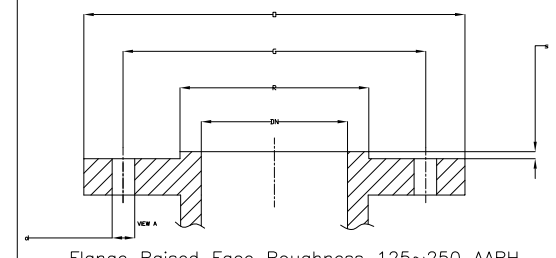


Refer to attached file

Mass Moment inertia Motor :	28.11 kgm <sup>2</sup>
Mass Moment inertia Pump:	11.128 kgm <sup>2</sup>
Dynamic Load	
Motor Dynamic Load :	15.5 KN
Pump dynamic Load :	7.869 KN
Total Dynamic Load Fx :	16.69 KN
Fy :	It can be ignored
Fz :	16.69 KN
Static Load	
Motor Static Load :	46.5 KN
Pump Static Load :	27.8 KN
Moment	
Motor Dynamic Moment :	15.19 N.m
Pump Dynamic Moment :	8.56 N.m
Total Dynamic Moment : Mx: 0	
My: 23.75 N.M	
Mz: 0	

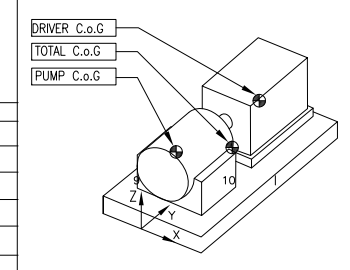
VIBRATION LEVEL (ISO 2372)	
Alarm :	V(RMS) > 3 mm/sec
Trip :	V(RMS) > 4.5 mm/sec
Max allowable vibration amplitude for foundation: 42.9 µm	
Max.MISSALIGNMENT	
AXIAL 1.5 (mm)	RADIAL 1.2 (mm)
ANGULAR 0.5 (degree)	
PUMP NOZZLES: ASME B16.5	



ELECTRICAL MOTOR	
MODEL :	Schorch
PHASE :	3
FRAME :	450
VOLTAGE :	6000
KW :	400
Hz :	50
RPM :	994

Pump Type:	10H2-400-728
Sealing System Plan:	32-52
COUPLING & Coupling Guard	
COUPLING MANUFACTURER: IIP Group	
MODEL : Flexible Spacer Type	

CENTER OF GRAVITY		( mm )
PUMP	X	63
	Y	778
	Z	946
DRIVER	X	0
	Y	2962
	Z	873
BASE	X	0
	Y	1780
	Z	153
TOTAL	X	18.2
	Y	2096.1
	Z	751.2



Instrument Number	
PT	40-PT-229A/B
LT	40-LT-225A/B
FG	40-FG-229A/B/C/D
RD	40-RO-229A/B
PG	40-PG-220A/B
LG	40-LG-229A/B

REFERENCE DOCUMENTS

DOC. NO.

Pump Data Sheet and Performance Curve for 40-P-203A/B

VP-40-000-MA-0011-0023

Pump cross sectional drawing and Part list for 40-P-203A/B

VP-40-000-MA-0011-0095

Coupling drawing for 40-P-203A/B

VP-40-000-MA-0011-0131

Motor data sheets for 40-P-203A/B

VP-40-000-MA-0011-0167

Motor outline drawing for 40-P-203A/B

VP-40-000-MA-0011-0239

Pump P&ID for 40-P-203A/B

VP-40-000-MA-0011-0275

NOTE

1-All dimensions are mm.  
2-Quantity shown in Motor data sheet is not stated in 100 and not 1000.  
3-Reference Area is 2m from Motor and end to from other side.  
4-Location of dynamic load is at the 25.2.

-Bolt material shall conform to specification ASTM A193 Grade B7 (anchor bolts shall be partly hot dip galvanized in thread length plus 100mm length embedded into concrete).  
-Anchor bolt and nut will be supplied by IIP  
-All nuts/washers shall be hot dip galvanized according to ASTM A153  
-Grout thickness: 30mm

M 16 Level Screw

Anchor Bolt M 20

Base Plate

Plate 60x60 th10mm

Plate 100x100-th 30mm

Anchor Bolt Box

Anchor Bolt Sleeve

Primary concrete

Plate 60x60-th3mm

socket welded

100x100

Thickness=25mm

Ø20

30

65

M 12

50

150

M10

EARTHING BOSS

LEVELING SCREW

LIFTING LUG

NOZZLE LOADS

FORCE

N 2XAPI 610

MOMENTS

Nm 2XAPI 610

SUCTION :

20460 16900 13340 29700 14640 7320 10840 19640

DISCHARGE :

16900 13340 20460 29700 14640 7320 10840 19640

FOUNDATION LOADS (approx. weight)

PUMP :

2823 Kg

ROTOR PUMP :

874 Kg

MOTOR :

4950 Kg

ROTOR MOTOR :

1150 Kg

BASE PLATE&SEALING SYSTEM :

1800 Kg

TOTAL :

9373 Kg

Code1

Approved:

No comment and the document is released for Manufacturing.

Code2

Approved with Minor comment:

Vendor shall correct, revise and resubmit the document. The document can be released for Manufacturing if changes incorporated.

Code3

Commented:

Vendor shall correct, revise and resubmit the document by the date specified. The document shall be revised under the Status of "R: Revised Issue". All corrected documents shall be resubmitted before starting the Manufacturing.

Code4

Not Accepted (Rejected):

Vendor shall re-work/re-design/re-specify the contents of the documents according to the comments/ reasons for rejection. All corrected documents shall be resubmitted before starting the Manufacturing process. In this case vendor shall not proceed with subsequent work until receiving code 1 or code 2 or no code from CONSULTANT / OWNER / MC. VENDOR shall resubmit the documents with the same revision within (10) working days(including transmission/mailing time) after receiving the commented documents from CONSULTANT / OWNER / MC.

No Code

No Code/ Only for "FOR INFORMATION" documents and "As-Built DWGs"

Document has been submitted for CONSULTANT / OWNER / MC's information(FI) consistency, completeness and correctness of documents content is in VENDOR/EPC contractor responsibility.

Above checking results by EIED shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.

EIED

DATE :

28.06.2022

DEPT. :

MA

Signature :

S.Razani

Only for internal review

CV

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MA

ST

AR

PR

SA

HV

TL

06

21Jun.2022

R

Issue for Approval

A.K

M.B

M.M

GH.P

05

07Jun.2022

R

Issue for Approval

A.K

M.B

M.M

GH.P

04

09Apr.2022

R

Issue for Approval

A.K

M.B

A.N

GH.P

03

27Feb.2022

R

Issue for Approval

A.K

M.B

A.N

GH.P

02

16Dec.2021

R

Issue for Approval

A.K

M.B

A.N

GH.P

01

26Sep.2021

R

Issue for Approval

A.K

M.B

A.N

GH.P

00

05Sep.2021

F

Issue for Approval

A.K

S.G

A.N

GH.P

REV.

DATE

STATUS

PURPOSE OF ISSUE

PREP.

CHKD.

APPD.

AUTH.

EIED

Soroush Mahestan Asaloyeh Company

HDPE Project

P.O DESCRIPTION: Centrifugal pumps

SCALE: None

DRAWING TITLE:

General Arrangement Drawing for 40-P-203A/B

DRAWING NO.

VP-40-000-MA-0011-0059

REV.

06

SHEET No.

1 OF 1

SIZE

A3

POS.	Q.	NPS	CONN. TYPE	DESCRIPTION	O (mm)	G (mm)	No.of holes	hole Ø (mm)	raised R (mm)	face S (mm)
N1	1	16"	ASME B16.5 # 300 RF	Suction Flange	648	571.5	20	35	469.9	1.6
N2	1	16"	ASME B16.5 # 300 RF	Discharge Flange	648	571.5	20	35	469.9	1.6
N3	1	1"	ASME B16.5 # 300 RF	Pump Drain Flange	124	88.9	4	19	50.8	1.6
N4	1	2"	ASME B16.5 # 150 RF	Base Plate Drain Blind Flange	152	120.6	4	19	92.1	1.6
N5	1	1/2"	ASME B16.5 # 300 RF	Sealing System Vent Flange	95	66.7	4	15.8	34.9	1.6
N6	1	1/2"	ASME B16.5 # 300 RF	Reservoir Drain Flange	95	66.7	4	15.8	34.9	1.6
N7	1	1/2"	ASME B16.5 # 300 RF	Quick Coupler For nitrogen filling						
N8	1	1/2"	ASME B16.5 # 300 RF	Sealing System Flange(HHX)	95	66.7	4	15.8	34.9	1.6
N9	1	1/2"	ASME B16.5 # 300 RF	Sealing system Drain Flange	95	66.7	4	15.8	34.9	1.6
CL	1	1/2"	ASME B16.5 # 150 RF	Cooling Water Inlet	89	60.3	4	15.8	34.9	1.6
CO	1	1/2"	ASME B16.5 # 150 RF	Cooling Water Outlet	89	60.3	4	15.8	34.9	1.6
CLO	1		CLO	Constant level oiler By Vendor						
FG	1	1/2"	Flanged ANSI # 150RF	Flow Indicator By Vendor						
V1	1	1"	Gate Valve # 800	Pump Drain Valve By Vendor						
V2	1	1/2"	Gate valve #800	Cooling Water Outlet valve By Vendor						
V3	1	1/2"	Gate valve #800	Cooling Water Inlet valve By Vendor						
V4	1	1/2"	Ball valve #800	Heat Exchanger Drain valve By Vendor						
V5	1	1/2"	Ball valve #800	Sealing system Drain valve By Vendor						
S1	1	1/2"	#800 SS-316	strainer						

to be 2 , FG for plan 32 to be considered as per TCL in bid stage

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