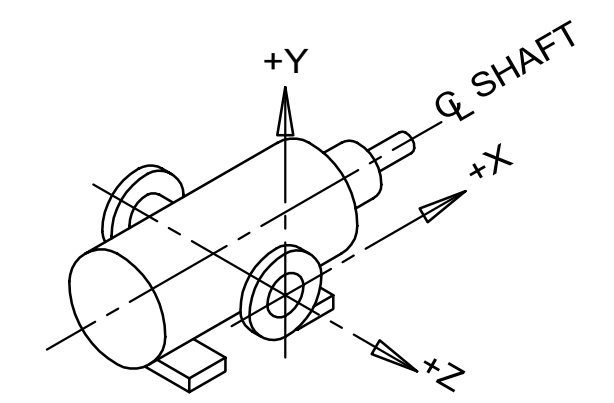
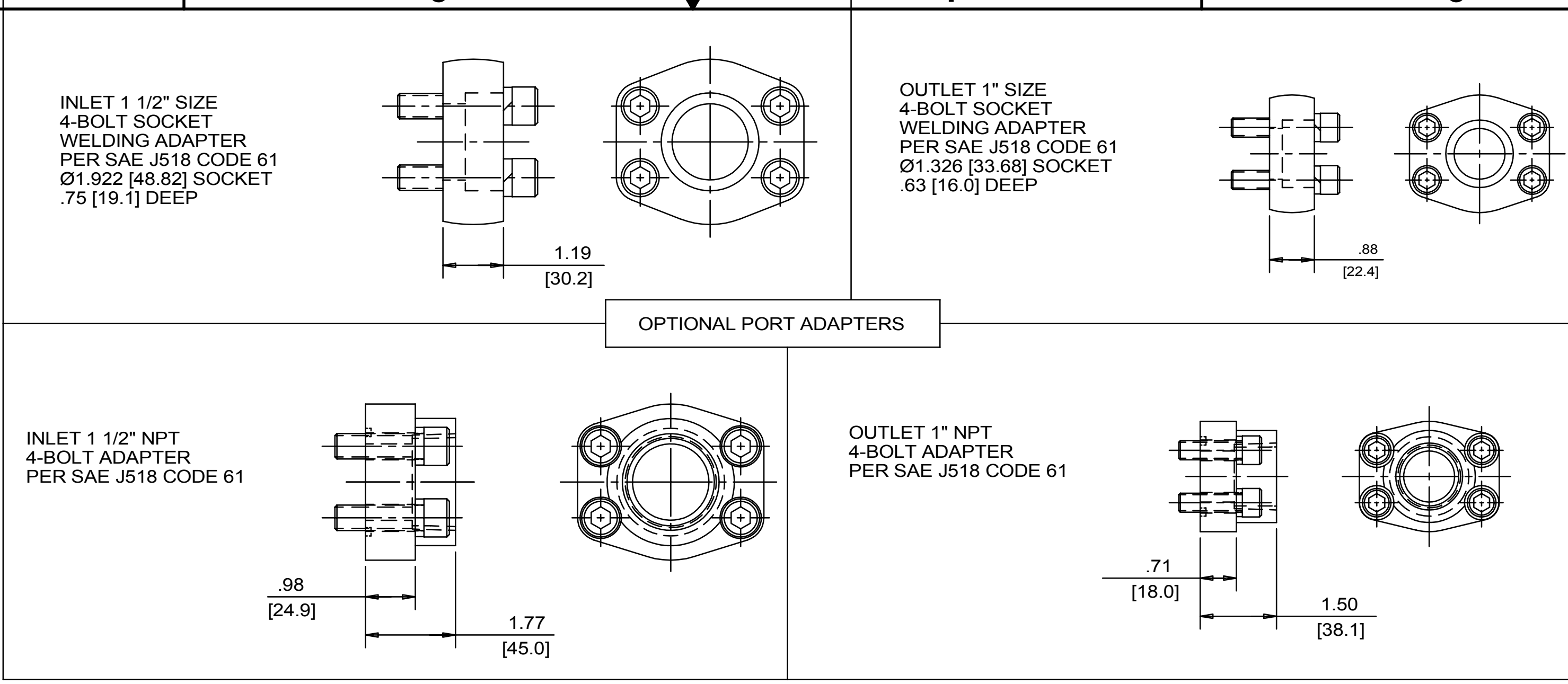


| REVISION HISTORY |      |     |                         | DATE    | BY  | APPROVED |
|------------------|------|-----|-------------------------|---------|-----|----------|
| CHG NO           | ZONE | REV | DESCRIPTION             |         |     |          |
| 11-0187          | A1   | 7   | CHANGED TITLE, WAS AA3C | 5-16-11 | ERH | ERH      |

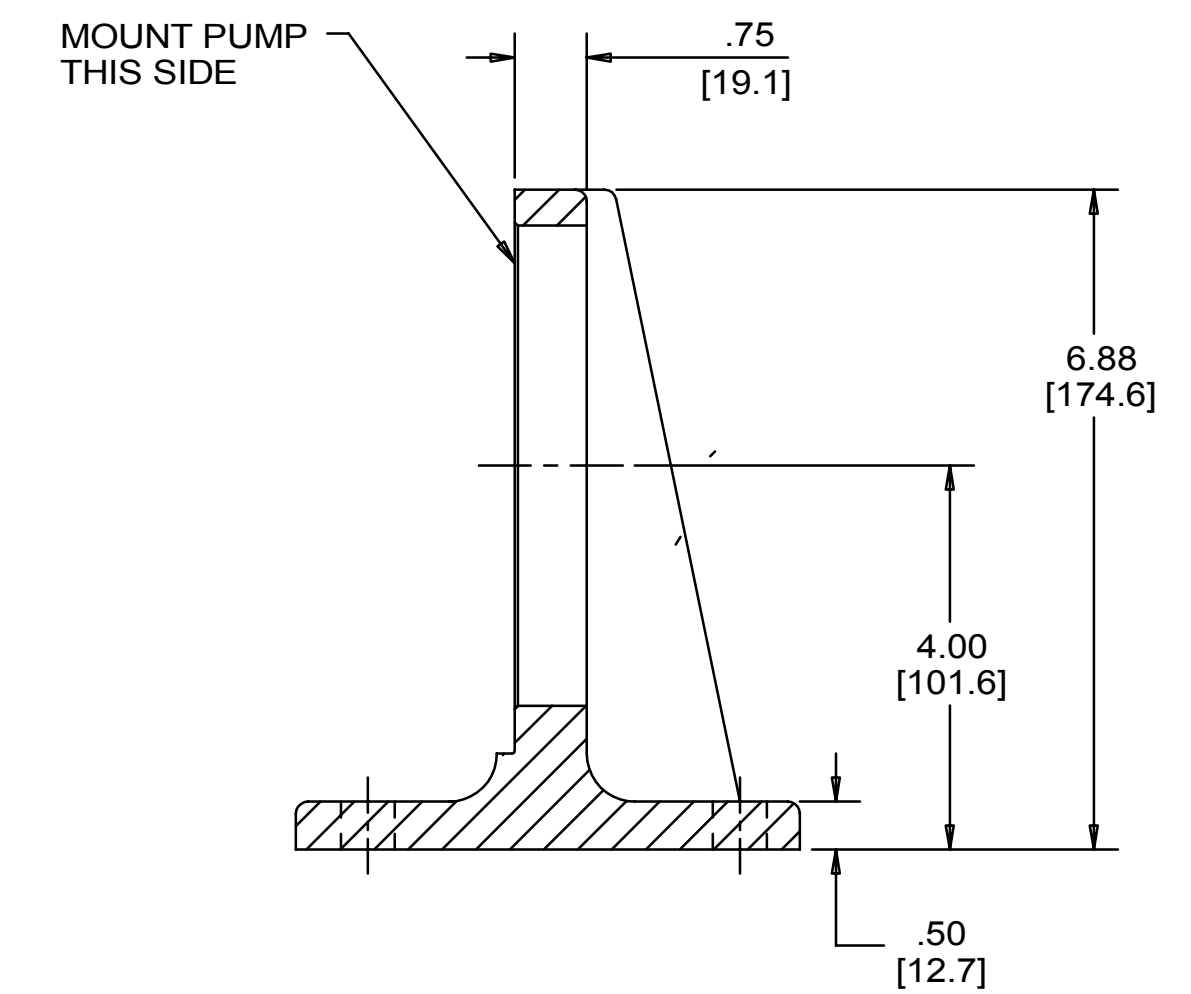
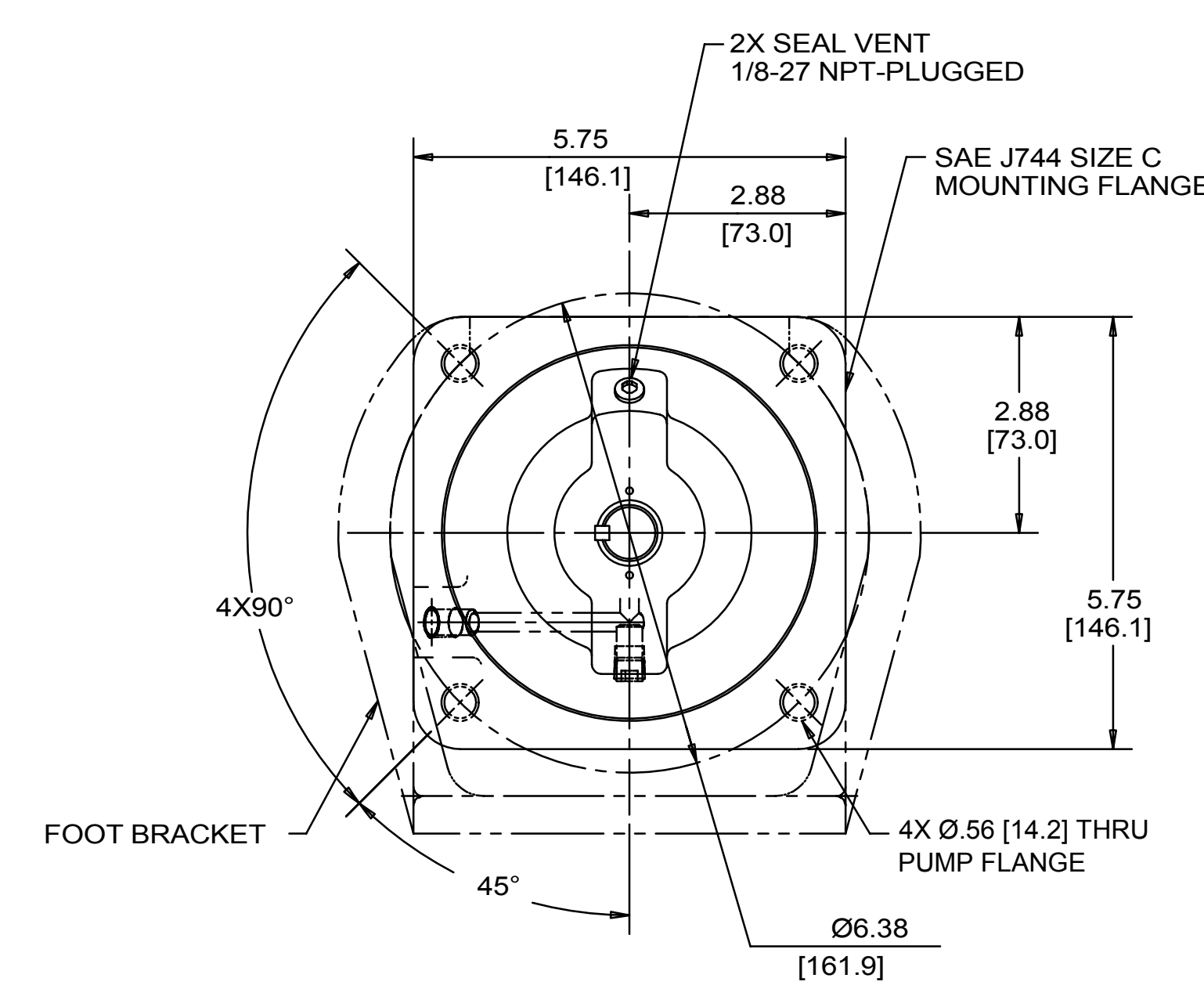
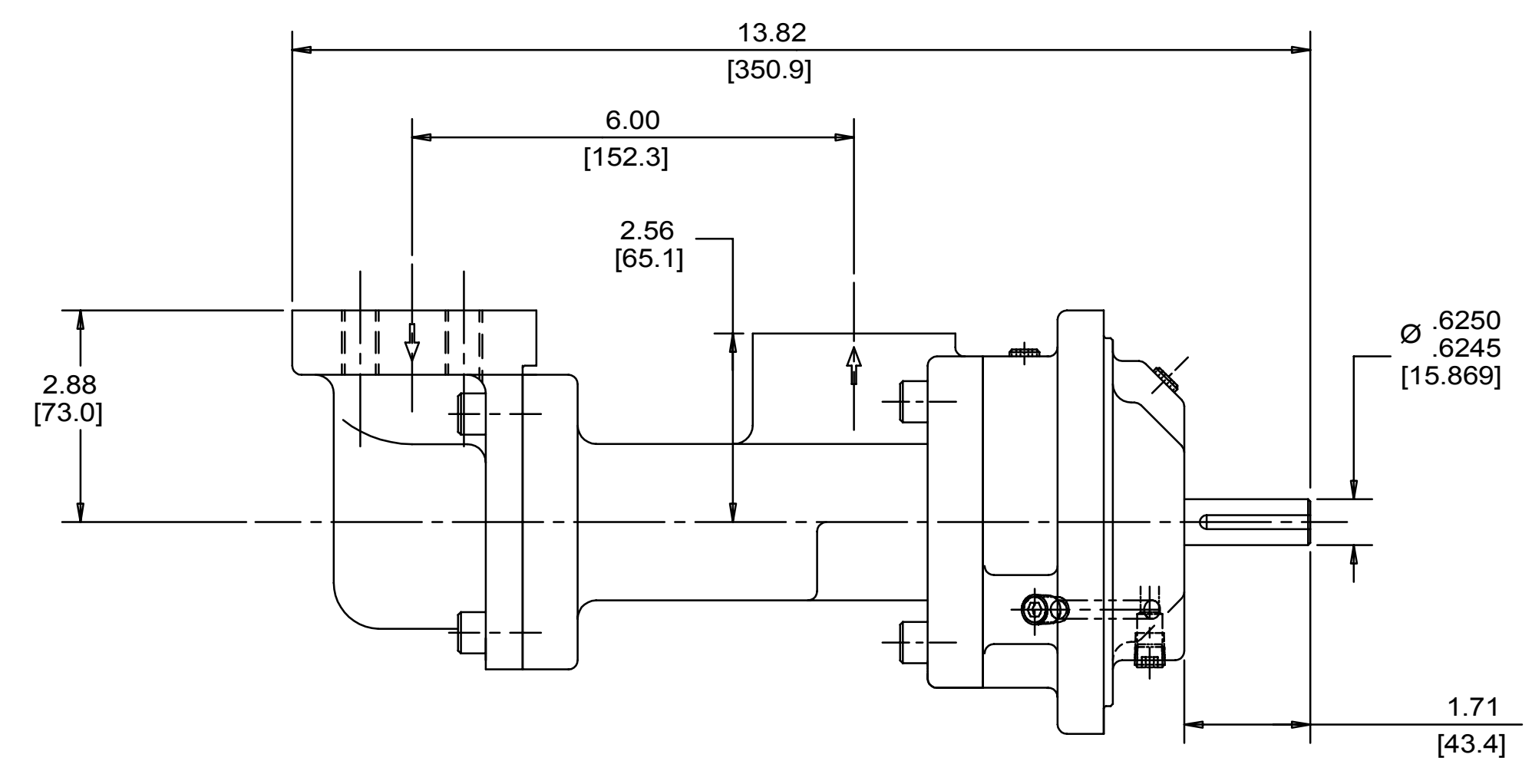
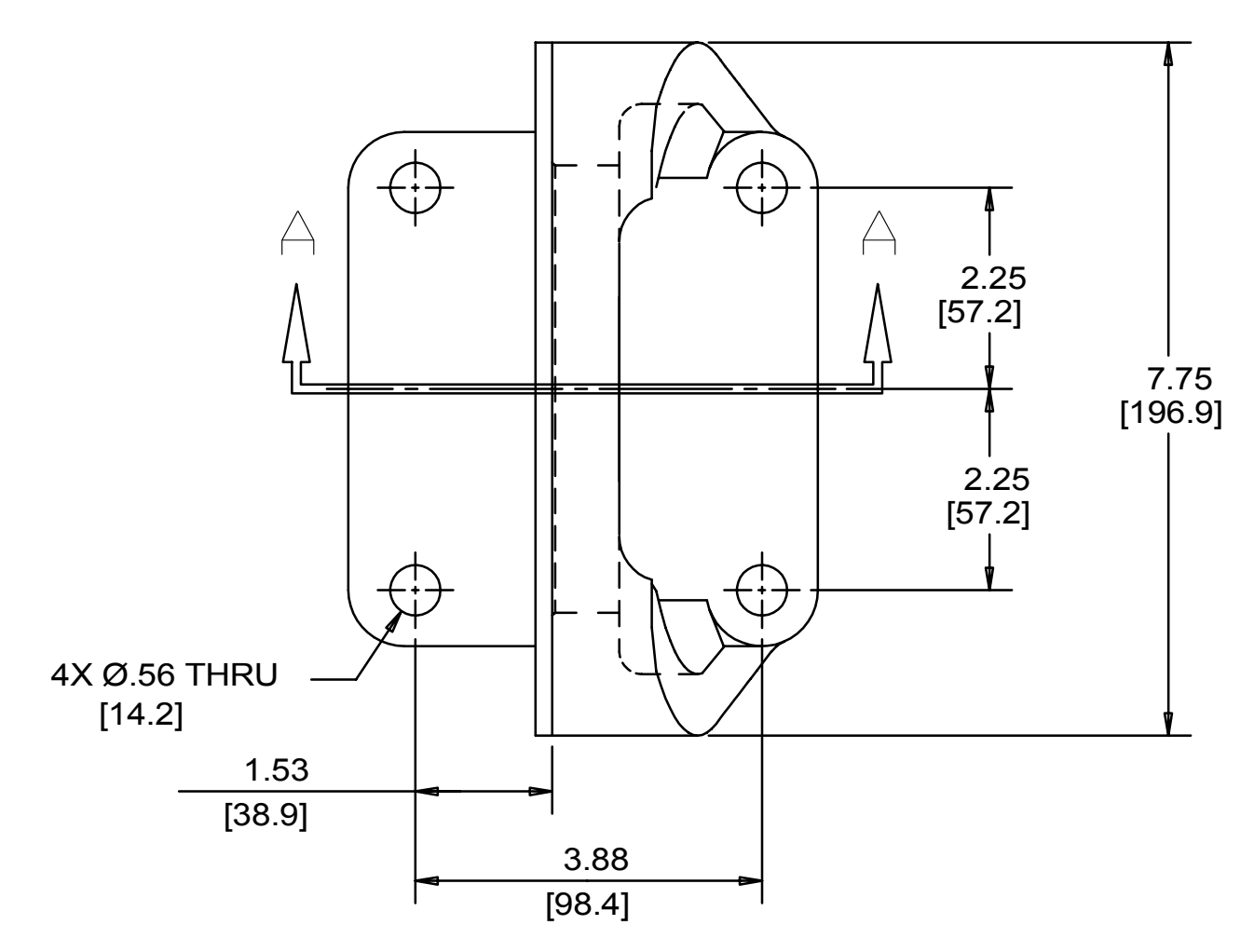
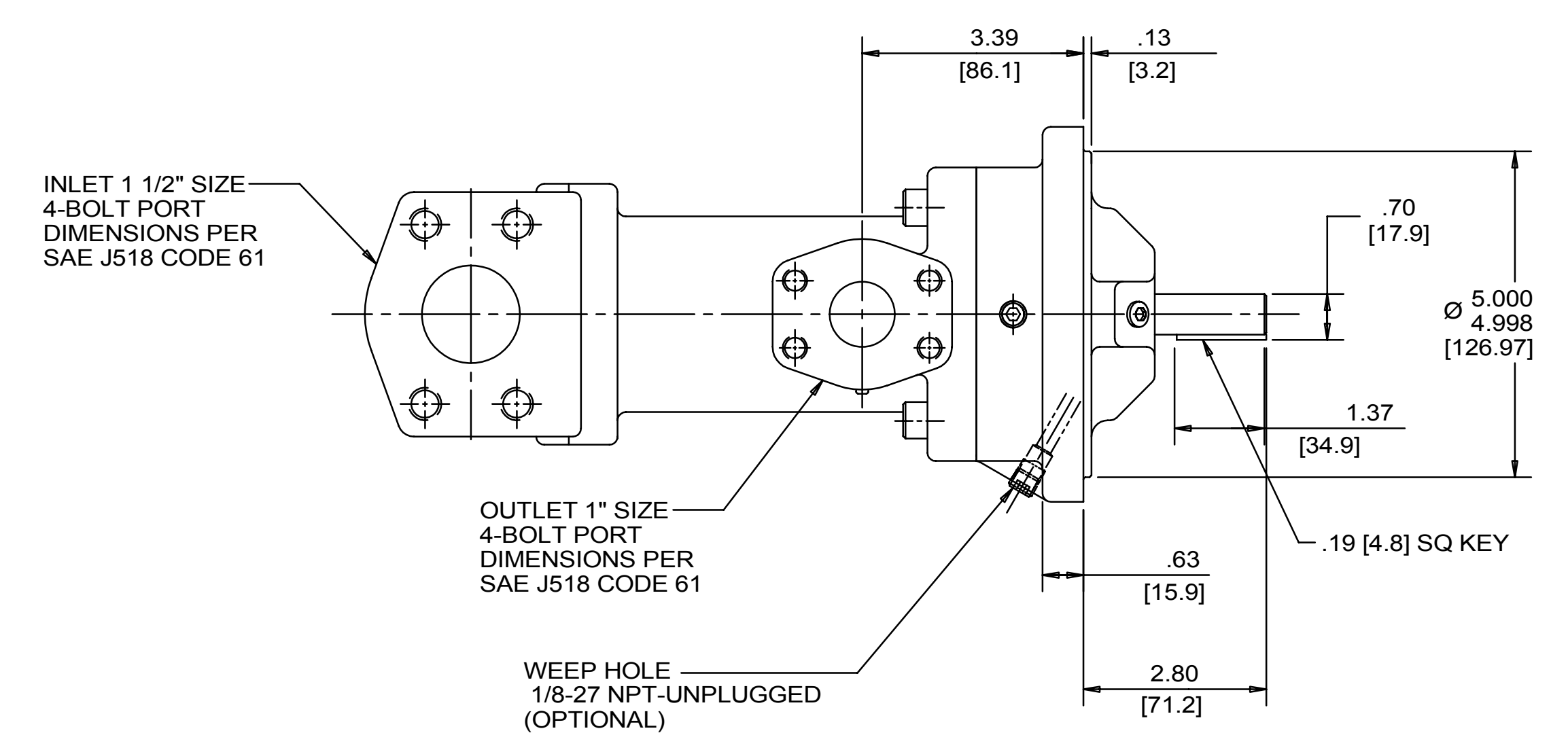


COORDINATE SYSTEM FOR MAXIMUM PUMP FORCES (F) AND MOMENTS (M)

INLET:  
 FX= 113 LBF [500 N]    MX= 188 LB FT [254 N.m]  
 FY= 113 LBF [500 N]    MY= 188 LB FT [254 N.m]  
 FZ= 113 LBF [500 N]    MZ= 188 LB FT [254 N.m]

OUTLET:  
 FX= 75 LBF [334 N]    MX= 125 LB FT [169 N.m]  
 FY= 75 LBF [334 N]    MY= 125 LB FT [169 N.m]  
 FZ= 75 LBF [334 N]    MZ= 125 LB FT [169 N.m]

FORCE AND MOMENT VALUES ARE RELATIVE TO CENTER OF INLET AND OUTLET PORT FACES.



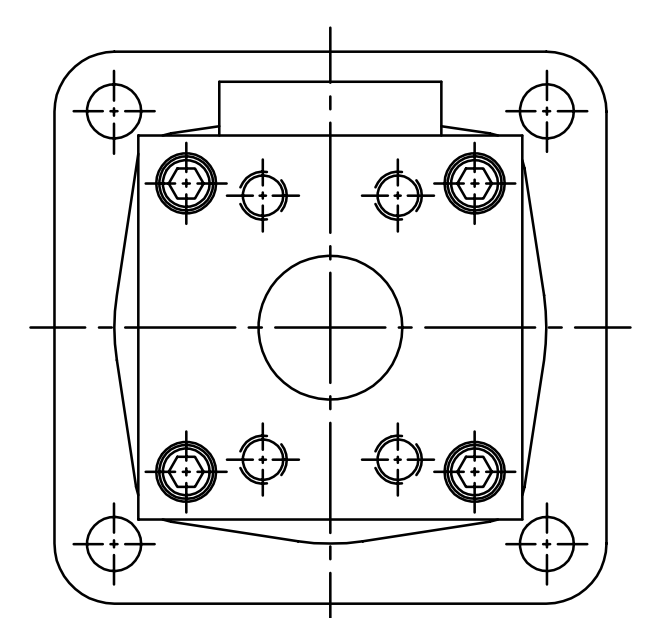
SECTION A-A  
FOOT BRACKET (OPTIONAL)

| DRAWING CERTIFICATION         |  |
|-------------------------------|--|
|                               |  |
| CUSTOMER NAME .....           |  |
| CUSTOMER PO NUMBER .....      |  |
| CUSTOMER PART NUMBER .....    |  |
| BOM NUMBER .....              |  |
| PUMP TYPE .....               |  |
| SHAFT ROTATION .....          |  |
| INLET PORT ORIENTATION .....  |  |
| OUTLET PORT ORIENTATION ..... |  |
| FOOT BRKT. ORIENTATION .....  |  |
| INLET PORT OPTION .....       |  |
| INLET ADAPTER OPTION .....    |  |
| OUTLET ADAPTER OPTION .....   |  |
| OTHER INFORMATION .....       |  |
| CERTIFIED BY .....            |  |
| CERTIFIED DATE .....          |  |
| IMO ORDER NUMBER .....        |  |
| DATA REVISION NUMBER .....    |  |

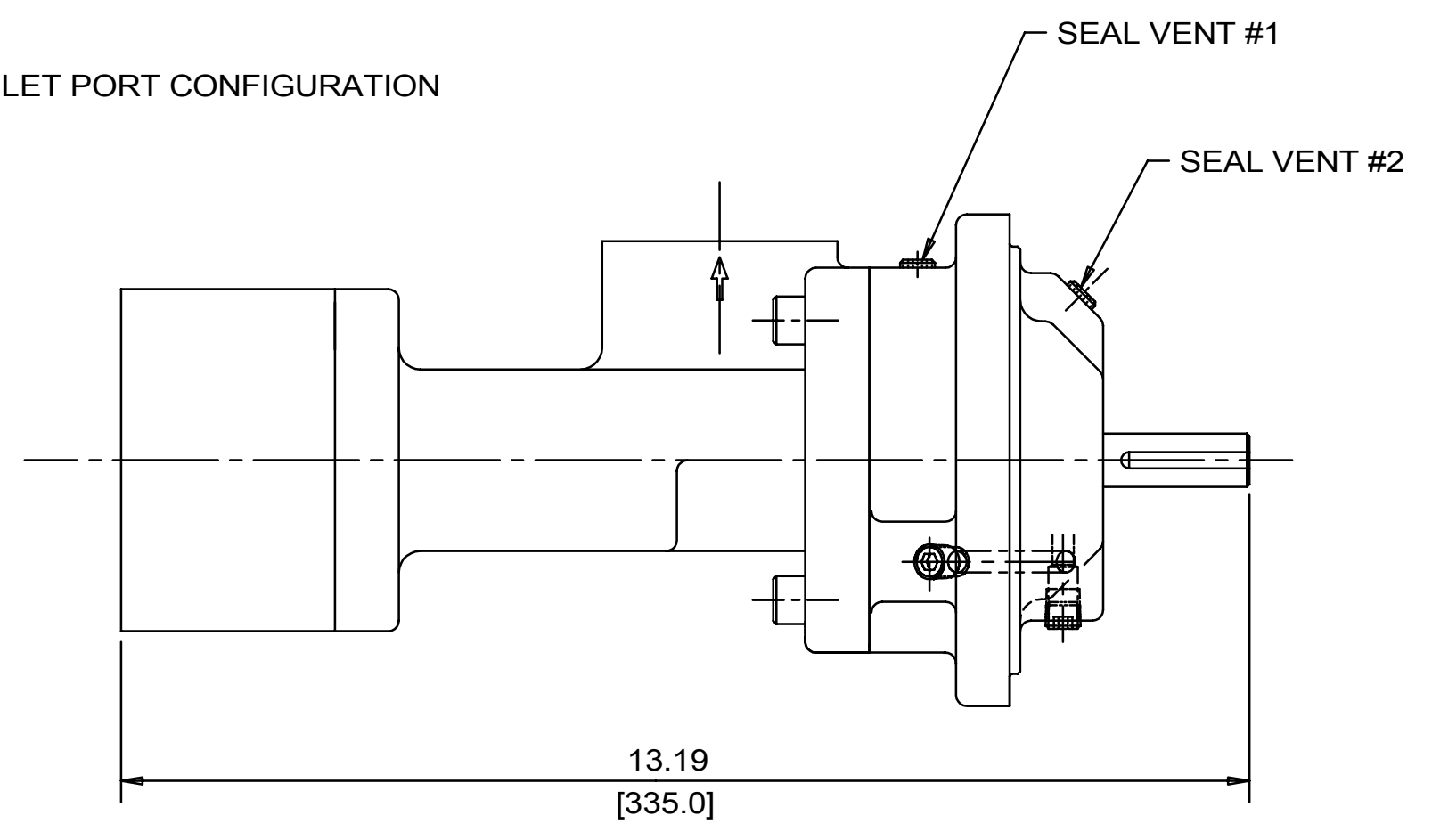
NOTES:

- TO MAXIMIZE SEAL LIFE, SEAL VENT MUST BE ORIENTED UPWARD (12 O'CLOCK) WHEN PUMP IS INSTALLED HORIZONTALLY. VENT ORIENTATION IS NOT CRITICAL WHEN PUMP IS INSTALLED WITH SHAFT VERTICALLY UPWARD.
- PORT, FOOT, AND SEAL VENT ORIENTATIONS ARE SUPPLIED AS SHOWN ON DRAWING UNLESS OTHERWISE SPECIFIED.
- ALTERNATE PORT AND FOOT ORIENTATIONS ARE PROVIDED IF SPECIFIED ON ORDER. AVAILABLE ORIENTATIONS ARE 3, 6, 9, AND 12 O'CLOCK.
- BOLT PATTERN FOR SAE 4-BOLT AXIAL INLET IS ALWAYS ORIENTED AS SHOWN WITH RESPECT TO OUTLET PORT.
- APPROXIMATE PUMP WEIGHT (WITHOUT ADAPTERS):  
 FLANGE MOUNT PUMP—33.2 LBS. (15.1 kgs)  
 FOOT MOUNT PUMP—45.4 LBS. (20.6 kgs)
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

VIEWS FOR ALTERNATE AXIAL INLET PORT CONFIGURATION



END VIEW  
1 1/2" SIZE  
4-BOLT PORT  
DIMENSIONS PER  
SAE J518 CODE 61



|                                                |     |                  |                    |                                                                                     |
|------------------------------------------------|-----|------------------|--------------------|-------------------------------------------------------------------------------------|
| DRAWN                                          | ERH | 3-3-99           |                    | <b>IMO Pump</b><br>1710 Airport Road<br>PO Box 5020<br>Monroe, NC USA<br>28111-5020 |
| CHECKED                                        | NRS | 4-7-99           |                    |                                                                                     |
| APPROVED                                       | MJC | 4-7-99           |                    |                                                                                     |
| UNLESS OTHERWISE SPECIFIED<br>ASME Y14.5M-1994 |     |                  |                    | TITLE<br><b>OUTLINE STANDARD (STEEL)</b><br><b>3G/_S__A118__</b>                    |
| FIRST ORDER<br>E1102A                          |     | SIZE<br><b>F</b> | SAGE CODE<br>59180 | DWG NO.<br><b>SDD19644</b>                                                          |
| SCALE                                          |     | 1/2              | WEIGHT             | SEE NOTE 5                                                                          |
| SHEET                                          |     |                  | OF 1               |                                                                                     |