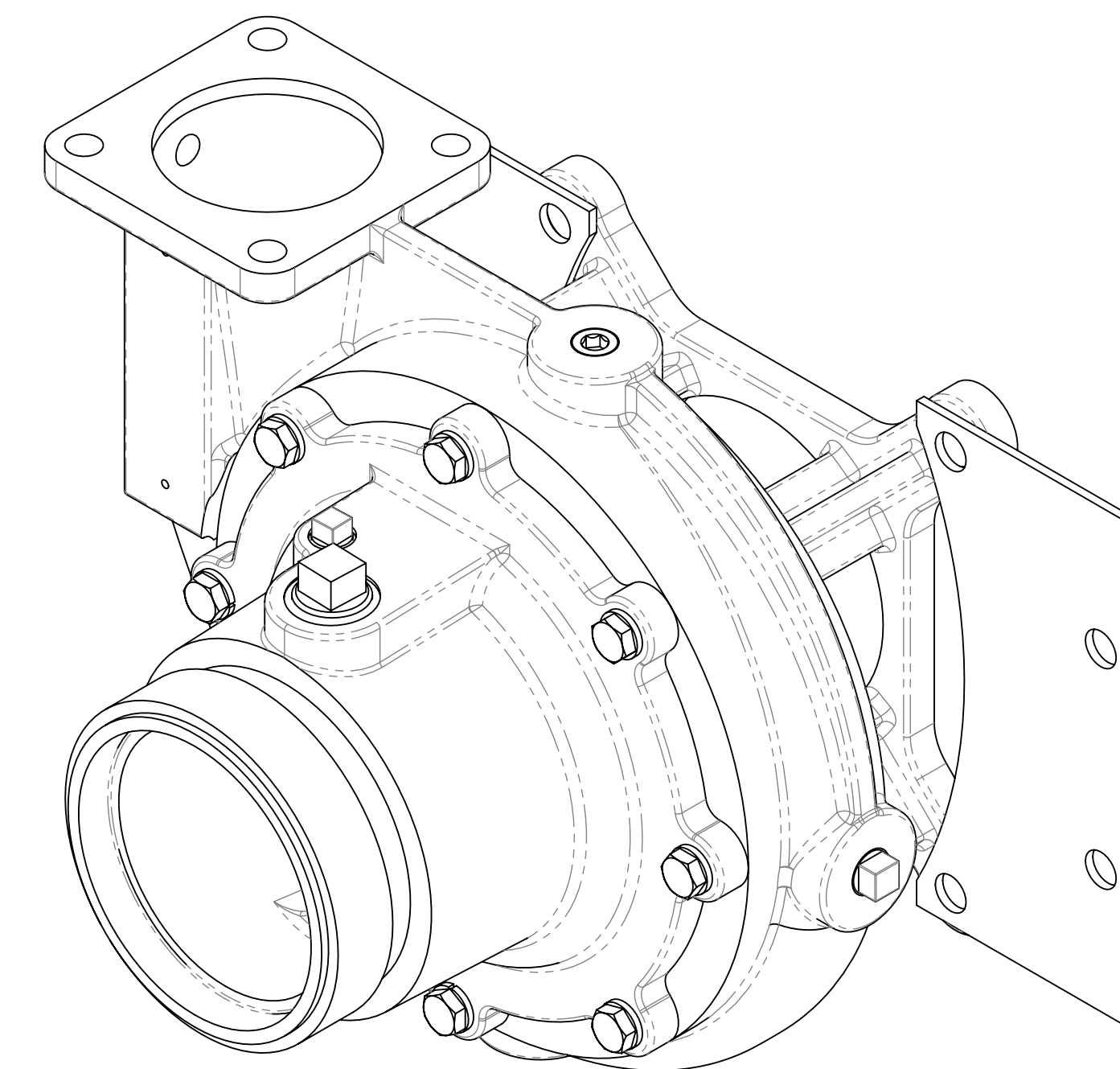
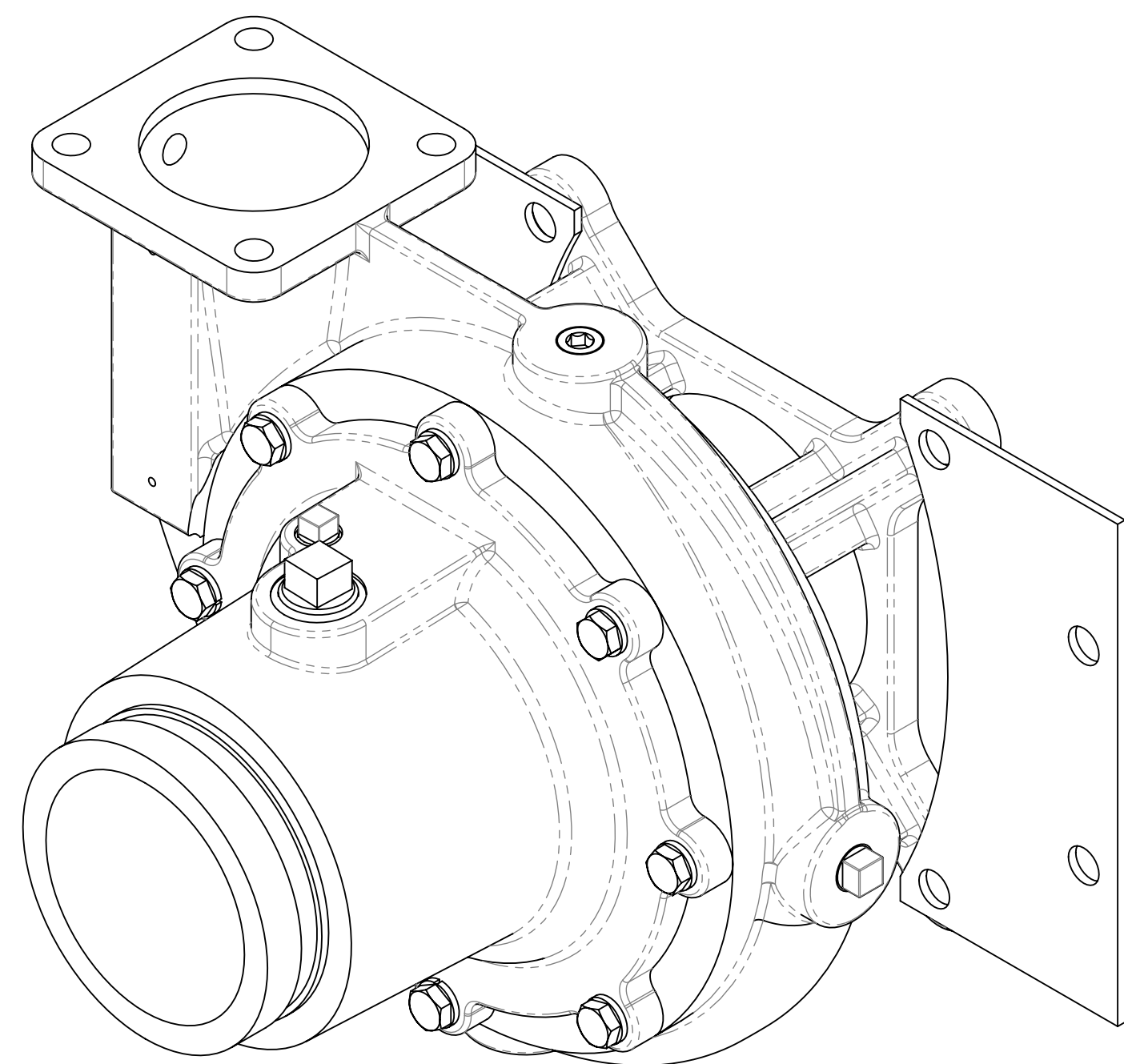


CL Series Fire Pump Dimensional Drawings Pump Models: CLR and CLV

Feature	See Page	
	CLR	CLV
Pump with Transmission	See Table on Page 2	
Basic Pump Body Dimensions without Transmission	3	4
Optional Discharge Fittings	8	
Pump Discharge Positions	9	
K & T Transmission Positions	10	
PA Transmission Positions	11	
Optional End Yokes and Companion Flanges	12	

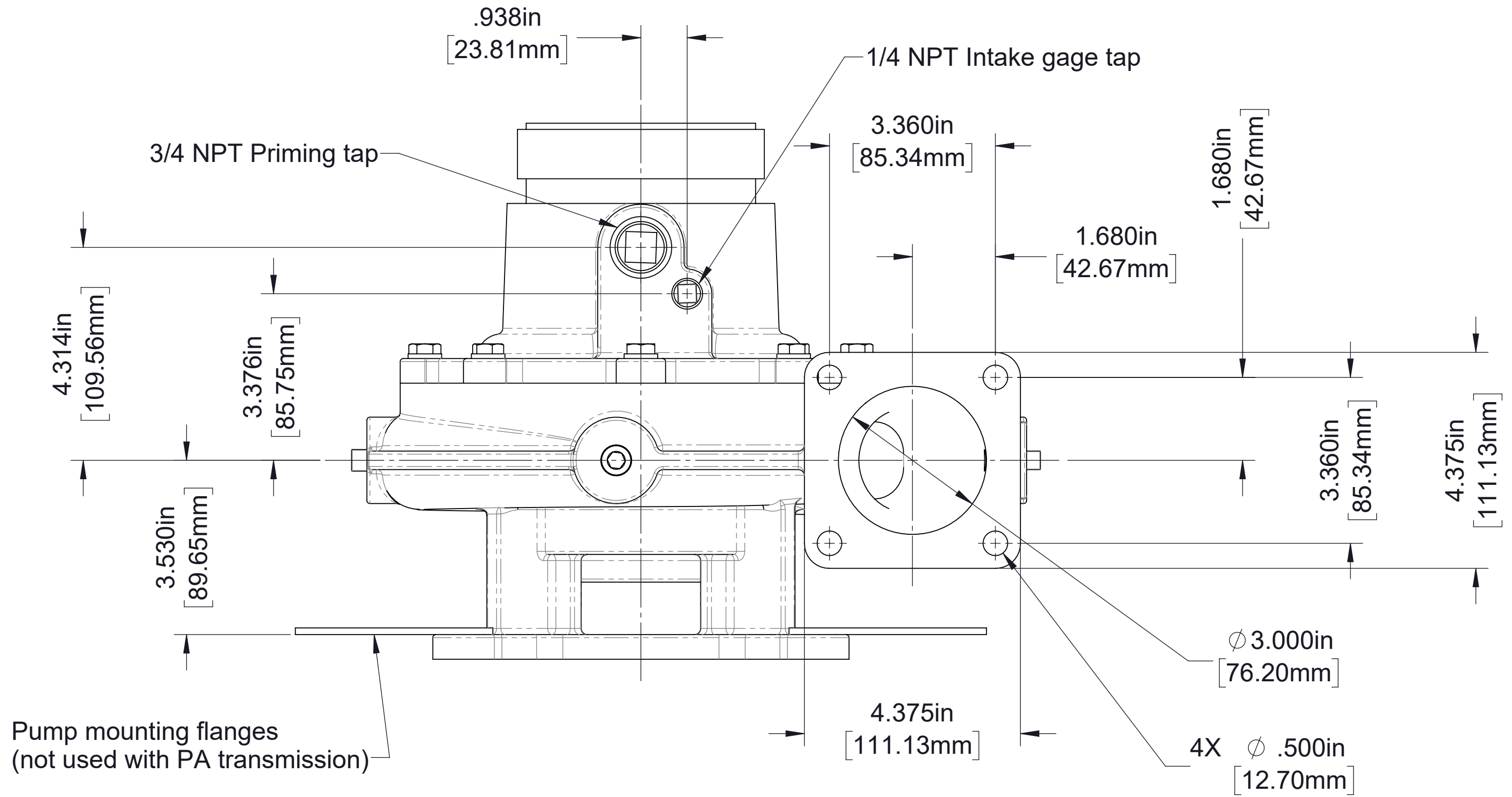


Note: Pump must be installed in accordance with Waterous Installation Instructions.

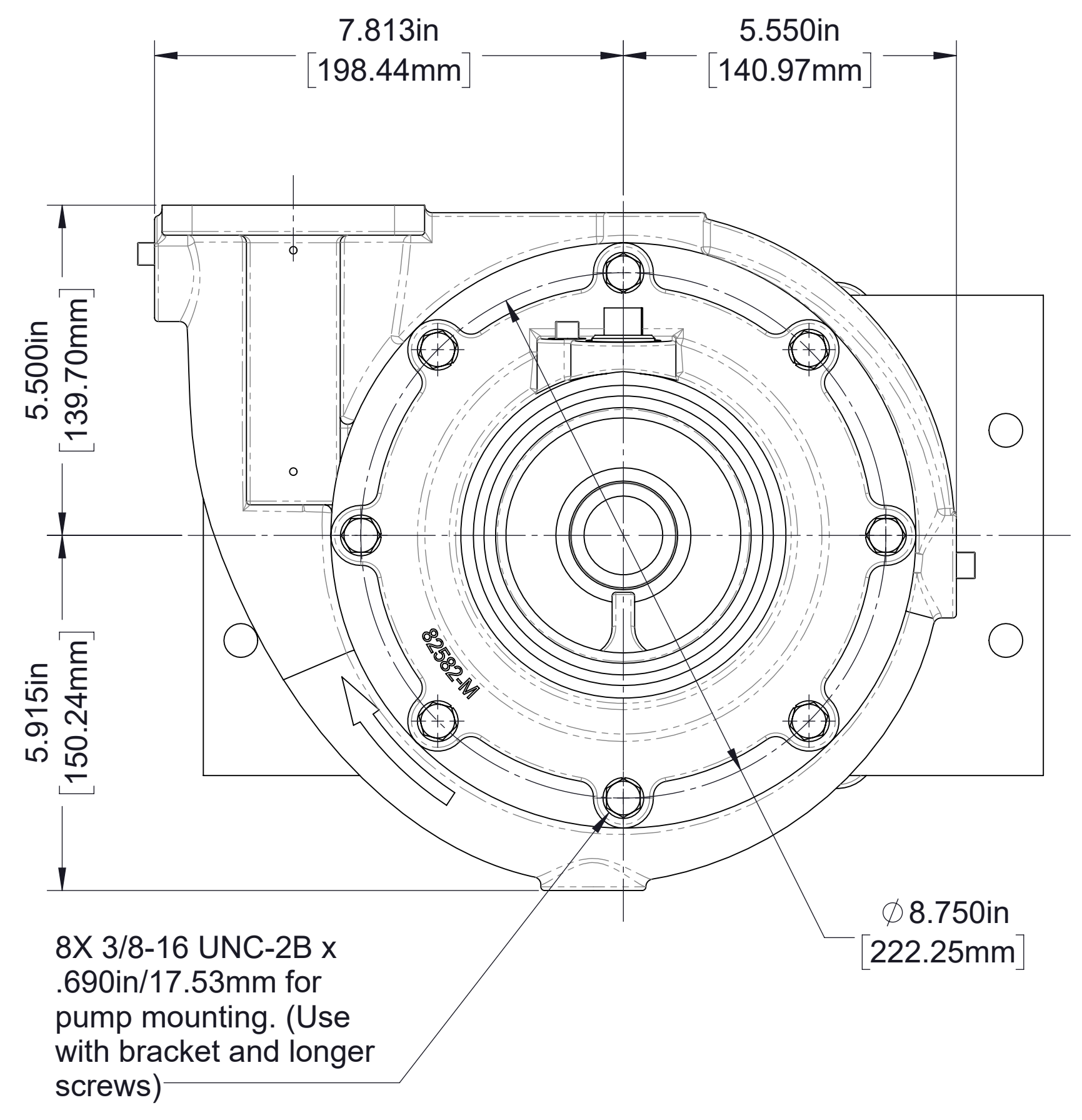
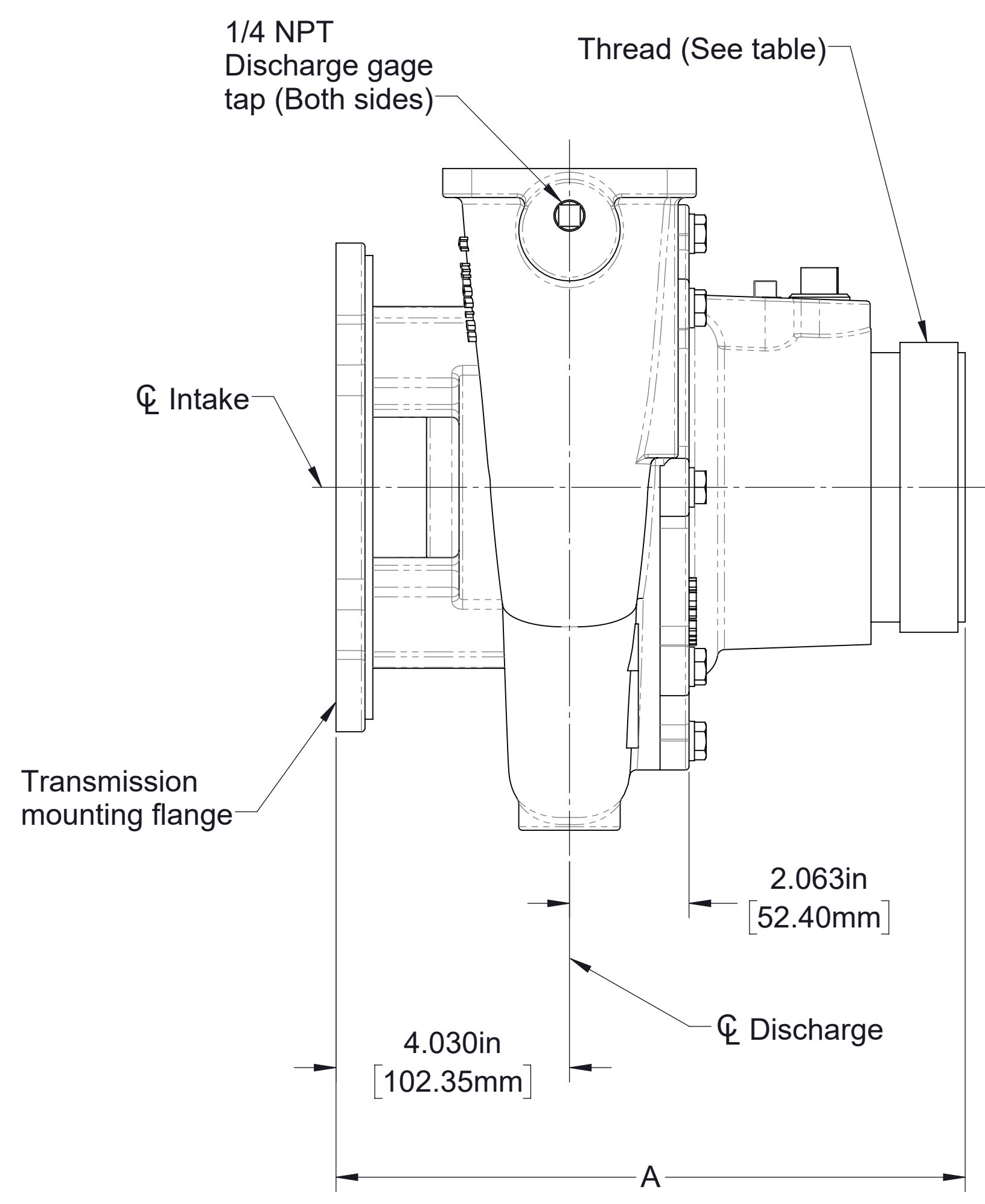
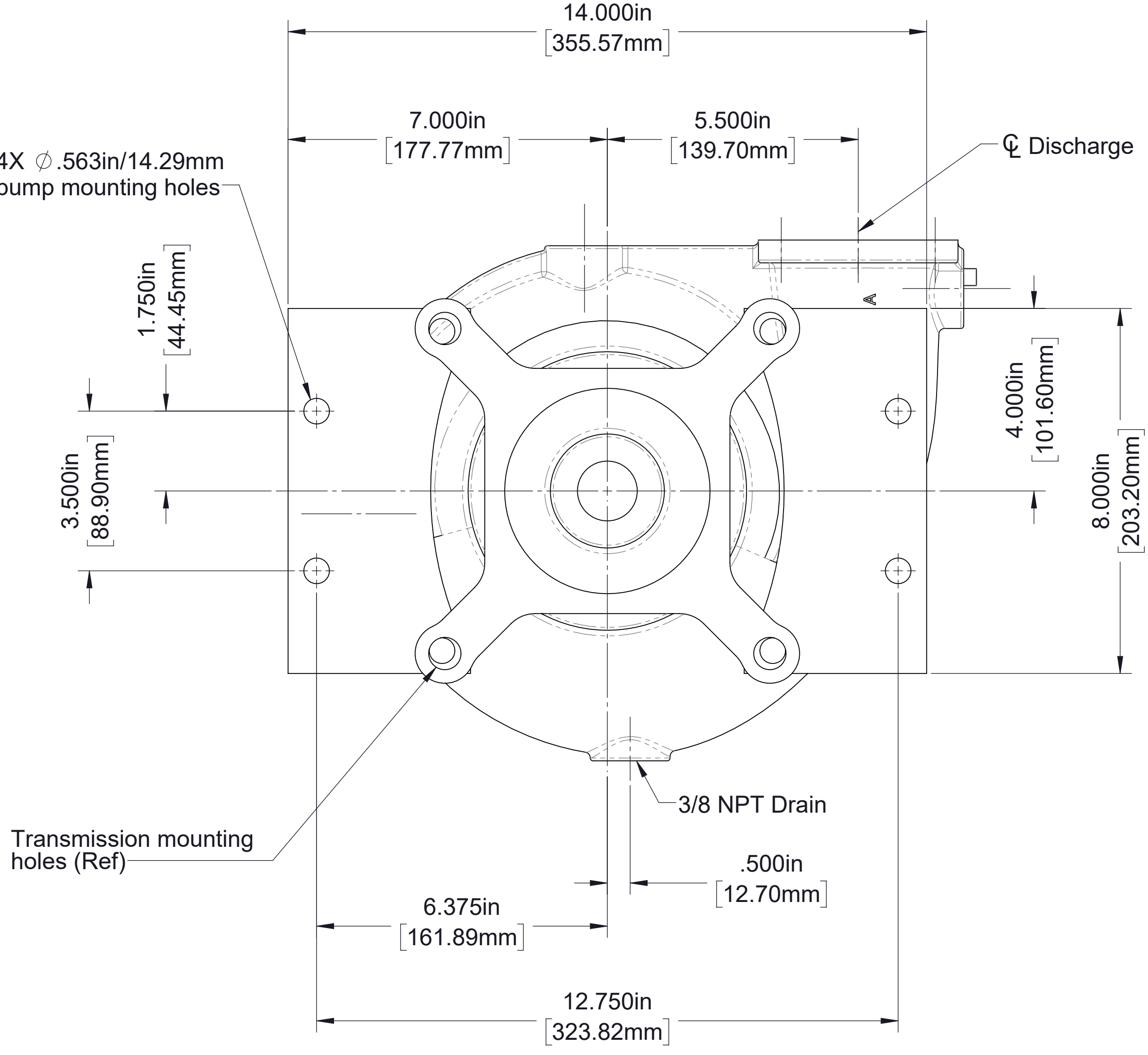
Transmission				Pump			See Page		
Type	Driveline	Pump Mounting on Transmission	Input Rotation (1)	Impeller Rotation (2)	Pump and Transmission Model		Pump and Transmission		
					CLR	CLV	Dimensions	Available	
								Pump Discharge Positions	Transmission Mounting Positions
K Series Two Gear, PTO Driven	Input Shaft Only	Opposite Input Shaft	CW	CW	CLRK	CLVK	5	9	10
			CCW	CCW	CLRK	CLVK	5	9	10
T Series Two Gear, Direct Engine Mount	Input Shaft Only	Opposite Input Shaft	CW	CW	CLRT	CLVT	6	9	10
			CCW	CCW	CLRT	CLVT	6	9	10
P Series Chain Drive, PTO Driven	Input Shaft Only	Input Shaft Side	CW	CW	CLRPA	CLVPA	7	9	11

Notes:

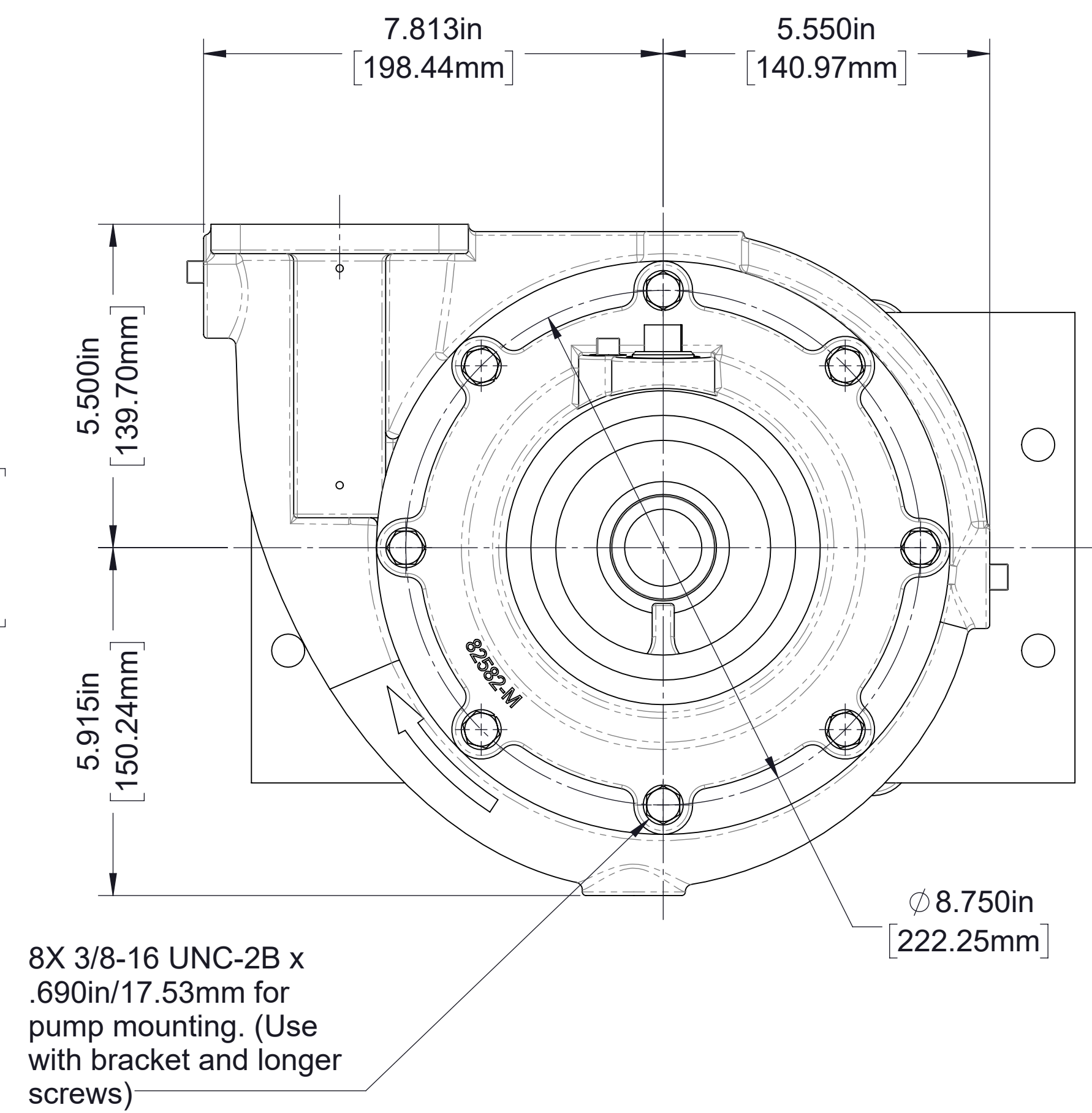
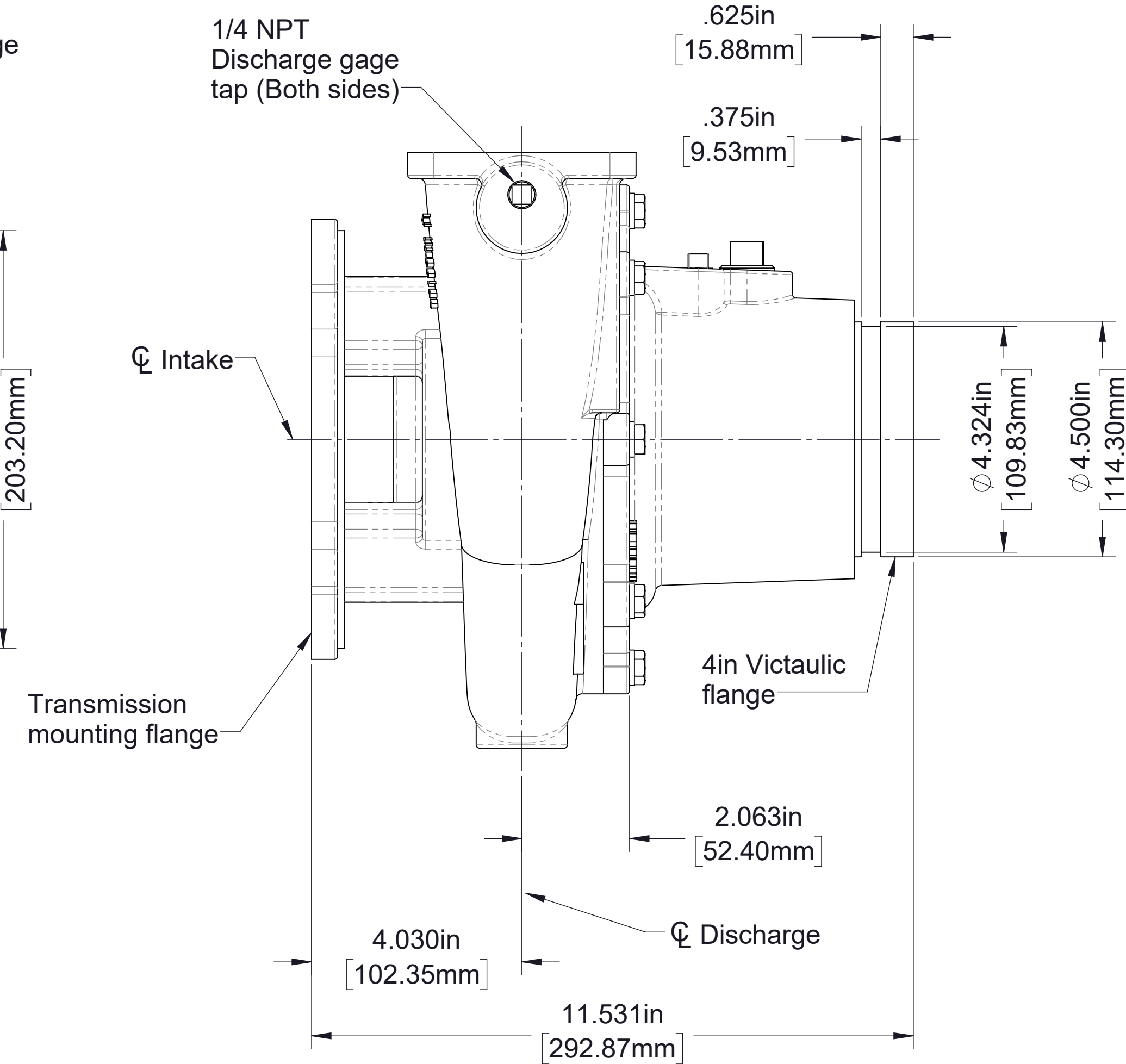
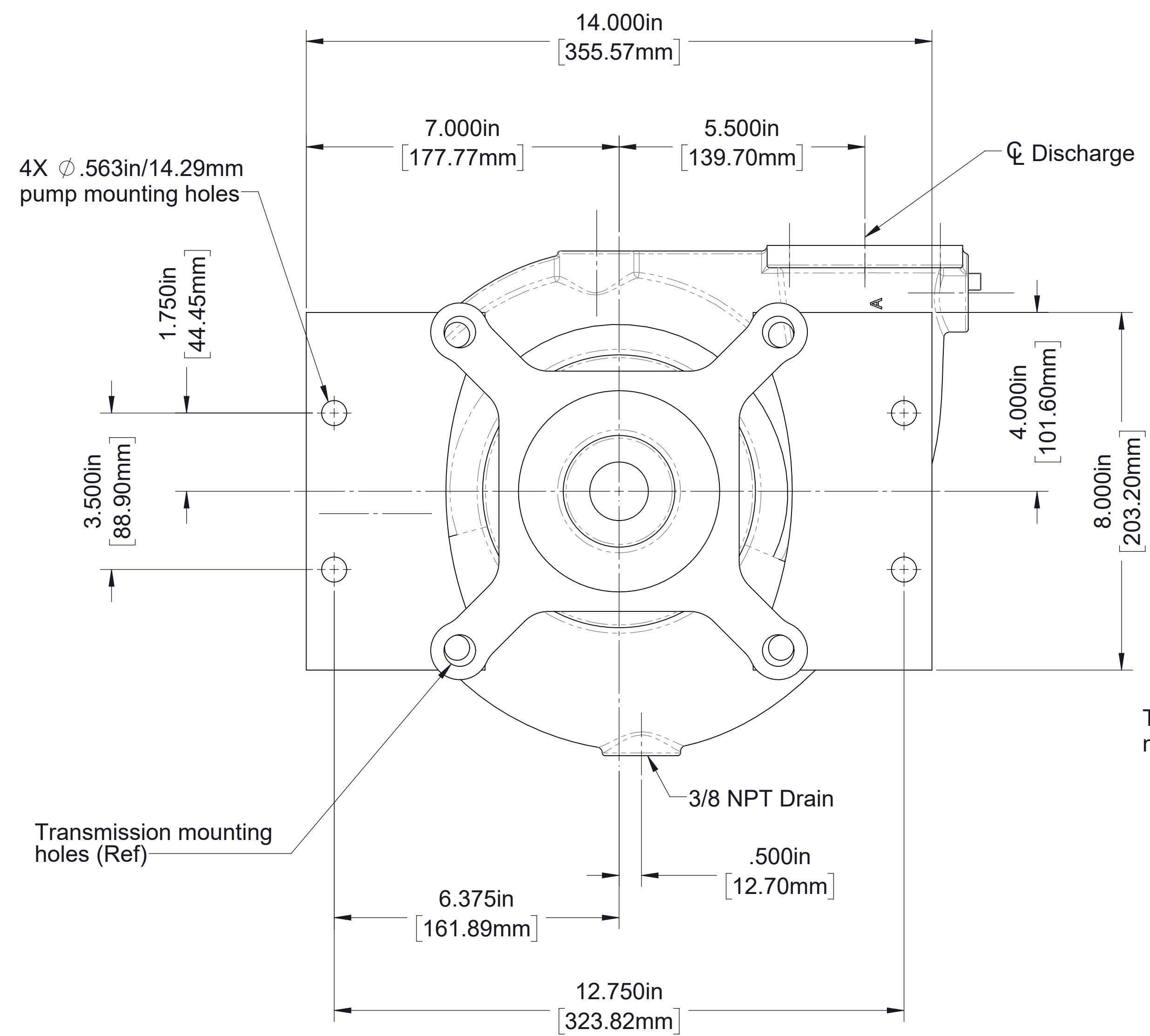
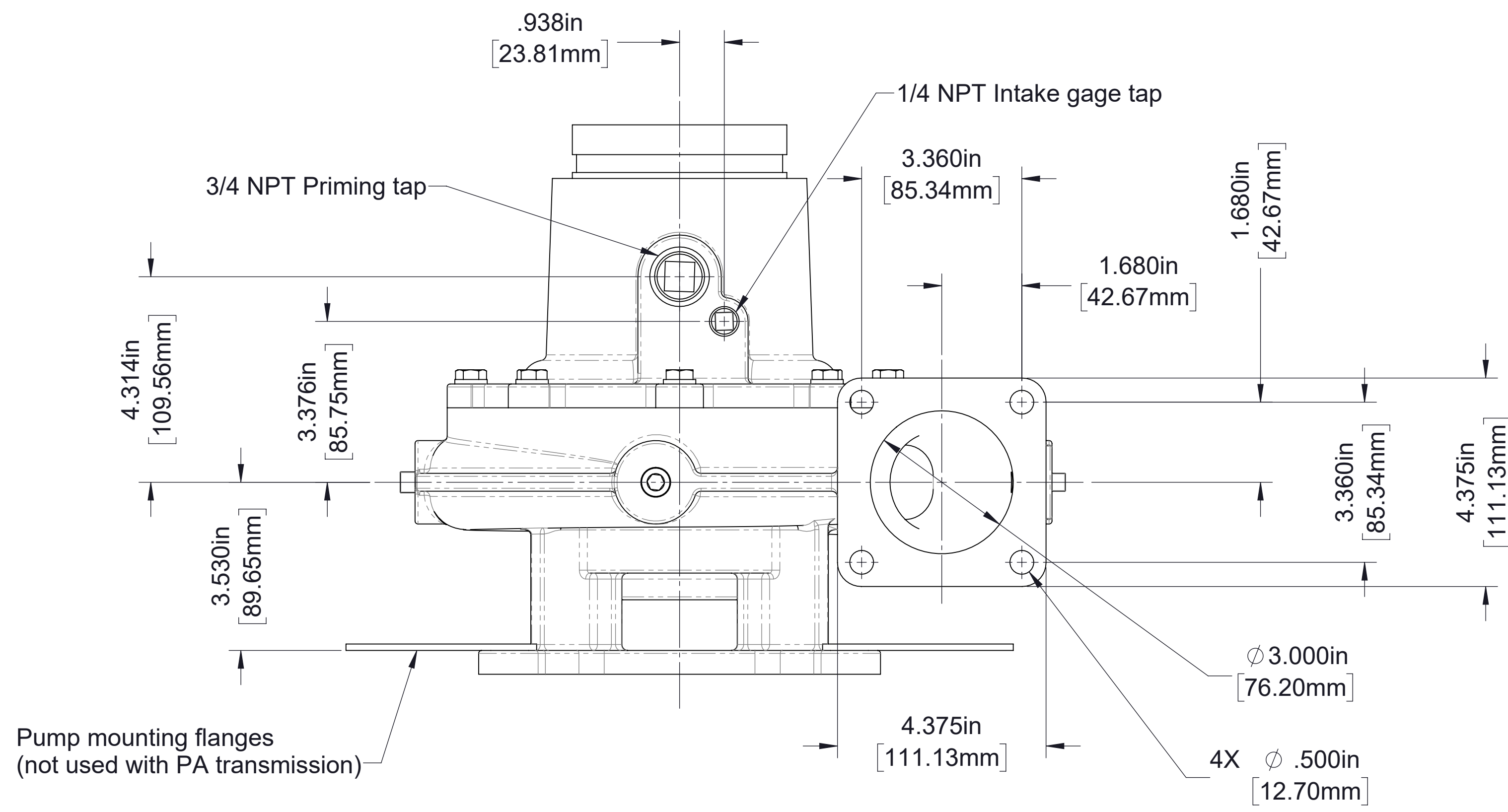
1. Input rotation is viewed looking directly at the transmission input shaft.
2. Impeller rotation is viewed looking directly at the intake fitting (impeller eye).



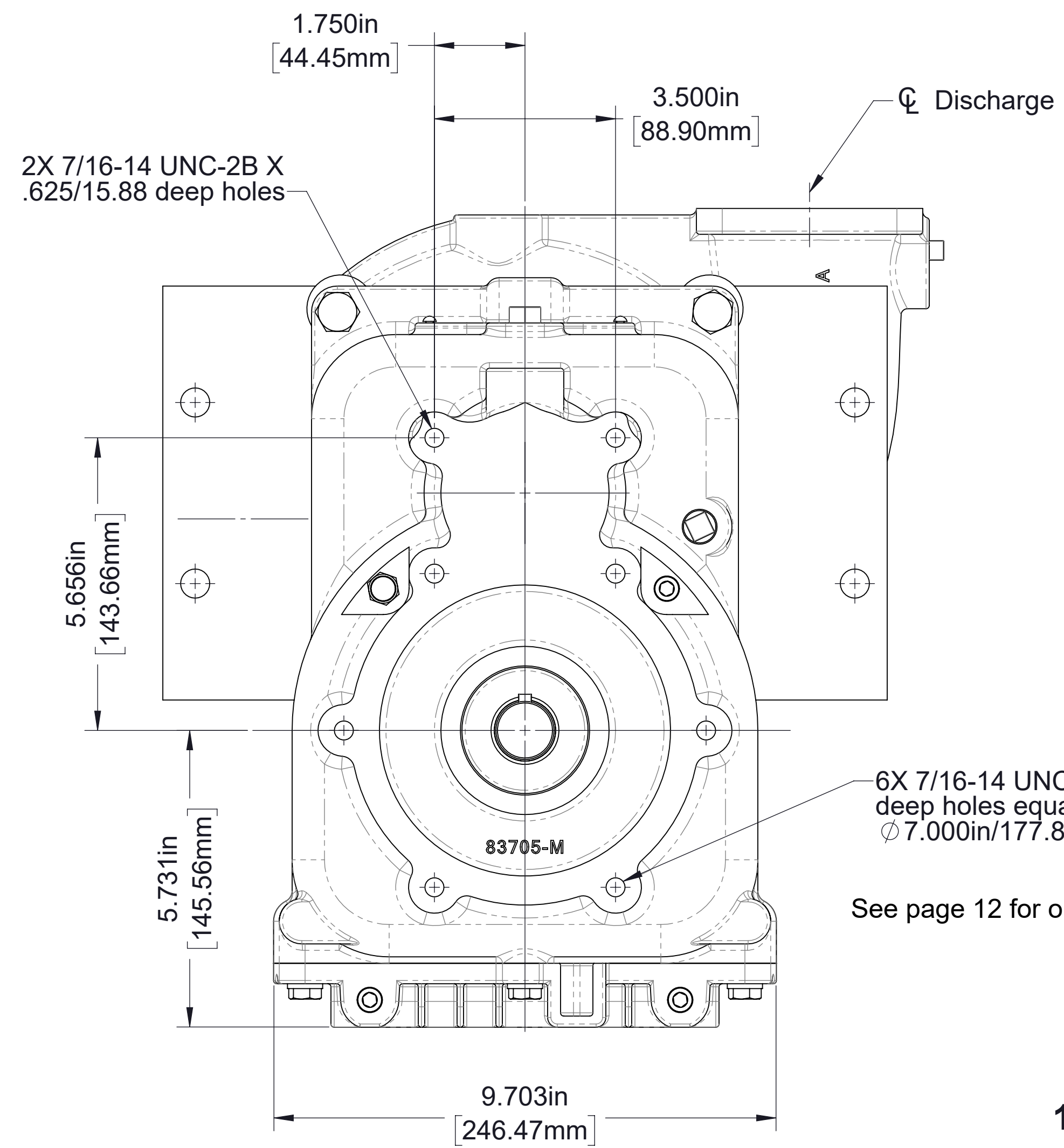
Thread Size	Dim "A"
4 IN NH	10.860in/275.84mm
4 IN BSP	11.531in/292.89mm



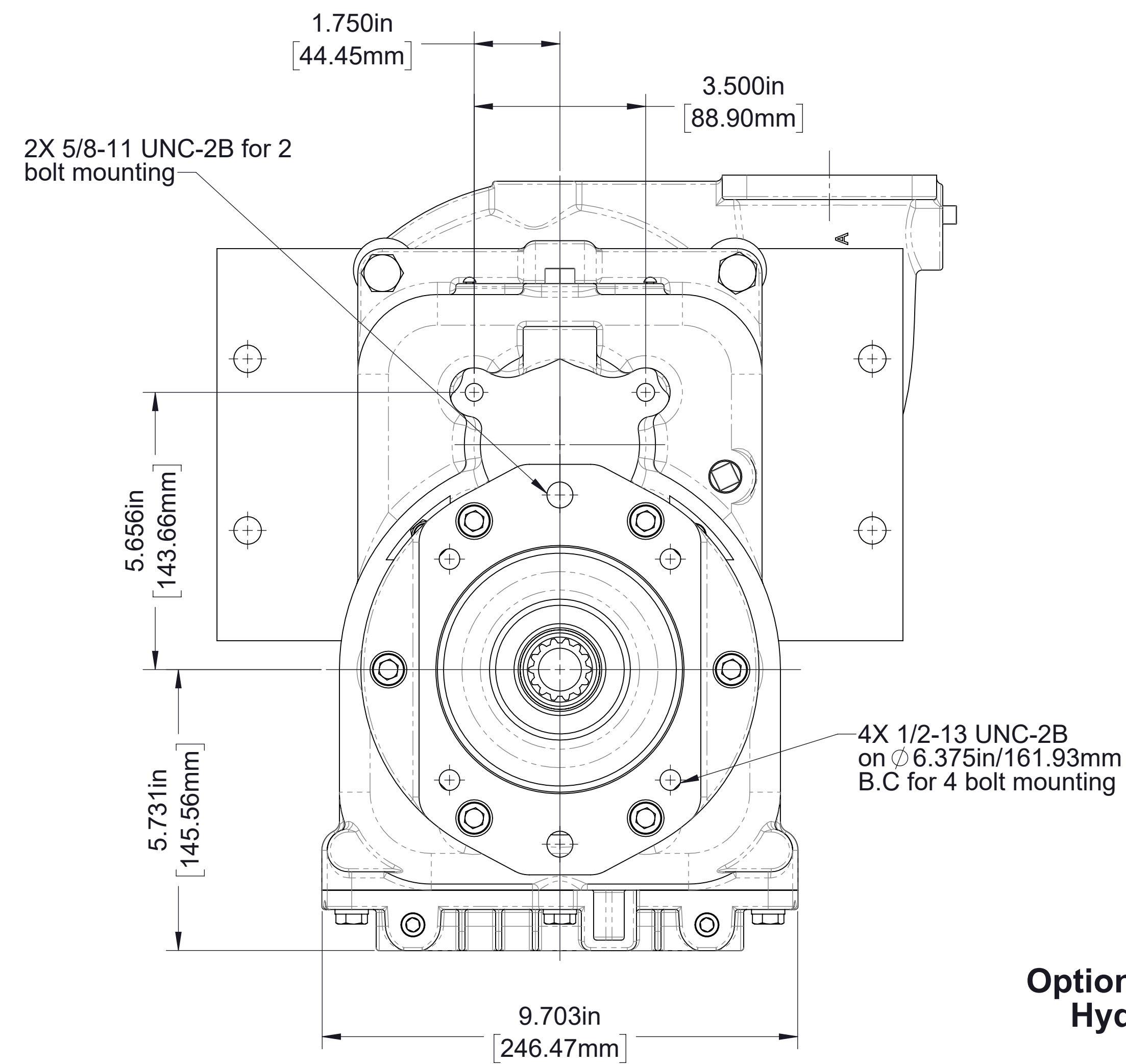
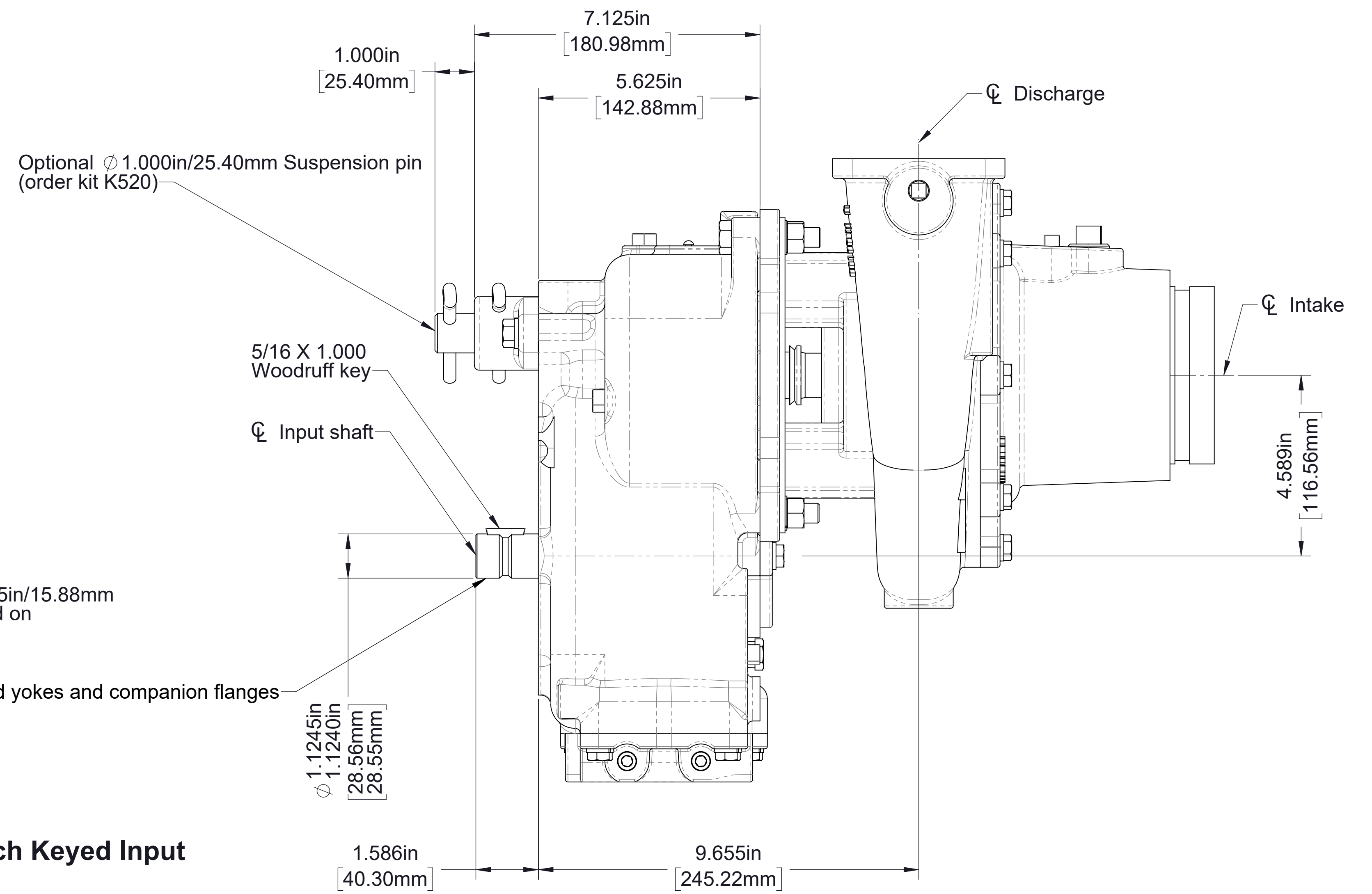
CLR Body Dimensions
CW Impeller Rotation Shown



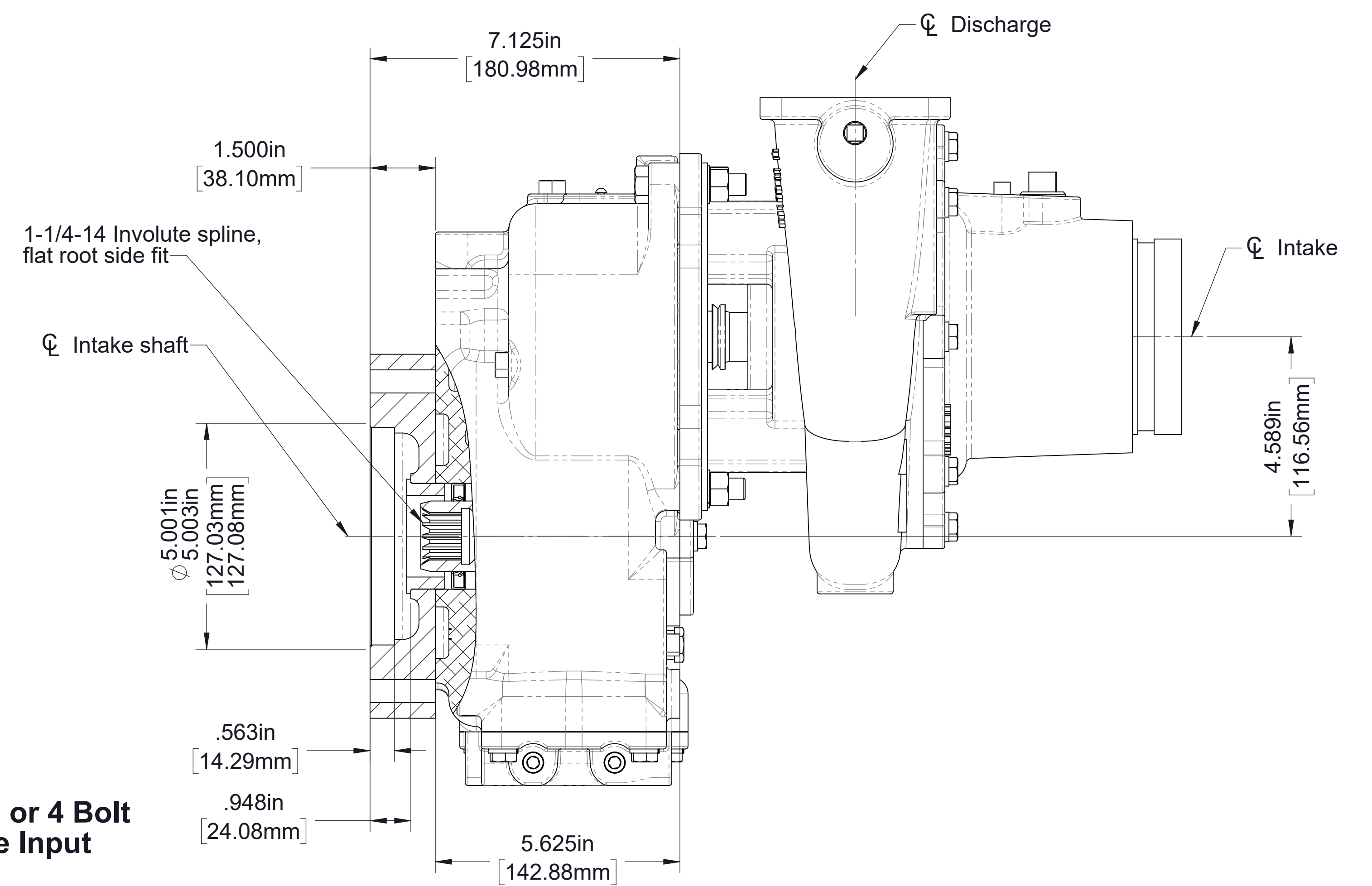
CLV Body Dimensions
CW Impeller Rotation Shown



1-1/8 Inch Keyed Input

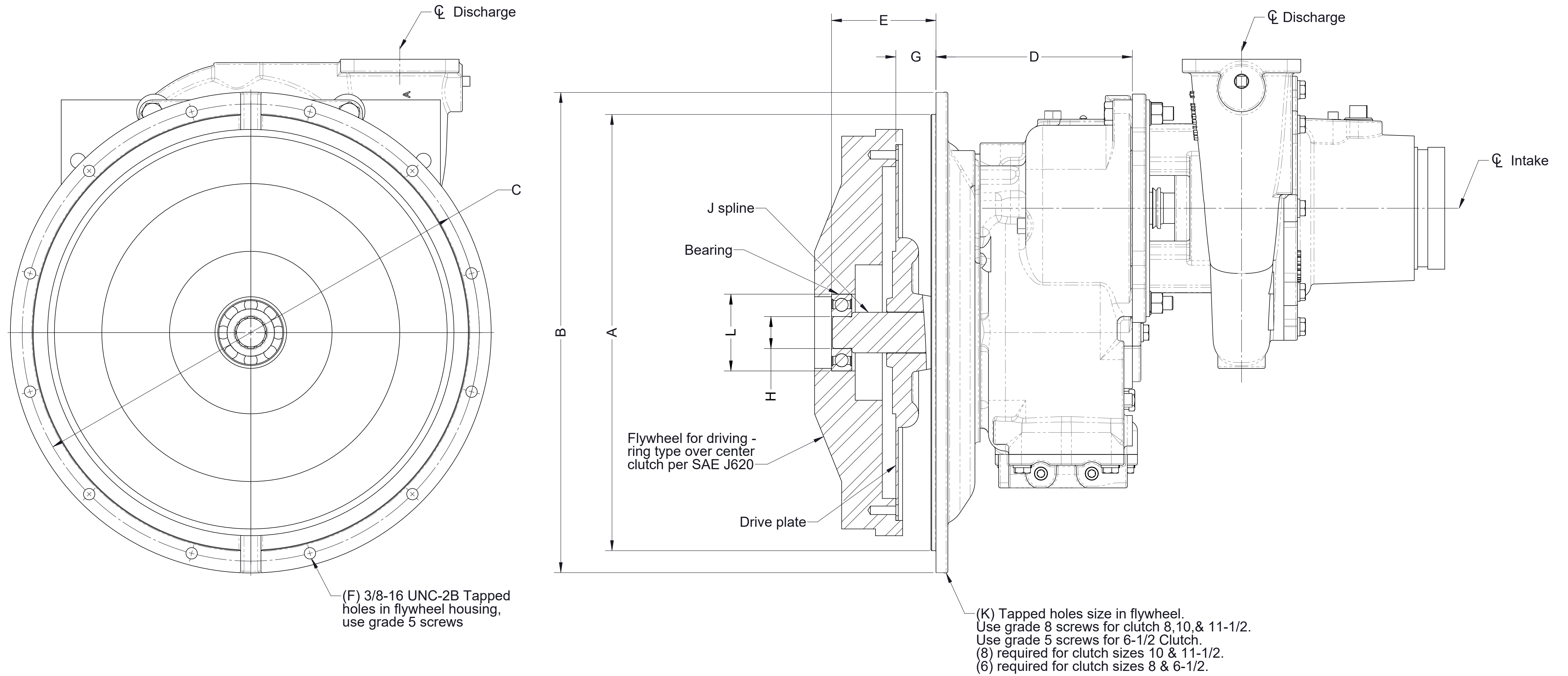


Optional SAE Class "C" 2 or 4 Bolt Hydraulic Pump Flange Input



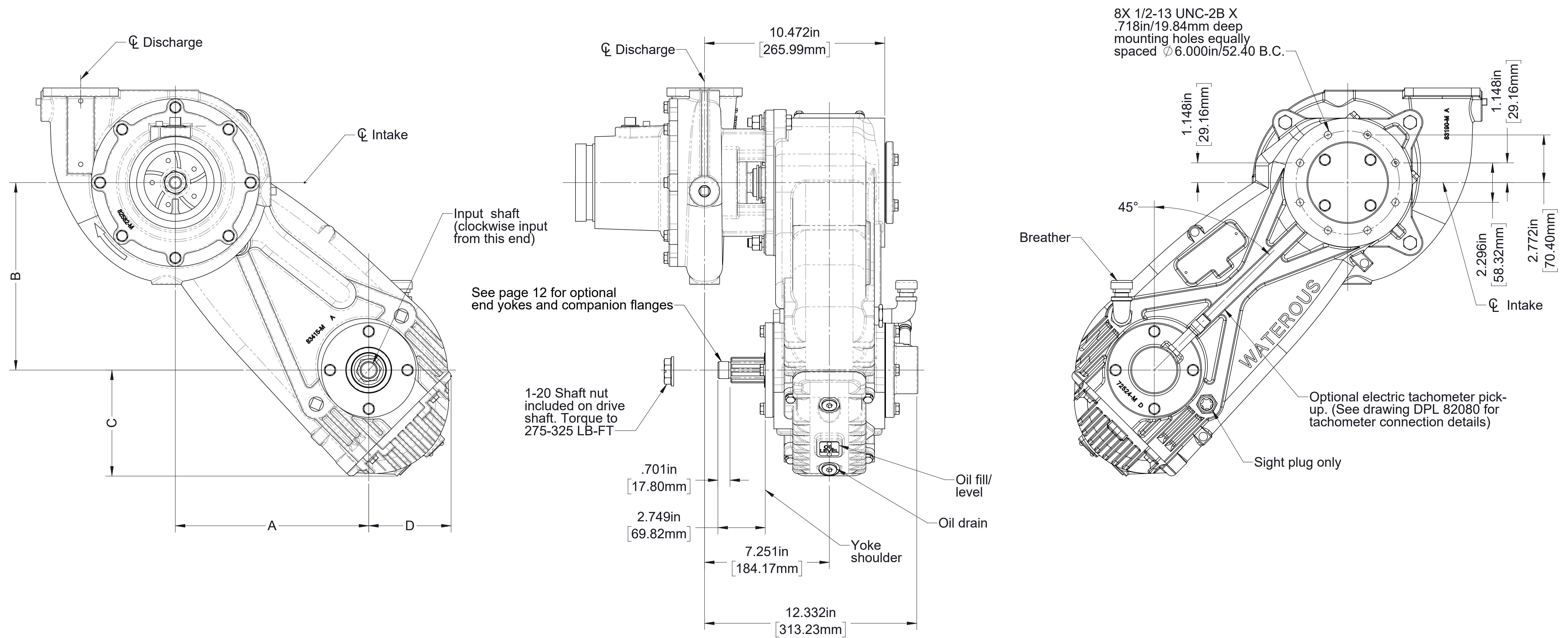
Model CLV/CLR with K
 Clockwise or Counterclockwise input
 (Clockwise input shown)

(CLVK in vertical mounting position shown, See page 10 for mounting positions)



SAE Bellhousing - J617				Bellhousing Adapter		SAE Flywheel - J620					Drive Plate		Drive Shaft	
Size	(Ø) A	(Ø) B	(Ø) C	(Ø) F	D	Clutch Number	G	(Ø) L (Pilot Bearing O.D.)	K Fasteners Grade 8	E	Part Number	Rating	(Ø) H (Pilot Bearing I.D.)	J
3	16.125in 409.58mm	17.750in 450.85mm	16.875in 428.63mm	.424in 10.77mm (12X)	7.250in 184.15mm	10	2.120in 53.85mm	2.8346in 72.00mm	3/8-16 (8X)	3.940in 100.1mm	V3807	120hp 90kW	1.1803in 30.00mm	1-1/2-10 SAE
3	16.125in 409.58mm	17.750in 450.85mm	16.875in 428.63mm	.424in 10.77mm (12X)	7.250in 184.15mm	10	2.120in 53.85mm	2.8346in 72.00mm	3/8-16 (8X)	3.940in 100.1mm	V4412	250hp 186kW	1.1803in 30.00mm	1-1/2-10 SAE
3	16.125in 409.58mm	17.750in 450.85mm	16.875in 428.63mm	.424in 10.77mm (12X)	7.250in 184.15mm	11-1/2	1.560in 39.62mm	2.8346in 72.00mm	3/8-16 (8X)	3.940in 100.1mm	V2461	425 lb-ft 576 N·m	1.1803in 30.00mm	1-1/2-10 SAE
4	14.250in 361.95mm	15.875in 403.23mm	15.000in 381.00mm	.424in 10.77mm (12X)	7.250in 184.15mm	8	2.440in 61.97mm	2.4409in 62.00mm	3/8-16 (6X)	3.940in 100.1mm	V2852	965 lb-ft 1308 N·m	1.1803in 30.00mm	1-1/2-10 SAE
4	14.250in 361.95mm	15.875in 403.23mm	15.000in 381.00mm	.424in 10.77mm (12X)	7.250in 184.15mm	10	2.120in 53.85mm	2.8346in 72.00mm	3/8-16 (8X)	3.940in 100.1mm	V3807	120hp 90kW	1.1803in 30.00mm	1-1/2-10 SAE
4	14.250in 361.95mm	15.875in 403.23mm	15.000in 381.00mm	.424in 10.77mm (12X)	7.250in 184.15mm	7-1/2	1.190in 30.23mm	2.0472in 52.00mm	5/16-18 (8X)	2.810in 71.4mm	V4128	50hp 37kW	0.7863in 20.00mm	1-15T Involute
5	12.375in 314.32mm	14.000in 355.60mm	15.000in 381.00mm	.408in 10.36mm (8X)	6.250in 158.75mm	6-1/2	1.190in 30.23mm	2.0472in 52.00mm	5/16-18 (6X)	2.810in 71.4mm	V2865	50hp 37kW	0.7863in 20.00mm	1-15T Involute

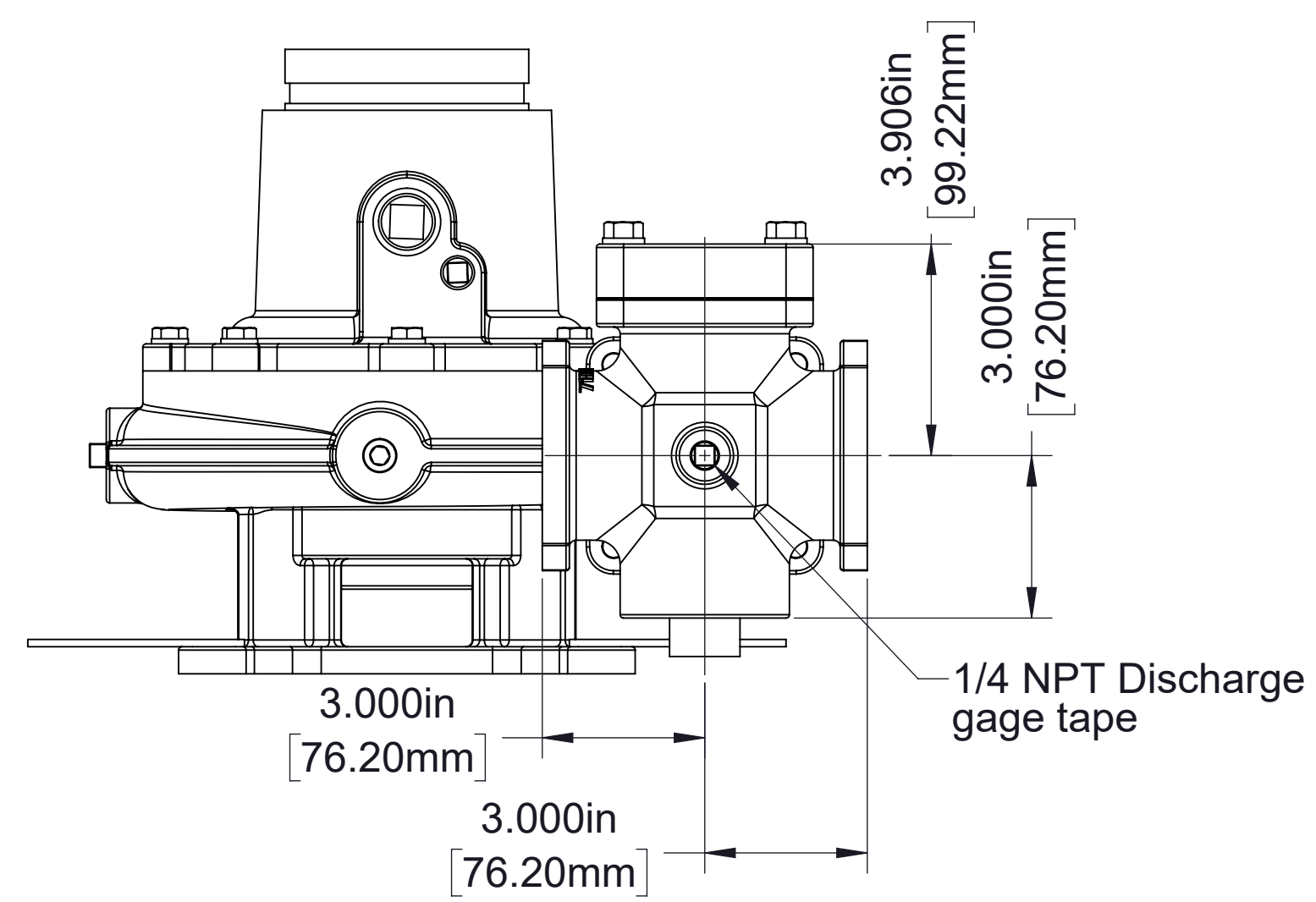
Model CLR/CLV with T
 Clockwise or Counterclockwise input
 (Clockwise input shown)
 (CLVT in vertical mounting position shown, See page 10 for mounting positions)



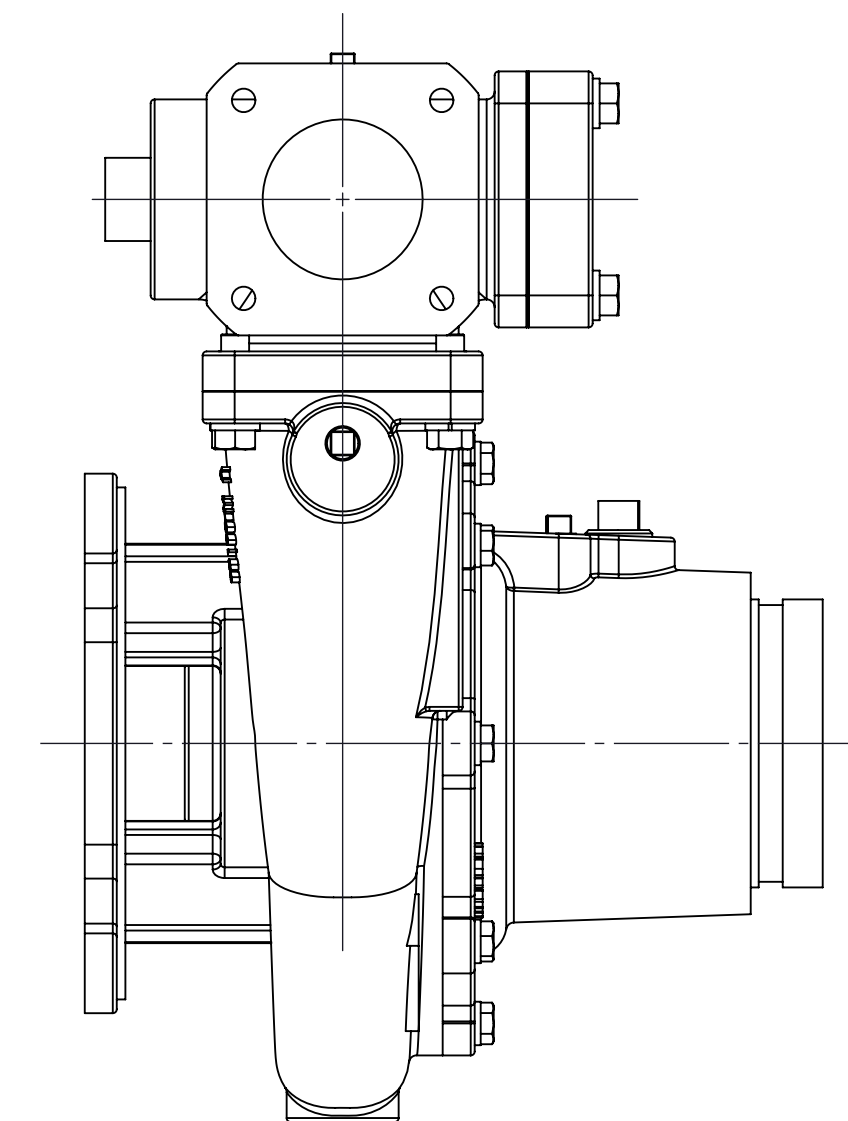
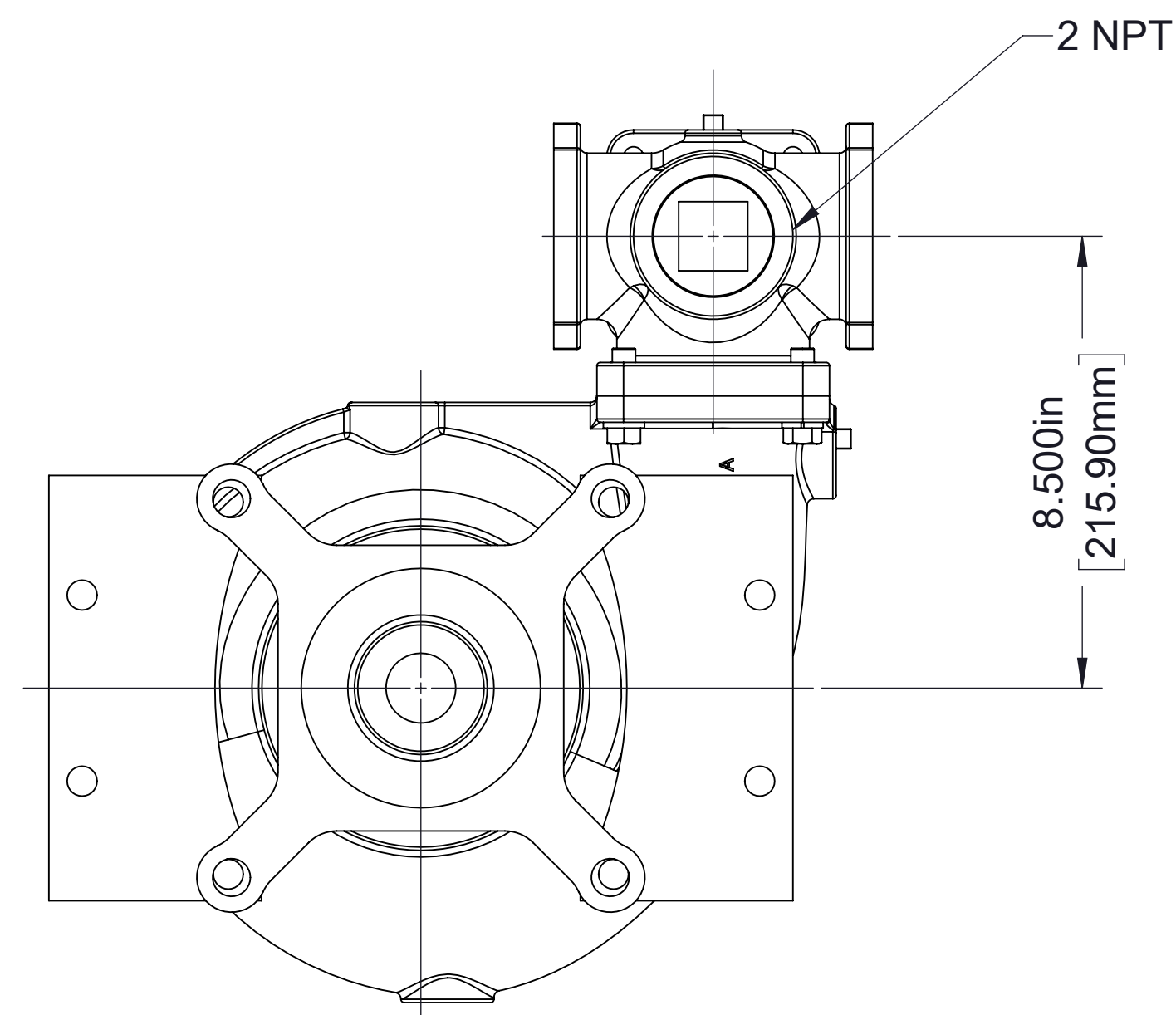
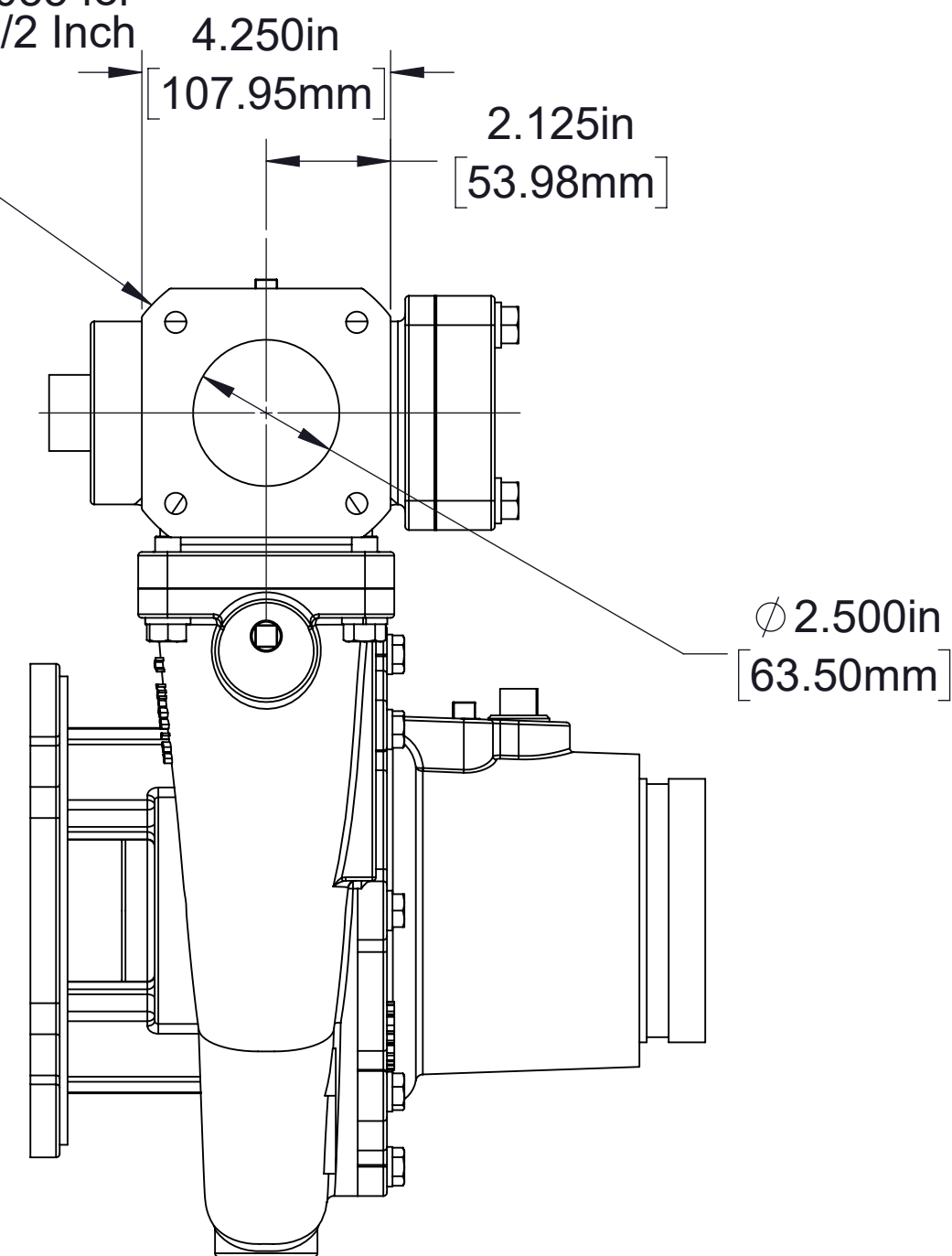
Drive Line		Ratio	Dim A	Dim B	Dim C	Dim D
Size	Spline					
1-1/2 in	1-1/2-10 SAE	1.70	11.288in 286.71mm	10.943in 277.94mm	6.111in 155.22mm	4.737in 120.32mm
		1.90	11.269in 286.24mm	10.924in 277.47mm	6.130in 155.70mm	4.755in 120.79mm
		2.10	11.239in 285.46mm	10.894in 276.70mm	6.160in 156.46mm	4.786in 121.56mm

Model CLR/CLV with PA
Clockwise input
CLVPA shown

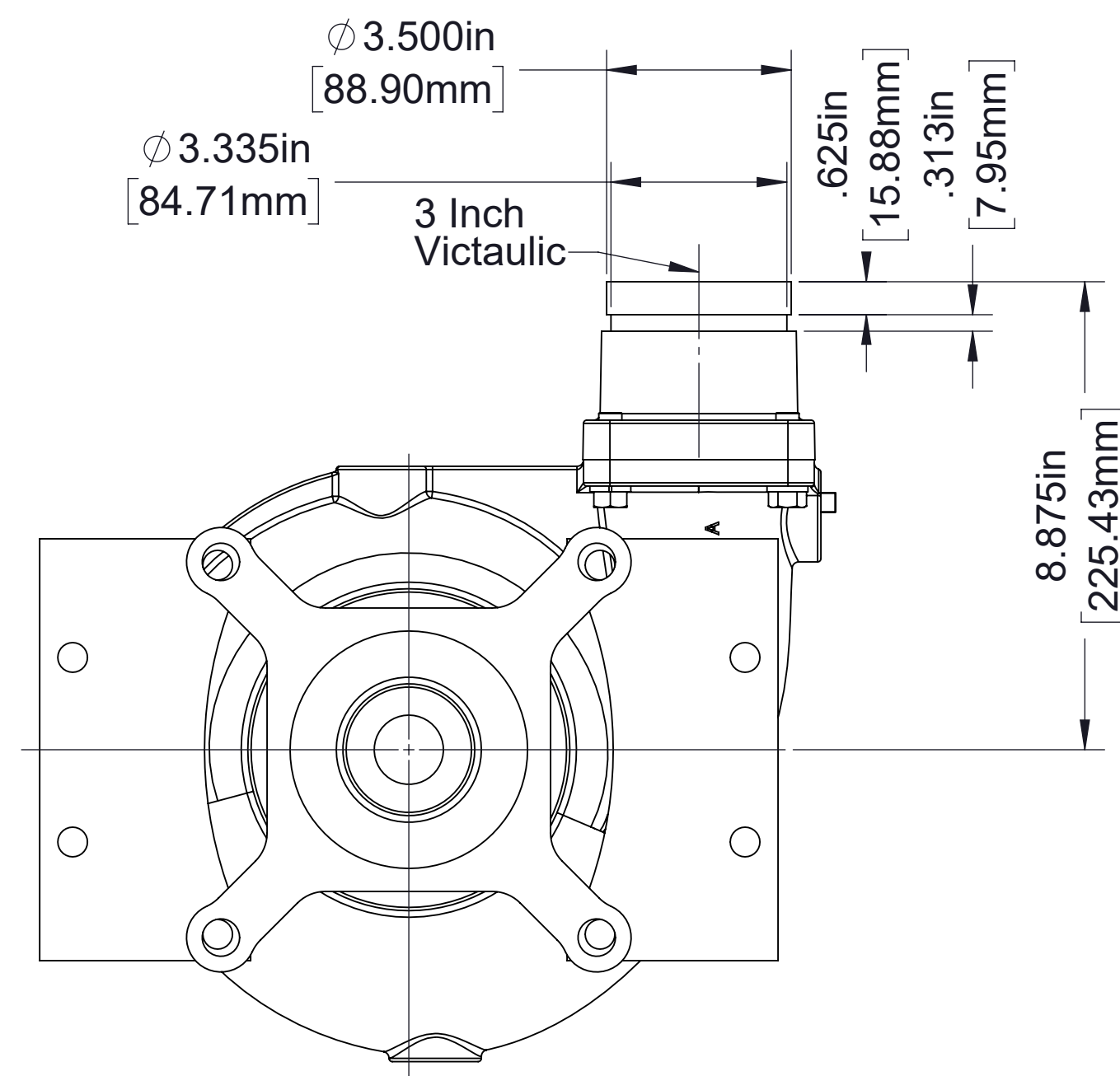
Note: See drawing DPL82080 for additional details of PA transmission



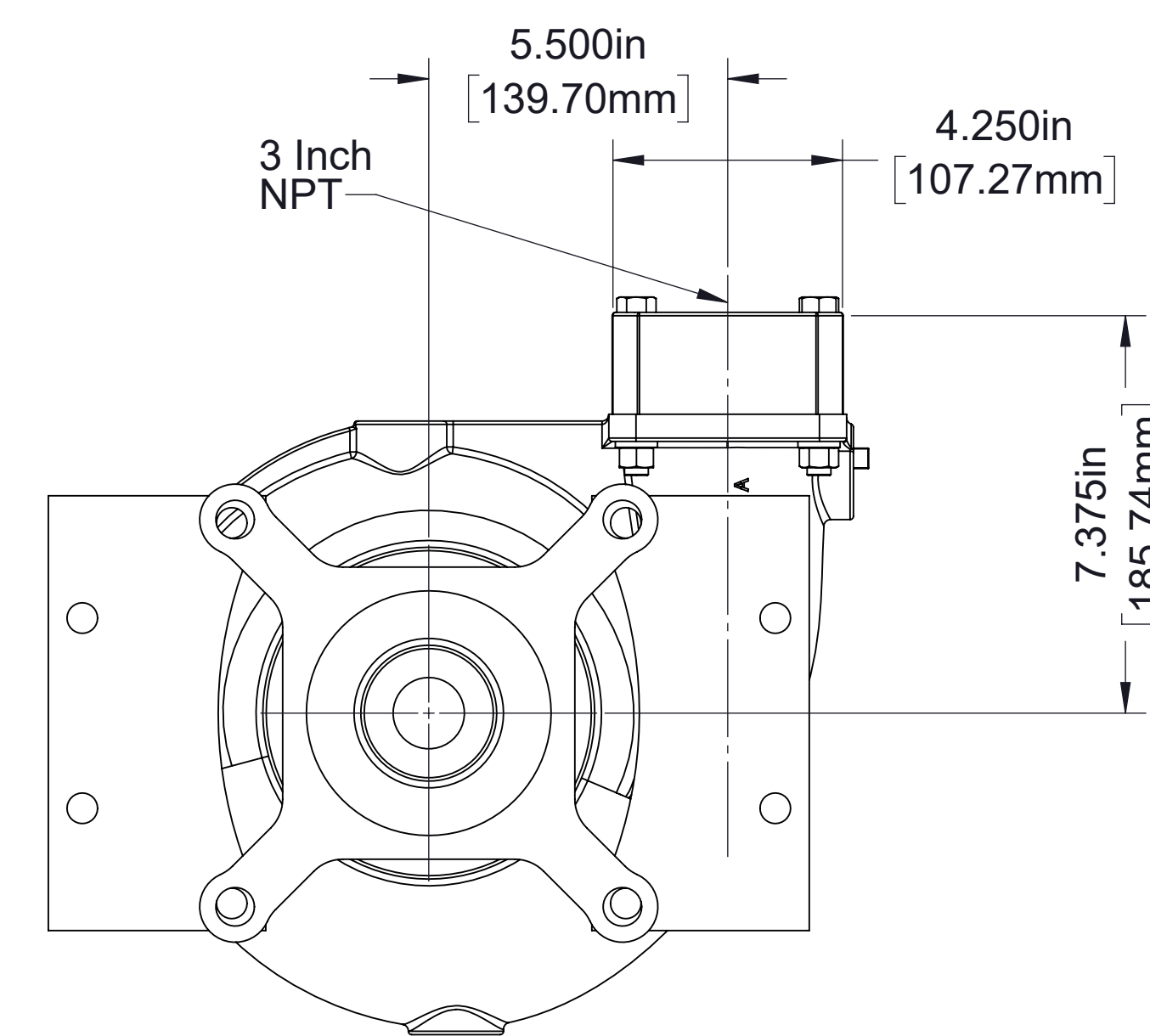
4.250in/107.95mm Square flange.
4 X 7/16-14 UNC-2B tapped
holes on 4.375in/111.13 B.C. both
sides (See drawing DPL82055 for
information on ordering 2-1/2 Inch
discharge fitting)



Optional Pump Discharge Head

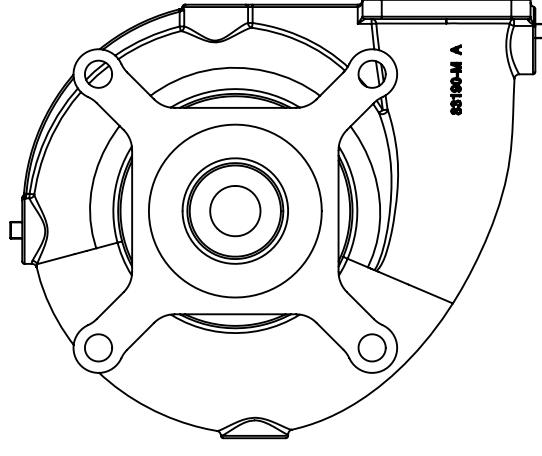
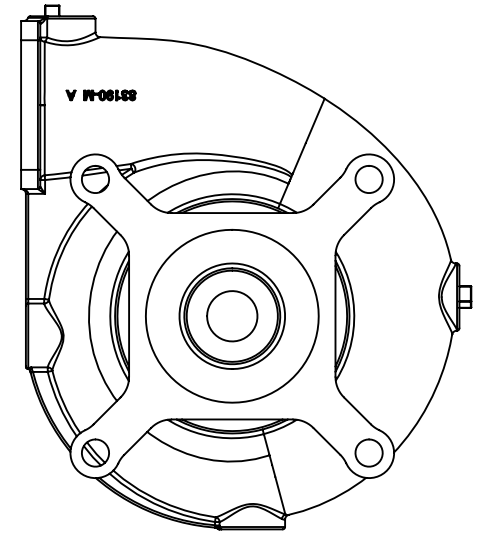
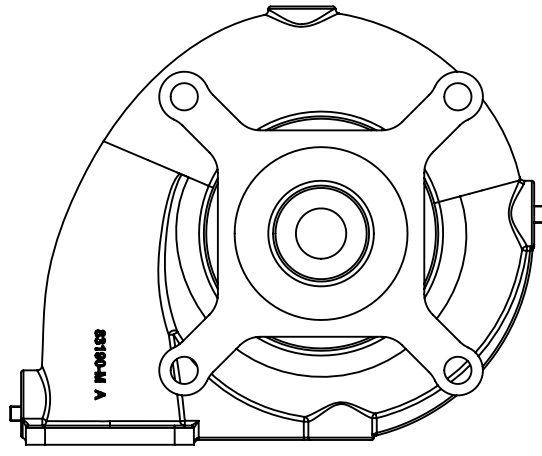


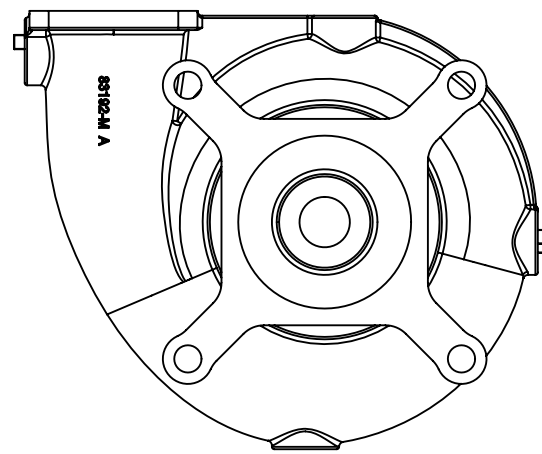
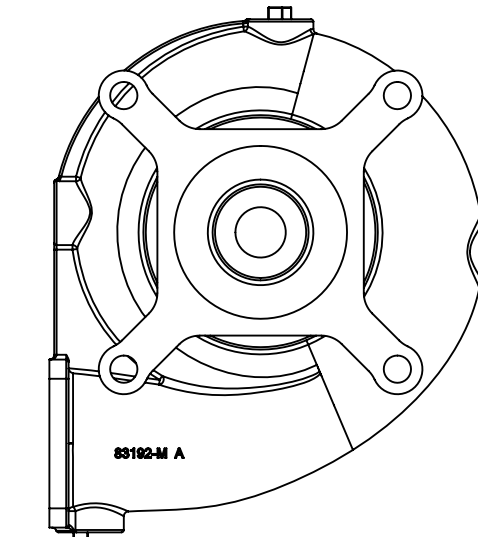
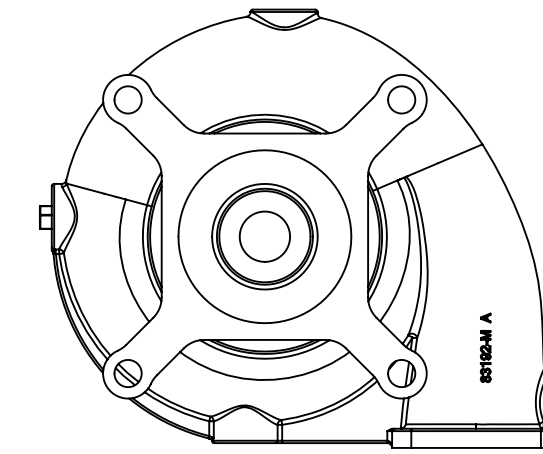
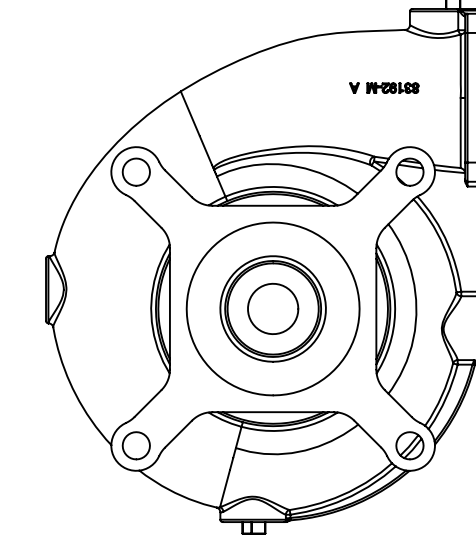
Optional 3 Inch
Victaulic Flange
On Discharge



Optional 3 Inch NPT
Tapped Flange On
Discharge

Optional Discharge Fittings

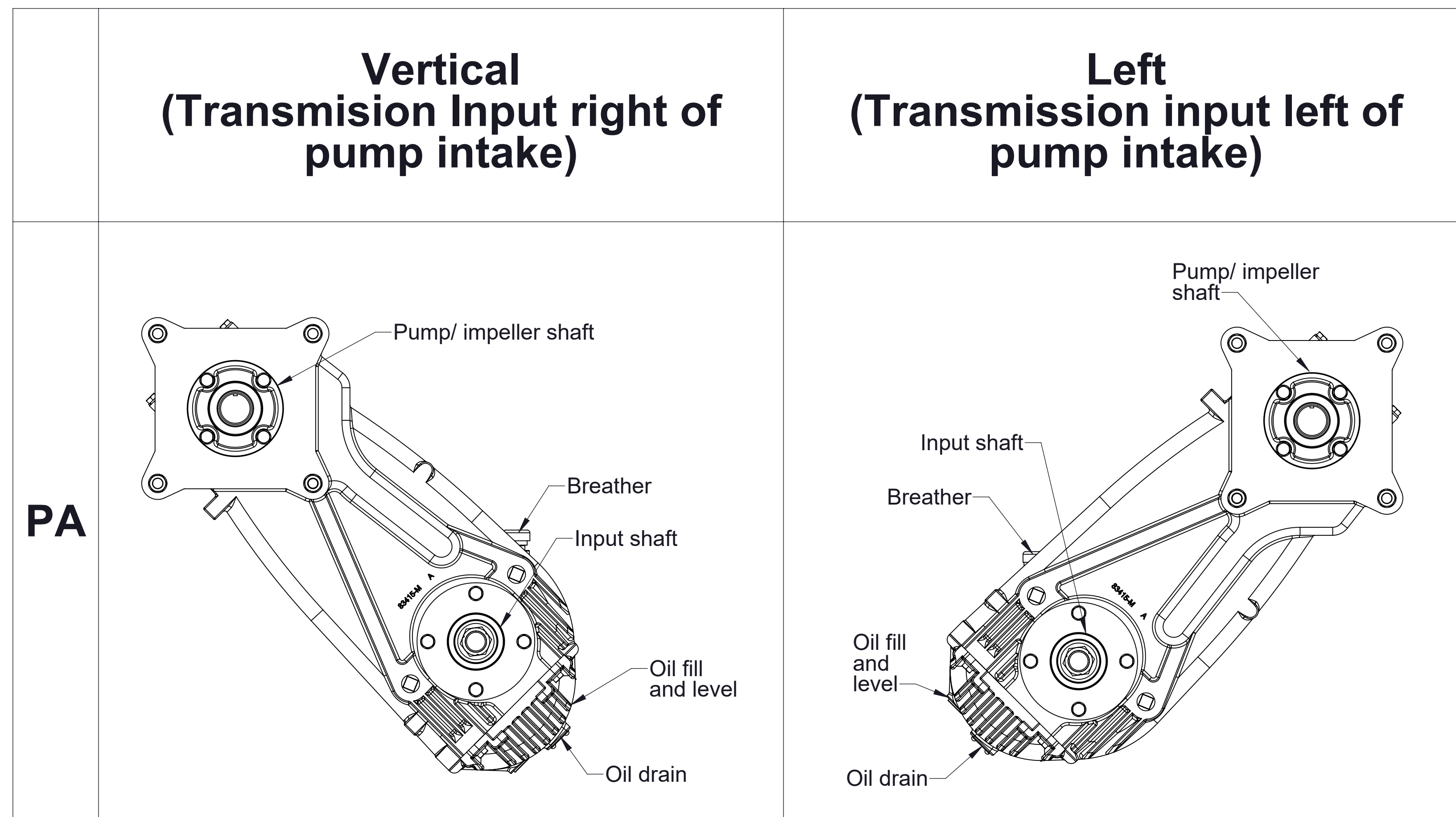
Discharge Position		Available With:			
		Transmission Series			
		K	PA		T
Vertical (Right)	Horizontal (Left)				
Up		Yes	Yes	Yes	Yes
Left		Yes	Yes	No	Yes
Down		Yes	Yes	No	Yes
Right		Yes	Yes	No	Yes
Clockwise (CW) Input Rotation					

Discharge Position		Available with:	
		Transmission Series	
		K	T
Up		Yes	Yes
Left		Yes	Yes
Down		Yes	Yes
Right		Yes	Yes
Counterclockwise (CCW) Input Rotation			

Available pump discharge positions as viewed from transmission end of pump

	Vertical	Inverted	Left	Right
K	<p>Pump impeller shaft (Opposite side)</p> <p>Breather</p> <p>Input shaft</p> <p>Oil level (Opposite side)</p> <p>Oil drain</p>	<p>Breather</p> <p>Input shaft</p> <p>Pump impeller shaft (Opposite side)</p> <p>Oil level</p> <p>Oil Drain</p>	<p>Breather</p> <p>Input shaft</p> <p>Oil level</p> <p>Pump impeller shaft (Opposite side)</p> <p>Oil drain</p>	<p>Input shaft</p> <p>Breather</p> <p>Pump impeller shaft (Opposite side)</p> <p>Oil level</p> <p>Oil drain (Opposite side)</p>
T	<p>Bell housing adapter (Not shown)</p> <p>Breather</p> <p>Oil Level (Opposite side)</p> <p>Pump impeller shaft (Opposite side)</p> <p>Input shaft</p> <p>Oil drain</p>	<p>Breather</p> <p>Bell housing adapter (Not shown)</p> <p>Input shaft</p> <p>Oil level</p> <p>Oil drain</p> <p>Pump impeller shaft</p>	<p>Not Available</p>	<p>Not Available</p>

Available transmission mounting positions as viewed from transmission input shaft



**Available transmission mounting positions
as viewed from transmission input shaft**

Optional End Yokes and Companion Flanges

Pump Model	Transmission Series	Input Shaft	Optional End Yokes and Companion Flanges See DPL83861 for Dimensions		
			Type	Series	Part Number
CLR CLV	K Medium Duty	1-1/8 in with 5/16 in Key	Companion Flange	1310	Q-0315208
	PA	1-1/2-10 SAE Splined Shaft	End Yoke	1410	V 2861
			Companion Flange	1350/1410	V 1822
				70 mm Male Pilot	73330