



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

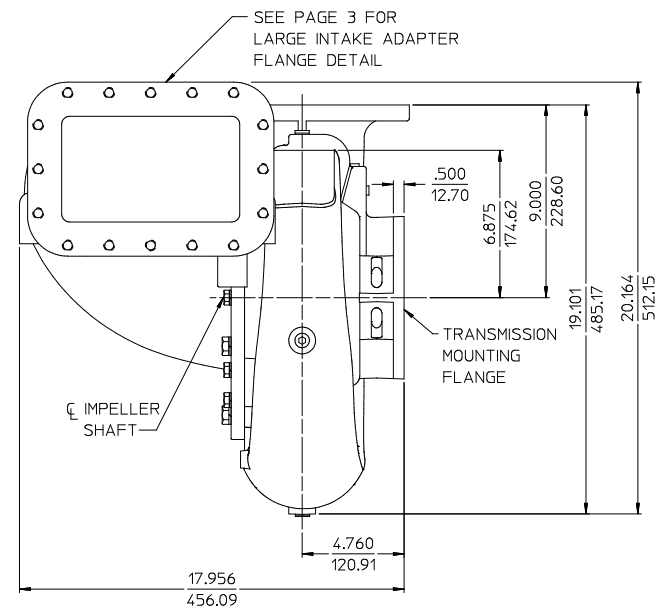
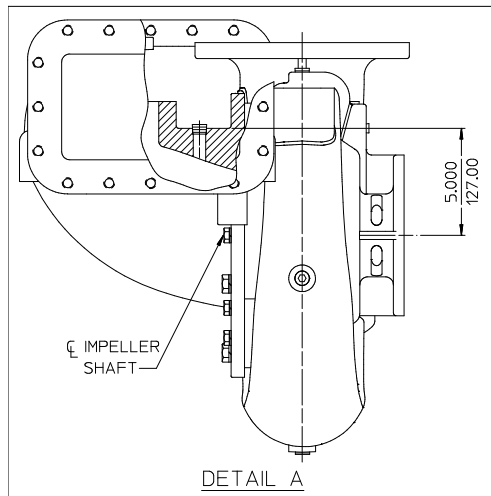
S101 Series Fire Pump Dimensional Drawings With Crosspipe Intake Fitting

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

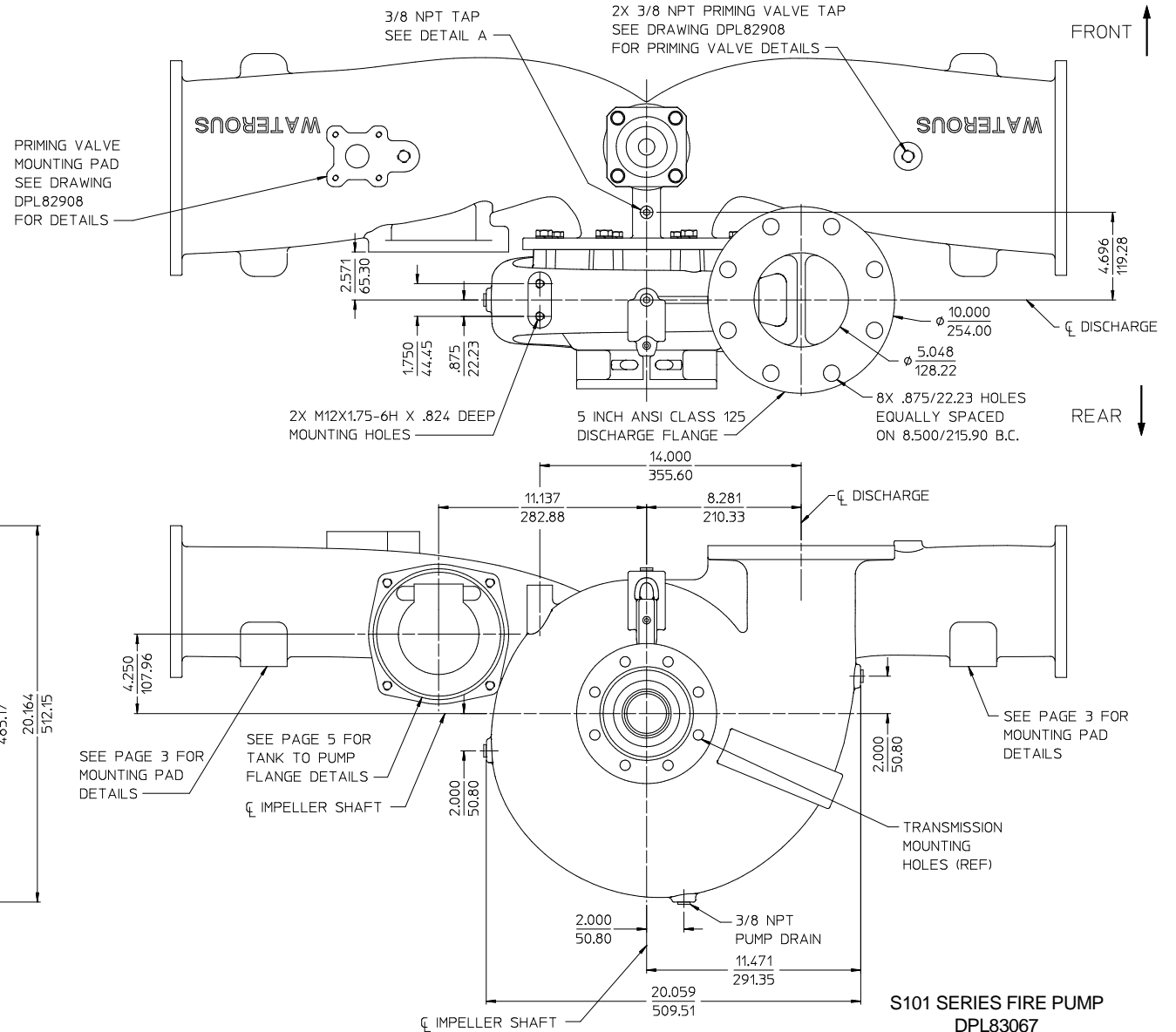
Pump and Transmission										
Drive				Impeller Rota- tion (2)	Pump Model	Assembly Number	See Page			
Type	Pump Body Mouting on Transmission	Input Rota- tion (1)	Driveline Type				Hydraulic Pump Mounting Provision		Available Pump Discharge Positions and Ordering Info	Optional Discharge Manifold Mounting on Pump (Perpendicular to In- take Only)
							No	Yes		
C20 Series Split Shaft Chain Drive Transmis- sion	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).

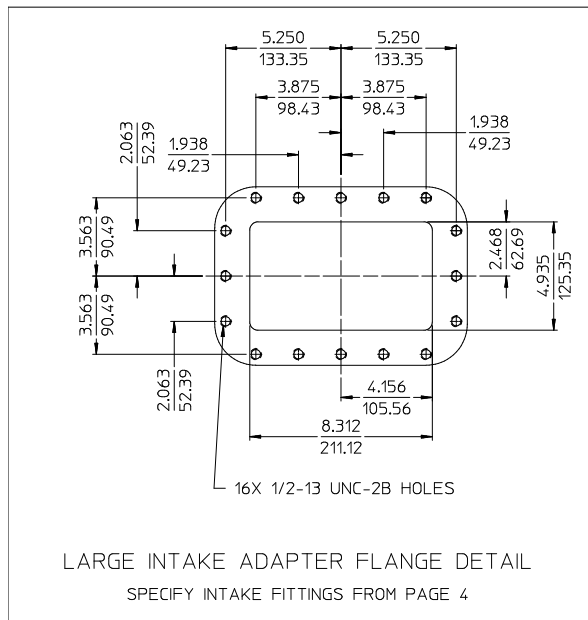


ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
($\frac{\text{INCH}}{\text{MILLIMETER}}$)

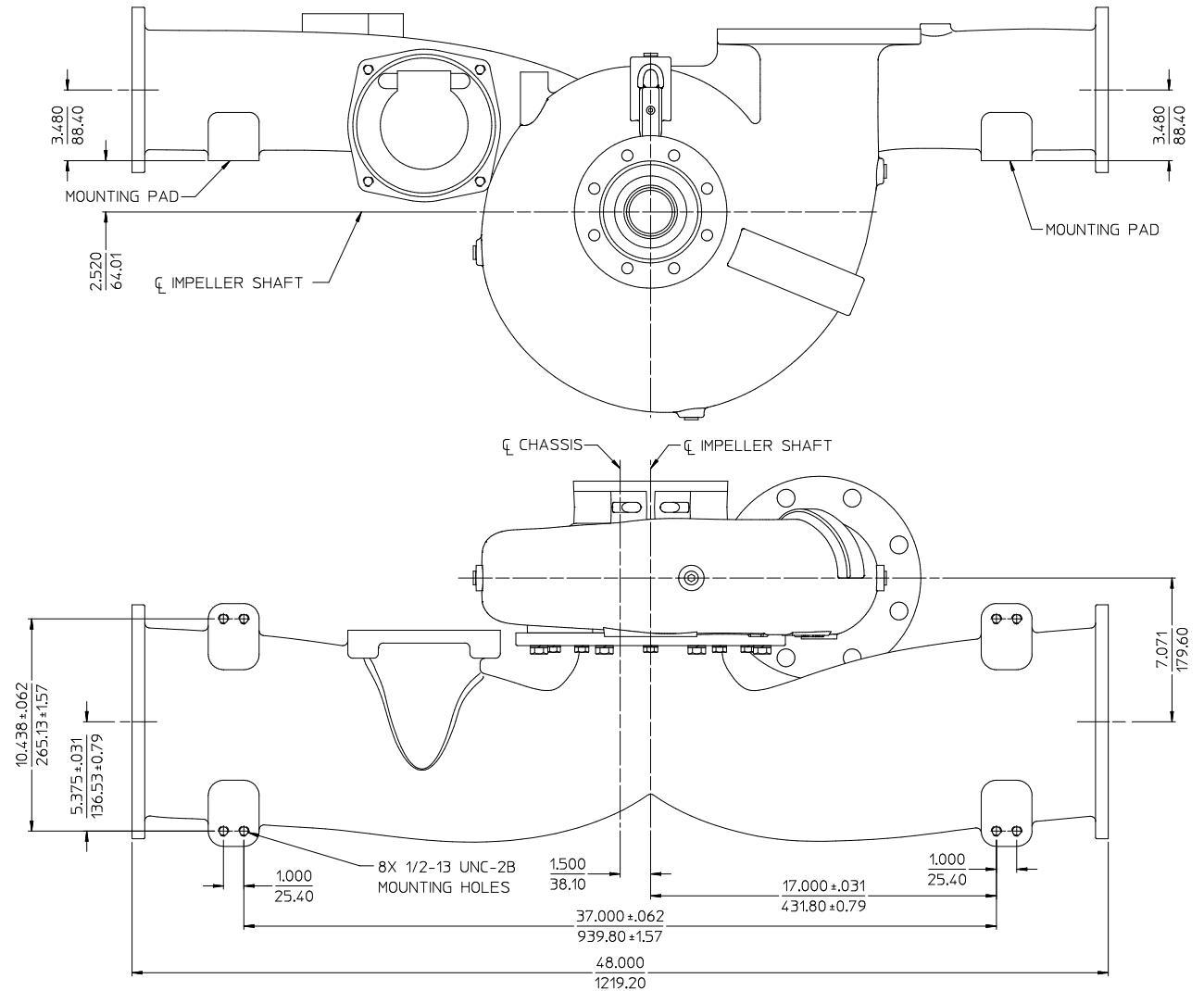


PUMP BODY AND CROSSPIPE DIMENSIONS

S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
PAGE 2 OF 14

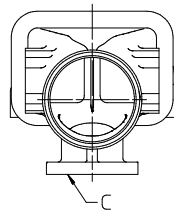
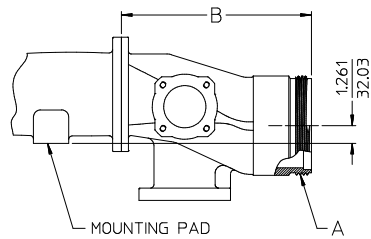
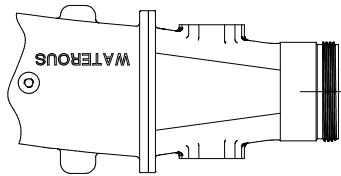


ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
($\frac{\text{INCH}}{\text{MILLIMETER}}$)



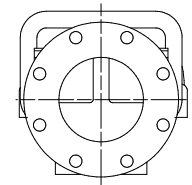
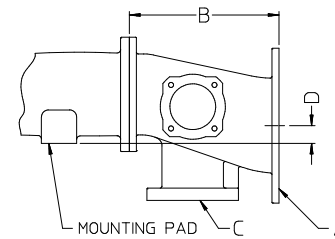
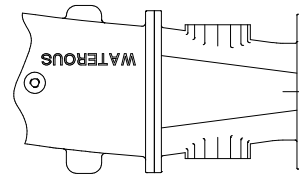
PUMP BODY AND CROSSPIPE DIMENSIONS

S101 SERIES FIRE PUMP
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WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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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
		13.500 342.90	3-1/2 IN. 8 BOLT	NO	81916
			NO	YES	82173
			5 IN. ANSI	YES	82174
		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	50.29	YES	82302
		10.625 269.88	3-1/2 IN. 8 BOLT	1.261	NO	82011
			NO		YES	82165
			5 IN. ANSI		YES	82168

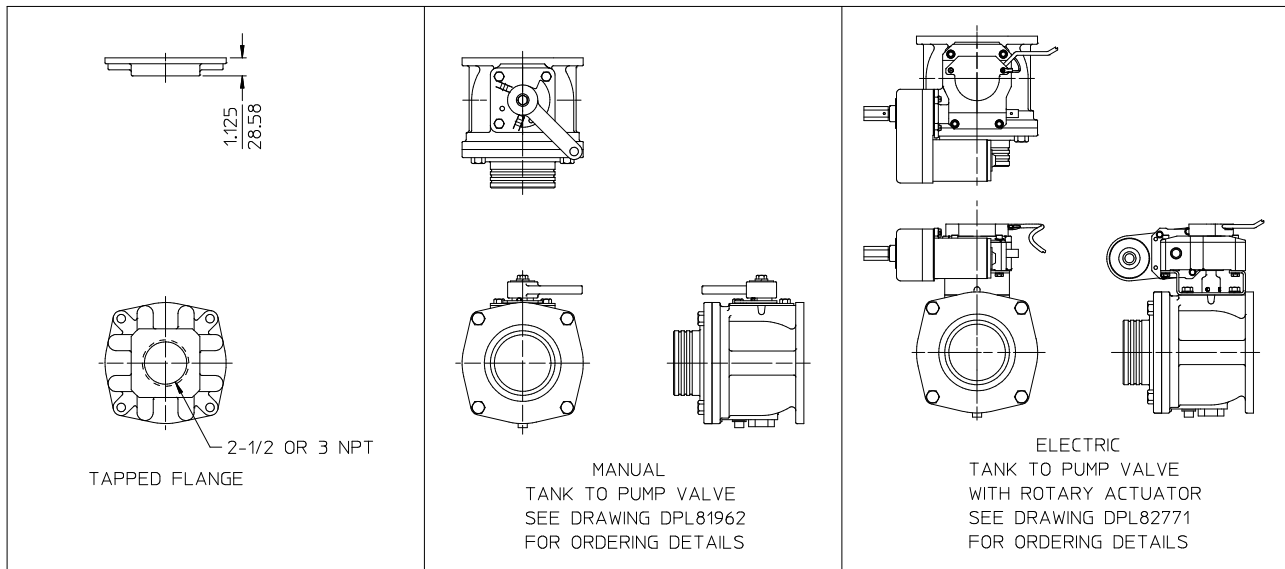
FLANGED INTAKE FITTING
PART 82011 SHOWN

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

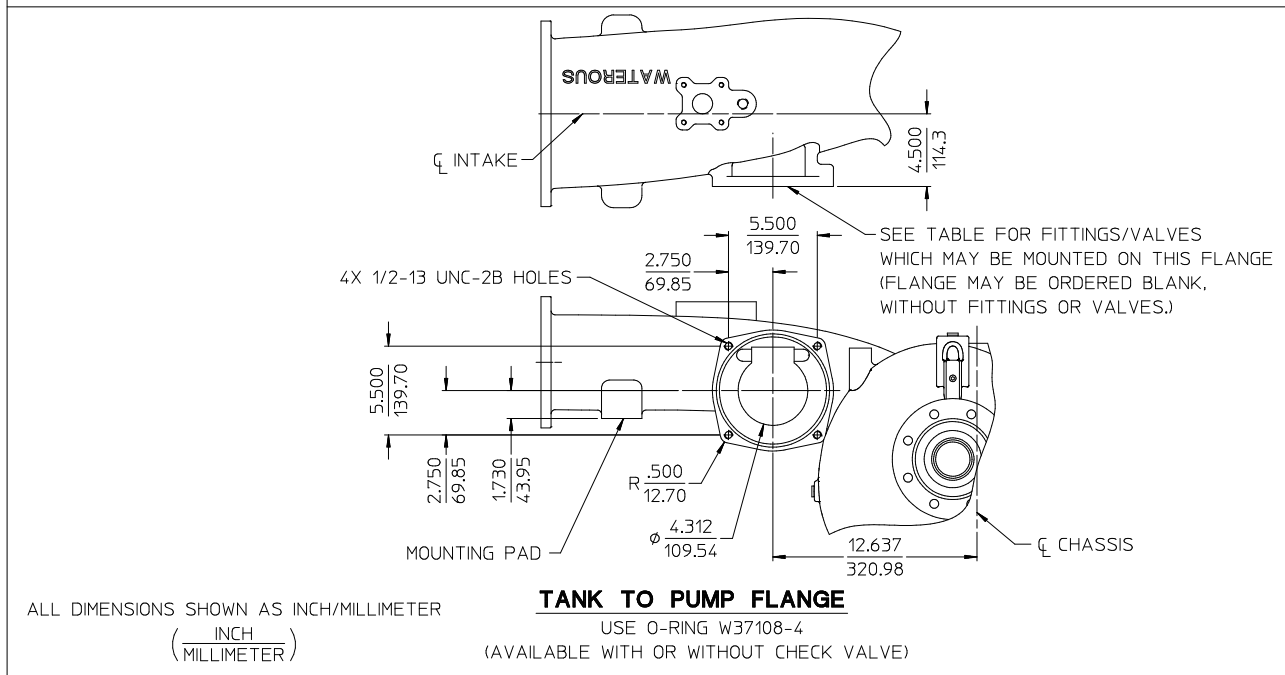
ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
($\frac{\text{INCH}}{\text{MILLIMETER}}$)

AVAILABLE INTAKE FITTINGS

S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
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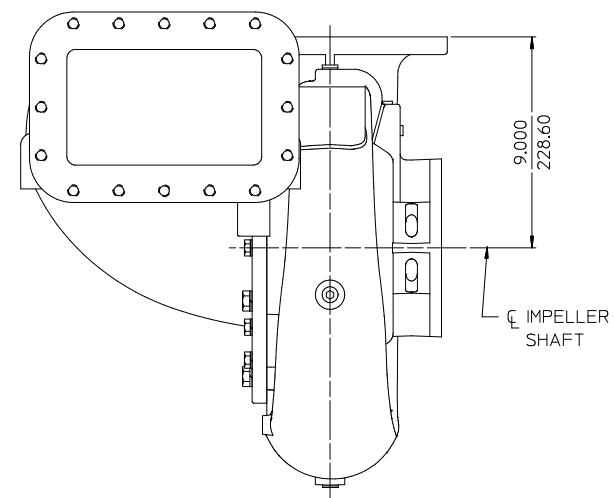
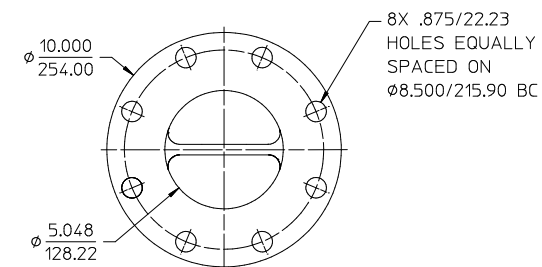
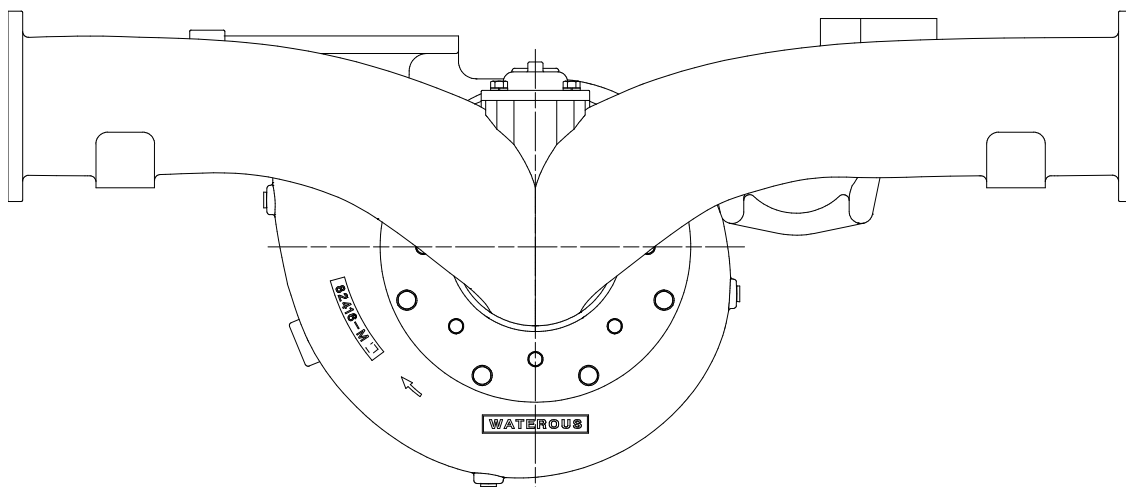


TANK TO PUMP FLANGE FITTINGS/VALVES



S101 SERIES FIRE PUMP
DPL83067
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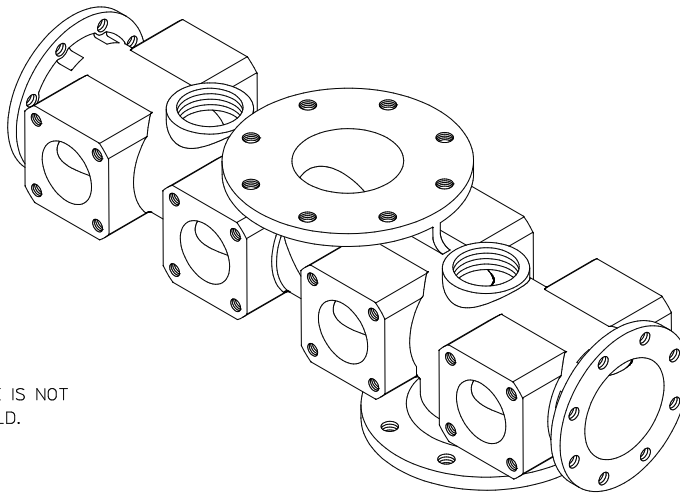
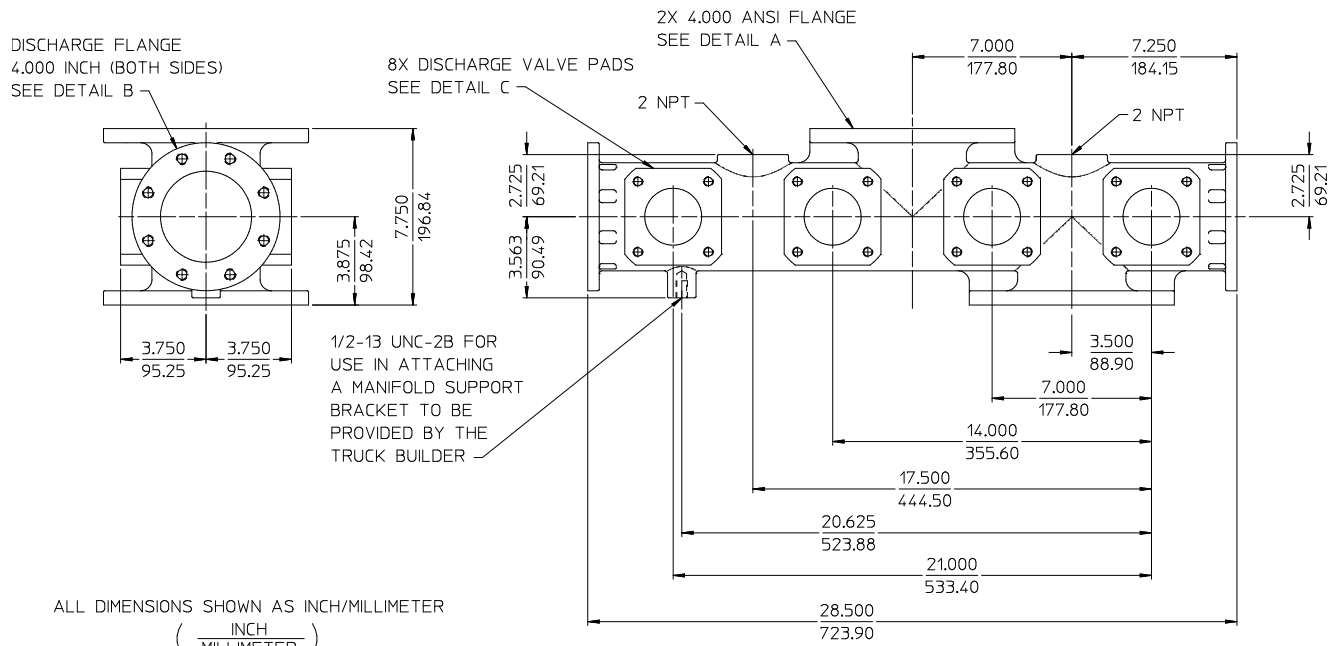
AVAILABLE TANK TO PUMP FITTINGS



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

OPTIONAL BLANK DISCHARGE (5 IN. ANSI FLANGE)

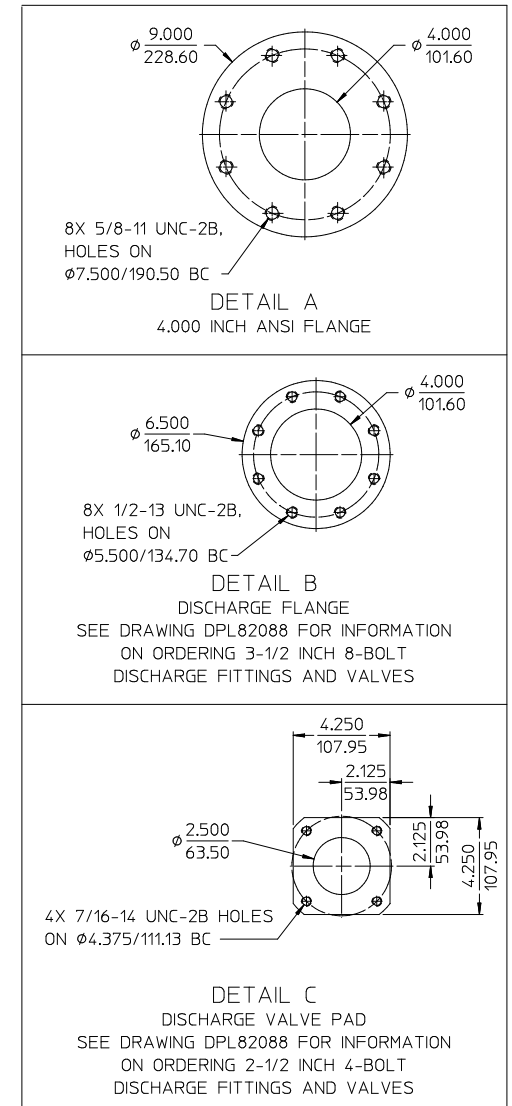
S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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NOTE: PUMP MOUNTED RELIEF VALVE IS NOT
AVAILABLE WITH THIS MANIFOLD.

OPTIONAL DISCHARGE MANIFOLD WITH 4 IN. END FLANGES

SEE PAGE 14 FOR MANIFOLD MOUNTING ON PUMP

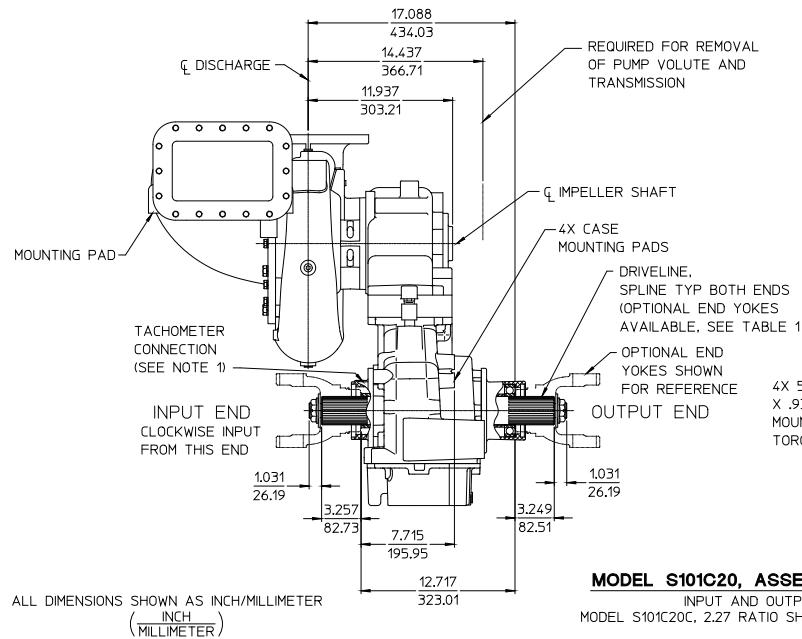


**S101 SERIES FIRE PUMP
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WATEROUS COMPANY
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TABLE 1 - AVAILABLE DRIVELINE / MODELS						
DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS			
TYPE	SIZE	SPLINE	SPICER SERIES	YOKE PART NUMBER	CROSS AND BEARING KIT	COMPANION FLANGE
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE	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	--
			PUMP MODELS			
			S101C20C, S101C20D, S101C20E, S101C20F			

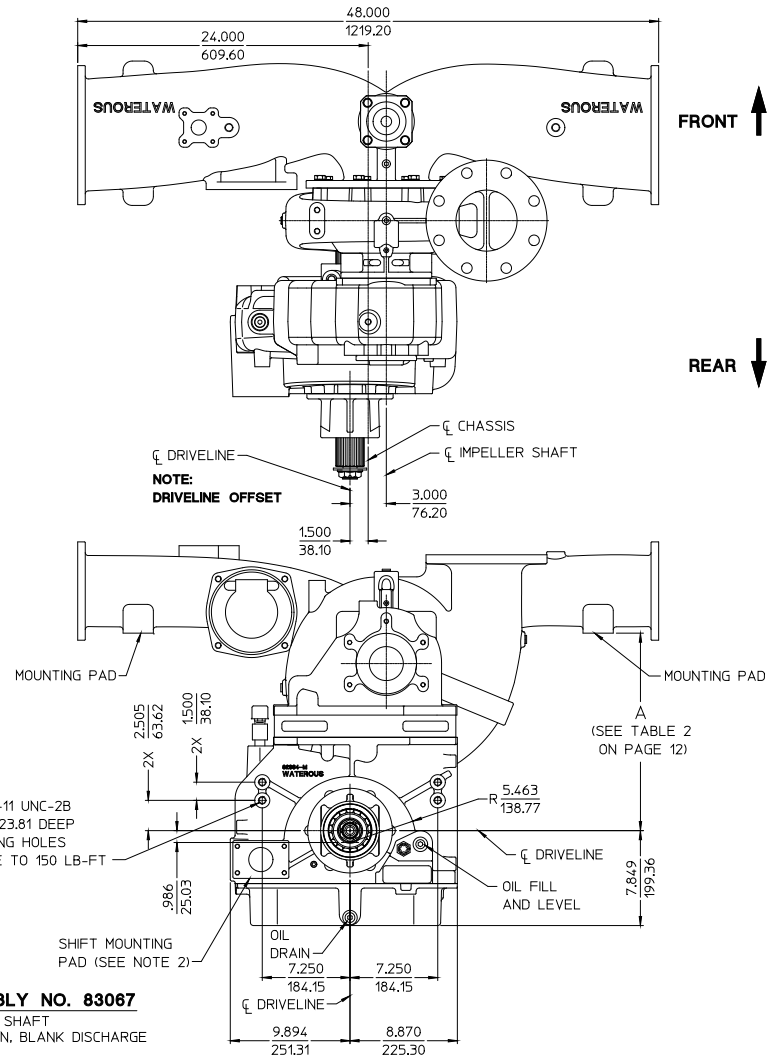
NOTES:

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.

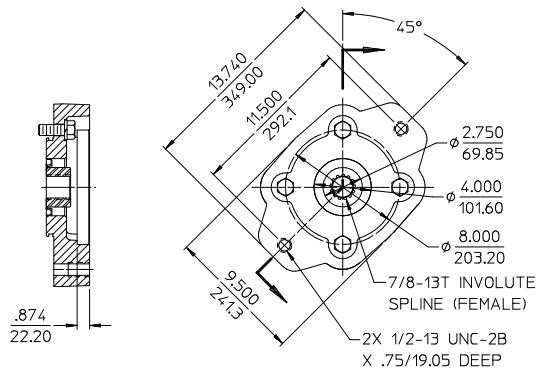


MODEL S101C20, ASSEMBLY NO. 83067

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



S101 SERIES FIRE PUMP
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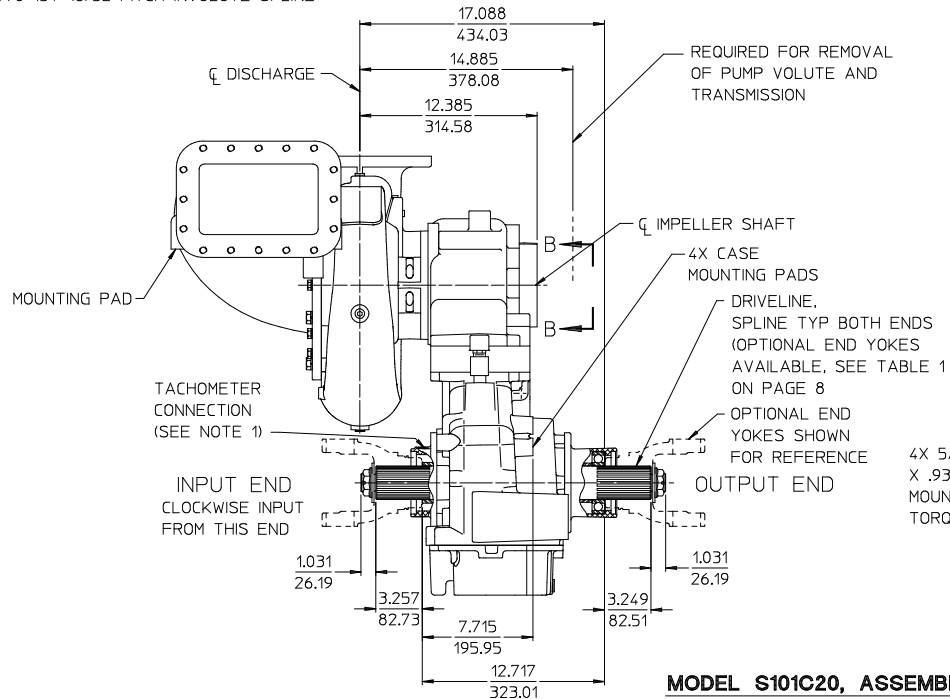


VIEW B-B

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:

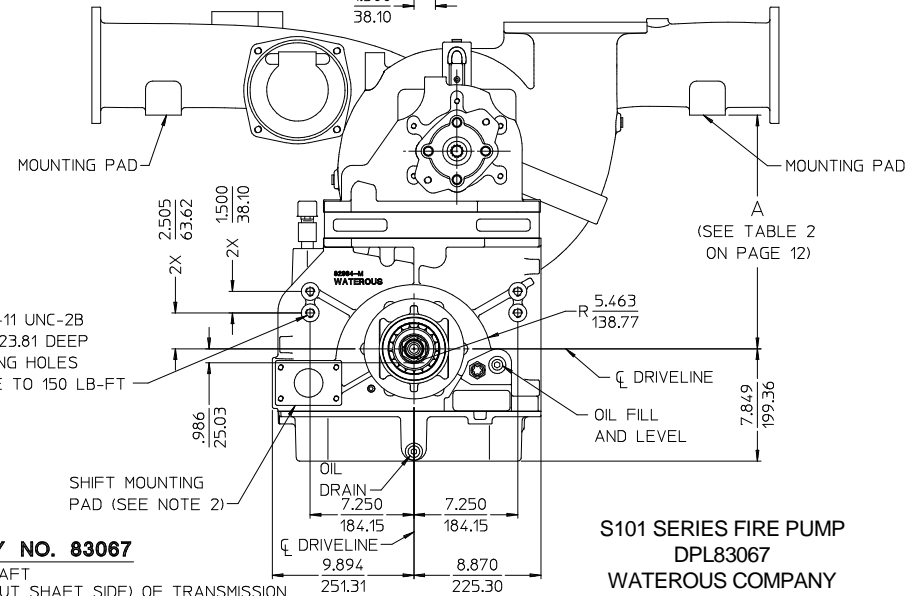
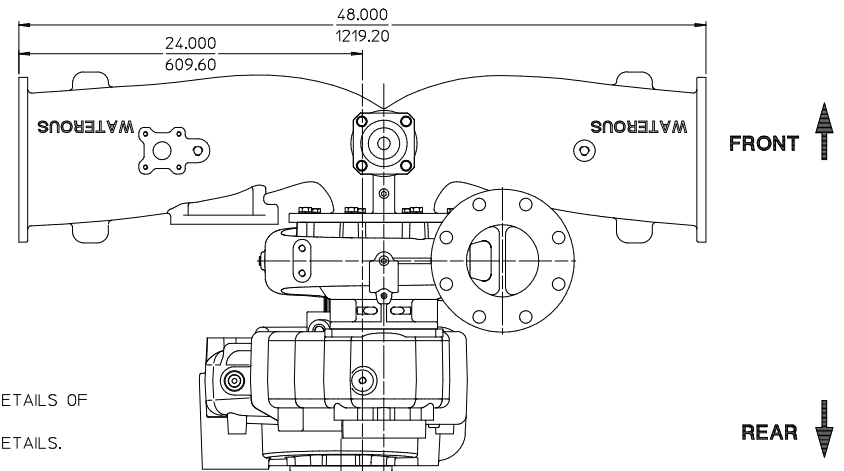
1. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSIONS.
2. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.



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

MODEL S101C20, ASSEMBLY NO. 83067

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

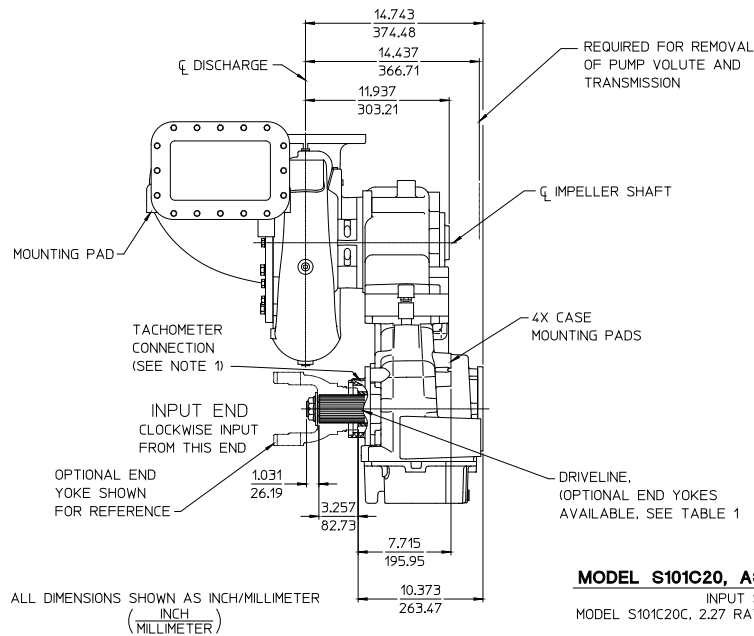


**S101 SERIES FIRE PUMP
DPL83067
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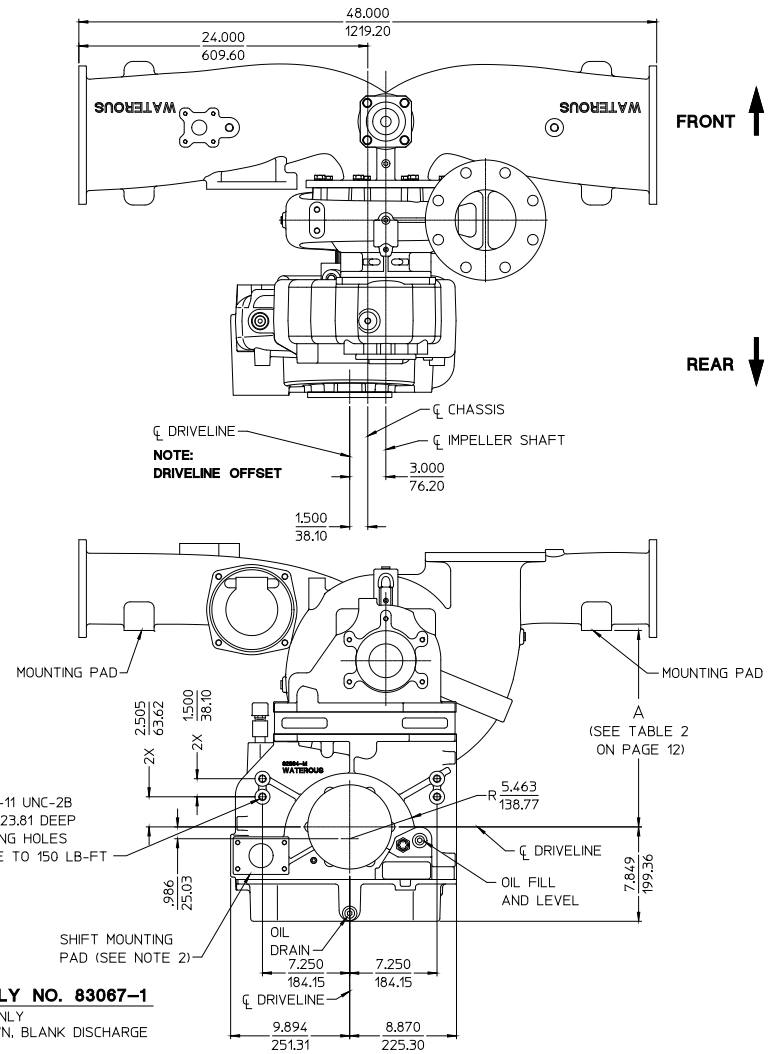
TABLE 1 - AVAILABLE DRIVELINE / MODELS							
DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS				PUMP MODELS
TYPE	SIZE	SPLINE	SPICER SERIES	YOKE		COMPANION FLANGE	
EXTRA HEAVY DUTY	2.35 INCH	2.350-46T INVOLUTE		1480/1610	--	--	V 3719
			1650/1710	--	--	V 3619	
			1710	V 2837	V 2839	--	
			1810 (3)	V 2838	V 2840	--	
			SPL140	V 3388	V 3389	--	

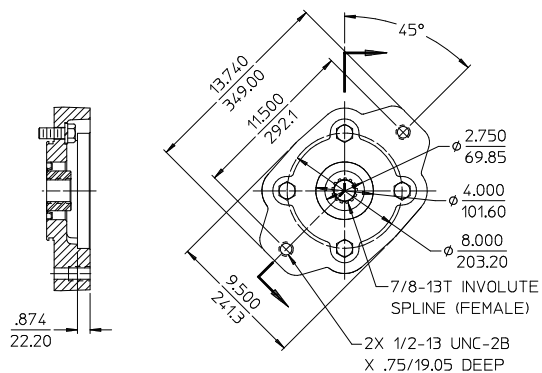
NOTES:

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.



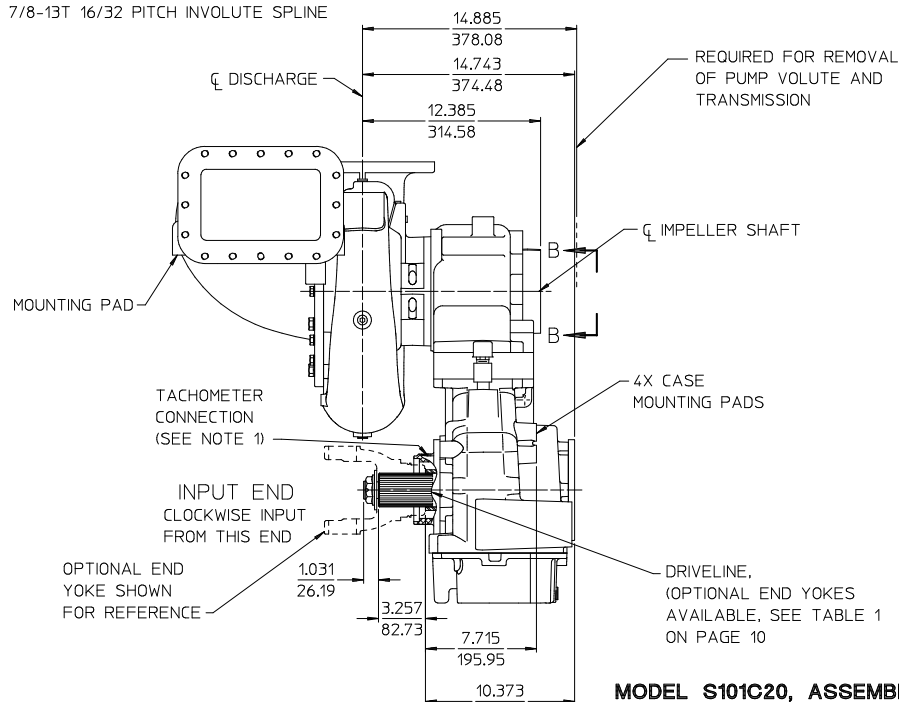
MODEL S101C20, ASSEMBLY NO. 83067-1
INPUT SHAFT ONLY
MODEL S101C20C, 2.27 RATIO SHOWN, BLANK DISCHARGE





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

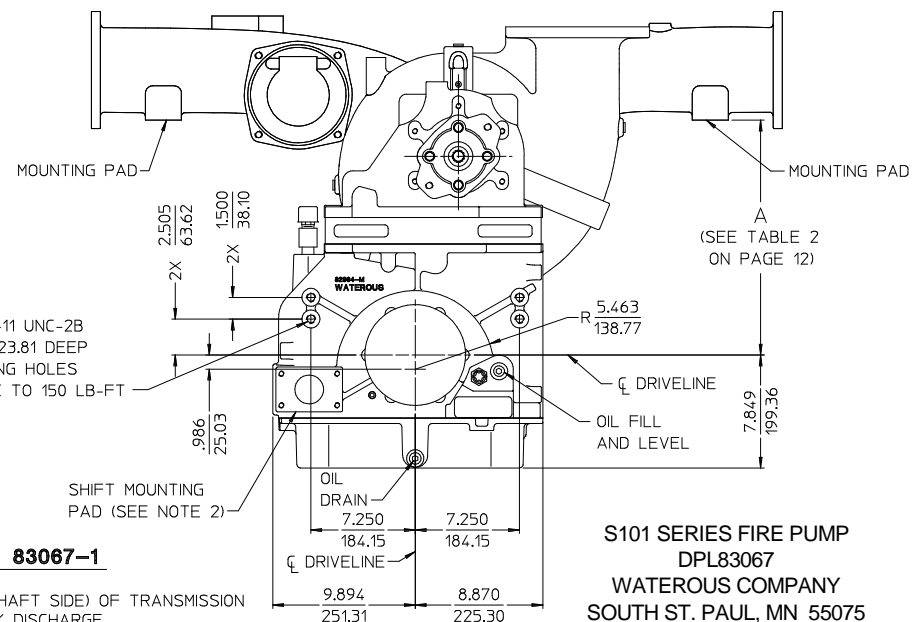
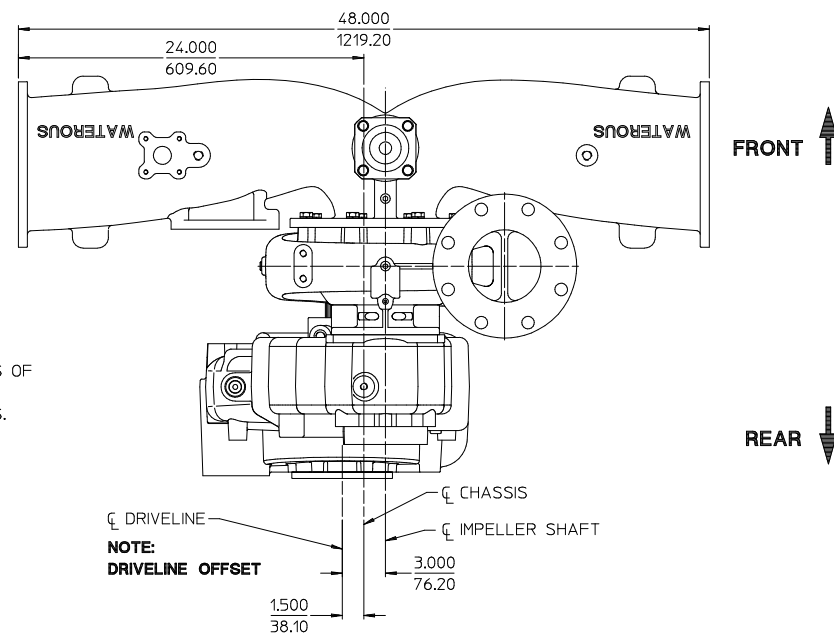
- NOTES:
1. SEE DRAWING DPL83065 FOR ADDITIONAL DETAILS OF
C20 SERIES TRANSMISSIONS.
2. SEE DRAWING DPL82086 FOR SHIFT UNIT DETAILS.



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



**S101 SERIES FIRE PUMP
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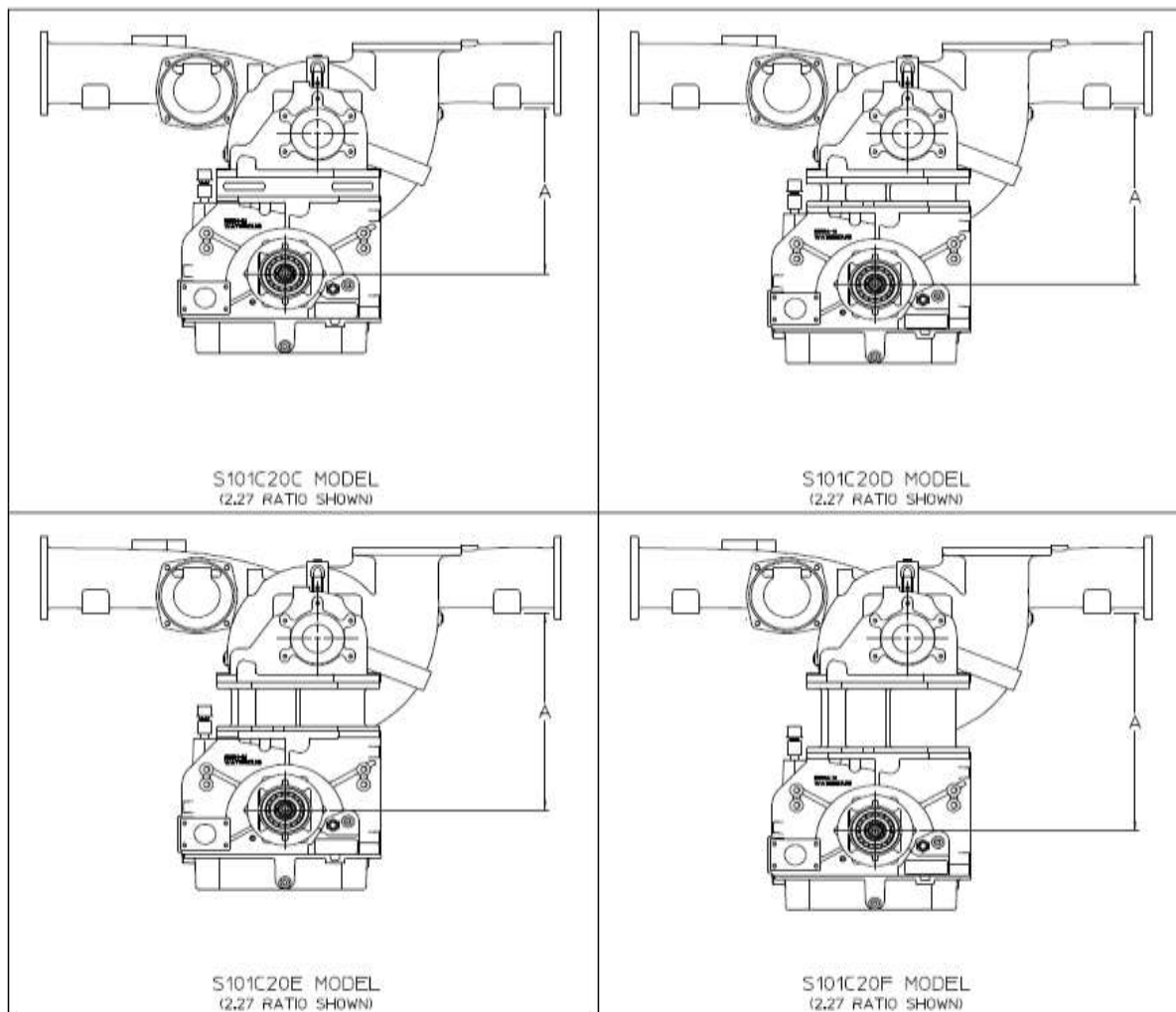
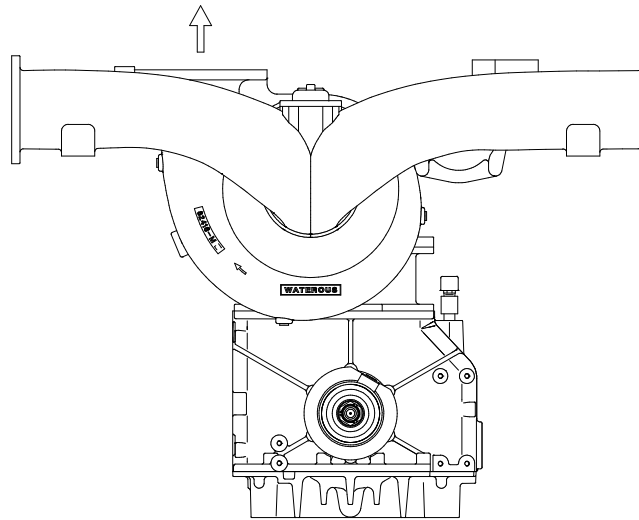


TABLE 2 - AVAILABLE RATIOS				
DRIVE TO DRIVEN RATIO	DIMENSION A			
	S101C20C	S101C20D	S101C20E	S101C20F
1.27	16.832 427.52	17.345 440.56	19.381 492.27	21.412 543.86
1.41	16.419 417.03	17.451 443.25	19.491 495.06	21.522 546.65
1.48	16.398 416.50	17.427 442.64	19.471 494.56	21.501 546.12
1.58	16.276 413.40	17.308 439.62	19.350 491.48	21.381 543.07
1.69	16.359 415.51	17.396 441.85	19.443 493.84	21.481 545.61
1.79	16.565 420.74	17.592 446.83	19.647 499.03	21.688 550.87
1.88	16.210 411.73	17.237 437.81	19.293 490.03	21.329 541.75
1.97	16.390 416.30	17.432 442.76	19.490 495.04	21.532 546.90
2.03	16.504 419.19	17.548 445.71	19.606 497.98	21.652 549.95
2.27	16.331 414.80	17.376 441.34	19.440 493.77	21.491 545.86
2.46	16.562 420.67	17.607 447.21	19.674 499.71	21.725 551.81
2.68	16.266 413.16	17.313 439.75	19.385 492.38	21.443 544.65

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER
(
INCH
MILLIMETER

RATIO AND DROP DIMENSIONS

S101 SERIES FIRE PUMP
DPL83067
WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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PUMP DISCHARGE IS ONLY AVAILABLE IN THE UP POSITION
POSITION AS VIEWED LOOKING AT TRANSMISSION INPUT SHAFT.

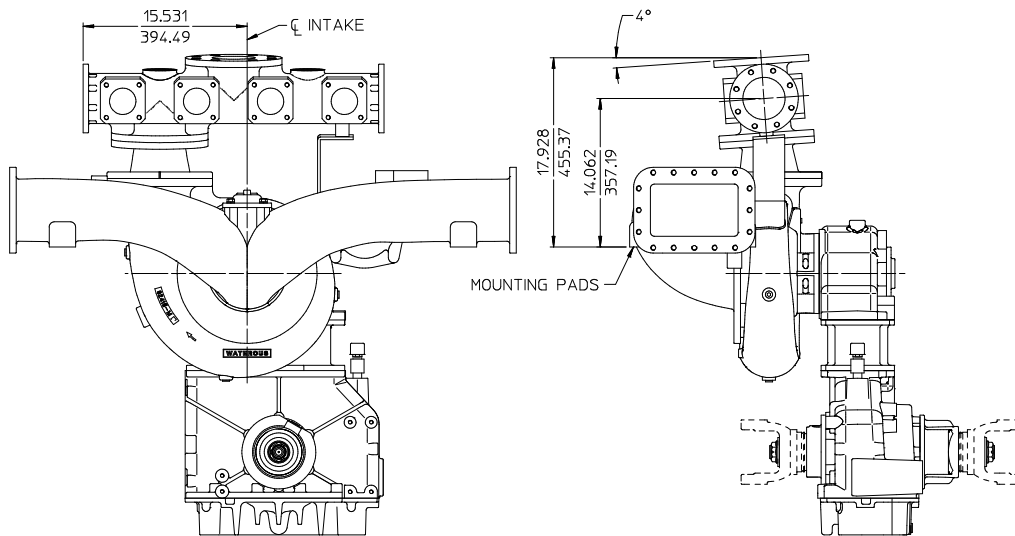
DISCHARGE POSITION

ORDERING INFORMATION

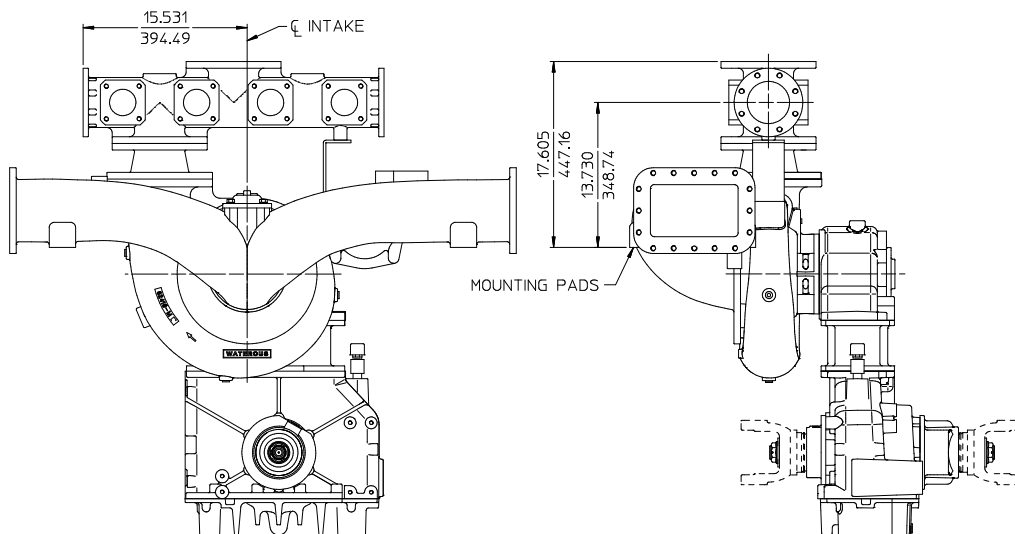
WHEN ORDERING FURNISH THE FOLLOWING INFORMATION:

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)

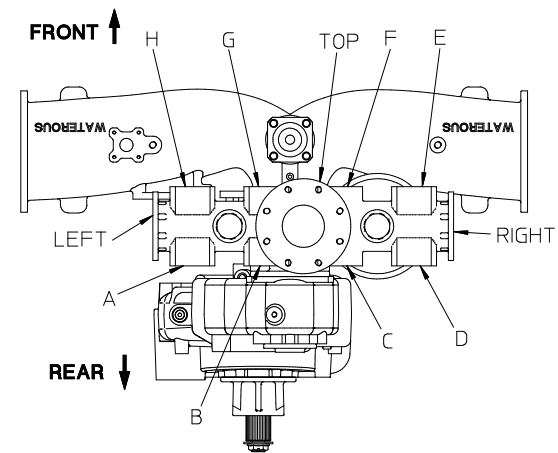
S101 SERIES FIRE PUMP
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WATEROUS COMPANY
SOUTH ST. PAUL, MN 55075
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ANGLE COMPENSATED



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
 ($\frac{\text{INCH}}{\text{MILLIMETER}}$)

S101 SERIES FIRE PUMP
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 WATEROUS COMPANY
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