



Document Number	Issue Date	Rev. Date
DPL 82846	06/16/05	12/22/17

Iron CM Series Fire Pump Dimensional Drawings

Special Application Pipeline Cleaning Pump With Inverted Pump Body

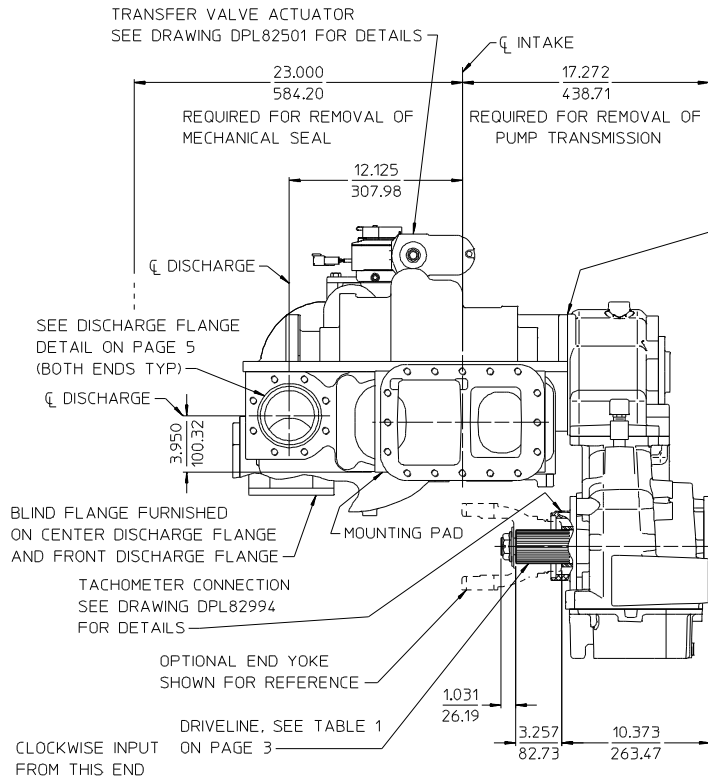
Pump and Transmission								
Pump Type	Transmission		Pump Model	Assembly Number	Drive		Hydraulic Pump Mounting Provision	See Page
	Model	Drive			Input Rotation (1)	Driveline Type		
Two Stage Series/Parallel (CM, CMU)	C20 Series	Split Shaft, Chain Drive	CMC20B	82846	CW	Input Shaft Only	Not Available	2, 3
			CMUC20B	82846-1				
	D Series	Direct Drive Connection from P.T.O.	CMD	82846-2	CW (Front Drive) or CCW (Rear Drive)	-	Not Available	4
			CMUD	82846-3				

Notes:

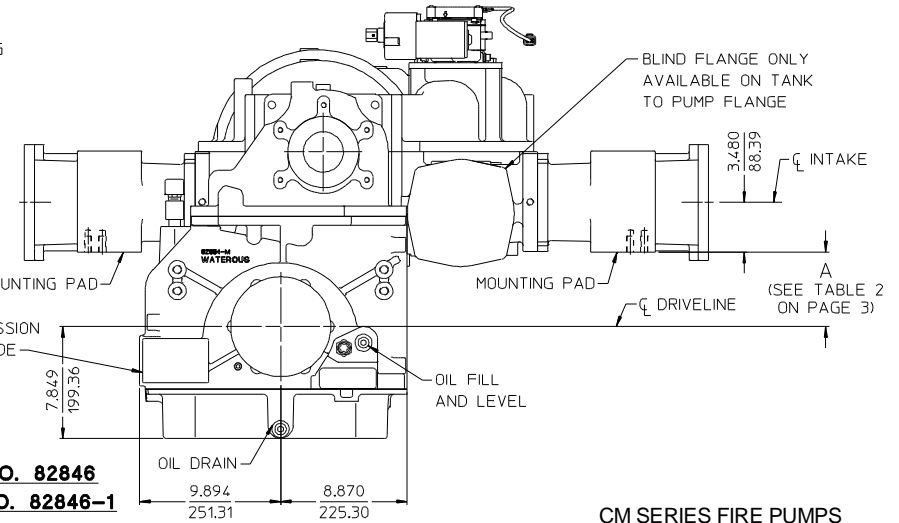
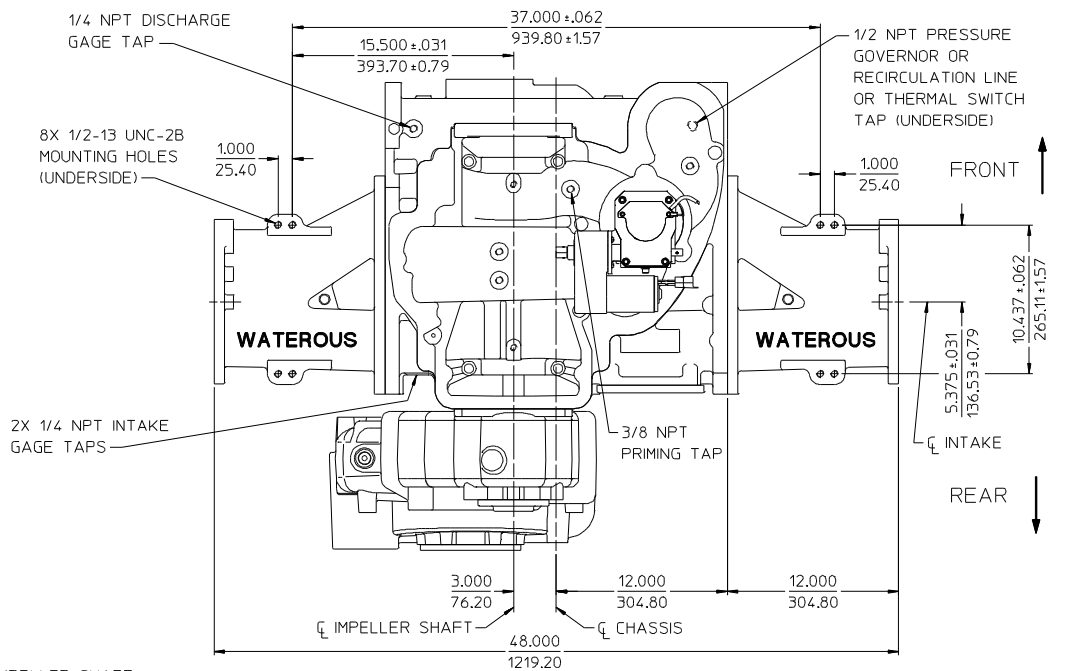
1. Input rotation is viewed looking directly at the transmission input shaft or direct drive end.

Basic Pump Dimensions (Without Transmission)	
Feature	See Page
Intake Adapter Flanges	5
Optional Rear Intake Adapters	
Discharge Connections	

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



SEPARABLE IMPELLER SHAFT, TRANSMISSION MAY BE REMOVED FROM PUMP WITHOUT DISASSEMBLING THE PUMP



MODEL CMC20B, ASS'Y NO. 82846
MODEL CMUC20B, ASS'Y NO. 82846-1
 INPUT SHAFT ONLY
 MODEL CMUC20B, 2.27 RATIO SHOWN

CM SERIES FIRE PUMPS
 DPL82846
 WATEROUS COMPANY
 SOUTH ST. PAUL, MN 55075
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TABLE 1 - AVAILABLE DRIVELINES / MODELS							
DRIVELINE			OPTIONAL END YOKES AND COMPANION FLANGES AVAILABLE FROM WATEROUS				PUMP MODELS
TYPE	SIZE	SPLINE	YOKE		CROSS AND BEARING KIT	COMPANION FLANGE	
			SPICER SERIES	PART NUMBER		SPICER SERIES	PART NUMBER
EXTRA HEAVY DUTY	2.35 INCH	2.35-46T INVOLUTE	1710 BP	V 2837	V 2839	1480/1610	V 3719
			1810 BP	V 2838	V 2840		V 3619
			1710 HR	V 4101	-	1710/1810	-
			1810 HR	V 4102	-		-
			SPL140	V 3388	V 3389	-	-

TABLE 2 - AVAILABLE RATIOS	
DRIVE TO DRIVEN RATIO	C20B
	DIMENSION A
1.27	5.239/133.07
1.41	4.829/122.66
1.48	5.315/135.00
1.58	5.194/131.93
1.69	5.279/134.09
1.79	4.947/125.65
1.88	5.118/130.00
1.97	5.295/134.49
2.03	4.885/124.08
2.27	5.229/132.82
2.46	4.930/125.22
2.68	5.158/131.01

NOTE:

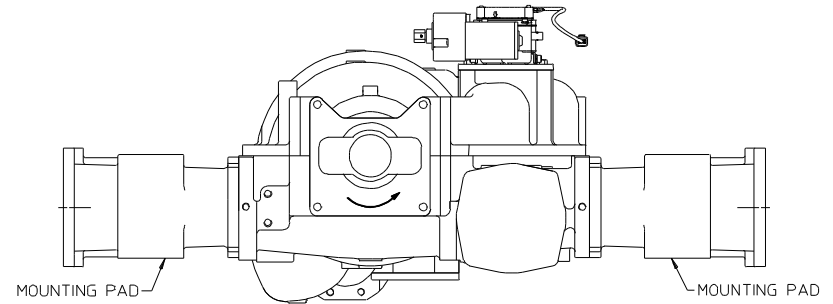
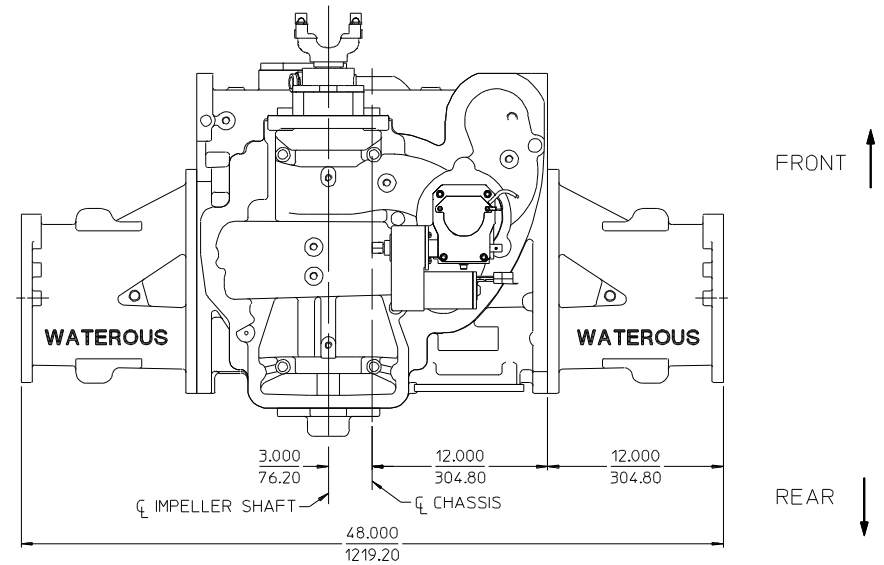
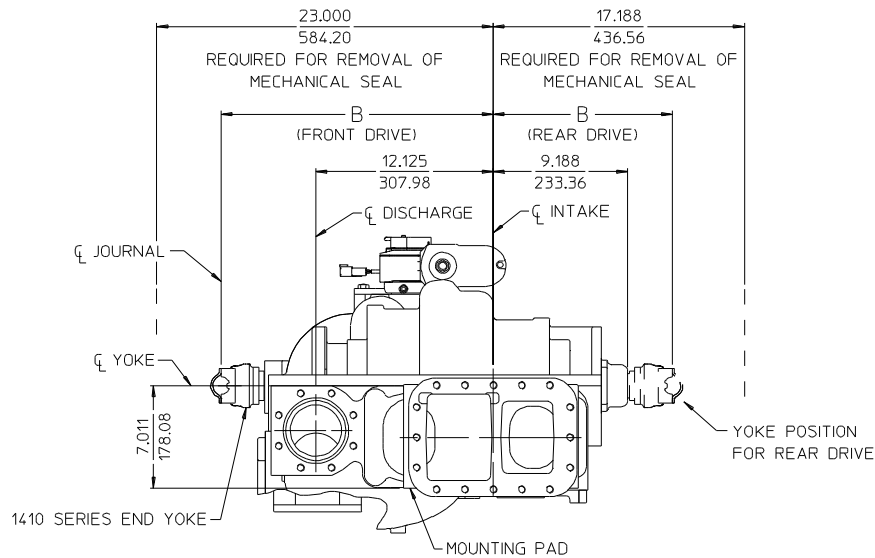
1. SEE DRAWING DPL82994 FOR ADDITIONAL DETAILS OF C20 SERIES TRANSMISSION.

ALL DIMENSIONS SHOWN AS INCH/MILLIMETER

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

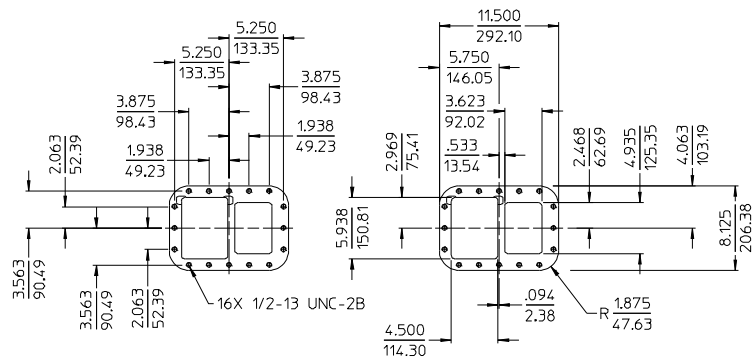
AVAILABLE AS FOLLOWS			
DRIVE LOCATION	DIMENSION B		INPUT ROTATION (VIEWED LOOKING AT YOKE)
	WITH PACKING	WITH MECHANICAL SEALS	
FRONT	18.600/472.44	18.600/472.44	CLOCKWISE
REAR	12.250/311.15	12.250/311.15	COUNTERCLOCKWISE

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

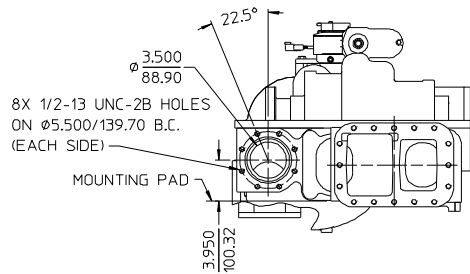
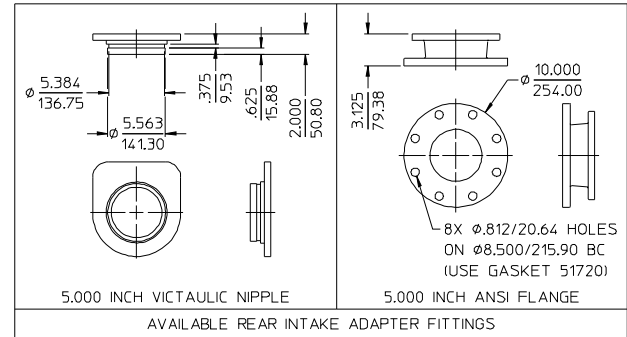


MODEL CMD, ASS'Y NO. 82846-2
MODEL CMUD, ASS'Y NO. 82846-3
 DIRECT DRIVE CONNECTION FROM PTO

CM SERIES FIRE PUMPS
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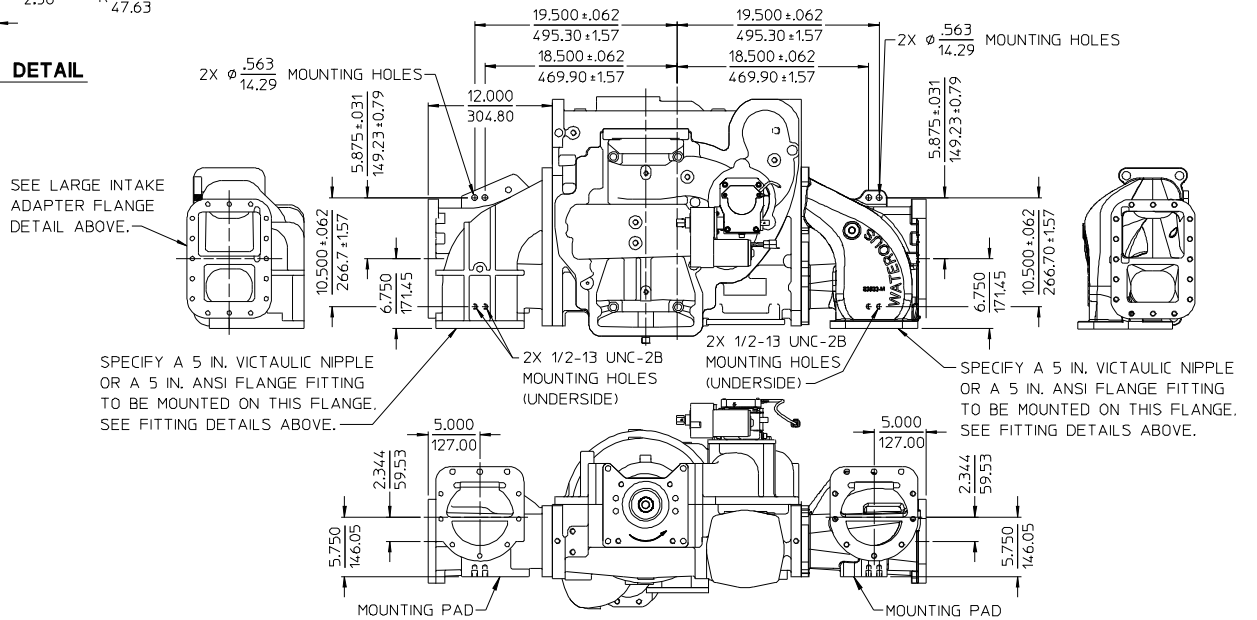


LARGE INTAKE ADAPTER FLANGE DETAIL



DISCHARGE CONNECTIONS

SEE DRAWING DPL82085 FOR INFORMATION ON ORDERING DISCHARGE FITTINGS AND VALVES



OPTIONAL REAR INTAKE ADAPTERS

AVAILABLE WITH 5.000 INCH ANSI FLANGE OR 5.000 INCH VICTAULIC NIPPLE

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