

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							  	
	DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0012	نسخه D01	شماره صفحه: 1 از 6

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER

نگهداشت و افزایش تولید میدان نفتی بینک

D01	DEC.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	APR.2022	IFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 2

CLIENT Doc. Number: F9Z-708933

status:

IDC: Inter-Discipline Check

IFC: Issued For Comment

IFA: Issued For Approval

AFD: Approved For Design

AFC: Approved For Construction

AFP: Approved For Purchase

AFQ: Approved For Quotation

IFI: Issued For Information

AB-R: As-Built for CLIENT Review

AB-A: As-Built -Approved



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER

شماره پیمان:

053 - 073 - 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D01	0012	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: 2 از 6

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04
1	X	X			
2	X	X			
3	X	X			
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Page	D00	D01	D02	D03	D04
65					
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NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER

شماره پیمان:

053 - 073 - 9184

پروژه

BK

بسته کاری

GCS

صادرکننده

PEDCO

تسهیلات

120

رشته

IN

نوع مدرک

DT

سریال

0012

نسخه

D01

شماره صفحه: 3 از 6

REFERENCE DOCUMENTS :

Specification For Instrumentation

BK-GNRAL-PEDCO-000-IN-SP-0001

Process Basis Of Design

BK-GNRAL-PEDCO-000-PR-DB-0001

Piping Material Specification

BK-GCS-PEDCO-120-PI-SP-0001

Hazardous Area Classification Layout

BK-GCS-PEDCO-120-SA-PY-0002

Instrument & Control System Design Criteria

BK-GCS-PEDCO-120-IN-DC-0002

D01

Symbol & Legend For PFD and P&ID

BK-GCS-PEDCO-120-PR-PI-0001

P&ID - Gas Compression Inlet Gas Pipeline (Binak)

BK-GCS-PEDCO-120-PR-PI-0002

P&ID - Gas Compression Inlet Gas Pipeline (Golkhari)

BK-GCS-PEDCO-120-PR-PI-0003

P&ID - Slug Catcher System

BK-GCS-PEDCO-120-PR-PI-0004

P&ID - Gas Compression Inlet Knock Out Drum

BK-GCS-PEDCO-120-PR-PI-0005

P&ID - 1st Stage Gas Compression Suction Drums

BK-GCS-PEDCO-120-PR-PI-0006

P&ID - 1st Stage Gas Compression Compressors

BK-GCS-PEDCO-120-PR-PI-0007

P&ID - 1st Stage Gas Compression Air Coolers

BK-GCS-PEDCO-120-PR-PI-0008

P&ID - 2nd Stage Gas Compression Suction Drums

BK-GCS-PEDCO-120-PR-PI-0009

P&ID - 2nd Stage Gas Compression Compressors

BK-GCS-PEDCO-120-PR-PI-0010

P&ID - 2nd Stage Gas Compression Air Coolers

BK-GCS-PEDCO-120-PR-PI-0011

P&ID - 2nd Stage Gas Compression Discharge Drum

BK-GCS-PEDCO-120-PR-PI-0012

P&ID - Gas Compression Dehydration Package

BK-GCS-PEDCO-120-PR-PI-0013

P&ID - Lean Glycol Storage Tank

BK-GCS-PEDCO-120-PR-PI-0014

P&ID - Instrument & Plant Air System

BK-GCS-PEDCO-120-PR-PI-0015

P&ID - Nitrogen Generation System

BK-GCS-PEDCO-120-PR-PI-0016

P&ID - Close Drain System

BK-GCS-PEDCO-120-PR-PI-0017

P&ID - Corrosion Inhibitor Package

BK-GCS-PEDCO-120-PR-PI-0018

P&ID - Methanol Injection Package

BK-GCS-PEDCO-120-PR-PI-0019

P&ID - LP Flare System

BK-GCS-PEDCO-120-PR-PI-0020

P&ID - Oily Water Sewer

BK-GCS-PEDCO-120-PR-PI-0021

P&ID - Fuel Gas System

BK-GCS-PEDCO-120-PR-PI-0022

P&ID - Diesel Oil System

BK-GCS-PEDCO-120-PR-PI-0023

P&ID - Potable Water System

BK-GCS-PEDCO-120-PR-PI-0024

P&ID - Glycol Sump Drum

BK-GCS-PEDCO-120-PR-PI-0025

P&ID - Fire Water Network

BK-GCS-PEDCO-120-SA-PI-0001

P&ID - Total Flooding System For Extension of Existing Elect. Building

BK-GCS-PEDCO-120-SA-PI-0002

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 4 از 6
	BK	GCS	PEDCO	120	IN	DT	0012	D01	

GENERAL NOTES:

1 - Zero and span adjustment shall be included and be accessible from outside in addition to HHC.

2 - Over range protection (at least 30% full scale) shall be considered.

3 - Tag plate as per Specification for Instrumentation, shall be stainless steel 304 SS (VTC). Following details shall be engraved on them:

D01

- Tag Number
- Range Limit
- Service
- Manufacture Model

4 - Painting shall be in accordance with manufacturer standard.

5 - VTA : Vendor To Advise

6 - N/A : Not Applicable

7 - Environmental condition for field instrumentation of Binak oilfield shall be considered as per the following (According to "BK-GNRL-PEDCO-000-PR-DB-0001: Process Basis Of Design":

Maximum ambient temperature: 50 (°C)
Minimum ambient temperature: 5 (°C)
Maximum steel surface exposed to sun: 85 (°C)
Maximum summer dry bulb: 50 (°C)
DB/RH for Summer HVAC Design: 41 °C / 61 %
DB FOR Winter HVAC Design: 6 °C

Relative Humidity:

- Maximum Design relative humidity (%): 100
- Minimum Design relative humidity (%): 0

8 - Material Test Certificate and calibration Certificate for all transmitters to be submitted by Vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 		
	DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0012	نسخه D01	شماره صفحه: 5 از 6

DIFF. PRESSURE TYPE FLOW TRANSMITTER							
GENERAL DATA	1	Tag No.				SEE NEXT PAGE	
	2	P&ID No.				SEE NEXT PAGE	
	3	Equipment No. / Line No.				SEE NEXT PAGE	
	4	Area Classification				ZONE 2, IIB T4	
	5	Piping Class				SEE NEXT PAGE	
	6	RFI Protection	Tropicalisation			NEEDED	Needed
OPERATING CONDITIONS	7	Fluid				SEE NEXT PAGE	
	8	Phase				SEE NEXT PAGE	
	9	Operating Pressure (Barg)				SEE NEXT PAGE	
	10	Design Pressure (Barg)				SEE NEXT PAGE	
	11	Operating Temperature (°C)				SEE NEXT PAGE	
	12	Design Temperature (°C)				SEE NEXT PAGE	
	13	Min./Normal/Max Flow Rate (Kg/h)				SEE NEXT PAGE	
TRANSMITTER	14	Element Type				SEE NEXT PAGE	
	15	Size of Process Connection				SEE NEXT PAGE	
	16	Rating of Process Connection				-	
	17	Element Material				SEE NEXT PAGE	
	18	Enclosure Material				Die cast aluminium	
	19	Instrument Range				SEE NEXT PAGE	
	20	Power Supply				24 VDC-Loop powered	
	21	Output Signal				4-20 mA	
	22	Communication Protocol				SMART HART (4-20mA)	
	23	Electrical Connection				ISO M20 x 1.5	
	24	Electrical Certification				Ex "ia"	
	25	Ingress Protection				IP-65 as minimum	
	26	Accuracy	Write Protection			0.1% of F.S	Not Needed (Note 1)
	27	Repeatability				+/- 0.1% or better	
28	Span and Zero Adjustment				Required		
29	Over Range Protection				SEE NEXT PAGE (1.3 of F.S)		
DIAPHRAGM SEAL	30	Type				N/A	
	31	Size (In)				N/A	
	32	Fill Fluid				N/A	
	33	Diaphragm Material				N/A	
	34	Capillary Material				N/A	
	35	Capillary Length				N/A	
OPTIONS	36	Integral Indicator	Display Unit			Required	Barg
	37	Mounting Brackets				Required, 2" Support Pipe	
	38	Manifold	Body Material			SEE NEXT PAGE	316 S.S.L
	39	Connection				1/2 " NPT	
	40	Manifold Model	Manifold Manufacturer			-	
	41	Integral Indicator Style				LCD TYPE	
	42	NACE Requirements				SEE NEXT PAGE	
PURCHASING DATA	43	Model	Manufacturer			Will be finalized later	Will be finalized later
	44	Supplier	Order			Will be finalized later	Will be finalized later

Notes:

(1) According to Specification For Instrumentation, If smart type transmitters are selected for **ESD application** they shall be configured as "write protected". There is no Flow Transmitter for ESD.

 NISOC		تجهيزات و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																							
		DATA SHEETS FOR DIFF. PRESSURE FLOW TRANSMITTER																							
شماره پیمان: 003 - 073 - 9388		پوزی	بسته گازی	مشارکت کننده	تجهيزات	رشته	نوع مدارک	سرال	نسخه	شماره مشخصه: 6 از 6															
		BK	GCS	PEDCO	120	IN	DT	0012	D01																
DIFF. PRESSURE TYPE FLOW TRANSMITTER LIST																									
Rev.	Item No.	Tag No.	P&ID No.	Equipment No. / Line No.	Service	Fluid	Connection Rating	Phase	Design Pressure (Bar-g)	Operating Pressure (Bar-g)	Design Temp. (°C)	Operating Temp. (°C)	Calibration Range (mBarg)	Instrument Range (mBarg)	Flow Rate (Kg/h)			Element Type	Element Material	Size of Process Connection (Orifice Flange Tapping)	Over Range Protection	5-Way Valve (1/2"NPTF x 1/4"NPTF)	NACE	Model	Remark
															Min.	Normal	Max.								
D01 MODIFIED	1	FIT-2101	BK-GCS-PEDCO-120-PR-PI-0002-D04	GAS-111-0101-AN07-6"-PT	Gas Compression Inlet Gas Pipeline (Binak)	GAS	300#	Vapour	9	7.5	85	46.11/26.67	0-250	0-250	2297.4	6564	7220.4	Diaphragm	SS 316L	2 x 1 1/2" NPTF	X 1.3 Full Scale	Yes	Yes	VTA	
D01 MODIFIED	2	FIT-2102	BK-GCS-PEDCO-120-PR-PI-0003-D04	GAS-111-0001-FN05-8"-PT	Gas Compression Inlet Gas Pipeline (Golkhar)	GAS	300#	Vapour	9	7.5	85	32/15.5	0-250	0-250	3711.96	10605.6	11666.16	Diaphragm	SS 316L	2 x 1 1/2" NPTF	X 1.3 Full Scale	Yes	Yes	VTA	
D01 MODIFIED	3	FIT-2111	BK-GCS-PEDCO-120-PR-PI-0004-D04 (2 of 2)	CDH-112-0015-CN05-4"-PT	Slug Catcher System	GAS	300#	LIQUID	23.3	19.5	85	23.22/8.82	0-250	0-250	3 (m3/h)	10 (m3/h)	11 (m3/h)	Diaphragm	SS 316L	2 x 1 1/2" NPTF	X 1.3 Full Scale	Yes	Yes	VTA	
D01 ADDED	4	FIT-2211	BK-GCS-PEDCO-120-PR-PI-0016-D04	NIT-112-0024-AN01-2"-PT	Nitrogen Package Outlet	GAS	300#	GAS	8	12.5	85	60	0-250	0-250	13.56	38.74	42.61	Diaphragm	SS 316L	2 x 1 1/2" NPTF	X 1.3 Full Scale	Yes	No	VTA	
D01 MODIFIED	5	FIT-2271	BK-GCS-PEDCO-120-PR-PI-0022-D04	FLG-112-0110-AN07-2"-PT	Fuel Gas System	Fuel Gas	300#	GAS	F.V/9	4.9	85	48	0-250	0-250	24.5	70	77	Diaphragm	SS 316L	2 x 1 1/2" NPTF	X 1.3 Full Scale	Yes	Yes	VTA	