



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEET FOR LEVEL SWITCH

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادر کننده

PEDCO

تسهیلات

120

رشته

IN

نوع مدرک

DT

سریال

0008

نسخه

D02

شماره صفحه: ۱ از ۶

طرح نگهداشت و افزایش تولید ۲۷ مخزن

DATA SHEET FOR LEVEL SWITCH

نگهداشت و افزایش تولید میدان نفتی بینک

D02	SEP.2023	AFC	P.Hajisadeghi	M.Fakharian	A.M.Mohseni	
D01	SEP.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: 1

CLIENT Doc. Number: F9Z-708929

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



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شماره صفحه: ۶ از ۲

REVISION RECORD SHEET

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3	X	X	X		
4	X	X			
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DATA SHEET FOR LEVEL SWITCH

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

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نسخه

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شماره صفحه: ۳ از ۶

D02

REFERENCE DOCUMENTS :

Specification For Instrumentation
Process Basis Of Design
Piping Material Specification
Hazardous Area Classification Layout
Instrument & Control System Design Criteria

BK-GNRAL-PEDCO-000-IN-SP-0001-D04
BK-GNRAL-PEDCO-000-PR-DB-0001-D04
BK-GCS-PEDCO-120-PI-SP-0001-D02
BK-GCS-PEDCO-120-SA-PY-0002-D00
BK-GCS-PEDCO-120-IN-DC-0002-D01

Symbol & Legend For PFD and P&ID
P&ID - Gas Compression Inlet Gas Pipeline (Binak)
P&ID - Gas Compression Inlet Gas Pipeline (Golghari)
P&ID - Slug Catcher System
P&ID - Gas Compression Inlet Knock Out Drum
P&ID - 1st Stage Gas Compression Suction Drums
P&ID - 1st Stage Gas Compression Compressors
P&ID - 1st Stage Gas Compression Air Coolers
P&ID - 2nd Stage Gas Compression Suction Drums
P&ID - 2nd Stage Gas Compression Compressors
P&ID - 2nd Stage Gas Compression Air Coolers
P&ID - 2nd Stage Gas Compression Discharge Drum
P&ID - Gas Compression Dehydration Package
P&ID - Lean Glycol Storage Tank
P&ID - Instrument & Plant Air System
P&ID - Nitrogen Generation System
P&ID - Close Drain System
P&ID - Corrosion Inhibitor Package
P&ID - Methanol Injection Package
P&ID - LP Flare System
P&ID - Oily Water Sewer
P&ID - Fuel Gas System
P&ID - Diesel Oil System
P&ID - Potable Water System
P&ID - Glycol Sump Drum
P&ID - Fire Water Network
P&ID - Total Flooding System For Extension of Existing Elect. Building

BK-GCS-PEDCO-120-PR-PI-0001-D04
BK-GCS-PEDCO-120-PR-PI-0002-D06
BK-GCS-PEDCO-120-PR-PI-0003-D06
BK-GCS-PEDCO-120-PR-PI-0004-D06
BK-GCS-PEDCO-120-PR-PI-0005-D06
BK-GCS-PEDCO-120-PR-PI-0006-D06
BK-GCS-PEDCO-120-PR-PI-0007-D06
BK-GCS-PEDCO-120-PR-PI-0008-D06
BK-GCS-PEDCO-120-PR-PI-0009-D06
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BK-GCS-PEDCO-120-PR-PI-0017-D06
BK-GCS-PEDCO-120-PR-PI-0018-D07
BK-GCS-PEDCO-120-PR-PI-0019-D06
BK-GCS-PEDCO-120-PR-PI-0020-D06
BK-GCS-PEDCO-120-PR-PI-0021-D05
BK-GCS-PEDCO-120-PR-PI-0022-D06
BK-GCS-PEDCO-120-PR-PI-0023-D06
BK-GCS-PEDCO-120-PR-PI-0024-D06
BK-GCS-PEDCO-120-PR-PI-0025-D06
BK-GCS-PEDCO-120-SA-PI-0001-D04
BK-GCS-PEDCO-120-SA-PI-0002-D02

IPS Construction and Installation Standard for Level instruments
IPS Engineering and Design Standard for Level instruments
IPS Material and Equipment Standard for Level instruments

IPS-C-IN-140
IPS-E-IN-140
IPS-M-IN-140



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DATA SHEET FOR LEVEL SWITCH

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۴ از ۶
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	PEDCO	120	IN	DT	0008	D02	

GENERAL NOTES:

- 1 - Vendor to follow materials indicated in the Data Sheets, related wetted parts, these materials can be as minimum and shall be verified by vendor.
- 2 - For level switches suitable sunshades shall be supplied by vendor.
- 3 - Vendor design shall be in accordance with : "Specification For Instrumentation, Doc. No. BK-GNRAL-PEDCO-000-IN-SP-0001" and all related spec.s for level switches.
- 4 -Vendor shall specify dead band of switches at quotation stage for client approval.
- 5 - Calibration scale shall be provided in switch to indicate exact set-point setting of switch.
- 6 - Vendor shall provide calibration certificate, factory visual and dimensional inspection report, hydrostatic pressure test certification, and mechanical test report.
- 7 - Level switches shall be fabricated according to IPS-M-IN-140.
- 8 - Level switches shall be provided with a stainless steel 304 SS (VTC) nameplate permanently fastened to the instrument. Following details shall be engraved on them:

- Tag Number
- Manufacturer model and serial number
- Service
- Contact rating
- Electrical classification and certification agency name and code
- Project Information

- 9 - Environmental condition for field instrumentation of Binak oilfield shall be considered as per the following (According to "BK-GNRAL-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: - (°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

- 10- Internal stilling well should be supplied by the Vendor, and should have an inside diameter of at least 25mm larger than the displacer or float diameter.
The stilling well shall be open at the bottom end, and should have a vent hole located above the maximum level.



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DATA SHEET FOR LEVEL SWITCH

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

نسخه	سرال	نوع مدرک	رشته	تسهيلات	صادر کننده	بسته کاری	پروژه
D02	0008	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: ۵ از ۶

LEVEL SWITCH

GENERAL DATA	1	Tag No.	SEE PAGE 6	
	2	P & ID No.	SEE PAGE 6	
	3	Service	SEE PAGE 6	
	4	Equipment No.	SEE PAGE 6	
	5	Area Clacification	ZONE 2, IIB T4	
	6			
OPERATING CONDITIONS	7	Upper Fluid	Lower Fluid	SEE PAGE 6
	8	Upper Phase	Lower Phase	SEE PAGE 6
	9	Operating Pressure	Design Pressure (barg)	SEE PAGE 6
	10	Operating Temperature	Design Temperature (°C)	SEE PAGE 6
	11	Upper Density	Lower Density (kg/m ³)	SEE PAGE 6
	12			
BODY/GAGE	13			
	14	Body/Cage Material	SEE PAGE 6	
	15	Head Orientation	Top	
	16	Connection Size & Rating	SEE PAGE 6	
	17	Flange Material	SEE PAGE 6	
	18	Length of Center To Center (C-C)	Set Point (mm)	N.A SEE PAGE 6 (Note 1)
DISPLACER / FLOAT	19	Mounting	Internal	
	20			
	21	Type	SEE PAGE 6	
	22	Insertion Depth	VTA	
	23	Displacer or Float Material	316 S.S	
SWITCH	24	Setting	Adjustable / Internal	
	25	Differential Gap (Fixed/Adj)	Fixed	
	26	Type	Snap Acting with Hermetically Sealed (write protected)	
	27	Quantity	2 x DPDT	
	28	Setpoint	SEE PAGE 6	
	29	Ingress Protection	IP-65 as minimum	
	30	Electrical Certificate	EExd IIB,T4	
	31	Electrical Connection	ISO M20 x 1.5	
	32	Contact Rating	10A @ 110 VAC	
	33	Load Type	Inductive	
OPTIONS	34	Case Material	VTA	
	35	Contacts (Open / Close)	Normally Close	
	36	On Level (Incr. / Decr.)	SEE PAGE 6	
	37	ACCURACY	1% OF SPAN	
PURCHASING DATA	38	Tag Name Plate	Required	
	39	Cable Gland	Required	
	40	Vent/Drain Valve	N.A	
	41	NACE Requirement (As per MR0175/ISO 15156 Compliance)	SEE PAGE 6	
	42	Model	Manufacture	Will be finalized later
	43	Supplier	Order	Will be finalized later
	44			

VTA : VENDOR TO ADVISE

(1) The location for installation will be finalized by process and mechanical departments.

(2) Safety area classification shall be hold until to be finalized in Doc.: Hazardous Area Classification Layout BK-GCS-PEDCO-120-SA-PY-0002.

