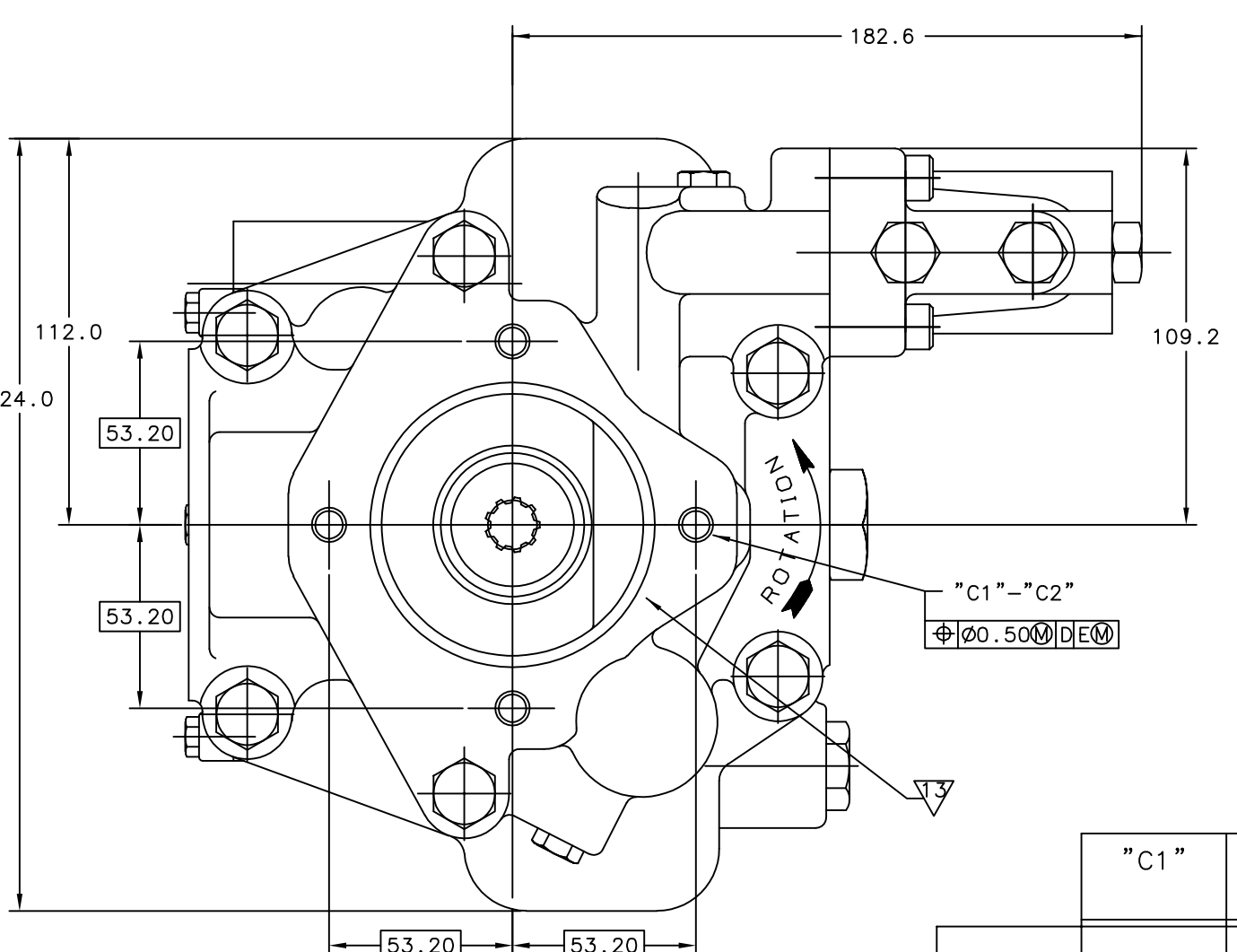
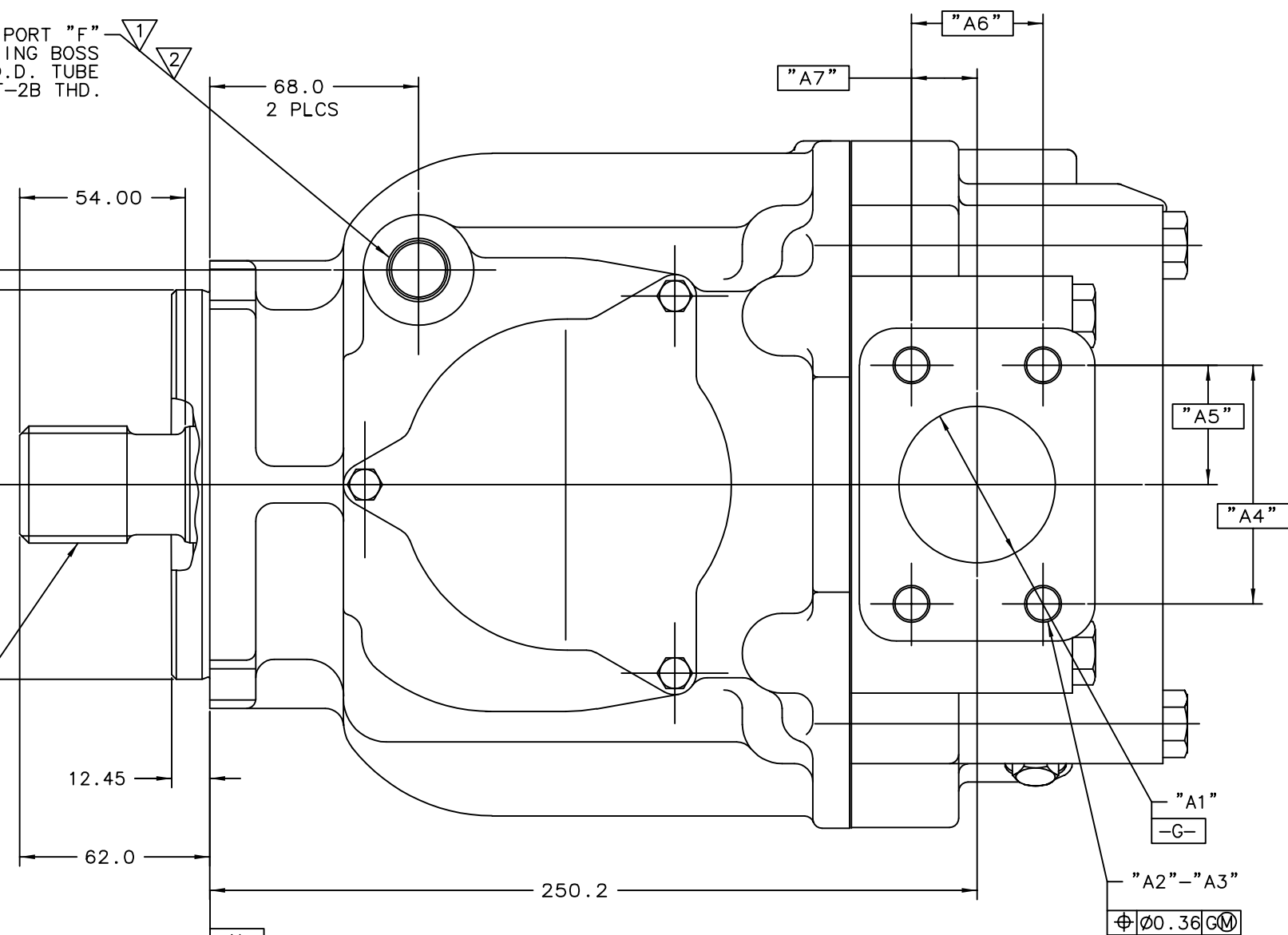


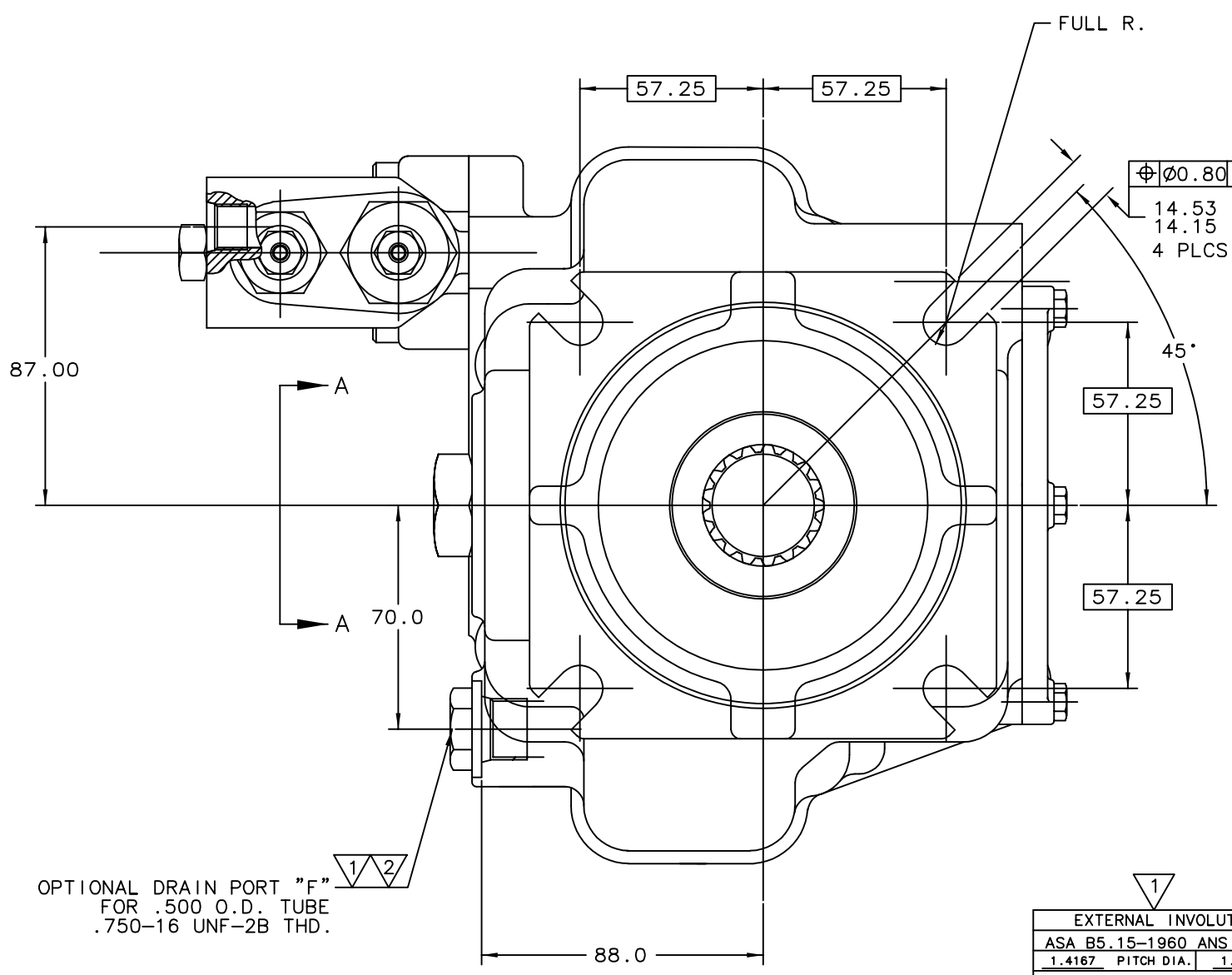
D.T. CODE NO.		DIST. CODES B1, AE, O		FIRST USE ON P474/H/81		AEL O	
UNLESS OTHERWISE SPECIFIED HONEYWELL HDV 3-1/2" x 1-1/2" ANGULAR DIMENSIONS ± .01" SURFACE ROUNDED 2" SURF. TOLERANCES ON DECIMALS 1 PLACE 2 PLACE 3 PLACE IN .05 .03 .02 .01 INCH .005 .003 .002 .001 BREAK RADII REINFORCE CODE 0.25 MIN (.010) MAX.				THIN ANGLE PROTECTION DWN RE 644427 MATERIAL K.LEWIS LENDORS HEAT TREATMENT J.ROBEY ZINCO88 COATING/PLATING PHOTO PROTO		VICKERS INSTALLATION VARIABLE DISPL. THRU DRIVE	
ALL TECHNICAL DATA & DISCLOSED HEREIN IS THE PROPERTY OF VICKERS INCORPORATED AND SHALL NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF THE OWNER.				SIZING CODE NO. 020E08 D.WRIGHT SCALE 1/16" WT		DRAWING NO. 864472 B SHEET 1 OF 5	



	"A1"	"A2"	"A3"	"A4" BASIC	"A5" BASIC	"A6" BASIC	"A7" BASIC
INCH PORTS	Ø50.8 INLET PORT "B" SAE J518C 4 BOLT FLANGE PORT STANDARD PRESSURE SERIES	4X	·500-13UNC-2B THD. 1.06 DEEP MIN. 	77.77	38.88	42.88	21.44
METRIC PORTS	51 SIZE INLET PORT "B" ISO/DIS 6162 4 BOLT FLANGE STANDARD PRESSURE SERIES	4X	M12 THREAD 29.0 DEEP MIN.	77.75	38.88	42.90	21.45



EXTERNAL INVOLUTE SPLINE			
ASA B5.15-1960 ANS B92.1-1970			
1.4167	PITCH DIA.	1.2269	BASE DIA.
FLAT ROOT		SIDE FIT	
17 TEETH	12 / 24 PITCH	30° PR. ANGLE	
MAJOR DIA.		MINOR DIA.	
1.4793 MAX.	1.3297	1.3127 MAX.	
1.4730 MIN.		1.2997 MIN.	
CIRCULAR TOOTH THICKNESS			
.1294	MAX. EFF.	.1277	MAX. ACT. REF.
.1282	MIN. EFF. REF.	.1265	MIN. ACT.
MEASUREMENT OVER .1600 DIA. PINS			
1.6520	MAX. REF.	1.6498	MIN. REF.
SPLINE CODE NUMBER:			



	"B1"	"B2"	"B3"	"B4" BASIC	"B5" BASIC	"B6" BASIC	"B7" BASIC
INCH PORTS	Ø25.4 INLET PORT "C" SAE J518C 4 BOLT FLANGE PORT STANDARD PRESSURE SERIES	4X	.375-16 UNC-2B THD .88 DEEP MIN. 	52.37	26.18	26.19	13.10
METRIC PORTS	25 SIZE OUTLET PORT "C" ISO/DIS R162 4 BOLT FLANGE STANDARD PRESSURE SERIES	4X	M10 THREAD 23.0 DEEP MIN.	52.37	26.18	26.20	13.10

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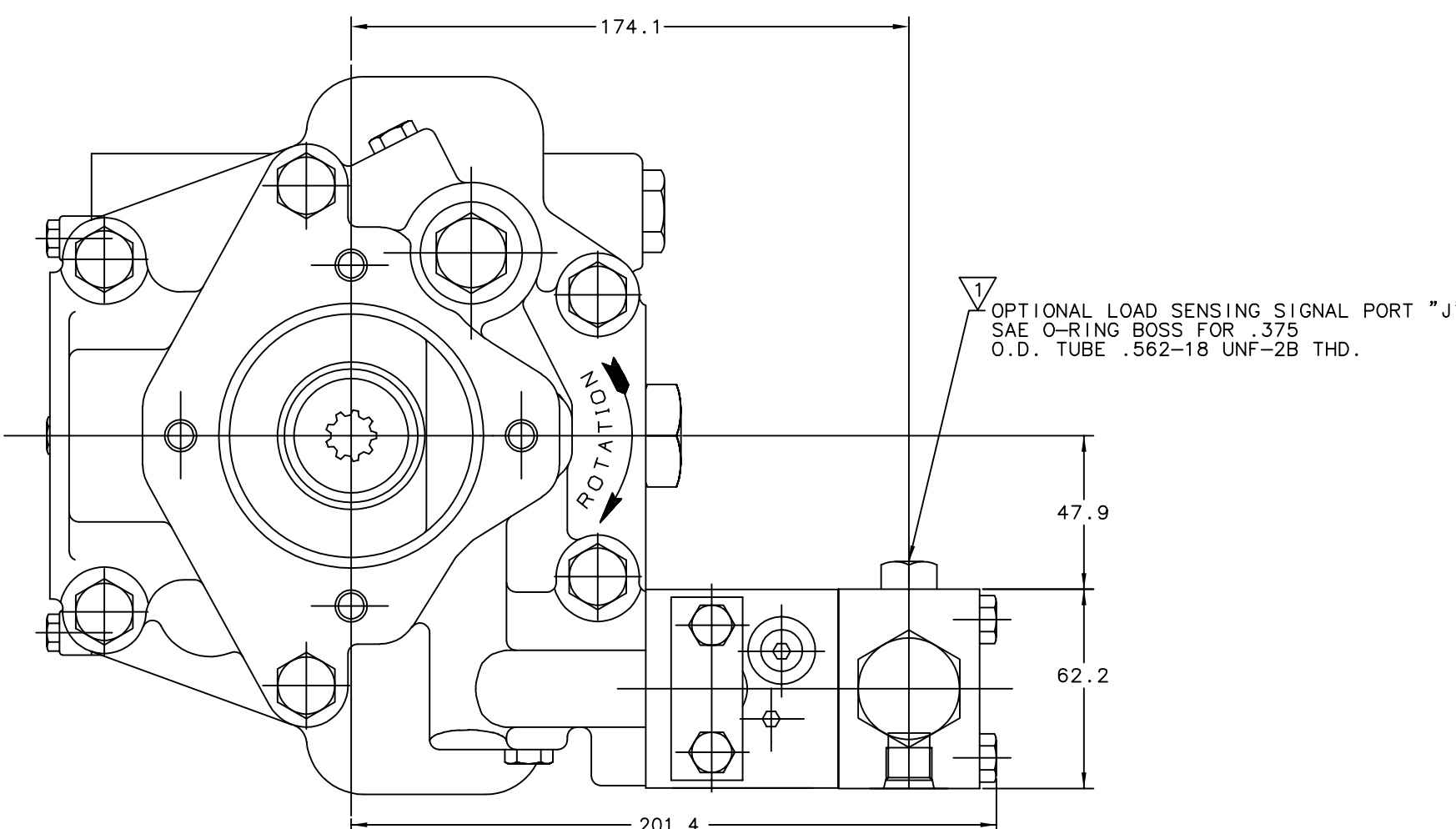
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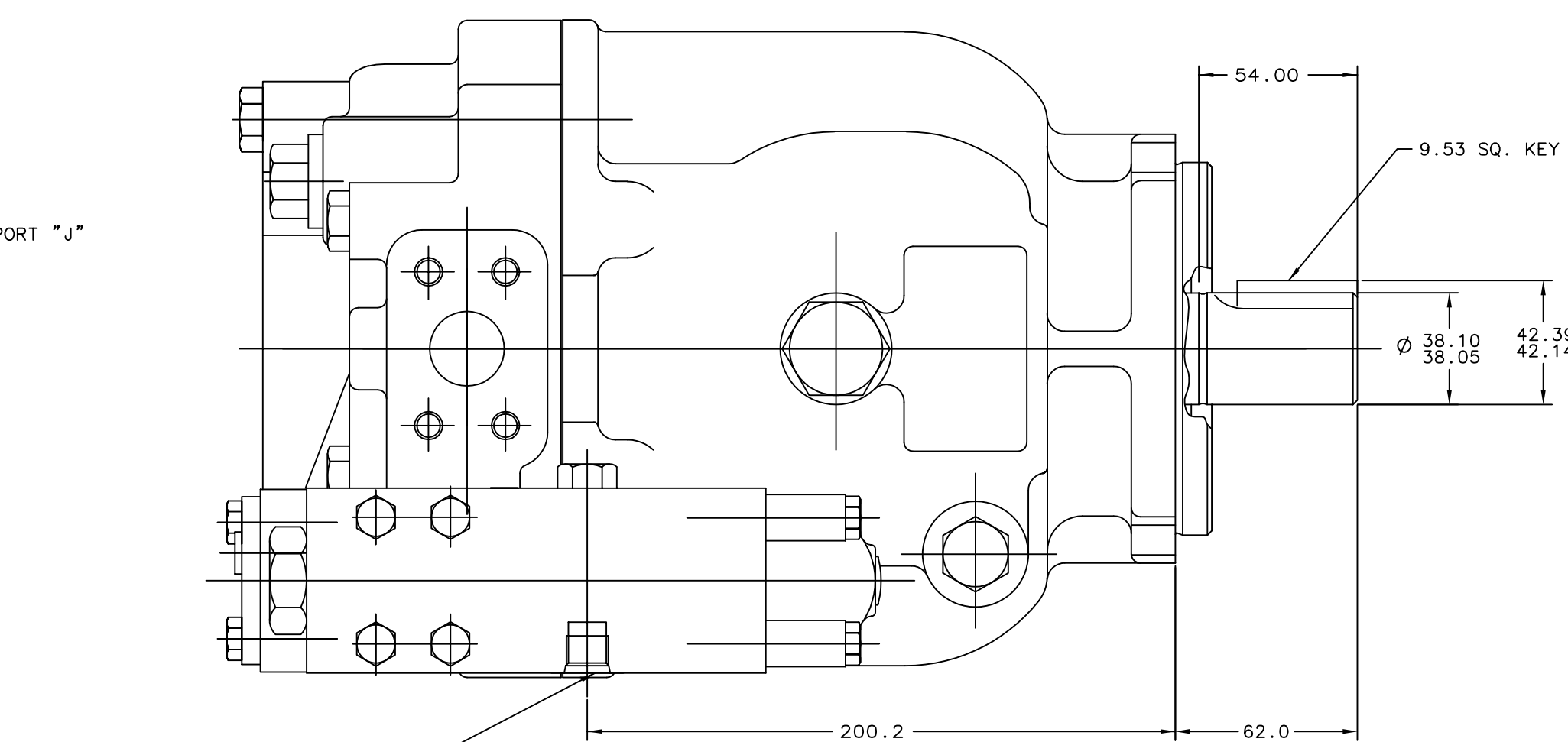
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A

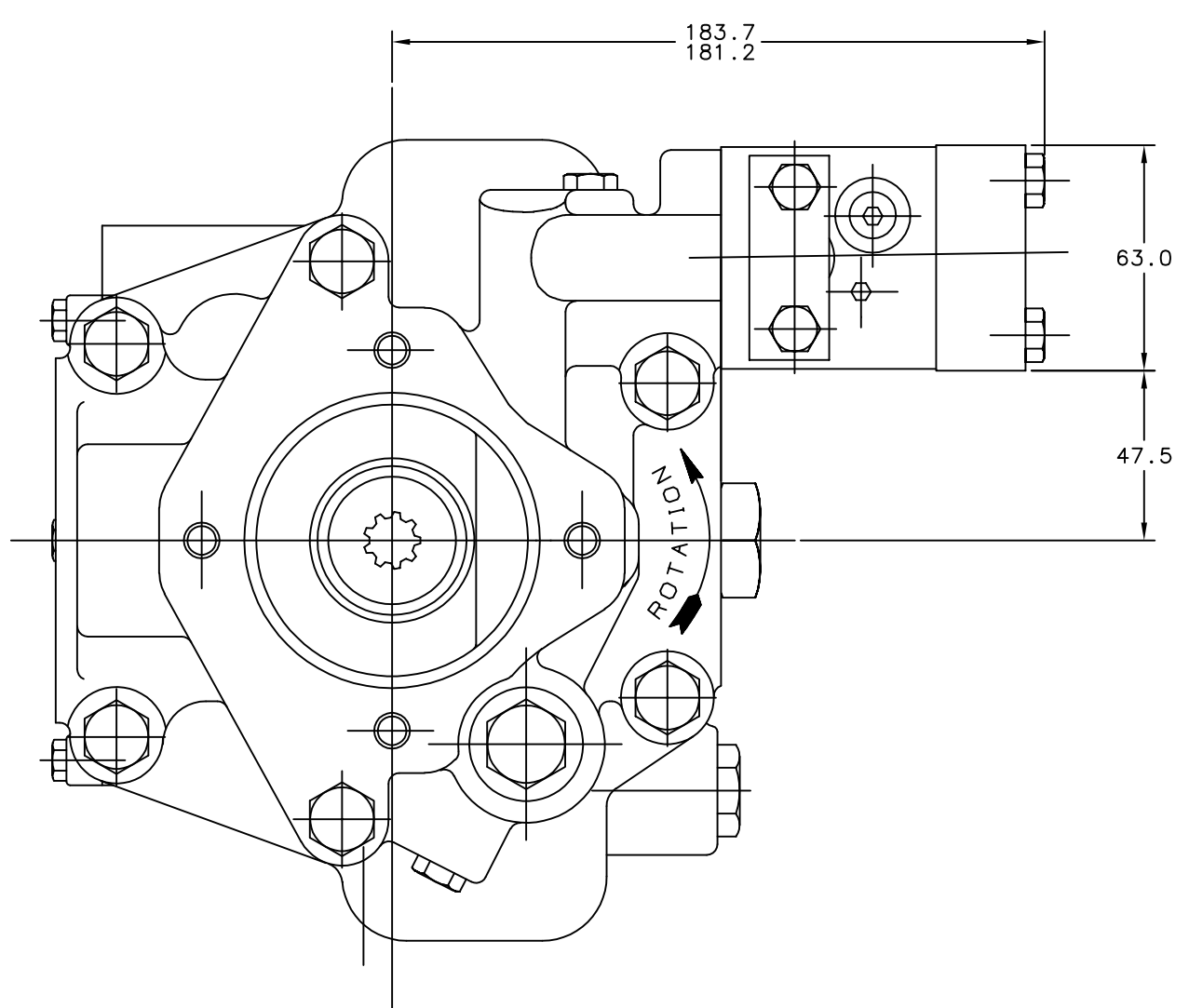
ZONE		REV		REVISIONS		DATE		APPROVED	
A		E.C. NO. 0800775		16AUG80		S.K.W.		J.R.R.	
B		E.C. NO. 0840875 (BC)		29AUG94		B.C.W.		J.T.E.	
		1-2) SEE SHEET #1							
		3-4) SEE SHEET #5							



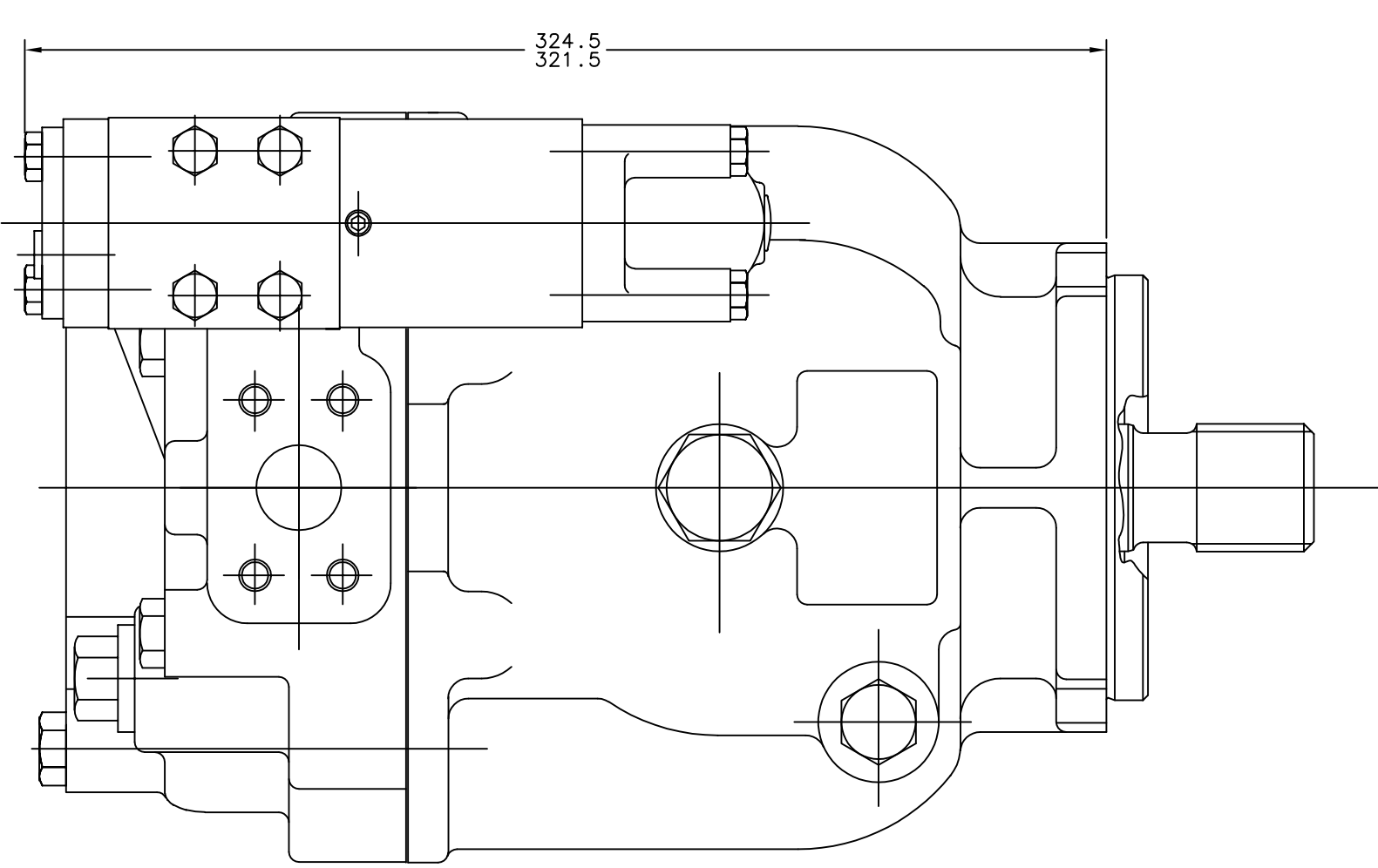
LEFT HAND ROTATION
PRESSURE COMPENSATED WITH LOAD SENSE &
TORQUE LIMIT MODEL



LEFT HAND ROTATION
PRESSURE COMPENSATED WITH LOAD SENSE &
TORQUE LIMIT MODEL



RIGHT HAND ROTATION
PRESSURE COMPENSATED &
TORQUE LIMIT MODEL



RIGHT HAND ROTATION
PRESSURE COMPENSATED &
TORQUE LIMIT MODEL

DWG NO. 864472

REV 2

REV 8

G.T. CODE NO.		DIST. CODES B1, AE, O		FIRST USED ON PVH74/B1		AEL O	
UNLESS OTHERWISE SPECIFIED		THIRD ANGLE PROJECTION		REF 864427		AC	
INTERPRET FOR ISO 15-3-51		MATERIAL		DIN			
ANGULAR DIMENSIONS ± 1°		HEAT TREATMENT		NFC REV			
SURFACE FINISHES 3.2 µm (125 µin)		T.Y.S.		I.D.			
TOLERANCES ON DECIMALS		COATING/PLATING		PROTO			
1 PLACE 2 PLACE 3 PLACE		REMOVE BURRS		PROD.			
mm .01 .005 .002		BREAK EDGES 0.25 mm (.010 IN) MAX.		ENGNG APPVL			
INCH .001 .0005 .0002		ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS, INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, REPRODUCTION, OR DISCLOSURE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.		SIZE/CAGE NO. J		DRAWING NO. 864472	
				SCALE 1/1 WT		REV B	
						SHEET 2 OF 5	

VICKERS

INSTALLATION
VARIABLE DISPL.
PISTON PUMP
THRU DRIVE

METRIC

DWG NO. 864472

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12 11 10 9 8 7 6 5 4 3 2 1

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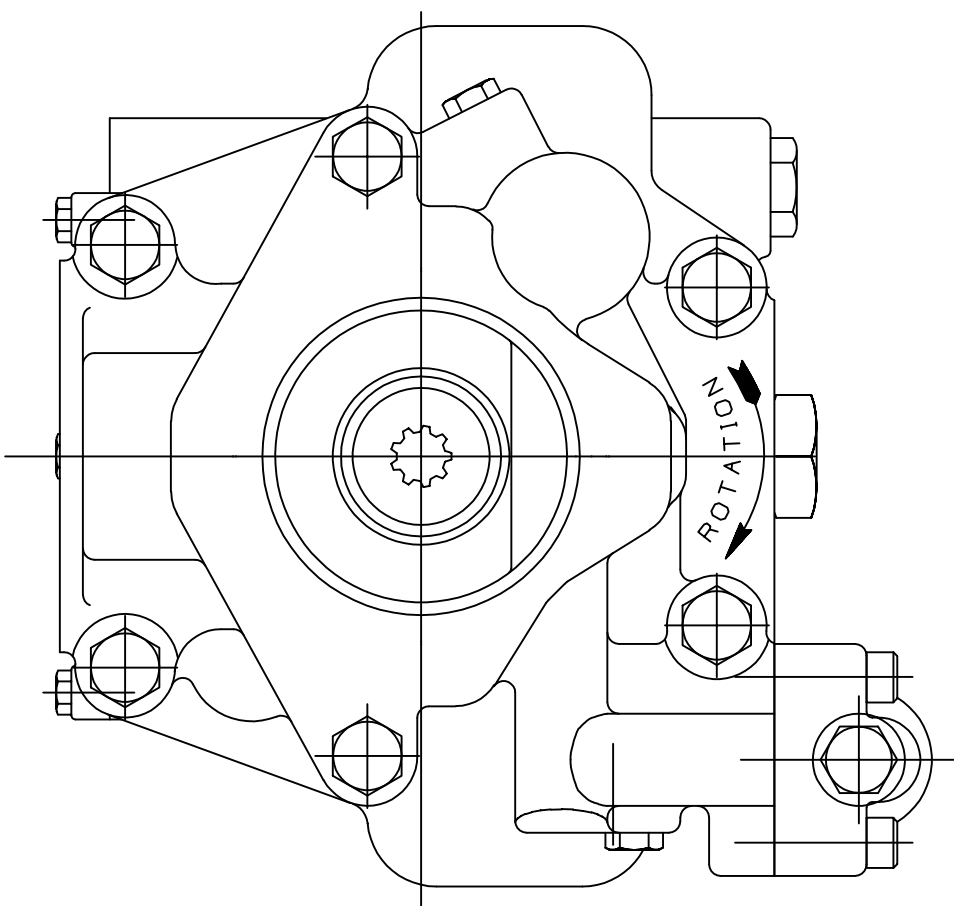
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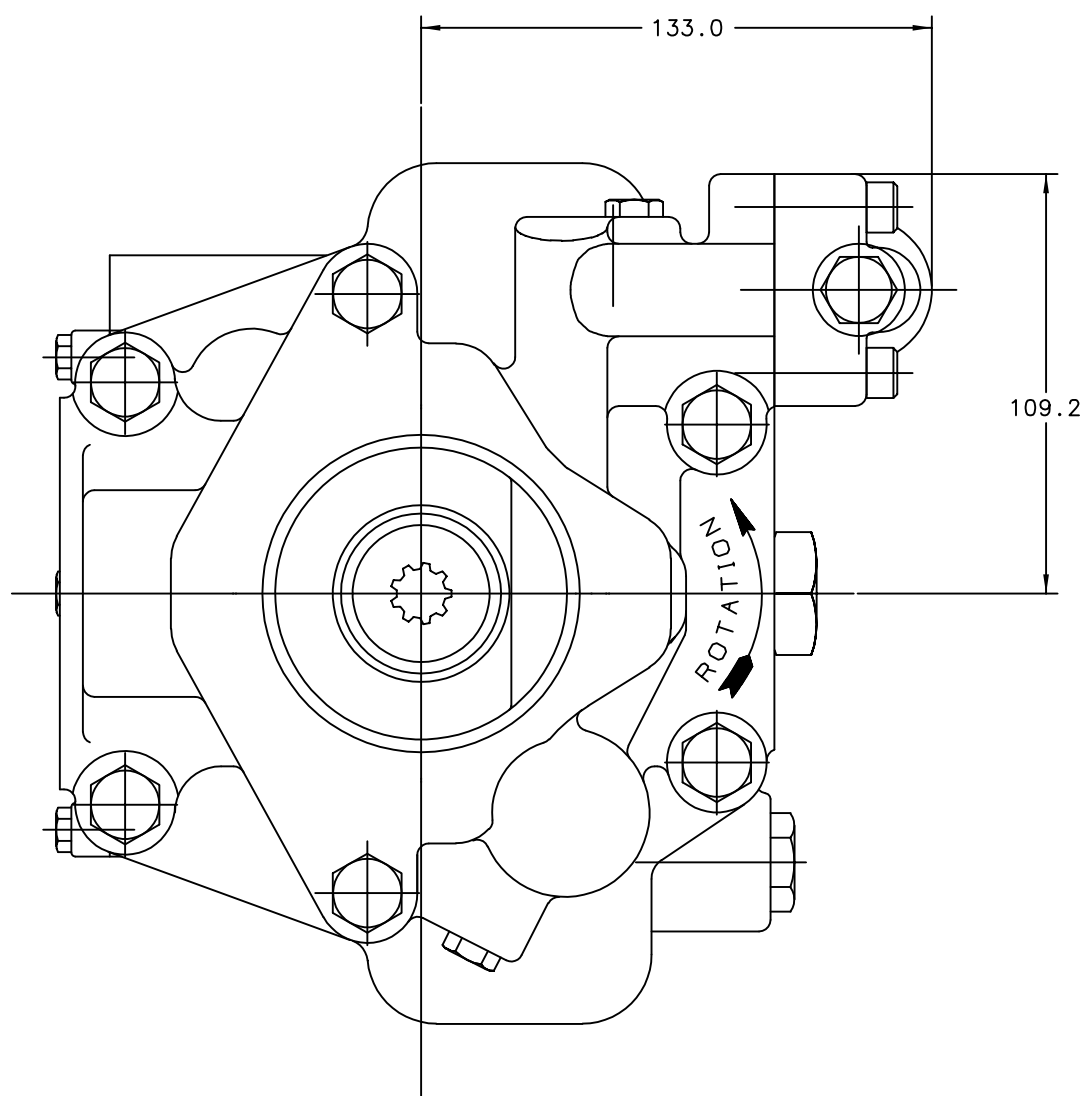
B

A

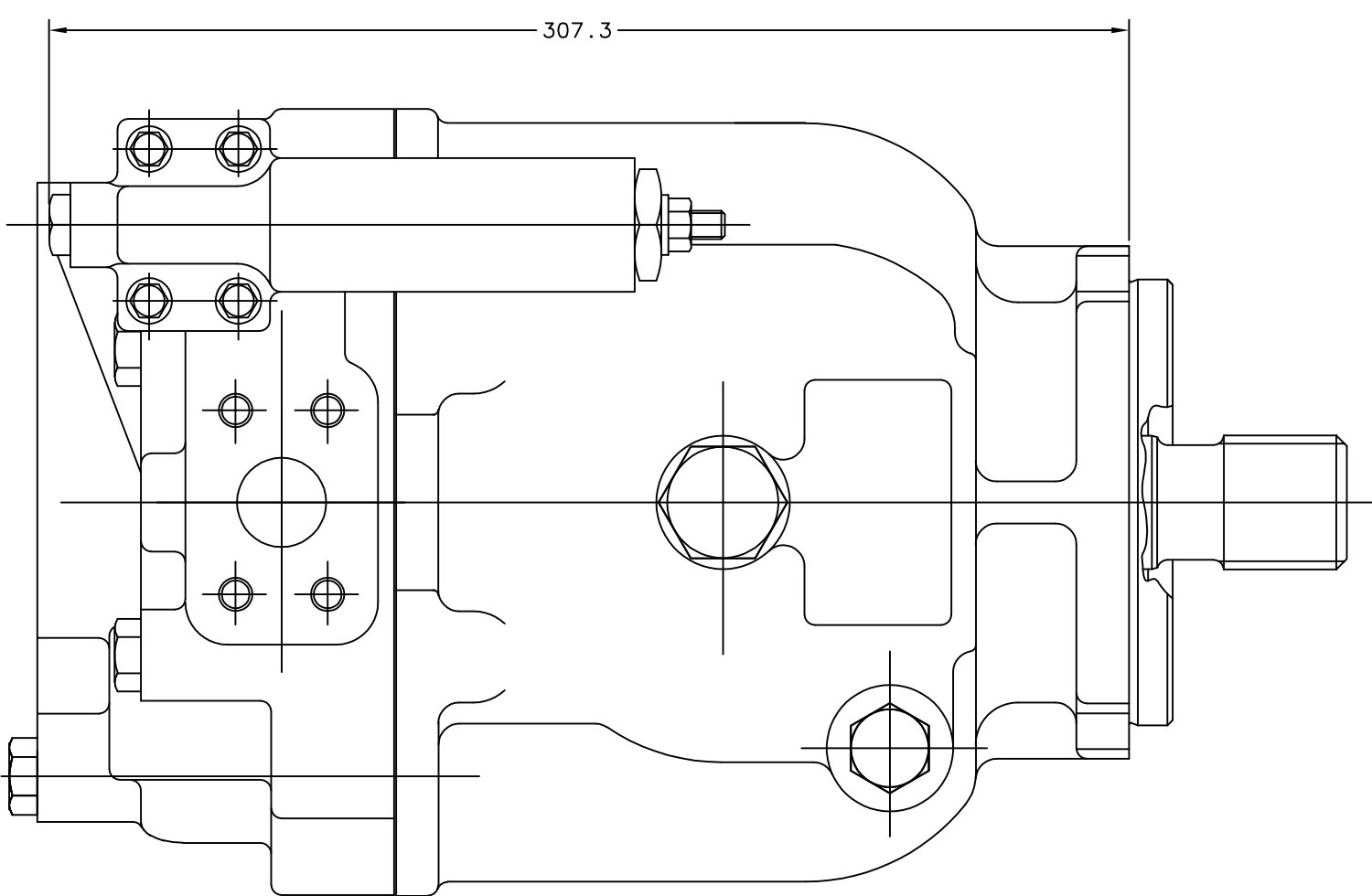
ZONE		REV		DESCRIPTION		DATE		APPROVED	
A		E.C. NO. 0800775		SEE SHEET #1		18AUG80		S.R.W.	
B		E.C. NO. 0840875 (BC)		RE-DRAWN ON AUTOCAD		23JUL94		B.C.W.	
		1-2) SEE SHEET #1						J.T.E.	
		3-4) SEE SHEET #5							



LEFT HAND ROTATION
PRESSURE COMPENSATED



RIGHT HAND ROTATION
PRESSURE COMPENSATED



RIGHT HAND ROTATION
PRESSURE COMPENSATED

DWG NO. 864472 3 REV B

G.T. CODE NO.		DIST. CODES B1, AE, O		FIRST USED ON PVH74/B1		AEL O	
UNLESS OTHERWISE SPECIFIED		THIRD ANGLE PROJECTION		REF 864427		AC	
INTERPRET FOR ISO 15-3-5-1		MATERIAL		DIN			
ANGULAR DIMENSIONS ± 5°		HEAT TREATMENT		MFC REV			
SURFACE FINISHES 3.2 µm (125 µin)		T.Y.S.		L			
TOLERANCES ON DECIMALS		COATING/PLATING		L			
1 PLACE 2 PLACE 3 PLACE		REMOVE BURRS		L			
mm .01 .005 .001		BREAK EDGES 0.25 mm (.010 IN) MAX.		L			
INCH .001 .0005 .0001		ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS, INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, REPRODUCTION, OR DISCLOSURE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.		L			
		SIZE/CAGE NO.		DRAWING NO.		REV	
		J		864472		B	
		SCALE 1/1 WT		AEC		SHEET 3 OF 5	

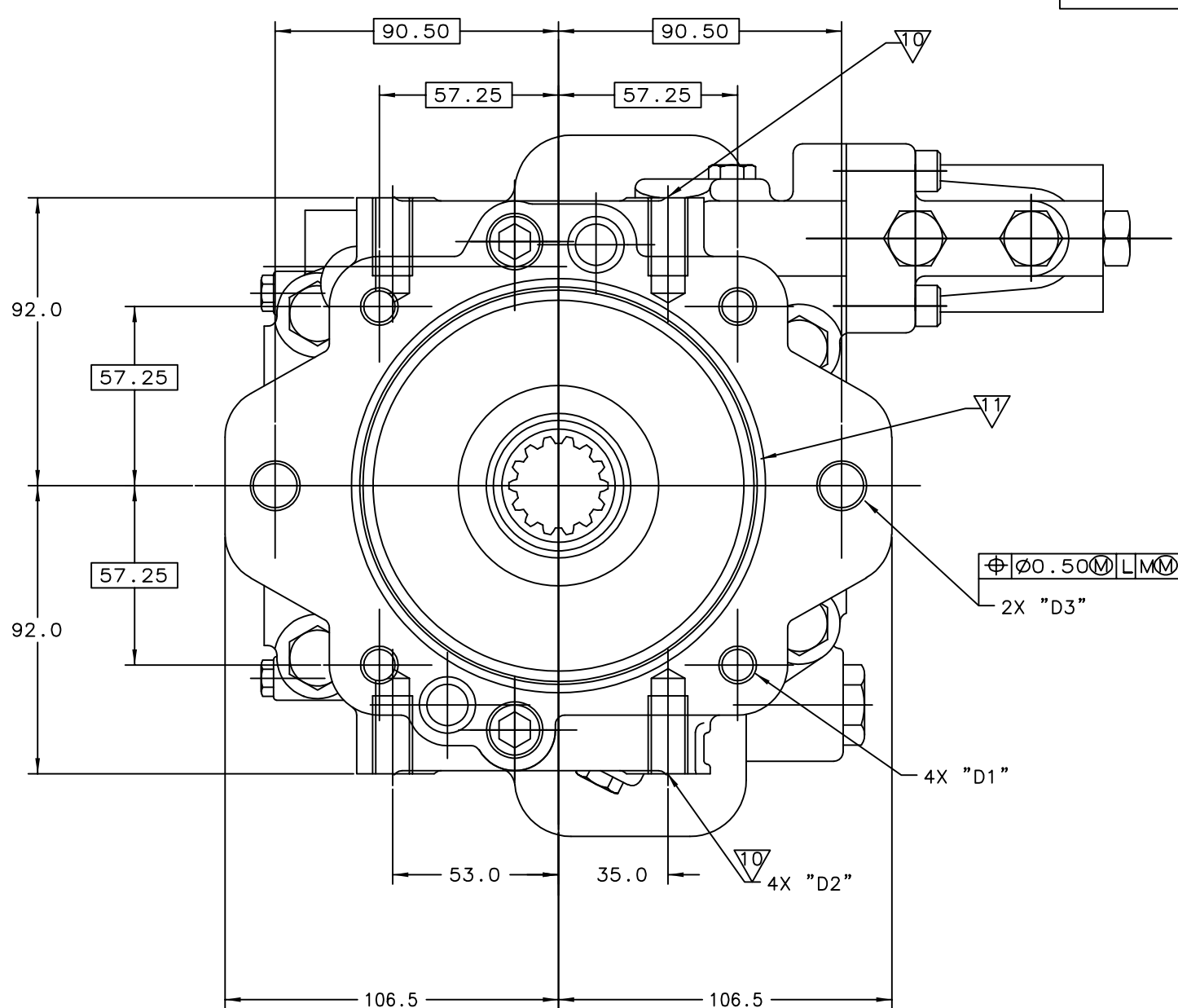
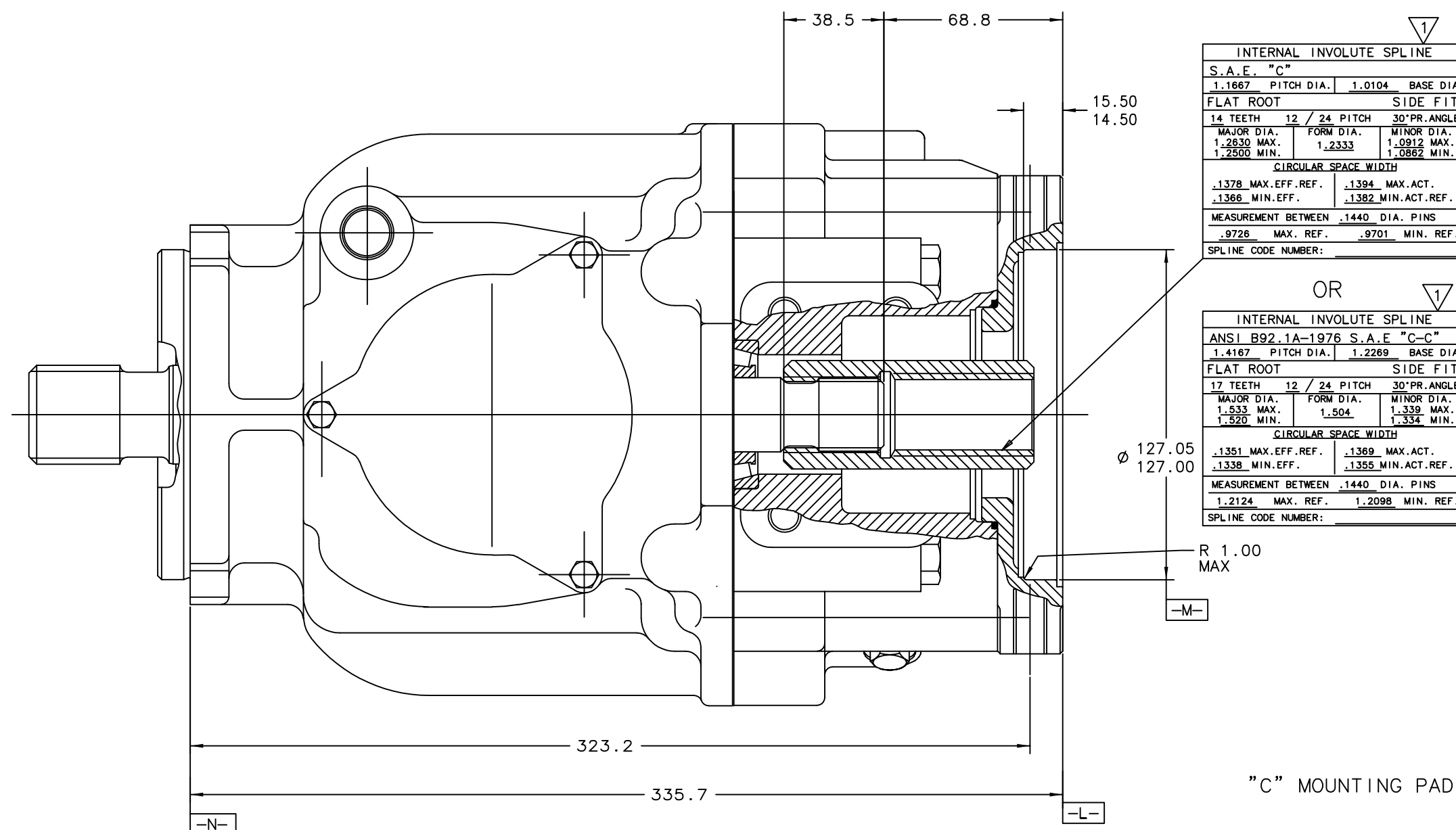
VICKERS

INSTALLATION
VARIABLE DISPL.
PISTON PUMP
THRU DRIVE

METRIC

DWG NO. 864472 3 REV B

D.T. COUNTRY		DIST. CODES		B1, AE, O		FIRST USED ON		PVH74/81		AEL O		AC	
UNLESS OTHERWISE SPECIFIED INTERHOLE PITCH 10 U.S.-S.I. ANGULAR DIMENSIONS $\pm 2^\circ$ SURFACE FINISHES 3.2 μ (120 μ) TOLERANCES ON DECIMALS						THIRD ANGLE PROJECTION							
1 PLACE 2 PLACE MM .00 .00 INCH .000 .000 BEND RADIUS BREAK DIMENSIONS 0.25 MM (0.010 IN) MAX.				MATERIAL HEAT TREATMENT COATING/PLATING		REF 864427 DRN W.P. REV I.F.C. PROTO ENG'D APP'VAL		TITLE INSTALLATION VARIABLE DISPL. PISTON PUMP THRU DRIVE					
				SEE SHEET 1				SIZE/GEAR NO. SCALE 1/1 WT		DRAWING NO. 8644472 B		REV 4 OF 5	



	"D1"	"D2"	"D3"
INCH	.500-13UNC-2B THD 1.00 DEEP 	.500-13UNC-2B THD .980 DEEP MIN. 	.625-11UNC-2B THD 1.00 DEEP 
METRIC	M12X1.75 THREAD 25.0 DEEP	M12X1.75 THREAD 25.0 DEEP MIN.	M16X2.00 THREAD 25.0 DEEP

D.T. CIRCLE USE NO.	DIST. CODES B1, AE, O	FIRST USED ON PVH74/81	AEL O
NEVER OTHERWISE SPECIFIED INTERPRET PER ISO 10-3-61 ANGULAR DIMENSIONS ± .2° SURFACE FINISHES 3.2 μm (120 μin) TOLERANCES ON DECIMALS	THIRD ANGLE PROJECTION 	REF 864427	AC
1 PLACE 2 PLACE 3 PLACE mm .05 .05 .05 inch .001 .001 .001	MATERIAL	DATE	VICKERS
BREAK BREAKS	HEAT TREATMENT	W.P.'S REV	TITLE
REMOVE GROOVE 0.25 mm (.010 IN) MAX.	COATING/PLATING	P.T.C. PROG. PROD. ENGRG APPVL	INSTALLATION VARIABLE DISPL. PISTON PUMP THRU DRIVE
ALL DIMENSIONS ARE TO BE THE PROPERTY OF VICKERS INCORPORATED AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF THE OWNER.	SIZE/GEAR NO.	DRAWING NO.	REV
	J	864427 B	5
	SCALE 1/1 WT	ACTL SCALE	5 OF 5

FILL CASE WITH OIL THROUGH EITHER OF THESE DRAIN PORTS. CASE MUST BE FILLED BEFORE PUMP IS STARTED. CASE DRAIN PORT MUST BE LOCATED AT THE UPPERMOST POSITION OF THE PUMP AND MUST BE CONNECTED DIRECTLY TO THE RESERVOIR. MAXIMUM CONTINUOUS PRESSURE AT THE CASE DRAIN PORT MUST NOT EXCEED 0.5 bar.

IN THOSE CASES WHERE GEOMETRIC TOLERANCE OF MOUNTING ARE CRITICAL OR WHERE SPECIFIC TOLERANCE RANGES ARE REQUIRED AND NOT SPECIFIED, CONSULT VICKERS ENGINEERING DEPT. FOR SPECIFIC LIMITS.

	FOR PVH74
RATED SPEED _____	2200 RPM
*RATED PRESSURE MAX _____	250 bar (3625 PSI)
THEORETICAL DISPL _____	73.69 ml/REV (4.5 CIR)
INLET PRESSURE _____	1.0 bar ABS (14.5 PSIA)
RATED TEMPERATURE _____	93°C (200°F)

		FOR PVH74Q	FOR PVH81Q
(A3)	RATED SPEED	2100 RPM	2200 RPM
*	RATED PRESSURE MAX	250 bar (3625 PSI)	225 bar (3263 PSI)
	THEORETICAL DISPL	73.69 ml/REV (4.5 CIR)	81.03 ml/REV (4.94 CIR)
	INLET PRESSURE	1.0 bar ABS (14.5 PSIA)	1.0 bar (14.5 PSIA)
	RATED TEMPERATURE	93°C (200°F)	93°C (200°F)

RATED SPEED		FOR PVH74Q1	
AT 0.85 bar ABS	INLET PRESSURE	_____	1500 RPM
AT 1.00 bar ABS	INLET PRESSURE	_____	1800 RPM
AT 1.50 bar ABS	INLET PRESSURE	_____	1800 RPM
*RATED PRESSURE MAX	_____	250 bar	(3625 PSI)
THEORETICAL DISPL	_____	73.69 ml/REV	(4.5 CIR)
RATED TEMPERATURE	_____	65°C	(150°F)

6. CARE SHOULD BE TAKEN THAT MECHANICAL AND HYDRAULIC RESONANCES ARE AVOIDED IN THE APPLICATION OF THIS COMPONENT. SUCH RESONANCES CAN SERIOUSLY COMPROMISE THE LIFE AND/OR SAFE OPERATION OF THE COMPONENT.

7. THE MAXIMUM ECCENTRICITY BETWEEN SHAFT O.D. (OR SPLINE P.D.) & PILOT DIA. IS 0.15 (.006) T.I.R. WHICH INCLUDES AN ECCENTRICITY OF 0.076 (.003) BETWEEN THE SHAFT AND ITS BEARING PILOT. MAXIMUM SQUARENESS DEVIATION OF MOUNTING FLANGE FACE TO AXIS OF SHAFT IS (0.0015)mm mm. MATING PART TOLERANCES & INSTALLATION PRACTICES MUST BE COMPATIBLE SO THAT INTERFERENCE DOES NOT RESULT IN SHAFT SIDE LOAD DURING OPERATION. A COUPLING MAY BE USED TO PERMIT GREATER TOLERANCE IF IT DOES NOT RESULT IN SHAFT SIDE LOAD.

8. "90" DUROMETER NITRILE (BUNA-"N") ELASTOMER O-RING
TO BE USED ON ALL S.A.E. AND I.S.O. STRAIGHT THREAD CONNECTIONS.

9 PRESSURE DECAY RATE OF SIGNAL LINE "J" SHALL NOT EXCEED
11.0 KBAR/SEC (160.0 KSI/SEC).

▽ CUSTOMER REQUIRED TO SUPPORT PUMP HERE.

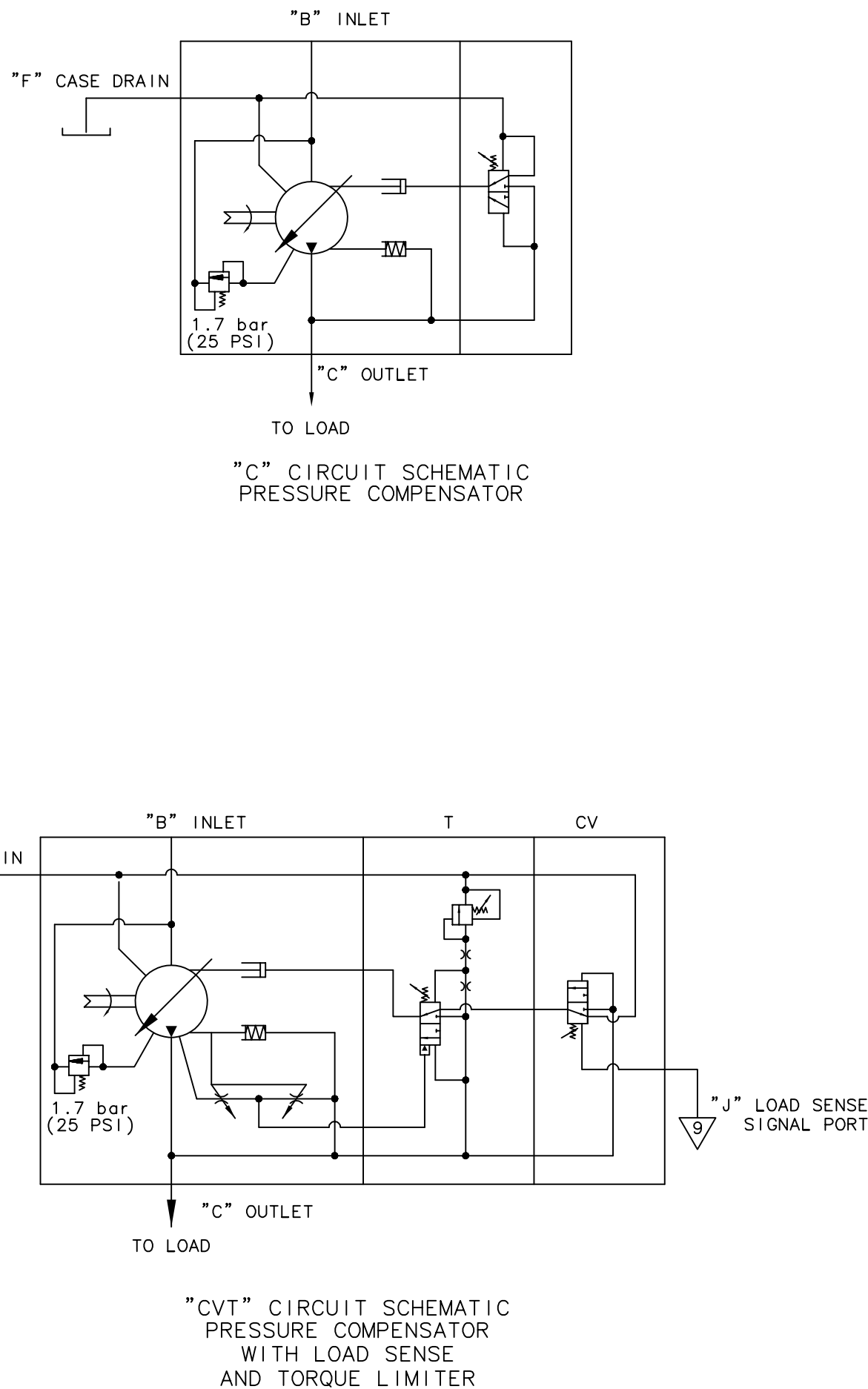
 MOUNTING PAD IS MACHINED TO ACCEPT AS568 DASH NUMBER -159 O-RING
 MOUNTING PAD IS CONNECTED TO PUMP CASE AND MUST BE SEALED.

12 MOUNTING PAD IS MACHINED TO ACCEPT AS568 DASH NUMBER -155 O-RING
MOUNTING PAD IS CONNECTED TO PUMP CASE AND MUST BE SEALED.

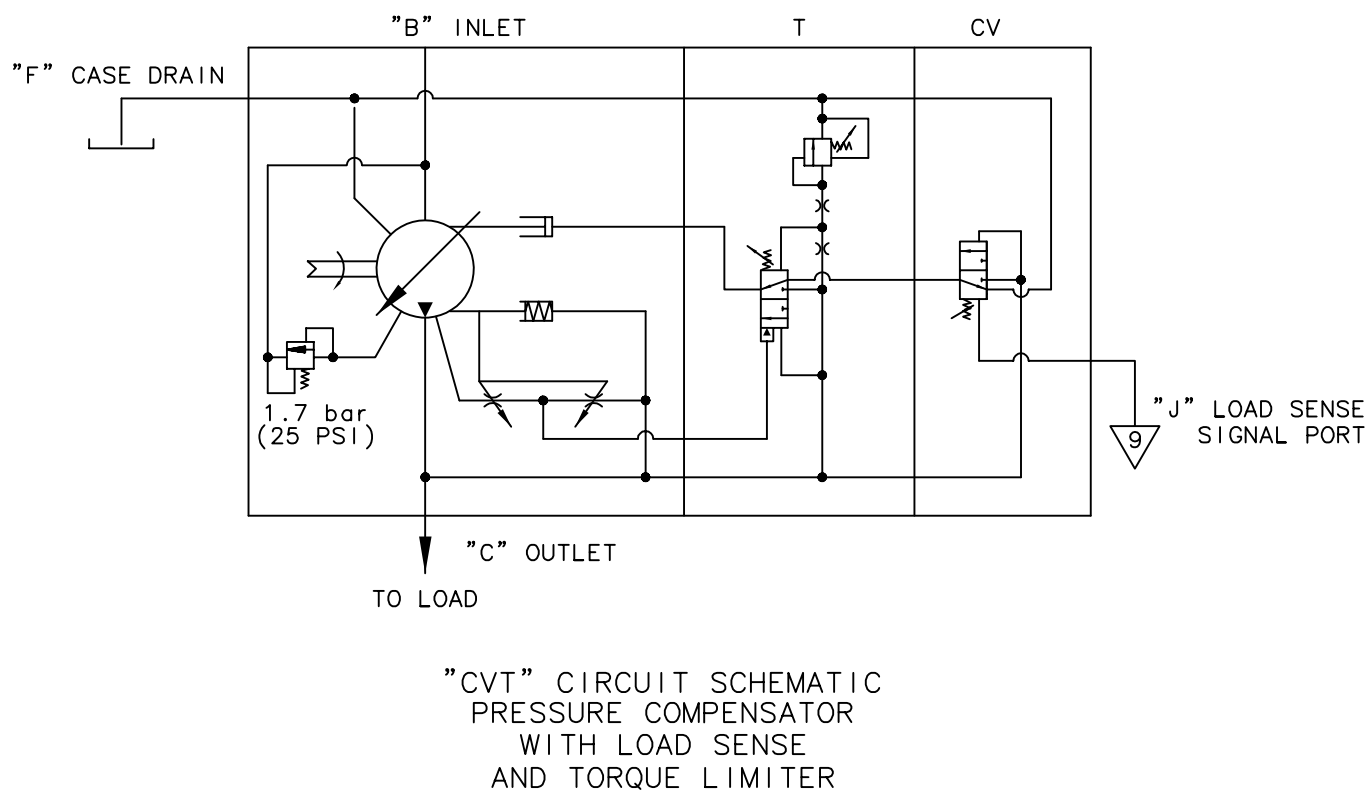
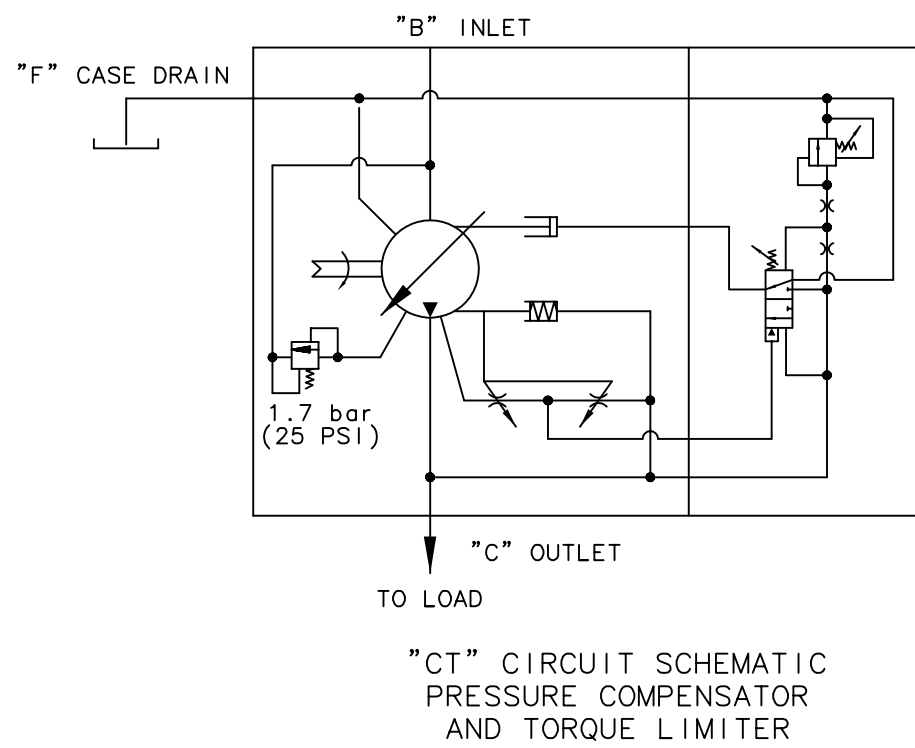
13 MOUNTING PAD IS MACHINED TO ACCEPT AS568 DASH NUMBER -152 O-RING
MOUNTING PAD IS CONNECTED TO PUMP CASE AND MUST BE SEALED.

4/ RATED THRU DRIVE TORQUE CAPACITY OF SHAFT IS 320 N.m (2830 IN.-LBF.)

15 DIMENSION SHOWN FOR ALTERNATE LOAD SENSING SIGNAL PORT "J".



(B4)



METRIC

DWG NO.	864472	SH 5	REV B
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