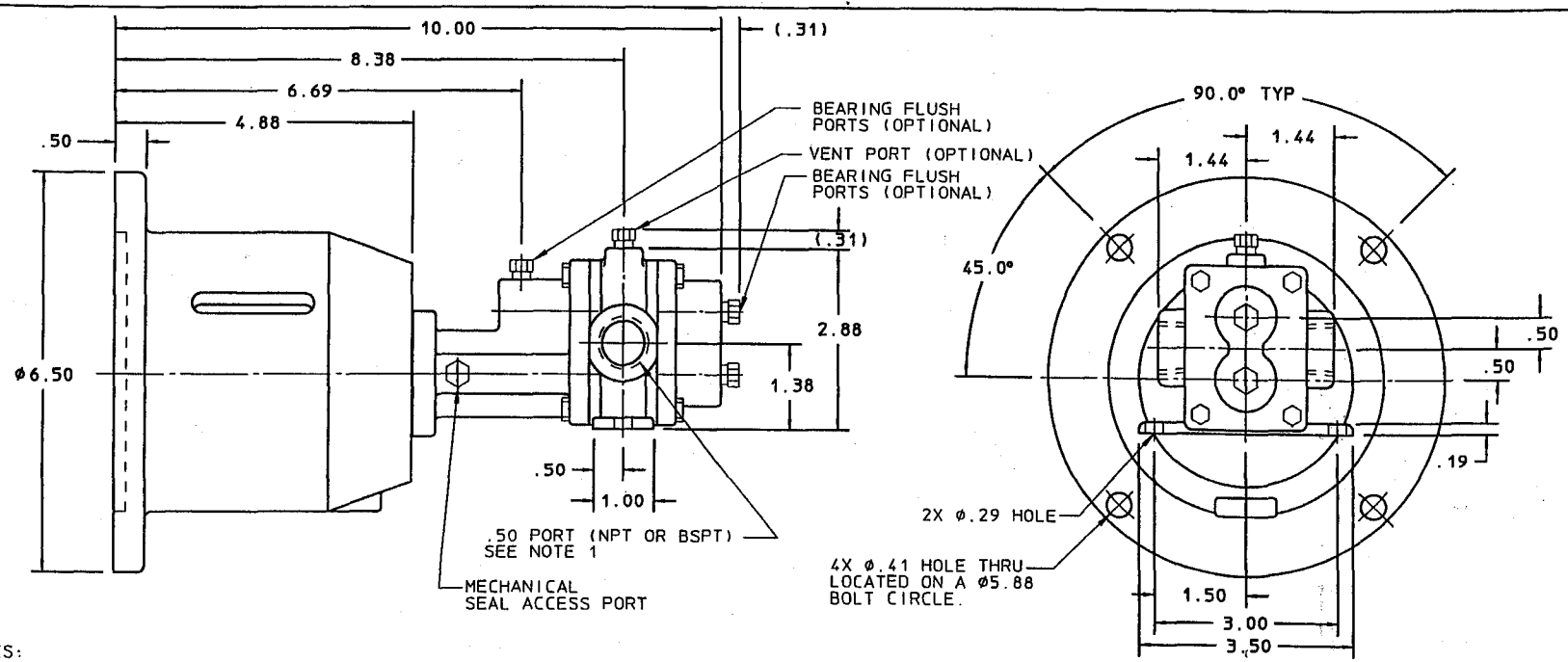


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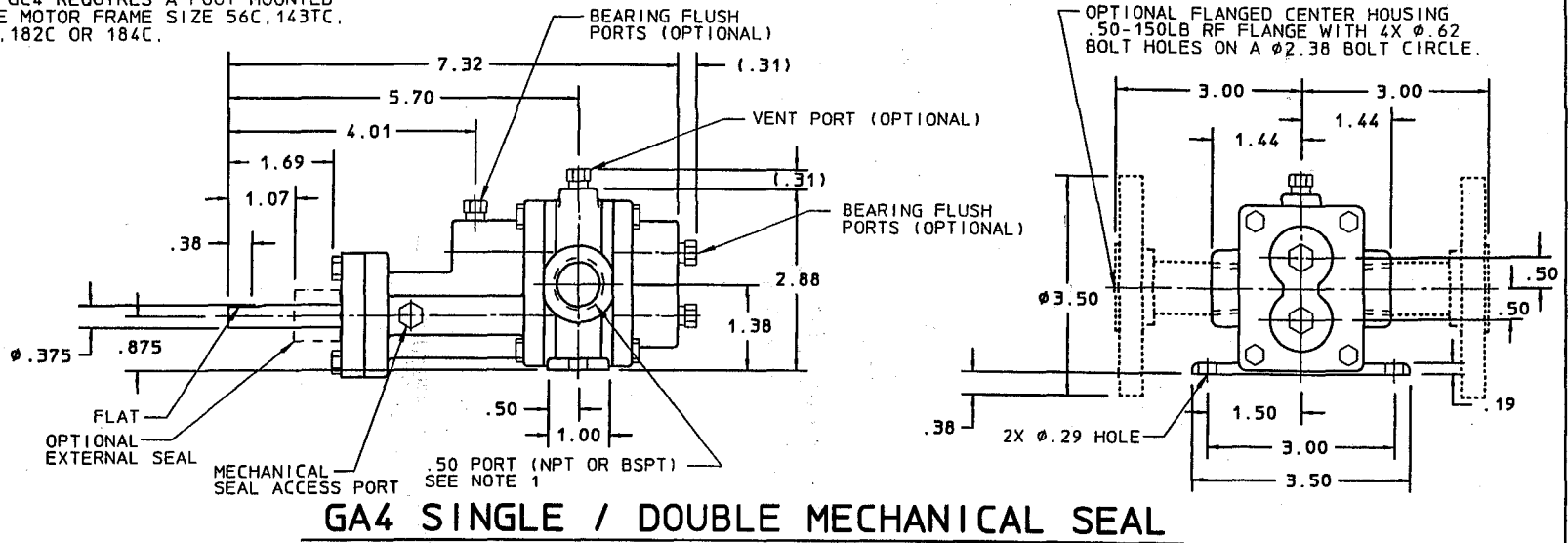
REF	ADDED OPTIONAL FLANGE
	REVISION UPDATE
DATE	03/27/01
SUPERSEDES	EFFECTIVE
	03/27/01
	12/01/97
	SECTION/PAGE
	C/GA4/GC4/4224



- NOTES:
- 1) SUCTION AND DISCHARGE PORTS ARE DEPENDENT UPON ROTATION.
 - 2) ALL STANDARD AND OPTIONAL PIPE PLUGS ARE .125 NPT.
 - 3) MODEL GC4 REQUIRES A FOOT MOUNTED C-FACE MOTOR FRAME SIZE 56C, 143TC, 145TC, 182C OR 184C.

GC4 SINGLE / DOUBLE MECHANICAL SEAL

DATE	04/14/97
DWN BY	PFM
SD	2851
ALL DIMENSIONS ARE IN INCHES	
ECO	
PUL SAFARIER	
A Unit of DEK Corporation	
DIMENSIONAL DRAWING	
GA4/GC4 PUMP UNMOUNTED	



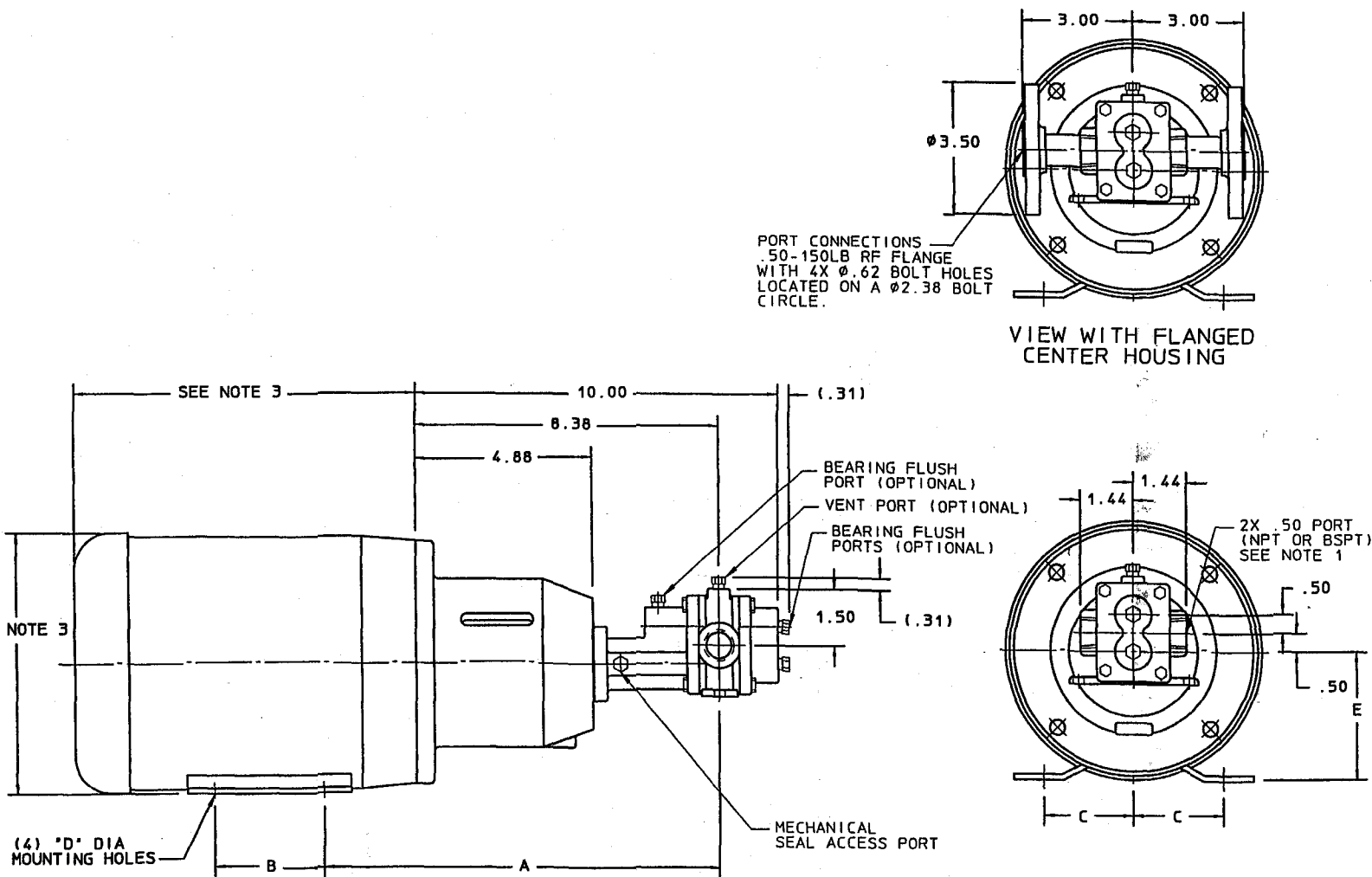
GA4 SINGLE / DOUBLE MECHANICAL SEAL

REF	ADDED FLANGE VIEW	SECTION/PAGE	DATE	EFFECTIVE	SUPERSEDES	DATE	DWN BY: PFM	SD-2881
	REVISION UPDATE	C/GC/L/225	03/27/01	03/27/01	12/01/97	11/13/97		

ECO
PULSAFEEDER
 A Unit of DEX Corporation

ALL DIMENSIONS ARE IN INCHES

DIMENSIONAL DRAWING
 GC4 MOTOR MOUNTED



- 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 FLANGE VIEW
REVISION UPDATE
DATE 03/27/01

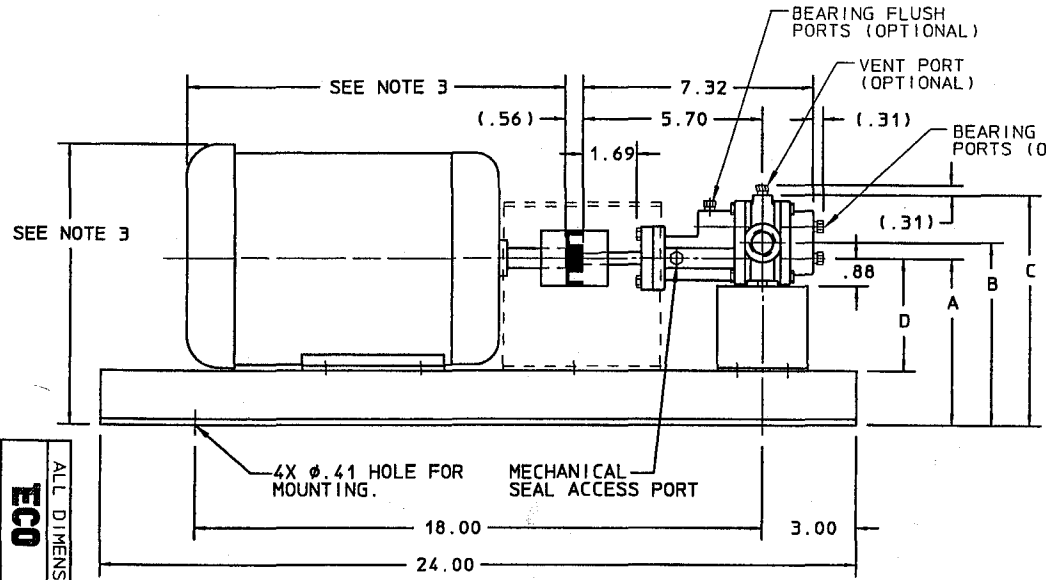
SECTION/PAGE C/GA4/2226
EFFECTIVE 03/27/01
SUPERSEDES 12/01/97

DWN BY: PFM
DATE: 11/03/97
SD-2877

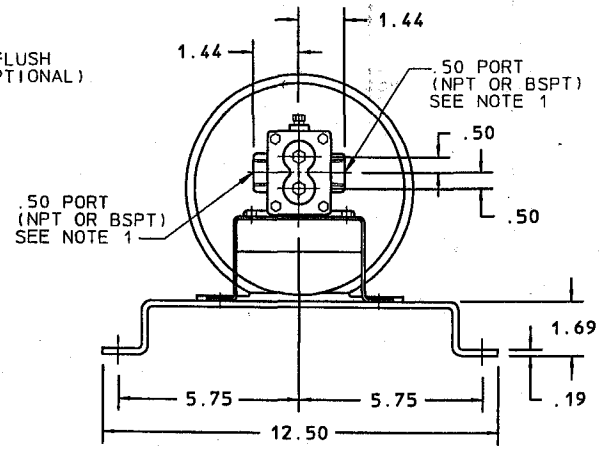
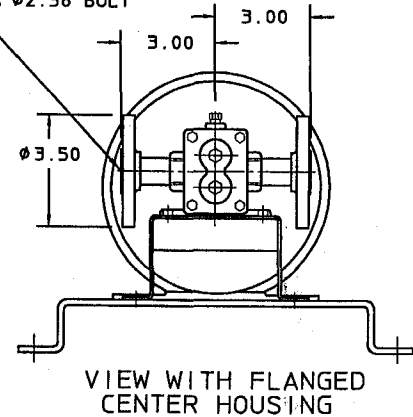
ECO
PULSAFEEDER
A Unit of DECK Corporation

ALL DIMENSIONS ARE IN INCHES

GA4 SERIES MOUNTING
ON BASE PLATE



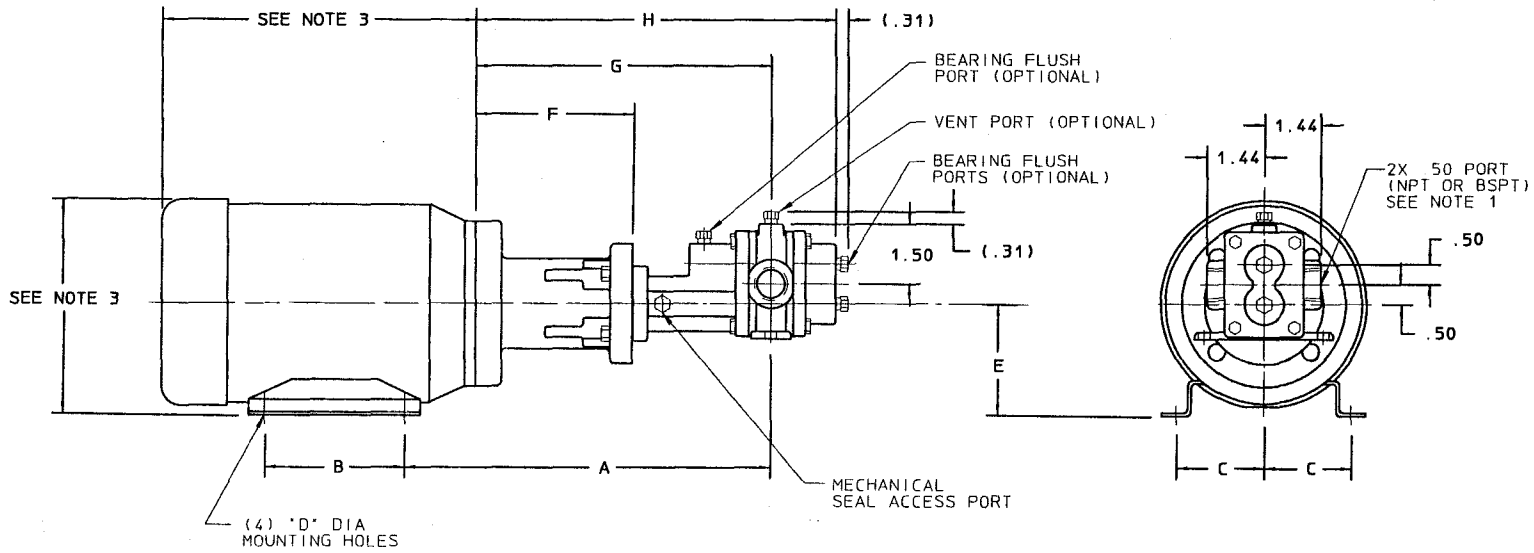
PORT CONNECTIONS
.50-150LB RF FLANGE
WITH 4X Ø.62 BOLT HOLES
LOCATED ON A Ø2.38 BOLT
CIRCLE.



PUMP SERIES	DIMENSIONS			MOTOR INFO.	
	A	B	C	FRAME	D
GA4	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.

REF	REVISION UPDATE	DATE	SECTION/PAGE	EFFECTIVE	SUPERSEDES	NEW	DWN BY:	DATE:	SD-2899
			C/GC4/L227	10/14/98			PEH	10/21/98	



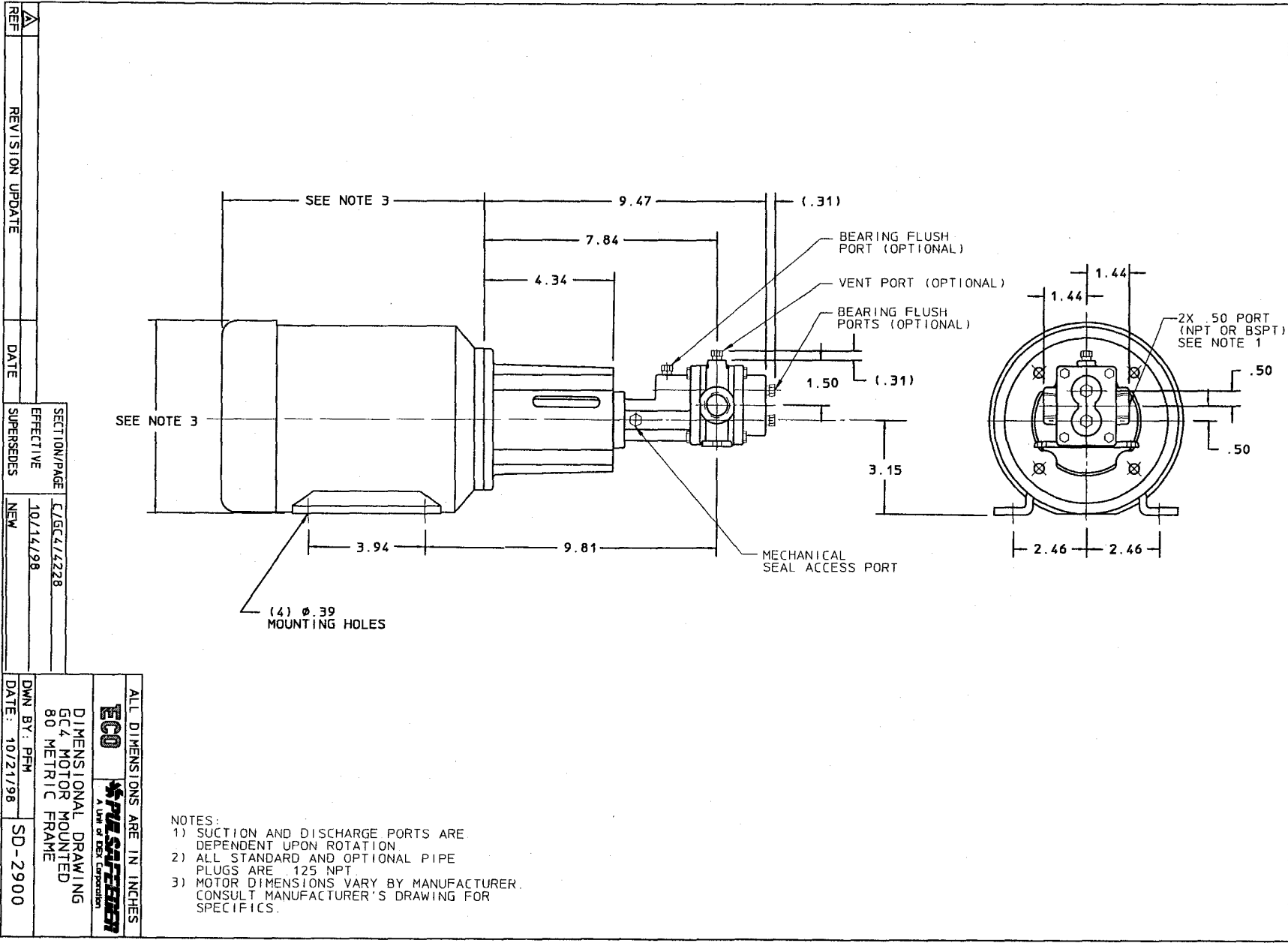
MOTOR FRAME	A	B	C	D	E	F	G	H
63C	8.76	3.15	1.97	.28	2.48	3.69	7.19	8.81
71C	9.24	3.54	2.20	.28	2.80	3.97	7.47	9.09

- ALL DIMENSIONS ARE IN INCHES
- 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.

ECO **W. P. SAFER**
A Unit of Dex Corporation

DIMENSIONAL DRAWING
G4 MOTOR MOUNTED
63, 71 METRIC FRAME

DWN BY: PEH
DATE: 10/21/98



- 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.

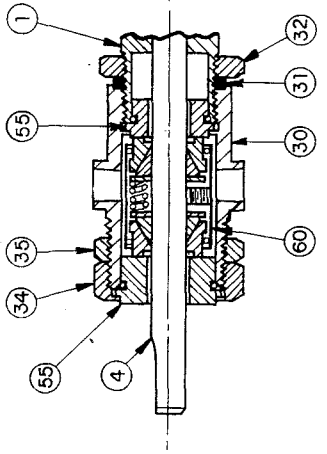
REF	REVISION UPDATE	DATE	SECTION/PAGE	EFFECTIVE	SUPERSEDES
			E/GC4/228	10/14/98	NEW
<p>ALL DIMENSIONS ARE IN INCHES</p> <p>ECO PULSAR A Unit of Rex Corporation</p> <p>DIMENSIONAL DRAWING GC4 MOTOR MOUNTED 80 METRIC FRAME</p> <p>DWN BY: PFH DATE: 10/21/98</p> <p>SD-2900</p>					

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
59	SEAL SEAT W/O-RING G2, 4, 6, 8
60	PIN, PUMP END SEAT
62	SEAL HEAD ASSEMBLY
63	PLUG, 1/8" NPT
63	PLUG, 1/4" NPT

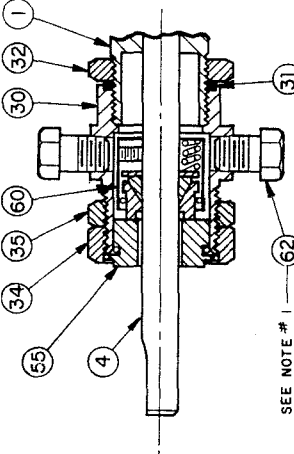
SECTION / PAGE
C / 4202

EFFECTIVE
02-01-96

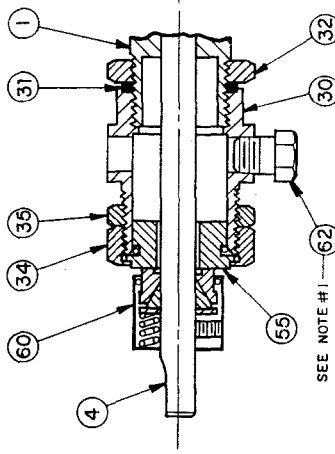
SUPERSEDES
01-01-95



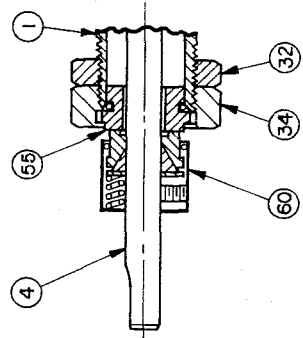
DOUBLE INTERNAL SEAL
A6, G2, G4, G6, G8



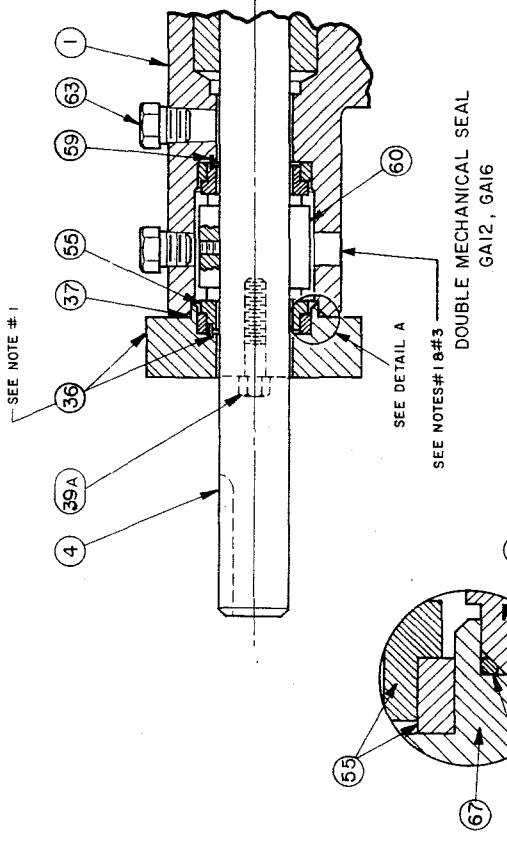
SINGLE INTERNAL SEAL
A6, G2, G4, G6, G8



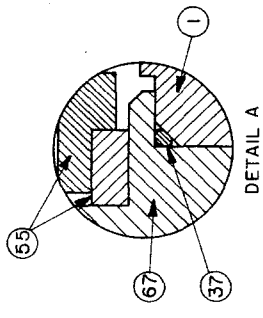
EXTERNAL SEAL FOR VACUUM SERVICE
G2, G4, G6, G8



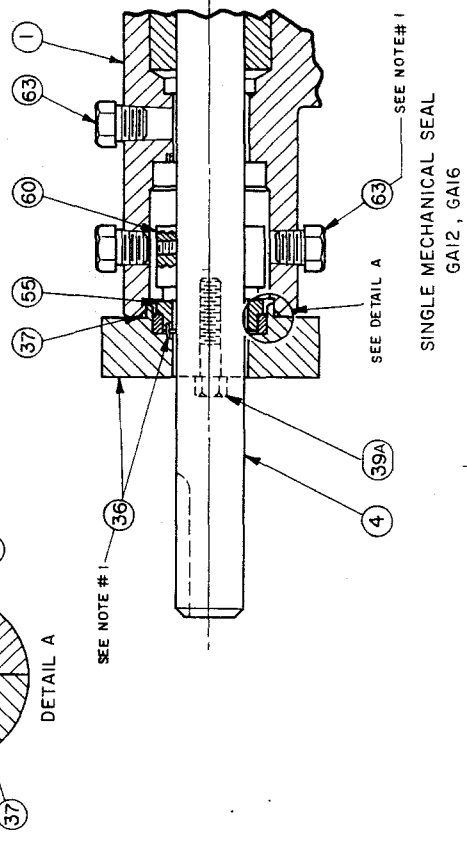
SINGLE EXTERNAL SEAL
A6, G2, G4, G6, G8



DOUBLE MECHANICAL SEAL
GA12, GA16



DETAIL A



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, ABOVE PUMP DISCHARGE PRESSURE, FLUID TEMPERATURE & FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 160°F IN SEAL HOUSING.

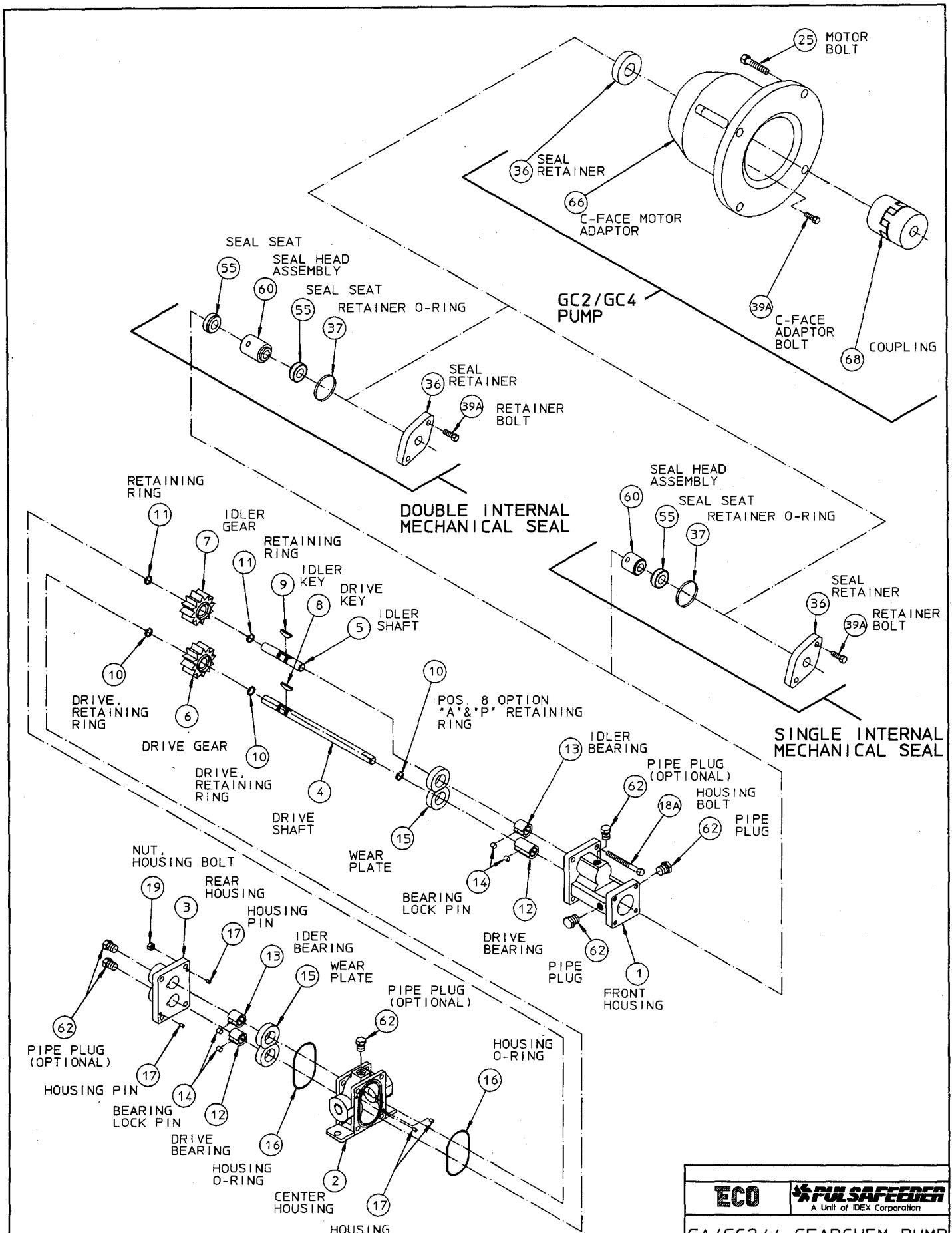
ECO **Pulsafeeder, Inc.**
ROCHESTER, NY USA

MECHANICAL SEAL ARRANGEMENTS
FOR GEARCHEM/ROTARY PUMPS

DWN BY: KRY
DATE: 6-19-85

8/95 B REM NIPPLE
7/91 A UPDATED ITEM NUMBERS

SD-2652



ECO **PULSAFEEDER**
A Unit of IDEX Corporation

**GA/GC2/4 GEARCHEM PUMP
EXPLODED VIEW**

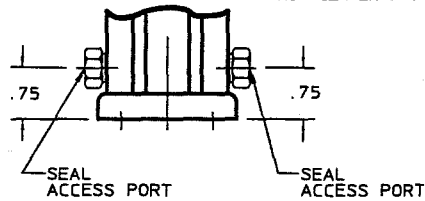
SECTION/PAGE	C/GA4/GC4/4220
EFFECTIVE	12/01/97
SUPERSEDES	NEW

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

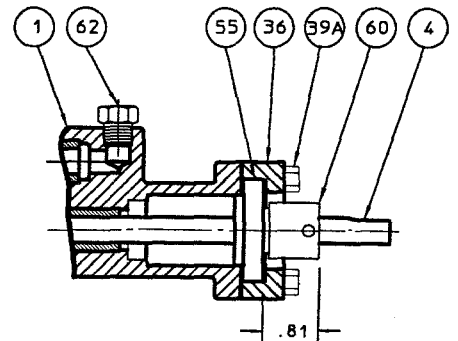
REF	REVISION UPDATE	DATE
-----	-----------------	------

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

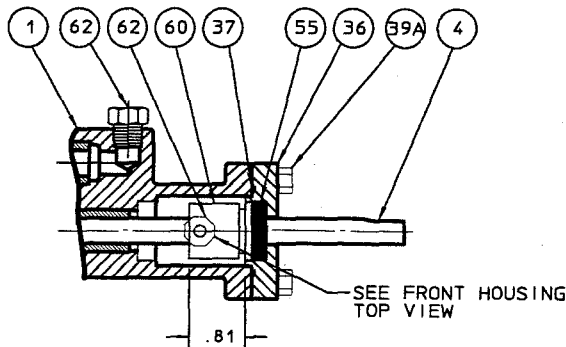
NOTE: FOR CODE E USE EITHER PORT. (SETScrew IS NOT CENTERED IN PORT)



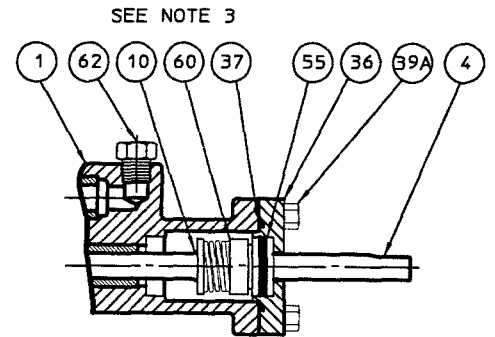
FRONT HOUSING TOP VIEW



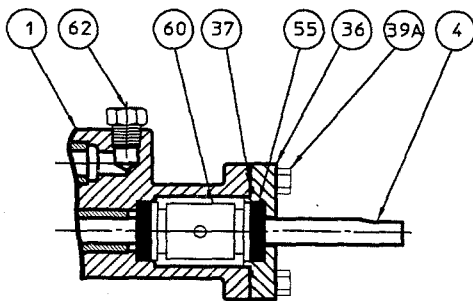
EXTERNAL MECH. SEAL CODE V,W



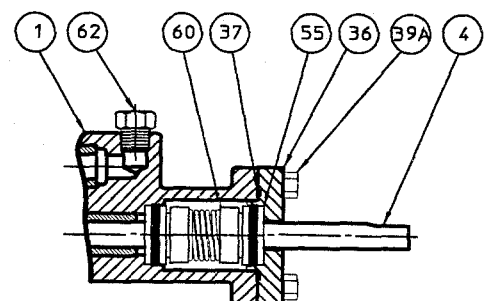
(CENTER SETSCREWS IN PORT OPENING)
SINGLE MECH. SEAL CODE Q,U



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 B SEAL OPTION "A" & "P".

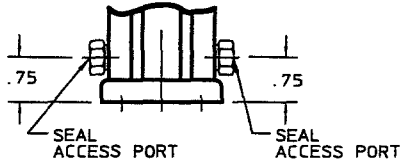
▲	UPDATED PICTORIALLY	10/14/98
REF	REVISION UPDATE	DATE

SECTION/PAGE	C/GA4/4221
EFFECTIVE	10/14/98
SUPERSEDES	12/01/97

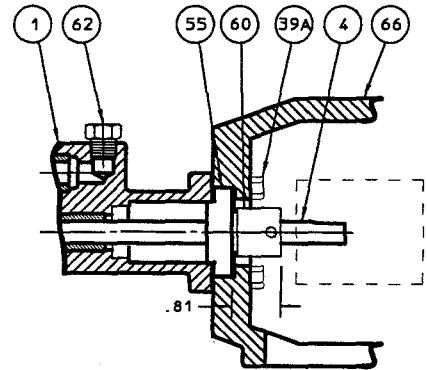
ALL DIMENSIONS ARE IN INCHES	
ECO	PULSAFEEDER A Unit of IDEX Corporation
GA2/GA4 GEARCHEM PUMP SEAL ARRANGEMENTS CROSS SECTIONAL VIEWS	
DWN BY: PFM	SD-2849
DATE: 04/15/97	

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)

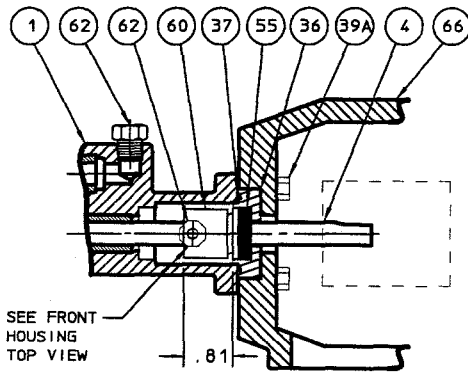


FRONT HOUSING TOP VIEW

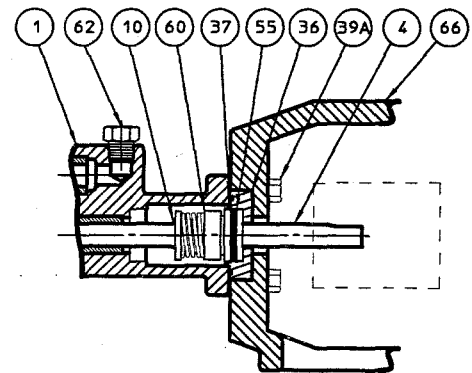


EXTERNAL MECH. SEAL CODE V,W

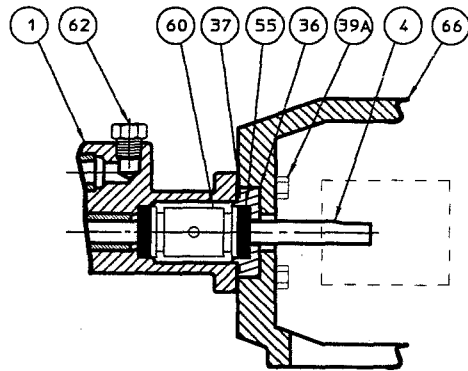
SEE NOTE 3



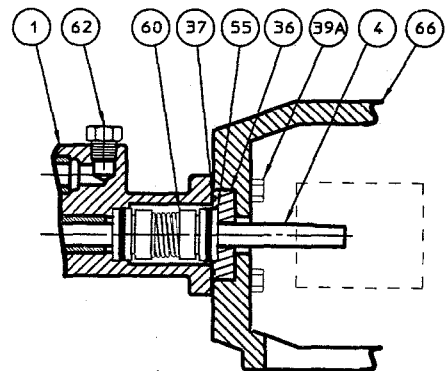
SINGLE MECH. SEAL CODE Q,U



SINGLE MECH. SEAL CODE A,P



DOUBLE MECH. SEAL CODE E



DOUBLE MECH. SEAL CODE C

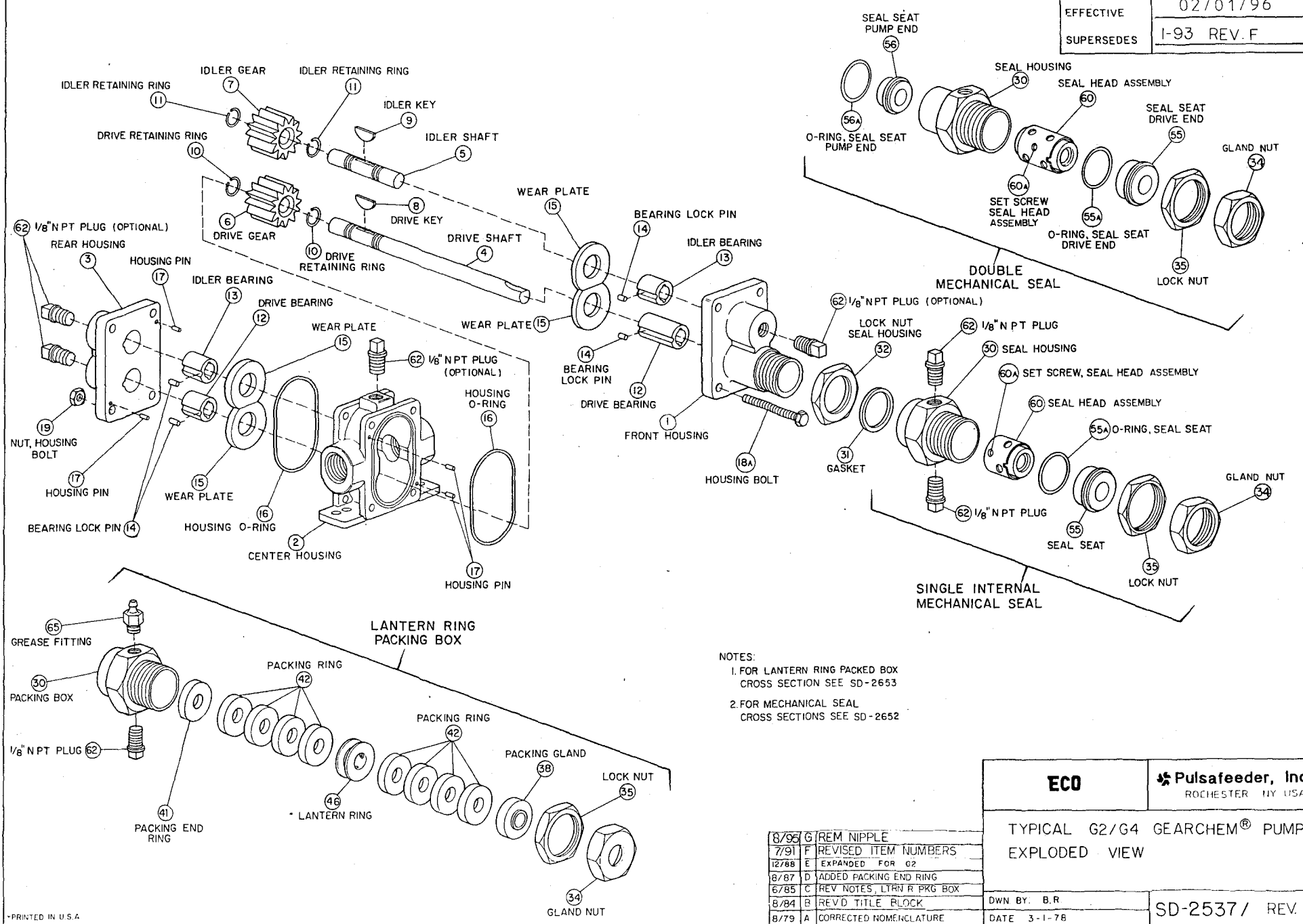
NOTES:

- 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	
ECO	PULSAFEEDER A Unit of IDEX Corporation
GC2/GC4 GEARCHEM PUMP SEAL ARRANGEMENTS CROSS SECTIONAL VIEWS	
DWN BY: PFM	SD-2854
DATE: 05/01/97	

SECTION/PAGE	C/GC4/4222
EFFECTIVE	10/14/98
SUPERSEDES	12/01/97
UPDATED PICTORIALY	10/14/98
REF	REVISION UPDATE DATE

SECTION/PAGE	c/4200
EFFECTIVE	02/01/96
SUPERSEDES	I-93 REV. F

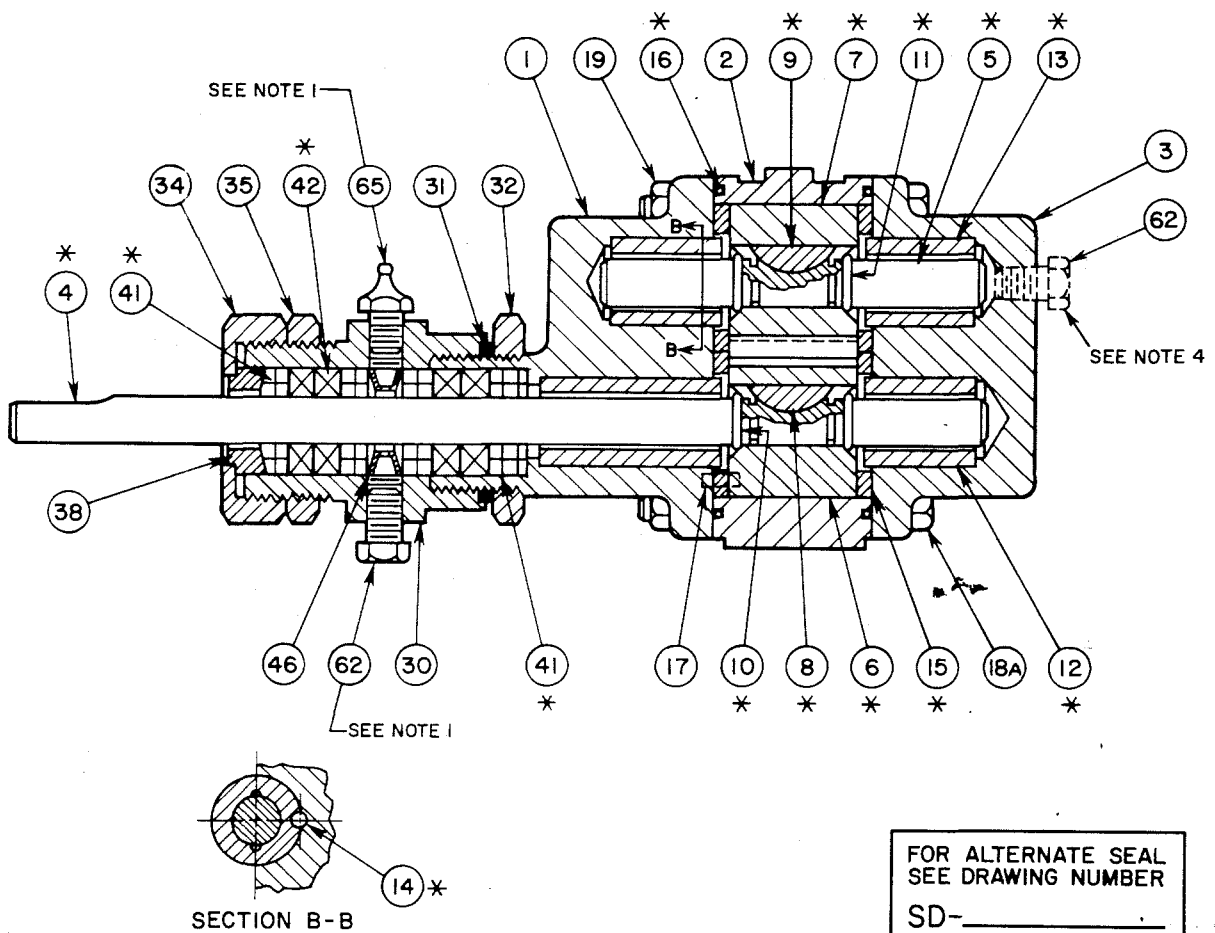


- NOTES:
1. FOR LANTERN RING PACKED BOX CROSS SECTION SEE SD-2653
 2. FOR MECHANICAL SEAL CROSS SECTIONS SEE SD-2652

ECO	Pulsafeeder, Inc. ROCHESTER NY USA
TYPICAL G2/G4 GEARCHEM® PUMP EXPLODED VIEW	
8/95 G REM NIPPLE	DWN BY: B.R
7/91 F REVISED ITEM NUMBERS	DATE 3-1-78
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 REVD TITLE BLOCK	
8/79 A CORRECTED NOMENCLATURE	
SD-2537/ REV. G	

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		

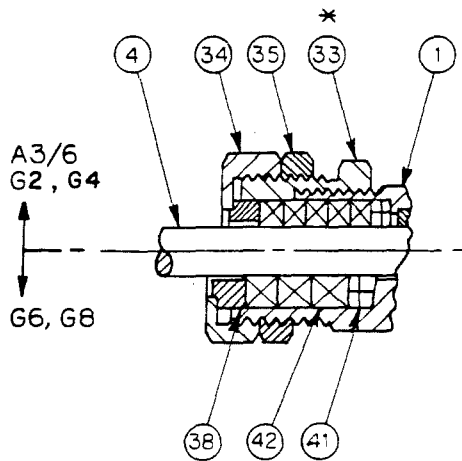
SECTION/PAGE	C/4201
EFFECTIVE	01-01-93
SUPERSEDES	01-26-81



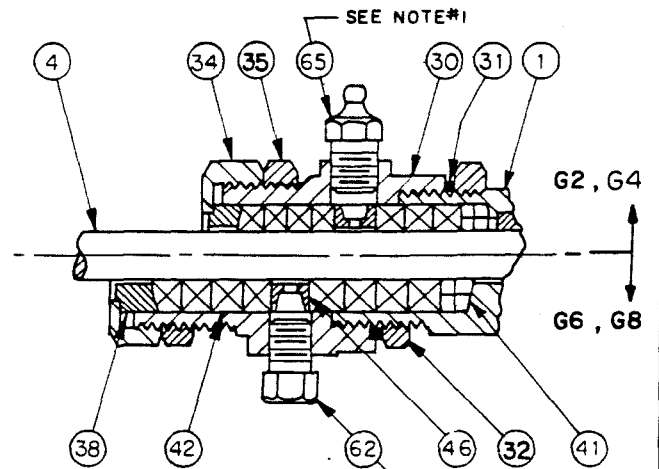
- NOTES: 1. PACKING BOX SHOWN 90° OUT OF POSITION.
 2. * RECOMMENDED SPARE PARTS, AVAILABLE AS OVERHAUL KIT.
 3. MECHANICAL SEALS ARE AVAILABLE.
 4. 1/8" NPT FLUSH PORTS ARE AN AVAILABLE OPTION.

ECO	Pulsafeeder, Inc ROCHESTER, NY USA
G4 MODEL GEARCHEM® PUMP CROSS SECTION WITH LANTERN RING PACKING BOX	
DWN. BY: B.R.	SD-2602
DATE: 10-1-79	

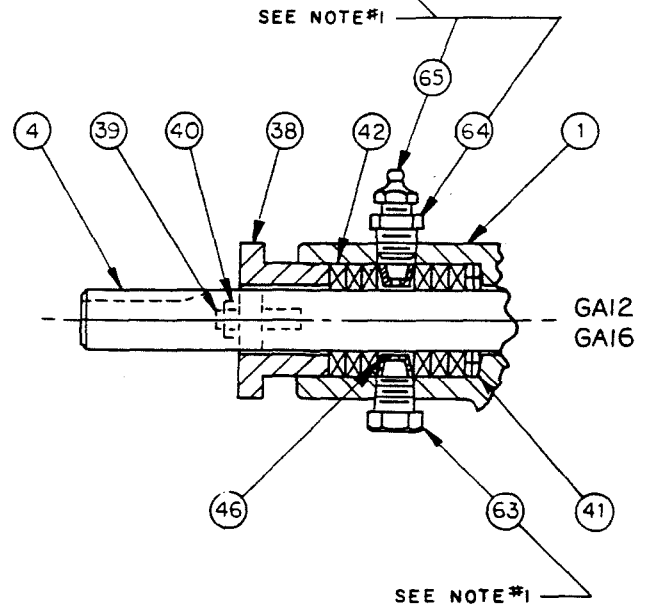
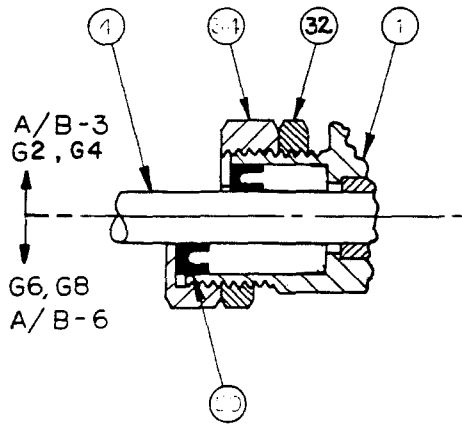
STANDARD STUFFING BOX



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	DATE	04/04/01
	REVISION UPDATE	DATE	

SECTION/PAGE	C/G2/4-203
EFFECTIVE	04/03/01
SUPSEDES	12/10/97

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

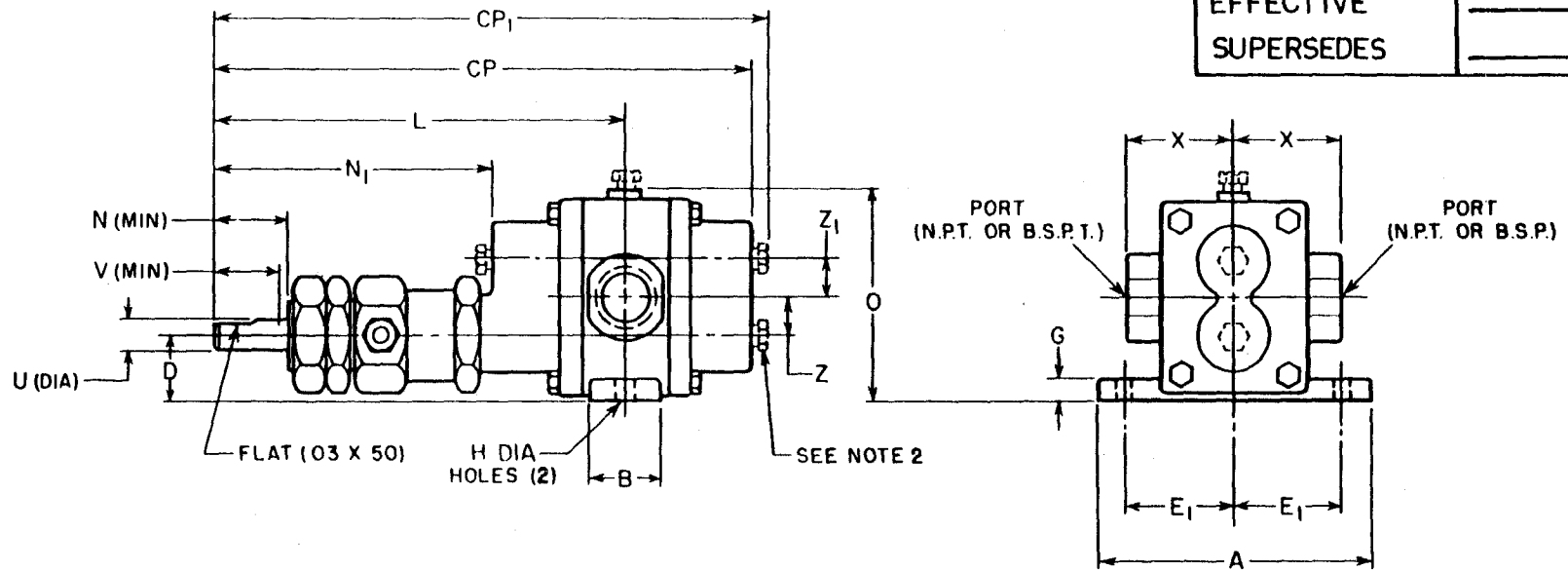
△	REMOVED ITEM NUMBER 53	/ /
REF	REVISION UPDATE	DATE

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

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

SECTION / PAGE
EFFECTIVE
SUPERSEDES

C 4204
12/20/85



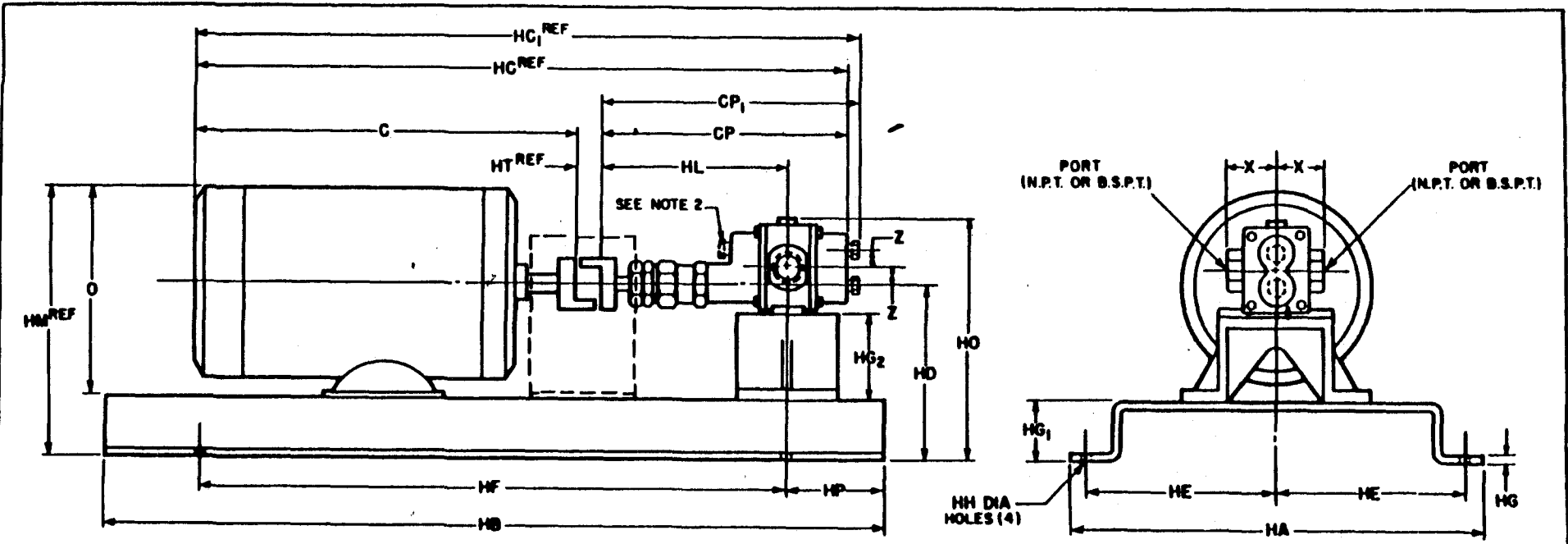
- NOTES: 1. SUCTION AND DISCHARGE PORTS DEPENDENT UPON DIRECTION OF ROTATION.
2. BEARING FLUSH PLUGS (1/8 N.P.T.) OPTIONAL.
3. VENT PLUG (1/8 N.P.T.) OPTIONAL.

PORTS	DIMENSIONS																	
	INCHES MM																	
	A	B	D		E ₁	G	H	O	U	X	Z	Z ₁	CP	CP ₁	L	N	N ₁	V
1/2	3 1/2	1	7/8		1 1/2	3/16	17/64	2 7/8	3/8	1 7/16	1/2	1/2	7 7/16	8	5 11/16	7/8	3 5/16	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

ECO	PULSAFEEDER
G4 SERIES UNMOUNTED PUMP	
DWN BY:	SD-250I
DATE	

CUSTOMER _____
ECO ORDER NO. _____ PUMP MODEL _____
CERTIFIED BY _____

P.O. NO. _____
ITEM NO. _____
DATE _____



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

DIMENSIONS																						
INCHES																						
PORTS	C	CP	CP ₁	HA	HB	HC	HC ₁	HD	HE	HF	HG	HG ₁	HG ₂	HH	HL	HM	HO	HP	HT	O	X	Z
1/2		7 7/16	8	12 1/2	24			5 3/16	5 3/8	18	7 3/16	1 1/16	2 3/8	1 3/32	5 3/16		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		36.5	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 PUMP CORPORATION
 SOUTH PLAINFIELD, N.J. U.S.A.

G4 SERIES
 MOUNTED ON BASE PLATE

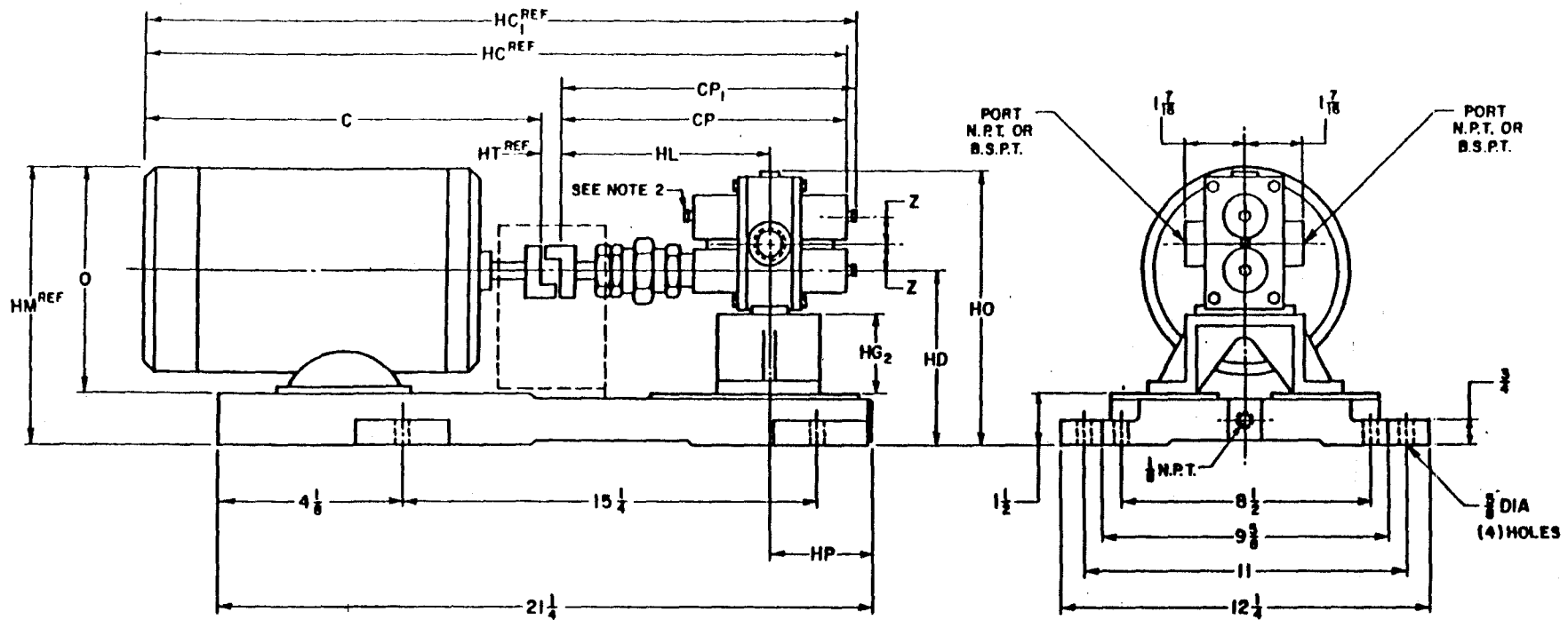
DWN BY: _____
 DATE _____

SD-2502

CUSTOMER _____ P.O. NO. _____

ECO ORDER NO. _____ PUMP MODEL NO. _____

CERTIFIED BY _____ DATE _____



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 ₁	HC	HC ₁	HD	HG ₂	HL	HM	HO	HP	HT	O	Z
1/2		7 1/16	8			5	2 5/8	5 1/16		6 13/16	3 9/16	3/4		1/2
		168.9	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													

ECO PUMP CORPORATION
SOUTH PLAINFIELD, N.J. U.S.A.

**G4 SERIES MOUNTED
ON DRIP RIM BASE**

CUSTOMER _____
ECO ORDER NO. _____ PUMP MODEL NO. _____
CERTIFIED BY _____

P.O. NO. _____
ITEM NO. _____
DATE _____

OWN BY: _____
DATE _____

SD-2535