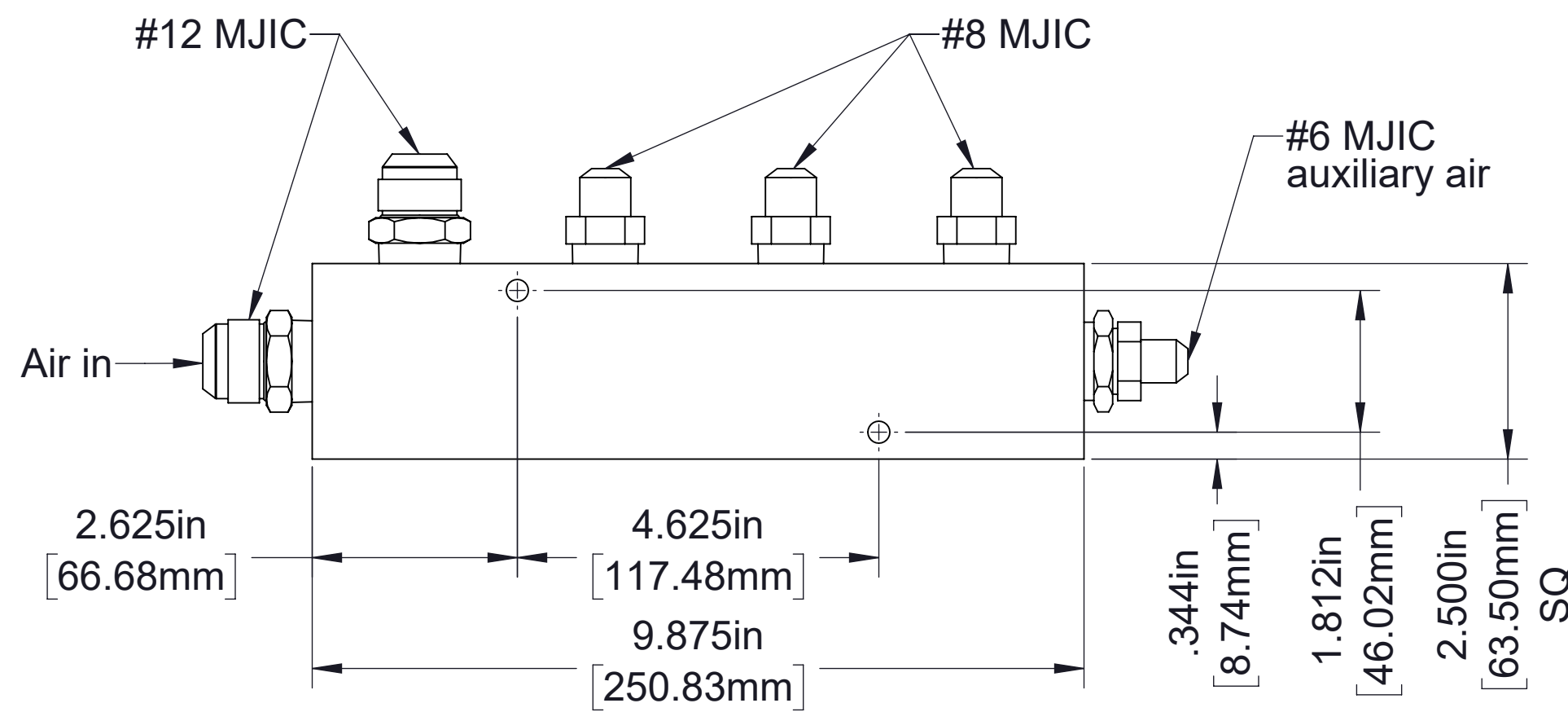
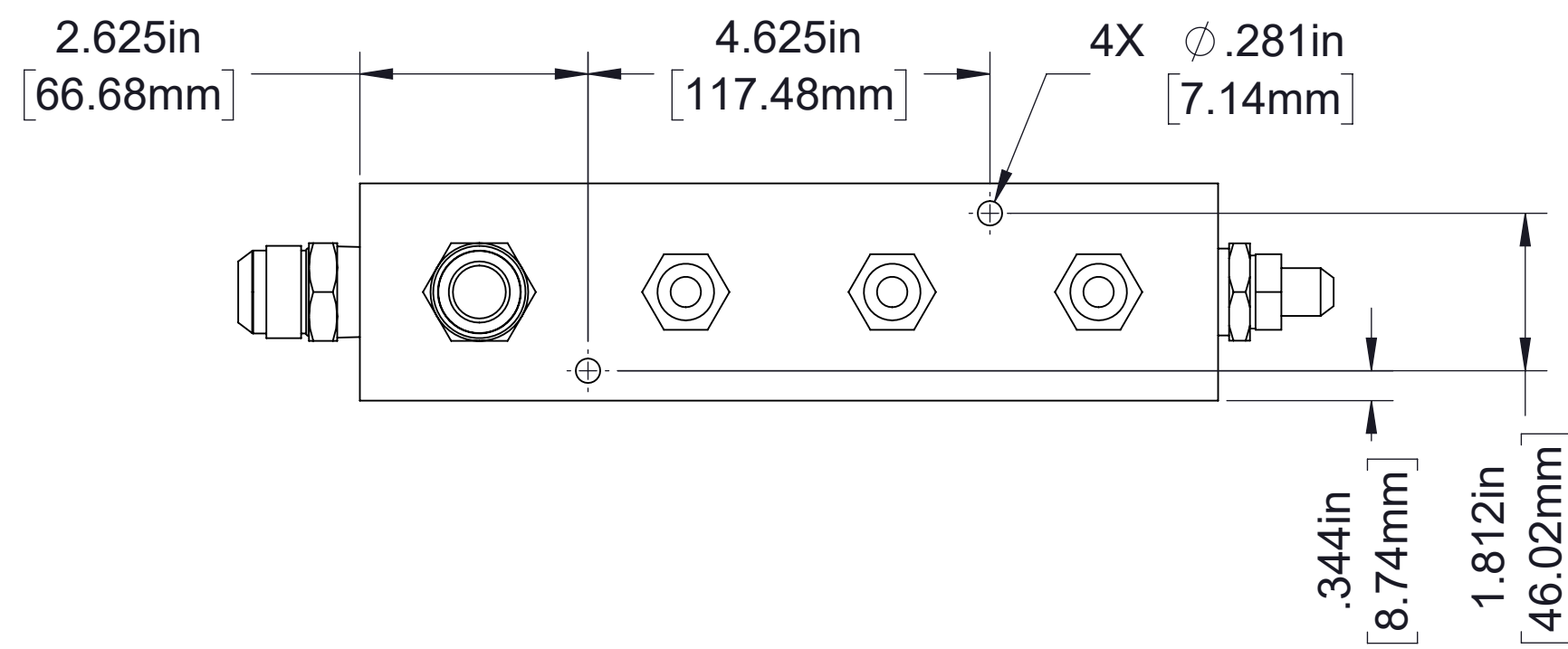
Optional Panel Mounted Strainer



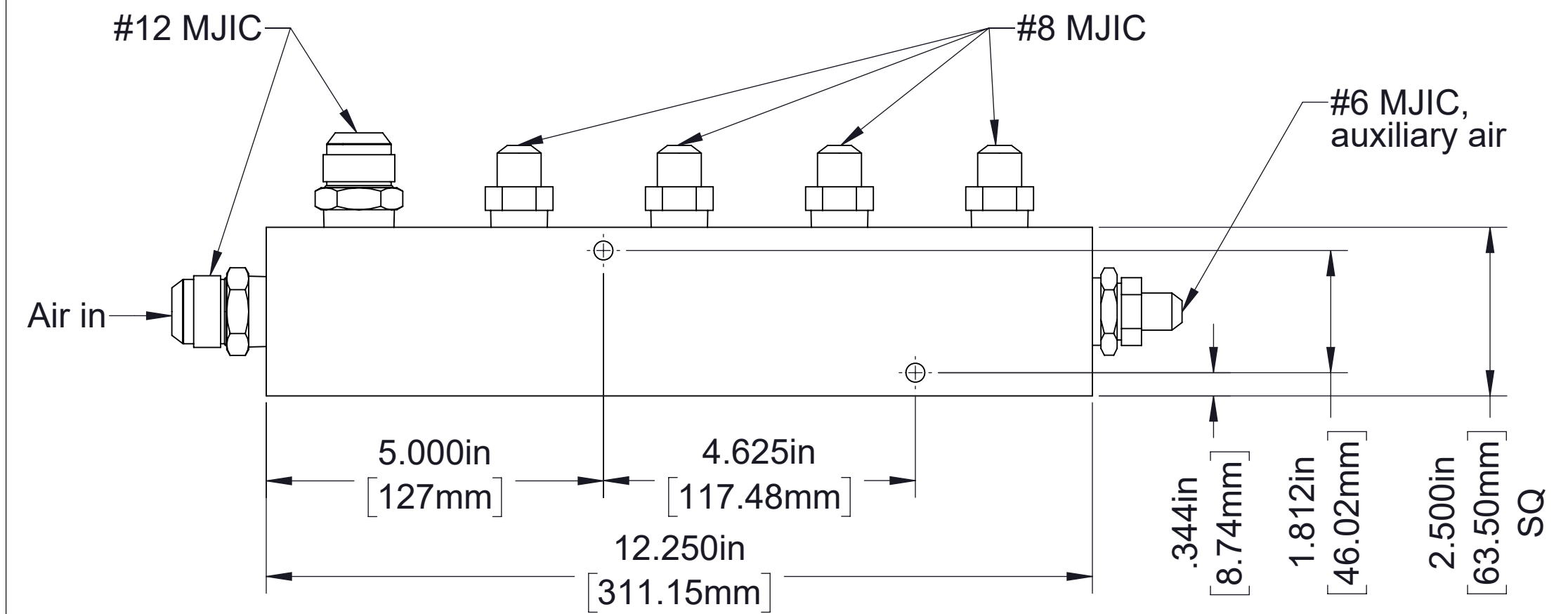
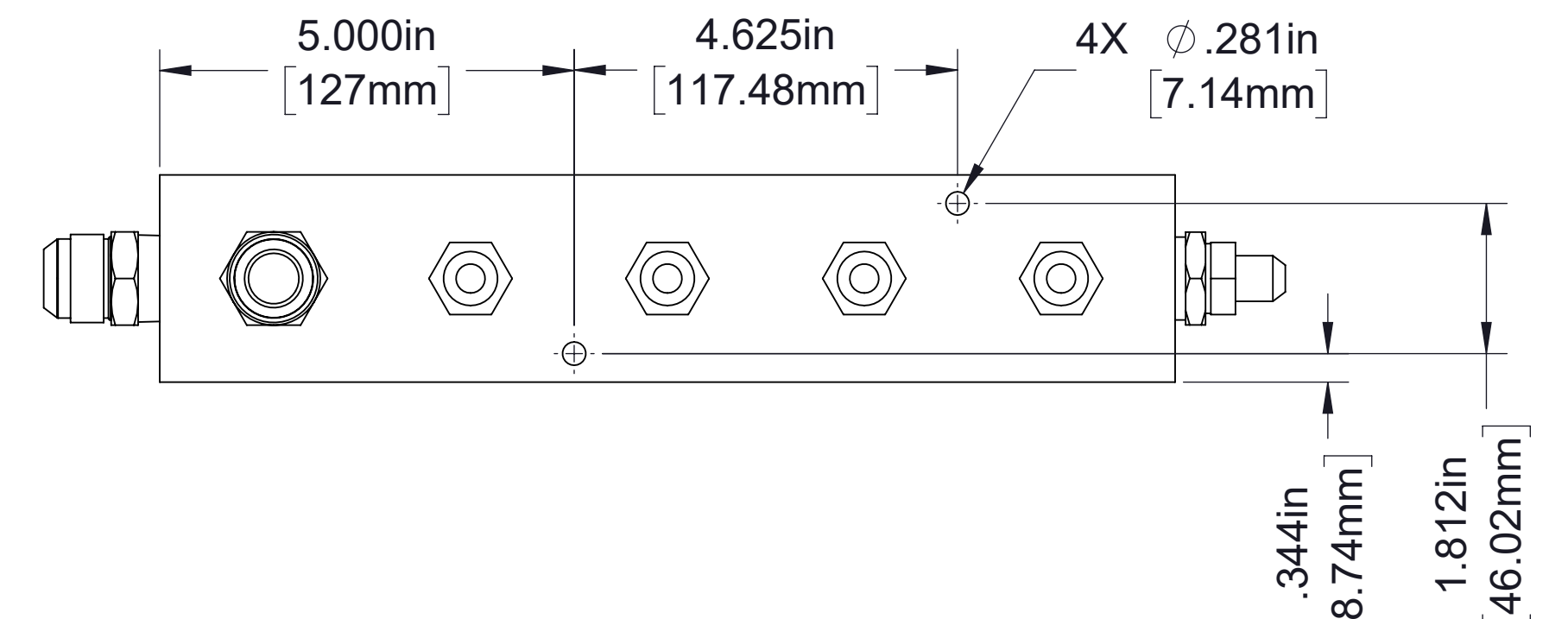
Oil Cooler



3 Port Manifold
Order part number 83360-1A

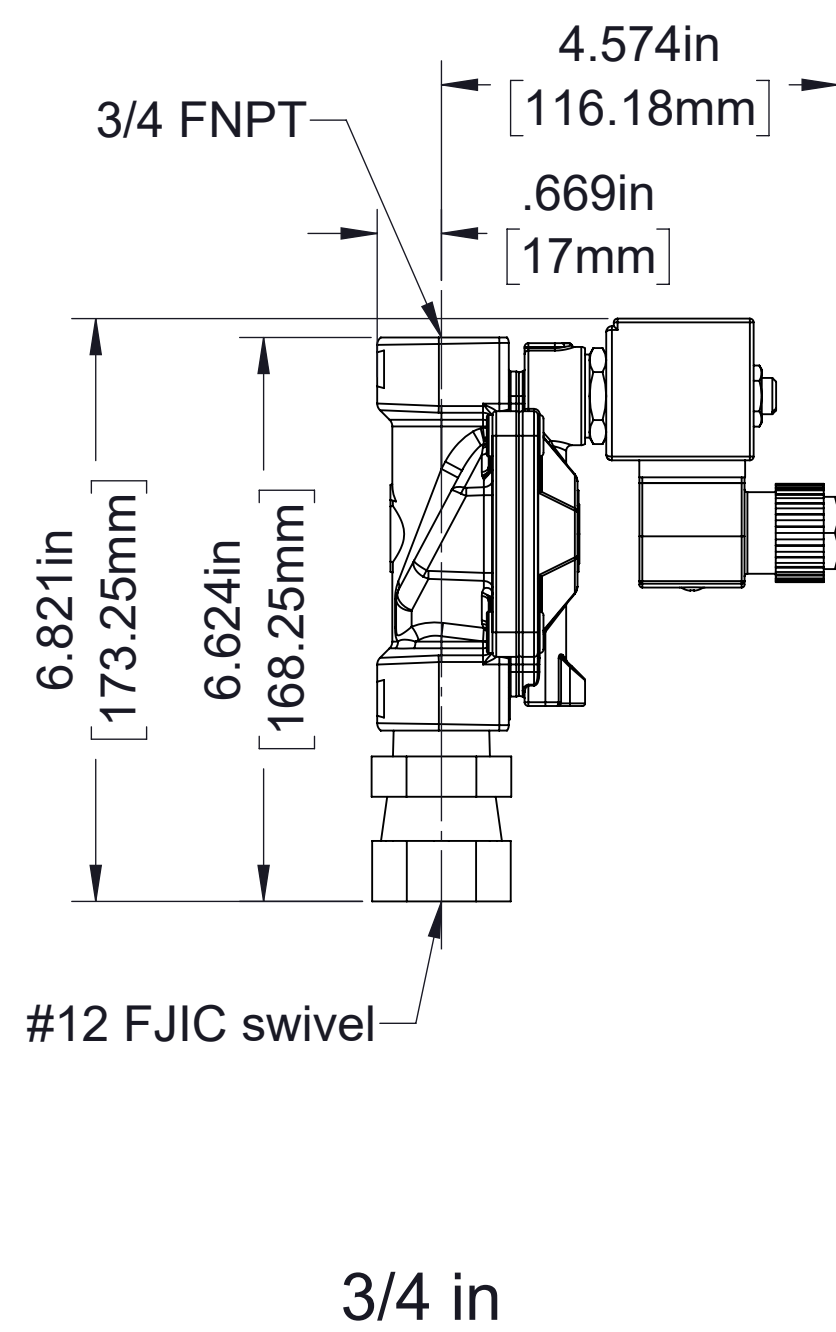
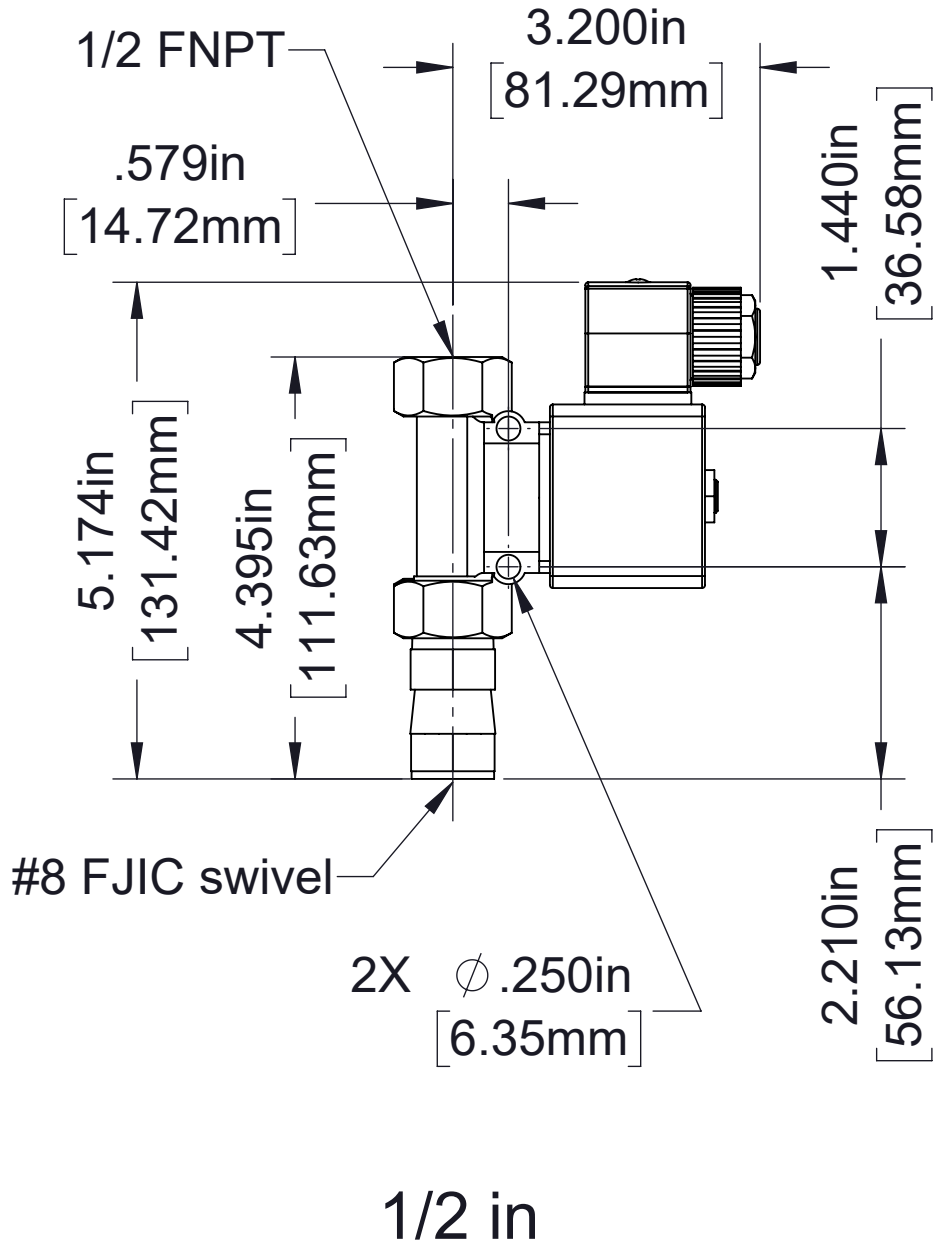


4 Port Manifold
Order part number 83360-1B

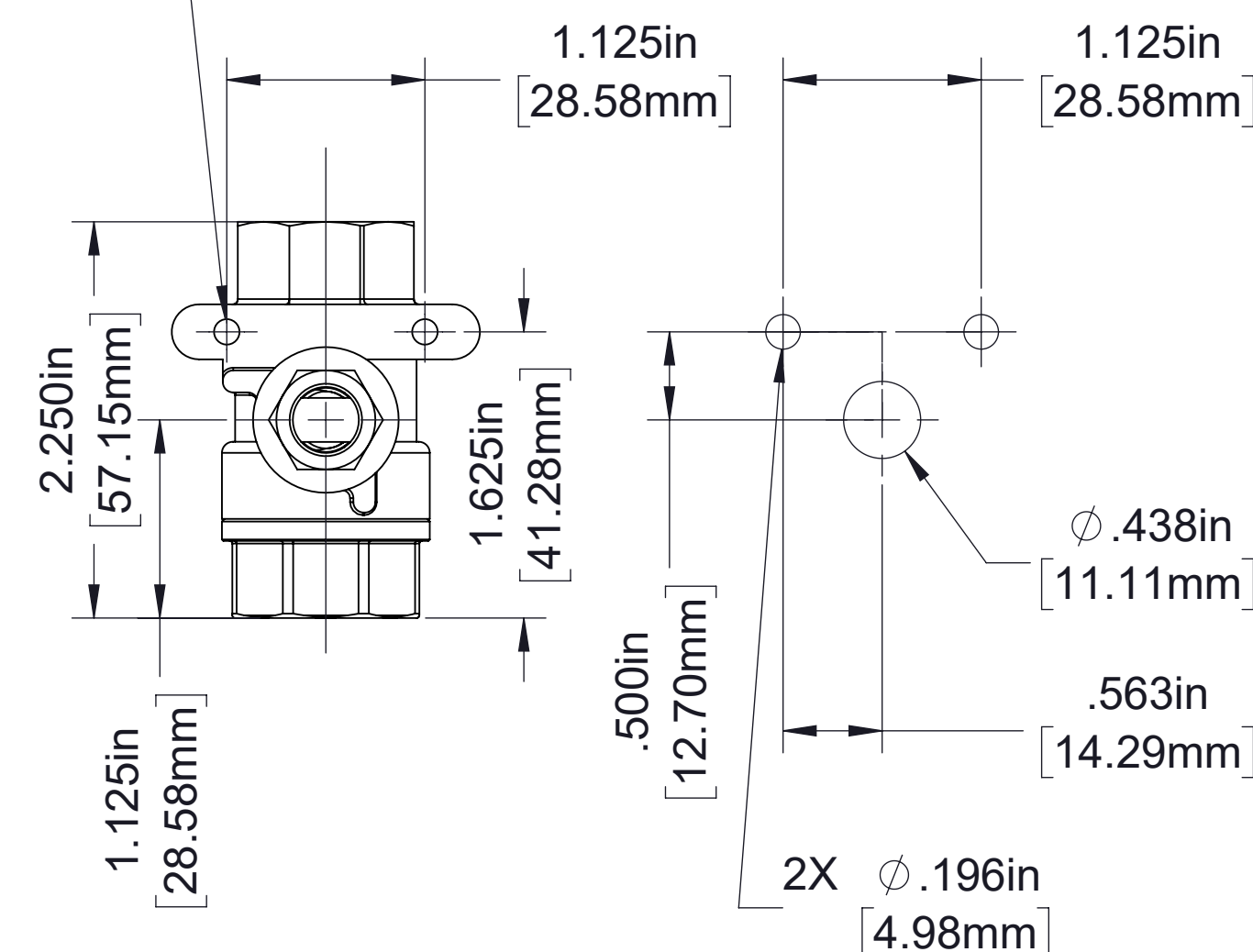
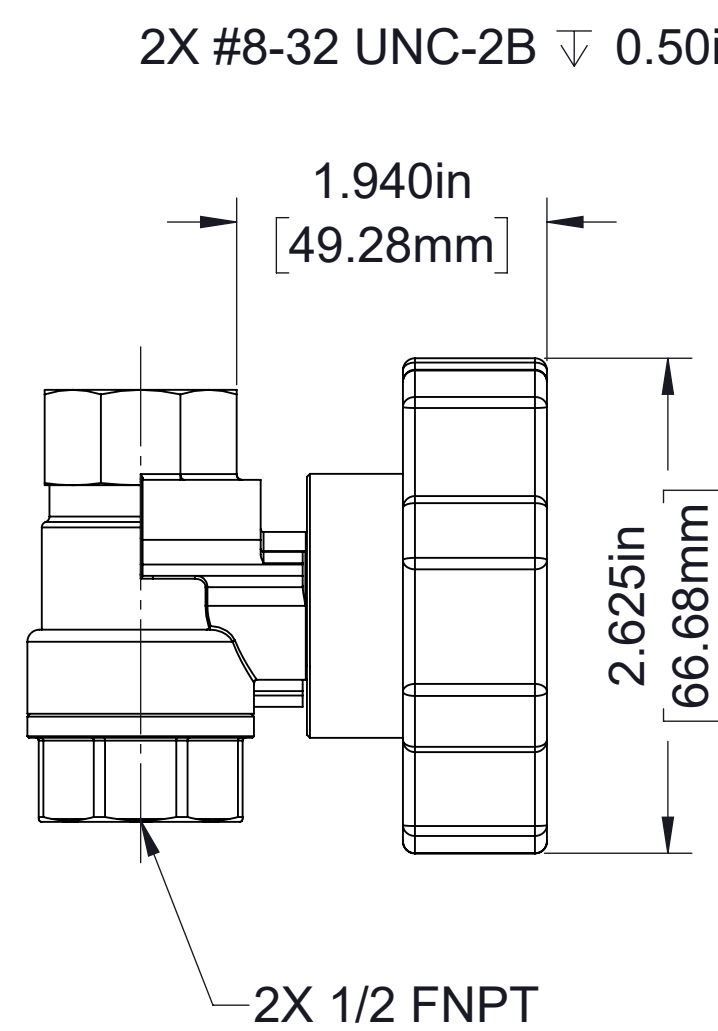


5 Port Manifold
Order part number 83360-1C

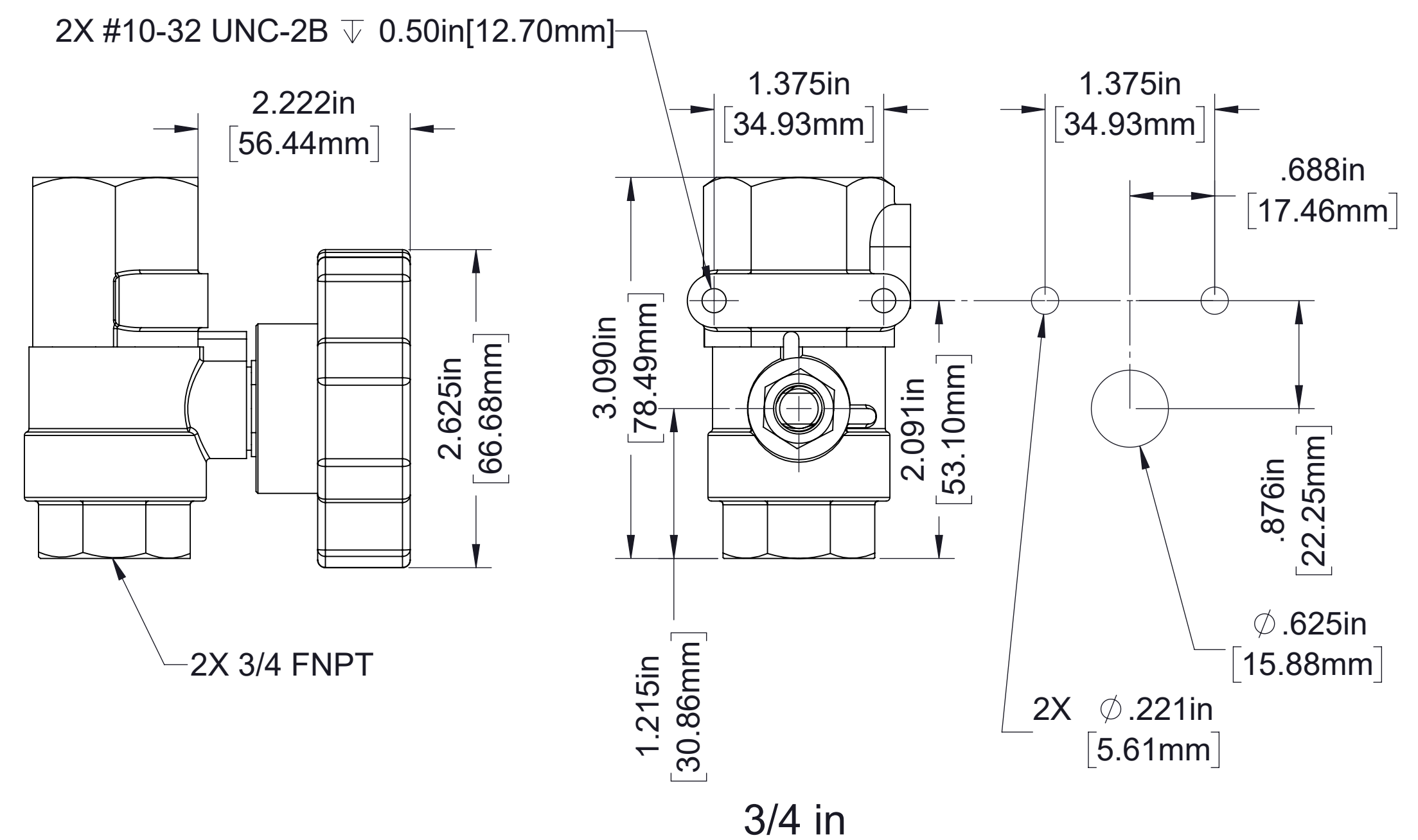
Optional Air Distribution Manifolds



Electric Valves



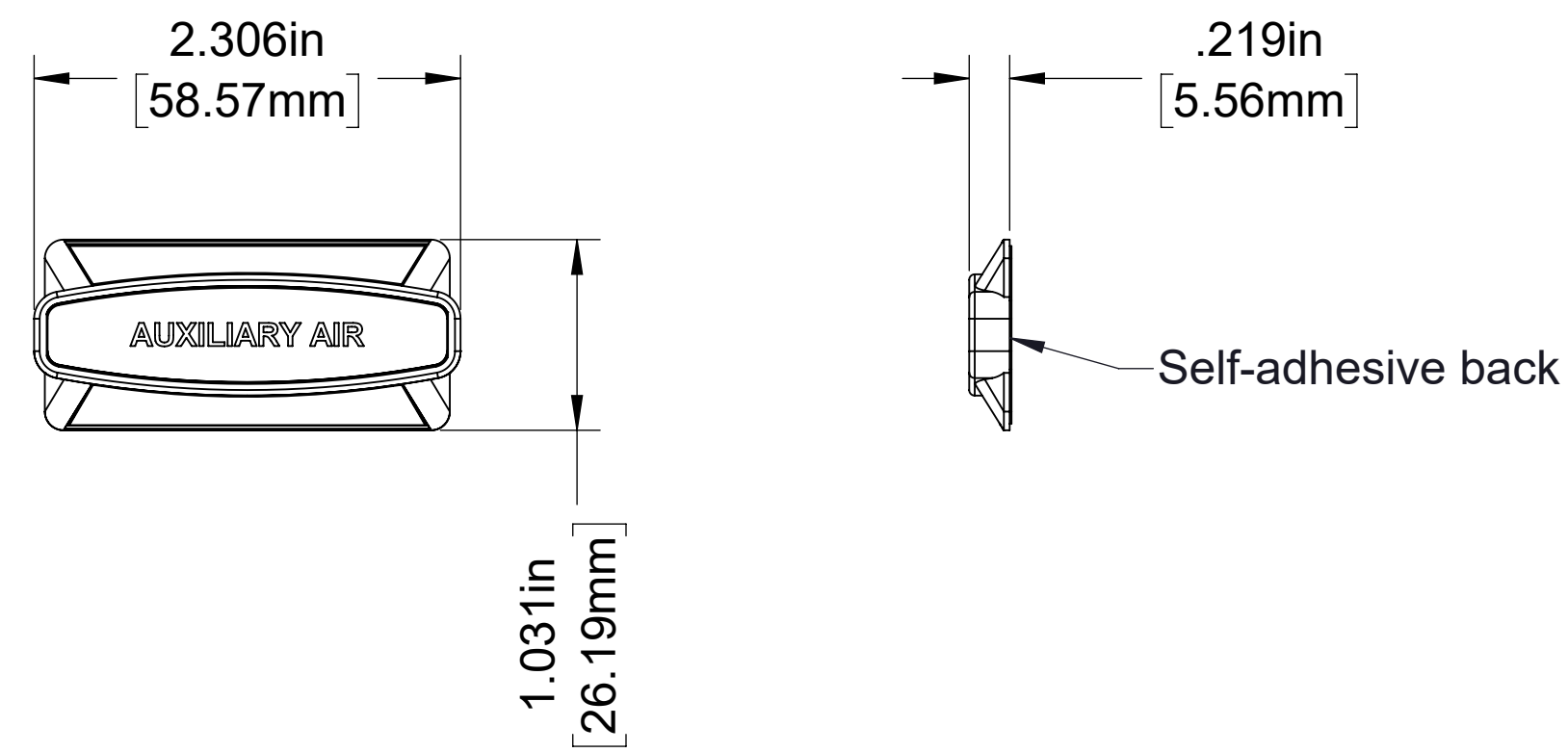
1/2 in



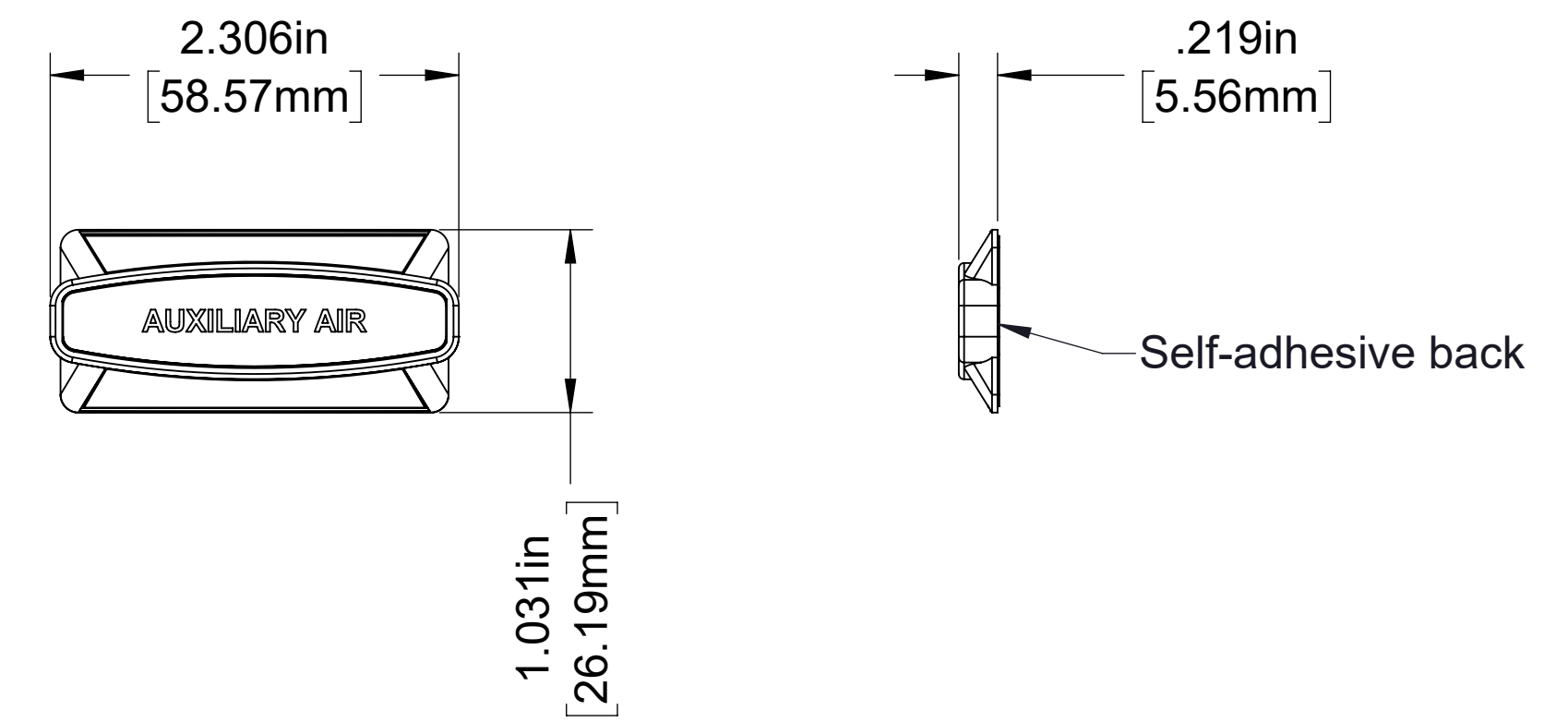
3/4 in

Manual Valves

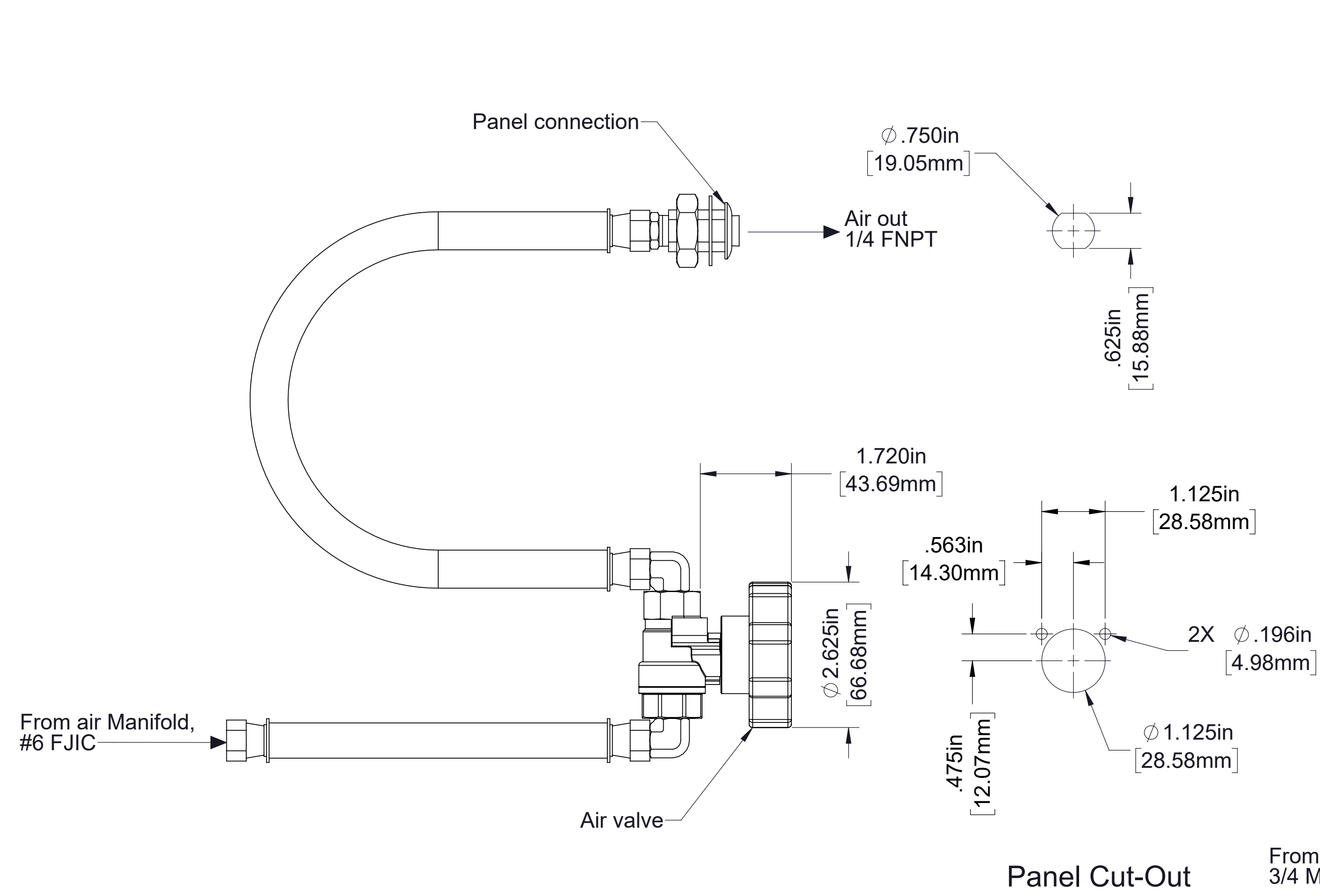
Optional Air Valves



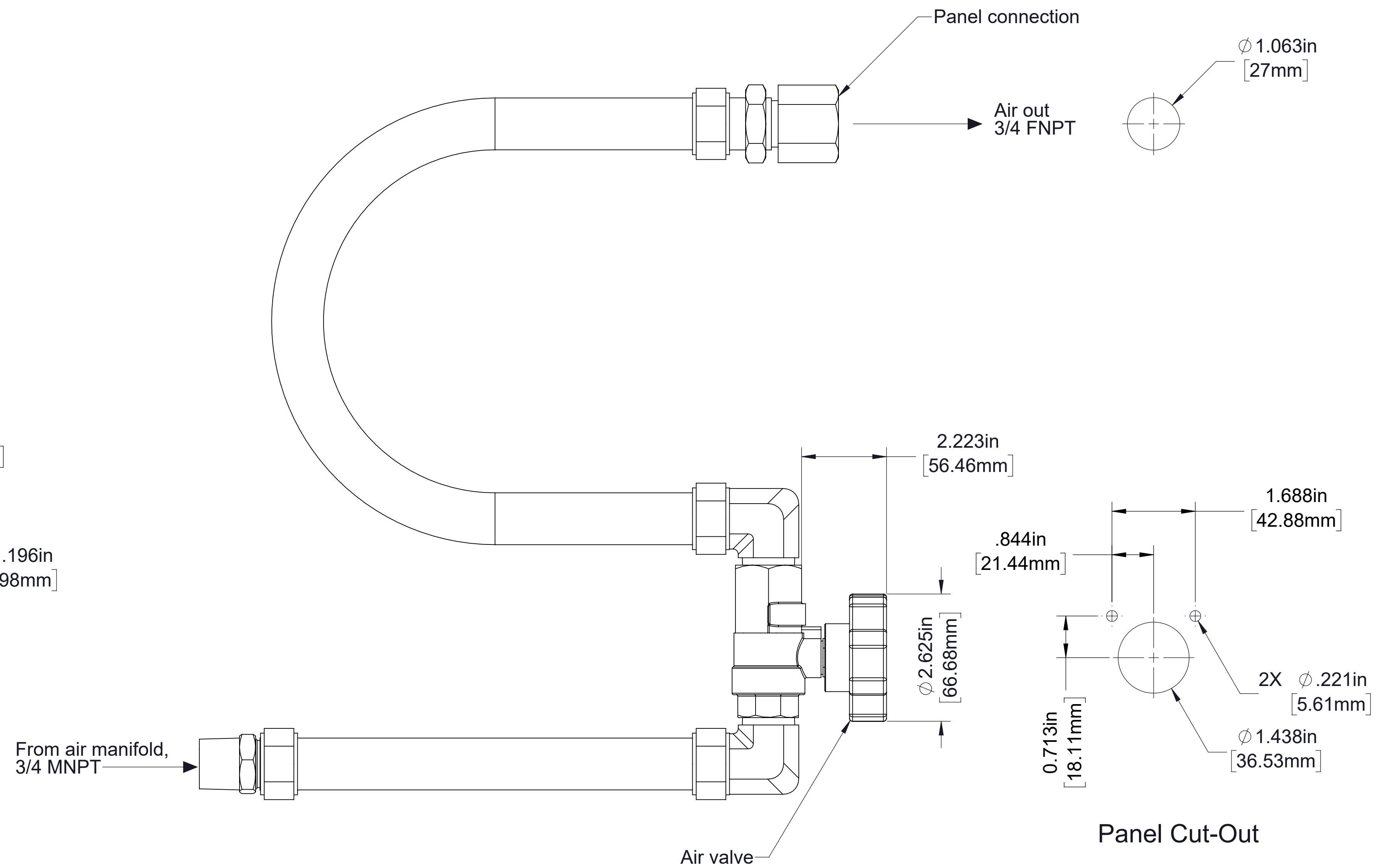
Label
(Panel bezel)



Label
(Panel bezel)

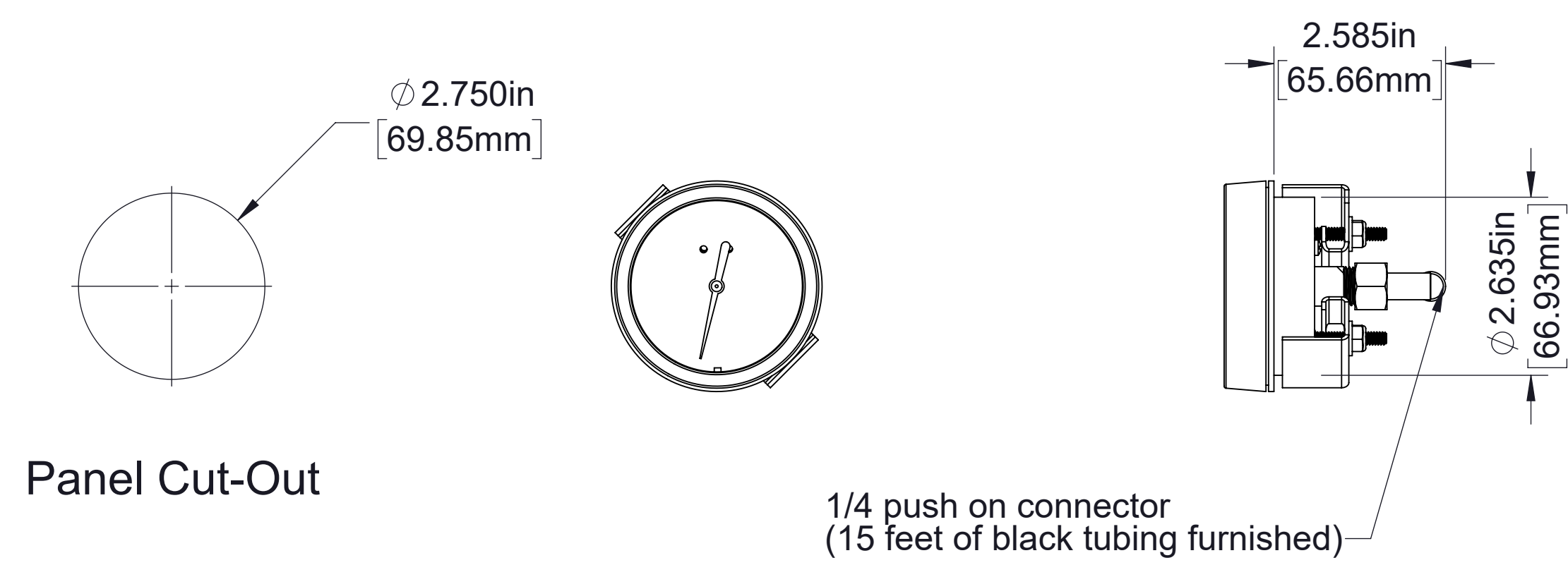


1/4 FNPT Connection
(Hoses and fittings furnished)
Order part number 83360-3A

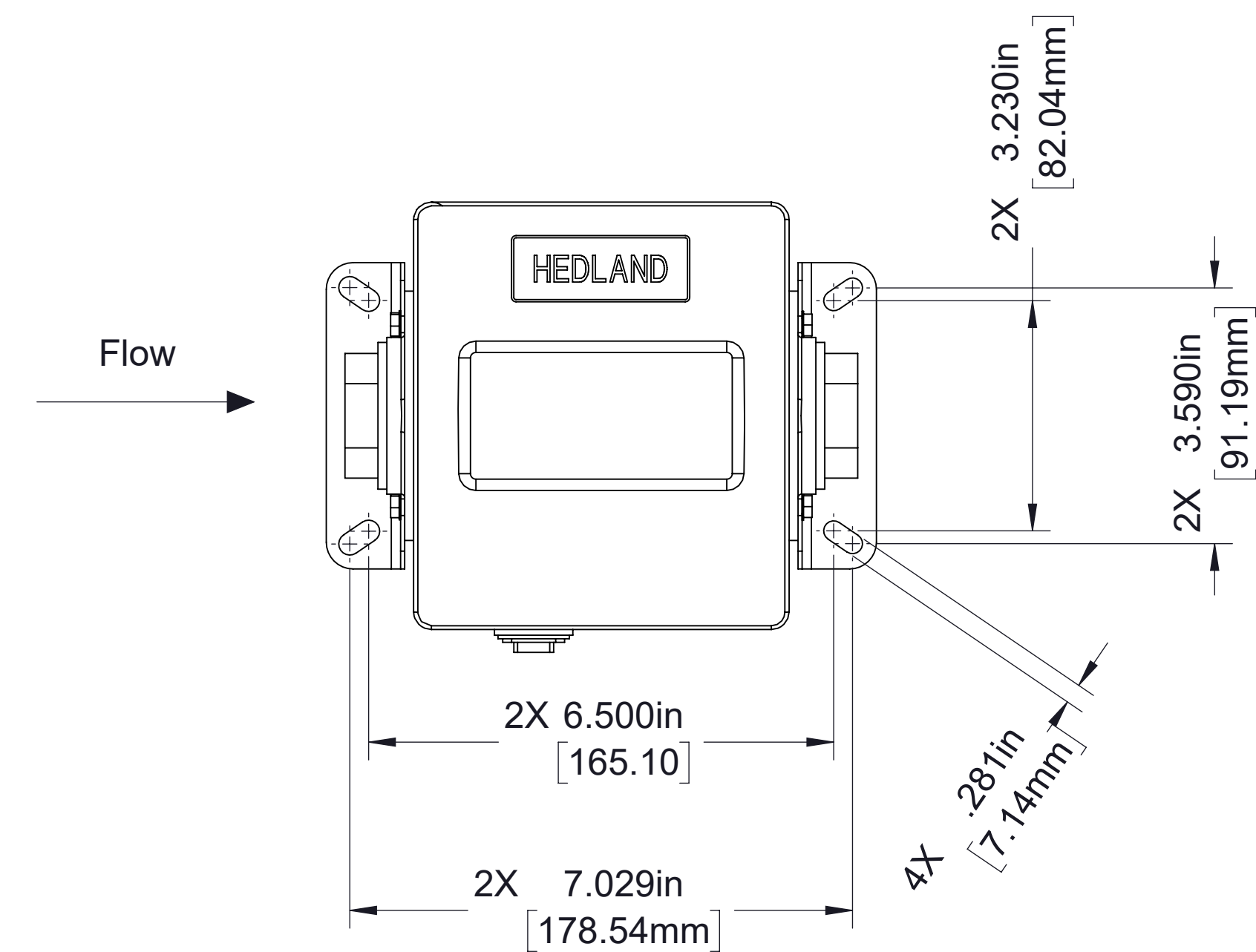
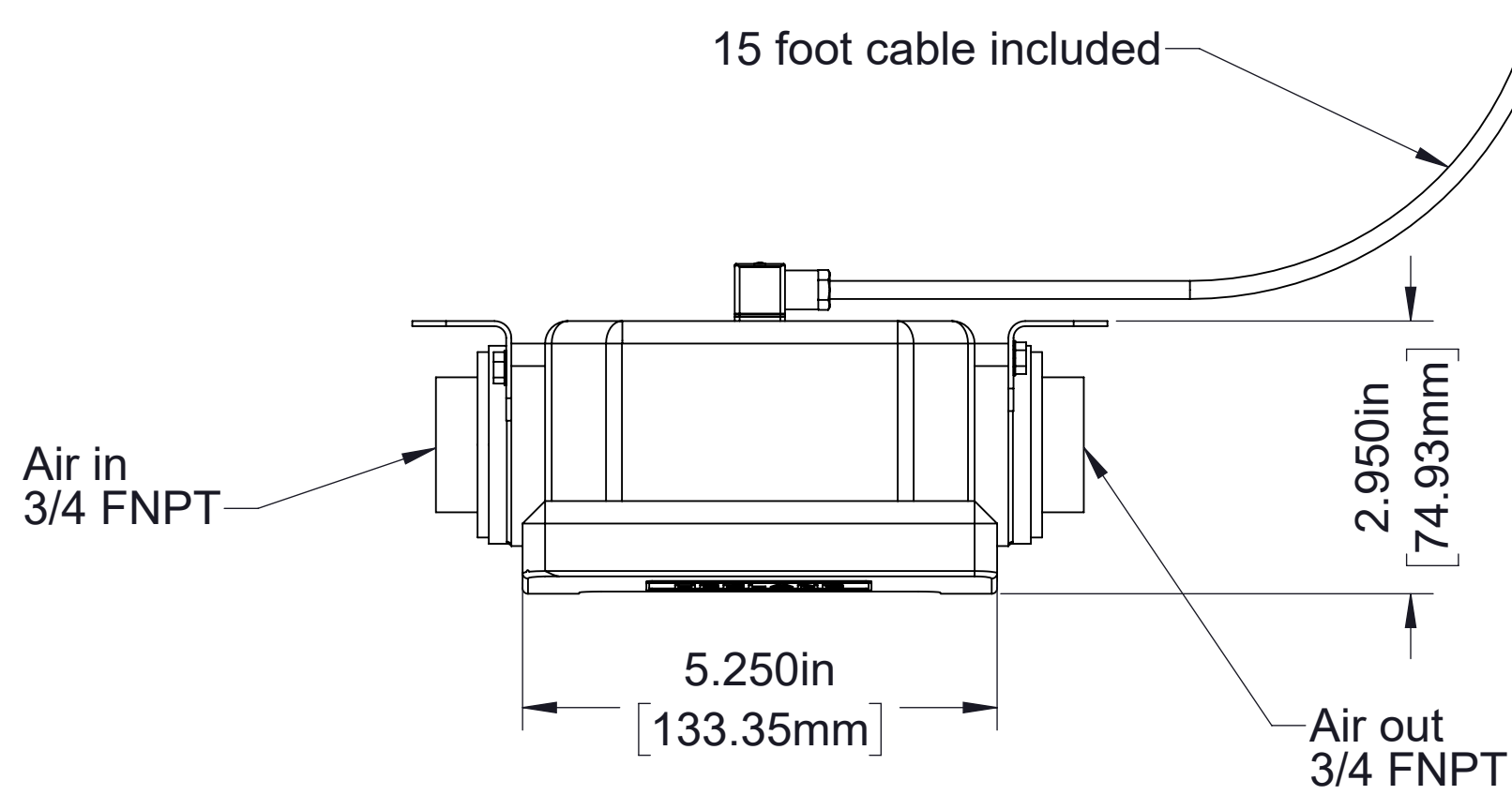
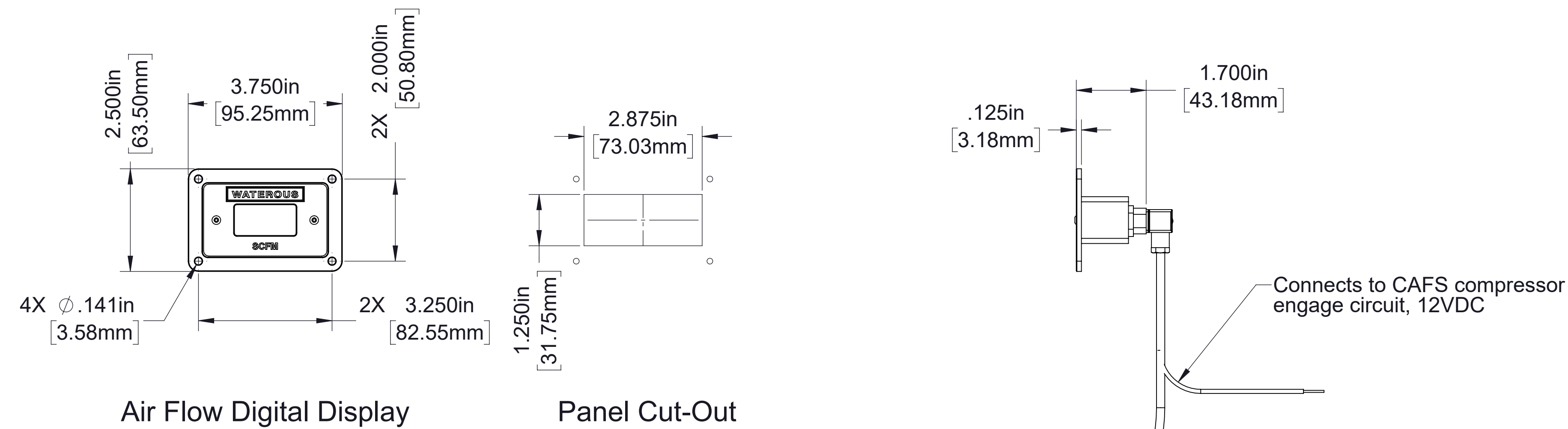


Panel Cut-Out

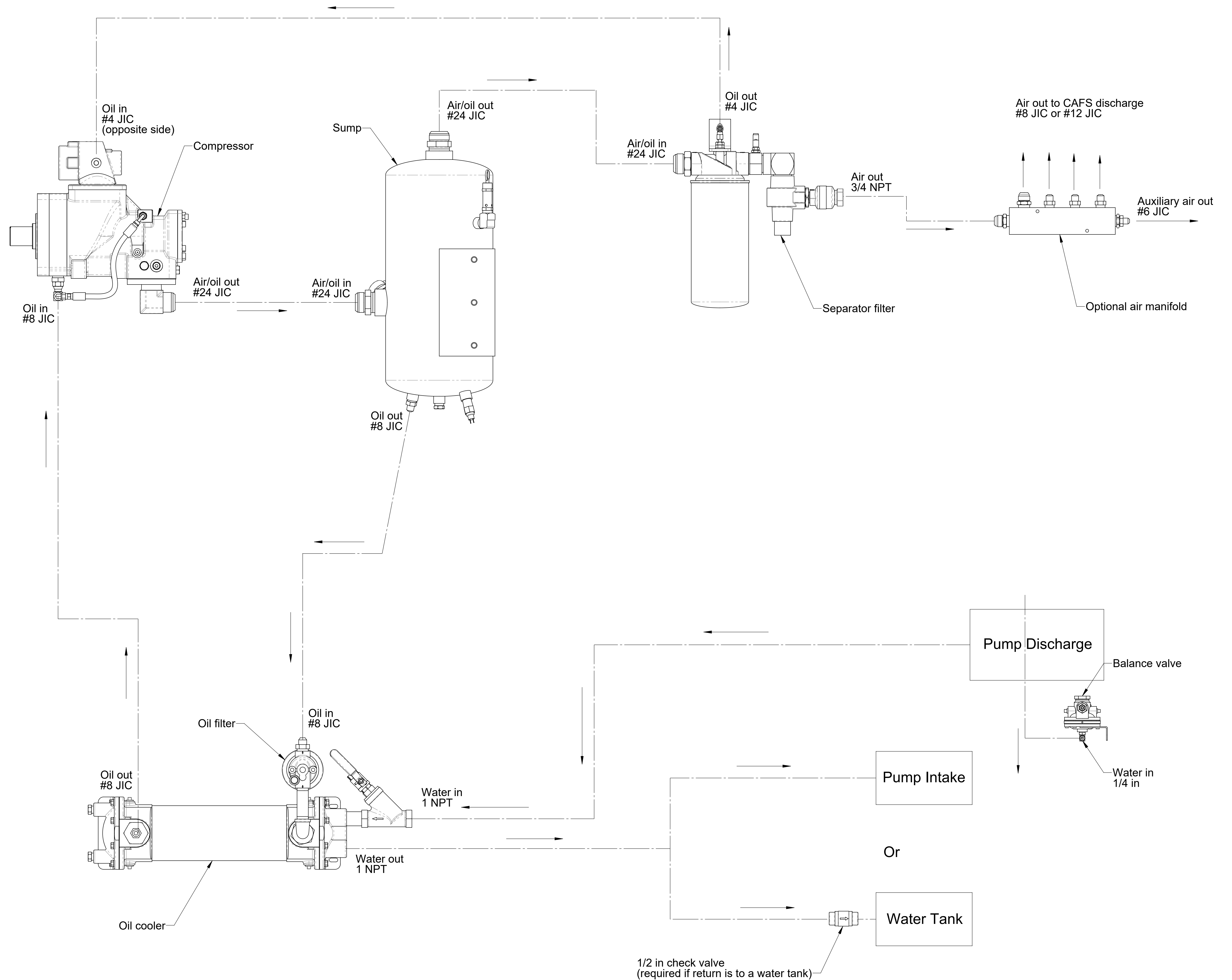
Auxiliary Air Connection

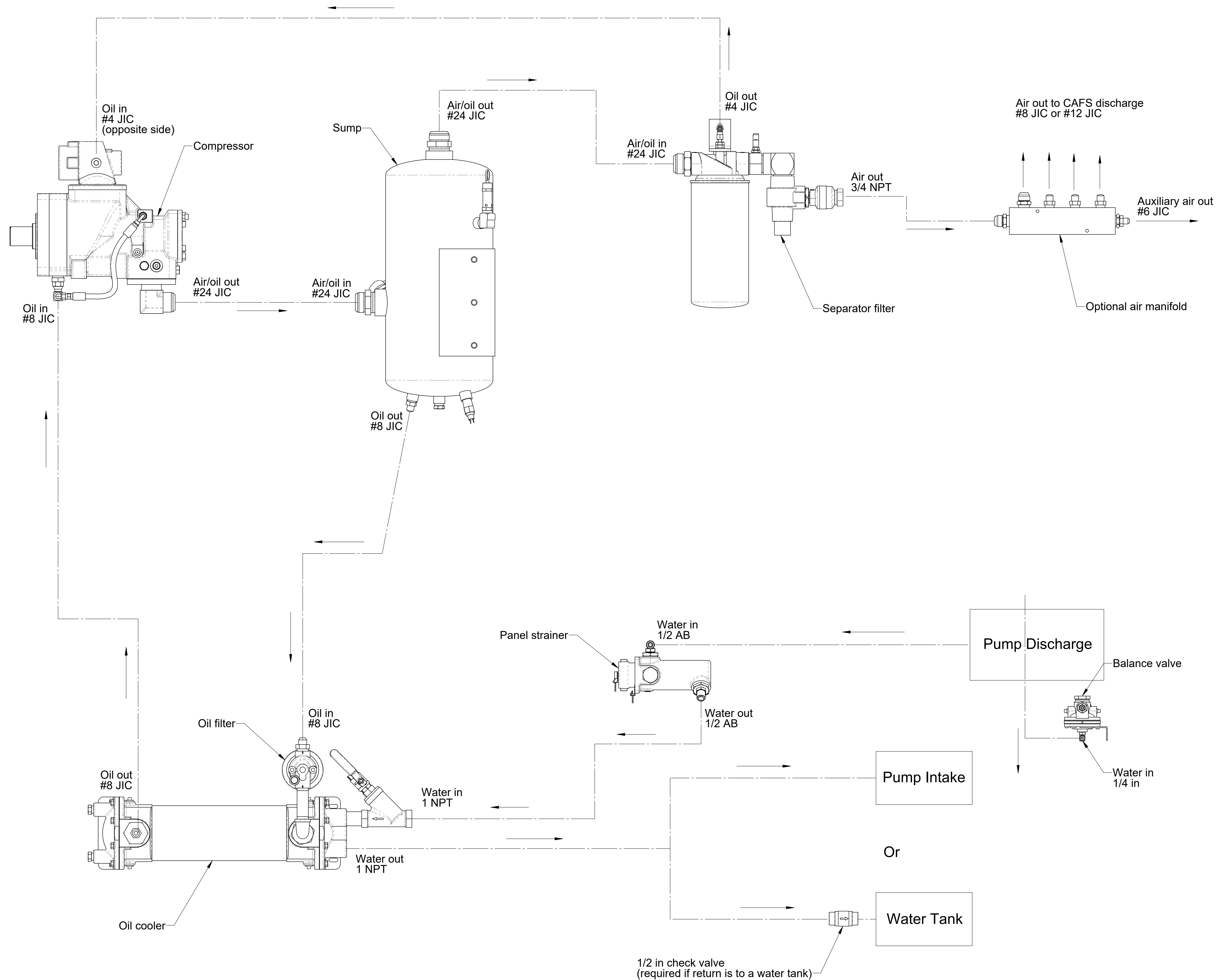


Optional Air Pressure Gauge
 Single Mpa scale order part number 83417-1A
 Dual PSI/Kpa scale order part number 83417-1B

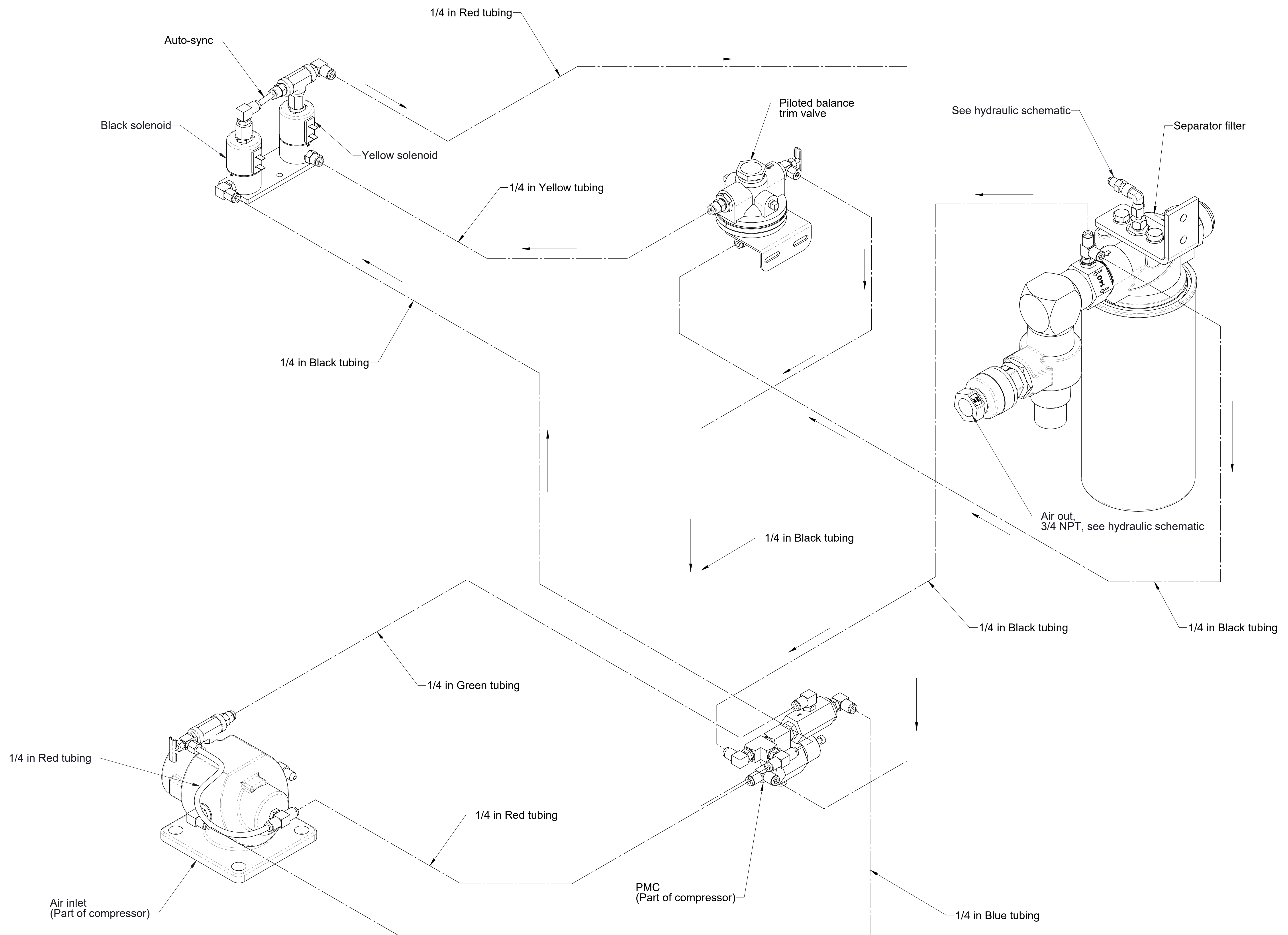


Optional Digital Air Flow Meter
 Order part number Q-0390024, 12V

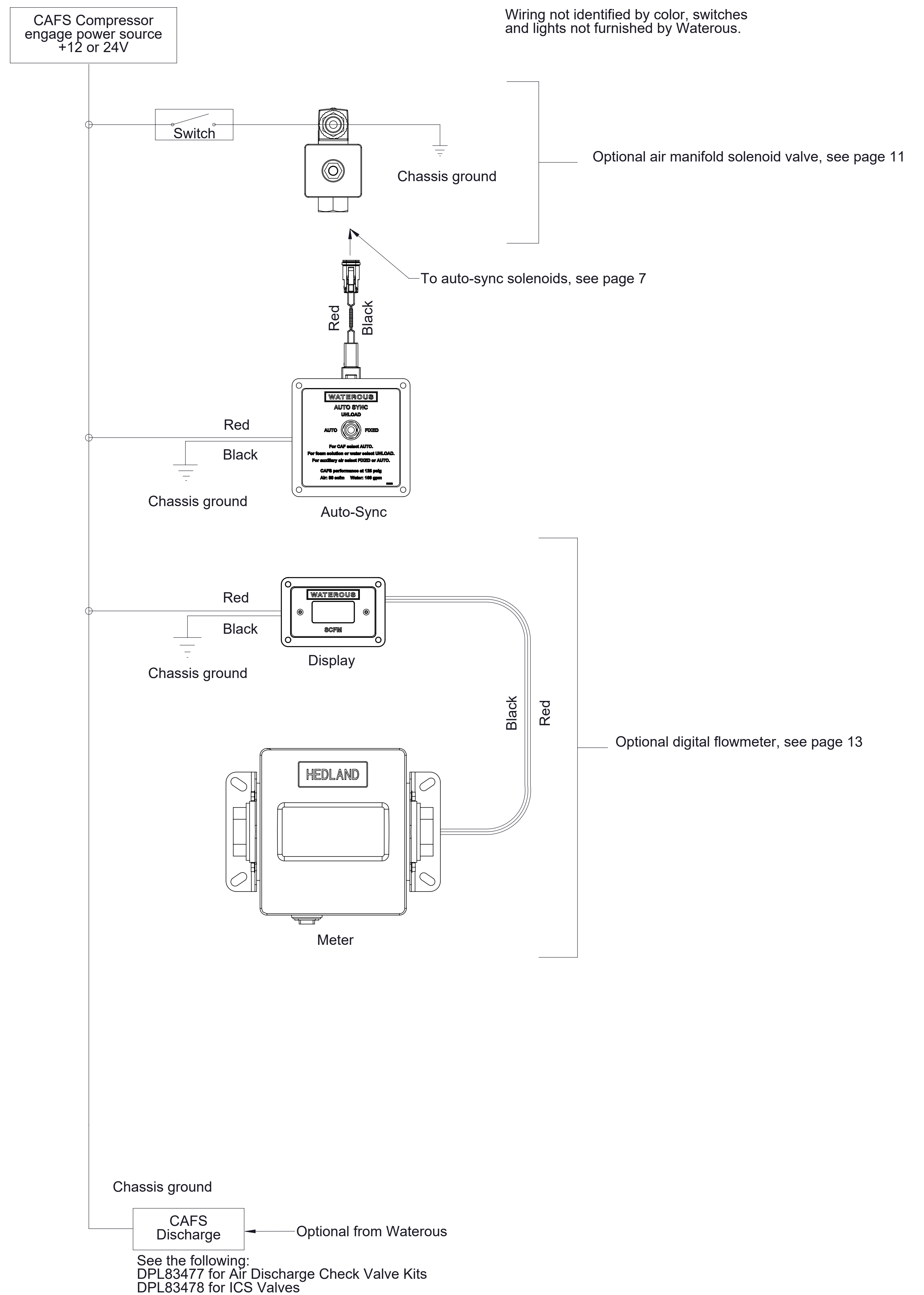
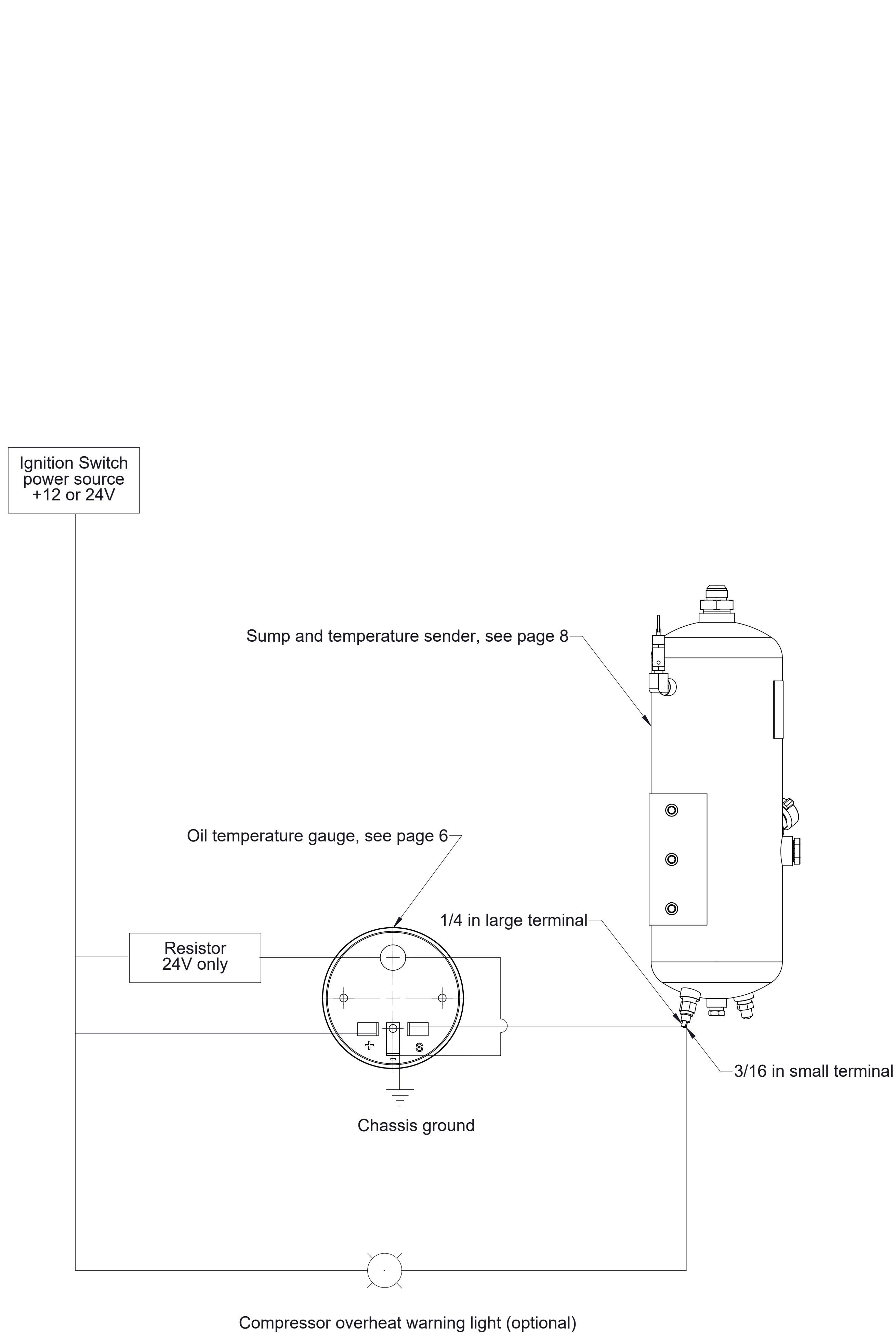




Hydraulic Schematic
Panel strainer



Air Circuit Schematic



Notes:
1. Wiring and light not furnished by Waterous.
2. All wire 16 gauge unless noted otherwise.