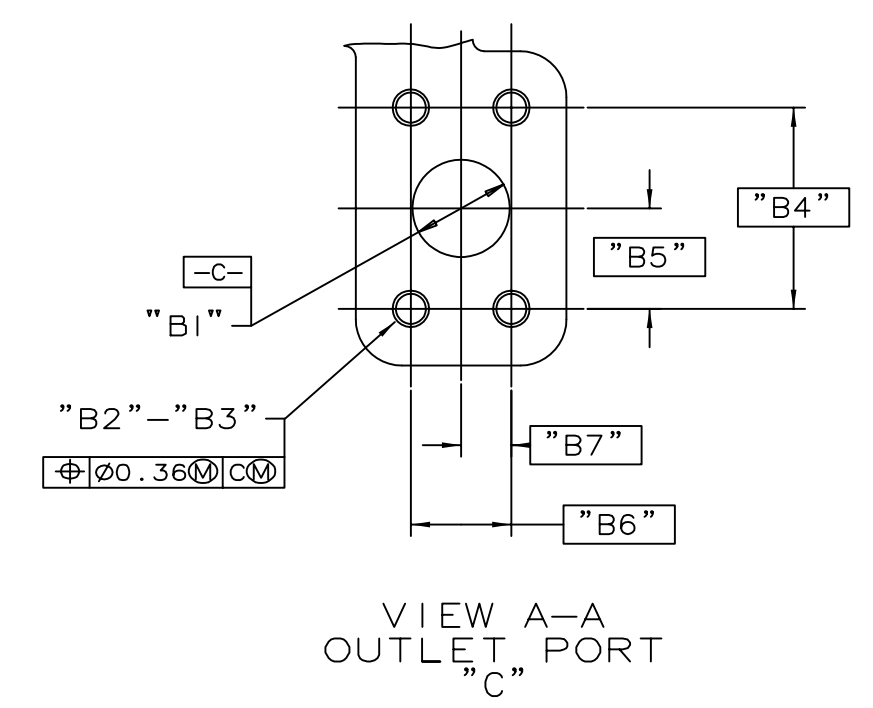
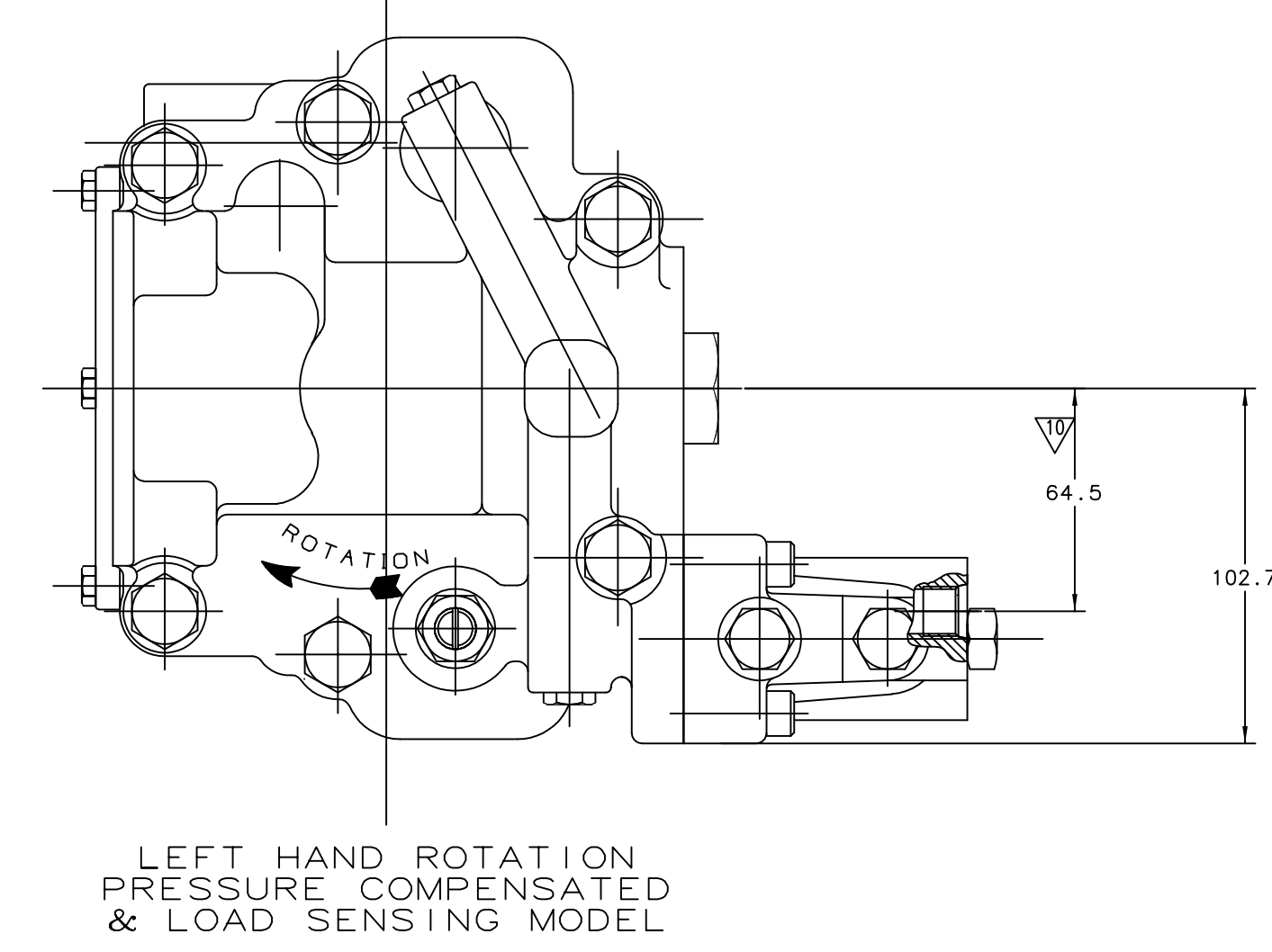
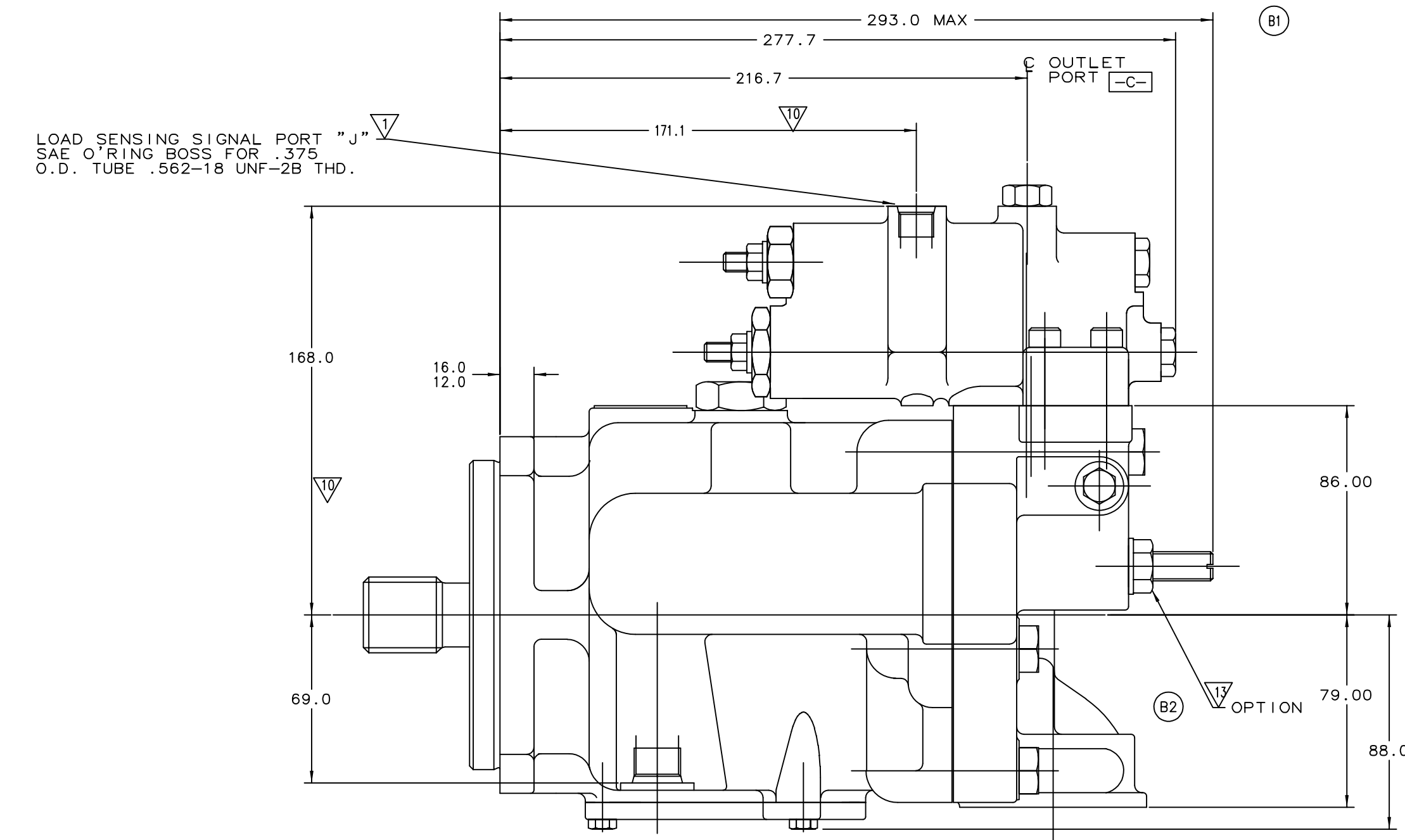


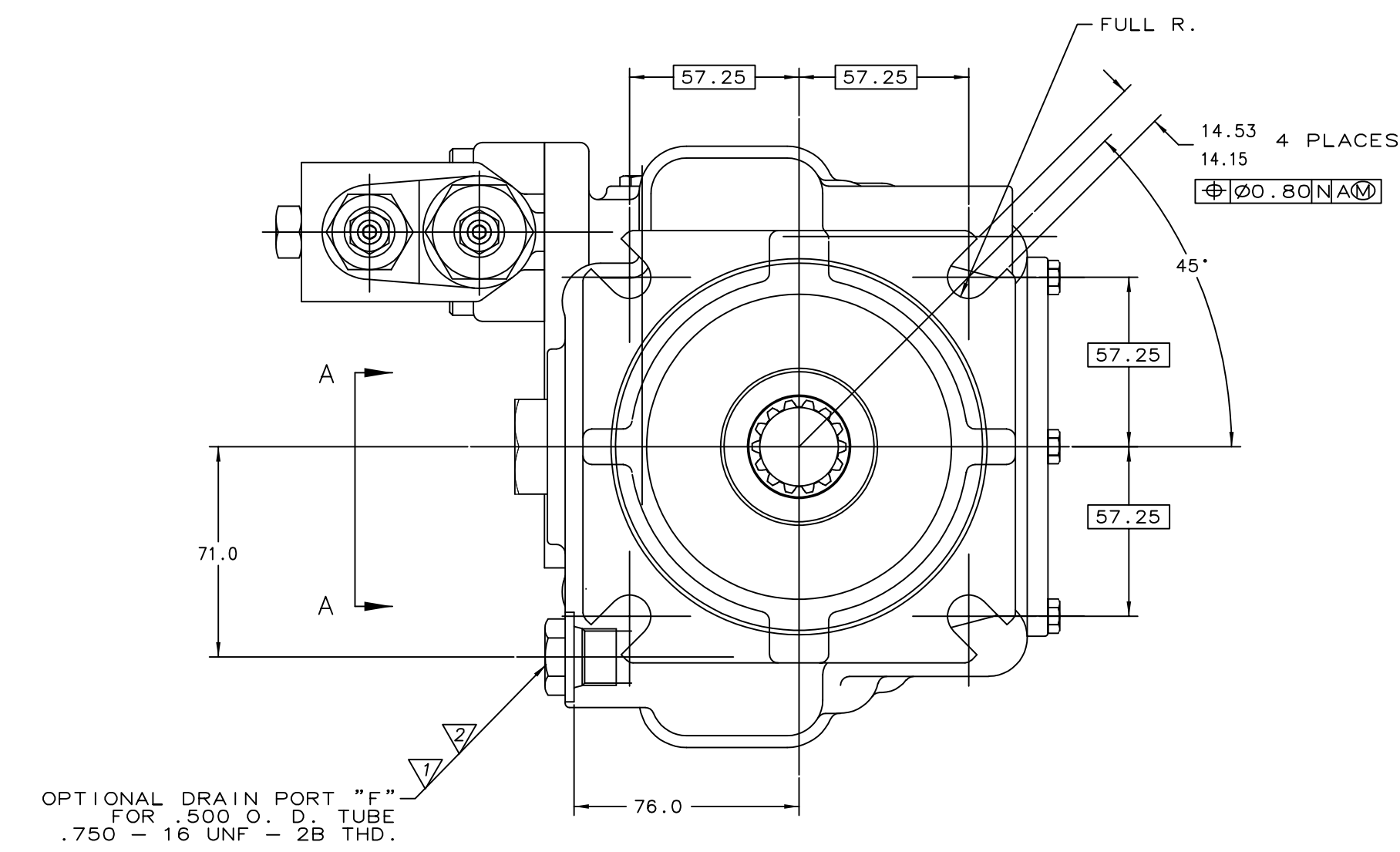
ZONE REV		REVISIONS		DATE	APPROVED
REV	DESCRIPTION	DATE	APPROVED	S.R.W.	N.B.
A	E.C. NO. 0900164 (R.C.) REVISED AND REISSUED	25APR90			
B	1. ADDED DIM 293.0 MAX 2. ADDED V1 AND OPTION 3. ADDED DIM 69.5 4. ADDED DIM 102.7 5. ADDED NOTE 1	07AUG92			
				L.K.	



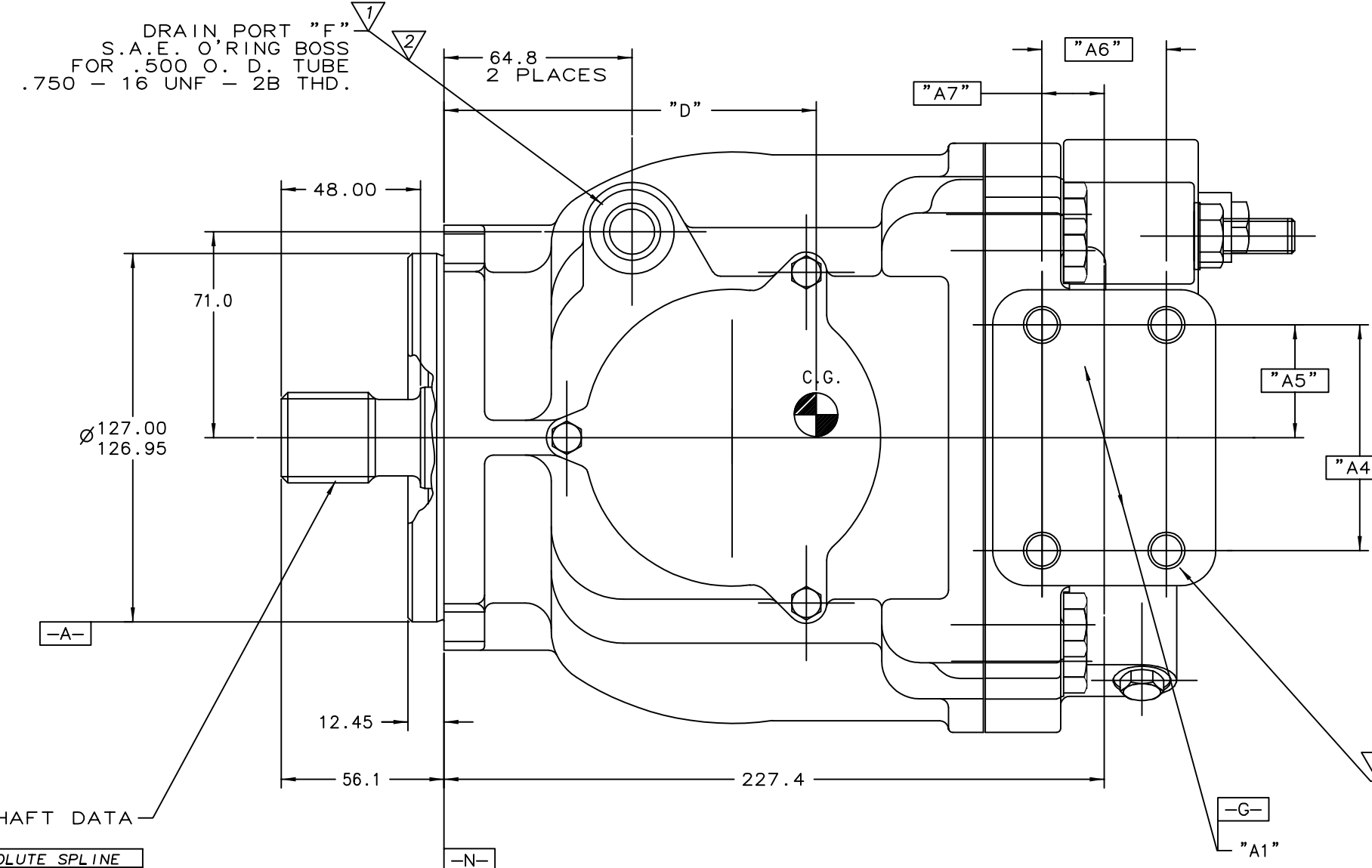
	"B1"	"B2"	"B3"	"B4"	"B5"	"B6"	"B7"
INCH PORTS	Ø25.4 OUTLET PORT "C" SAE J518C 4 BOLT FLANGE PORT STANDARD PRESSURE SERIES	4X	.375-16UNC-2B THD. .88 DEEP MIN.	BASIC	BASIC	BASIC	BASIC
METRIC PORTS	25 SIZE OUTLET PORT "C" ISO/DIS 6162 4 BOLT FLANGE STANDARD PRESSURE SERIES	4X	M10 THREAD 23.0 DEEP MIN.	52.37	26.18	26.19	13.10



LEFT HAND ROTATION
PRESSURE COMPENSATED
& LOAD SENSING MODEL



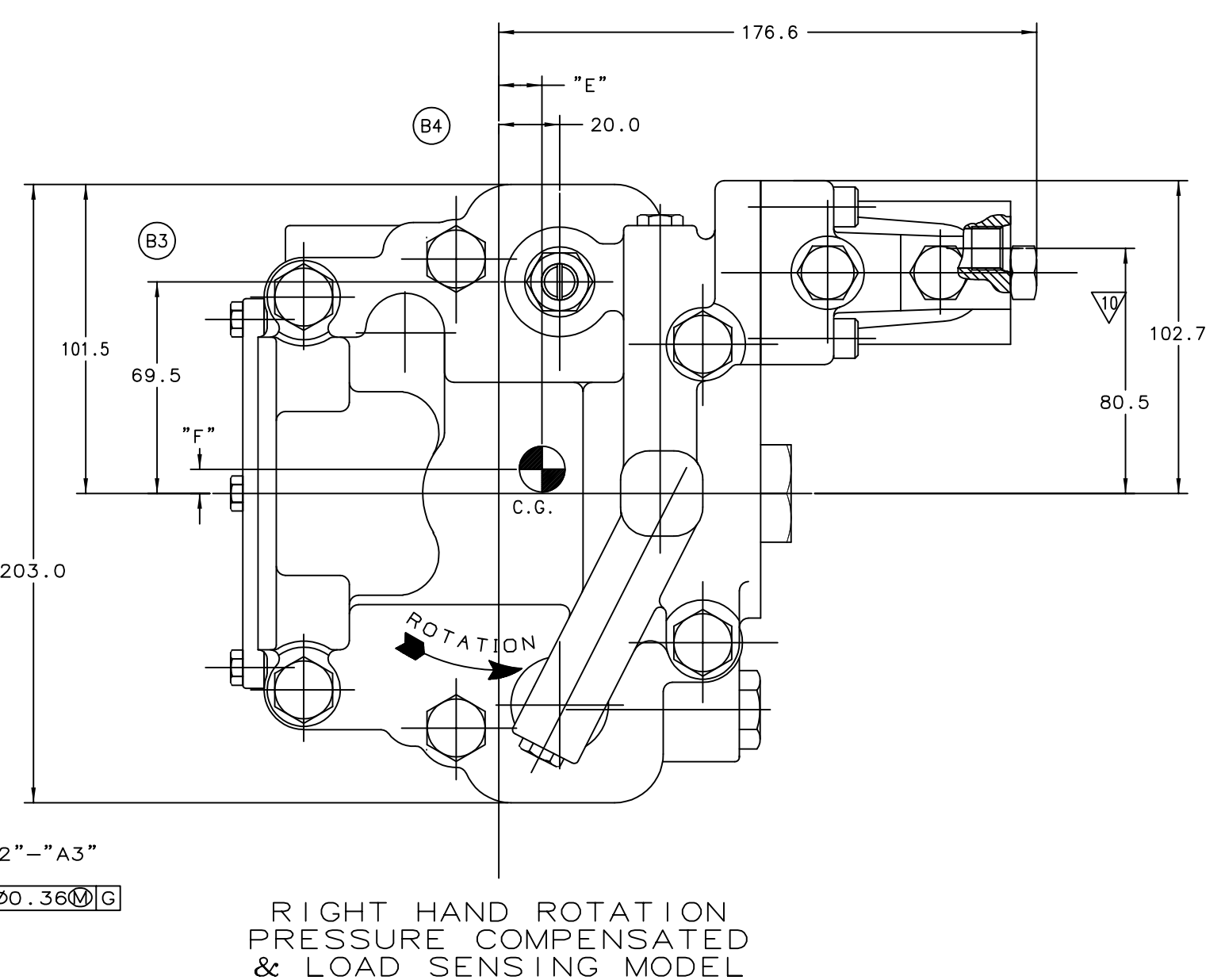
OPTIONAL DRAIN PORT "F"
FOR .500 O. D. TUBE
.750 - 16 UNF - 2B THD.



SHAFT DATA

EXTERNAL INVOLUTE SPLINE		
ASA B5.15-1980		
1.1887	PITCH DIA	1.3104 BASE DIA
FLAT ROOT SIDE FIT		
14	TEETH 12 / 24 PITCH	30° PR. ANGLE
MAJOR DIA	FORM DIA	MINOR DIA
1.2243 MAX	1.0822	1.0522 MAX
1.2243 MIN		1.0492 MIN
CIRCULAR TOOTH THICKNESS		
1.204	MAX EFF	1.277 MAX ACT REF
1.282	MIN EFF REF	1.265 MIN ACT

	"A1"	"A2"	"A3"	"A4"	"A5"	"A6"	"A7"
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.	BASIC	BASIC	BASIC	BASIC
METRIC PORTS	51 SIZE INLET PORT "B" ISO/DIS 6162 4 BOLT FLANGE STANDARD PRESSURE SERIES	4X	M12 THREAD 29.0 DEEP MIN.	77.77	38.88	42.88	21.44



RIGHT HAND ROTATION
PRESSURE COMPENSATED
& LOAD SENSING MODEL

G.T. CODE NO. DIST. CODES O, A, AE, B1, BR, BS, SA

UNLESS OTHERWISE SPECIFIED
INTERPRET PER ISO 15-1980
ANGULAR DIMENSIONS ± 3°
SURFACE FINISHES 3.2 µm (125 µin)
TOLERANCES ON DECIMALS

THIRD ANGLE PROJECTION FIRST USED ON PVH57

REF 885533

MATERIAL: DYN O. L. TUM 12NOV88

HEAT TREATMENT: SFC REV. R. ROBEY 02DEC88

REMOVE BURRS: 1 PLACE 2 PLACE 3 PLACE
= 60.0 60.0 60.0
INCH 6.03 6.016

COATING/PLATING: L. PROTO

BREK EDGES 0.25 mm (.010 IN) MAX.

ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS, INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, REPRODUCTION, OR DISSEMINATION WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

SCALE: 1/1

REV 1

SIZE: 864469

DRAWING NO. 864469

SHEET 1 of 4

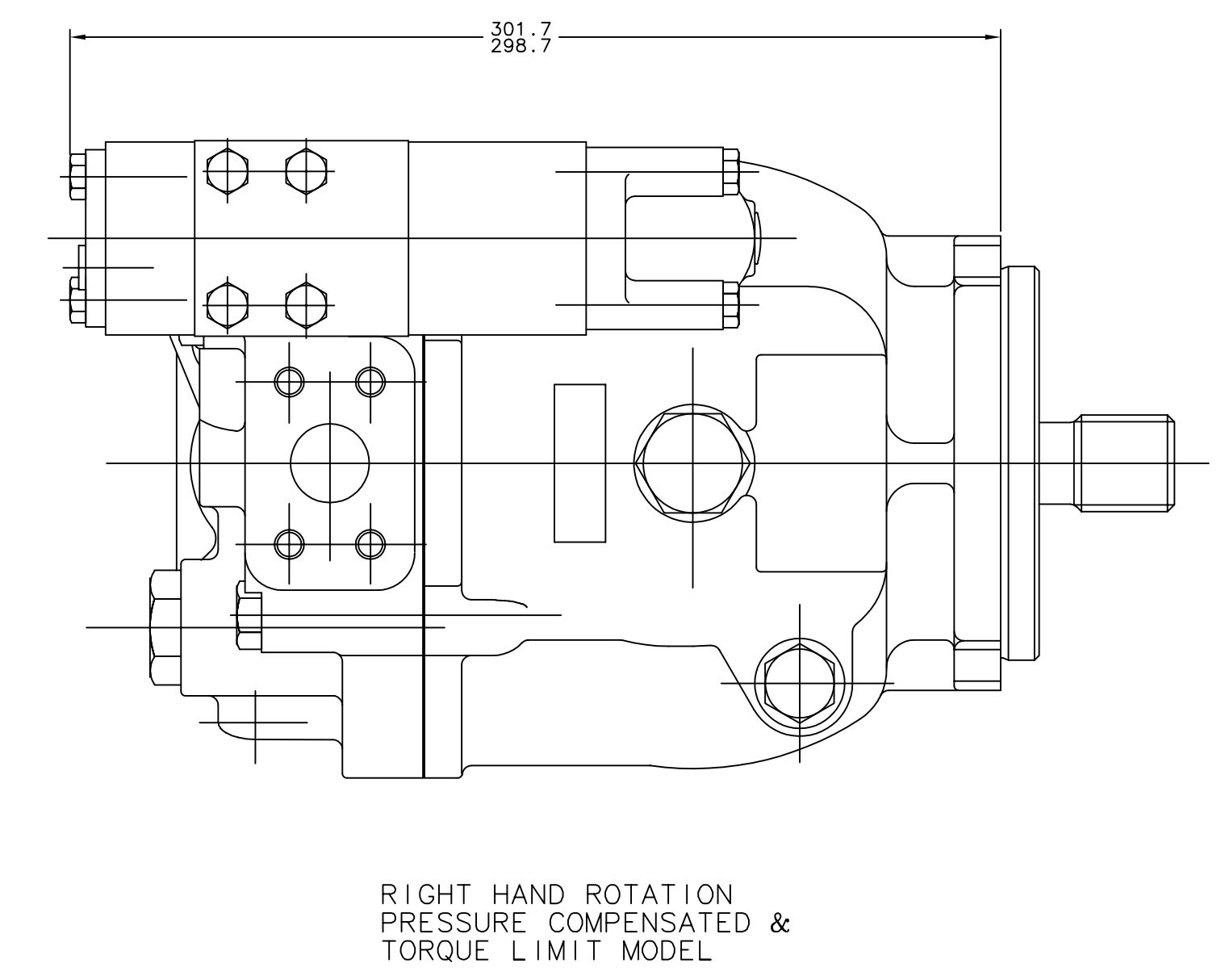
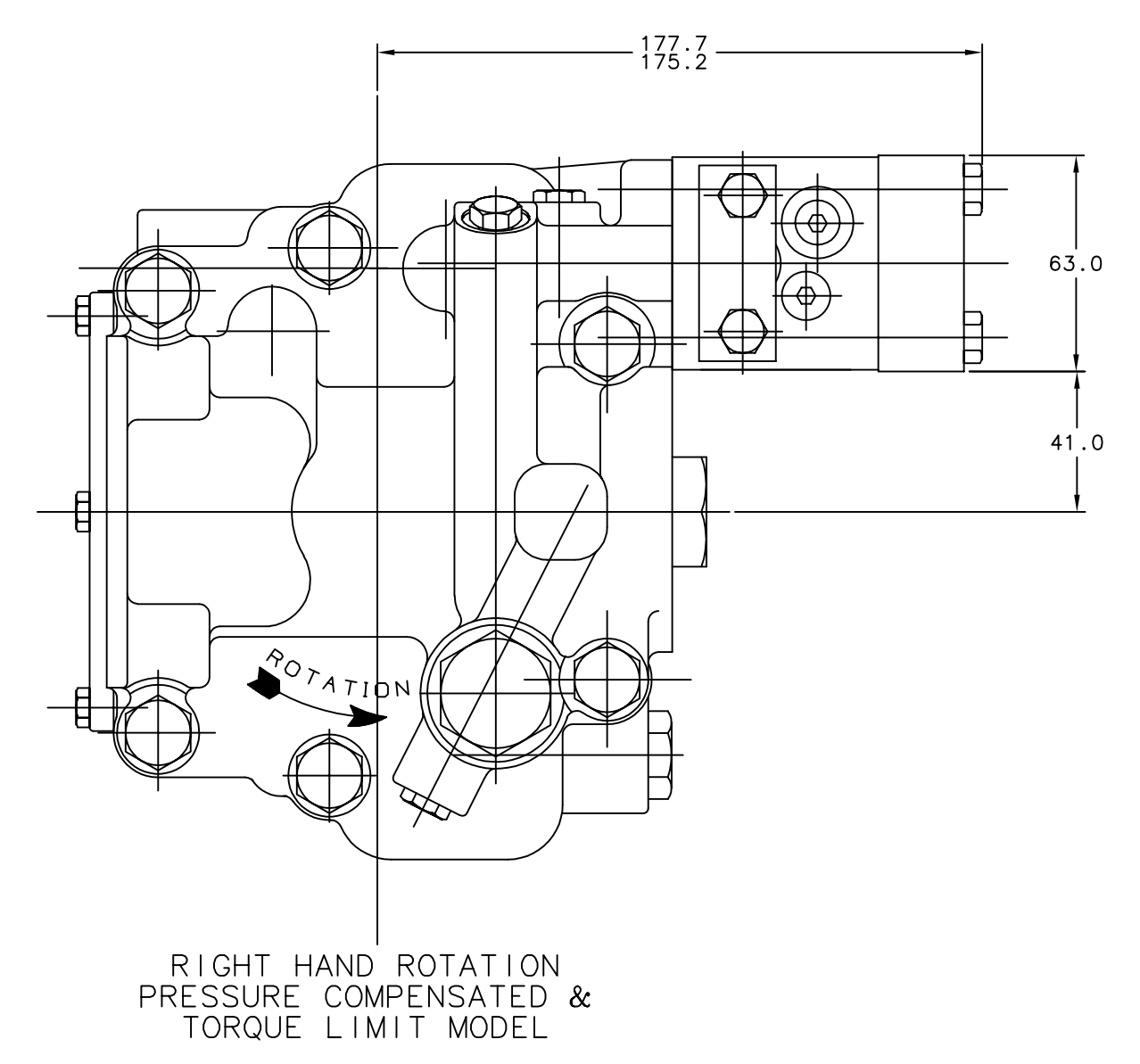
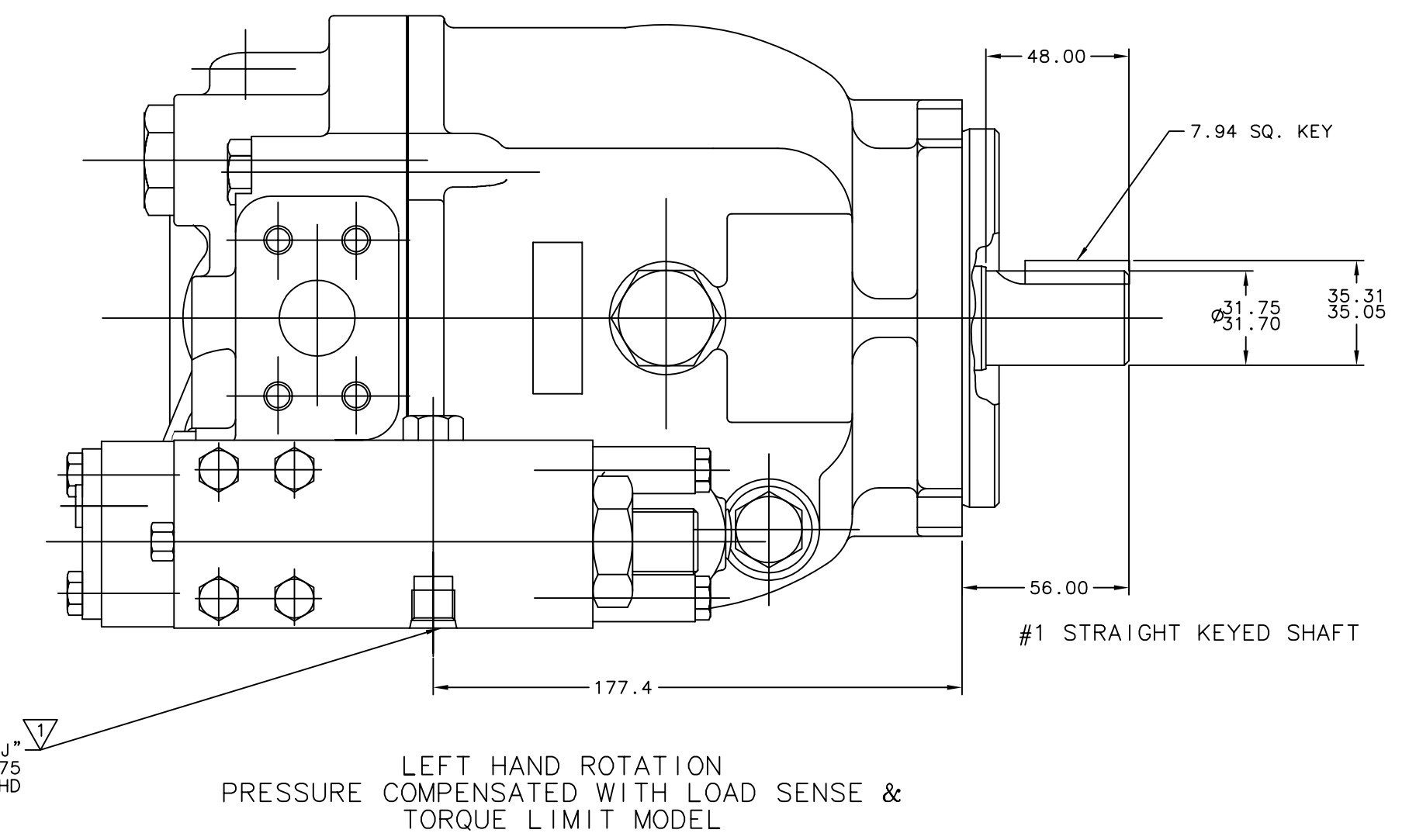
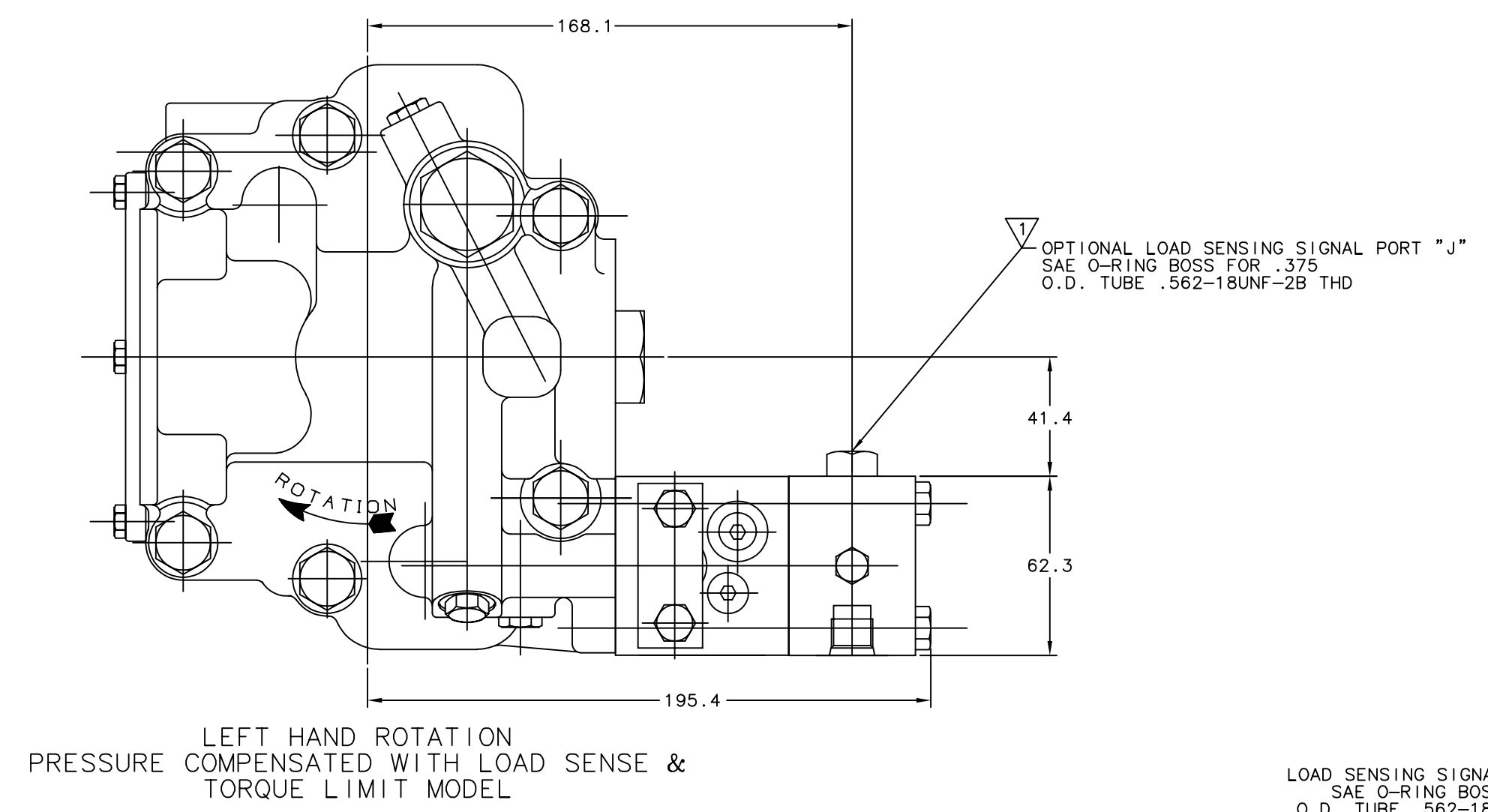
VICKERS

INSTALLATION - VARIABLE DISPL. PISTON PUMP

DWG NO. 864469

METRIC

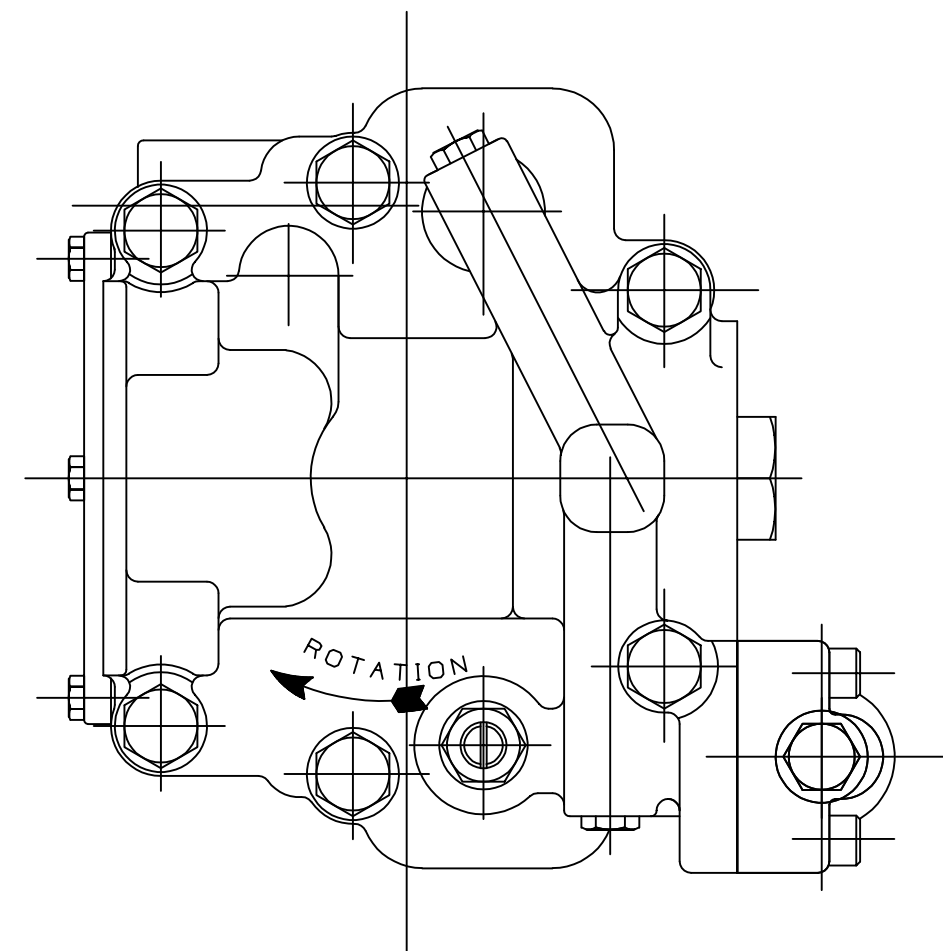
ZONE REV		REVISIONS		DATE	APPROVED
A	E.C. NO. 0900184 (R.C.) REVISED AND REDRAWN			25APR90	S.R.W.
B	E.C. NO. 0920919 (R.C.) 1-4 SEE SHEET #1 5-8 SEE SHEET #2 9. SEE SHEET #4			07AUG92	N.B.



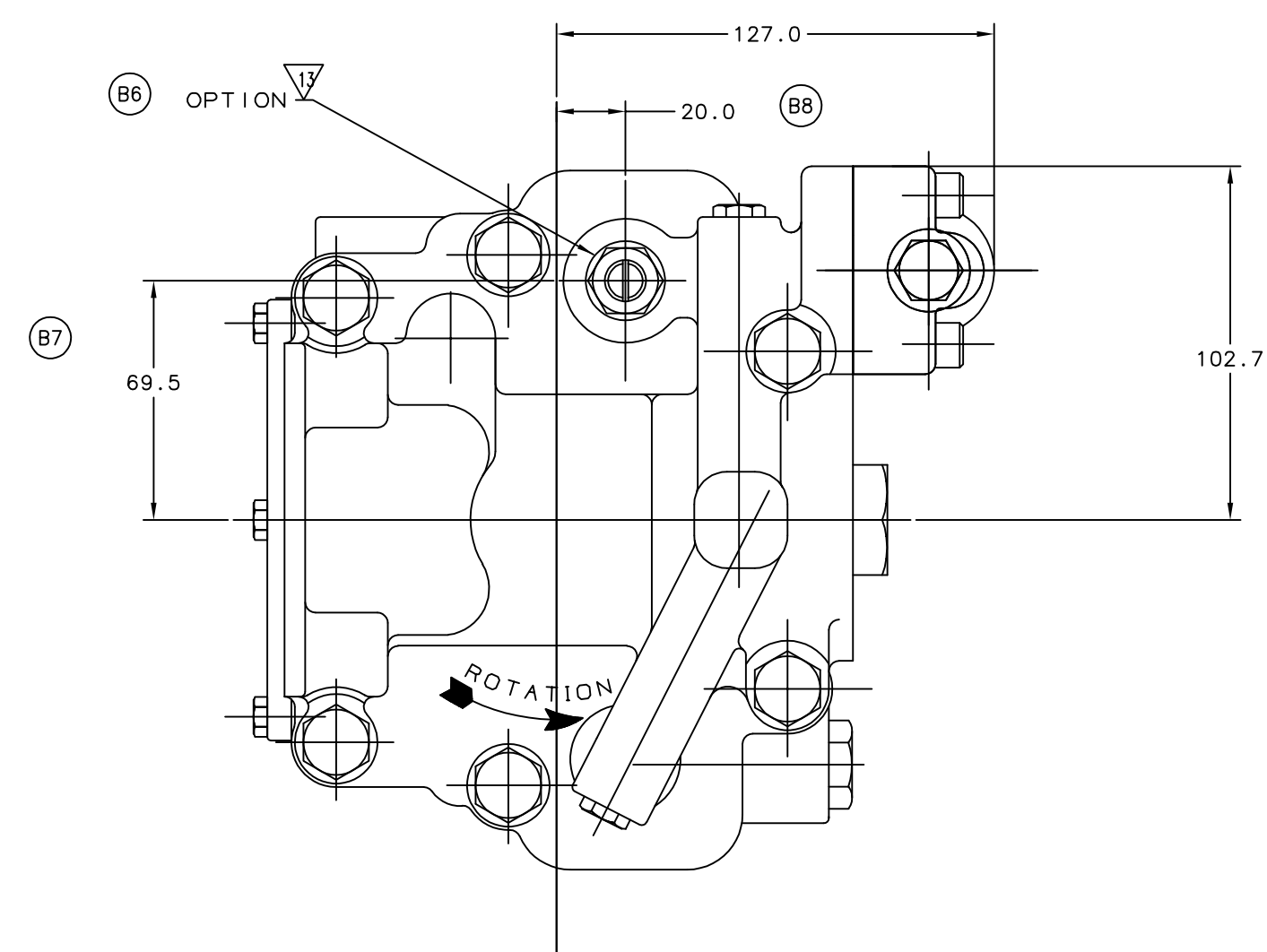
DWG NO. 864469 REV B

G.T. CODE NO.	DIST. CODES O, A, AE, B1, BR, BS, SA	THIRD ANGLE PROJECTION	FIRST USED ON PVH57	REL O
UNLESS OTHERWISE SPECIFIED INTERPRET PER AS 15-3-91 ANGULAR DIMENSIONS ± 3° SURFACE FINISHES 3.2 μm (125 μin) TOLERANCES ON DECIMALS	MATERIAL	REF		
1 PLACE 2 PLACE 3 PLACE = .012 .0075 .005	HEAT TREATMENT	WPC REV		
REMOVE BURRS	COATING/PLATING	PROTO		
BREAK EDGES 0.25 mm (.010 IN) MAX.	PROD.	ENGNG APPRVL		
ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS. INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, PROCUREMENT, OR DISPOSITION WITHOUT THE WRITTEN PERMISSION OF THE OWNER.		TITLE VICKERS INSTALLATION - VARIABLE DISPL. PISTON PUMP		REV
SIZE/GAGE NO. J		DRAWING NO. 864469		REV
SCALE 1/1 WT		SCALE 2 of 4		REV

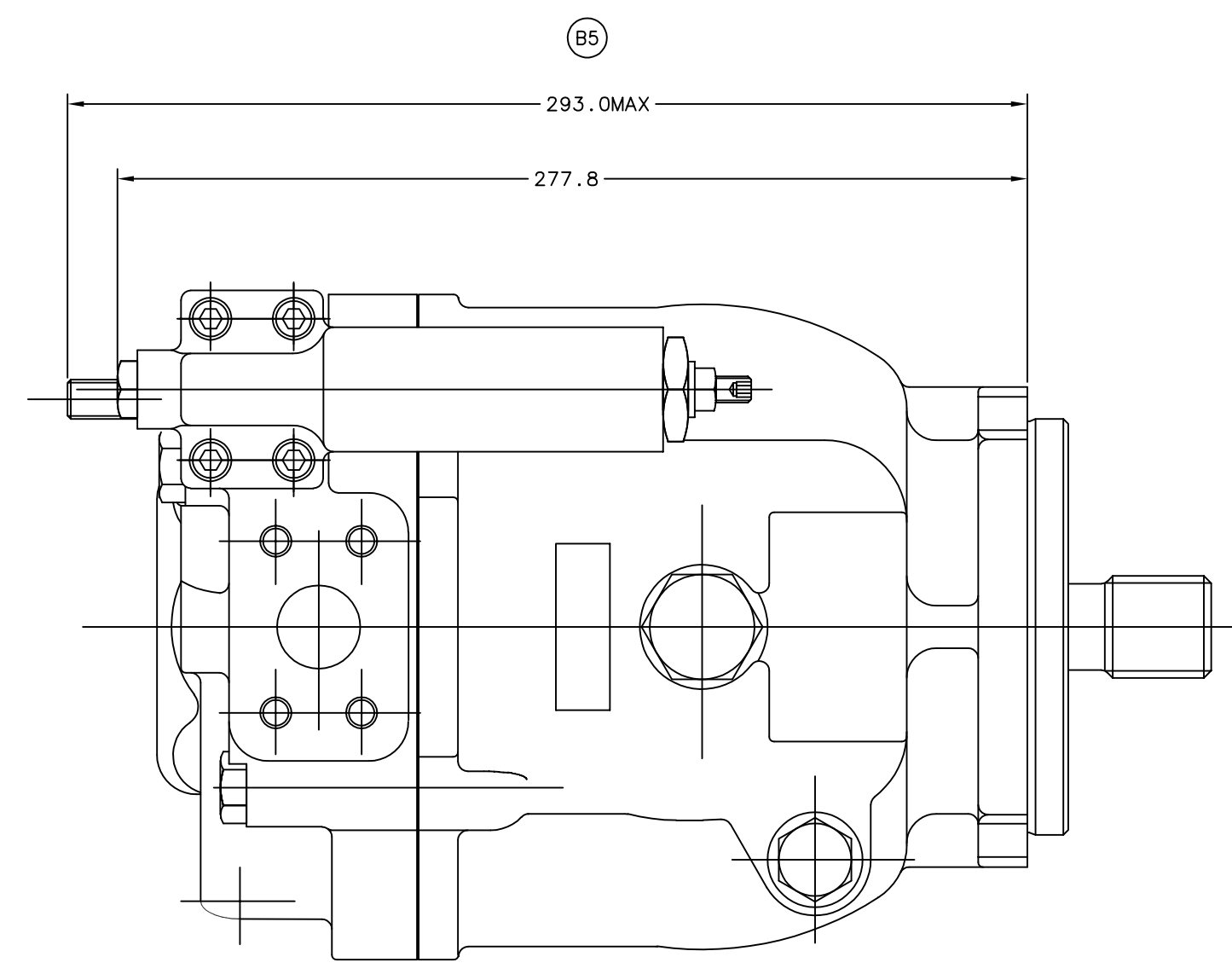
REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
	A	E.C. NO. 0900164 (B.C.) SEE SHEET #1	25APR90 S.R.W. N.B.
4E	100	E.C. NO. 0900164 (B.C.) 1. L.C. SEE SHEET #1 2. ADDED DIM 283.0 MAX 3. ADDED DIM 277.8 4. ADDED DIM 293.0 5. ADDED DIM 28.0 6. ADDED DIM 22.0 7. SEE SHEET #1	07AUG92 L.K. N.B.



LEFT HAND ROTATION
PRESSURE COMPENSATED



RIGHT HAND ROTATION
PRESSURE COMPENSATED



RIGHT HAND ROTATION
PRESSURE COMPENSATED

DWG NO. 864469 REV B

G.T. CODE NO.	DIST. CODES O, A, AE, B1, BR, BS, SA	THIRD ANGLE PROJECTION	REF FIRST USED ON PVH57	REF O	
UNLESS OTHERWISE SPECIFIED INTERPRET PER AS 13-3-81 ANGULAR DIMENSIONS ± 2° SURFACE FINISHES 3.2 μm (125 μin) TOLERANCES ON DECIMALS					
1 PLACE 2 PLACE 3 PLACE mm .0125 .0075 .0050 INCH .001 .0005 .0003					
REMOVE BURRS BREAK EDGES 0.25 mm (.010 IN) MAX.					
ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS. INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, REPRODUCTION, OR DISSEMINATION WITHOUT THE WRITTEN PERMISSION OF THE OWNER.					
MATERIAL: D3K		HEAT TREATMENT: S15C		FINISH: POLISH	
COATING/PLATING: NONE		PROOF: NONE		ENGNG APPROV: [Signature]	
TITLE: INSTALLATION - VARIABLE DISPL. PISTON PUMP			DRAWING NO. 864469		REV B
SCALE: 1/1			SHEET 3 OF 4		

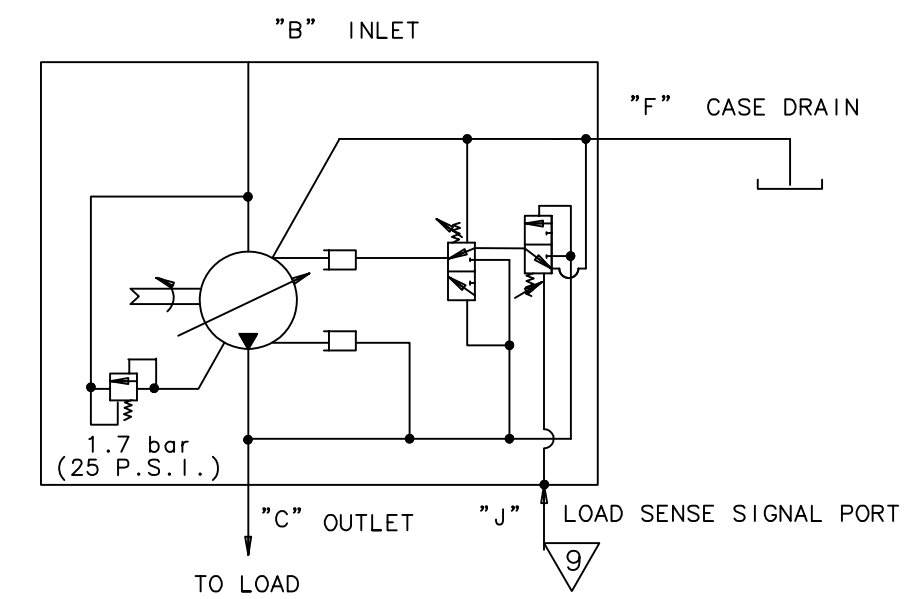
864469

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
A	E.C. NO. 0900164 (B.C.) SEE SHEET #1	25APR90	S.R.W. N.B.
B	E.C. NO. 0900169 (B.C.) 1-4 SEE SHEET #1 9. ADDED NOTE	07AUG92	N.B. L.K.

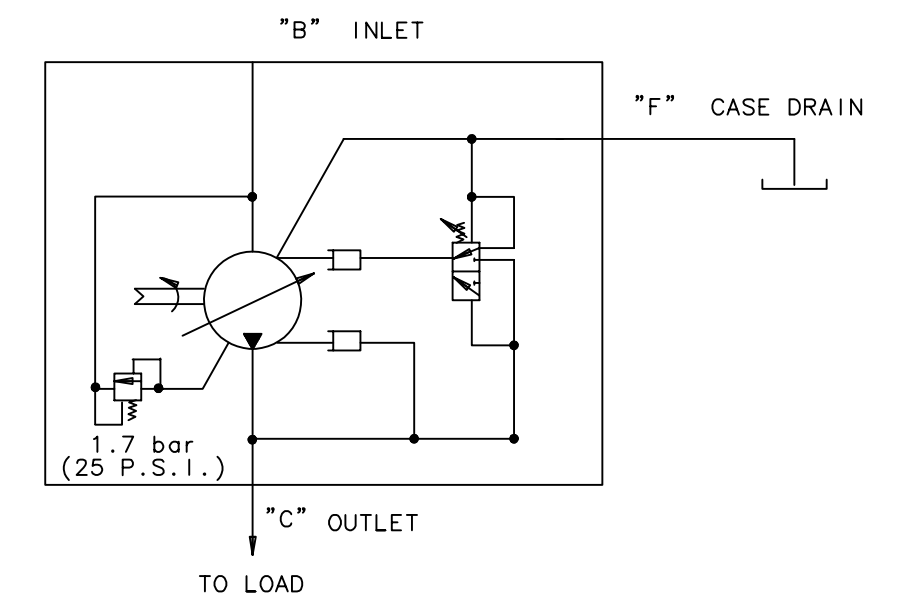
- 1 THESE FEATURES ARE DIMENSIONED IN INCHES THE LOCATION TOLERANCES ARE METRIC.
- 2 FILL CASE WITH OIL THROUGH EITHER OF THESE DRAIN PORTS. CASE MUST BE FILLED BEFORE PUMP IS STARTED. CASE DRAIN PORT MUST BE LOCATED AT THE UPPERMOST POSITION OF THE PUMP AND MUST BE CONNECTED DIRECTLY TO THE RESERVOIR. MAXIMUM CONTINUOUS PRESSURE AT THE CASE DRAIN PORT MUST NOT EXCEED 0.5 bar.
3. THE FLUID MUST CONFORM TO VICKERS HYDRAULIC FLUID RECOMMENDATION M-2950-S.
4. 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.
5. PERFORMANCE SPECIFICATION:
- | | | |
|-------------------|--------------|-------------------|
| RATED SPEED | 2400 RPM. | |
| MAX. SPEED | 2640 RPM. | |
| RATED PRESS. MAX. | 250 bar | (3625 P.S.I.) |
| THEORETICAL DISP. | 57.35 L/REV. | (3.5 CU.IN./REV.) |
| INLET PRESSURE | 1.0 bar ABS | (14.5 P.S.I.A.) |
| RATED TEMPERATURE | 93°C | (200°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.R.I. 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. MOUNTING PART TOLERANCES & INSTALLATION PRACTICES MUST BE COMPATIBLE SO THAT INTERFERENCES DO NOT RESULT IN SHAFT SIDE LOAD DURING OPERATION. A COUPLING MAY BE USED TO PERMIT GREATER TOLERANCES 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).

- 10 DIMENSION SHOWN FOR LOAD SENSING SIGNAL PORT "J".
- 11 WEIGHT SPECIFICATION:
- | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|
| | C | CV | CT | CVT |
| DRY: | 29.79Kg
(65.68 lb) | 31.12Kg
(68.60 lb) | 33.80Kg
(74.52 lb) | 35.69Kg
(78.69 lb) |
| WET: | 30.93Kg
(68.18 lb) | 32.25Kg
(71.10 lb) | 34.94Kg
(77.02 lb) | 36.83Kg
(81.19 lb) |
- 12 CENTER OF GRAVITY
- | | | | | |
|-----|-------------|-------------|-------------|-------------|
| | C | CV | CT | CVT |
| "D" | 127.5/124.5 | 129.8/126.8 | 133.9/130.9 | 136.4/133.4 |
| "E" | 8.9/5.9 | 15.7/12.7 | 23.1/20.1 | 30.2/27.2 |
| "F" | 6.5/3.5 | 9.4/6.4 | 14.6/11.6 | 17.7/14.7 |

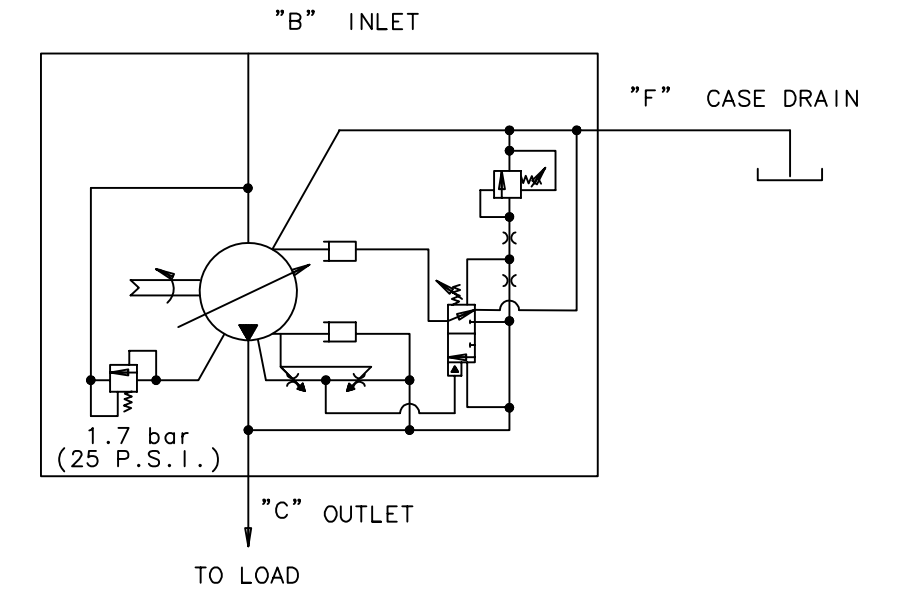
3 MAXIMUM ADJUSTABLE STOP OPTION, TORQUE SEALING LOCKNUT 25 - 50 N.m.



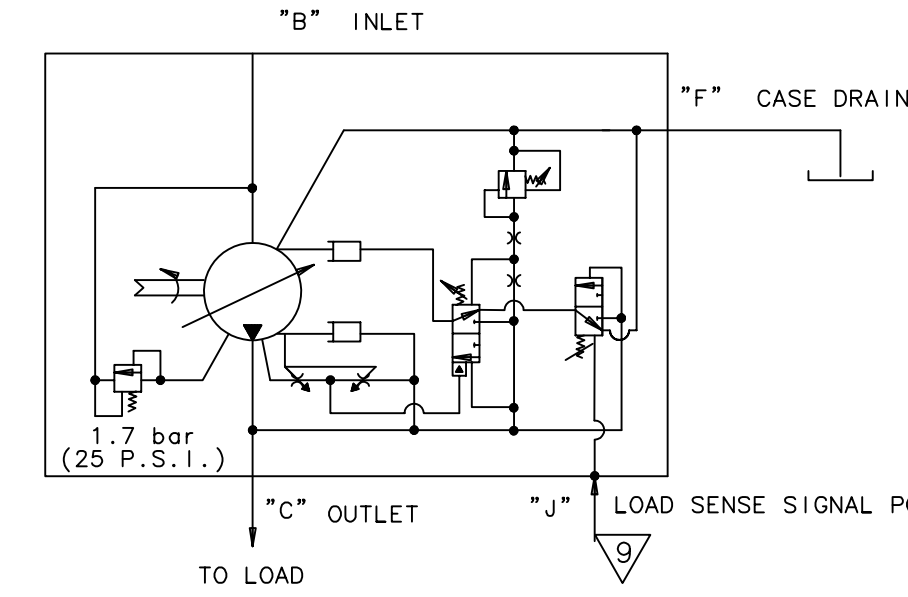
"CV" CIRCUIT SCHEMATIC
PRESSURE COMPENSATOR
& LOAD SENSING



"C" CIRCUIT SCHEMATIC
PRESSURE COMPENSATOR



"CT" CIRCUIT SCHEMATIC
PRESSURE COMPENSATOR
& TORQUE LIMITER



"CVT" CIRCUIT SCHEMATIC
PRESSURE COMPENSATOR
& TORQUE LIMITER

C.T. CODE NO.	DIST. CODES O, A, AE, B1, BR, BS, SA	THIRD ANGLE PROJECTION	REF. FIRST USED ON PVH57	REF. O
UNLESS OTHERWISE SPECIFIED INTERPRET PER ISO 15-0-01 ANGULAR DIMENSIONS ± 3° SURFACE FINISHES 3.2 μm (125 μin) TOLERANCES ON DECIMALS				
MATERIAL	STEEL	HEAT TREATMENT	TEMP. REV.	
1 PLACE 2 PLACE 3 PLACE				
INCH	6.03	6.016		
REMOVE BURRS		COATING/PLATING		
BREAK EDGES 0.25 mm (.010 IN) MAX.				
ALL TECHNICAL DATA DISCLOSED HEREIN IS THE PROPERTY OF VICKERS. INCORPORATED AND SHALL NOT BE USED BY OTHERS FOR MANUFACTURE, REPRODUCTION, OR DISSEMINATION WITHOUT THE WRITTEN PERMISSION OF THE OWNER.				
TITLE		DRAWING NO.		REV.
INSTALLATION - VARIABLE DISPL. PISTON PUMP		864469		B
SCALE 1/1		SHEET 4 of 4		

864469 4 B