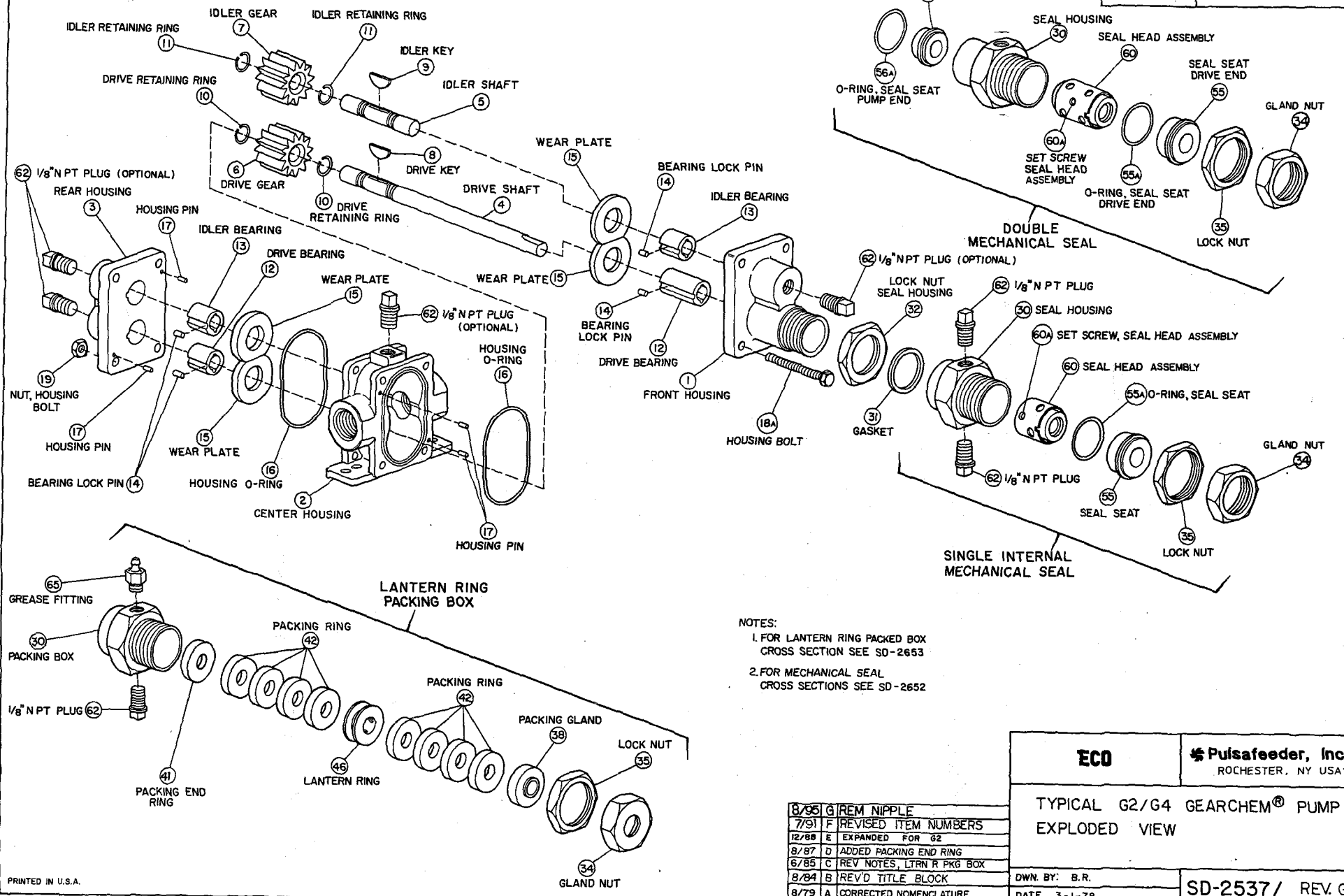


## Table of Contents

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G2/G4 EXPLODED VIEW	1
G2 CROSS SECTION WITH LANTERN RING PACKING BOX	2
Packing Arrangements	4
Bill of materials	5
Unmounted Pump	6
Mounted on Baseplate	7
Mounted on Drip Rim Base	8
GA/GC2/4 Exploded View	9
GA2/GA4 Seal Arrangements Cross Sectional Views	10
GC2/GC4 Seal Arrangements Cross Sectional Views	11
GA2/GC2 Pump Unmounted - Single and Double Mechanical Seal	12
GC2 Motor Mounted	13
GC2 Motor Mounted 63, 71 Metric frame	15
GC2 Motor Mounted 80 Metric Frame	16

SECTION/PAGE	C/2200
EFFECTIVE	02/01/96
SUPERSEDES	I-93 REV.F



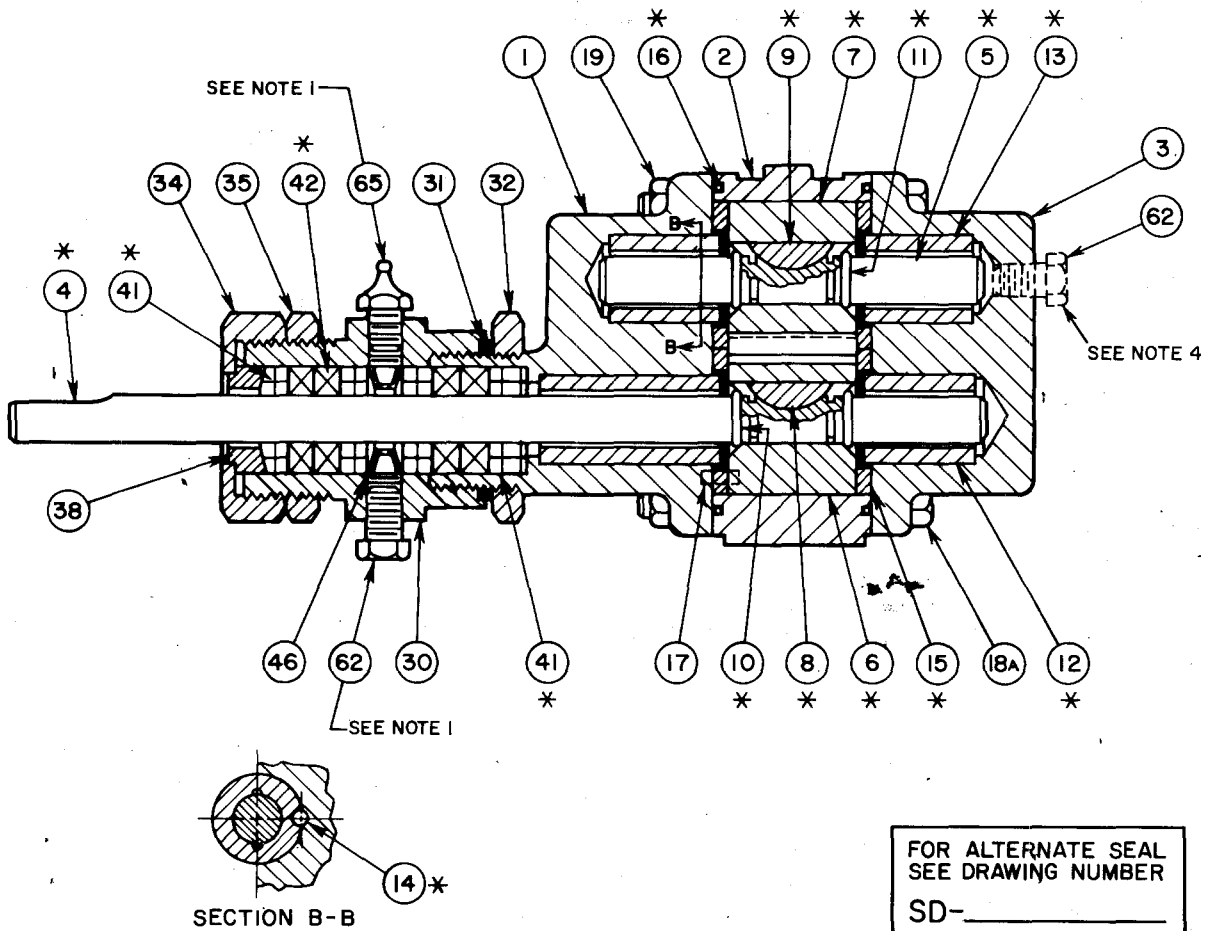
NOTES:  
 1. FOR LANTERN RING PACKED BOX  
 CROSS SECTION SEE SD-2653  
 2. FOR MECHANICAL SEAL  
 CROSS SECTIONS SEE SD-2652

8/85	G	REM NIPPLE
7/91	F	REVISED ITEM NUMBERS
12/88	E	EXPANDED FOR G2
8/87	D	ADDED PACKING END RING
6/85	C	REV NOTES, LTRN R PKG BOX
8/84	B	REV'D TITLE BLOCK
8/79	A	CORRECTED NOMENCLATURE

<b>ECO</b>	<b>Pulsafeeder, Inc.</b> ROCHESTER, NY USA
TYPICAL G2/G4 GEARCHEM® PUMP EXPLODED VIEW	
DWN BY: B.R.	SD-2537/ REV.G
DATE 3-1-78	

ITEM	PART NAME	ITEM	PART NAME
1	FRONT HOUSING	17	HOUSING PIN
2	CENTER HOUSING	18A	HOUSING BOLT
3	REAR HOUSING	19	NUT, HOUSING BOLT
4	DRIVE SHAFT	30	PACKING BOX
5	IDLER SHAFT	31	GASKET
6	DRIVE GEAR	32	LOCK NUT, HOUSING
7	IDLER GEAR	34	GLAND NUT
8	DRIVE KEY	35	LOCK NUT
9	IDLER KEY	38	PACKING GLAND
10	DRIVE RETAINING RING	41	PACKING END RING
11	IDLER RETAINING RING	42	PACKING RING
12	DRIVE BEARING	46	LANTERN RING
13	IDLER BEARING	62	PLUG, 1/8" NPT
14	BEARING LOCK PIN	65	GREASE FITTING
15	WEAR PLATE		
16	HOUSING O-RING		

SECTION/PAGE	C / 2201
EFFECTIVE	01-01-93
SUPERSEDES	12-01-88

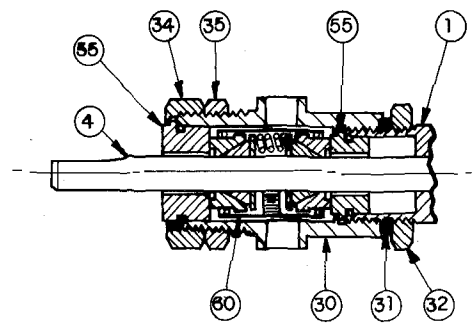


- NOTES: 1. PACKING BOX SHOWN 90° OUT OF POSITION.  
 2. \* RECOMMENDED SPARE PARTS, AVAILABLE AS OVERHAUL KIT.  
 3. MECHANICAL SEALS ARE AVAILABLE.  
 4. 1/8" N PT FLUSH PORTS ARE AN AVAILABLE OPTION.

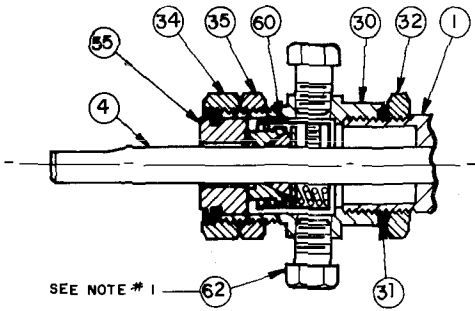
<b>ECO</b>	<b>Pulsafeeder, Inc</b> ROCHESTER, NY USA
<b>G2 MODEL GEARCHEM® PUMP</b> CROSS SECTION WITH LANTERN RING PACKING BOX	
DWN. BY: CLA	<b>SD-2661</b>
DATE: 7-5-88	

ITEM	PART NAME
1	FRONT HOUSING
4	DRIVE SHAFT
30	SEAL HOUSING
31	GASKET
32	LOCK NUT, HOUSING
34	GLAND NUT
35	LOCK NUT
36	SEAT RETAINER W/PIN
37	O-RING, SEAT RETAINER
39A	BOLT, SEAT RETAINER
55	SEAL SEAT W/SEAL RING GA12, 16
55	SEAL SEAT W/O-RING G2, 4, 6, 8
59	PIN, PUMP END SEAT
60	SEAL HEAD ASSEMBLY
62	PLUG, 1/8" NPT
63	PLUG, 1/4" NPT

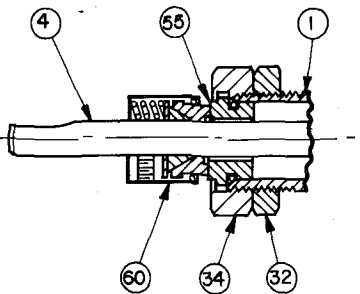
SECTION / PAGE	C / 2202
EFFECTIVE	02-01-96
SUPERSEDES	01-01-95



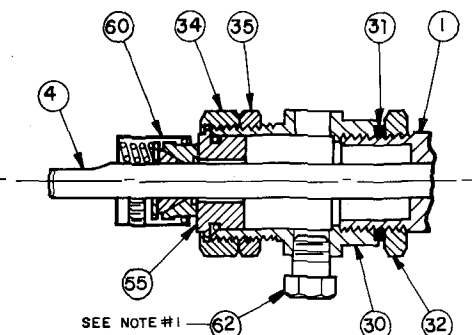
DOUBLE INTERNAL SEAL  
A6, G2, G4, G6, G8



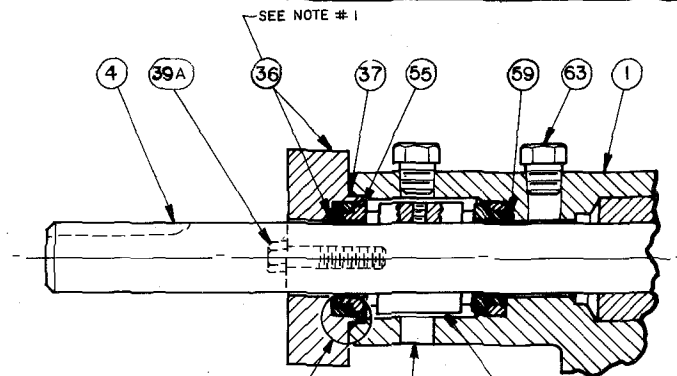
SINGLE INTERNAL SEAL  
A6, G2, G4, G6, G8



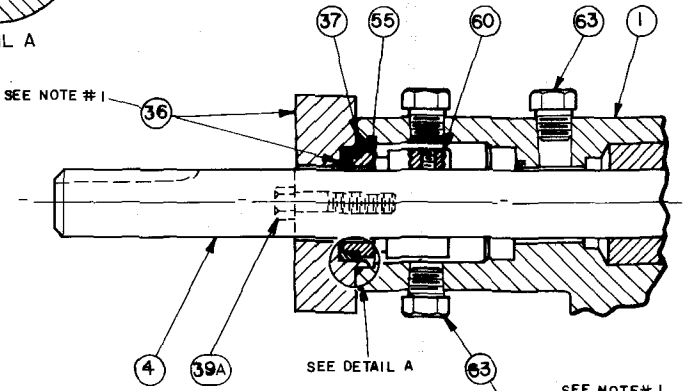
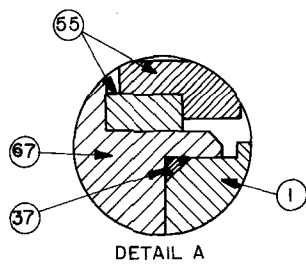
SINGLE EXTERNAL SEAL  
A6, G2, G4, G6, G8



EXTERNAL SEAL FOR VACUUM SERVICE  
G2, G4, G6, G8



DOUBLE MECHANICAL SEAL  
GA12, GA16

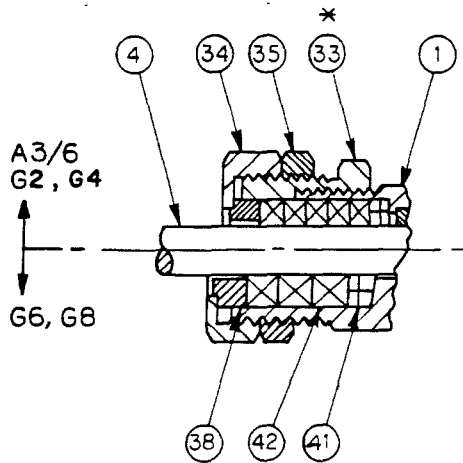


SINGLE MECHANICAL SEAL  
GA12, GA16

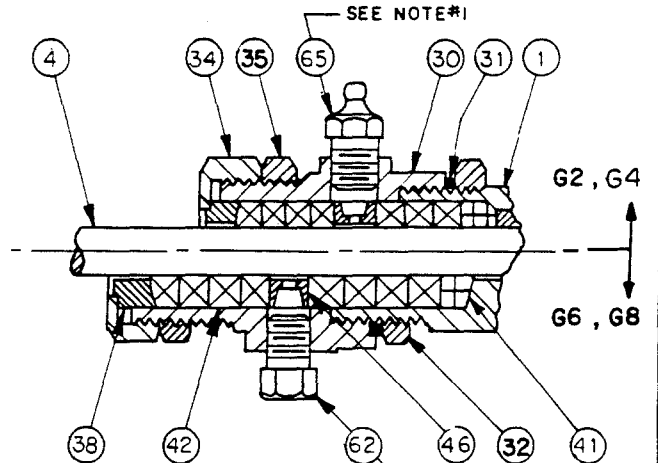
- NOTES: 1. PARTS SHOWN 90° OUT OF POSITION.  
 2. REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS AND QUANTITY.  
 3. FOR ALL DOUBLE MECHANICAL SEALS, CIRCULATE SUITABLE FLUID AT 25-30 PSI ABOVE PUMP DISCHARGE PRESSURE. FLUID TEMPERATURE & FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 160°F IN SEAL HOUSING.

<b>ECO</b>	<b>Pulsafeeder, Inc.</b> ROCHESTER, NY USA
<b>MECHANICAL SEAL ARRANGEMENTS FOR GEARCHEM/ROTARY PUMPS</b>	
DWN BY: KRY	DATE: 6-19-85
8/95 B REM NIPPLE	SD-2652
7/91 A UPDATED ITEM NUMBERS	

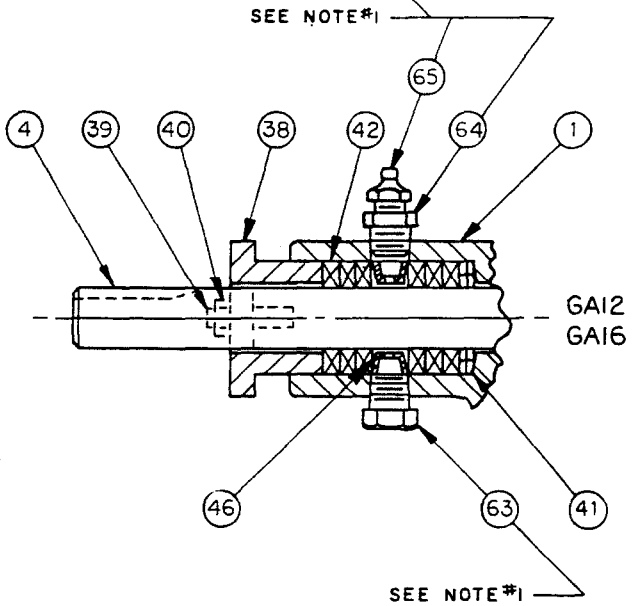
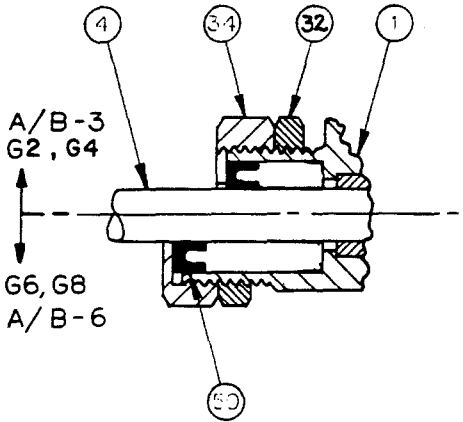
### STANDARD STUFFING BOX



### LANTERN RING STUFFING BOX



### U-CUP LIP SEAL



65	GREASE FITTING
64	ADAPTOR, 1/4" TO 1/8" NPT
63	PLUG, 1/4" NPT
62	PLUG, 1/8" NPT
50	LIP SEAL, U-CUP
46	LANTERN RING
42	PACKING RING
41	PACKING END RING
40	NUT, STUD
39	STUD, PACKING GLAND
38	PACKING GLAND
35	LOCK NUT
34	GLAND NUT
33	HOUSING EXTENSION
32	LOCK NUT, HOUSING
31	GASKET
30	PACKING BOX
4	DRIVE SHAFT
1	FRONT HOUSING
ITEM	PART NAME

**NOTES:**

- 1.) PARTS SHOWN 90° OUT OF POSITION.
- 2.) \* ITEM 33 COMPONENT ONLY A3/6, G2/4.
- 3.) REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS & QUANTITY.

ALL DIMENSIONS ARE IN INCHES



PACKING ARRANGEMENTS FOR  
GEARCHEM/ROTARY PUMPS

REF	REMOVED ITEM NUMBER 53	04/04/01
	REVISION UPDATE	DATE

SECTION/PAGE	C/G2/2203
EFFECTIVE	04/03/83
SUPERSEDES	12/10/87

DWN BY: KRY	SD-2653
DATE 6/19/85	

PARTS ARE ON MANUAL DRAWING

NOTES:

- 1.) PARTS SHOWN 90° OUT OF POSITION.
- 2.) \* ITEM 33 COMPONENT ONLY A3/6, G2/4.
- 3.) REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS & QUANTITY.

65	GREASE FITTING
64	ADAPTOR, 1/4" TO 1/8"
63	PLUG, 1/4" NPT
62	PLUG, 1/8" NPT
50	LIP SEAL, U-CUP
46	LANTERN RING
42	PACKING RING
41	PACKING END RING
40	NUT, STUD
39	STUD, PACKING GLAND
38	PACKING GLAND
35	LOCK NUT
34	GLAND NUT
33	HOUSING EXTENSION
32	LOCK NUT, HOUSING
31	GASKET
30	PACKING BOX
4	DRIVE SHAFT
1	FRONT HOUSING
ITEM	PART NAME

ALL DIMENSIONS ARE IN INCHES



PACKING ARRANGEMENTS FOR  
GEARCHEM/ROTARY PUMPS

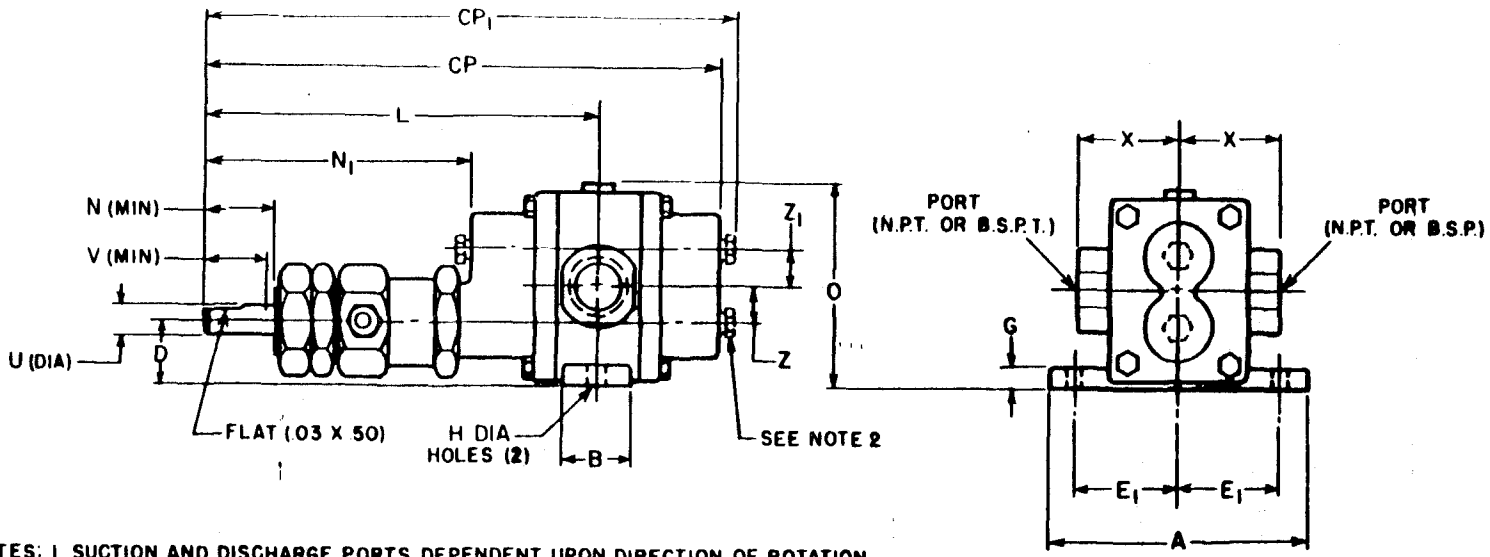
△	REMOVED ITEM NUMBER 53	/ /
REF	REVISION UPDATE	DATE

SECTION/PAGE	
EFFECTIVE	04/03/01
SUPERSEDES	12/10/97

DWN BY: KRY	SD-2653
DATE: 6/19/85	

SECTION / PAGE  
EFFECTIVE  
SUPERSEDES

C2204  
12 / 01 / 88  
NEW



NOTES: 1. SUCTION AND DISCHARGE PORTS DEPENDENT UPON DIRECTION OF ROTATION.  
2. BEARING FLUSH PLUGS (1/8 N.P.T.) OPTIONAL.

PORTS	DIMENSIONS																	
	INCHES MM																	
	A	B	D		E <sub>1</sub>	G	H	O	U	X	Z	Z <sub>1</sub>	CP	CP <sub>1</sub>	L	N	N <sub>1</sub>	V
1/4	3 1/2	1	7/8		1 1/2	3/16	17/64	2 7/8	3/8	1 1/16	1/2	1/2	7 7/16	B	5 11/16	7/8	3 15/16	13/16
	88.9	25.4	22.2		38.1	4.7	6.7	73	9.5	36.5	12.7	12.7	188.9	203.2	144.4	22.2	100	20.6

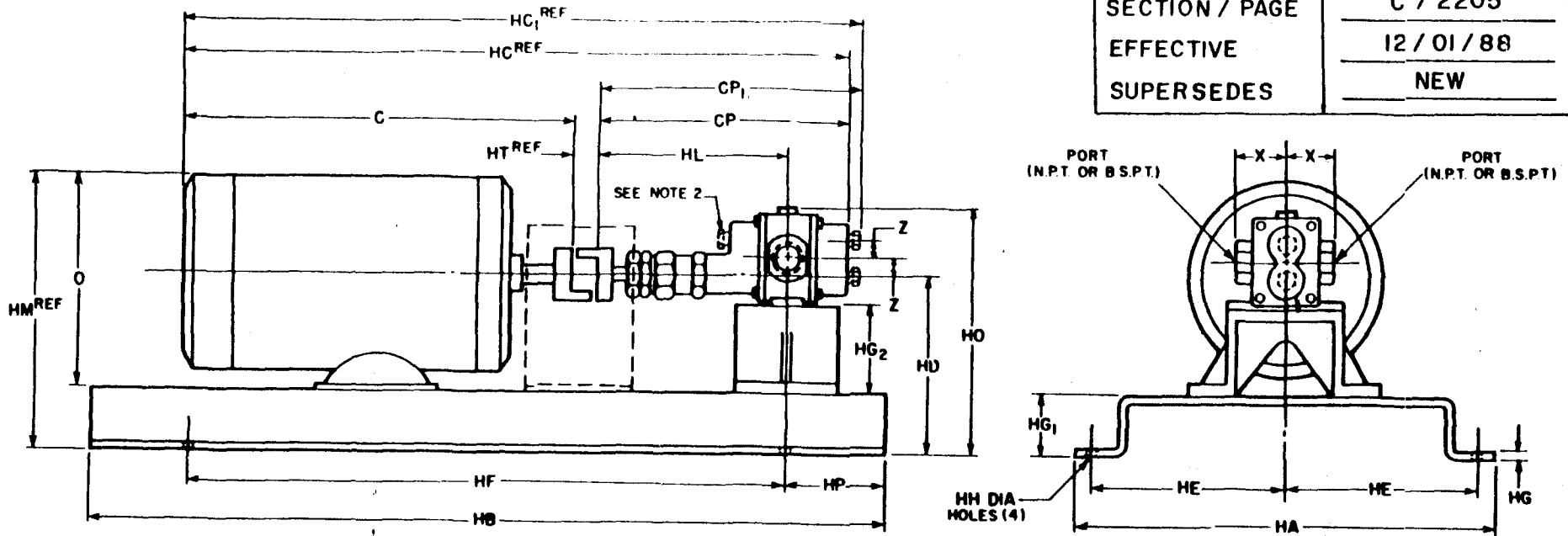
CERTIFIED DRAWING BY **Pulsafeeder, Inc.**

FOR: \_\_\_\_\_  
 CUSTOMER P.O. NO.: \_\_\_\_\_  
 ITEM: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
 PULSA. ORDER NO.: \_\_\_\_\_  
 DATED: \_\_\_\_\_ BY: \_\_\_\_\_  
 TAGGING: \_\_\_\_\_

DWN.	CLA	7/6/88	<b>ECO</b>	<b>Pulsafeeder, Inc.</b> ROCHESTER, NY USA
CHK.			TITLE G2 SERIES UNMOUNTED PUMP	
APP.			BOOKCASE	SIZE A
			SD-2662	
REF			SCALE	SHEET OF

SECTION / PAGE  
EFFECTIVE  
SUPERSEDES

C / 2205  
12 / 01 / 88  
NEW



NOTES: 1. SUCTION AND DISCHARGE PORTS DEPENDENT UPON DIRECTION OF ROTATION.  
2. BEARING FLUSH PLUGS (1/8 N.P.T.) OPTIONAL.

DIMENSIONS																						
INCHES																						
MM																						
PORTS	C	CP	CP <sub>1</sub>	HA	HB	HC	HC <sub>1</sub>	HD	HE	HF	HG	HG <sub>1</sub>	HG <sub>2</sub>	HH	HL	HM	HO	HP	HT	O	X	Z
1/4		7 7/16	8	12 1/2	24			5 3/8	5 3/4	10	3/16	1 1/16	2 3/8	1 3/16	5 1/16		7 3/16	3	3/4		1 1/16	1/2
		188.9	203.2	317.5	609.6			131.7	146.0	457.2	4.7	42.8	66.6	10.3	144.4		177.8	76.2	190		365	12.7
MOTOR DATA	FRAME	HP	RPM	PHASE / HZ / VOLTS																		
ENCLOSURE	MFR																					

NOTE: PRINTED DIMENSIONS SHOWN FOR MOTOR FRAME SIZES 48, 56, 143T, 145T

**ECO**

**Pulsafeeder, Inc**  
ROCHESTER, NY USA

G2 SERIES  
MOUNTED ON BASE PLATE

CUSTOMER \_\_\_\_\_  
ECO ORDER NO. \_\_\_\_\_ PUMP MODEL NO. \_\_\_\_\_  
CERTIFIED BY \_\_\_\_\_

P.O. NO. \_\_\_\_\_  
ITEM NO. \_\_\_\_\_  
DATE \_\_\_\_\_

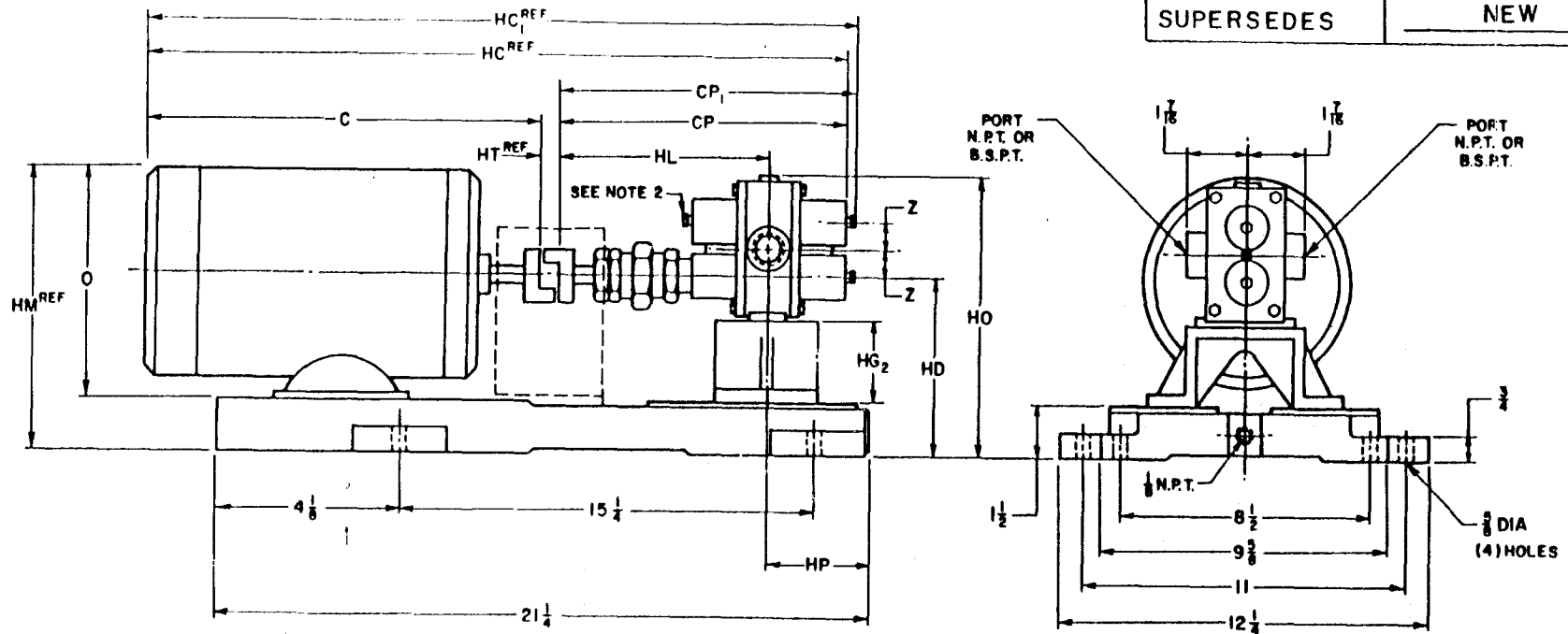
DWN BY: \_\_\_\_\_  
DATE \_\_\_\_\_

SD-2663



SECTION / PAGE  
EFFECTIVE  
SUPERSEDES

C / 2206  
12 / 01 / 88  
NEW

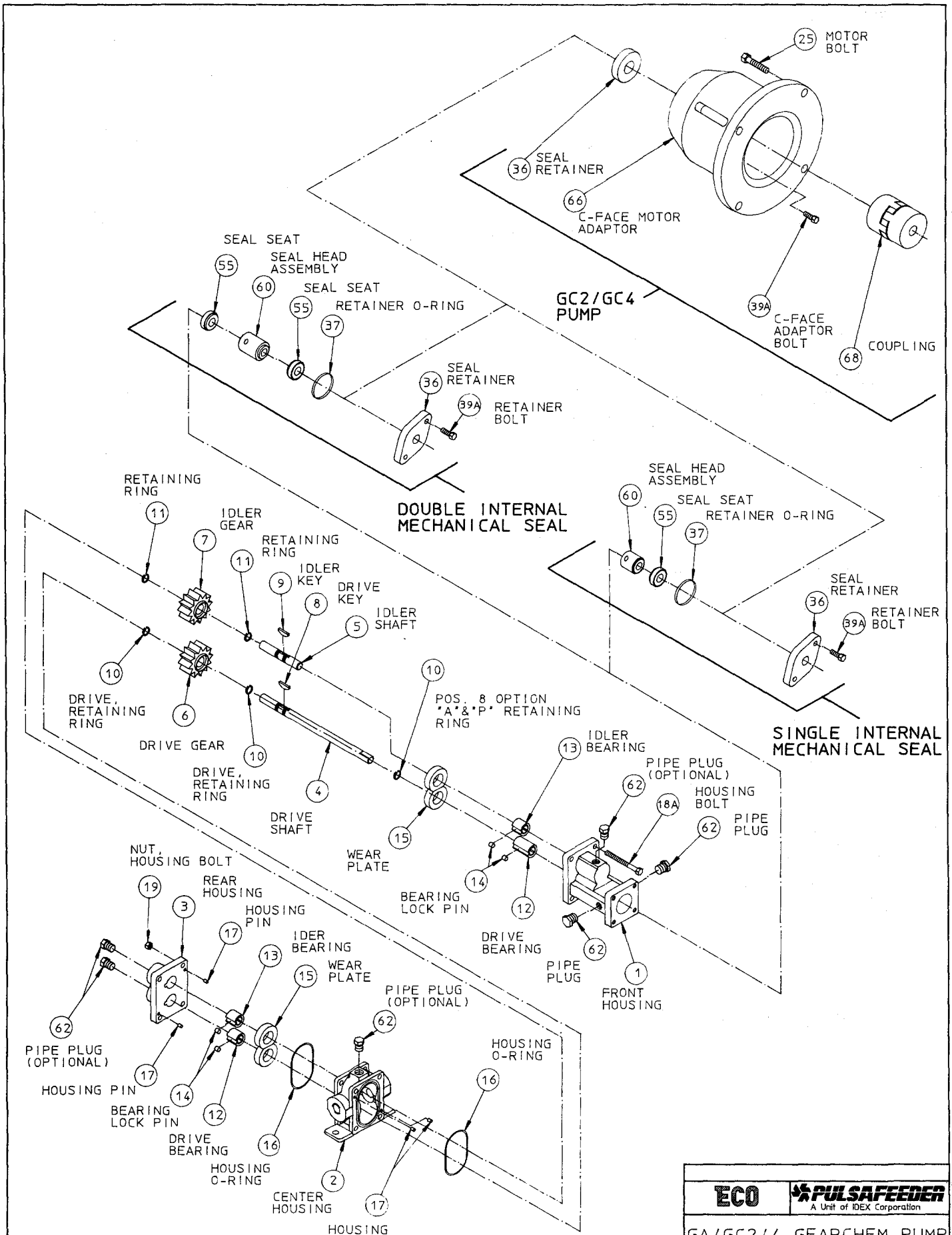


- NOTES:  
1. SUCTION AND DISCHARGE PORTS DEPENDENT ON DIRECTION OF ROTATION  
2. BEARING FLUSH PLUGS (1/8 N.P.T.) OPTIONAL

DIMENSIONS														
PORTS	C	CP	CP <sub>1</sub>	HC	HC <sub>1</sub>	HD	HG <sub>2</sub>	HL	HM	HO	HP	HT	O	Z
1/4		7 1/16	8			5	2 5/8	5 11/16		6 13/16	3 9/16	3/4		1/2
4		188.9	203.2			127.0	66.6	144.4		173.0	90.4	19.0		12.7
MOTOR DATA	FRAME	H.P.	R.P.M.	PHASE / HZ / VOLTS										
ENCLOSURE	MFR													

<b>ECO</b>	<b>Pulsafeeder, Inc</b> ROCHESTER, NY USA
<b>G2 SERIES MOUNTED ON DRIP RIM BASE</b>	
DWN BY:	<b>SD-2664</b>
DATE	

CUSTOMER \_\_\_\_\_ P.O. NO. \_\_\_\_\_  
 ECO ORDER NO. \_\_\_\_\_ PUMP MODEL NO. \_\_\_\_\_ ITEM NO. \_\_\_\_\_  
 CERTIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_



**ECO** **PULSAFEEDER**  
A Unit of IOEX Corporation

GA/GC2/4 GEARCHEM PUMP  
EXPLODED VIEW

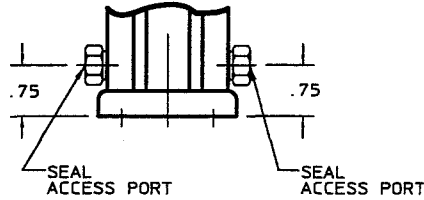
SECTION/PAGE	C/GA2/GC2/2220
EFFECTIVE	12/01/97
SUPERSEDES	NEW

DWN BY: PFM	SD-2847
DATE: 04/23/97	

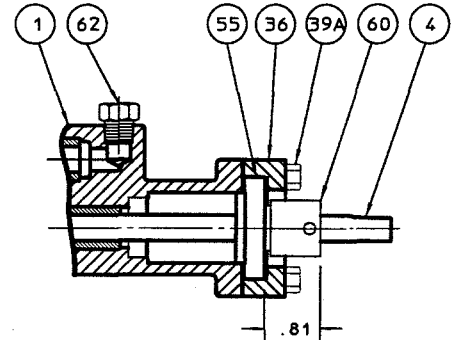
REF	REVISION UPDATE	DATE
-----	-----------------	------

ITEM	PART NAME
1	FRONT HOUSING
4	DRIVE SHAFT
10	RETAINING RING
36	SEAL RETAINER
37	O-RING
39A	BOLT, RETAINER
55	SEAL SEAT
60	SEAL HEAD ASSEMBLY
62	PLUG, 1/8" NPT

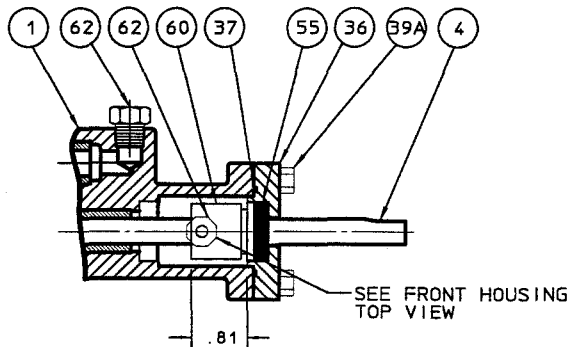
NOTE: FOR CODE E USE EITHER PORT. (SETScrew IS NOT CENTERED IN PORT)



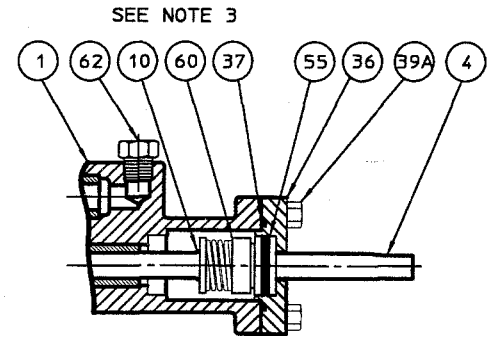
**FRONT HOUSING TOP VIEW**



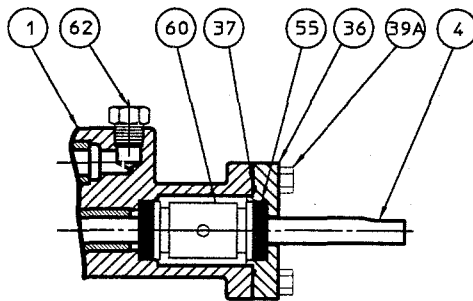
**EXTERNAL MECH. SEAL CODE V,W**



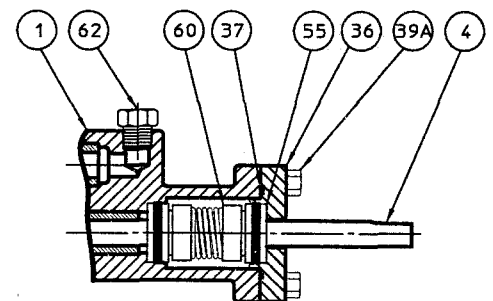
(CENTER SETSCREWS IN PORT OPENING)  
**SINGLE MECH. SEAL CODE Q,U**



**SINGLE MECH. SEAL CODE A,P**



**DOUBLE MECH. SEAL CODE E**



**DOUBLE MECH. SEAL CODE C**

NOTES:

- REFER TO STANDARD SALES BILL OF MATERIALS.
- FOR ALL DOUBLE MECHANICAL SEALS, CIRCULATE SUITABLE FLUID AT 25-30 PSI ABOVE PUMP DISCHARGE PRESSURE. FLUID TEMPERATURE AND FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 450° F IN SEAL HOUSING.
- ITEM 10 IS ONLY USED WITH POSITION 8 SEAL OPTION "A&P"

ALL DIMENSIONS ARE IN INCHES



GA2/GA4 GEARCHEM PUMP SEAL ARRANGEMENTS CROSS SECTIONAL VIEWS

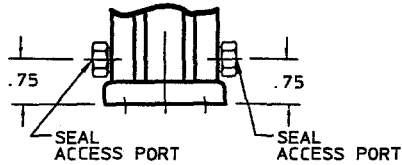
▲	UPDATED PICTORIALY	10/14/98
REF	REVISION UPDATE	DATE

SECTION/PAGE	C/GA2/2221
EFFECTIVE	10/14/98
SUPERSEDES	12/01/97

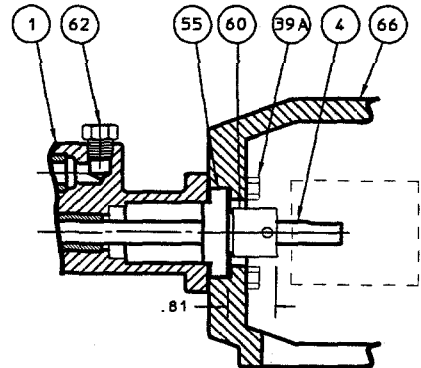
DWN BY: PFM	SD-2849
DATE: 04/15/97	

ITEM	PART NAME
1	FRONT HOUSING
4	DRIVE SHAFT
10	RETAINING RING
36	SEAL RETAINER
37	O-RING
39A	BOLT, RETAINER
55	SEAL SEAT
60	SEAL HEAD ASSEMBLY
62	PLUG, 1/8" NPT
66	C-FACE MOTOR ADAPTOR

NOTE: FOR CODE E USE EITHER PORT. (SETScrew IS NOT CENTERED IN PORT)

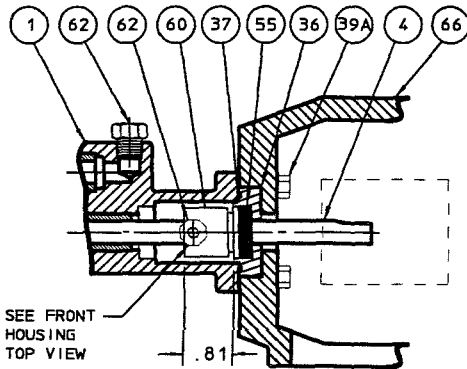


**FRONT HOUSING TOP VIEW**

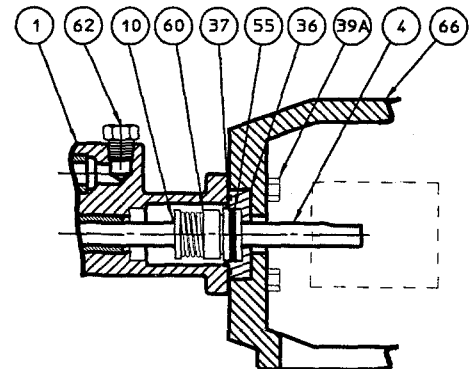


**EXTERNAL MECH. SEAL CODE V,W**

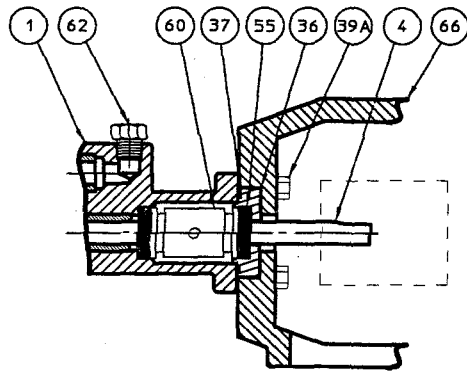
SEE NOTE 3



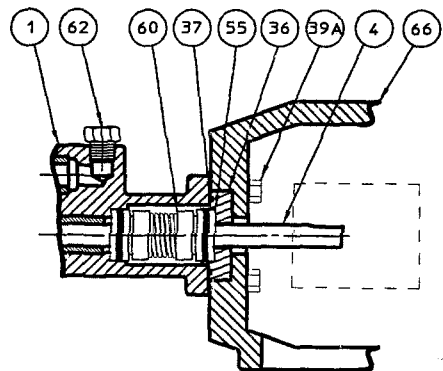
**SINGLE MECH. SEAL CODE Q,U**



**SINGLE MECH. SEAL CODE A,P**



**DOUBLE MECH. SEAL CODE E**



**DOUBLE MECH. SEAL CODE C**

NOTES:

- REFER TO STANDARD SALES BILL OF MATERIALS.
- FOR ALL DOUBLE MECHANICAL SEALS, CIRCULATE SUITABLE FLUID AT 25-30 PSI ABOVE PUMP DISCHARGE PRESSURE. FLUID TEMPERATURE AND FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 450° F IN SEAL HOUSING.
- ITEM 10 IS ONLY USED WITH POSITION 8 SEAL OPTION "A" & "P".

ALL DIMENSIONS ARE IN INCHES



GC2/GC4 GEARCHEM PUMP SEAL ARRANGEMENTS CROSS SECTIONAL VIEWS

▲ UPDATED PICTORIALLY	10/14/98
REF REVISION UPDATE	DATE

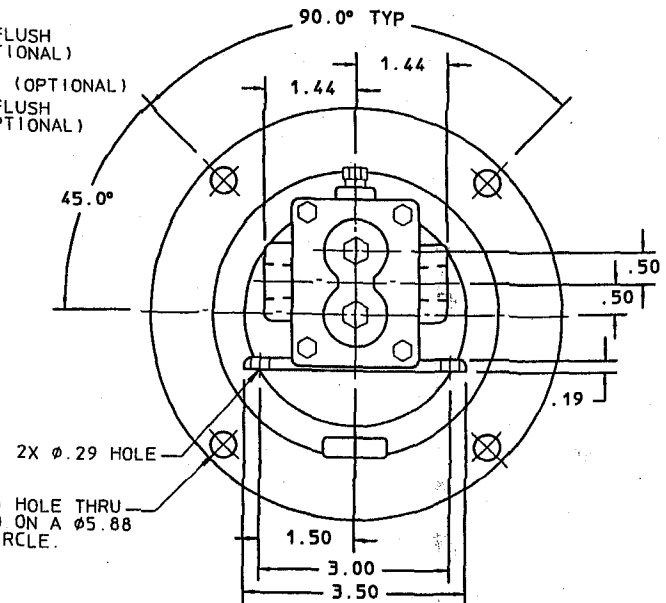
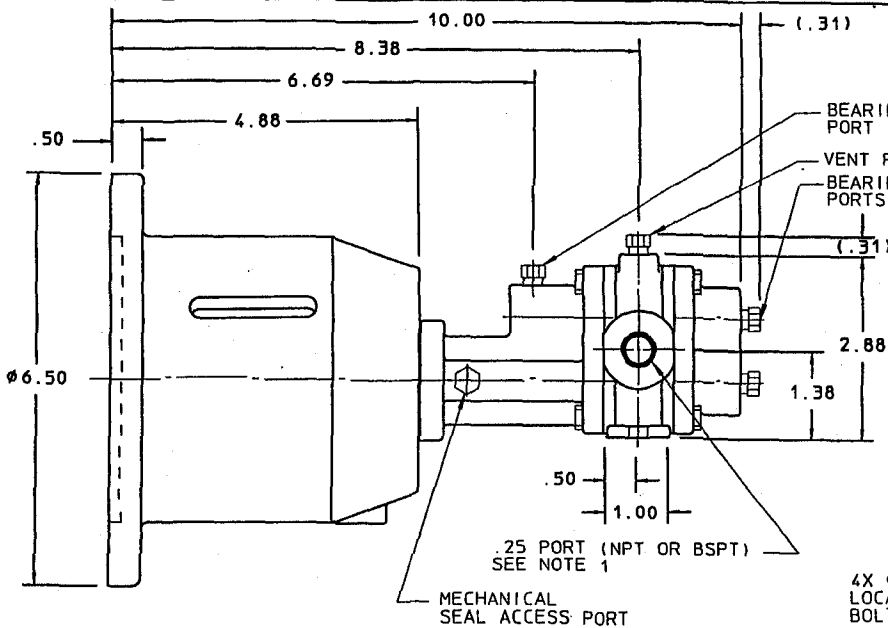
SECTION/PAGE	C/GC2/2222
EFFECTIVE	10/14/98
SUPERSEDES	12/01/97

DWN BY: PFM	SD-2854
DATE: 05/01/97	

REF A  
 ADDED OPTIONAL FLANGE  
 REVISION UPDATE  
 03/27/01  
 DATE

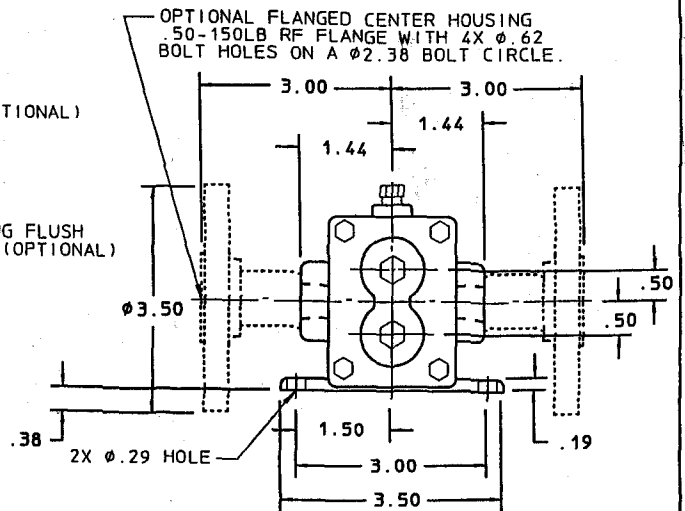
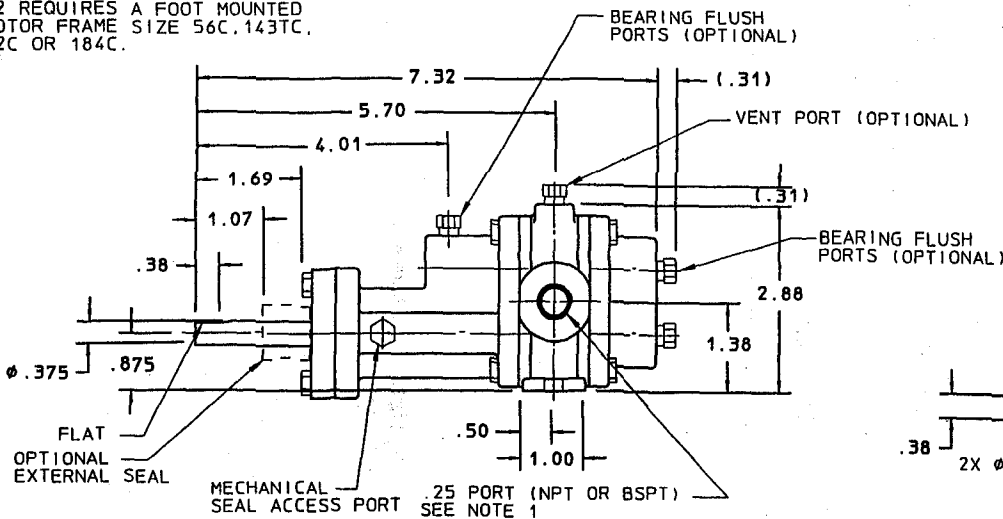
SECTION/PAGE  
 EFFECTIVE  
 SUPERSEDES  
 C/GA2/GC2/2224  
 03/27/01  
 12/01/97

ALL DIMENSIONS ARE IN INCHES  
**ECO**  
**KRUL SAFERIDER**  
 A Unit of DEK Corporation  
 DIMENSIONAL DRAWING  
 GA2/GC2 PUMP UNMOUNTED  
 DWN BY: PFM  
 DATE: 04/14/97  
 SD-2850



- NOTES:  
 1) SUCTION AND DISCHARGE PORTS ARE DEPENDENT UPON ROTATION.  
 2) ALL STANDARD AND OPTIONAL PIPE PLUGS ARE .125 NPT.  
 3) MODEL GC2 REQUIRES A FOOT MOUNTED C-FACE MOTOR FRAME SIZE 56C, 143TC, 145TC, 182C OR 184C.

### GC2 SINGLE / DOUBLE MECHANICAL SEAL



### GA2 SINGLE / DOUBLE MECHANICAL SEAL

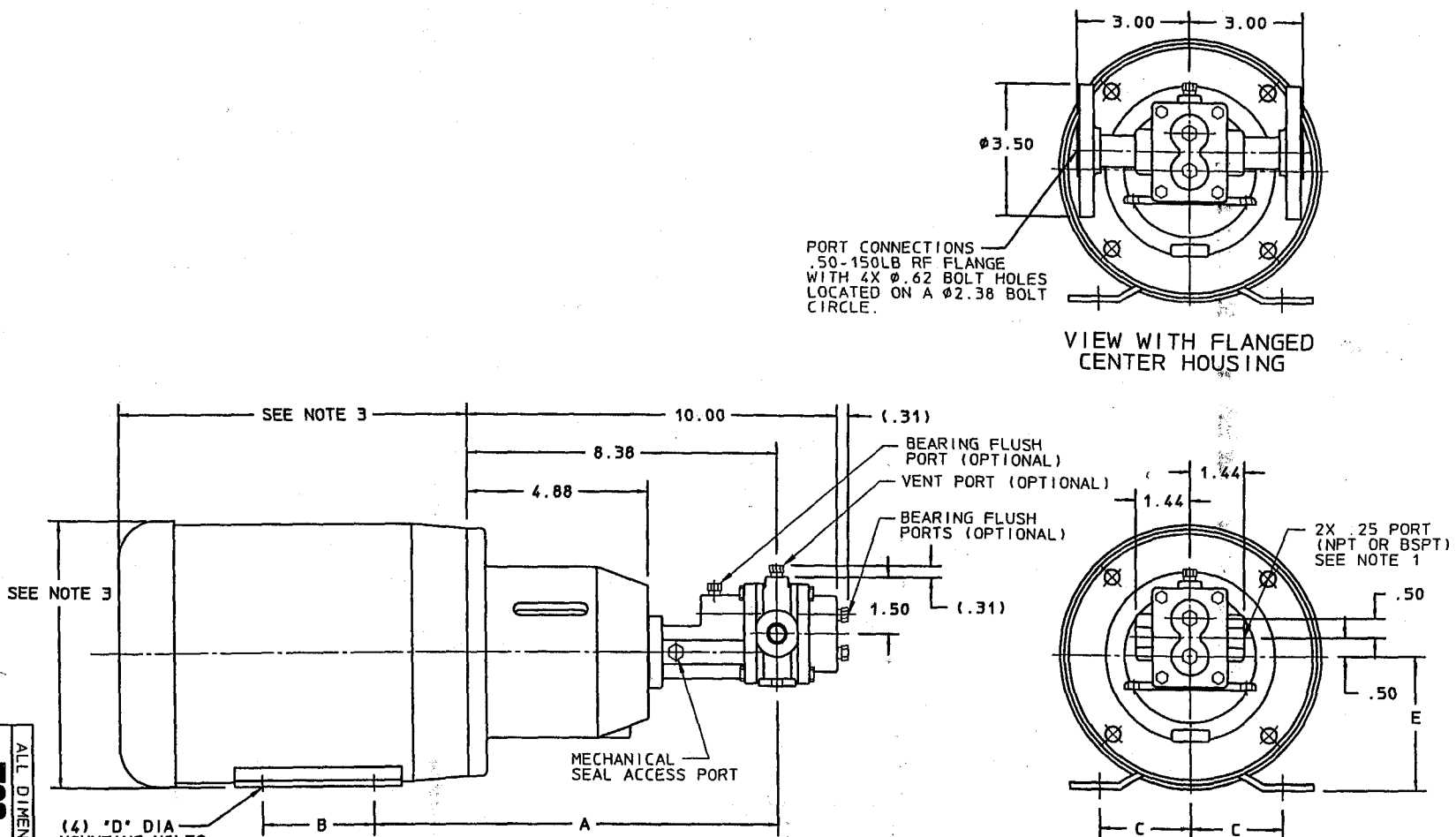
REF  
 Δ ADDED FLANGED VIEW  
 REVISION UPDATE  
 DATE 03/27/01

SECTION/PAGE  
 EFFECTIVE  
 SUPERSEDES  
 C/GC2/2225  
 03/27/01  
 12/01/97

DWN BY: PFM  
 DATE: 11/13/97  
 SD-2880

ALL DIMENSIONS ARE IN INCHES  
**ECO**  
**PHSAFFERER**  
 A Unit of IDEX Corporation

DIMENSIONAL DRAWING  
 GC2 MOTOR MOUNTED



PORT CONNECTIONS  
 .50-150LB RF FLANGE  
 WITH 4X Ø.62 BOLT HOLES  
 LOCATED ON A Ø2.38 BOLT  
 CIRCLE.

VIEW WITH FLANGED  
 CENTER HOUSING

- NOTES:  
 1) SUCTION AND DISCHARGE PORTS ARE DEPENDENT UPON ROTATION.  
 2) ALL STANDARD AND OPTIONAL PIPE PLUGS ARE .125 NPT.  
 3) MOTOR DIMENSIONS VARY BY MANUFACTURER. CONSULT MANUFACTURER'S DRAWING FOR SPECIFICS.

MOTOR FRAME	A	B	C	D	E
56C	10.94	3.00	2.44	.34	3.50
143TC	11.25	4.00	2.75	.34	3.50
145TC	11.25	5.00	2.75	.34	3.50
182C	11.25	4.50	3.75	.41	4.50
184C	11.25	5.50	3.75	.41	4.50

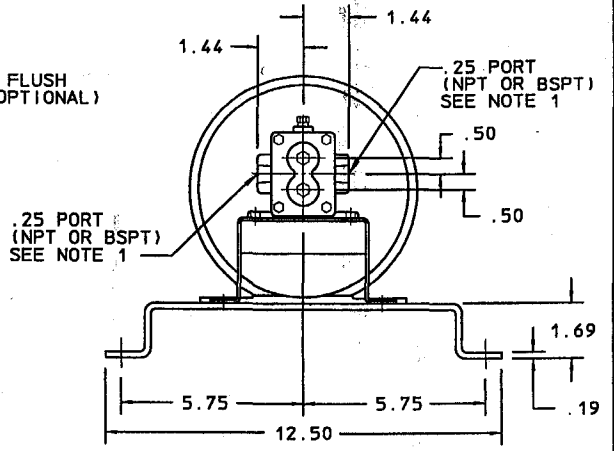
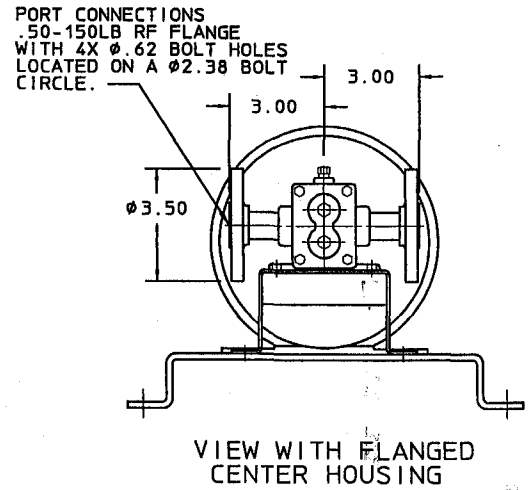
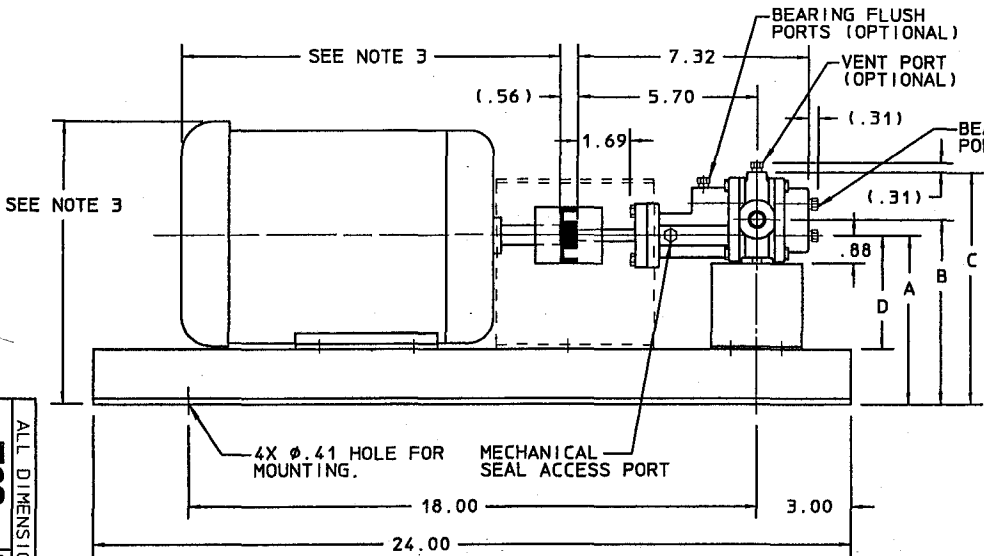
REF A ADDED FLANGED VIEW  
 REVISION UPDATE  
 DATE 03/27/01

SECTION/PAGE C/GA2/22226  
 EFFECTIVE 03/27/01  
 SUPERSEDES 12/01/97

DWN BY: PEM  
 DATE: 10/31/97  
 SD-2876

ALL DIMENSIONS ARE IN INCHES  
**ECO**  
**PUMPSAFETY**  
 A UNIT OF DEK Corporation

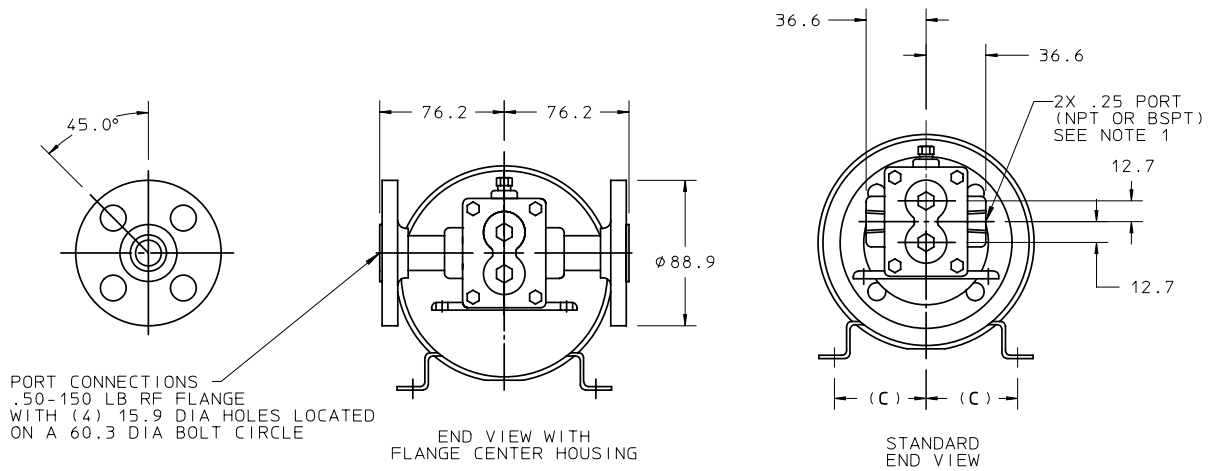
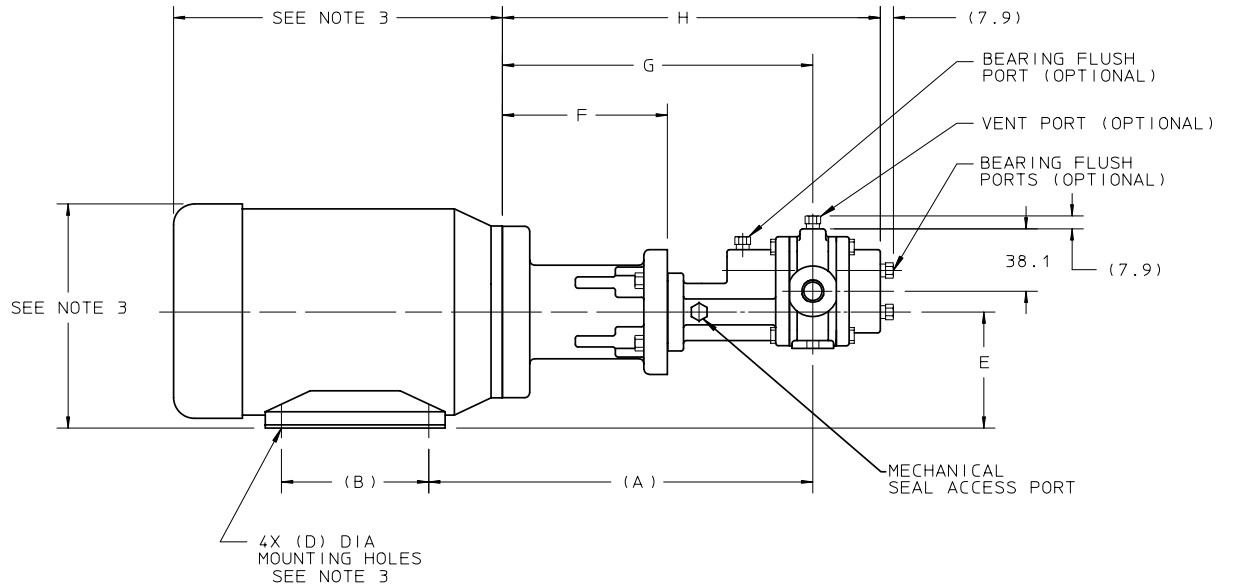
GA2 SERIES MOUNTED  
 ON BASE PLATE



PUMP SERIES	DIMENSIONS			MOTOR INFO. FRAME	
	A	B	C		D
GA2	5.19	5.69	7.19	56	3.50
	5.19	5.69	7.19	143/5T	3.50
	6.19	6.69	8.19	182/4T	4.50

- NOTES:
- SUCTION AND DISCHARGE PORTS DEPENDENT ON DIRECTION OF ROTATION.
  - ALL STANDARD AND OPTIONAL PIPE PLUGS ARE (1/8" N.P.T.).
  - MOTOR DIMENSIONS VARY BY MANUFACTURER, CONSULT MANUFACTURERS DRAWING FOR SPECIFICS. BASE WILL ACCOMMODATE MOTOR FRAME SIZES, 56, 143/5T, AND 182/4T.

- NOTES:  
 1) SUCTION AND DISCHARGE PORTS ARE DEPENDENT UPON ROTATION.  
 2) ALL STANDARD AND OPTIONAL PIPE PLUGS ARE .125 NPT.  
 3) MOTOR DIMENSIONS VARY BY MANUFACTURER. CONSULT MANUFACTURER'S DRAWING FOR SPECIFICS.



REF DIMS SEE NOTE 3

MOTOR FRAME	A	B	C	D	E	F	G	H
63C	222.5	80.0	50.0	7.1	63.0	93.7	82.6	223.8
71C	234.7	89.9	55.9	7.1	71.0	100.8	189.7	230.9

ALL DIMENSIONS ARE IN MM

**ECO** **PULSAFEEDER**  
 A Unit of IDEX Corporation

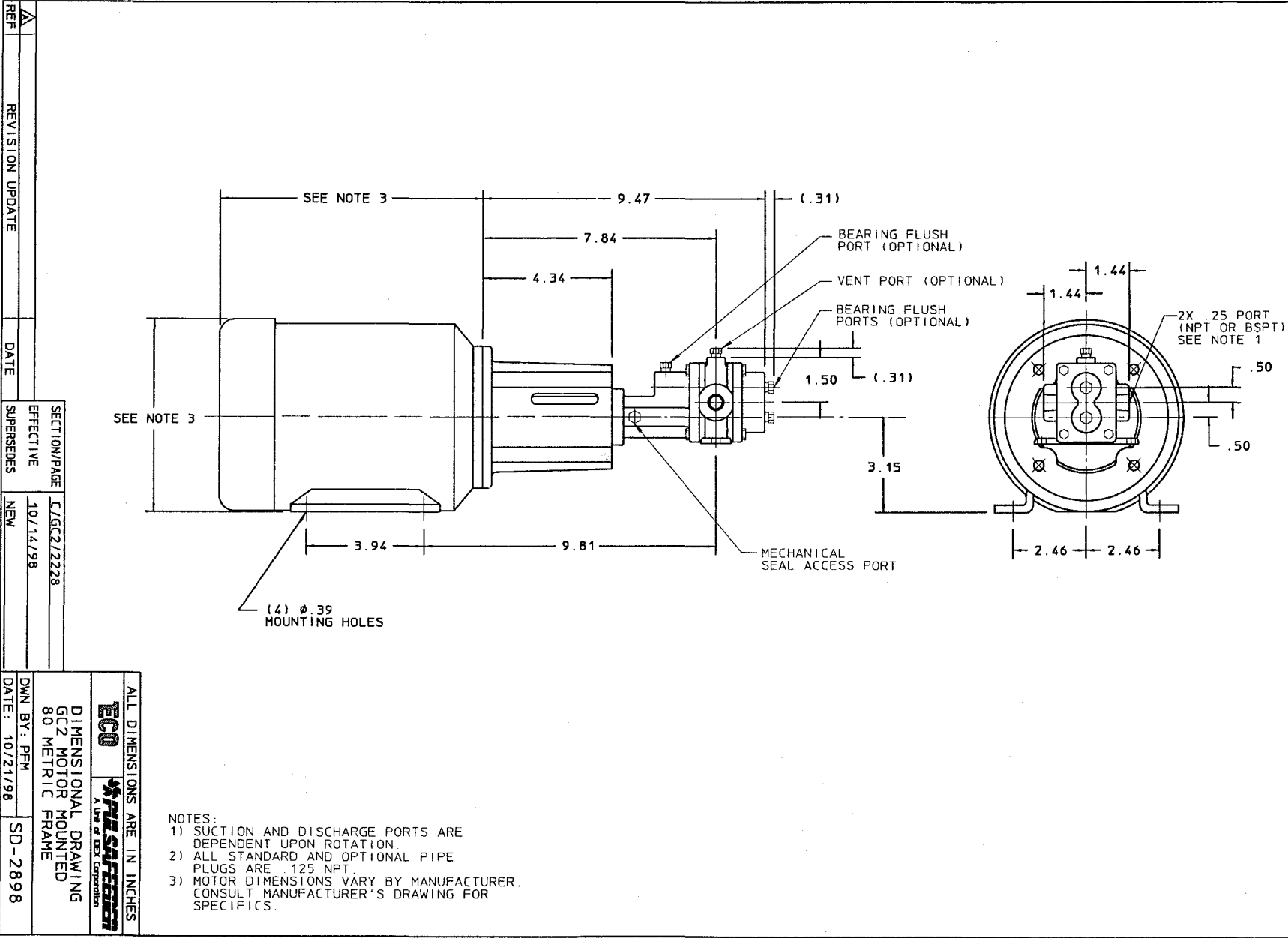
DIMENSIONAL DRAWING  
 GC2 MOTOR MOUNTED  
 63, 71 METRIC FRAME

DWN BY: PFM  
 DATE: 10/21/98

SD-2897

REV	DESCRIPTION	DATE	SECTION/PAGE	EFFECTIVE	SUPERSEDES
△	ADDED FLANGED END VIEW	04/27/07	C/GC2/2227	04/27/07	
	REVISION UPDATE				10/14/98





- ALL DIMENSIONS ARE IN INCHES
- ECO**  
**HYDRA-SAFETY**  
 A UNIT OF DEK CORPORATION
- DIMENSIONAL DRAWING  
 GC2 MOTOR MOUNTED  
 80 METRIC FRAME
- NOTES:  
 1) SUCTION AND DISCHARGE PORTS ARE DEPENDENT UPON ROTATION.  
 2) ALL STANDARD AND OPTIONAL PIPE PLUGS ARE .125 NPT.  
 3) MOTOR DIMENSIONS VARY BY MANUFACTURER. CONSULT MANUFACTURER'S DRAWING FOR SPECIFICS.