

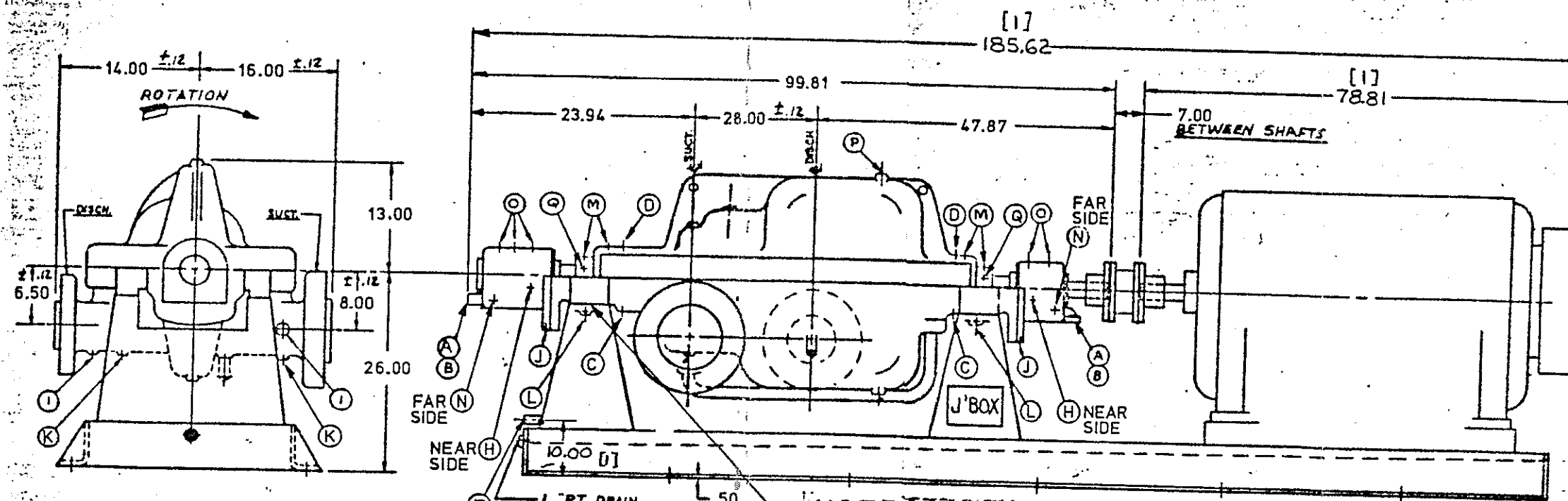
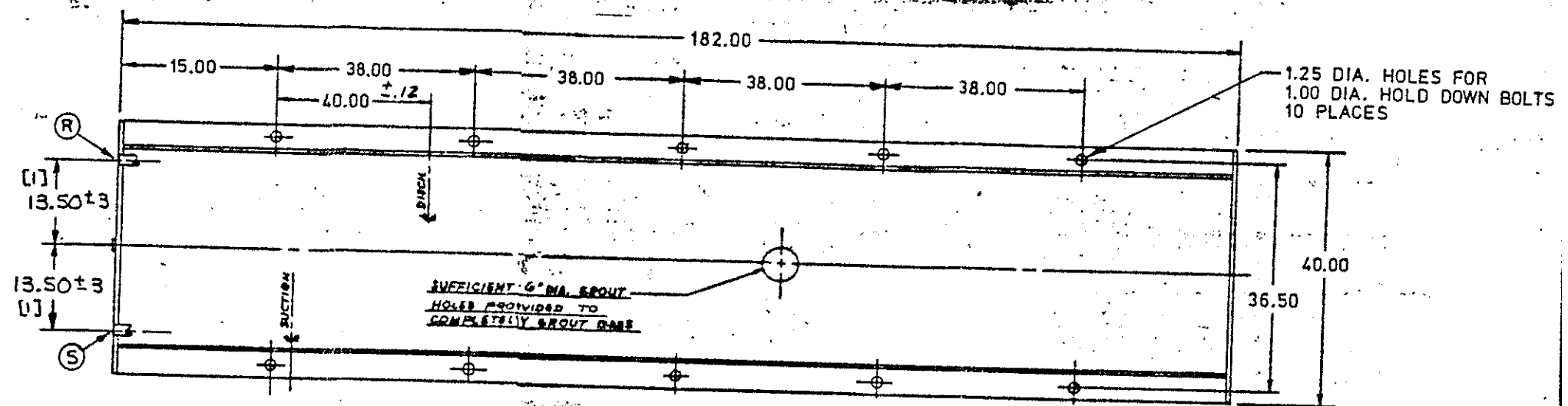
Bingham-Williams Company
 Bingham-Williams Ltd.

FORLAND, OR.
 SHERBORNE, LA.
 WINN-DIXIE, S.C.

12 STAGE - DOUBLE SUCTION DOUBLE VOLUTE
 PUMP - BINGHAM Type "MSD-D"

B43234

ITEM	LEGEND	PIPE TAP SIZE
A	BEARING HOUSING COOLING INLET	▲ 3/4
B	BEARING HOUSING COOL'G. OUTLET	▲ 3/4
C	STUFFING BOX COOLING INLET	● 1/2
D	STUFFING BOX COOLING OUTLET	● 1/2
E	SEALING LIQUID INLET	
F	SEALING LIQUID OUTLET	
G	THERMOWELL CONN. CASE	
H	THERMOWELL CONN. BRGS.	● 1/2
I	GAGE CONNECTION	▲ 3/4
J	OIL DRAIN	▲ 3/4
K	PUMP DRAIN	▲ 3/4
L	BEARING BRACKET DRAIN	— 1-1/2
M	FLUSHING LIQUID	● 1/2
N	CONSTANT LEVEL OILER	● 1/4
O	OIL INSPECTION HOLE COVER	■ —
P	PUMP VENT	▲ 3/4
Q	QUENCH. IN AND OUT	▲ 1/2
R	COOLING WATER - INLET	■ 1-1/2
S	COOLING WATER - OUTLET	■ 1-1/2



NOTE - MINIMUM FLOW BY-PASS
 AN UNOBSTRUCTED BY-PASS MUST BE PROVIDED FROM THIS DISCHARGE TO THE PRIMARY SUCTION SOURCE TO PERMIT A FLOW OF 135 GPM MINIMUM CUSTOMER TO PROVIDE FLOW SENSITIVE VALVE TO CLOSE BY-PASS LINE AT DESIGN CAPACITY

NOTE:
 WITH BASE GROUTED TO FOUNDATION AND PUMP FINAL ALIGNED TO DRIVER, POSITION ALIGNING KEYS USING ".002" THICK SHIM BETWEEN KEY AND FOOT. TIGHTEN BOLT, THEN DRILL AND REAM ALIGNING KEY TO BASE PAD FOR TAPER PINS. REMOVE .002 SHIM AFTER REAMING AND BEFORE INSTALLING TAPER PINS.

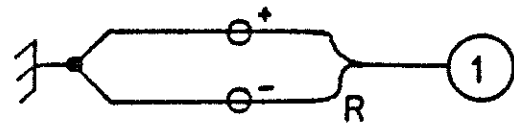
UNIT DATA	
PUMP SPECIFICATIONS	
SIZE and TYPE:	3X6X9E MSD-D
NO. STAGES:	12 RPM. 3560
ROTATION:	CCW
DISCHARGE FLG. 3"	900 #ANSI R.F.
SUCTION FLANGE:	6" 900 #ANSI R.F.
MECH. SEAL:	SEALOL
TYPE:	CODE:
PACKING:	
NO. PINS:	SIZE:
ASSEMBLY:	
COUPLING	
TYPE:	THOMAS SER 71 SIZE: 375
GUARD:	ALUMINUM

DRIVER SPECIFICATIONS	
MOTOR:	LOUIS-ALLIS
FURNISHED BY:	BINGHAM
FRAME:	7110BS
HP:	700 SPEED: 3600 RPM
VOLTAGE:	2400VOLT, 3 PHASE, 60 CYCLE
DIMEN. PRINT:	7-J44607-X
TYPE:	
FURNISHED BY:	
DIMEN. PRINT:	

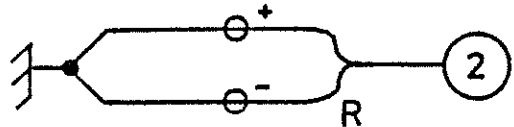
WEIGHTS, lb.	
PUMP:	5000
BASE:	2300
DRIVER:	4500
TOTAL:	11800 APPROX.

CUSTOMER DATA	
PURCHASER:	
PURCHASE ORDER NO.:	LA29306
ITEM NO.:	
SERVICE:	BOILER FEED
PUMP SIZE:	3X6X9E MSD-D
and TYPE:	

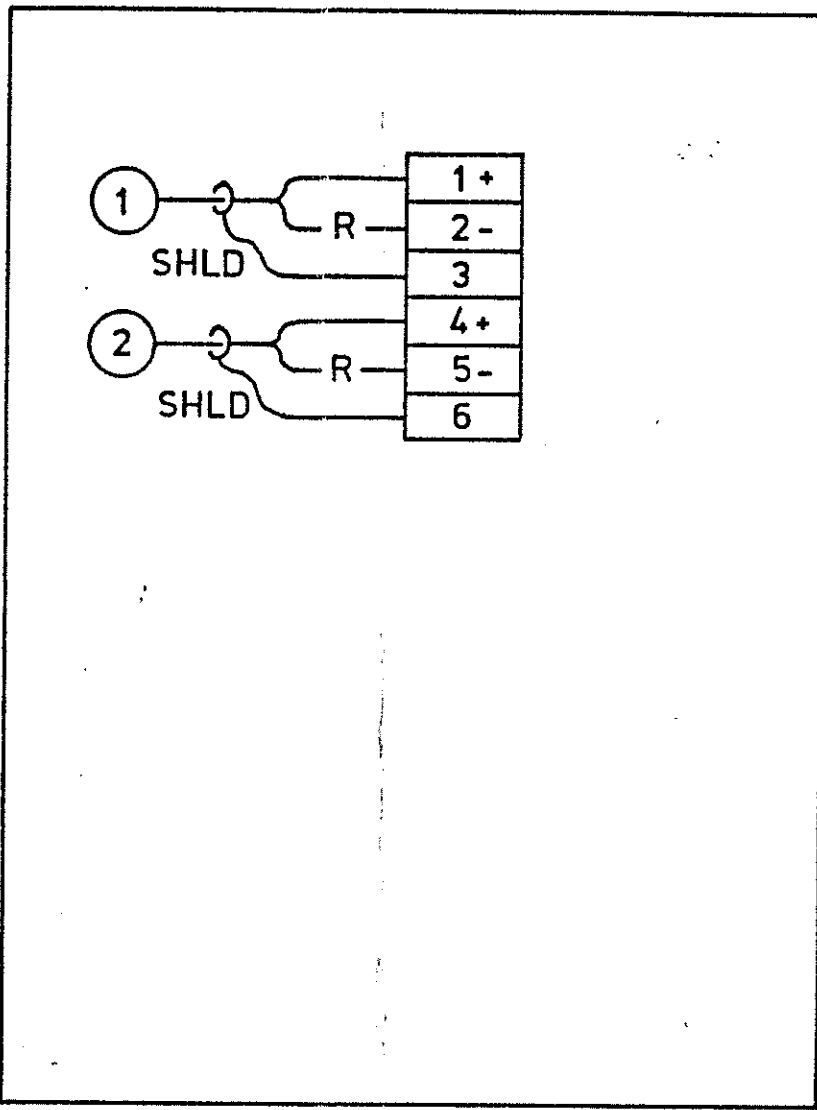
CAUTION! CAREFULLY CHECK ALIGNMENT BEFORE STARTING UNIT. ALL HOLES IN FLANGES STRAIGHTENED. UNIT SHOULD BE RELIEVED OF EXCESS PUMPING STRAINS.	
WAS 176.56 LG; 63.75 MTR LENGTH, ADDED J'BOX; ADDED MTR DRIVE	CERTIFIED FOR INSTALLATION
[1] BY DRT PKC. DATE 4/26/88	PRELIMINARY-CERTIFIED FOR NEEDLE & MOUNTING LOCATIONS ONLY
[3] BY DATE	PRELIMINARY-FOR REVIEW ONLY
[2] BY DATE	
[1] BY DATE	
APPROVED BY: DRT PKC. DATE 4/26/88	APPROVED BY: SDP DATE 4/26/88
Bingham-Willamette Company	PORTLAND, OR SHREVEPORT, LA
Bingham-Willamette Ltd.	VANCOUVER, B.C.
OUTLINE DIMENSION DRAWING	REV 1
D-1C255-02	



PUMP DRIVE END JOURNAL BRG



PUMP THRUST END JOURNAL BRG



REV.	REVISION DESCRIPTION	INIT.	APPD.	DATE
[A]				
[B]				

- ASSY NOTES:
- 1) EXTENSION CABLE SHALL BE 16 AWG SINGLE TWISTED PAIR WITH SHIELD.
 - 2) WHEN STRANDED WIRE IS USED, FORKED LUGS OF THE SAME MATL AS THE T/C SHALL BE USED.
 - 3) TERMINAL BOX SHALL BE NEMA 4.
 - 4) ALL CONDUCTORS SHALL BE MARKED AT BOTH ENDS WITH WIRE NO. AS SHOWN. (EXCEPT SHIELDS)
 - 5) ALL CONDUIT SHALL BE RIGID METAL OR LIQUID TIGHT FLELIBLE CONDUIT.
 - 6) ALL THERMOCOUPLES ARE ~~UN~~ GROUND ~~ED~~ TYPE.

UNLESS OTHERWISE SPECIFIED DIMENSIONS NOT BRACKETED ARE IN INCH DIMENSIONS IN BRACKETS [] ARE IN METRIC DIMENSIONS

TYPE OF DIMEN.	INCH SYSTEM		METRIC SYSTEM	
	MACHINING	FABRICATION	MACHINING	FABRICATION
ANGULAR	± 0.5°	± 1.0°	± 0.5°	± 1.0°
LINEAR	± 0.02 in	± 0.12 in	± 0.5 mm	± 3 mm

THERMOCOUPLE WIRE INSULATION COLOR CODE			
THERMOCOUPLE WIRE	POSITIVE (+)	NEGATIVE (-)	OUTER
PLAT.-RHODIUM, PLAT. (R, S)	COPPER, (BLACK)	◆II ALLOY (RED)	GREEN
IRON-CONSTANTAN (J)	IRON (WHITE)	CONSTANTAN (RED)	BLACK
CHROMEL-ALUMEL (K)	CHROMEL (YELLOW)	ALUMEL (RED)	YELLOW
COPPER-CONSTANTAN (38) (T)	COPPER (BLUE)	CONSTANTAN (RED)	BLUE
CHROMEL-CONSTANTAN (E)	CHROMEL (PURPLE)	CONSTANTAN (RED)	PURPLE

CUSTOMER DATA	
USER:	GENSTAR
INSTALLATION AT:	
PURCHASER:	
P.O. NO.:	LA29306
ITEM NO.:	
PUMP S.O. NO.:	1C255/6

Bingham-Willamette Company Bingham-Willamette Ltd.	PORTLAND, OR. SHREVEPORT, LA.	PATT. NO.	WIRING DIAGRAM, THERMOCOUPLES	DR. SDP	APPD. DRT	DATE: 10/22/86	SCALE: NONE	REV. B-1C255-06
	VANCOUVER, B.C. CAMBRIDGE, ONT.	REF. ECN 1791-04						