



Document Number	Issue Date	Rev. Date
DPL 83002	08/27/09	10/27/15

S100C20 Series Fire Pump with Eclipse ES™ CAFS Dimensional Drawings

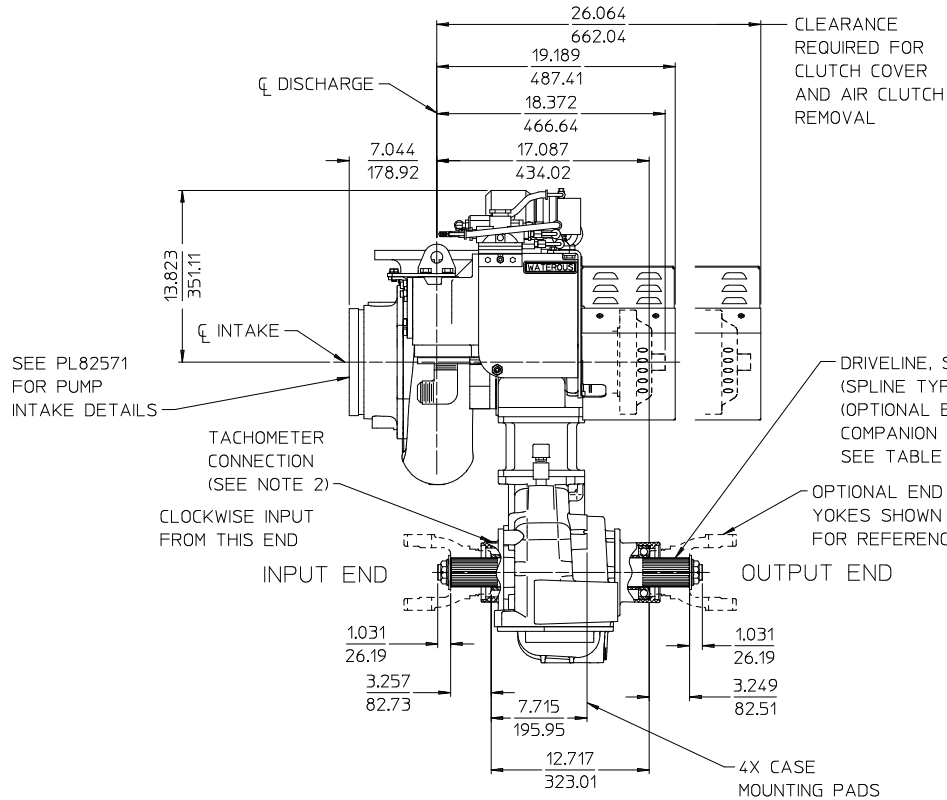
Item	See Page	
	Input and Output Shaft	Input Shaft Only
Pump Models	2	3
Ratio and Drop Dimensions	4	4
Compressor	Electrical and Plumbing Schematics	5
	Components Shipped Loose	6, 7
S100 Pump Intake and Discharge Options	See DPL82571	
C20 Transmission Options		

Note: When ordering furnish the following information:

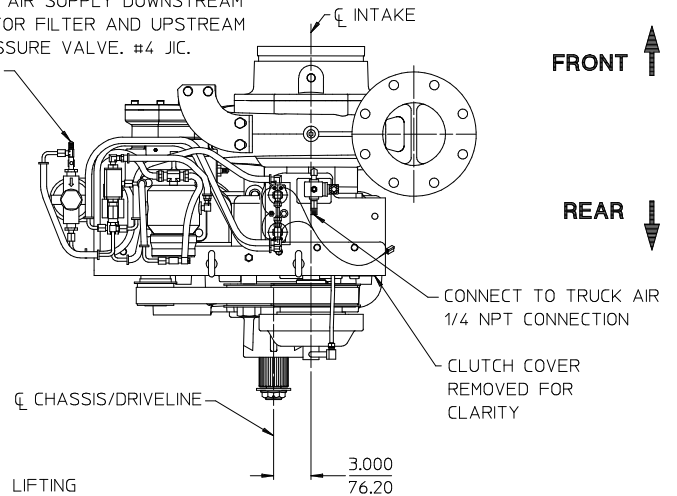
1. Pump Models (See pages 2 or 3)
2. Drive to Driven Ratio (See page 4)
3. Discharge Position: Discharge Flange Facing Up is the only available position
4. Optional Discharge Fitting See DPL82571.
Note that the optional discharge manifold may only be mounted perpendicular to the pump intake.
5. Assembly Number: 83002

TABLE 1 - AVAILABLE DRIVELINE / MODELS

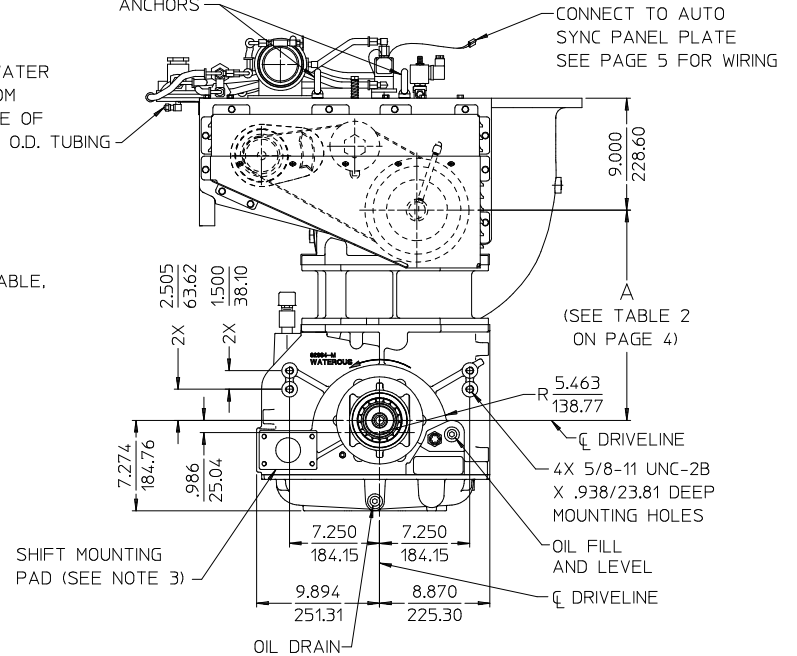
DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS				PUMP MODELS
TYPE	SIZE	SPLINE	SPICER SERIES	YOKE		COMPANION FLANGE	
				PART NUMBER	CROSS AND BEARING KIT		
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	1480/1610	--	--	V 3719	S100C20C, S100C20D, S100C20E, S100C20F
			1650/1710	--	--	V 3619	
			1710	V 2837	V 2839	--	
			1810	V 2838	V 2840	--	
			SPL140	V 3388	V 3389	--	



CONNECT TO AIR SUPPLY DOWNSTREAM OF SEPARATOR FILTER AND UPSTREAM OF MIN. PRESSURE VALVE. #4 JIC. SEE PAGE 5



CONNECT TO WATER PRESSURE FROM DISCHARGE SIDE OF FIRE PUMP. 1/4 O.D. TUBING



NOTES:

1. SEE TABLE 2 ON PAGE 4 FOR AVAILABLE RATIOS.
2. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSION.
3. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS

S100C20 SERIES WITH ECLIPSE ES CAFS

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
INPUT AND OUTPUT SHAFT
CLOCKWISE INPUT, MODEL S100VC20E, 2.27 RATIO SHOWN
BLANK DISCHARGE SHOWN

(INCH / MILLIMETER)

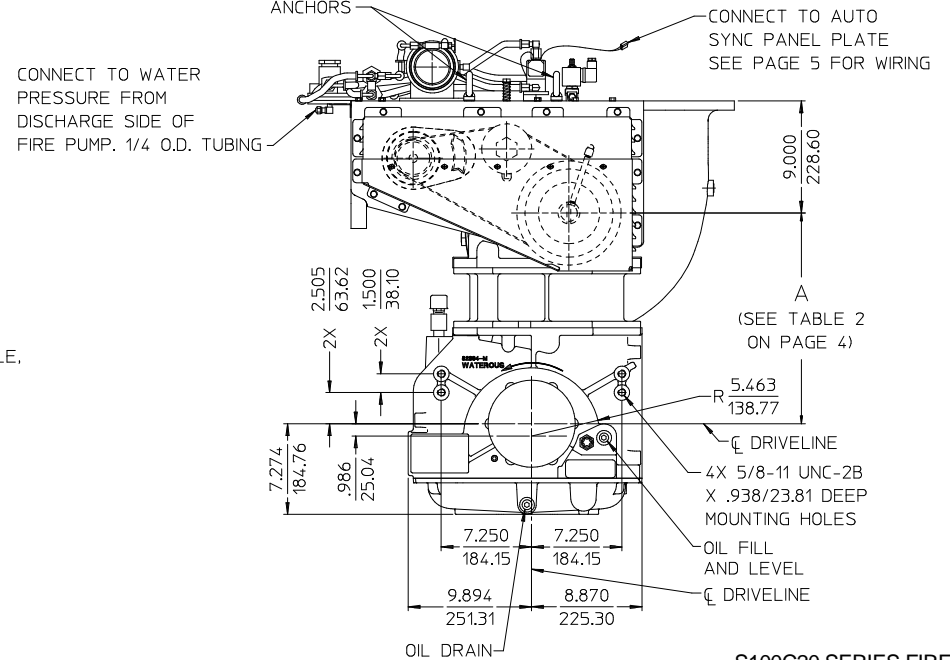
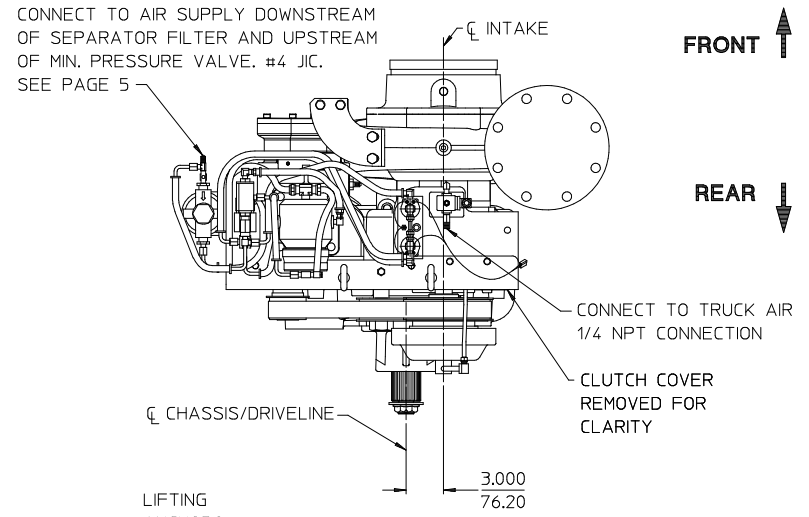
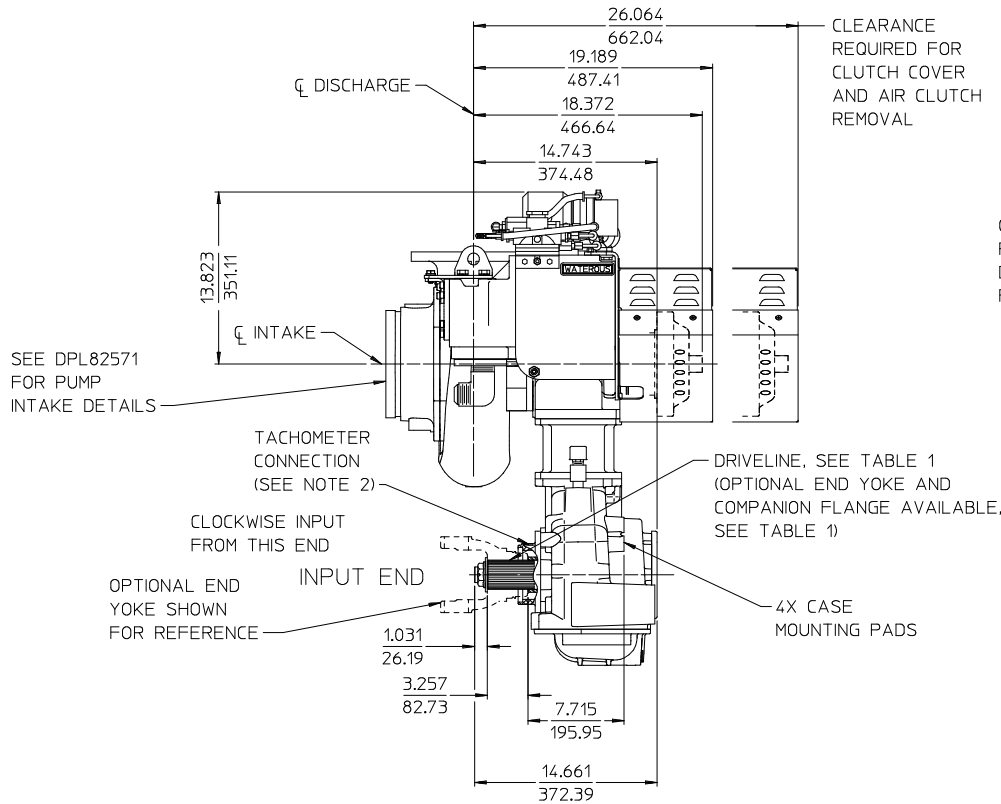
S100C20 SERIES FIRE PUMP
DPL83002

WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075

PAGE 2 OF 7

TABLE 1 - AVAILABLE DRIVELINE / MODELS

DRIVELINE			OPTIONAL END YOKE AND COMPANION FLANGES AVAILABLE FROM WATEROUS				PUMP MODELS
TYPE	SIZE	SPLINE	SPICER SERIES	YOKE		COMPANION FLANGE	
				PART NUMBER	CROSS AND BEARING KIT		
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	1480/1610	--	--	V 3719	S100C20C, S100C20D, S100C20E, S100C20F
			1650/1710	--	--	V 3619	
			1710	V 2837	V 2839	--	
			1810	V 2838	V 2840	--	
			SPL140	V 3388	V 3389	--	



NOTES:
 1. SEE TABLE 2 ON PAGE 4 FOR AVAILABLE RATIOS.
 2. SEE DRAWING DPL82994 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSION.

S100C20 SERIES WITH ECLIPSE ES CAFS

INPUT SHAFT ONLY
 CLOCKWISE INPUT, MODEL S100C20E, 2.27 RATIO SHOWN
 BLANK DISCHARGE SHOWN

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH / MILLIMETER)

**S100C20 SERIES FIRE PUMP
 DPL83002**

**WATEROUS COMPANY
 SOUTH ST. PAUL, MN 55075**

PAGE 3 OF 7

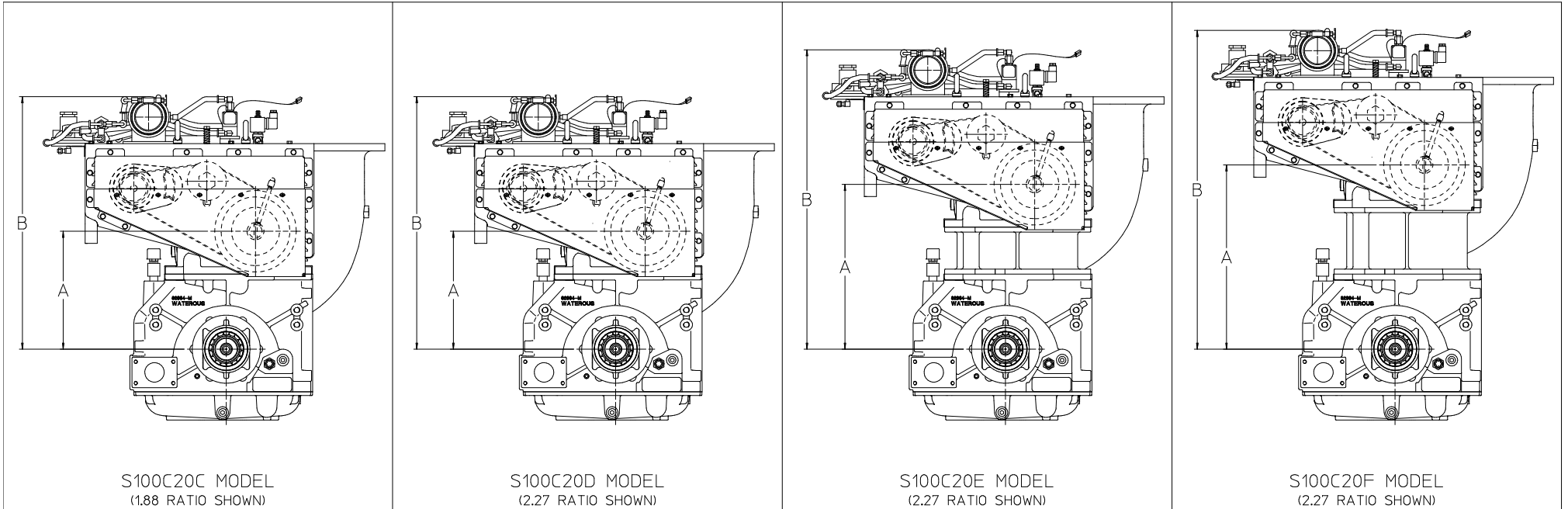
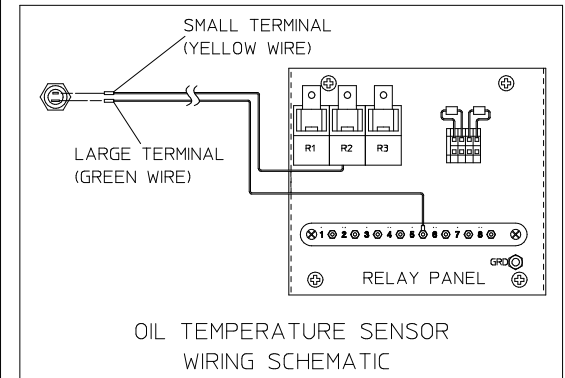
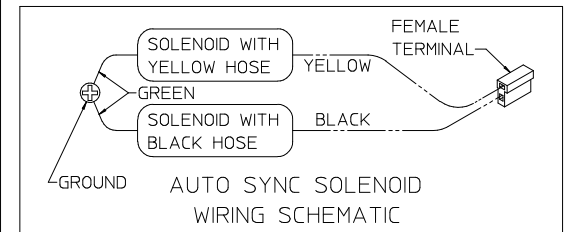
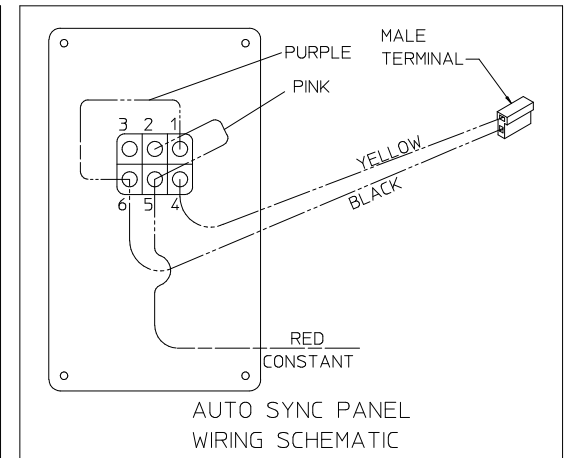
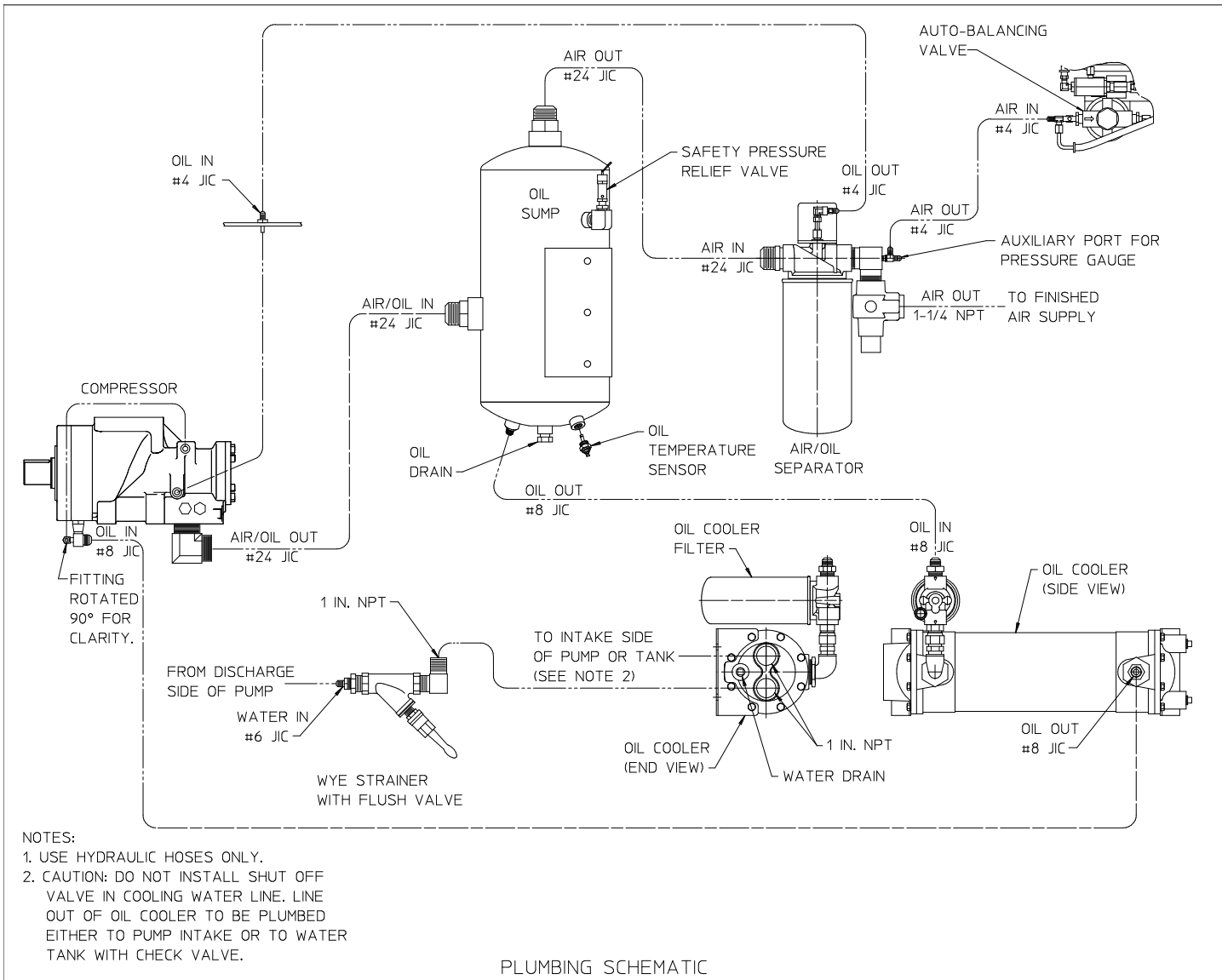


TABLE 2 - AVAILABLE RATIOS

DRIVE TO DRIVEN RATIO	S100C20C		S100C20D		S100C20E		S100C20F	
	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B	DIMENSION A	DIMENSION B
1.27	14.312/363.52	28.135/714.63	14.825/376.56	28.648/727.67	16.861/428.27	30.684/779.38	18.892/479.86	32.715/830.97
1.41	13.899/353.03	27.722/704.14	14.931/379.25	28.754/730.36	16.971/431.06	30.794/782.17	19.002/482.65	32.825/833.76
1.48	13.878/352.50	27.701/703.61	14.907/378.64	28.730/729.75	16.951/430.56	30.774/781.67	18.981/482.12	32.81/833.23
1.58	13.756/349.40	27.579/700.51	14.788/375.62	28.611/726.73	16.830/427.48	30.653/778.59	18.861/479.07	32.684/830.18
1.69	13.839/351.51	27.662/702.62	14.876/377.85	28.699/728.96	16.923/429.84	30.746/780.95	18.961/481.61	32.784/832.72
1.79	14.045/356.74	27.868/707.85	15.072/382.83	28.895/733.94	17.127/435.03	30.95/786.14	19.168/486.87	32.991/837.98
1.88	13.690/347.73	27.513/698.84	14.717/373.81	28.540/724.92	16.773/426.03	30.59/777.14	18.809/477.75	32.632/828.86
1.97	13.870/352.30	27.693/703.41	14.912/378.76	28.735/729.87	16.970/431.04	30.793/782.15	19.012/482.90	32.835/834.01
2.03	13.984/355.19	27.807/706.30	15.028/381.71	28.851/732.82	17.086/433.98	30.909/785.09	19.132/485.95	32.955/837.06
2.27	13.811/350.80	27.634/701.91	14.856/377.34	28.679/728.45	16.920/429.77	30.743/780.88	18.971/481.86	32.794/832.97
2.46	14.042/356.67	27.865/707.78	15.087/383.21	28.910/734.32	17.154/435.71	30.977/786.82	19.205/487.81	33.028/838.92
2.73	14.115/358.52	27.938/709.63	15.173/385.39	28.996/736.50	16.738/425.15	30.561/776.25	18.808/477.72	32.631/828.83

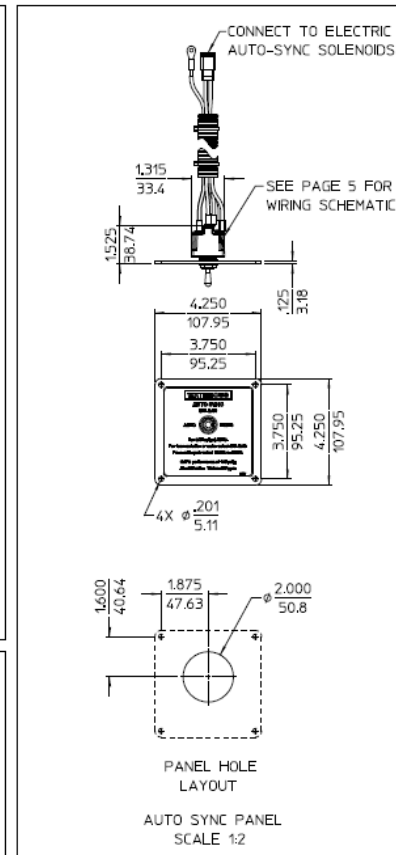
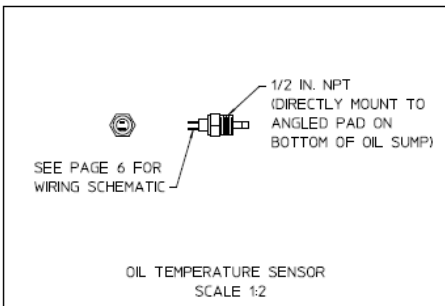
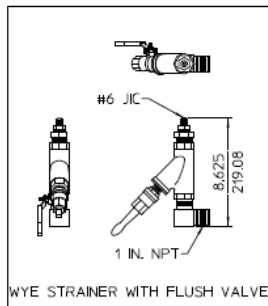
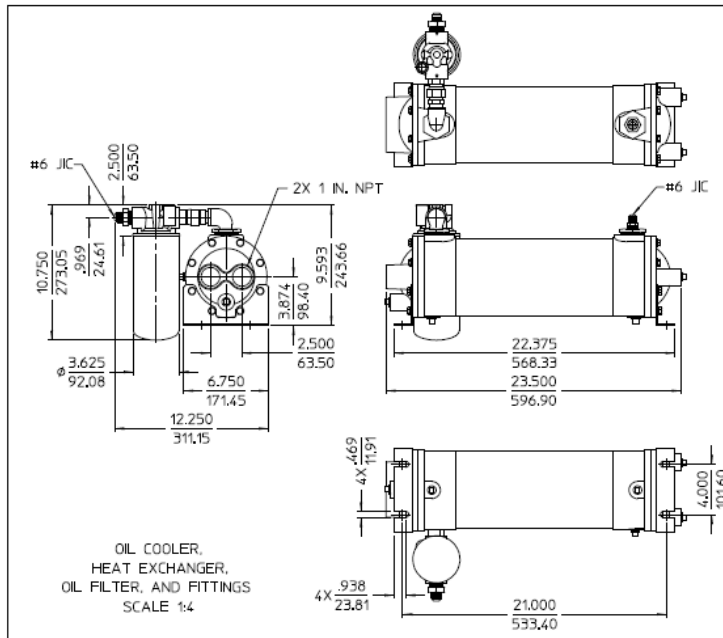
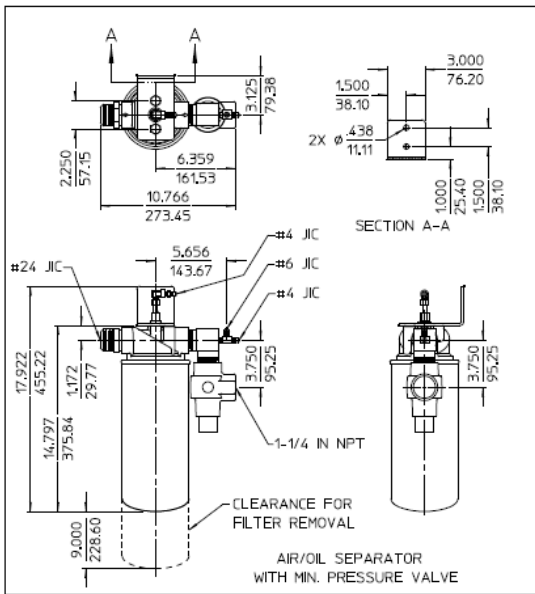
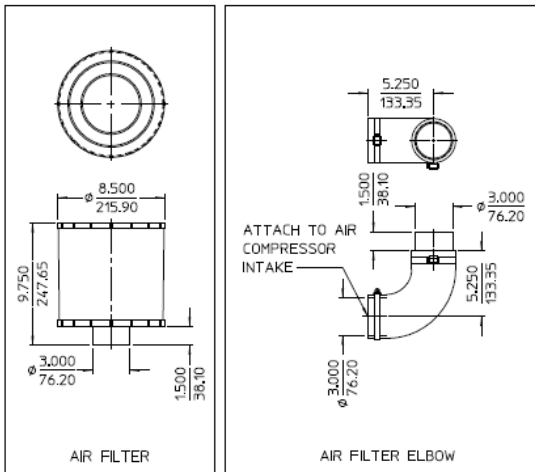
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 $\left(\frac{\text{INCH}}{\text{MILLIMETER}} \right)$

RATIO AND DROP DIMENSIONS



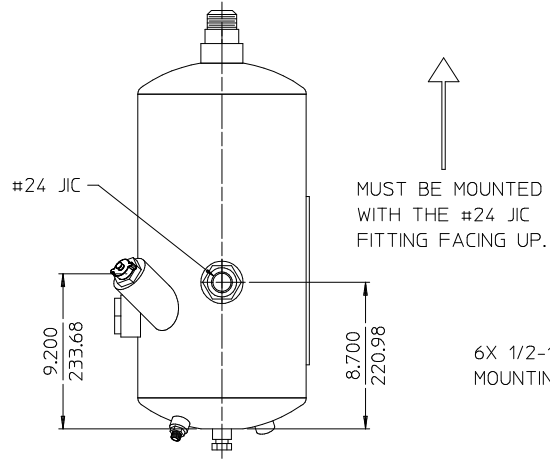
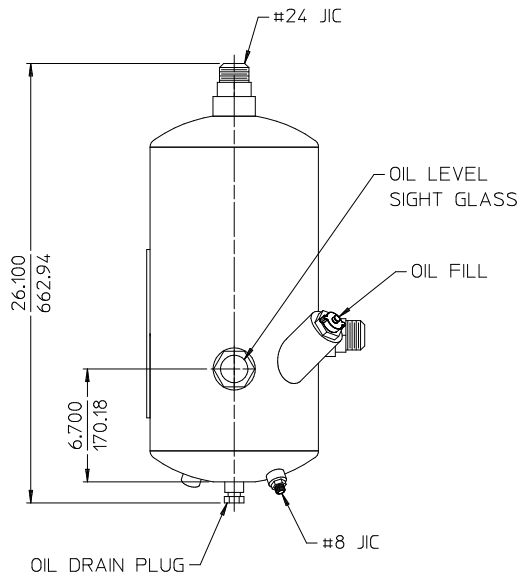
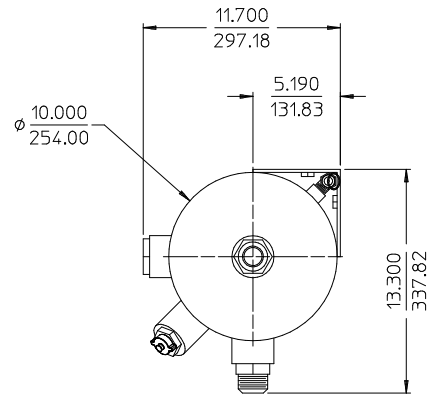
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH / MILLIMETER)

**COMPRESSOR
 ELECTRICAL AND PLUMBING SCHEMATICS**



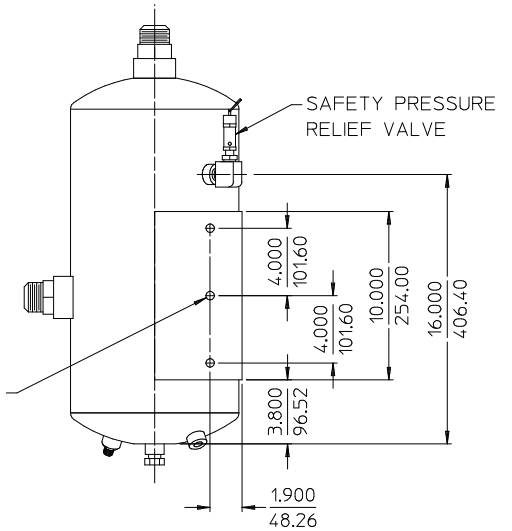
COMPRESSOR COMPONENTS SHIPPED LOOSE

- NOTES:
1. SEE PAGE 5 FOR PLUMBING OF ALL OIL, WATER, AND AIR LINES.
 2. SEE PAGE 7 FOR OIL SUMP DETAILS.



MUST BE MOUNTED WITH THE #24 JIC FITTING FACING UP.

6X 1/2-13 UNC MOUNTING HOLES



ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
($\frac{\text{INCH}}{\text{MILLIMETER}}$)

OIL SUMP

NOTES:

1. SEE PAGE 5 FOR PLUMBING OF ALL OIL, WATER, AND AIR LINES.
2. OIL LEVEL IN OIL RESERVOIR SHOULD BE AT LOWER ELEVATION THAN COMPRESSOR. IF OIL RESERVOIR MUST BE PLACED HIGHER THAN COMPRESSOR, CONTACT PNEUMAX FOR ADDITIONAL PARTS THAT MUST BE INSTALLED.

COMPRESSOR
COMPONENTS SHIPPED LOOSE

S100C20 SERIES FIRE PUMP
DPL83002
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
PAGE 7 OF 7