

06018
CENTRAL ILLINOIS
ETHANOL PLANT
CANTON, ILLINOIS

CROSS REFERENCE FILE FORM

EQUIPMENT TAG NUMBER:	PC-8201
INFORMATION/DRAWINGS FILED WITH TAG NUMBER:	PC-2101



SUPPLIER DOCUMENTS INDEX

TO: LURGI PSI INC
 ATTN: JAMICA MILLER
 1790 KIRBY PARKWAY
 MEMPHIS, TN 38138

SERIAL NO.: 7297500
 CUSTOMER: LURGI PSI INC
 P.O. NO.: 6018-70750 / ORDER: 566188
 PUMP ITEM NO.: PC-8201
 SERVICE: 200 PROOF PRODUCT PUMP
 END USER : CENTRAL ILLINOIS ENERGY, L.L.C.
 PROJECT# : 2003-01
 LOCATION : CANTON, ILLINOIS

SUPPLIER INFORMATION : GOWDS PUMPS, INC.
 240 PAUL STREET
 SENECA FALLS, NY, 13148
 CONTRACT ADMINISTRATOR: Carl Sangiacomo
 CONTRACT MANAGER: Dave Sprull
 DATE: 12/06/06
 MAILED VIA: REGULAR MAIL

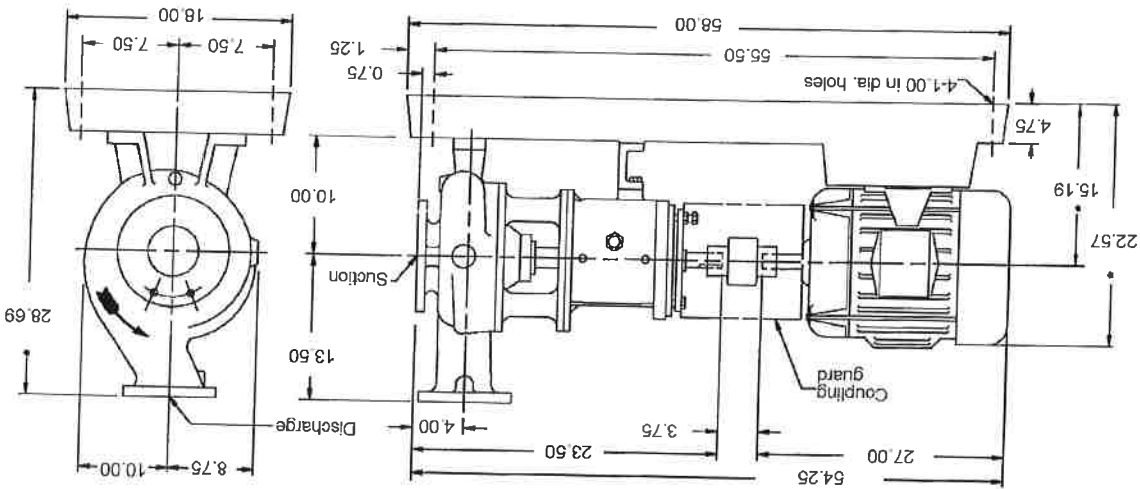
SUPPLIER DOCUMENT TITLE	SUPPLIER DOC.# / REVISION NO.	REVISE QTY.	FINAL QTY.	DATE APPROVED	SUB#	DATE	SUBMIT DATE	RETURN DATE	REF. CODE
Pump Documents Required									
* Pump Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Tapped Openings			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Pump CDS Curve			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Cross Sectional			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* 3196 Pump Instruction Manuals			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Seal Documents Required									
* Seal Drawing			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Documents Required									
* Motor Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Wiring Diagram			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Electrical/Performance			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Instructions-(Reliance)			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Instructions-(Reliance)			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Q.A. Documents Required									
* Comp. Hydrostatic Test Report			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	

(*) Denotes Documents in this Submittal.
 Your complete approval is required before order is scheduled and released to manufacturing. Please forward approval by / / .
 The above literature is for your information and records. It does not require your approval. Retain literature as your final distribution.
 Note: Any Changes may affect Quoted Price and Shipping Details.

FIELD FILE

CIE: ETHANOL
 Canton, Illinois
RECEIVED DEC 13 2006

File: **PC-8201**
0180013035



Pump specification

SUCT. FLANGE SIZE 6"	DILLING ANSI 150#	FACING FF	FINISH SERATED
DISCH. FLANGE SIZE 4"	DILLING ANSI 150#	FACING FF	FINISH SERATED
PUMP ROTATION (LOOKING AT PUMP FROM MOTOR)	CW		
TYPE OF LUBRICATION	FLOOD OIL		
TYPE OF STUFFING BOX	TAPER BORE PLUS WITH AXIAL RIBS		
TYPE OF SEALING	MECHANICAL SEAL		

Weights and Measurements

PUMP	425.0 LB
MOTOR/CPLG	405.0/11.0 LB
BASEPLATE	205.0 LB
TOTAL	1,046.0 LB
GR. VOLUME W/BOX	30.0 FT ³
GR. WEIGHT W/BOX	1,196.0 LB

Notes and References

- MTR DIMENSIONS ARE APPROXIMATE
- INSTALL FOUNDATION BOLTS IN PIPE SLEEVES
- ALLOW FLOW FROM 0.75 TO 1.50in. FOR GROUTING. SEE INSTRUCTION BOOK FOR DETAILS.
- Tolerance is +0 -0.5
- SUCTION FLANGE HAS 8-3/4-10 UNC TAPPED HOLES

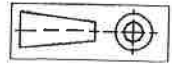
Motor specification

MOTOR BY	PUMP MFG	MOUNT BY	PUMP MFG	MFG.	RELIANCE
FRAME	286T	POWER	30.0 hp	RPM	1800
PHASE	3	FREQUENCY	60 HZ	VOLTS	460
INSULATION	F	S.F.	1.15		
ENCLOSURE	TEFC CLASS 1 DIV 2 (FI GRP D) T3				

Auxiliary specification

MOTOR BY	PUMP MFG	CPLG TYPE	REXNORD OMEGA REX ELASTOMER-ES-10 (STAND)
CPL GUARD BY	PUMP MFG	CPLG GUARD MATL	CARBON STEEL
BASEPLATE	CAST IRON CAMBER TOP D00058A (*)		
MECH. SEAL	JOHN CRANE - 5610Q-X(18)F(55)1X(18)O(58)H		

(*) Baseplate is sized to accommodate 324T/324TS/326T/326TS future motor size



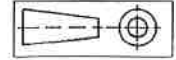
Andrew Young
DIMENSIONS ARE CERTIFIED FOR CONSTRUCTION BY:
DATE December 6, 2006

Customer: LURGI PSI INC
Goulds Serial No: 729F500
Customer P.O. No: 6018-70750
Item No: PC-8201
Service: 200 PROOF PRODUCT PUMP
End User: CENTRAL ILLINOIS ENERGY, L.L.C.
Project#: 2003-01
Location: CANTON, ILLINOIS

DRAWING NO A7295000
Rev. 0 Date: December 6, 2006
SUPERSEDES ANY PREVIOUS DRAWINGS

All dimensions are in inches.
Drawing is not to scale
Weights (lbs) are approximate

All dimensions are in inches.
Drawing is not to scale



SUPERSEDES ANY PREVIOUS DRAWINGS

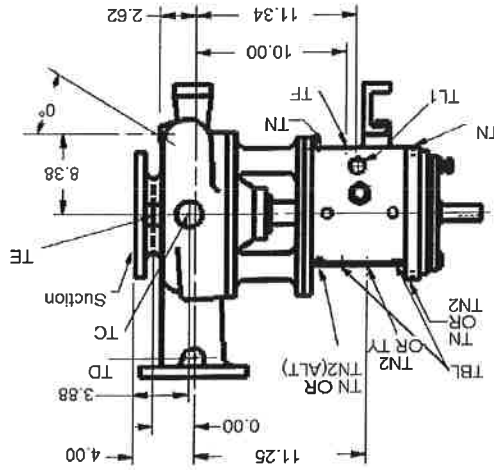
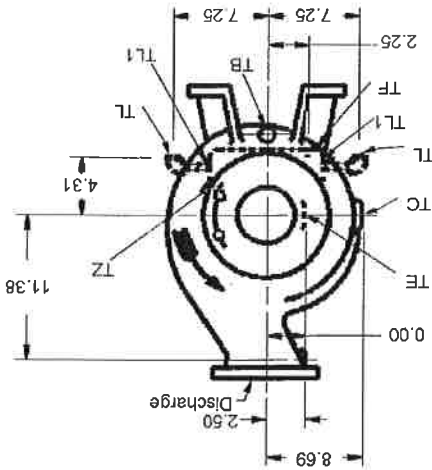
DRAWING NO A729500T **Rev. 0** Date: December 6, 2006

Customer: LURGI PSI INC
Goulds Serial No: 729F500
Customer P.O. No: 6018-70750
Item No: PC-8201
Service: 200 FROOF PRODUCT PUMP
End User: CENTRAL ILLINOIS ENERGY, L.L.C.
Project#: 2003-01
Location: CANTON, ILLINOIS

Andrew Young

DATE December 6, 2006

DIMENSIONS ARE CERTIFIED FOR CONSTRUCTION BY:



NO.	SIZE	QTY.	PURPOSE	YES/NO	NO.	SIZE	QTY.	PURPOSE	YES/NO
TL	1/2	2	FRAME COOLING CONNECTION	NO	TBL	1/4	2	VIB./TEMP. CONN.	YES
TF	3/8	1	BEARING FRAME DRAIN	YES	TZ	1/4	1	BOTTLE OILER CONN.	YES
TE	3/8	1	SUCTION GAUGE CONNECTION	NO	TY	1/2	1	OIL FILL	YES
TD	3/8	1	DISCH. GAUGE CONNECTION	NO	TN2	1/4	2	OIL MIST INJECTION PORT	YES
TC	1/2	1	BY-PASS CONNECTION	NO	TN	1/4	4	GREASE FITTING	YES
TB	1/2	1	CASING DRAIN	YES	TL1	---	2	FRAME COOLER ACCESS	YES
FURNISHED					FURNISHED				

TAPPED OPENINGS MODEL 3196 MTX 4x6-13 A.N.S.I. NO. A80

GOULDS PUMPS TAPPED OPENINGS Model 3196 MTX Size 4x6-13



Goulds Pumps

CENTRIFUGAL PUMP CHARACTERISTICS

CDS 1786-6

RPM 1780

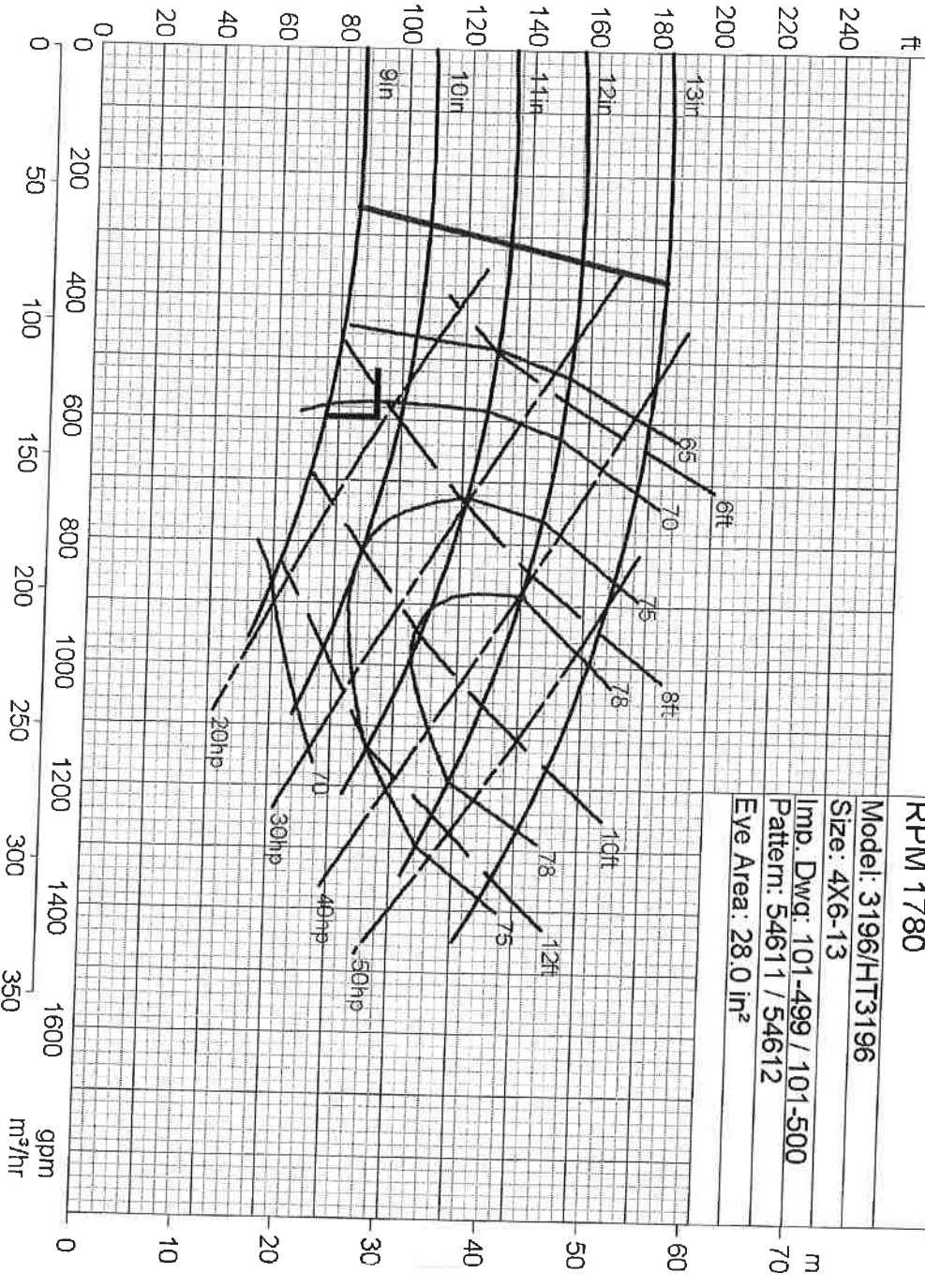
Model: 3196/HT3196

Size: 4X6-13

Imp. Dwg: 101-499 / 101-500

Pattern: 54611 / 54612

Eye Area: 28.0 in²

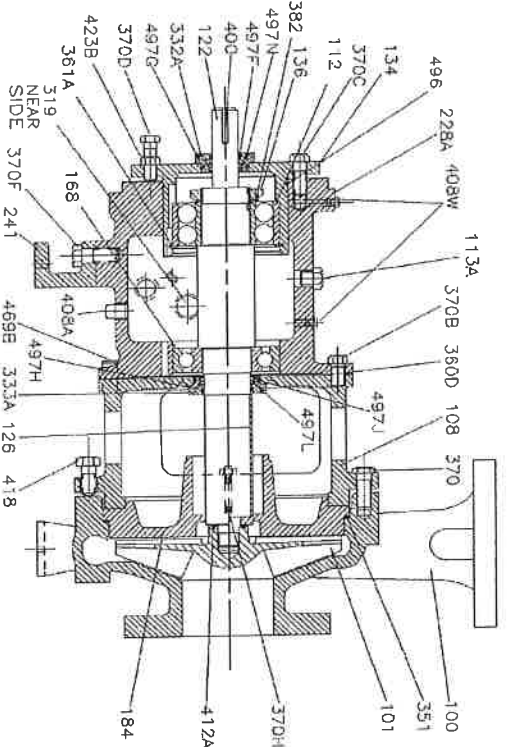


Rated Flow: 600.0 gpm
 Rated TDH: 93.0 ft
 Imp. Diam.: 9.7500 in
 Certified By: Andrew Young

Customer: LURGI PSI INC
 Goulds Serial No: 729F300
 Customer P. O. No: 6018-70750
 Item No: PC-8201
 Service: 200 PROOF PRODUCT PUMP
 End User: CENTRAL ILLINOIS ENERGY, L.L.C.
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FLOOD OIL LUBRICATION

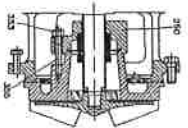


* Recommended spare parts
Items not illustrated

BILL OF MATERIAL

ITEM	QTY	PART NAME	MATERIAL	ASTM#
100	1	CASING W/DRN	DUCTILE IRON	DI 60 A395-88
101	1	IMPELLER W/O-RING	DUCTILE IRON	DI 60 A395-88
108	1	FRAME ADAPTER	DUCTILE IRON	DI 60 A536-94
112	1	PIPE PLUG OIL FILL	CAST IRON	A307 A276-91A
113A	1	SHAFT	CAST IRON	A48
122	1	BEARING HOUSING		
134	1	BEARING LOCK NUT		
136	1	BALL BEARING (IMBOARD)		
188	1	ST BOX COVER		
194	1	FRAM E OR Y BASE		
225A	1	FRAM E OR Y BASE		
319	1	FRAM E OR Y BASE		
351	1	LAB SEAL O/B	BRONZE	A395-88
354	1	LAB SEAL I/B	BRONZE	A48
359	1	CASE GASKET	NONWASH	
370	1	GLAND STUD		
370C	1	GLAND WASHER		
370D	1	HEX NUT (GLAND STUD)		
370H	1	NUT HEX (COVER TO ADAPT)		
370J	1	GLAND PLUG		
370K	1	GASKET ADAPTER		
370L	1	RETAINING RING BRG HSG		
370M	1	H CAP SCREW (CASE)	CARBON STEEL GR B	A307
370N	1	H CAP SCREW (FRAME-ADPTR)	CARBON STEEL GR B	A307
370O	1	H CAP SCREW (BRG HSG-FRM)	CARBON STEEL GR B	A307
370P	1	H CAP SCREW (FRM-FR FOOT)	CARBON STEEL GR B	A307
370Q	1	STUD (COVER)	CARBON STEEL GR B	A276-95
382	1	BEARING LOCKWASHER		
396	1	MECHANICAL SEAL (ORDERED SO END KEY (PLG))		
400	1	PIPE PLUG (OIL DRAIN)	CARBON STEEL 1018/1020	A108
408A	1	PIPE PLUG (OIL MIST CONN)		
408J	1	PIPE PLUG (OILER PLUG)		
408L	1	PIPE PLUG (FRAME OLG IN)		
408M	1	PIPE PLUG (FR OLG OUT)		
412A	1	O-RING IMPLR		
418	1	H TAP BOLT		
423	3	UAM NUT (BRG HSG)	TITANIUM	A3851
427C	4	BUT THE IMPELLER ADPLATE	CARBON STEEL GR B	A307
428B	2	O-RING BRG HOUSING	CARBON STEEL A	A307
487E	1	O-RING LAB SEAL	BUNAN	A536
487G	1	O-RING LAB SEAL	BUNAN	
487H	1	O-RING LAB SEAL	BUNAN	
497J	1	O-RING LAB SEAL	BUNAN	
497L	1	O-RING LAB SEAL	BUNAN	
497N	1	ORING,RADIAL O/B	VITON	
528A	2	WASHER,THRUST O/D		
902	1	MAINTENANCE KIT		
906A	1	OIL PUMP REPAIR KIT		
920A	1	POWER END		

SEAL CHAMBER
TAPER BORE™ PLUS



REFER TO SEAL DRAWING NO. HSP .38068

FORM # ED0334 +336

Customer: LURGI PSI INC
Goulds Serial No: 729F500
Customer P.O. No: 6018-70750
Item No: PC-4201
Service: 200 PROOF PRODUCT PUMP
End User: CENTRAL ILLINOIS ENERGY, L.L.C.
Project#: 2003-01
Location: CANTON, ILLINOIS

DRAWING NO A729500C Rev. 0 Date: December 6, 2006
SUPERSEDES ANY PREVIOUS DRAWINGS