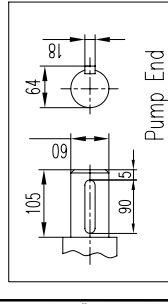


PROCESS CONNECTIONS		
Code	Name	Size & Rating
N1	Pump Suction	12", 300#, RF
N2	Pump Discharge	6", 300#, RF
N3	Pump Barrel Vent	3/4", 300#, RF Flange with valve
N4	External Case Drain (with seal chamber)	3/4", 300#, RF Flange with valve
N5	Pump Barrel Drain	3/4", 300#, RF Flange with valve
N6	Mechanical Seal Vent (gross fluid)	3/4", 300#, RF Flange with valve
N7	Pan 23 Vent	3/4", 300#, RF Flange with valve

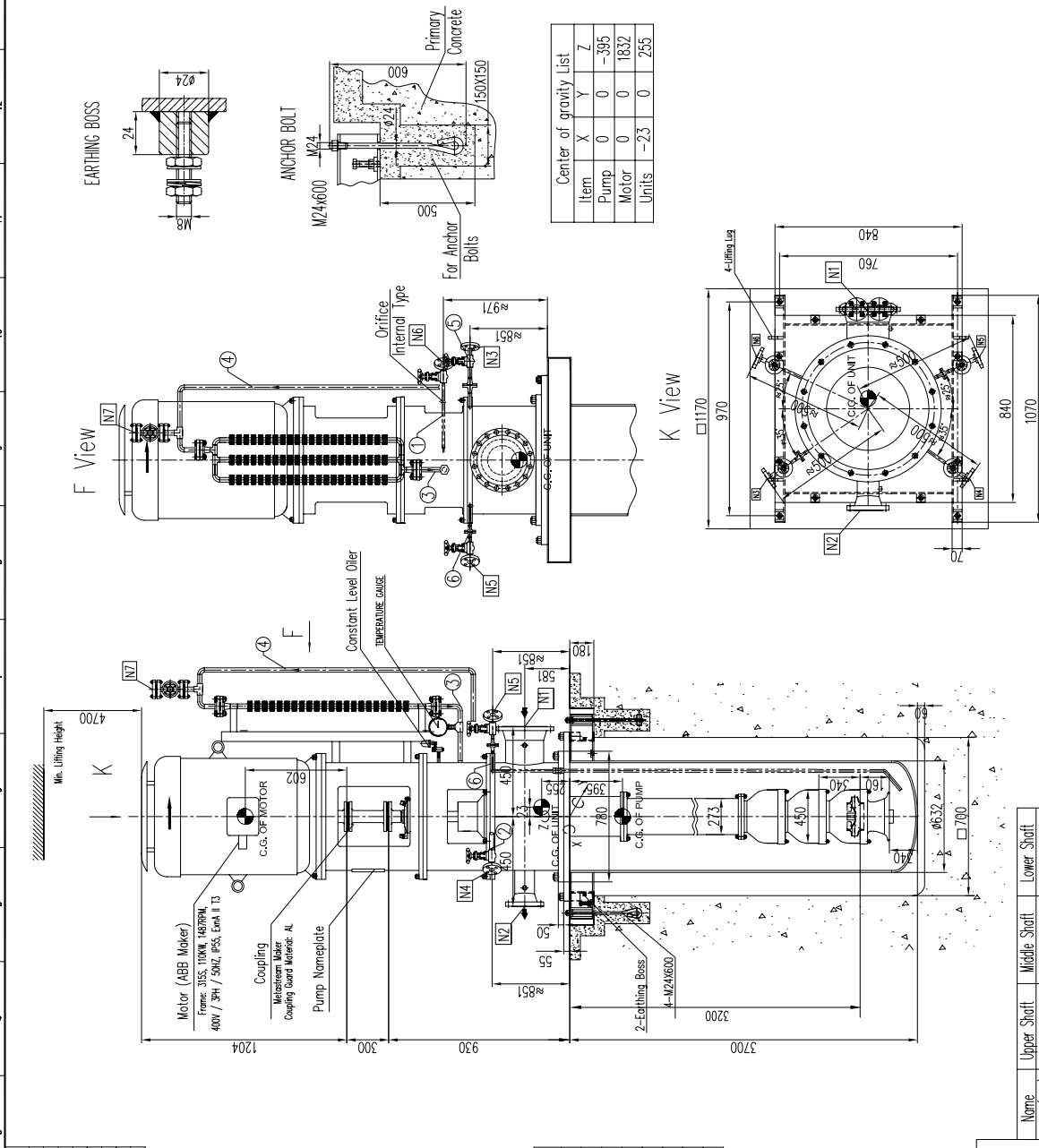


MINIMUM CLEARANCE (mm)	
Wear Ring	Second Stage(front) 0.35~0.407 Second Stage(behind) 0.35~0.399
Balance Disc / Balance Sleeve	Axial 0.1~0.15 Radial 0.35~0.4
Shaft Bushing / Shaft Sleeve	0.2~0.26
Bearing / Cover	0.1~0.2

Pipeline Instruction	
①	Mechanical Seal Vent
②	External Casing Drain
③	Pan/23 Flushing Pipeline (to seal chamber)
④	Pan/23 Flushing Pipeline (from seal chamber)
⑤	Pump Barrel Vent
⑥	Pump Barrel Drain

WEIGHT TABLE	
PUMP	: 3300 KG
MOTOR	: 900 KG
SEAL SYSTEM	: 30 KG
MOUNTING PLATE	: 110 KG
OTHERS	: 40 KG
TOTAL WEIGHT	: 4380 KG
ROTOR OF PUMP	: 235 KG
ROTOR OF MOTOR	: 202 KG
MAX. MAINTANCE WEIGHT	: 2300 KG

MAX. ALLOWABLE MISALIGNMENT(mm)	
Outer Diameter	Radial
Coupling (l)	Displacement
D ≤ 200	< 0.05
200 < D ≤ 300	< 0.08
300 < D ≤ 400	< 0.1
400 < D ≤ 500	< 0.15
500 < D ≤ 600	< 0.2
600 < D ≤ 700	< 0.25
700 < D ≤ 800	< 0.3
800 < D ≤ 900	< 0.35
900 < D ≤ 1000	< 0.4
1000 < D ≤ 1100	< 0.45
1100 < D ≤ 1200	< 0.5
1200 < D ≤ 1300	< 0.55
1300 < D ≤ 1400	< 0.6
1400 < D ≤ 1500	< 0.65
1500 < D ≤ 1600	< 0.7
1600 < D ≤ 1700	< 0.75
1700 < D ≤ 1800	< 0.8
1800 < D ≤ 1900	< 0.85
1900 < D ≤ 2000	< 0.9
2000 < D ≤ 2100	< 0.95
2100 < D ≤ 2200	< 1.0
2200 < D ≤ 2300	< 1.05
2300 < D ≤ 2400	< 1.1
2400 < D ≤ 2500	< 1.15
2500 < D ≤ 2600	< 1.2
2600 < D ≤ 2700	< 1.25
2700 < D ≤ 2800	< 1.3
2800 < D ≤ 2900	< 1.35
2900 < D ≤ 3000	< 1.4
3000 < D ≤ 3100	< 1.45
3100 < D ≤ 3200	< 1.5
3200 < D ≤ 3300	< 1.55
3300 < D ≤ 3400	< 1.6
3400 < D ≤ 3500	< 1.65
3500 < D ≤ 3600	< 1.7
3600 < D ≤ 3700	< 1.75
3700 < D ≤ 3800	< 1.8
3800 < D ≤ 3900	< 1.85
3900 < D ≤ 4000	< 1.9
4000 < D ≤ 4100	< 1.95
4100 < D ≤ 4200	< 2.0
4200 < D ≤ 4300	< 2.05
4300 < D ≤ 4400	< 2.1
4400 < D ≤ 4500	< 2.15
4500 < D ≤ 4600	< 2.2
4600 < D ≤ 4700	< 2.25
4700 < D ≤ 4800	< 2.3
4800 < D ≤ 4900	< 2.35
4900 < D ≤ 5000	< 2.4
5000 < D ≤ 5100	< 2.45
5100 < D ≤ 5200	< 2.5
5200 < D ≤ 5300	< 2.55
5300 < D ≤ 5400	< 2.6
5400 < D ≤ 5500	< 2.65
5500 < D ≤ 5600	< 2.7
5600 < D ≤ 5700	< 2.75
5700 < D ≤ 5800	< 2.8
5800 < D ≤ 5900	< 2.85
5900 < D ≤ 6000	< 2.9
6000 < D ≤ 6100	< 2.95
6100 < D ≤ 6200	< 3.0
6200 < D ≤ 6300	< 3.05
6300 < D ≤ 6400	< 3.1
6400 < D ≤ 6500	< 3.15
6500 < D ≤ 6600	< 3.2
6600 < D ≤ 6700	< 3.25
6700 < D ≤ 6800	< 3.3
6800 < D ≤ 6900	< 3.35
6900 < D ≤ 7000	< 3.4
7000 < D ≤ 7100	< 3.45
7100 < D ≤ 7200	< 3.5
7200 < D ≤ 7300	< 3.55
7300 < D ≤ 7400	< 3.6
7400 < D ≤ 7500	< 3.65
7500 < D ≤ 7600	< 3.7
7600 < D ≤ 7700	< 3.75
7700 < D ≤ 7800	< 3.8
7800 < D ≤ 7900	< 3.85
7900 < D ≤ 8000	< 3.9
8000 < D ≤ 8100	< 3.95
8100 < D ≤ 8200	< 4.0
8200 < D ≤ 8300	< 4.05
8300 < D ≤ 8400	< 4.1
8400 < D ≤ 8500	< 4.15
8500 < D ≤ 8600	< 4.2
8600 < D ≤ 8700	< 4.25
8700 < D ≤ 8800	< 4.3
8800 < D ≤ 8900	< 4.35
8900 < D ≤ 9000	< 4.4
9000 < D ≤ 9100	< 4.45
9100 < D ≤ 9200	< 4.5
9200 < D ≤ 9300	< 4.55
9300 < D ≤ 9400	< 4.6
9400 < D ≤ 9500	< 4.65
9500 < D ≤ 9600	< 4.7
9600 < D ≤ 9700	< 4.75
9700 < D ≤ 9800	< 4.8
9800 < D ≤ 9900	< 4.85
9900 < D ≤ 10000	< 4.9



Length(mm)		1222	
Quantity	1	2	1
Nozzle Allowable Force & Moment			
Force (N)	Fx	Fy	Fz
	±13340	±16000	±10680
	Mx	My	Mz
	±12200	±5960	±9220
Moment (N.m)	Fx	Fy	Fz
	±7560	±9780	±6220
	Mx	My	Mz
	±7060	±3520	±5160
Flange Size(mm)			
Name			Standard
DN			ØD
b			ØK
n-Ød1			Ød
N7			ANSI B16.5 300# RF
N6			ANSI B16.5 300# RF
N5			ANSI B16.5 300# RF
N4			ANSI B16.5 300# RF
N3			ANSI B16.5 300# RF
N2			ANSI B16.5 300# RF
N1			ANSI B16.5 300# RF
4-Ø18			82.5
4-Ø18			42.9
4-Ø18			42.9
4-Ø18			42.9
4-Ø18			42.9
12-Ø26			270
16-Ø32.5			381
n-Ø41			Ø4

GENERAL NOTES

PUMP INFORMATION

Item No.:	121-P-102 A/B/C
Unit:	121
Service:	STEAM CONDENSATE FEED PUMPS
Model:	APFLO-VB 400-25X3
Seal Plan:	23+61
Motor:	110KW - 4P
Capacity:	441 m ³ /h
Head:	58 m

Note: 1. Maximum Allowable Amplitude For Foundation:
Velocity Peak-Peak: 4 mm/s
Displacement Peak-Peak: 50.8 μm

3. Max. allowable working pressure: 40 barg

4. For lifting position, Deep Blue suggest:
1. through the bottom of suction-discharge nozzle;
2. through the motor frame.

5. The unit of dimension is mm.

6. Main power cable gland size: 2MM50 cable cores: 2(3X120) mm²
Space heater cable gland size: 1MM20 cable cores: 3X4 mm²

REFERENCE DRAWINGS

DWG NO.	VP-S92021-ON-MA-121-P102-0013
SEAL SYSTEM DRAWING	VP-S92021-ON-MA-121-P102-0013
MOTOR OUTLINE DRAWING	VP-S92021-ON-MA-121-P102-0016
Coupling DRAWING AND BOM	VP-S92021-ON-MA-121-P102-0008
ELECTRICAL MOTOR DATASHEET	VP-S92021-ON-MA-121-P102-0009
PUMP DATASHEET	VP-S92021-ON-MA-121-P102-0003

Code 1

(Approved) Vendor to submit "For Final"
(No comment & release for manufacturing)

Code 2

(Approved with comments) Vendor shall correct / revise & submit it as "For Final"
(Released for manufacturing if change incorporated as indicated)

Code 3

(Commented) : Vendor shall correct / revise & resubmit it as "For Approval" of the date specified : (Corrected documents to be)

Code 4

Not Acceptable quality (Reject)

The above checking result by OEC shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement between the parties.

DATE: 16-12-2013

DEPT: Machinery

Signature: S. Shahrarian

OIEC-SP 20A21

Only for internal review

CV	PI	EL	IN	ME	MA
ST	BU	PR	SA	HW	TL

3	14	Dec. 2013	FOR APPROVAL	DBP	Eric	Tino	Ryan
2	12	Oct. 2013	FOR APPROVAL	DBP	Eric	Tino	Ryan
1	26	Aug. 2013	FOR APPROVAL	DBP	Eric	Tino	Ryan
0	18	Aug. 2013	FOR APPROVAL	DBP	Eric	Tino	Ryan
REV.	DATE	DESCRIPTION	ORIG. PREP.	CHD.	APTD.	Contractor	APTD.

SOUTH PARS GAS FIELD DEVELOPMENT - PHASE 20 & 21, ASSALUYEH-IRAN ONSHORE FACILITIES

PROJECT No.: POGC-572-88-35

DOC CLASS: DEEP BLUE PUMP CO.

SCALE: 1:100

STEAM CONDENSATE FEED PUMPS 121-P-102 A/B/C

GENERAL ARRANGEMENT DRAWING

DRAWING No. VP-S92021-ON-MA-121-P102-0001

SHEET No. 1 OF 1

REV. 3