

PUMP SPECIFICATIONS		
SIZE & TYPE: 4x6x9-1 OHH		
SPEED: 3570 RPM		
ROTATION: CCW (AS VIEWED FROM DRIVER)		
DISCH FLG: 4	CLASS: 300 RF	Standard: ASME B16.5
SUCT FLG: 6	CLASS: 300 RF	Standard: ASME B16.5
MECH SEAL TYPE: JOHN CRANE		
MECH SEAL DRG: GA-277445-1 API CODE: 21A-FFN-048-11/61		
API PIPING PLANS: 11		

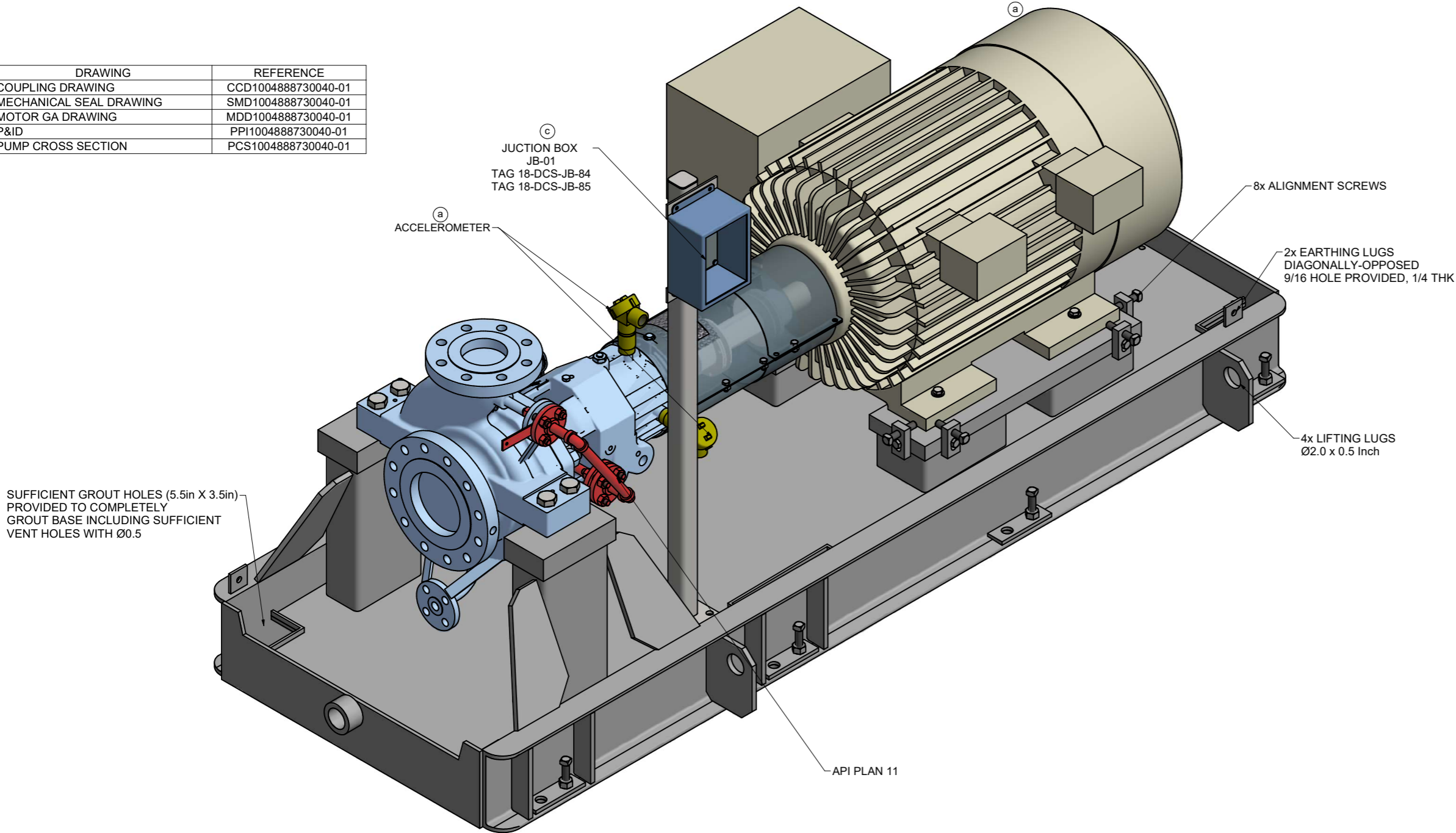
DRAWING	REFERENCE
COUPLING DRAWING	CCD1004888730040-01
MECHANICAL SEAL DRAWING	SMD1004888730040-01
MOTOR GA DRAWING	MDD1004888730040-01
P&ID	PPI1004888730040-01
PUMP CROSS SECTION	PCS1004888730040-01

COUPLING SPECIFICATIONS	
MFR: THOMAS REXNORD	
TYPE: XTSR71	SIZE: 0996
COUPLING-GUARD MATERIAL: ALUMINUM	

DRIVER SPECIFICATIONS	
MOTOR: ABB	
FRAME: 444TS	
POWER: 100 HP	SPEED: 3570 RPM
PHASE: 3	VOLTAGE: 460 V
FURNISHED BY: SULZER	CYCLE: 60 Hz

CONTRACT DATA		
PURCHASER:	Air Products Manufacturing LLC.	
USER:	WORLD ENERGY PARAMOUNT	
JOB/PROJECT:	World Energy Renewables Project	
WBS:	1860	QTY OF PUMPS: 2 (2W)
CWA:	31A	
CUST. P.O. NO.:	SM00001022	
SERVICE:	Diesel Product Loading Pumps	
INSTALLED AT:	World Energy, Paramount, CA, USA	
PUMP OEM:	SULZER PUMPS	
SULZER ORDER NO.:	100488873-0040	

IDENTIFICATION NUMBERS		
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
656622	18-P-1880A	18-P-1880AM
656623	18-P-1880B	18-P-1880BM



SUFFICIENT GROUT HOLES (5.5in X 3.5in) PROVIDED TO COMPLETELY GROUT BASE INCLUDING SUFFICIENT VENT HOLES WITH Ø0.5

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NOTES:

- CAUTION!** CAREFULLY CHECK ALIGNMENT BEFORE STARTING UNIT. ALL HOLES IN FLANGES STRADDLE CENTERLINES. **THE CONNECTION OF PIPES TO THE UNIT HAS TO BE STRESS FREE.**
- COLORS ARE NOT INTENDED TO REPRESENT "AS SHIPPED" PAINT REQUIREMENTS. THEY ARE FOR QUICK IDENTIFICATION OF PIPING AND EQUIPMENT.
- PIPING AND EQUIPMENT ARE MODELED REPRESENTATIONS ONLY, ACTUAL LOCATION AND ORIENTATION MAY VARY PER SHOP STANDARDS, UNLESS OTHERWISE DIMENSIONED.
- SEE DRIVER, SEAL SYSTEM, MECHANICAL SEAL OR COUPLING DRAWINGS FOR MAJOR DETAILS.

APPROXIMATE WEIGHTS		
PUMP:	452	LBS
MOTOR:	1737	LBS
BASEPLATE:	1133	LBS
AUXILIARY:	30	LBS
TOTAL:	3352	LBS

<input checked="" type="checkbox"/> CERTIFIED FINAL	DO NOT SCALE. DIMENSIONS: INCH  <u>UNLESS OTHERWISE SPECIFIED</u> TOLERANCES .X ± .50 .XX ± .12  AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 1.0
<input type="checkbox"/> CERTIFIED FOR NOZZLE & FOUNDATION ONLY	
<input type="checkbox"/> PRELIMINARY ONLY	

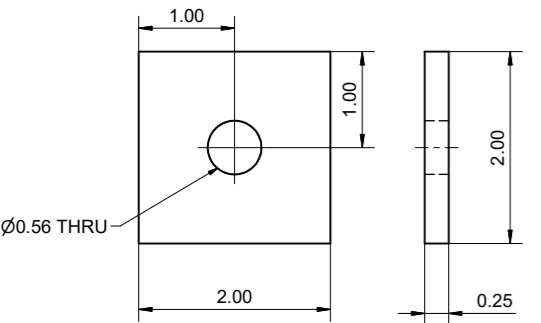
DRAWING CONTENT	
SHEET DESCRIPTION	SHEET NO.
GA ISOMETRIC DATA SHEET	1
FOUNDATION AND NOZZLE	2
CONNECTION LAYOUT	3

(d) AS BUILD REVISION		18/SEP/2023	18/SEP/2023	18/SEP/2023
		J. FLORES	A. GUTIERREZ	C. GONZALEZ
REV.	MODIFICATION	MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: SULZER PUMPS	THIRD ANGLE PROJECTION
REPLACED BY:	-	SUBSTITUTE FOR:	-	ORIGINAL SCALE: -
OHH		GENERAL ARRANGEMENT		DRAWN: 08/NOV/2022 J. FLORES
4X6X9-1		GA ISOMETRIC AND DATA SHEET		CHECKED: 08/NOV/2022 A. GUTIERREZ
SULZER PUMPS		-		APPROVED: 08/NOV/2022 C. GONZALEZ
100488873-0040		GENERAL ARRANGEMENT DRAWING		
<b>SULZER</b>		PART NO. -	EN	PGA1004888730040-01
				1 / 3

PGA1004888730040-01\_Z21\_000\_11057z5 di-gep-3 MARTSAR 2023-09-20T11:44:06 1.000

(b)

		FORCE IN lb	MOMENTS IN Ft-lb
		SUCT	DISCH
FORCE	Fx	1400	640
	Fy	1120	520
	Fz	920	800
	Fr	2020	1140
MOMENTS	Mx	3400	1960
	My	1740	1000
	Mz	2600	1480
	Mr	4620	2660



Technical drawing of a pump assembly, showing a side view. The drawing includes the following dimensions and labels:

- Dimensions:**
  - Overall width: 43.00
  - Overall height: 21.00
  - Height of the pump body: 12.99
  - Height of the base plate: 8.00
  - Height of the motor: 0.40
  - Height of the pump body (from base plate): 6.03
  - Height of the pump body (from base plate): 15.00
- Labels:**
  - ROTATION (indicated by a curved arrow)
  - BASEPLATE
  - PUMP & MOTOR

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EXPRESS **PRIOR** WRITTEN CONSENT OF SULZER  
PUMPS

Technical drawing of the internal layout of a 1000L liquid nitrogen storage dewar. The drawing shows the internal components including the liquid nitrogen storage tank, vaporizer, and various valves and pipes. Dimensions are provided in millimeters (mm). Key dimensions include: overall width 60.0 mm, overall height 36.0 mm, internal width 27.0 mm, internal height 17.0 mm, and a coupling guard width of 10.13 mm. Labels include 'VENT HOLES', 'GROUT HOLES', and 'COUPLING GUARD'.

Technical drawing of a pump assembly showing dimensions and labels. The drawing includes a side view of the pump, a junction box, and a motor. Key dimensions and labels are as follows:

- Top Dimensions:**
  - 5.91
  - 26.57
  - D.B.S.E. 7.00
  - (a) (80.70)
  - (a) (41.2)
- Labels:**
  - DISCHARGE
  - SUCTION
  - JUNCTION BOX "8X6" PUMP VIBRATION
- Bottom Dimensions:**
  - 4.5
  - 1.7
  - (a) [152 mm] 6 in
  - (a) [715 mm] 28.16 in
  - 3.00 (ALL)
  - (a) [715 mm] 28.16 in
  - (a) [715 mm] 28.16 in
  - (6.0)
  - 96.5 ± 1.0

(b)

SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
656622	18-P-1880A	18-P-1880AM
656623	18-P-1880B	18-P-1880BM

AUXILIARY CUSTOMER CONNECTION DIMENSIONS  $\pm 1.0$ 

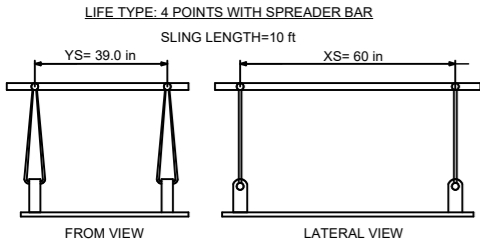
(d)	NO CHANGES IN THIS SHEET			18/SEP/2023	18/SEP/2023	18/SEP/2023
				J. FLORES	A. GUTIERREZ	C. GONZALEZ
REV.	MODIFICATION			MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST: NO FORMAT: A1 DESIGN GROUP: SULZER PUMPS THIRD ANGLE PROJECTION						
REPLACED BY:				SUBSTITUTE FOR:		ORIGINAL SCALE:

OHH 4X6X9-1	GENERAL ARRANGEMENT FOUNDATION AND NOZZLE	DRAWN: 08/NOV/2022 J. FLORES
SULZER PUMPS 100488873-0040	- GENERAL ARRANGEMENT DRAWING	CHECKED: 08/NOV/2022 A. GUTIERREZ
		APPROVED: 08/NOV/2022 C. GONZALEZ

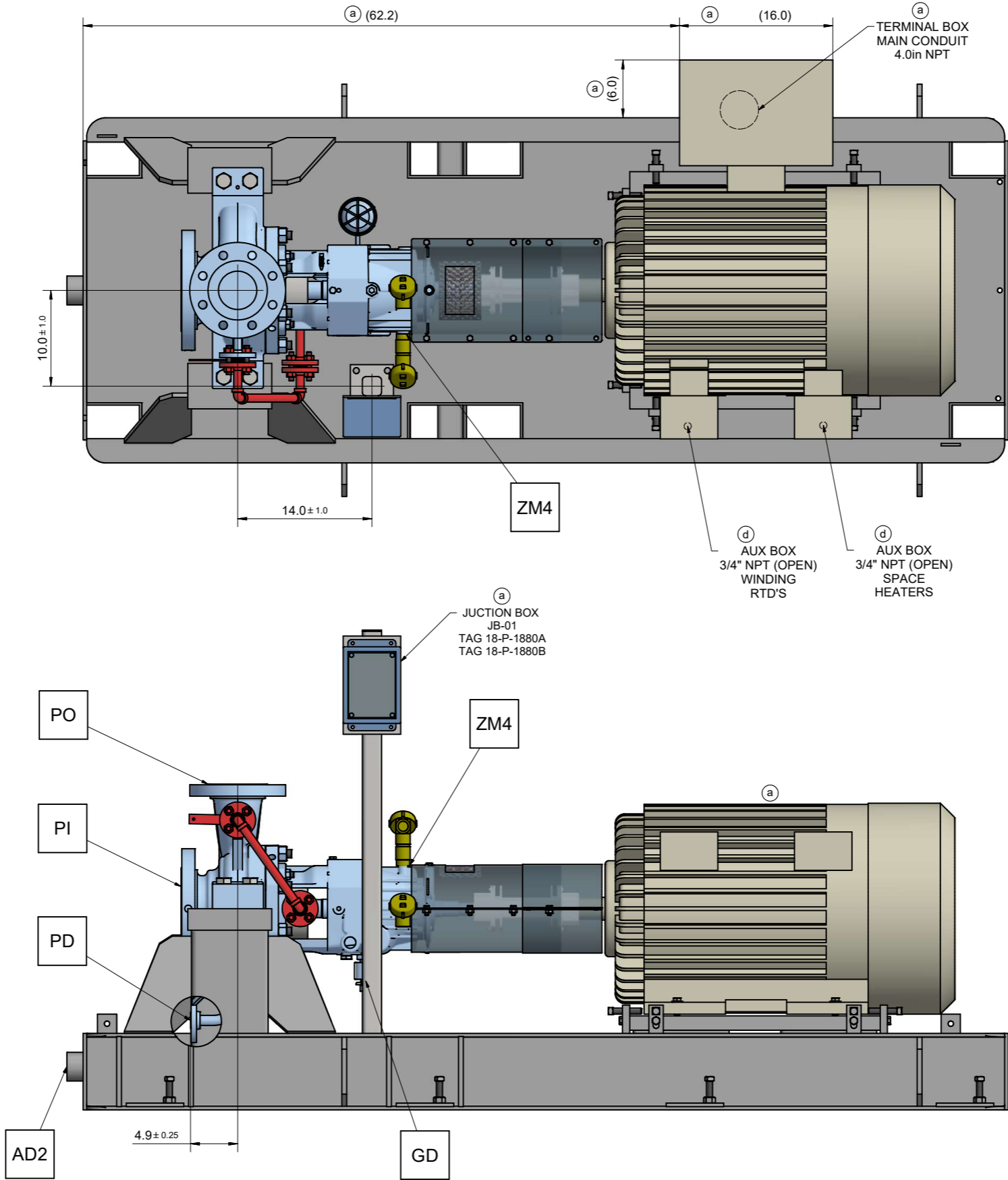
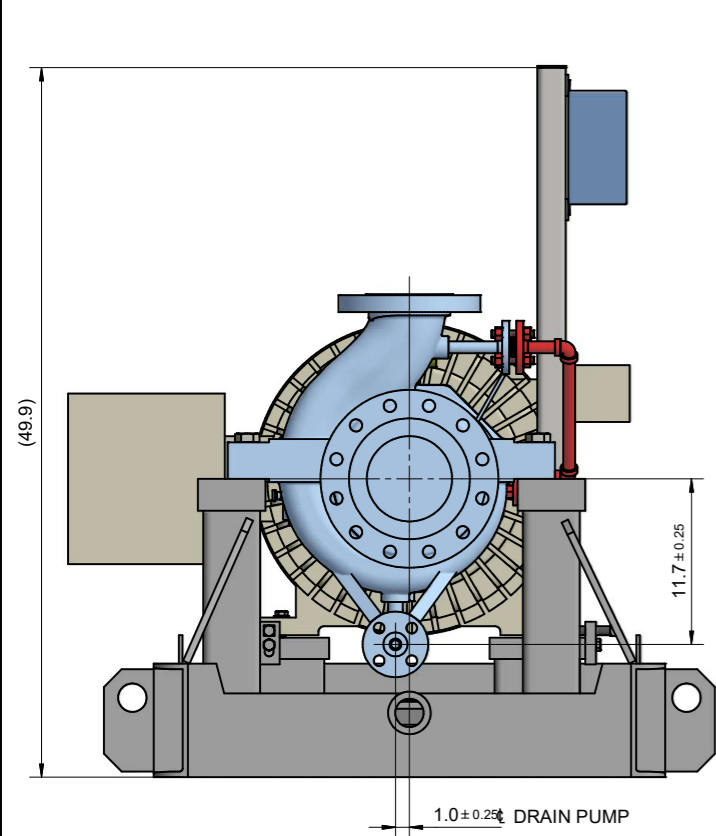
<b>SULZER</b>	PART NO. -	EN	PGA1004888730040-01	2 / 3
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CONNECTION LEGEND			
ITEM	DESCRIPTION	SIZE	TYPE
PI	PUMP SUCTION NOZZLE	6"	300# RF FLANGE
PO	PUMP DISCHARGE NOZZLE	4"	300# RF FLANGE
PD	PUMP DRAIN	0.75"	300# RF FLANGE
AD2	BASE DRAIN	2"	NPT FEMALE
GD	OIL DRAIN	0.75"	NPT PLUGGED
ZM4	VIBRATION PAD	1.00"	FLAT SURFACES

- a) NOTES:**
- CONNECTION INDICATED IN BOX □ ARE CUSTOMER CONNECTIONS POINTS.
  - BASEPLATE PREPARED FOR EPOXY GROUT AND SEAL WELDED.
  - PUMP IS SELF-VENTING
  - LIFTING LUGS DESIGNED FOR LIFTING WITH SPREADER BAR AS SHOWN BELOW (TO AVOID INTERFERENCE WITH MAIN MOTOR JUNCTION BOX).  
\*(SPREADER BAR, SLINGS/CHAINS BY CUSTOMER).



- b) 5. INSTRUMENTS WIRING TILL JB BY SULZER**



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PUMPS

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<input type="checkbox"/> CERTIFIED FOR NOZZLE & FOUNDATION ONLY	UNLESS OTHERWISE SPECIFIED TOLERANCES .X ± .50 .XX ± .12
<input type="checkbox"/> PRELIMINARY ONLY	AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 1.0

	COG	X	Y	Z
	PUMP	38.58	-17.76	11.04
	MOTOR	67.91	-16.25	17.61
	BASEPLATE	48.12	-17.85	6.22
	PACKAGE	6355	-16.36	18.01
COG=CENTER OF GRAVITY				

(d) AS BUILD REVISION		18/SEP/2023	18/SEP/2023	18/SEP/2023
REV. MODIFICATION		J. FLORES	A. GUTIERREZ	C. GONZALEZ
SEP. PARTS LIST: NO		FORMAT: A1	DESIGN GROUP: SULZER PUMPS	THIRD ANGLE PROJECTION
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4X6X9-1		-		CHECKED: 08/NOV/2022 A. GUTIERREZ
SULZER PUMPS		-		APPROVED: 08/NOV/2022 C. GONZALEZ
100488873-0040		GENERAL ARRANGEMENT DRAWING		
SULZER		PART NO.	EN	PGA1004888730040-01 3 / 3

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