



Document Number	Issue Date	Rev. Date
DPL83067	07/16/09	10/28/19

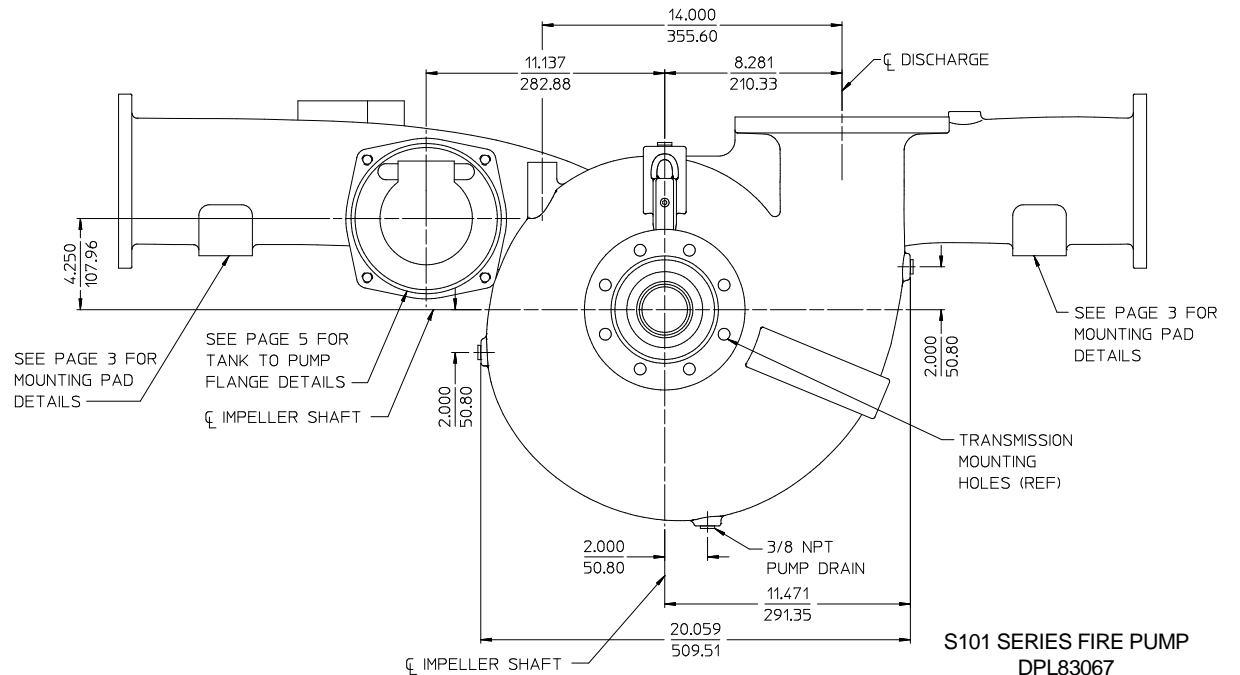
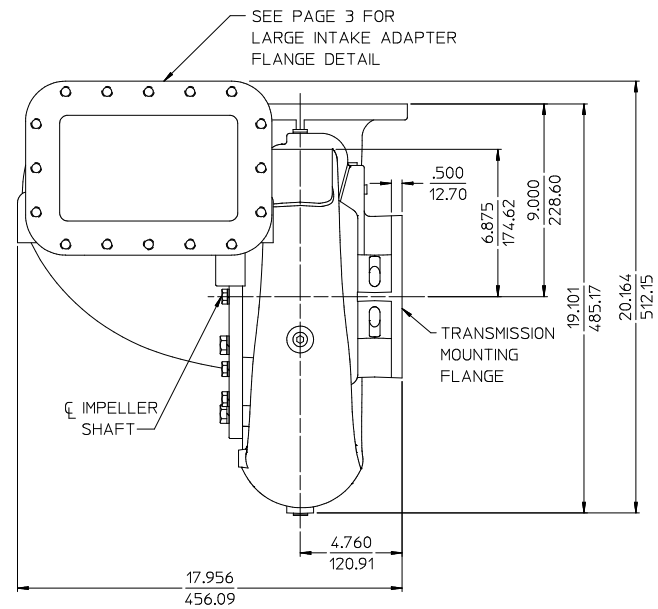
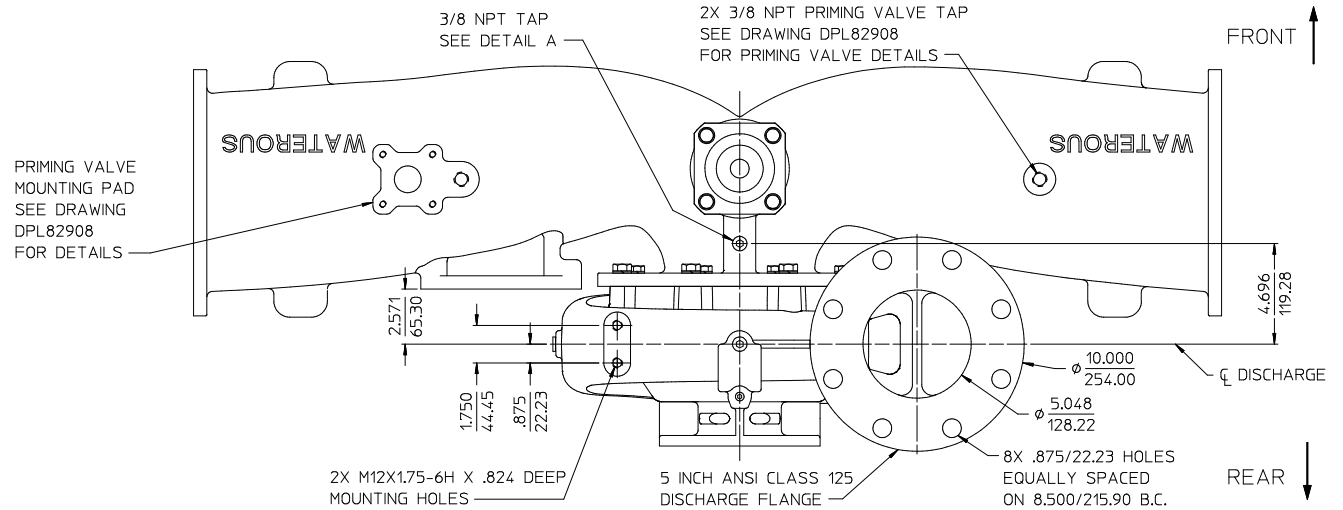
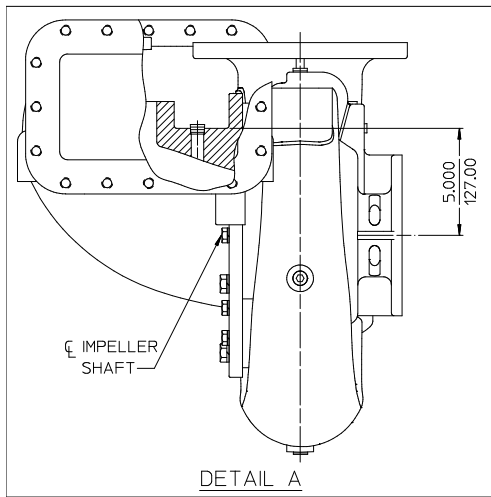
S101 Series Fire Pump Dimensional Drawings With Crosspipe Intake Fitting

Basic Pump Dimensions (Without Transmission)			
Feature		See Page	
Body Dimensions	Pump Body Crosspipe	2, 3	
	Intake Crosspipe	Available Intake Fittings	4
		Available Tank to Pump Fittings	5
Optional Discharge Arrangements	Blanek (5 in. ANSI Flange)	6	
	Manifold with 4 in. End Flanges	7	

Pump and Transmission										
Drive				Impeller Rotation (2)	Pump Model	Assembly Number	See Page			
Type	Pump Body Mounting on Transmission	Input Rotation (1)	Driveline Type				Hydraulic Pump Mounting Provision		Available Pump Discharge Positions and Ordering Info	Optional Discharge Manifold Mounting on Pump (Perpendicular to Intake Only)
							No	Yes		
C20 Series Split Shaft Chain Drive Transmission	Front (Input Shaft Side)	CW	Input and Output Shaft	CW	S101C20C S101C20D S101C20E S101C20F	83067	8, 12	9, 12	13	14
			Input Shaft Only	CW	S101C20C S101C20D S101C20E S101C20F	83067-1	10, 12	11, 12		

Notes:

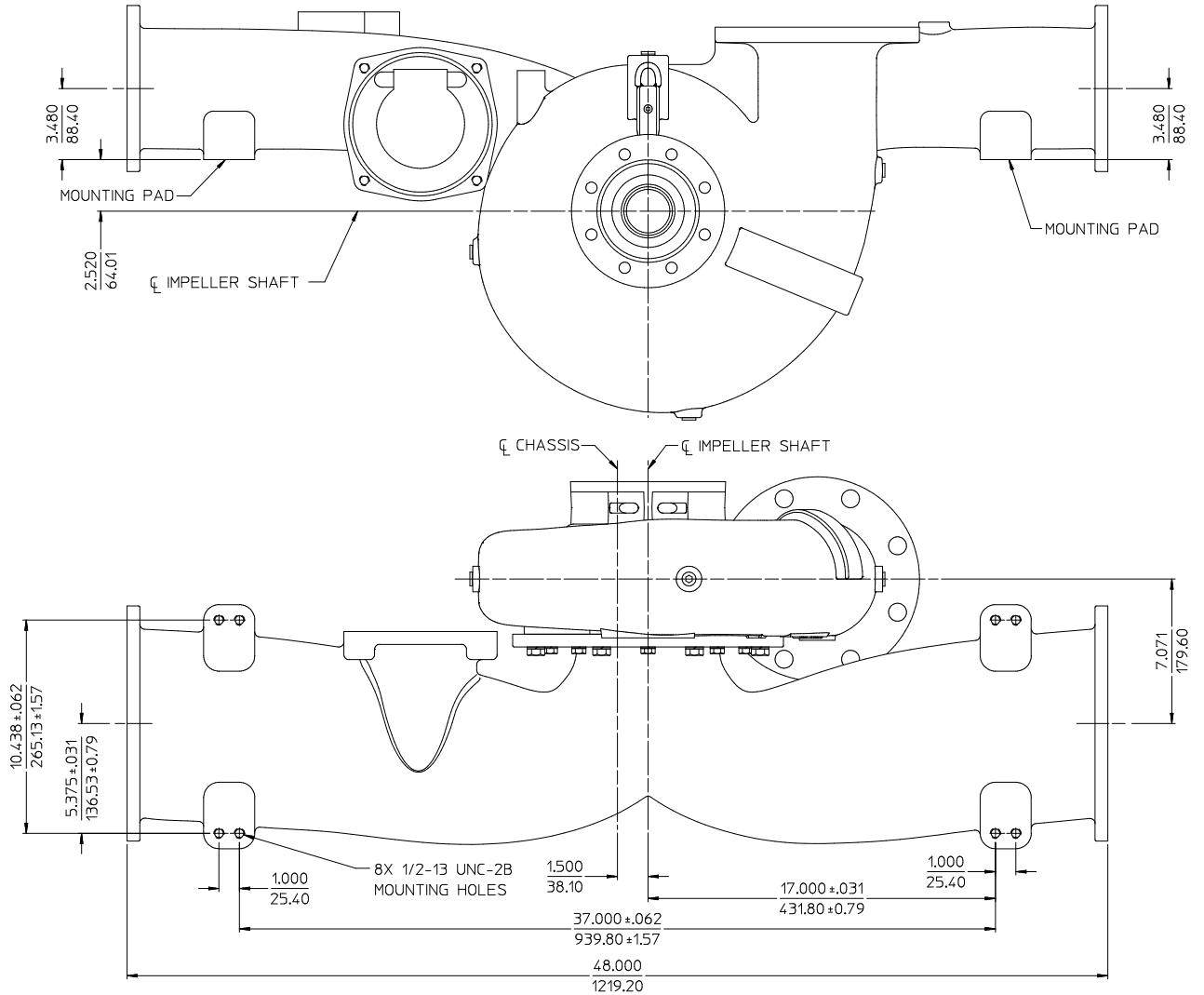
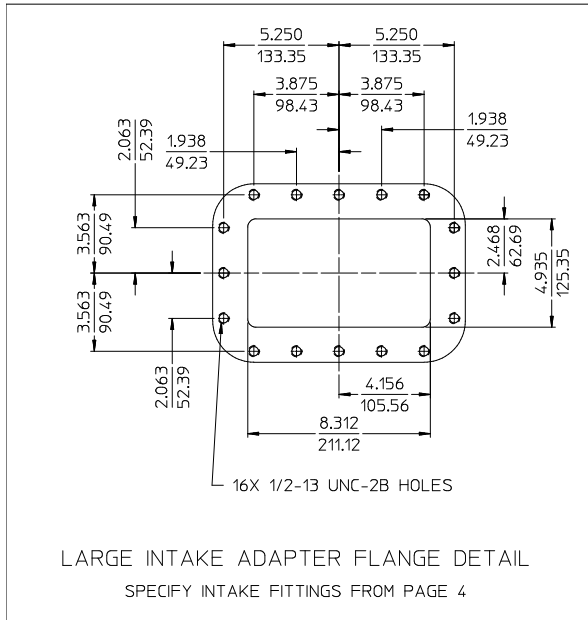
1. Input rotation is viewed looking directly at the transmission input shaft or direct drive end yoke.
2. Impeller rotation is viewed looking directly at the intake fitting (impeller eye).



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

PUMP BODY AND CROSSPIPE DIMENSIONS

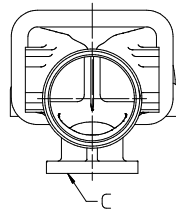
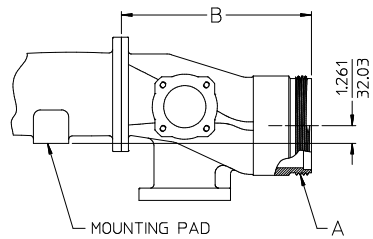
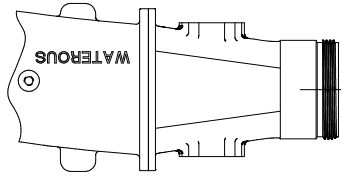
**S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
 (INCH / MILLIMETER)

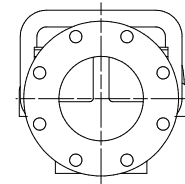
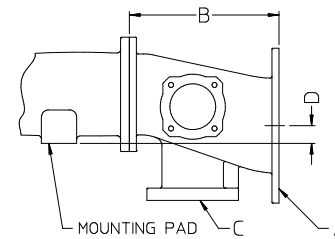
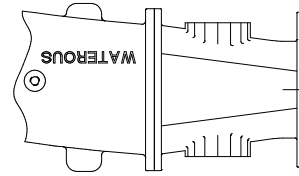
PUMP BODY AND CROSSPIPE DIMENSIONS

S101 SERIES FIRE PUMP
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TYPE	END SIZE 'A'	LENGTH 'B'	BOTTOM FLG 'C'	RELIEF VALVE	PART NO.
THREADED	6 IN. NH	10.500 266.70	3-1/2 IN. 8 BOLT	NO	81929
			NO	YES	82164
		5 IN. ANSI	YES	82167	
			NO	YES	81916
		13.500 342.90	3-1/2 IN. 8 BOLT	NO	81916
			NO	YES	82173
		5 IN. ANSI	YES	82174	
			NO	YES	81915
		15.000 381.00	3-1/2 IN. 8 BOLT	NO	81915
NO	YES		82163		
5 IN. ANSI	YES	82166			

THREADED INTAKE FITTING
PART 81916 SHOWN



TYPE	END SIZE 'A'	LENGTH 'B'	BOTTOM FLG 'C'	'D'	RELIEF VALVE	PART NO.	
FLANGED	6 IN. ANSI	6.750 171.45	2-1/2 IN. 4 BOLT	1.980	NO	82289	
			NO		YES	82301	
		5 IN. ANSI	YES	82302			
			NO	YES	82011		
		10.625 269.88	3-1/2 IN. 8 BOLT	1.261	NO	YES	82165
			NO		YES	82168	
5 IN. ANSI	32.03						

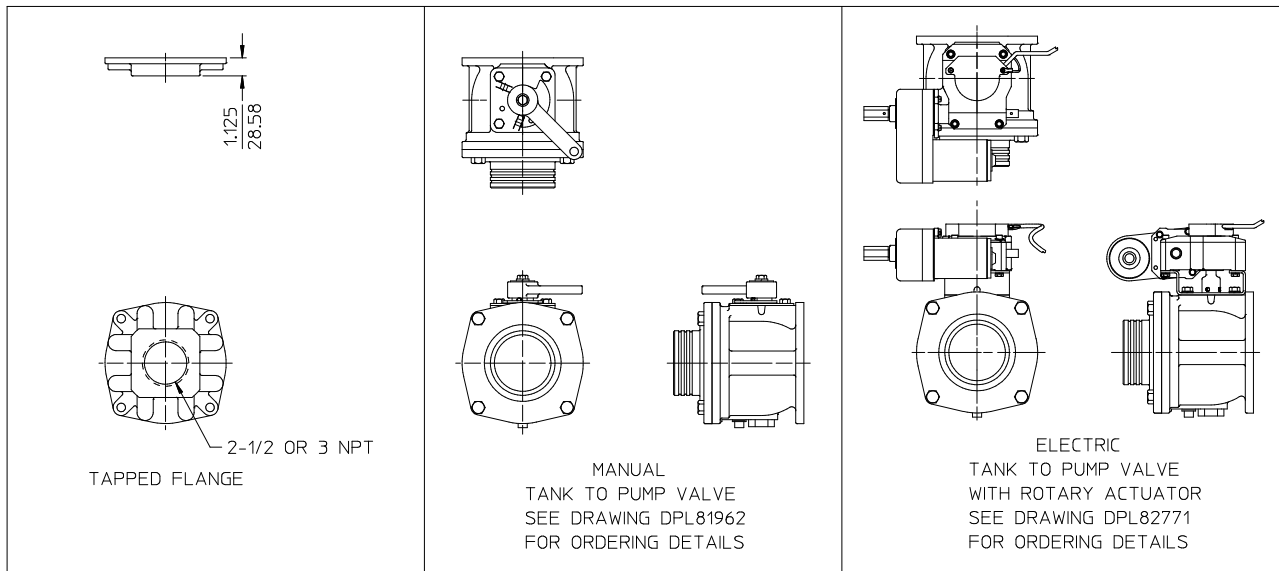
FLANGED INTAKE FITTING
PART 82011 SHOWN

NOTE:
1. REFER TO DIMENSIONAL DPL81867 FOR ADDITIONAL INTAKE FITTING DIMENSIONS AND PAD DETAILS.

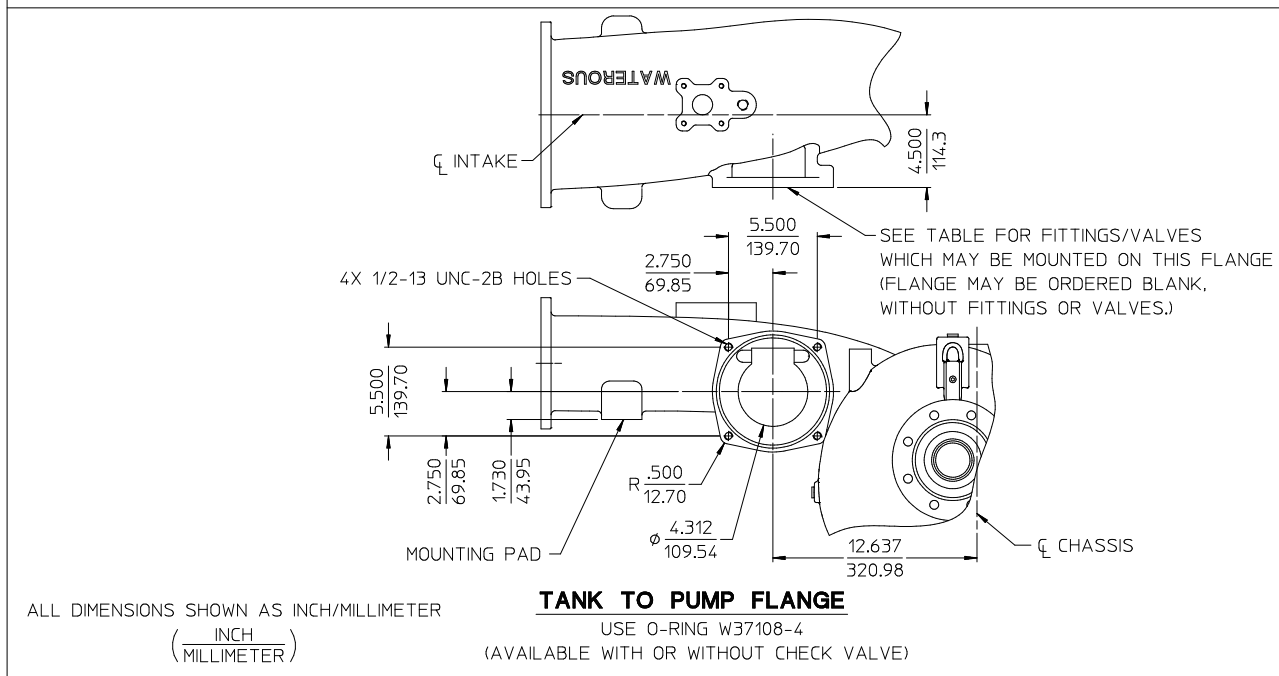
AVAILABLE INTAKE FITTINGS

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

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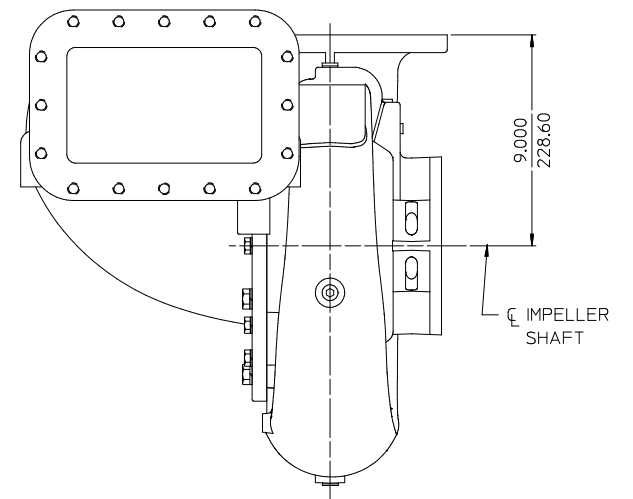
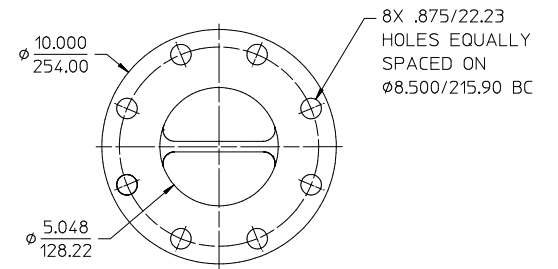
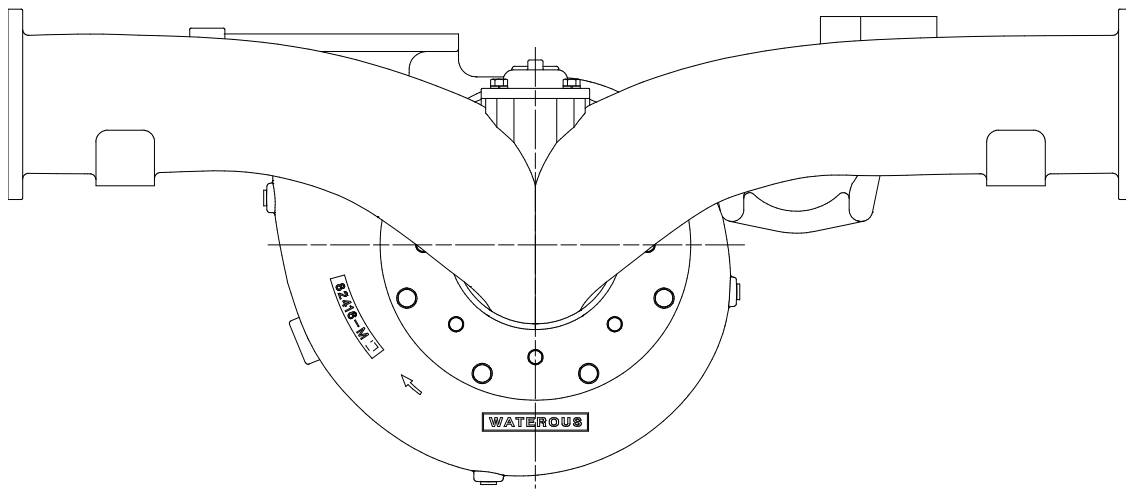


TANK TO PUMP FLANGE FITTINGS/VALVES



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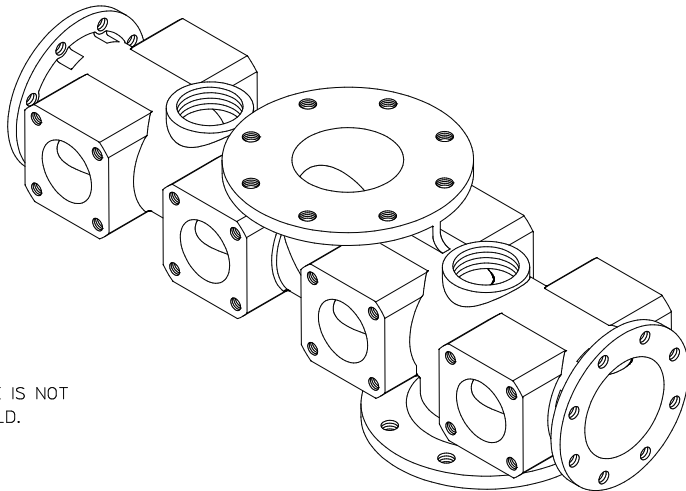
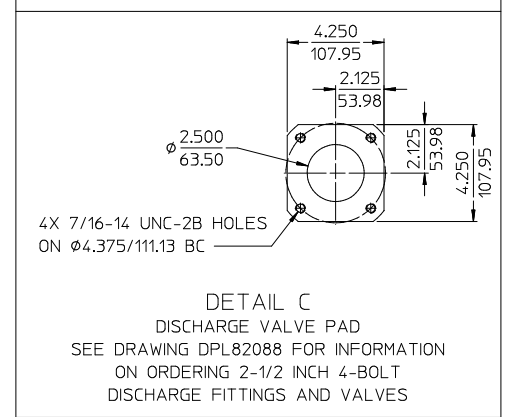
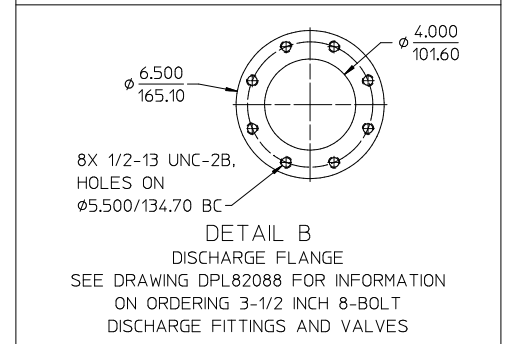
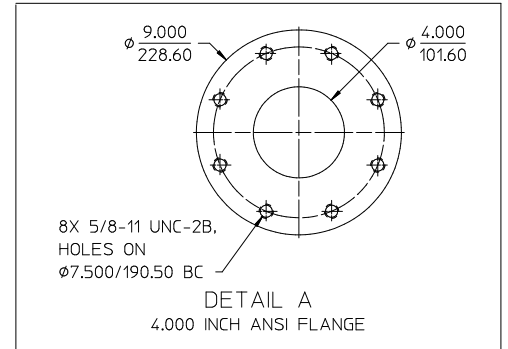
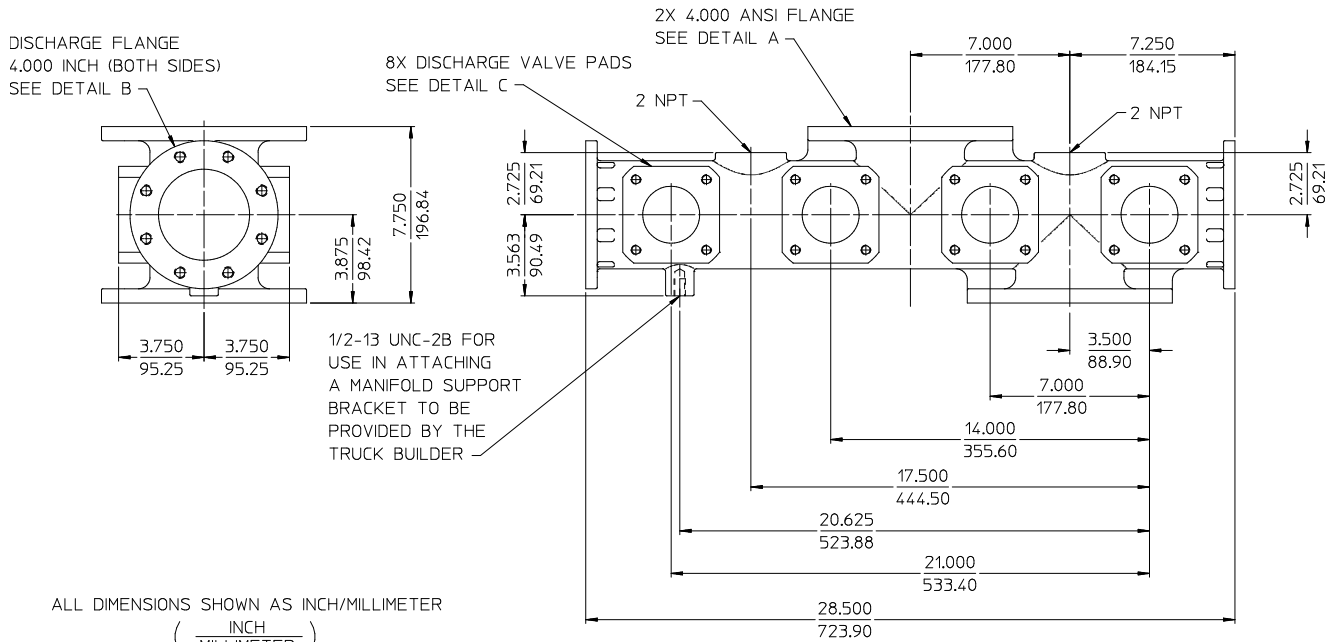
AVAILABLE TANK TO PUMP FITTINGS



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

OPTIONAL BLANK DISCHARGE (5 IN. ANSI FLANGE)

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NOTE: PUMP MOUNTED RELIEF VALVE IS NOT AVAILABLE WITH THIS MANIFOLD.

OPTIONAL DISCHARGE MANIFOLD WITH 4 IN. END FLANGES

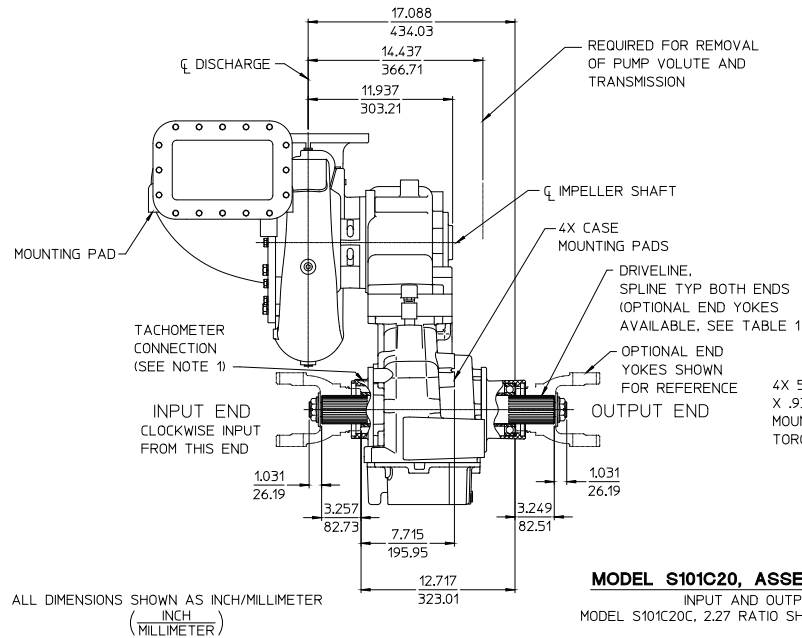
SEE PAGE 14 FOR MANIFOLD MOUNTING ON PUMP

**S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
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DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS			PUMP MODELS	
TYPE	SIZE	SPLINE	YOKE		COMPANION FLANGE		
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	SPICER SERIES	PART NUMBER	CROSS AND BEARING KIT		S101C20C, S101C20D, S101C20E, S101C20F
			1480/1610	--	--	V 3719	
			1650/1710	--	--	V 3619	
			1710 BP	V 2837	V 2839	--	
			1810 BP (3)	V 2838	V 2840	--	
			1710 HR	V 4101	--	--	
1810 HR (3)	V 4102	--	--				
			SPL140	V 3388	V 3389	--	

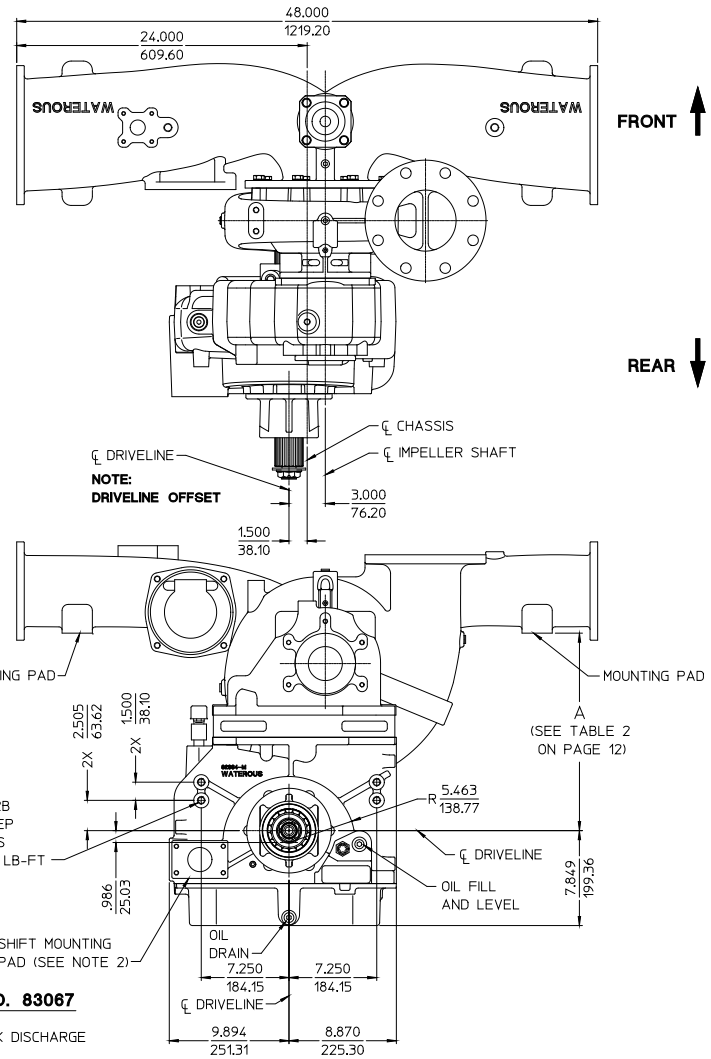
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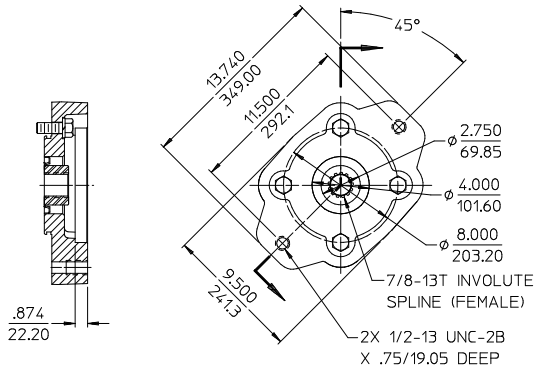
- SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSIONS.
- SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.
- 1810 SERIES END YOKE NOT AVAILABLE ON MODEL S101C20C.



MODEL S101C20, ASSEMBLY NO. 83067

INPUT AND OUTPUT SHAFT
MODEL S101C20C, 2.27 RATIO SHOWN, BLANK DISCHARGE

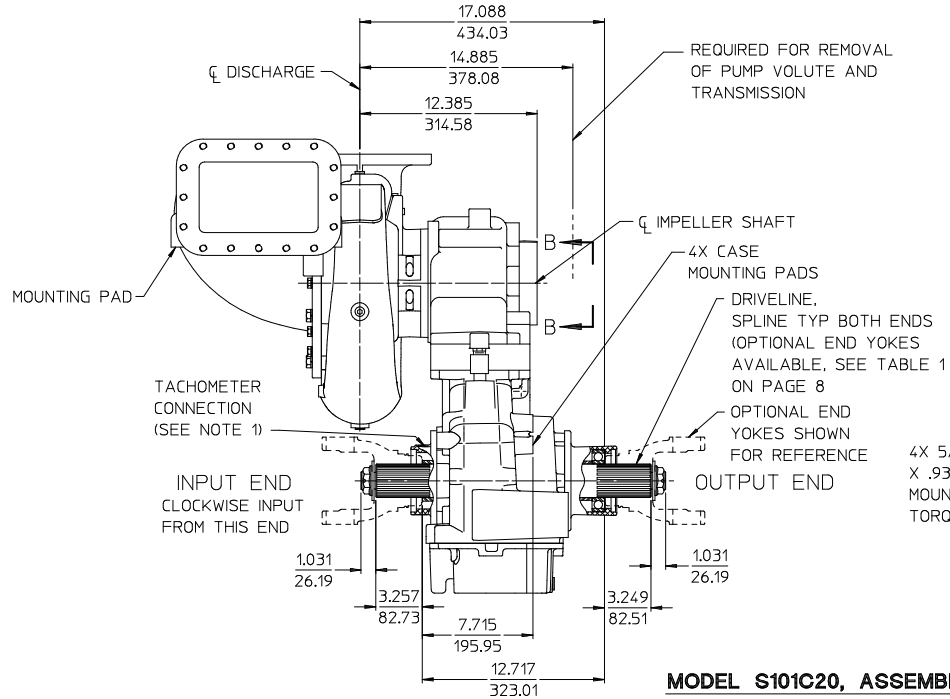




VIEW B-B
HYDRAULIC PUMP ADAPTER FLANGE
USED FOR SAE J744 CLASS B 2-BOLT
HYDRAULIC PUMP WITH MALE
7/8-13T 16/32 PITCH INVOLUTE SPLINE

NOTES:

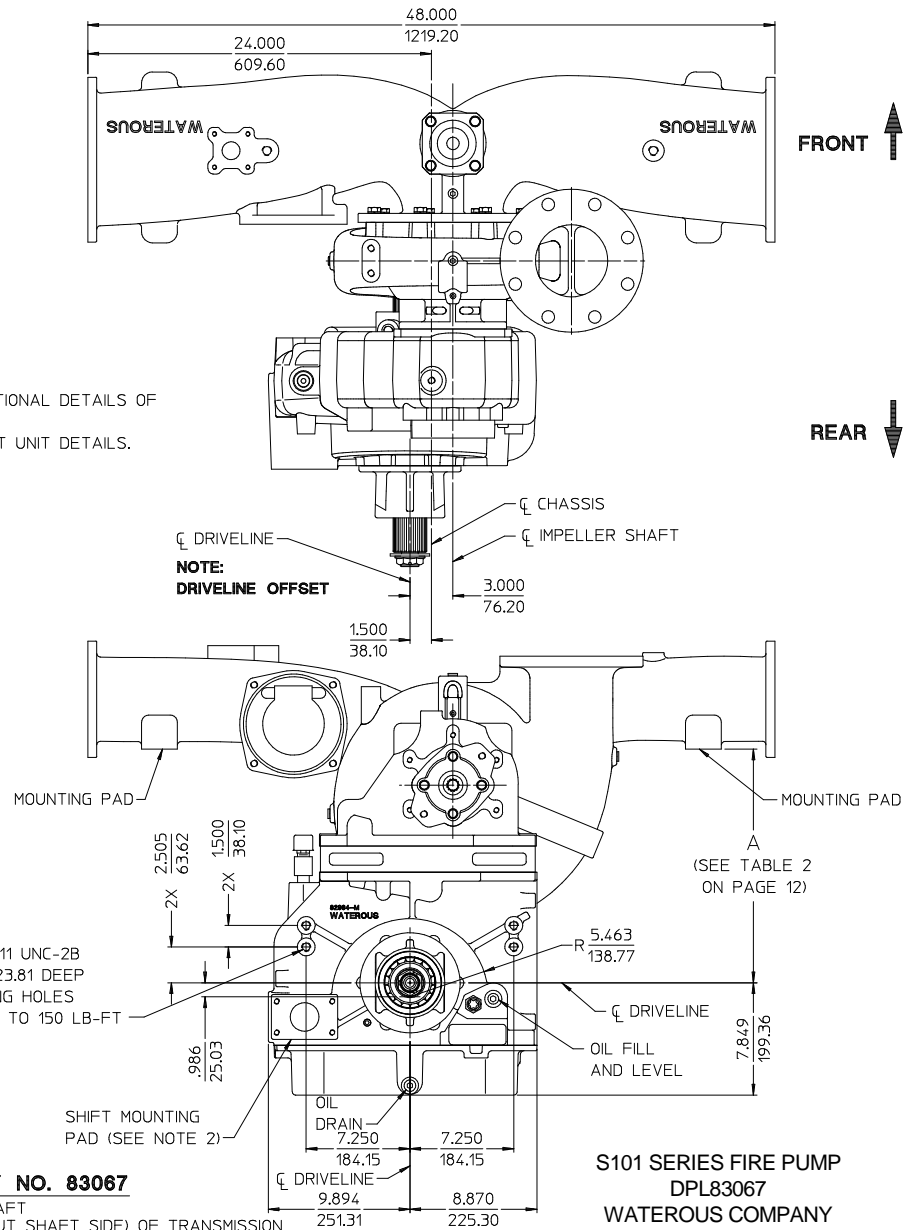
1. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSIONS.
2. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.



MODEL S101C20, ASSEMBLY NO. 83067

INPUT AND OUTPUT SHAFT
HYDRAULIC PUMP MOUNTING PROVISION ON REAR (OUTPUT SHAFT SIDE) OF TRANSMISSION
MODEL S101C20C, 2.27 RATIO SHOWN, BLANK DISCHARGE

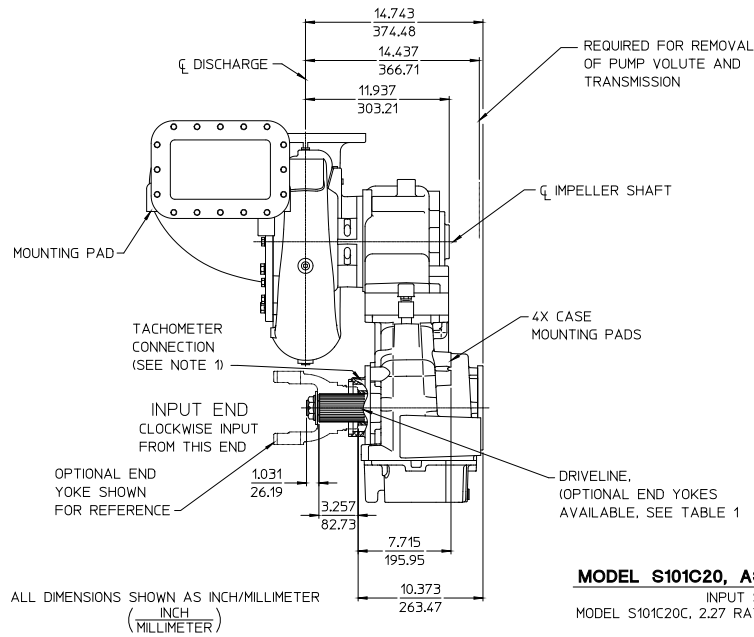
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
(INCH / MILLIMETER)



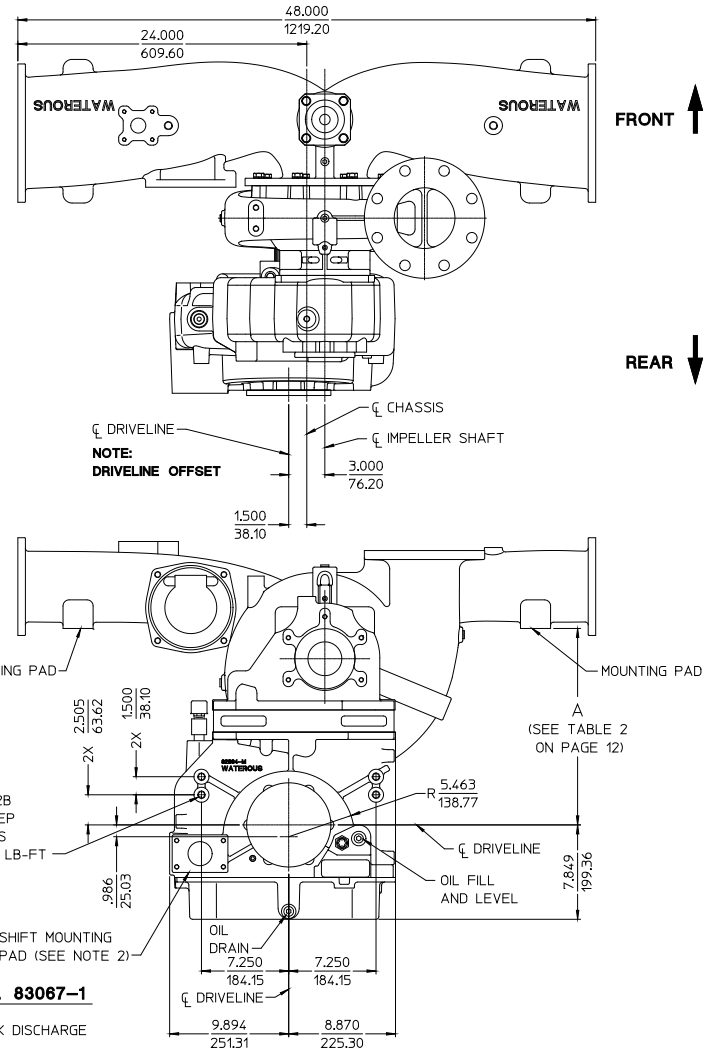
S101 SERIES FIRE PUMP
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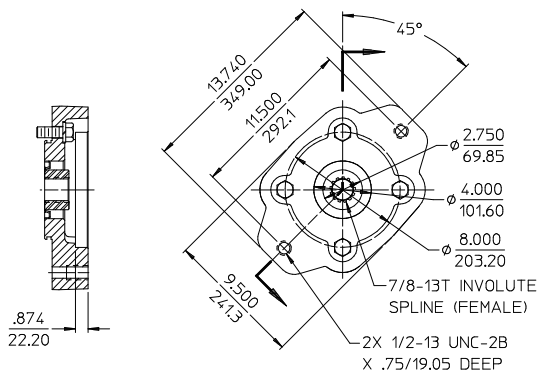
TABLE 1 - AVAILABLE DRIVELINE / MODELS						
DRIVELINE			OPTIONAL END YOKE AND COMPANION FLANGES AVAILABLE FROM WATEROUS			PUMP MODELS
TYPE	SIZE	SPLINE	YOKE		COMPANION FLANGE	
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	SPICER SERIES	PART NUMBER	CROSS AND BEARING KIT	
			1480/1610	--	--	V 3719
			1650/1710	--	--	V 3619
			1710	V 2837	V 2839	--
			1810 (3)	V 2838	V 2840	--
SPL140	V 3388	V 3389	--			

- NOTES:
 1. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSIONS.
 2. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.
 3. 1810 SERIES END YOKE NOT AVAILABLE ON MODEL S101C20C.



MODEL S101C20, ASSEMBLY NO. 83067-1
 INPUT SHAFT ONLY
 MODEL S101C20C, 2.27 RATIO SHOWN, BLANK DISCHARGE



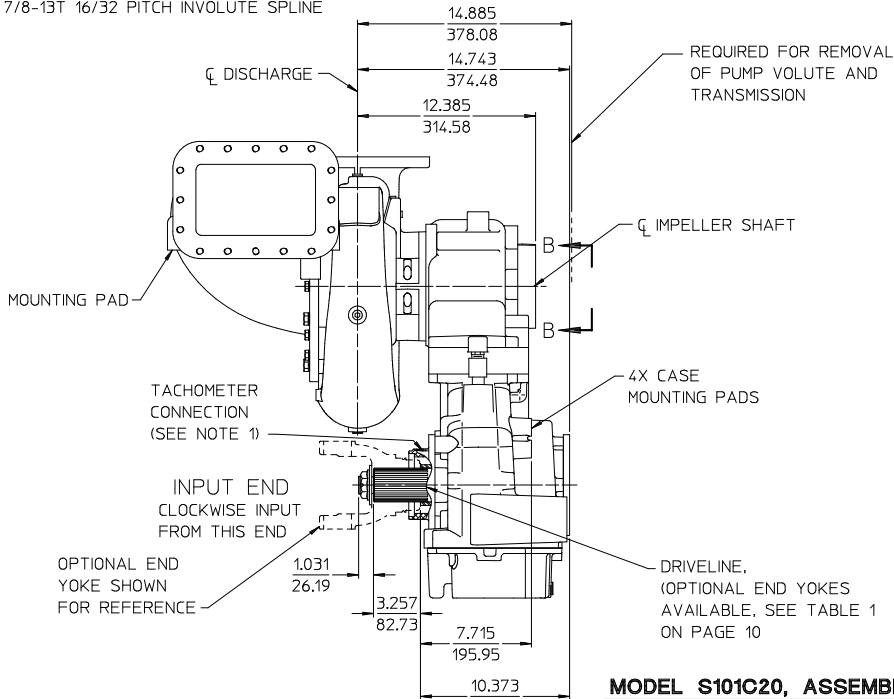


VIEW B-B

HYDRAULIC PUMP ADAPTER FLANGE

USED FOR SAE J744 CLASS B 2-BOLT
HYDRAULIC PUMP WITH MALE
7/8-13T 16/32 PITCH INVOLUTE SPLINE

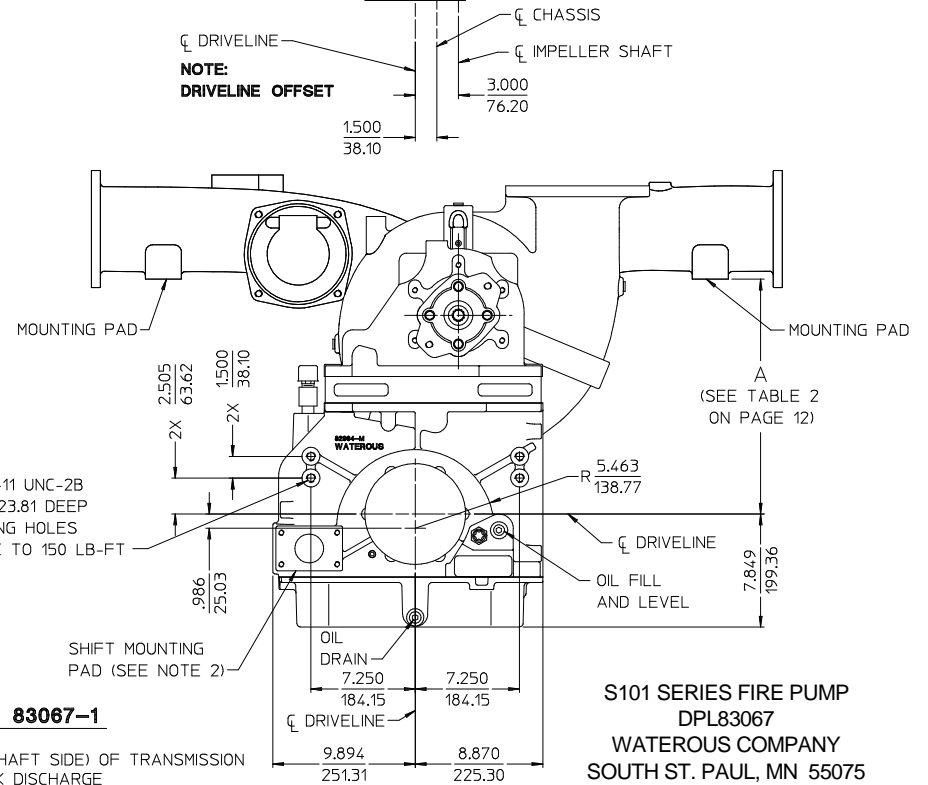
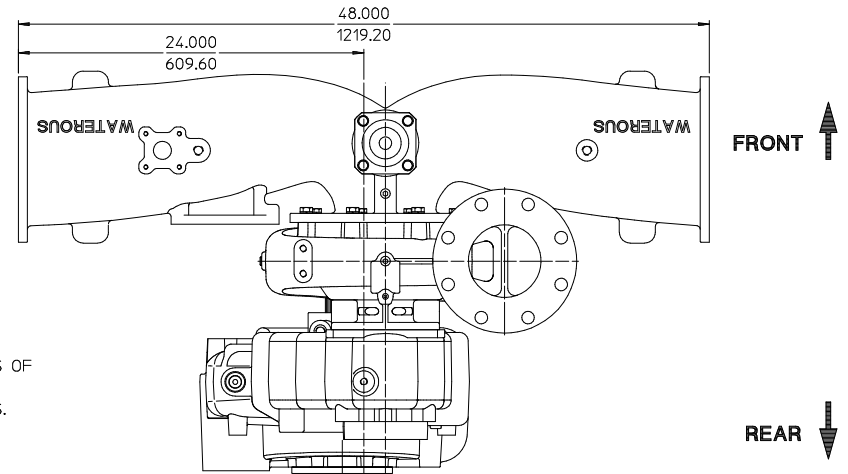
- NOTES:
1. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF
C20 SERIES TRANSMISSIONS.
2. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.



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

MODEL S101C20, ASSEMBLY NO. 83067-1

INPUT SHAFT ONLY
HYDRAULIC PUMP MOUNTING PROVISION ON REAR (OUTPUT SHAFT SIDE) OF TRANSMISSION
MODEL S101C20C, 2.27 RATIO SHOWN, BLANK DISCHARGE



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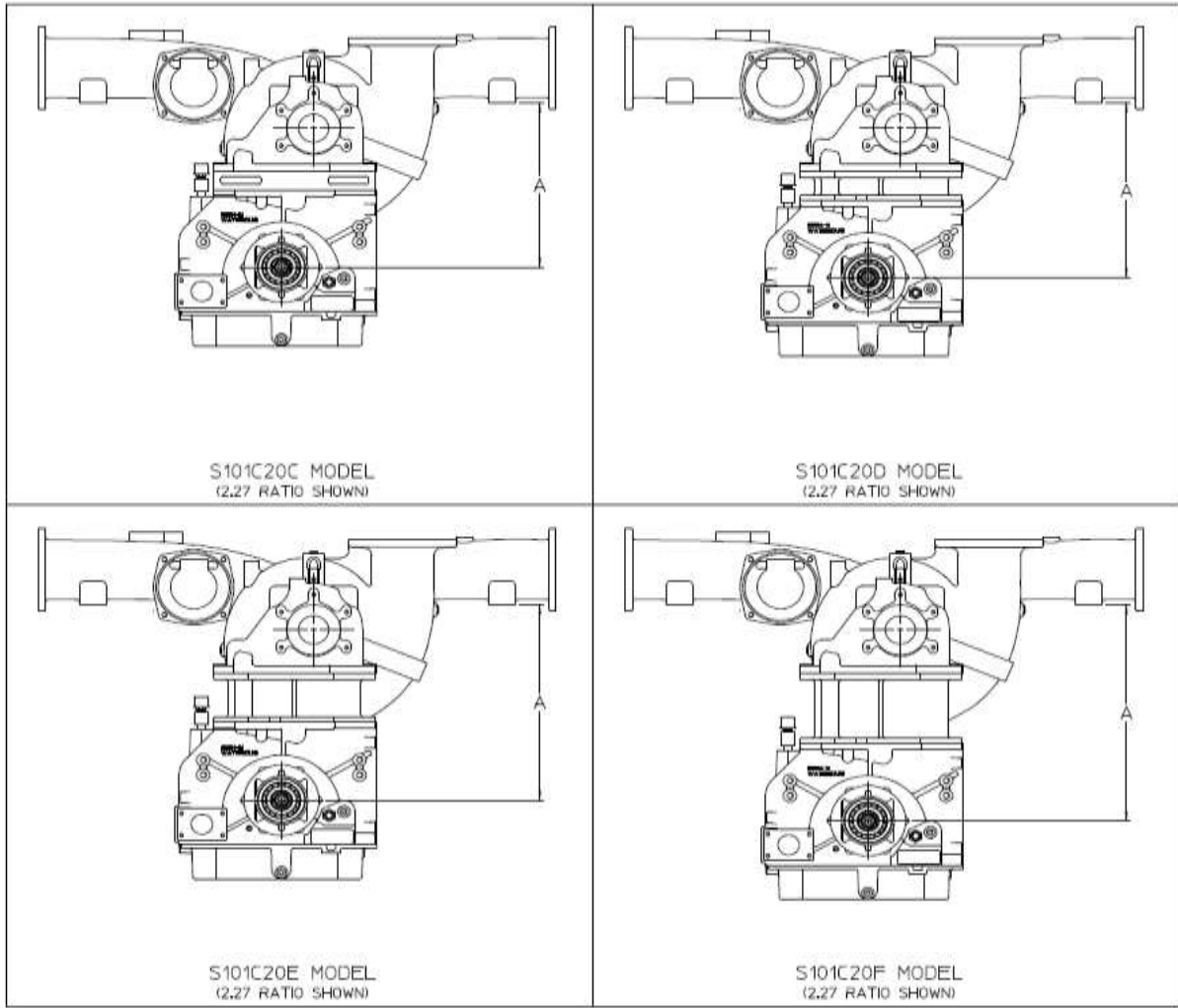
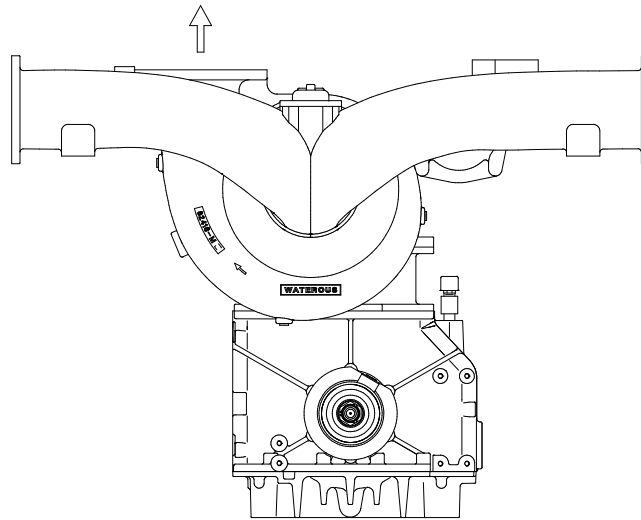


TABLE 2 - AVAILABLE RATIOS

DRIVE TO DRIVEN RATIO	DIMENSION A			
	S101C20C	S101C20D	S101C20E	S101C20F
1.27	16.832	17.345	19.381	21.412
	427.52	440.56	492.27	543.86
1.41	16.419	17.451	19.491	21.522
	417.03	443.25	495.06	546.65
1.48	16.398	17.427	19.471	21.501
	416.50	442.64	494.56	546.12
1.58	16.276	17.308	19.350	21.381
	413.40	439.62	491.48	543.07
1.69	16.359	17.396	19.443	21.481
	415.51	441.85	493.84	545.61
1.79	16.565	17.592	19.647	21.688
	420.74	446.83	499.03	550.87
1.88	16.210	17.237	19.293	21.329
	411.73	437.81	490.03	541.75
1.97	16.390	17.432	19.490	21.532
	416.30	442.76	495.04	546.90
2.03	16.504	17.548	19.606	21.652
	419.19	445.71	497.98	549.95
2.27	16.331	17.376	19.440	21.491
	414.80	441.34	493.77	545.86
2.46	16.562	17.607	19.674	21.725
	420.67	447.21	499.71	551.81
2.68	16.266	17.313	19.385	21.443
	413.16	439.75	492.38	544.65

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

RATIO AND DROP DIMENSIONS



PUMP DISCHARGE IS ONLY AVAILABLE IN THE UP POSITION
POSITION AS VIEWED LOOKING AT TRANSMISSION INPUT SHAFT.

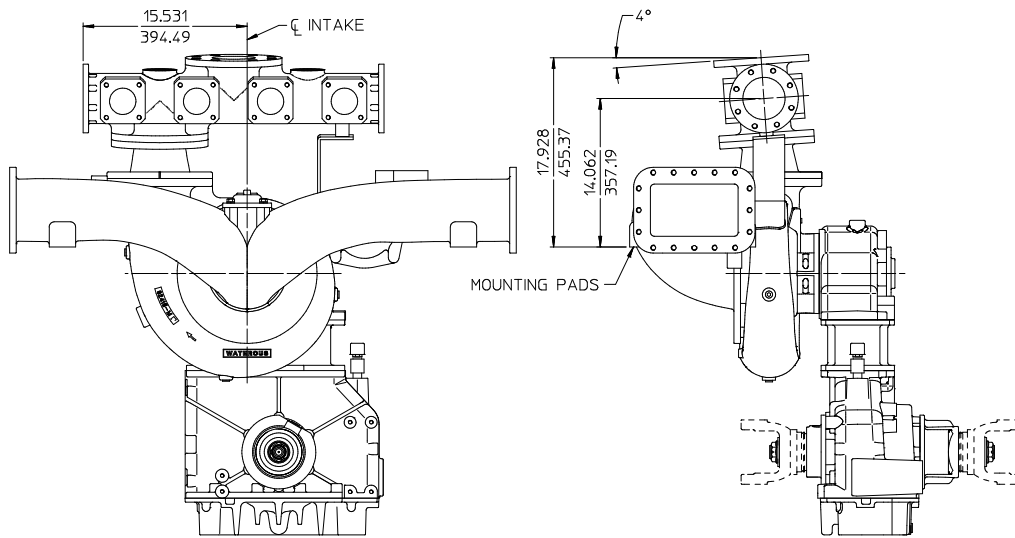
DISCHARGE POSITION

ORDERING INFORMATION

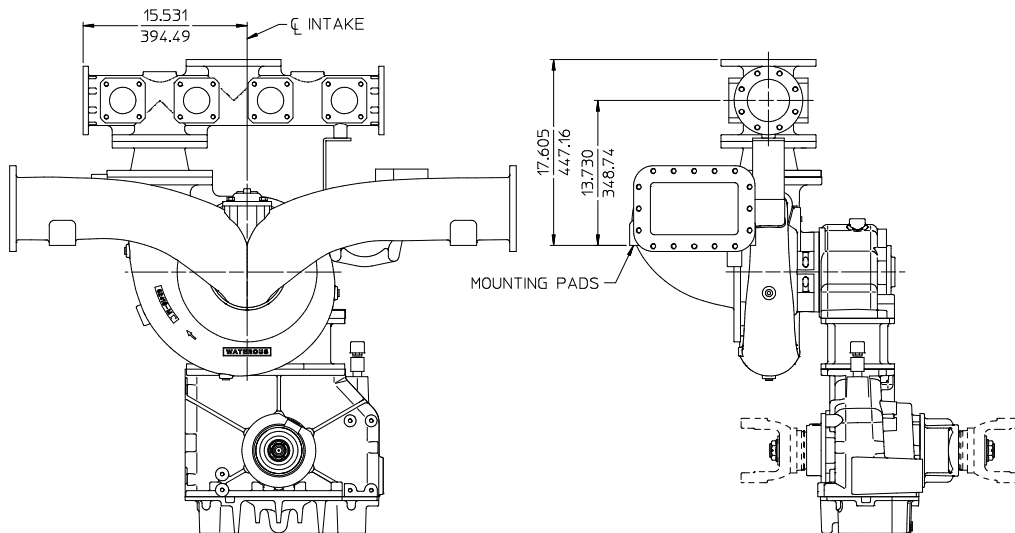
WHEN ORDERING FURNISH THE FOLLOWING INFORMATION:

1. PUMP MODEL: (SEE PAGES 8-11).
2. DRIVE TO DRIVEN RATIO: (SEE PAGE 12).
3. HYDRAULIC ADAPTER (SEE PAGES 9 OR 11).
4. OPTIONAL DISCHARGE FITTING: (SEE PAGES 6 OR 7 AND 14).
5. ASSEMBLY NUMBER (SEE PAGES 8-11)

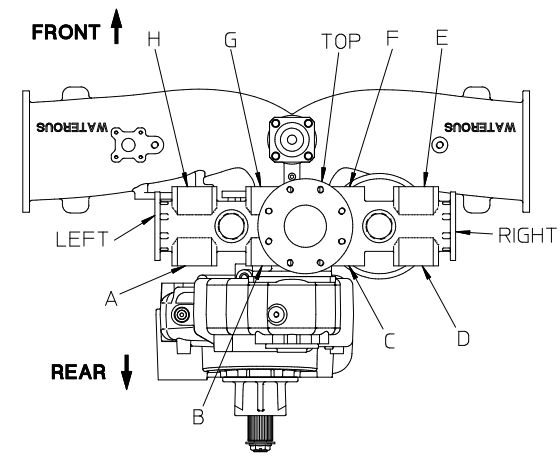
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WATEROUS COMPANY
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ANGLE COMPENSATED



NON-ANGLE COMPENSATED



PAD	SIZE	SEE DETAIL ON PAGE 7
LEFT	4 IN. 8-BOLT	B
RIGHT	4 IN. 8-BOLT	B
TOP	4 IN. ANSI	A
A	2-1/2 IN. 4-BOLT	C
B	2-1/2 IN. 4-BOLT	C
C	2-1/2 IN. 4-BOLT	C
D	2-1/2 IN. 4-BOLT	C
E	2-1/2 IN. 4-BOLT	C
F	2-1/2 IN. 4-BOLT	C
G	2-1/2 IN. 4-BOLT	C
H	2-1/2 IN. 4-BOLT	C

MANIFOLD PADS

**MANIFOLD MOUNTED PERPENDICULAR TO INTAKE
MODEL S101C20, ASSEMBLY NO'S. 83067 AND 83067-1**

NOTE: SEE PAGE 7 FOR MANIFOLD DIMENSIONS NOT SHOWN

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

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