

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0016	نسخه D03	شماره صفحه: 1 از 27

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

نگهداشت و افزایش تولید میدان نفتی بینک

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D01	OCT.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	MAY.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-708936				
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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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

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REVISION RECORD SHEET

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2	X	X	X	X		66					
3	X	X				67					
4	X					68					
5	X	X	X			69					
6	X	X	X			70					
7	X	X	X	X		71					
8	X	X	X	X		72					
9	X	X	X	X		73					
10	X	X	X	X		74					
11	X	X	X	X		75					
12	X	X	X	X		76					
13	X	X	X			77					
14	X	X	X	X		78					
15	X	X	X	X		79					
16	X		X	X		80					
17	X	X	X	X		81					
18	X		X	X		82					
19	X	X	X	X		83					
20	X		X	X		84					
21	X	X	X			85					
22	X	X	X	X		86					
23	X	X	X			87					
24	X	X	X	X		88					
25	X	X	X			89					
26		X	X	X		90					
27		X	X	X		91					
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REFERENECE DOCUMENT

F&G Location Layout For Process AREA	BK-GCS-PEDCO-120-IN-PY-0005
F&G Location Layout For Buildings	BK-GCS-PEDCO-120-IN-PY-0006
FIRE & GAS DETECTION DESIGN CRITERIA	BK-GCS-PEDCO-120-IN-DC-0001
SPEC. FOR FIRE & GAS SENSOR AND DEVICES	BK-00-HD-000-IN-SP-0009-D00
F&G Cause and Effect Diagram For Process Area	BK-GCS-PEDCO-120-IN-DG-0009
F&G Cause and Effect Diagram For Buildings	BK-GCS-PEDCO-120-IN-DG-0010



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GENERAL NOTES:

- 1 - Vendor shall identify and detail any deviation from the present Data Sheet
- 2- All equipments/detectors listed in this document shall be supplied with related calibration and test equipments.
- 3 - S.S. Name olate including project description to be provided.
- 4- Low power consumption to be considered. Q

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DATASHEET FOR FLAMMABLE GAS DETECTOR

GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page'
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	Function	Flammable Gas Detector (HC)
	9	Service	See Next Page
	9	Case Color	Red
	10	Detector Type	Conventional
	11	Sensor Type	Infra Red (IR)
	12	Covering Range	75 m2
	13	Accuracy	< +/-3% Full Scale
	14	Detection Range	0 to 100% LEL with 2 digital Auxiliary switch for L/H alarm signals
	15	Repeatability	<±2% of Full Scale
	16	Response time	<5 Sec
	17	Life Time	More than 5 Years
	18	Output Signal	4~20 Ma+ Hart (signal+power)
	19	System Wiring	3 wire
	20	Local Indicator LCD Type	Yes
	21	Built-in-Test	Manual and Automatic
	22	Power Supply	24 VDC-Loop powered
	23	Power Consumption	VTA (Note 8)
	24	Electrical Connection	M20 x 1.5
	25	Body and Housing Material	Epoxy coated die cast aluminum(copper free)
	26	Mounting	Bracket (Note 5)
	27	Mounting Accessories Material	316 SS
	28	Degree of Protection	See Next Page
	29	Explosion Protection	See Next Page
	30	Safety Integrity Level	See Next Page
	31	Certificate	Calibration, SIL, IEC 60529 (IP), ATEX , MATERIAL
	32	Nameplates	Stainless Steel
	33	Manufacturer	VTA
	34	Model No.	VTA

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,not at all.
3. The response of a detector shall be clearly visible from the outside by a flashing ligh-emitting(LED) of sufficient brightness.
4. The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.
5. Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands,shelter, other accessories (including splash guard, Calibration Kit, etc)
6. Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.
7. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
8. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
9. Analogue data with two digital signals as low, high alarm to be sent by detector to F&G system via multicore cable. Also analogue data to be shown by local indicator(LCD) at field.
10. FGDs shall be capable to connect to Smart Hart Communication.



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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

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FLAMMABLE GAS DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SIL	SERVICE	REMARKS
1	FGD-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (4 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
2	FGD-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
3	FGD-2002	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
4	FGD-2003	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
5	FGD-2004	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
6	FGD-4001A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
7	FGD-4002A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
8	FGD-4003A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
9	FGD-4004A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
10	FGD-4001B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
11	FGD-4002B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
12	FGD-4003B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
13	FGD-4004B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
14	FGD-4001C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
15	FGD-4002C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
16	FGD-4003C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
17	FGD-4004C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
18	FGD-5001A	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
19	FGD-5001B	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
20	FGD-5001C	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
21	FGD-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
22	FGD-6002	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
23	FGD-6003	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
24	FGD-7001	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
25	FGD-7002	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
26	FGD-7003	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
27	FGD-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
28	FGD-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
29	FGD-1103	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
30	FGD-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
31	FGD-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
32	FGD-1203	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	

Calibration and test device for Flammable Gas Detectors

NOTE 1

1. Calibration and test devices for Flammable Gas Detectors to be advise by vendor.

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DATASHEET FOR TOXIC GAS DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Function
	9	Service
	10	Detector Type
	11	Sensor Type
	12	Measuring Range / Calibration Range
	13	Accuracy
	14	Repeatability
	15	Response time
	16	Life Time
	17	Output Signal
	18	System Wiring
	19	Local Indicator LCD Type
	20	Built-in-Test
	21	Power Supply
	22	Power Consumption
	23	Electrical Connection
	24	Body and Housing Material
	25	Mounting
	26	Mounting Accessories Material
	27	Degree of Protection
	28	Explosion Protection
	29	Safety Integrity Level
	30	Certificate
	31	Nameplates
	32	Manufacturer
	33	Model No.

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,not at all.
3. The response of a detector shall be clearly visible from the outside by a flashing high-emitting(LED) of sufficient brightness.
4. The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.
5. Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands,shelter, other accessories (including splash guard, Calibration Kit, etc)
6. Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.
7. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
8. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
9. Analogue data with two digital signals as low, high alarm to be sent by detector to F&G system via multicore cable. Also analogue data to be shown by local indicator(LCD) at field.
10. TGDs shall be capable to connect to Smart Hart Communication.



احداث رديف تراكم گاز در ايستگاه جمع آوري بينك



سمازہ پیمان:

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TOXIC GAS DETECTOR LIST

1. Calibration and test devices for Toxic Gas Detectors to be advise by vendor.

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DATASHEET FOR FLAME DETECTOR			
GENERAL	1	Tag No.	See Next Page
	1	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	2	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	3	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	6	F&G Location Layout No.	See Next Page
	4	Area Classification	See Next Page
	5	Location of Installation	See Next Page
DETECTOR	6	Function	Flame Detector
	7	Service	See Next Page
	8	Detector Type	Conventional
	9	Sensor Type	UV/IR
	10	Spectral Response	(VTA)
	11	Field of Vision	max : 120° horizontal, 120° vertical
	12	Range (m)	20 Meter
	13	Sensitive wave length	VTA
	14	Response time	less than 5 sec @ 50 feet.
	15	Output Signal	4~20 Ma+ Hart (signal+power) D03
	16	System Wiring	3 wire
	17	Built-in-Test	Manual and Automatic (HART Compatible)
	18	Power Supply	24 VDC-Loop powered
	19	Power Consumption	VTA (Note 5)
	20	Electrical Connection	M20 x 1.5
	21	Body and Housing Material	Enclosure material Epoxy coated die cast aluminum (copper free)
	22	Mounting	Mounting Bracket with Tilt Mount capability
	23	Mounting Accessories Material	316 SS
	24	Degree of Protection	See Next Page
	25	Explosion Protection	See Next Page
	26	Safety Integrity Level	See Next Page
	27	Certificate	Calibration, SIL ,IEC 60529 (IP), ATEX ,BSI EN54-10(2002)
	28	Nameplates	Stainless Steel
	30	Manufacturer	VTA
	31	Model No.	VTA

Notes :

1. VTA : Vendor To Advise. VTC : Vendor To Confirm N/A : Not Applicable
2. Vendor scope of supply includes: All Mounting Accessories, cable glands, sunshade, other accessories (including air shield, swivel elbow union, sun and rain protection,etc) and also device shall have self testing ability, IR3 test lamp (with charger),Status Indicator (LED with status, fault and alarm indication) , test magnets (if required).
3. Vendor shall consider specific requirement for proper operation of detector according to ambient humidity if required.
4. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
5. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
6. FDs shall be capable to connect to Smart Hart Communication.



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شماره صفحه: 11 از 27

FLAME DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SIL	SERVICE	REMARKS
1	FD-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
2	FD-2002	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
3	FD-2003	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
4	FD-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (6 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
5	FD-4001A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
6	FD-4002A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
7	FD-4003A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
8	FD-4004A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
9	FD-4001B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
10	FD-4002B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
11	FD-4003B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
12	FD-4004B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
13	FD-4001C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
14	FD-4002C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
15	FD-4003C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
16	FD-4004C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	3	Hydrocarbon	
17	FD-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
18	FD-6002	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
19	FD-8001	Area 8 - Air Compressor /Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (11 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
20	FD-8002	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (11 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	NON	Hydrocarbon	
21	Calibration and test device for Flame Detectors								NOTE 1

1. Calibration and test devices for Flame Detectors to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک					 			
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0016	نسخه D03	شماره صفحه: 12 از 27

DATASHEET FOR HORN			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	Conventional
	9	Function	Local Alarm with 2 modes: non-continuous for flammable and toxic gas detection low alarm • Continuous for fire detection & for flammable and toxic gas detection high alarm
	10	Sound Level	not exceed 120dB (A) at 1 meter distance (VTA)
	11	Service	Hydrocarbon
	12	Adjustable Sound Intensity	Yes
	13	Frequency Range	VTA
	14	Multiple Terminal Connection	Required
	15	No. of Selectable Tones	Minimum 2
	16	Power Supply	24 VDC-Loop powered 
	17	System Wiring	5 Core x 1.5
	18	Power Consumption	VTA (Note 4)
	19	Electrical Connection	M25 x 1.5(Note 9)
	20	Body and Housing Material	Epoxy coated die cast aluminum (copper free).
	21	Installation	Fix
	22	Mounting	Bracket (Note 2)
	23	Mounting Accessories Material	316 SS
	24	Degree of Protection	IP 65
	25	Explosion Protection	Eexd
	26	Weather Proof and Dust Proof	Yes
	27	Safety Integrity Level	Non SIL
28	Certificate	IEC 60529 (IP), ATEX , BSI EN54-3	
29	Nameplates Material	Stainless Steel	
	30	Manufacturer	VTA
	31	Model No.	VTA

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Vendor shall specify weight, color and dimensions of devices and accessories.
3. The value of End Of Line (EOL) resistor shall be suggested by vendor.
4. Mounting Accessories, sunshade and cable gland are included in vendor scope of supply.
5. 2 different tones one for Flammable/ Toxic gas detection (non-continuous) and one for fire detection (continuous). Each tone shall be activated by receiving dedicated signal.
6. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
8. Horn alarms shall have a range of at least 1.5 km in still air.



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

پروژہ

BK

بسته کاری

GCS

صادر کنندہ

PEDCO

تَسْهِلَات

120

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شماره صفحه: 13 از 27

FLAME DETECTOR LIST

[illegible]

1. Calibration and test devices for Horn to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 14 از 27
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03	

DATASHEET FOR BEACON		
GENERAL	1	Tag No.
	2	Ambient Temptrature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	System Type
	9	Service
	10	Function
	11	Flash Rate
	12	Colour
	13	Lens Type
	14	Field of View
	15	Tube type
	16	Effective Intensity
	17	Power Supply
	18	System Wiring
	19	Power Consumption
	20	Electrical Connection
	21	Body and Housing Material
	22	Installation
	23	Mounting
	24	Mounting Accessories Material
	25	Degree of Protection
	26	Explosion Protection
	27	Weather Proof and Dust Proof
	28	Safety Integrity Level
	29	Certificate
	30	Body Color
	31	Nameplates Material
	32	Manufacturer
	33	Model No.

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable

2. Vendor shall specify weight, color and dimentions of devices and accessories.

3. The value of End Of Line (EOL) resistor shall be suggested by vendor.

4. Mounting Accessories, sunshade and cable gland are included in vendor scope of supply.

5. 3 different colors to be selected for lights of beacon:

- Red for fire detection
- Blue for Toxic Gas Detector(if applicable)
- Yellow for flammable gas detection

6. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.

7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف ترانکم گاز در ایستگاه جمع آوری بینک								  	
شماره پیمان:	پروژه	روش کار	مکان نشاند	نمایشات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 15 از 27	
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03		

BEACON LIST										
ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	COLOR	SERVICE	REMARKS	
1	BB-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
2	BB-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
3	BB-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
4	BB-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
5	BB-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
6	BB-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
7	BB-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
8	BB-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
9	BB-8001	Area 8 - Diesel Generator Area / Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
10	BB-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
11	BB-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
12	BB-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
13	BB-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
14	BB-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional	
15	BR-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
16	BR-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
17	BR-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
18	BR-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
19	BR-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
20	BR-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
21	BR-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
22	BR-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
23	BR-8001	Area 8 - Diesel Generator Area / Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
24	BR-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
25	BR-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
26	BR-1103	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Adressable	
27	BR-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Outdoor	IP54	Unclassified	Red	Hydrocarbon	Conventional	
28	BR-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
29	BR-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional	
30	BY-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
31	BY-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
32	BY-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
33	BY-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
34	BY-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
35	BY-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
36	BY-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
37	BY-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
38	BY-8001	Area 8 - Diesel Generator Area / Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
39	BY-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
40	BY-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
41	BY-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
42	BY-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
43	BY-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional	
44	calibration and test device for Beacons									NOTE 1

1. Calibration and test devices for Beacons to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 16 از 27
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03	

DATASHEET FOR HYDROGEN GAS DETECTOR			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	Conventional
	9	Function	Hydrogen Gas Detector
	10	Service	See Next Page
	11	Sensor Type	CatalyticType (HGD)
	12	Measuring Range/Calibration Range	VTA/ 0 - 100% LEL
	13	Accuracy	<+/-2 ppm
	14	Life Time	Typical 2 to 5 Years
	15	Response time	< 5 Seconds
	16	Alarm Range	High Level :5% LEL , High High Level:10% LEL
	17	Repeatability	VTA
	18	Output Signal	4~20 Ma+ Hart (signal+power) 
	19	Power Supply	24 VDC-Loop powered 
	20	System Wiring	3 wire 
	21	Power Consumption	VTA (Note 8)
	22	Electrical Connection	M20 x 1.5
	23	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	24	Installation	Fix
	25	Mounting	Bracket (Note 5)
	26	Mounting Accessories Material	316 SS
	27	Degree of Protection	See Next Page
	28	Explosion Protection	See Next Page
	29	Weather Proof and Dust Proof	Yes
	30	Safety Integrity Level	Non SIL
	31	Certificate	Calibration, SIL, IEC 60529 (IP), ATEX , MATERIAL
	32	Nameplates Material	Stainless Steel
	33	Manufacturer	VTA
	34	Model No.	VTA

Notes :

- VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
- The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,none at all.
- The response of a detector shall be clearly visible from the outside by a flashing high-emitting(LED) of sufficient brightness.
- The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.
- Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands, other accessories (including splash guard, Calibration Kit, etc)
- Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.
- All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
- Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
- HGDs shall be capable to connect to Smart Hart Communication.
- The VENDOR shall provide the zero stability and the drift of the full-scale sensitivity, in % LFL (for Catalytic GD), per month and year,



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

پروژه

BK

بسته کاری

GCS

صادرکننده

PEDCO

تسهیلات

120

رشته

IN

نوع مدرک

DT

سریال

0016

نسخه

D03

شماره صفحه: 17 از 27

HYDROGEN GAS DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION D03	SERVICE D03	REMARKS
1	HGD-1101	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 65	Eexd 'Zone1, IIC T4	Hydroen (related to the batteries)	
2	HGD-1102	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 65	Eexd 'Zone1, IIC T4	Hydroen (related to the batteries)	
5	calibration and test device for HGDs							NOTE 1

1. Calibration and test devices for HGDs to be advise by vendor.

 NISOC	 نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							
DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
053 - 073 – 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03
شماره صفحه: 18 از 27								

DATASHEET FOR MANUAL ALARM CALL POINT			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temprature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	Function	Manual Alarm
	9	Service	See Next Page
	10	Glass Type	Resettable type
	11	Switch Type	Single pole, Normally Closed , Hermetically Sealed (equipped with opening key for test, maintenance and reset)
	12	Detector Type	Conventional/Addressable
	13	Alarm Indicator	High Intensity Red LED
	14	Output Signal	Voltage Free Contact (24VDC,5A)
	15	System Wiring	2 Core
	16	Test Key	Required
	17	Power Supply	24 VDC-Loop powered 
	18	Electrical Connection	M20 x 1.5
	19	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	20	Colour	Red With Black Marking Colour
	21	End of Line Resistor	Yes
	22	Mounting	Bracket (Note 2)
	23	Mounting Accessories Material	316 SS
	24	Degree of Protection	See Next Page
	25	Explosion Protection	See Next Page
	26	Safety Integrity Level	Non SIL
	27	Certificate	IEC 60529 (IP), ATEX , BSI EN54-11
	28	Nameplates Material	Stainless Steel
	29	Manufacturer	VTA
	30	Model No.	VTA

Notes :

1. VT A : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Mounting Accessories, cable gland,sunshade are included in vendor scope of supply.
3. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
	شماره پیمان:	پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مترک	سروال	نسخه
053 - 073 – 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03	شماره صفحه: 20 از 27

DATASHEET FOR LINEAR HEAT DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Detector Type
	9	Function
	10	Service
	11	Sensor Type
	12	Outer Sheath Material
	13	Overall Diameter (mm)
	14	Alarm Temperature
	15	Temperature Rise
	16	Cable Length
	17	Output Signal
	18	Power Supply
	19	System Wiring
	20	Electrical Connection
	21	Body and Housing Material
	22	Installation
	23	Mounting
	24	Mounting Accessories Material
	25	Degree of Protection
	26	Explosion Protection
	27	Weather Proof and Dust Proof
	28	Safety Integrity Level
	29	Certificate
	30	Nameplates Material
	31	Manufacturer
	32	Model No.

Notes :

- VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
- Mounting Accessories, shelter and cable gland are included in vendor scope of supply.
- All devices shall have stainless steel tag plate with their tag no. engraved on it which is fixed on the body.
- All required mounting & Termination accessories to be provided by vendor.



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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

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شماره صفحه: 21 از 27

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D03	0016	DT	IN	120	PEDCO	GCS	BK

LINEAR HEAT DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	LHD-7001	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
2	LHD-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
3	LHD-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
4	LHD-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
5	LHD-1203	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5/6)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19	calibration and test device for LHDs							NOTE 1

1. Calibration and test devices for LHDs to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT							
شماره پیمان:	پروژه	پسینه کاری	صاحبکارخانه	تسهیلات	رشته	نوع متریک	سیرال	نسخه
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D03

شماره صفحه: 22 از 27

DATASHEET FOR SMOKE DETECTOR/HEAT & SMOKE DETECTOR				
GENERAL	1	Tag No.	See Next Page	
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)	
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)	
	4	Atmospheric Condition	Non-Acidic	
	5	Area Classification	See Next Page	
	6	F&G Location Layout No.	See Next Page	
	7	Location of Installation	See Next Page	
DETECTOR	8	Detector Type	Addressable	
	9	Function	Smoke Detector	
	10	Service	False floor/False ceiling / Ceiling smoke detection	
	11	Sensor Type	Smoke Sensing Element : Optical type(scattered-light type or transmitted-light type detectors)	
	12	Rate of Rise(ROR)	Yes (Temperature Rise: 8 °C Perminute)	
	13	Built-in-Test	Manual	
	14	Area Coverage	50 m²	
	15	Operating Temperature	-10 °C to 90 °C	
	16	Alarm Set point	VTC	
	17	Output Signal	VTA	
	18	Power Supply	24 VDC-Loop powered 	
	19	System Wiring	2 Core x 1.5	
	20	Contact Type & Rating	24 VDC, DPDT	
	21	Power Consumption	VTA (Note 7)	
	22	Electrical Connection	M20 x 1.5	
	23	Body and Housing Material	Epoxy coated die cast aluminum (copper free)	
	24	Installation	Fix	
	25	Sampling Frequency	VTA	
	26	Mounting	Under false floor/ Ceiling (Note 6)	
	27	Mounting Accessories Material	VTA	
	28	Degree of Protection	See Next Page	
	29	Explosion Protection	See Next Page	
	30	Weather Proof and Dust Proof	Yes	
	31	Safety Integrity Level	Non SIL	
	32	Certificate	IEC 60529 (IP), ATEX , MATERIAL	
	33	Sensitivity Adjustable Required	Yes	
	34	Indicator	2 LED Indication for local display and also a Remote Indicator for False Ceiling / False Floor application.	
	35	Nameplates Material	Stainless Steel	
		36	Manufacturer	VTA
		37	Model No.	VTA

Notes :

1. VTA : Vendor To Advise. VTC : Vendor To Confirm N/A : Not Applicable
2. Detectors shall have an inherently stable operation with built in compensation being impaired by dust, dirt or humidity.
3. All circuitry must be protected against electrical transients and electromagnetic interferences.
4. Faulty zone wiring shall not damage the detector.
5. A Built in barrier shall prevent entry of insects in the sensors.
6. Mounting Accessories, cable gland, end of line resistor are included in vendor scope of supply.
7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
8. Remote Indicator For False Ceiling /False Floor Smoke detector shall be considered.



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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

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شماره صفحه: 23 از 27

SMOKE DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	REMARKS
1	SD-1103	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
2	SD-1104	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
3	SD-1105	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
4	SD-1106	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
5	SD-1107	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
6	SD-1108	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
7	SD-1109	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
8	SD-1110	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
9	SD-1111	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
10	SD-1112	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
11	SD-1113	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
12	SD-1114	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
13	SD-1115	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
14	SD-1116	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
15	SD-1117	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
16	SD-1118	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
17	SD-1119	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
18	SD-1120	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	
19	SD-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Indoor	IP 54	Unclassified	
20	SD-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Indoor	IP 54	Unclassified	
21	SD-1203	Extension of Existing Elect. Building-False Floor	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Indoor	IP 54	Unclassified	
22	SD-1204	Extension of Existing Elect. Building-False Floor	BK-GCS-PEDCO-120-IN-PY-0006 (4/6)	Indoor	IP 54	Unclassified	
23	SD-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Indoor	IP 54	Unclassified	
24	SD-1302	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Indoor	IP 54	Unclassified	
25	SD-1303	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Indoor	IP 54	Unclassified	
26	SD-1304	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6/6)	Indoor	IP 54	Unclassified	
27	calibration and test device for SDs						NOTE 1

1. Calibration and test devices for SDs to be advise by vendor.

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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مترک	سروال	نسفه
	BK	GCS	PEDCO	120	IN	DT	0016	D03
053 - 073 – 9184								شماره صفحه: 24 از 27

DATASHEET FOR BELL									
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GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	See Next Page
	9	Sound Pressure Level	80 dB (At 1 meter) (VTA)
	10	Service	See Next Page
	11	Adjustable Sound Intensity	Yes
	12	Adjustable Sound In Intensity	Yes
	13	No. of Selectable Tones	Minimum 2
	14	Power Supply	24 VDC-Loop powered 
	15	System Wiring	2 Core x 1.5
	16	Power Consumption	VTA (Note 4)
	17	Electrical Connection	M25 x 1.5
	18	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	19	Installation	Fix
	20	Mounting	Wall mounted (Note 2)
	21	Mounting Accessories Material	316 SS
	22	Degree of Protection	See Next Page
	23	Explosion Protection	See Next Page
	24	Weather Proof and Dust Proof	Yes
	25	Safety Integrity Level	Non SIL
	26	Certificate	IEC 60529 (IP), ATEX , BSI EN54-3
	27	Nameplates Material	Stainless Steel
	28	Manufacturer	VTA
	29	Model No.	VTA

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Vendor shall specify weight, color and dimentions of devices and accessories.
3. Mounting Accessories, sunshade and cable gland are included in vendor scope of supply.
4. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
5. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.



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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

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شماره صفحه: 25 از 27

نمونه	سریال	نوع مدرک	رشته	تمهيلات	صادرکننده	بسته کاری	پروژه
D03	0016	DT	IN	120	PEDCO	GCS	BK

BELL LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	BL-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2/6)	Indoor	IP 54	Unclassified	Hydrocarbon	
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15	calibration and test device for Bells							NOTE 1

1. Calibration and test devices for Bells to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف ترانکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان: 053 - 073 - 9184	پروژه: BK	بسته کاری: GCS	صادرکننده: PEDCO	تسهیلات: 120	رشته: IN	نوع مدرک: DT	سریال: 0016	نسخه: D03	شماره صفحه: 26 از 27

DATASHEET FOR HEAT DETECTOR			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	Detector Type	Addressable / Conventional 
	9	Function	Heat Detector
	10	Service	Ceiling heat detection
	11	Sensor Type	Heat Sensing Element: Fusible Alloy Silver Contact
	12	Rate of Rise(ROR)	Yes (Temperature Rise: 8 °C Perminute)
	13	Built-in-Test	Manual
	14	Area Coverage	37 m²
	15	Operating Temperature	-10 °C to 90 °C
	16	Alarm Set point	VTC
	17	Output Signal	VTA
	18	Power Supply	24 VDC-Loop powered 
	19	System Wiring	2 Core x 1.5
	20	Contact Type & Rating	24 VDC, DPDT
	21	Power Consumption	VTA (Note 7)
	22	Electrical Connection	M20 x 1.5
	23	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	24	Installation	Fix
	25	Sampling Frequency	VTA
	26	Mounting	Under false Ceiling (Note 6)
	27	Mounting Accessories Material	VTA
	28	Degree of Protection	See Next Page
	29	Explosion Protection	See Next Page
	30	Weather Proof and Dust Proof	Yes
	31	Safety Integrity Level	Non SIL
	32	Certificate	IEC 60529 (IP), ATEX , MATERIAL
	33	Sensitivity Adjustable Required	Yes
	34	Indicator	2 LED Indication for local display and also a Remote Indicator for False Ceiling / False Floor application.
	35	Nameplates Material	Stainless Steel
	36	Manufacturer	VTA
	37	Model No.	VTA
Notes : 1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable 2. Detectors shall have an inherently stable operation with built in compensation being impaired by dust, dirt or humidity. 3. All circuitry must be protected against electrical transients and electromagnetic interferences. 4. Faulty zone wiring shall not damage the detector. 5. A Built in barrier shall prevent entry of insects in the sensors. 6. Mounting Accessories, cable gland, end of line resistor are included in vendor scope of supply. 7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor. 8. Remote Indicator For False Ceiling /False Floor Heat detector shall be considered.			



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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

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پروژہ

بسته کاری

صادر کنندہ

تَسْهِلَات

رشته

نوع مدرسه

سری

نسخه

شماره صفحه: 27 از 27

HEAT DETECTOR LIST

[illegible]

	1. Calibration and test devices for LHDs to be advise by vendor.
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