



OGDCL PAKISTAN:
OIL & GAS DEVELOPMENT
COMPANY LIMITED

NASHPA COMPRESSION PROJECT PHASE-II

ISSUE FOR TENDER

0	9-Mar-18	ISSUED FOR TENDER	SJA	NAS	SJA	MHQ	AHB		
A	21-Jan-18	ISSUED FOR REVIEW	SJA	NAS	SJA	MHQ	AHB		
REV	DATE	DESCRIPTION	ORIG	CHKD	LE	QA	PM	LOCAL REPR.	PROJ. MAN




ENAR Petrotech Services (Pvt.) Limited ,
7-B , Sector 7-A , Korangi Industrial Area ,
Karachi Pakistan

CONTRACT NO. 14-0193

DOCUMENT TITLE: DATA SHEET OF VORTEX FLOW METER

	193	DS	6000	0	
	CODE	TYPE	SEQ NO.	REV	.

 ENAR PETROTECH SERVICES (PVT.) LTD.		VORTEX FLOWMETER		DATA SHEET NO.	0193-DS-6000
				SHEET NO.	2 OF 2
				DATE	9/3/2018
				REV.	0
				PREPARED BY	SJA
				CHECKED BY	NAS
				APPROVED BY	AHB
		OWNER:	OIL & GAS DEVELOPMENT COMPANY LIMITED (OGDCL)		
		PROJECT:	NASHPA COMPRESSION PROJECT PHASE-II		
1	Quantity			1	
2	Tag Number			FT-2010	
3	Service			COMPRESSORS COMBINE LIQUID HEADER OUTLET	
4	Line No.			3"-P-105-A2	
5	P&ID No.			0193-PB-2101	
6	PROCESS SERVICE CONDITIONS				
7	Fluid			Condensate + Water	
8	State			Liquid (partially flash vapour)	
9	Flow Max.		bpd	1369	
10	Flow Min.		bpd	228	
11	Pressure Max.		Psig	260	
12	Pressure Oper.		Psig	150	
13	Pressure Min.		Psig	120	
14	Temperature Max.		°F	165	
15	Temperature Oper.		°F	150	
16	Temperature Min.		°F	60 (minimum ambient 35 F)	
17	Specific Gravity at Oper. Cond.		-	0.21 - 0.80	
18	Viscosity at Oper. Cond.		cP	0.300 - 0.500	
19	BODY				
20	Sensor Type			Vortex Shedder Bar	
21	Sensor Material			316SS	
22	Body Type			Flanged	
23	Body Size	(Note - 3)		VTA	
24	Body Material			316SS	
25	Flange Size / Rating / Face Finish	(Note - 1,2)		Flanged / 150# RF	
26	TRANSMITTER				
27	Digital Indicator			Yes	
28	Unit	(Note - 4)		Lb/hr	
29	Mounting			Inline	
30	Calibrated Range		bpd	0-1369	
31	Measuring Range Limit		bpd	=/> Twice of Calibration Range	
32	Over Pressure Limits			Twice Max Pressure	
33	Power Supply (Loop Powered)			24 VDC	
34	Output Signal			4-20 mA with HART protocol	
35	Accuracy			0.075 % of Calibrated Span	
36	Electrical Connection	(Note - 5)		M20 x 1.5	
37	Enclosure Material			Cast Aluminium	
38	Enclosure Protection Rating			IP65	
39	Tropicalization			Yes	
40	Electrical Classification	(Note - 6)		EEx'd' IIB T3	
41	ACCESSORIES				
42	Temperature Compensation			Not Required	
43	Tag Plate			Yes - SS	
44	NACE Compliance			Not Required	
45	NOTES:				
	1-	Flange construction shall be in accordance with ASME B16.5.			
	2-	Vendor shall provide flanged connection as mentioned. If calculated body size is less than, vendor shall offer reduced body flowmeter.			
	3-	Vendor shall submit vortex sizing sheet for review with technical bid. Error and permanent pressure loss shall be available on the sizing sheet.			
	4-	Flowmeter shall have multiple selectable standard engineering units e.g. lb/hr, MMSCFD etc.			
	5-	Vendor shall provide Ex'e' metallic plugs for spare electrical connection.			
	6-	Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).			
	7-	This Data Sheet is developed based on preliminary information, Contractor shall develop detail Data Sheet and confirm all parameters during detail engineering stage.			
		N/A - Not Applicable			
		VTA - Vendor to Advise			