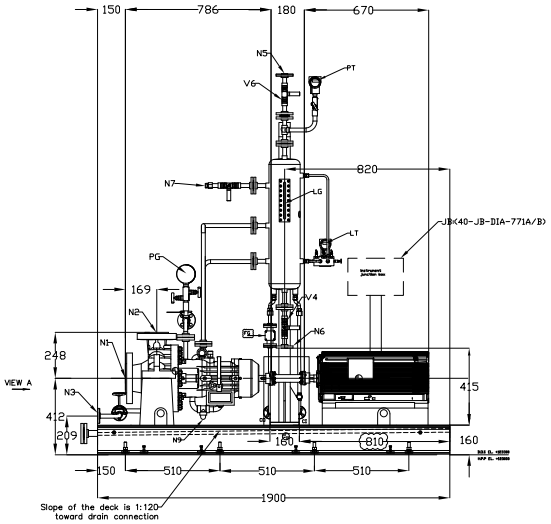
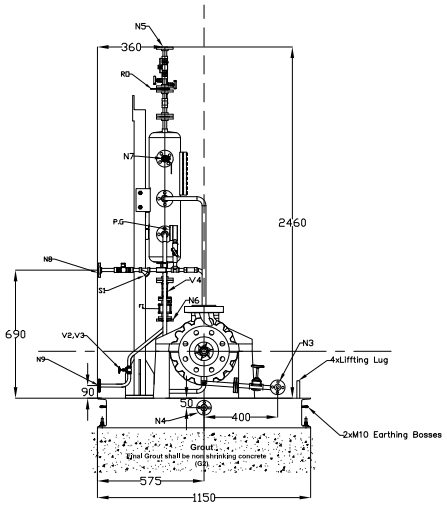
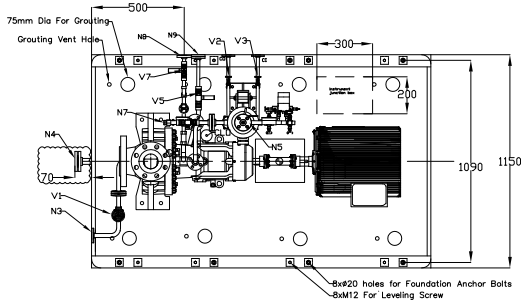






POS.	Q.	NPS	CONN. TYPE	DESCRIPTION	O (mm)	G (mm)	No.of holes	hole Ø (mm)	raised R (mm)	face S (mm)
N1	1	4"	ASME B16.5 # 300 RF	Suction Flange	254	200	8	22.2	157.2	1.6
N2	1	3"	ASME B16.5 # 300 RF	Discharge Flange	210	168.3	8	22.2	127	1.6
N3	1	3/4"	ASME B16.5 # 300 RF	Pump Drain Flange	117	82.6	4	19	42.9	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"		Quick Coupler For nitrogen filling						
N8	1	1/2"	ASME B16.5 # 300 RF	Sealing System Flange(form HHX service)	95	66.7	4	15.8	34.9	1.6
N9	1	1/2"	ASME B16.5 # 300 RF	Sealing system Drain Blind Flange	95	66.7	4	15.8	34.9	1.6
CI	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	3/4"	Gate Valve # 800	Pump Drain Valve(By Vendor)						
V2	1	1/2"	Globe valve #800	Cooling Water Outlet valve(By Vendor)						
V3	1	1/2"	Globe 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)						
V6	1	1/2"	Ball valve #800	Sealing system Vent valve(By Vendor)						
V7	1	1/2"	Ball valve #800	Sealing system valve(By Vendor)						
S1	1	1/2"	#800 SS-316	strainer						

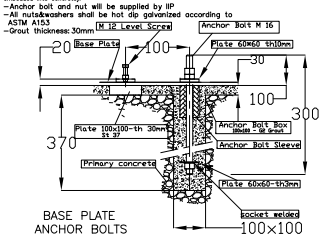
Instrument Number	
PT	40-PT-708A/B
LT	40-LT-705A/B
FG	40-FG-708A/B/C/D
RO	40-RO-708A/B
PG	40-PG-705A/B
LG	40-LG-708A/B

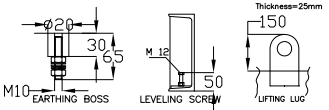
REFERENCE DOCUMENTS	DOC. NO.
Pump Data Sheet and Performance Curve for 40-P-721A/B	VP-40-000-MA-0011-0044
Pump cross sectional drawing and Part list for 40-P-721A/B	VP-40-000-MA-0011-0116
Coupling Drawing for 40-P-721A/B	VP-40-000-MA-0011-0152
Motor data sheets for 40-P-721A/B	VP-40-000-MA-0011-0188
Motor outline drawing for 40-P-721A/B	VP-40-000-MA-0011-0260
Pump P&ID for 40-P-721A/B	VP-40-000-MA-0011-0296

NOTE

1-All Dimension are mm.
2-Coupling guard is Aluminium.
3-Material of base plate is st37 & bolt A193 Gr B7 and nut A194 Gr 2H.
4-Maintenance area is 2m from Motor end and 1m from other sides.
5-All Dimension Clearances are according to ISO 286-1.

-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





NOZZLE LOADS

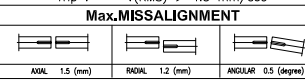
	FORCE N 2XAPI 610			MOMENTS Nm 2XAPI 610			
	Fx	Fr	Fz	Fx	Mx	Mr	Mz	Mx
SUCTION :	3560	2840	2320	5120	2660	1360	2000	3600
DISCHARGE	2140	1780	2660	3860	1900	940	1440	2560

FOUNDATION LOADS (approx. weight)

PUMP :	193 Kg
MOTOR :	184 Kg
BASE PLATE&SEALING SYSTEM :	580 Kg
TOTAL :	957 Kg

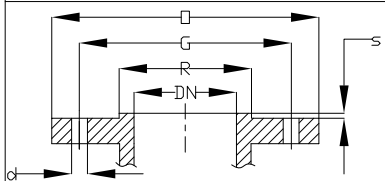
VIBRATION LEVEL (ISO 2372)
Alarm : V(RMS) > 3 mm/sec
Trip : V(RMS) > 4.5 mm/sec

Max.MISSALIGNMENT



AXIAL 1.5 (mm)	RADIAL 1.2 (mm)	ANGULAR 0.5 (degree)

PUMP NOZZLES: ASME B16.5



Flange Raised Face Roughness 125~250 AARH

ELECTRICAL MOTOR

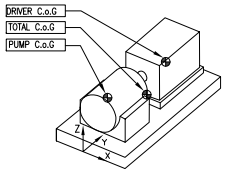
MODEL :	Schorch	PHASE :	3
FRAME :	160	VOLTAGE :	400
KW :	15	Hz :	50
RPM :	3000		

Pump Type: IOH2-80-200

Sealing System Plan: 32-52

COUPLING & Coupling Guard
COUPLING MANUFACTURER: IIP Group
MODEL : Flexible Spacer Type

CENTER OF GRAVITY (mm)



PUMP	X	45
	Y	420
	Z	452
DRIVER	X	0
	Y	1388
	Z	412
BASE	X	0
	Y	1012
	Z	100
TOTAL	X	9.7
	Y	933.5
	Z	217.5

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 : 10.1.2022 DEPT. : MA Signature : S.Razani

Only for internal review

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

REV.	DATE	STATUS	PURPOSE OF ISSUE	PREP.	CHKD.	APPD.	AUTH.
04	25.Dec.2021	R	Issue for Approval	A.K	M.B	A.N	GH.P
03	10.Oct.2021	R	Issue for Approval	A.K	M.B	A.N	GH.P
02	19.Sep.2021	R	Issue for Approval	A.K	M.M	A.N	GH.P
01	30.Aug.2021	R	Issue for Approval	A.K	S.G	A.N	GH.P
00	08.August.2021	F	Issue for Approval	A.K	S.G	A.N	GH.P

EIED — Soroush Mahestan Asaloyeh Company HDPE Project

U.P GROUP — P.O DESCRIPTION: Centrifugal pumps

Contract No. EMAC-01-19/2004 P.O No. KP-40-000-PS-MA-PO-0011 SCALE: None

DRAWING TITLE: General Arrangement Drawing for 40-P-721A/B

DRAWING NO. VP-40-000-MA-0011-0080 REV. 04 SHEET No. 1 OF 1 SIZE A3