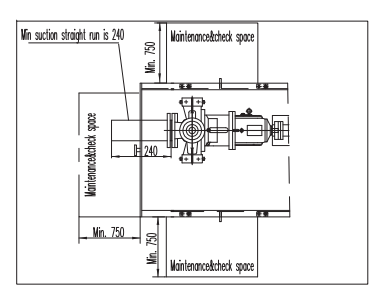


PROCESS CONNECTIONS				
Code	Size & Rating	Description	Remark	
N1	3"-ANSI 300Lb-RF	Suction		
N2	1 1/2"-ANSI 300Lb-RF	Discharge		
N3	3/4"-ANSI 300Lb-RF	Pump Drain	Flange With valve & blind flange	
N4	G2"	Baseplate Drain		
N5	3/4"-ANSI 150Lb-RF	Cooling Water Inlet	Blind Flange	
N6	3/4"-ANSI 150Lb-RF	Cooling Water Outlet	Blind Flange	
N7	3/4"-ANSI 300Lb-RF	N2 Connection	Flange With valve	
N8	3/4"-ANSI 300Lb-RF	Plan53A Drain	Flange With valve & blind flange	
N9	1/2" Quick Fittings	Plan53A Filling	Quick connection	
N10	3/4"-ANSI 300Lb-RF	Plan 53A Cooler Drain	Flange With valve & blind flange	
N11	3/4"-ANSI 300Lb-RF	Plan53A Vent	Flange With valve & blind flange	

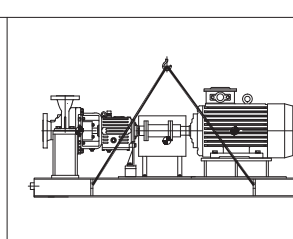
Pipeline Description	
①	Plan11 Flushing Pipeline
②	Pump Drain
③	Plan53A Flushing Pipeline (to seal chamber)
④	Plan53A Flushing Pipeline (from seal chamber)

WEIGHT TABLE	
PUMP	: 183 KG
MOTOR	: 275 KG
SEAL SYSTEM	: 80 KG
BASEPLATE	: 550 KG
OTHERS	: 35 KG
TOTAL WEIGHT	: 1123 KG

Maximum Allowable Amplitude For Foundation	
Velocity(PEAK)	: 4 mm/s
Displacement	: 25.4 μm

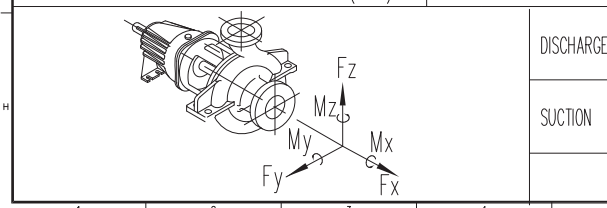


	DS<200	X	≤0.05
	200<DS<300	Y	≤0.05
		Z	Z±0.1
		X	≤0.08
	300<DS<400	Y	≤0.08
		Z	Z±0.15
		X	≤0.10
		Y	≤0.10
		Z	Z±0.2
		X	≤0.10
		Z	Z±0.2



Center of Gravity List	
PUMP	X 530 Y 0 Z 490
MOTOR	X -410 Y 0 Z 490
UNIT	X 200 Y 100 Z 417

Static loading calculation results			Dynamic loading calculation results		
FXStatic=±	4080	N	FXdynamic=±	0	N
FYStatic=±	3300	N	FYdynamic=±	44	N
FZStatic=±	-5249/12369	N	FZdynamic=±	44	N
MXStatic=±	4762	N*m	MXdynamic=±	119/-76	N*m
MYStatic=±	7677/4474	N*m	MYdynamic=±	25	N*m
MZStatic=±	4330	N*m	MZdynamic=±	25	N*m



DISCHARGE	1 1/2" Inch	±1420 Fx	±1160 Fy	±1780 Fz	±920 Mx	±460 My	±700 Mz
	DN	Force (N)			Moment (Nm)		
SUCTION	3" Inch	±2660 Fx	±2140 Fy	±1780 Fz	±1900 Mx	±940 My	±1440 Mz
	DN	Force (N)			Moment (Nm)		

Name	Standard	DN	øD	b	øK	ød	n-ød1
N3 Drain	ANSI B16.5 300# RF	3/4"	117.2	15.7	82.5	42.9	4-ø18
N2 Discharge	ANSI B16.5 300# RF	1 1/2"	155.4	20.5	114.3	73	4-ø22
N1 Suction	ANSI B16.5 300# RF	3"	209.5	28.4	168.1	127	8-ø22

### GENERAL NOTES

#### PUMP INFORMATION

Item No.: 140-P-104/204 A/B

Unit: 140

Service: HP FLARE STACK PUMPS

Model: APIFLO-P 40K2-315A

Seal Plan: 11+53A+61

Motor: 30KW - 2946RPM

NOTE: 1. Valve for pump drain is ball valve.  
2. The pump is self-vent.

2956 according to Pump data sheet. Revise it in final issue

**RE: Revised, please find the second page**

### REFERENCE DRAWING

MECH. SEAL SYSTEM DRAWING	VP-SP2021-ON-MA-140-P104-0016
MOTOR OUTLINE DRAWING	VP-SP2021-ON-MA-140-P104-0016
COUPLING DRAWING	VP-SP2021-ON-MA-140-P104-0008

### Checklist

Code1	<input checked="" type="checkbox"/> (Approved) Vendor to submit "For Final" (No comment & release for manufacturing)
	<input type="checkbox"/> (Approved with comments) Vendor shall correct / revise & submit it as "For Final"
Code2	(Released for manufacturing if change incorporated as indicated)
Code3	<input type="checkbox"/> (Commented) : Vendor shall correct / revise & resubmit it as "For Approval" of the date specified : ( Corrected documents to be
Code4	<input type="checkbox"/> Not Acceptable quality (Reject)

The above checking result by OIEC shall in no way relieve Vendor of any liability, obligation and responsibility on of the purchase order and the mutual agreement in writing

OIEC-SP 20&21

DATE : 01/01/2014

DEPT: Machinery

Signature : Salem

Only for internal review

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

3	03.Dec.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino
2	28.Oct.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino
1	14.Aug.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino
0	23.MAY. 2013	FOR APPROVAL	DBP	Apple	Ryan	Tino

REV.	DATE	DESCRIPTION	ORIG.	PREP.	CH'D	APP'D	Contractor APP'D

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

PROJECT No.: POGC-572-88-35

DOC.CLASS:

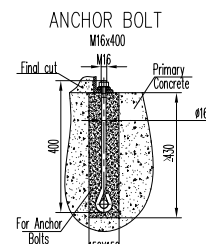
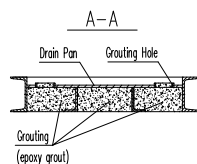
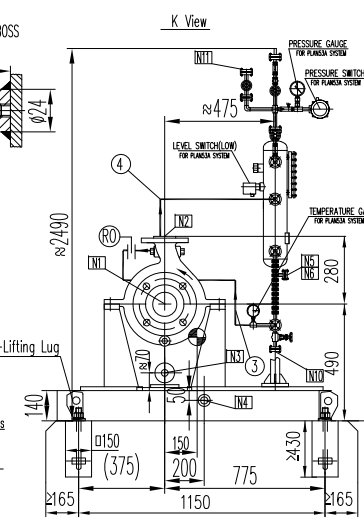
SCALE :

DEEP BLUE PUMP CO.

OIEC

140 P 104 A/B 140 P 204 A/B  
HP FLARE STACK PUMPS  
GENERAL ARRANGEMENT DRAWING

DRAWING No.	VP-SP2021-ON-MA-140-P104-0001	SHEET No.	1 OF 1	REV.	3
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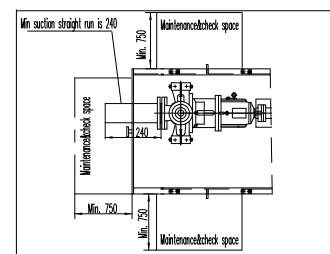


Code	Size & Rating	Description	Remark
N1	3"-ANSI 300LB-RF	Suction	
N2	1 1/2"-ANSI 300LB-RF	Discharge	
N3	3/4"-ANSI 300LB-RF	Pump Drain	Flange With valve & blind flang
N4	G2"	Basopline Flange	
N5	3/4"-ANSI 150LB-RF	Cooleing Water Inlet	Blind Flange
N6	3/4"-ANSI 150LB-RF	Cooleing Water Outlet	Blind Flange
N7	3/4"-ANSI 300LB-RF	N2 Connection	Flange With valve
N8	3/4"-ANSI 300LB-RF	Plan53A Drain	Flange With valve & blind flang
N9	1 1/2" Quick Fittings	Plan63A Filling	Quick connection
N10	3/4"-ANSI 300LB-RF	Plan 53A Cooler Drain	Flange With valve & blind flang
N11	3/4"-ANSI 300LB-RF	Plan 53A Vent	Flange With valve & blind flang

Pipeline Description	
①	Plan11 Flushing Pipeline
②	Pump Drain
③	Plan53A Flushing Pipeline (to seal chamber)
④	Plan53A Flushing Pipeline (from seal chamber)

WEIGHT TABLE			
PUMP	:	183	KG
MOTOR	:	275	KG
SEAL SYSTEM	:	80	KG
BASEPLATE	:	550	KG
OTHERS	:	35	KG
TOTAL WEIGHT	:	1123	KG

Maximum Allowable Amplitude For Foundation			
Velocity(PEAK)	:	4	mm/s
Displacement	:	25.4	μm




Item No.:	140-P-104/204 A/B
Unit:	140
Service:	HP FLARE STACK PUMPS
Model:	APIFLO-P 40K2-315A
Seal Plan:	11+53A+61
Motor:	30KW - 2956RPM

NOTE: 1. Valve for pump drain is ball valve.  
2. The pump is self-vent.

REFERENCE DRAWINGS	DWG NO.
MECH. SEAL SYSTEM DRAWING	VP-SP2021-ON-MA-140-P104-0013
MOTOR OUTLINE DRAWING	VP-SP2021-ON-MA-140-P104-0016
COUPLING DRAWING	VP-SP2021-ON-MA-140-P104-0008

Code1	<input type="checkbox"/> (Approved) Vendor to submit "For Final (No comment & release for manufacturing)"
Code2	<input type="checkbox"/> (Approved with comments) Vendor shall correct / revise & submit it as "For Final" (Released for manufacturing if change incorporated as indicated)
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Code4	<input type="checkbox"/> Not Acceptable quality (Reject)

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



**OIEC-SP 20&21**

DATE : \_\_\_\_\_

DEPT: \_\_\_\_\_

Signature : \_\_\_\_\_

Only for internal review					
CV	PI	EL	IN	ME	MA
ST	BU	PR	SA	HV	TL

3	03.Dec.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino	
2	28.Oct.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino	
1	14.Aug.2013	FOR APPROVAL	DBP	Apple	Ryan	Tino	
0	23.MAY. 2013	FOR APPROVAL	DBP	Apple	Ryan	Tino	
REV.	DATE	DESCRIPTION	ORIG.	PREP.	CH'D.	APP'D.	Contractor ASST.

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



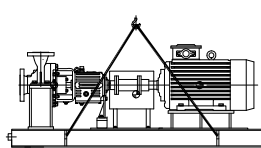
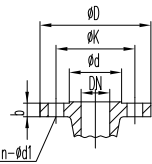
PROJECT No.: POGC-572-88-35	DOC.CLASS:	SCALE :
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140 P 104 A/B 140 P 204 A/B  
HP FLARE STACK PUMPS  
GENERAL ARRANGEMENT DRAWING

DRAWING No.	VP-SP2021-ON-MA-140-P104-0001	SHEET No.	1 OF 1	REV. 3
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	D≤200	X	≤0.05
		Y	≤0.05
		Z	Z±0.1
	200Φ≤300	X	≤0.08
		Y	≤0.08
		Z	Z±0.15
	300Φ≤400	X	≤0.10
		Y	≤0.10
		Z	Z±0.2
MAX. ALLOWABLE MISALIGNMENT(mm)			



Center of Gravity Location		
PUMP	X	53
	Y	0
	Z	49
MOTOR	X	-4
	Y	0
	Z	49
UNIT	X	20
	Y	10
	Z	41

Rotation: clockwise viewed from the drive-end

Static loading calculation results			Dynamic loading calculation results		
FXStatic= $\pm$	4080	N	FXdynamic= $\pm$	0	N
FYStatic= $\pm$	3300	N	FYdynamic= $\pm$	44	N
FZStatic= $\pm$	-5249/12369	N	FZdynamic= $\pm$	44	N
MXStatic= $\pm$	4762	N*m	MXdynamic= $\pm$	119/-76	N*m
MYStatic= $\pm$	7677/4474	N*m	MYdynamic= $\pm$	25	N*m
MZStatic= $\pm$	4330	N*m	MZdynamic= $\pm$	25	N*m

DISCHARGE	1 1/2"	±1420	±1160	±1780	±920	±460	±700
	Inch	F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
	DN	Force <sub>N</sub>			Moment <sub>Nm</sub>		
SUCTION	3"	±2660	±2140	±1780	±1900	±940	±1440
	Inch	F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
	DN	Force <sub>N</sub>			Moment <sub>Nm</sub>		

N3	Drain	ANSI B16.5 300# RF	3/4"	117.2	15.7	82.5	42.9	4-ø18
N2	Discharge	ANSI B16.5 300# RF	1 1/2"	155.4	20.5	114.3	73	4-ø22
N1	Suction	ANSI B16.5 300# RF	3"	209.5	28.4	168.1	127	8-ø22
	Name	Standard	DN	øD	b	øK	ød	n-ød1

Flange Size

