



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEET FOR ON OFF & SHUTDOWN VALVES

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

نسخه	سرال	یوع مدرک	رشته	تسهلات	صادرکننده	بسته کاری	پروژه
D02	0010	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: ۱ از ۳۸

طرح نگهداشت و افزایش تولید ۲۷ مخزن

DATA SHEET FOR ON OFF & SHUTDOWN VALVES

نگهداشت و افزایش تولید میدان نفتی بینک

D02	AUG.2023	AFC	P.Hajisadeghi	M.Fakharian	A.M.Mohseni	
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: F92-708931

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

تجهادداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEET FOR ON OFF & SHUTDOWN VALVES

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادرکننده

PEDCO

تجهیزات

120

رشته

IN

بوع مدرک

DT

سریال

0010

نسخه

D02

شماره صفحه: ۲ از ۳۸

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04
1	X	X	X		
2	X	X	X		
3	X	X			
4	X	X			
5	X	X	X		
6	X	X	X		
7	X	X	X		
8	X	X	X		
9	X	X	X		
10	X	X	X		
11	X	X	X		
12	X	X	X		
13	X	X	X		
14	X	X	X		
15	X	X	X		
16	X	X	X		
17	X	X	X		
18	X	X	X		
19	X	X	X		
20	X	X	X		
21	X	X	X		
22	X	X	X		
23	X	X	X		
24	X	X	X		
25	X	X	X		
26	X	X	X		
27	X	X	X		
28	X	X	X		
29	X	X	X		
30	X	X	X		
31	X	X	X		
32	X	X	X		
33	X	X	X		
34	X	X	X		
35	X	X	X		
36	X	X	X		
37	X	X	X		
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					

Page	D00	D01	D02	D03	D04
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					
109					
110					
111					
112					
113					
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEET FOR ON OFF & SHUTDOWN VALVES

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

نسخه	سریال	بوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D02	0010	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: ۳ از ۳۸

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
Instrument & Control System Design Criteria	BK-GCS-PEDCO-120-IN-DC-0002
Specification For Hazardous Area Classification	BK-GNRAL-PEDCO-000-SA-SP-0002
Specification For On-off /Shut Down Valves(ESDV/MOV)	BK-GNRAL-PEDCO-000-IN-SP-0006
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



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEET FOR ON OFF & SHUTDOWN VALVES

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

بسته کاری

صادر کننده

تجهیزات

رشته

نوع مدارک

سریال

نسخه

BK

GCS

PEDCO

120

IN

DT

0010

D02

شماره صفحه: ۴ از ۳۸

GENERAL NOTES:

1. Calculations shall be provided for each completely piped actuated valve assembly (including solenoid valve), the stroking times i.e. to close and to open.
2. The duty, failure action and stroke time shall all be approved by the Purchaser.
3. The actuator shall be designed to operate the valve through its full stroke.
4. The maximum valve stroking time to achieve the safety position shall be defined according to size of the body (5 seconds for body until 4", 1 second per inch for body greater than 4"). The maximum fully stroke time shall be 10 seconds.
5. The piping indicates corrosion allowance selected as per document "Piping & Pipeline Material Specification, No. " BK-GCS-PEDCO-120-PI-SP-0001 "
6. Hydro-test duration shall be in accordance with API 6D.
7. All ball valves shall be fitted with suitable 'end of travel' stops at the fully open and fully closed positions and a local position indicator . The design shall prevent the ingress of foreign material and corrosion products which would impair the operation of the stops. Devices capable of locking the valves in their safe position (ESDV in open or closed position) shall be provided for maintenance and shall be vendor's standard proven design.
8. Vendor shall guarantee and demonstrate the required stroking speed, during the Functional Test (FAT).
9. All accessories shall be mounted, together with solenoid valve, etc, on a 316SS sub-plate. Tubing shall be suitably sized TP 316L stainless steel with stainless steel double ferrule compression fittings
10. Solenoid valve shall be selected in accordance with low power type.
11. All on/off valves shall be preferably fitted with single acting, spring return pneumatic actuators, completed with mounting kit. Also Partial Stroking test or pilot valve to be considered.
12. The actuator shall be fail safe in operation (as specified in data sheets) in loss of electrical signal or loss of air supply.
13. The spring return actuator shall be "pre stressed".
14. Pneumatic actuators will be sized on the basis of a minimum safety factor of 1.5 and a minimum air pressure of 3 Bar g.
The valve actuator torque shall be in excess of the required valve torque under all operating conditions.
15. All actuators and accessories shall be clearly and permanently identified by nameplate. the nameplate shall be in stainless steel and affixed to the VALVE, actuator and accessories.
- 16 - Environmental condition for field instrumentation of Binak Oilfield shall be considered as per the followings:

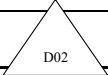
Maximum ambient temperature: 50 (°C)
Minimum ambient temperature: 5 (°C)
Maximum steel surface exposed to sun: 85 (°C)
Maximum summer dry bulb: 50 (°C)
DB/RH for Summer HVAC Design: 41 °C / 61 %
DB FOR Winter HVAC Design: 6 °C

Relative Humidity:

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

- 17 - Material Test Certificate and calibration Certificate for all transmitters to be submitted by Vendor.
- 18 - Flow direction shall be permanently and clearly indicated on the valve body.
- 19- External grounding shall be provided for each solenoid valve.
- 20- BDV's shall have a minimum body size of 2" with tight shutoff (ANSI B16.104, class VI), air volume tanks for larger valves and should be sized for three full open/closed operations at 3-barg instrument air pressure.
- 21- Valves in safety related services should have been fire tested and certification to be provided by Vendor.
- 22- Seat rings shall be spring loaded and so designed that line pressure will assist in sealing round the ball.
- 23- Valve stem extension shall be detachable for easy replacements.
- 24- At least two stem seals shall be provided with facility for injection of secondary sealant and with stainless steel fittings.
- 25- Stem seal shall be replaceable while the valve is in closed operation position.
- 26- Short stroke single acting pneumatic piston actuators shall preferably be used on emergency shutdown service.
- 27- Body of all On/Off Valves except ss316 body material, shall be painted with white color. Also actuator of ESDV and BDV valves shall be painted with Red color as well as actuator of XV valves shall be painted by Blue color.

 NIS OC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض							 HIRGAN ENERGY				 TS	
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک												
		Data Sheets For ON/OFF & Shutdown Valves												
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۲۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۵ از ۳۸				
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02				
On-Off Valve														
TAG NO: ESDV-2101		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0002_D06					SERVICE: Gas Compression Inlet Gas Pipeline (Binak)					
FLUID STATE: PROCESS GAS		PHASE:		GAS					AREA CLASSIFICATION: Zone2, IIB, T4					
SERVICE CONDITION	ITEM							UNITS	Max Flow	Norm. Flow	Min. Flow	Shut-Off		
	1	FLOW RATE							kg/h	7220.4928	6564	1969.23	-	
	2	INLET PRESSURE							bar(g)	7.5	7.5	7.5	-	
	3	OUTLET PRESSURE							bar(g)	7.5	7.5	7.5	-	
	4	DIFFERENTIAL PRESSURE							bar(g)	-	-	-	18.2	
	5	INLET TEMPERATURE							°C	26.67~46.11	26.67~46.11	26.67~46.11	-	
	6	DENSITY							kg/m3	5.43 ~ 6.66	5.43 ~ 6.66	5.43 ~ 6.66	-	
	7	VISCOSITY							CP	0.011 ~ 0.012	0.011 ~ 0.012	0.011 ~ 0.012	-	
	8	VAPOR PRESSURE Pv							bar(a)	155.5	155.5	155.5	-	
	9	CRITICAL PRESSURE							bar(a)	107.1	107.1	107.1	-	
LINE	10	PIPE LINE SIZE & SCHEDULE	IN OUT	CORROSION ALLOWANCE (mm)	6" 80 6" 80	6		ACTUATOR	53	TYPE		Single Acting , Spring Return		
	11	LINE NO.	GAS-111-0001-AN07-6"-PT						54	SIZE		VTa		
	12	TYPE	OUT		Full Bore Ball Valve/Trunion Mounted		55		SPRING FAIL ACTION		Fail to Close			
VALVE BODY & BONNET	13	SIZE	OUT		6"		POSITIONER	56	MAX ALLOWABLE PRESSURE		VTa			
	14	MAX PRESS./TEMP.	OUT		As per PMS			57	MIN REQUIRES PRESSURE		VTa			
	15	MFR. & MODEL	OUT		Will be finalized later			58	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	16	BODY / BONNET MATL	OUT		ASTM A216 Gr. WCB			59	BENCH RANGE		VTa			
	17	LINER MATERIAL / ID	OUT		VTa			60	TRAVELING TIME		6 S			
	18	END CONNECTION	IN OUT	6" /300# 6" /300#		61		FUNCTION		On/Off				
	19	FLG FACE FINISH	RF		62			LOCAL POSITION INDICATOR		Required				
	20	END EXT./MATL.	N/A			63		ACT. ORIENTATION		VTa				
	21	FLOW DIRECTION	(Note 18 in Page 4)		64			HAND WHEEL TYPE		Clutchable side mounted				
	22	TYPE OF BONNET	Standard			65		ADJUSTABLE LIMIT STOP		Yes				
	23	LUBE & ISO VALVE	No		66			INPUT SIGNAL		24VDC				
	24	PACKING MATERIAL	PACKING TYPE	PTFE		Standard		67	MFR. & MODEL		Will be finalized later			
	25	ENTRY DESIGN	Top Entry		68	TYPE			N/A					
	26	NACE REQUIREMENTNACE (MR-0175/ISO 15156)	YES			69		MFR. & MODEL		Will be finalized later				
TRIM	27	TRIM	TYPE	MATERIAL	VTa		316 SS+PTFE	LIMIT SWITCHES	70	ON INCR SIGNAL OUTPUT INCR / DECR		N/A		
	28	SIZE	RATED TRAVEL		VTa	VTa	71		GAUGES		N/A			
	29	CHARACTERISTICS	On/Off		72	CAM CHARACTERISTIC			N/A					
	30	BALANCED / UNBALANCED	BALANCED			73	AIR CONNECTION		N/A					
	31	RATED Cv	FL	XT			VTa	VTa	VTa	74	TAG NO. :		BZSC-2110 / BZSO-2110	
	32	PLUG / BALL / DISK MATERIAL	316 SS		75		TYPE		QUANTITY	Magnetically operated "REED" contacts	2			
	33	SEAT	TYPE	MATERIAL		Soft Seat	PTFE	76	CONTACTS / RATING		110V DC , 10A			
	34	CAGE / GUIDE MATERIAL	VTa			77	ACTUATION POINT		Fully Open/Close					
	35	STEM	TYPE	MATERIAL	Anti-Blow Out		316 SS	78	ENCLOSURE MATERIAL		Die Cast Amulium			
	36	LEAKAGE CLASS	ANSI Class VI		79		WEATHER PROTECTION		IP-65					
SOLENOID VALVE	37	VALVE STEM EXTENSION REQUIREMENT	YES			80	ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 x 1.5			
	38	TAG NO	ESO-V-2101				81	MFR. & MODEL		Will be finalized later				
	39	TYPE	3 Way		82			SET PRESSURE		Yes				
	40	BODY MATERIAL	WEATHER IP.	ALSI 316 S.S		IP-65		83	PNEUMATIC CONNECTION		1/4" NPT			
	41	ELE. CERTIFICATE	ELE. CONNECTION	EEx "d" ,IIB T4		ISO M20 x 1.5	84		GAUGES		FILTER	Required	Required	
	42	MANUAL RESET	Yes		85	MFR. & MODEL			Will be finalized later					
43	Power Supply	24 VDC		TEST		ANSI/FCI LEAKAGE CLASS		Required						
44	Phu. Connection	1/4" NPT				87	HYDRO PRESSURE		Required					
SPECIAL / ACCESS.	45	FUSIBLE LEAKAGE	No		88		FUNCTIONAL TEST		Required					
	46	BLOCK RELAY	No				89							
	47	QUICK EXHUST	Yes			90								
	48	QUICK EXHUST	Yes		91									
	49	FILTER REGULATOR	Yes				FIRE PROOF DESIGN	PASSIVE FIRE PROTECTION		Yes				
	50	VOLUME TANK	No			92		API 6FA REQUIREMENTS		Yes				
	51	MECHANICAL POSITION INDICATOR	Required		93			SIL 3 REQUIREMENTS		Yes				
	52	MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE	Yes				94	PARTIAL STROKING VALVE TEST		Yes				
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONIFRM														
(1) PMS: Piping material specification.														
(2) All material shall be suitable for minimum design metal temperature.														
(3) Shall be stated by vendor at quotation stage.														
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.														

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارضی						 HIRGAN ENERGY 									
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک															
شماره پیمان: ۰۳۸ - ۰۷۳ - ۰۵۳		پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرک	سریال	نسخه	 D02	شماره صفحه: ۶ از ۳۸						
		BK	GCS	PEDCO	120	IN	DT	0010	D02								
On-Off Valve																	
TAG NO: ESDV-2102		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0003-D06				SERVICE: Gas Compression Inlet Gas Pipeline (Golkhari)									
FLUID STATE: PROCESS GAS		PHASE:		GAS				AREA CLASSIFICATION: Zone2, IIB, T4									
SERVICE CONDITION	ITEM						UNITS		Max Flow	Norm. Flow	Min. Flow	Shut-Off					
	1 FLOW RATE						kg/h		12395.9	11269.0	3380.0	-					
	2 INLET PRESSURE						bar(g)		7.5	7.5	7.5	-					
	3 OUTLET PRESSURE						bar(g)		7.5	7.5	7.5	90					
	4 DIFFERENTIAL PRESSURE						bar(g)		-	-	-	-					
	5 INLET TEMPERATURE						°C		15.5 ~ 32	15.5 ~ 32	15.5 ~ 32	-					
	6 DENSITY						kg/m3		6.19 ~ 6.21	6.19 ~ 6.21	6.19 ~ 6.21	-					
	7 VISCOSITY						CP		0.011	0.011	0.011	-					
	8 VAPOR PRESSURE Pv						bar(a)		174.6	174.6	174.6	-					
	9 CRITICAL PRESSURE						bar(a)		103.1	103.1	103.1	-					
LINE	PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)	8" 100		6										
			OUT		8" 100												
	LINE NO.		GAS-111-0001-FN07-8"-PT														
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/Trunion Mounted														
	13 SIZE		8"														
	14 MAX PRESS./TEMP.		As per PMS														
	15 MFR. & MODEL		Will be finalized later														
	16 BODY / BONNET MATL		ASTM A216 Gr. WCB														
	17 LINER MATERIAL / ID		VTA														
	18 END CONNECTION	IN	8" /600#														
		OUT	8" /600#														
	19 FLG FACE FINISH		RF														
	20 END EXT./MATL.		N/A														
	21 FLOW DIRECTION		(Note 18 in Page 4)														
	22 TYPE OF BONNET		Standard														
	23 LUBE & ISO VALVE		No														
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard										
	25 ENTRY DESIGN		Top Entry														
	26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES														
	TRIM	27 TRIM		TYPE	MATERIAL	VTA		316 SS+RPTFE									
		28 SIZE		RATED TRAVEL		VTA		VTA									
29 CHARACTERISTICS		On/Off															
30 BALANCED / UNBALANCED		BALANCED															
31 RATED Cv		FL	XT	VTA		VTA		VTA									
32 PLUG / BALL / DISK MATERIAL		316 SS															
33 SEAT		TYPE	MATERIAL	Soft Seat		RPTFE											
34 CAGE / GUIDE MATERIAL		VTA															
35 STEM		TYPE	MATERIAL	Anti-Blow Out		Forged, 13% chromium steel											
36 LEAKAGE CLASS		ANSI Class VI															
37 VALVE STEM EXTENSION REQUIREMENT		YES															
SOLENOID VALVE	38 TAG NO		ESOV-2102														
	39 TYPE		3 Way														
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65										
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5										
	42 MANUAL RESET		Yes														
	43 Power Supply		24 VDC														
44 Pau. Connection		1/4" NPT															
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No														
	46 BLOCK RELAY		No														
	47 QUICK EXHUST		Yes														
	49 FILTER REGULATOR		Yes														
	50 VOLUME TANK		No														
	51 MECHANICAL POSITION INDICATOR		Required														
	52 MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes														
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONIFRM																	
(1) PMS: Piping material specification.																	
(2) All material shall be suitable for minimum design metal temperature.																	
(3) Shall be stated by vendor at quotation stage.																	
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.																	



NISOC

تکداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves




شماره پیمان: ۰۳۸ - ۰۷۳ - ۰۵۳

شماره صفحه: ۷ از ۳۸

D02

TAG NO: ESDV-2113

P&ID NO: BK-GCS-PEDCO-120-PR-PI-0005-D06 (1 of 1)

SERVICE: Gas Compression Inlet Knock Out Drum to Closed Drain

FLUID STATE: PROCESS GAS

PHASE: GAS

AREA CLASSIFICATION: Zone2, IIB, T4

SERVICE CONDITION	ITEM				UNITS	Max Flow	Norm. Flow	Min. Flow	Shut-Off	
	1	FLOW RATE				kg/h	1119.5	1017.8	305.3	-
	2	INLET PRESSURE				bar(g)	5.3	5.3	5.3	-
	3	OUTLET PRESSURE				bar(g)	5.3	5.3	5.3	-
	4	DIFFERENTIAL PRESSURE				bar(g)	-	-	-	18.2
	5	INLET TEMPERATURE				°C	36.9	36.9	36.9	-
	6	DENSITY				kg/m3	842.6	842.6	842.6	-
	7	VISCOSITY				CP	0.69	0.69	0.69	-
	8	VAPOR PRESSURE Pv				bar(a)	0.612	0.612	0.612	-
9	CRITICAL PRESSURE				bar(a)	221.4	221.4	221.4	-	
LINE	10	PIPE LINE SIZE & SCHEDULE	IN OUT	CORROSION ALLOWANCE (mm)	2" SCH.10S 2" SCH.10S	0				
	11	LINE NO.	CDH-111-0019-AS00-2"-NP							
	12	TYPE	Full Bore Ball Valve/Trunion Mounted							
VALVE BODY & BONNET	13	SIZE	2"							
	14	MAX PRESS./TEMP.	As per PMS							
	15	MFR. & MODEL	Will be finalized later							
	16	BODY / BONNET MATL	ASTM A351 GR.CF3M							
	17	LINER MATERIAL / ID	VTA							
	18	END CONNECTION	IN OUT	2" /300# 2" /300#						
	19	FLG FACE FINISH	RF							
	20	END EXT./MATL.	N/A							
	21	FLOW DIRECTION	(Note 18 in Page 4)							
	22	TYPE OF BONNET	Standard							
	23	LUBE & ISO VALVE	No							
	24	PACKING MATERIAL	PACKING TYPE	PTFE	Standard					
	25	ENTRY DESIGN	Top Entry							
	26	NACE REQUIREMENTNACE (MR-0175/ISO 15156)	YES							
TRIM	27	TRIM	TYPE	MATERIAL	VTA	316 SS+PTFE				
	28	SIZE	RATED TRAVEL	VTA	VTA					
	29	CHARACTERISTICS	On/Off							
	30	BALANCED / UNBALANCED	BALANCED							
	31	RATED Cv	FL	XT	VTA	VTA	VTA			
	32	PLUG / BALL / DISK MATERIAL	316 SS							
	33	SEAT	TYPE	MATERIAL	Soft Seat	PTFE				
	34	CAGE / GUIDE MATERIAL	VTA							
	35	STEM	TYPE	MATERIAL	Anti-Blow Out	316 SS				
	36	LEAKAGE CLASS	ANSI Class VI							
SOLENOID VALVE	38	TAG NO	ESOV-2113							
	39	TYPE	3 Way							
	40	BODY MATERIAL	WEATHER IP.	AISI 316 S.S	IP-65					
	41	ELE. CERTIFICATE	ELE. CONNECTION	EEx "d", IIB T4	ISO M20 x 1.5					
	42	MANUAL RESET	Yes							
	43	Power Supply	24 VDC							
	44	Pnu. Connection	1/4" NPT							
	45	FUSIBLE LEAKAGE	No							
SPECIAL / ACCESS.	46	BLOCK RELAY	No							
	47	QUICK EXHUST	Yes							
	49	FILTER REGULATOR	Yes							
	50	VOLUME TANK	No							
	51	MECHANICAL POSITION INDICATOR	Required							
	52	MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE	Yes							
	53	TYPE	Single Acting , Spring Return							
	54	SIZE	VTA							
55	SPRING FAIL ACTION	Fail to Close								
56	MAX ALLOWABLE PRESSURE	VTA								
57	MIN REQUIRES PRESSURE	VTA								
58	AVAILABLE AIR SUPPLY PRESSURE	MAX/NOR/MIN: 10/7/3 bar-g								
59	BENCH RANGE	VTA								
60	TRAVELING TIME	5 S								
61	FUNCTION	On/Off								
62	LOCAL POSITION INDICATOR	Required								
63	ACT. ORIENTATION	VTA								
64	HAND WHEEL TYPE	Clutchable side mounted								
65	ADJUSTABLE LIMIT STOP	Yes								
66	INPUT SIGNAL	24VDC								
67	MFR. & MODEL	Will be finalized later								
68	TYPE	N/A								
69	MFR. & MODEL	Will be finalized later								
70	ON INCR SIGNAL OUTPUT INCR / DECR	N/A								
71	GAUGES	N/A								
72	CAM CHARACTERISTIC	N/A								
73	AIR CONNECTION	N/A								
74	TAG NO. :	BZSC-2110 / BZSO-2110								
75	TYPE	QUANTITY	Magnetically operated "REED" contacts	2						
76	CONTACTS / RATING	110V DC , 10A								
77	ACTUATION POINT	Fully Open/Close								
78	ENCLOSURE MATERIAL	Die Cast Amulimum								
79	WEATHER PROTECTION	IP-65								
80	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 × 1.5						
81	MFR. & MODEL	Will be finalized later								
82	SET PRESSURE	Yes								
83	PNEUMATIC CONNECTION	1/4" NPT								
84	GAUGES	FILTER	Required	Required						
85	MFR. & MODEL	Will be finalized later								
86	ANSI/FCI LEAKAGE CLASS	Required								
87	HYDRO PRESSURE	Required								
88	FUNCTIONAL TEST	Required								
89										
90										
91										
92	PASSIVE FIRE PROTECTION	Yes								
93	API 6FA REQUIREMENTS	Yes								
94	SIL 3 REQUIREMENTS	Yes								
95	PARTIAL STROKING VALVE TEST	Yes								
96										

NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONIFRM

(1) PMS: Piping material specification.

(2) All material shall be suitable for minimum design metal temperature.

(3) Shall be stated by vendor at quotation stage.

(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.



NIS OC

تک‌داشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves




شماره پیمان:

۰۵۳ - ۰۷۳ - ۰۹۳۸

پروژه

بسته کاری

صادر کننده

تهیلات

رشته

نوع مدرک

سریال

نسخه

BK

GCS

PEDCO

120

IN

DT

0010

D02

شماره صفحه: ۳۸ از ۸

D02

On-Off Valve

TAG NO:

ESDV-2272

P&ID NO :

BK-GCS-PEDCO-120-PR-PI-0022-D06

SERVICE:

Fuel Gas System

FLUID STATE:

FUEL GAS

PHASE:

GAS

AREA CLASSIFICATION:

Zone2, IIB, T4

NOTE:

VTA : VENDOR TO ADVISE AT BIDDING STAGE

VTC: VENDOR TO CONFIRM

(1) PMS: Piping material specification.

(2) All material shall be suitable for minimum design metal temperature.

(3) Shall be stated by vendor at quotation stage.

(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.



NIS OC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves



شماره صفحه: ۱۱ از ۳۸

D02

On-Off Valve

TAG NO: BDV-2122B

P&ID NO : BK-GCS-PEDCO-120-PR-PI-0007-D06(2/3)

SERVICE: Gas Compression Inlet Knock Out Drum to Flare Header

FLUID STATE: PROCESS GAS

PHASE:	GAS
--------	-----

AREA CLASSIFICATION: Zone2, IIB, T4

SERVICE CONDITION	ITEM						UNITS	Max Flow	Norm. Flow	Min. Flow	Shut-Off				
	1	FLOW RATE						kg/h	-	300.0	-	-			
	2	INLET PRESSURE						bar(g)	4.9	4.9	4.9	-			
	3	OUTLET PRESSURE						bar(g)	4.9	4.9	4.9	-			
	4	DIFFERENTIAL PRESSURE						bar(g)	-	-	-	18.2			
	5	INLET TEMPERATURE						°C	-	18.9 ~ 36.78	-	-			
	6	DENSITY						kg/m3	-	5.37 ~ 5.77	-	-			
	7	VISCOSITY						CP	-	0.011	-	-			
	8	VAPOR PRESSURE Pv						bar(a)	-	167.5	-	-			
	9	CRITICAL PRESSURE						bar(a)	-	94.65	-	-			
LINE	10	PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)	2" 80	6	53	TYPE		Single Acting, Spring Return				
		OUT	2" 80	54		SIZE		VTA							
VALVE BODY & BONNET	11	LINE NO.		GAS-111-0035A-CN05-2"-PT						55	SPRING FAIL ACTION		Fail to Close		
	12	TYPE		Full Bore Ball Valve/Trunnion Mounted						56	MAX ALLOWABLE PRESSURE		VTA		
	13	SIZE		2"						57	MIN REQUIRES PRESSURE		VTA		
	14	MAX PRESS./TEMP.		As per PMS						58	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g		
	15	MFR. & MODEL		Will be finalized later						59	BENCH RANGE		VTA		
	16	BODY / BONNET MATL		ASTM A216 Gr. WCB						60	TRAVELING TIME		5 S		
	17	LINER MATERIAL / ID		VTA						61	FUNCTION		On/Off		
	18	END CONNECTION	IN	2"/300#						62	LOCAL POSITION INDICATOR		Required		
			OUT	2"/300#						63	ACT. ORIENTATION		VTA		
	19	FLG FACE FINISH		RF						64	HAND WHEEL TYPE		Clutchable side mounted		
	20	END EXT.MATL.		N/A						65	ADJUSTABLE LIMIT STOP		Yes		
	21	FLOW DIRECTION		(Note 18 in Page 4)						66	INPUT SIGNAL		24VDC		
	22	TYPE OF BONNET		Standard						67	MFR. & MODEL		Will be finalized later		
	23	LUBE & ISO VALVE		No						POSITIONER	68	TYPE		N/A	
	24	PACKING MATERIAL		PACKING TYPE		PTFE		Standard	69		MFR. & MODEL		Will be finalized later		
	25	ENTRY DESIGN		Top Entry							70	ON INCR SIGNAL OUTPUT INCR / DECR		N/A	
	26	NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES							71	GAUGES		N/A	
	TRIM	27	TRIM	TYPE	MATERIAL	VTA		316 SS+PTFE		72	CAM CHARACTERISTIC		N/A		
28		SIZE	RATED TRAVEL		VTA		VTA		73	AIR CONNECTION		N/A			
29		CHARACTERISTICS		On/Off						LIMIT SWITCHES	74	TAG NO. :		BZSC-2110 / BZSO-2110	
30		BALANCED / UNBALANCED		BALANCED							75	TYPE	QUANTITY	Magnetically operated 'REED' contacts	2
31		RATED Cv	FL	XT	VTA	VTA	VTA	76	CONTACTS / RATING		110V DC , 10A				
32		PLUG / BALL / DISK MATERIAL		316 SS							77	ACTUATION POINT		Fully Open/Close	
33		SEAT	TYPE	MATERIAL	Soft Seat		PTFE		78		ENCLOSURE MATERIAL		Die Cast Aluminum		
34		CAGE / GUIDE MATERIAL		VTA							79	WEATHER PROTECTION		IP-65	
35		STEM	TYPE	MATERIAL	Anti-Blow Out		316 SS		80		ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 × 1.5	
36		LEAKAGE CLASS		ANSI Class VI							81	MFR. & MODEL		Will be finalized later	
37	VALVE STEM EXTENSION REQUIREMENT		YES						AIR SET	82	SET PRESSURE		Yes		
38	TAG NO		PSOV-2110							83	PNEUMATIC CONNECTION		1/4" NPT		
39	TYPE		3 Way							84	GAUGES	FILTER	Required	Required	
40	BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65			85	MFR. & MODEL		Will be finalized later		
41	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d", IIB T4		ISO M20 × 1.5		TEST		86	ANSI/FCI LEAKAGE CLASS		Required		
42	MANUAL RESET		Yes							87	HYDRO PRESSURE		Required		
43	Power Supply		24 VDC						88	FUNCTIONAL TEST		Required			
44	Pnu. Connection		1/4" NPT												
SPECIAL / ACCESS.	45	FUSIBLE LEAKAGE		No											
	46	BLOCK RELAY		No											
	47	QUICK EXHUST		Yes											
	49	FILTER REGULATOR		Yes											
	50	VOLUME TANK		Yes											
	51	MECHANICAL POSITION INDICATOR		Required											
	52	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes											

NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE

VTC: VENDOR TO CONFIRM

(1) PMS: Piping material specification.

(2) All material shall be suitable for minimum design metal temperature.

(3) Shall be stated by vendor at quotation stage.

(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.

 NIS OC		تجه‌داشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 شرکت توسعه و پارس								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱۴ از ۳۸						
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02						
On-Off Valve																
TAG NO:		BDV-2134B		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0009-D06 (2 of 3)				SERVICE: 2nd Stage Gas Compression Suction Drums						
FLUID STATE:		VENT GAS		PHASE:		GAS				AREA CLASSIFICATION: Zone2, IIB, T4						
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off		
	1 FLOW RATE					kg/h		-		796		-		-		
	2 INLET PRESSURE					bar(g)		-		18.1~ 22		-		-		
	3 OUTLET PRESSURE					bar(g)		-		18.1~ 22		-		-		
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-		-		47.7		
	5 INLET TEMPERATURE					°C		-		22 ~ 59.88		-		-		
	6 DENSITY					kg/m3		-		18.08~ 1011		-		-		
	7 VISCOSITY					CP		-		0.013 ~0.98		-		-		
	8 VAPOR PRESSURE Pv					bar(a)		-		-		-		-		
9 CRITICAL PRESSURE					bar(a)		-		94.65		-		-			
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		2" 80		6		53 TYPE		Single Acting , Spring Return				
			OUT			2" 80				54 SIZE		VTA				
	11 LINE NO.		GAS-111-0160B-CN05-2"-PT									55 SPRING FAIL ACTION		Fail to Open		
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type									56 MAX ALLOWABLE PRESSURE		VTA		
	13 SIZE		2"									57 MIN REQUIRES PRESSURE		VTA		
	14 MAX PRESS./TEMP.		As per PMS									58 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g		
	15 MFR. & MODEL		Will be finalized later									59 BENCH RANGE		VTA		
	16 BODY / BONNET MATL		ASTM A351 GR.CF3M									60 TRAVELING TIME		5 S		
	17 LINER MATERIAL / ID		VTA									61 FUNCTION		On/Off		
	18 END CONNECTION		IN	2" /300#						62 LOCAL POSITION INDICATOR		Required				
			OUT	2"/300#						63 ACT. ORIENTATION		VTA				
	19 FLG FACE FINISH		RF									64 HAND WHEEL TYPE		Decutchable side mounted		
	20 END EXT./MATL.		N/A									65 ADJUSTABLE LIMIT STOP		No		
	21 FLOW DIRECTION		(Note 18 in Page 4)									66 INPUT SIGNAL		24VDC		
	22 TYPE OF BONNET		Standard									67 MFR. & MODEL		Will be finalized later		
	23 LUBE & ISO VALVE		No									68 TYPE		N/A		
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard				69 MFR. & MODEL		Will be finalized later			
25 ENTRY DESIGN		Top Entry									70 ON INCR SIGNAL OUTPUT INCR / DECR		N/A			
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES									71 GAUGES		N/A			
TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		72 CAM CHARACTERISTIC		N/A				
	28 SIZE		RATED TRAVEL		VTA		VTA		73 AIR CONNECTION		N/A					
	29 CHARACTERISTICS		On/Off									74 TAG NO. :		BZSC-2110 / BZSO-2110		
	30 BALANCED / UNBALANCED		BALANCED						75 TYPE		QUANTITY	Magnetically operated 'REED' contacts		2		
	31 RATED Cv		FL	XT	VTA		VTA	VTA	76 CONTACTS / RATING		110V DC , 10A					
	32 PLUG / BALL / DISK MATERIAL		316 SS									77 ACTUATION POINT		Fully Open/Close		
	33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE		78 ENCLOSURE MATERIAL		Die Cast Amulium				
	34 CAGE / GUIDE MATERIAL		VTA									79 WEATHER PROTECTION		IP-65		
	35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		80 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5		
	36 LEAKAGE CLASS		ANSI Class VI									81 MFR. & MODEL		Will be finalized later		
37 VALVE STEM EXTENSION REQUIREMENT		YES									82 SET PRESSURE		Yes			
SOLENOID VALVE	38 TAG NO		BSOV-2134B , PSOV-2134B									83 PNEUMATIC CONNECTION		1/4" NPT		
	39 TYPE		3 Way									84 GAUGES		FILTER	Required	Required
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85 MFR. & MODEL		Will be finalized later					
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		86 ANSI/FCI LEAKAGE CLASS		Required					
	42 MANUAL RESET		Yes									87 HYDRO PRESSURE		Required		
	43 Power Supply		24 VDC									88 FUNCTIONAL TEST		Required		
	44 Pnu. Connection		1/4" NPT									89				
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No									90				
	46 BLOCK RELAY		No									91 PASSIVE FIRE PROTECTION		No		
	47 QUICK EXHUST		Yes									92 API 6FA REQUIREMENTS		Yes		
	49 FILTER REGULATOR		Yes									93 SIL 3 REQUIREMENTS		Yes		
	50 VOLUME TANK		No									94 PARTIAL STROKING VALVE TEST		Yes		
51 MECHANICAL POSITION INDICATOR		Required									95					
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																
(1) PMS: Piping material specification.																
(2) All material shall be suitable for minimum design metal temperature.																
(3) Shall be stated by vendor at quotation stage.																
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.																

 NIS OC		تجهاد است و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 HIRGAN ENERGY 								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳۸ از ۱۵						
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02						
On-Off Valve																
TAG NO:		BDV-2134C		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0009-D06 (3 of 3)			SERVICE: 2nd Stage Gas Compression Suction Drums							
FLUID STATE:		VENT GAS		PHASE:		GAS			AREA CLASSIFICATION: Zone2, IIB, T4							
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off		
	1 FLOW RATE					kg/h		-		796		-		-		
	2 INLET PRESSURE					bar(g)		-		18.1~ 22		-		-		
	3 OUTLET PRESSURE					bar(g)		-		18.1~ 22		-		-		
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-		-		47.7		
	5 INLET TEMPERATURE					°C		-		22 ~ 59.88		-		-		
	6 DENSITY					kg/m3		-		18.08~ 1011		-		-		
	7 VISCOSITY					CP		-		0.013 ~0.98		-		-		
	8 VAPOR PRESSURE Pv					bar(a)		-		-		-		-		
9 CRITICAL PRESSURE					bar(a)		-		94.65		-		-			
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		2" 80		6		53 TYPE			Single Acting , Spring Return			
			OUT			2" 80				54 SIZE			VTA			
	11 LINE NO.		GAS-111-0160C-CN05-2"-PT									55 SPRING FAIL ACTION			Fail to Open	
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type				56 MAX ALLOWABLE PRESSURE			VTA						
	13 SIZE		2"				57 MIN REQUIRES PRESSURE			VTA						
	14 MAX PRESS./TEMP.		As per PMS				58 AVAILABLE AIR SUPPLY PRESSURE			MAX/NOR/MIN: 10/7/3 bar-g						
	15 MFR. & MODEL		Will be finalized later				59 BENCH RANGE			VTA						
	16 BODY / BONNET MATL		ASTM A216 Gr. WCB				60 TRAVELING TIME			5 S						
	17 LINER MATERIAL / ID		VTA				61 FUNCTION			On/Off						
	18 END CONNECTION		IN	2" /300#		62 LOCAL POSITION INDICATOR			Required							
			OUT	2"/300#		63 ACT. ORIENTATION			VTA							
	19 FLG FACE FINISH		RF				64 HAND WHEEL TYPE			Decutchable side mounted						
	20 END EXT./MATL.		N/A				65 ADJUSTABLE LIMIT STOP			No						
	21 FLOW DIRECTION		(Note 18 in Page 4)				66 INPUT SIGNAL			24VDC						
	22 TYPE OF BONNET		Standard				67 MFR. & MODEL			Will be finalized later						
	23 LUBE & ISO VALVE		No				68 TYPE			N/A						
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard		69 MFR. & MODEL			Will be finalized later				
	25 ENTRY DESIGN		Top Entry				70 ON INCR SIGNAL OUTPUT INCR / DECR			N/A						
	26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES				71 GAUGES			N/A						
	TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		72 CAM CHARACTERISTIC			N/A		
28 SIZE		RATED TRAVEL		VTA		VTA		73 AIR CONNECTION			N/A					
29 CHARACTERISTICS		On/Off				74 TAG NO. :			BZSC-2110 / BZSO-2110							
30 BALANCED / UNBALANCED		BALANCED				75 TYPE			QUANTITY	Magnetically operated 'REED' contacts		2				
31 RATED Cv		FL	XT	VTA		VTA	VTA	76 CONTACTS / RATING			110V DC , 10A					
32 PLUG / BALL / DISK MATERIAL		316 SS				77 ACTUATION POINT			Fully Open/Close							
33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE		78 ENCLOSURE MATERIAL			Die Cast Amulium				
34 CAGE / GUIDE MATERIAL		VTA				79 WEATHER PROTECTION			IP-65							
35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		80 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5			
36 LEAKAGE CLASS		ANSI Class VI				81 MFR. & MODEL			Will be finalized later							
37 VALVE STEM EXTENSION REQUIREMENT		YES				82 SET PRESSURE			Yes							
SOLENOID VALVE	38 TAG NO		BSOV-2134C , PSOV-2134C				83 PNEUMATIC CONNECTION			1/4" NPT						
	39 TYPE		3 Way				84 GAUGES		FILTER	Required		Required				
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85 MFR. & MODEL			Will be finalized later				
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		86 ANSI/FCI LEAKAGE CLASS			Required				
	42 MANUAL RESET		Yes				87 HYDRO PRESSURE			Required						
	43 Power Supply		24 VDC				88 FUNCTIONAL TEST			Required						
	44 Pnu. Connection		1/4" NPT				89									
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No				90									
	46 BLOCK RELAY		No				91 PASSIVE FIRE PROTECTION			No						
	47 QUICK EXHUST		Yes				92 API 6FA REQUIREMENTS			Yes						
	49 FILTER REGULATOR		Yes				93 SIL 3 REQUIREMENTS			Yes						
	50 VOLUME TANK		No				94 PARTIAL STROKING VALVE TEST			Yes						
51 MECHANICAL POSITION INDICATOR		Required				95										
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM (1) PMS: Piping material specification. (2) All material shall be suitable for minimum design metal temperature. (3) Shall be stated by vendor at quotation stage. (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.																

 NIS OC		تجهیزات و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 شرکت توسعه و پارس			
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تهیه کننده	نوع مدرک	سریال	نسخه	شماره صفحه: ۱۶ از ۳۸		
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02	
On-Off Valve											
TAG NO: BDV-2132A		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0011-D06 (1 of 3)				SERVICE: 2nd Stage Gas Compression Air Coolers			
FLUID STATE: VENT GAS		PHASE: GAS						AREA CLASSIFICATION: Zone2, IIB, T4			
SERVICE CONDITION	ITEM					UNITS		Max Flow	Norm. Flow	Min. Flow	Shut-Off
	1 FLOW RATE					kg/h		-	1414	-	-
	2 INLET PRESSURE					bar(g)		-	54.1 ~ 62	-	-
	3 OUTLET PRESSURE					bar(g)		-	54.1 ~ 62	-	-
	4 DIFFERENTIAL PRESSURE					bar(g)		-	-	-	62.4
	5 INLET TEMPERATURE					°C		-	22 ~ 60	-	-
	6 DENSITY					kg/m3		-	59.63~ 1012	-	-
	7 VISCOSITY					CP		-	0.014 ~ 0.976	-	-
	8 VAPOR PRESSURE Pv					bar(a)		-	-	-	-
9 CRITICAL PRESSURE					bar(a)		-	94.65	-	-	
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		1 1/2"	40S	0			
			OUT			1 1/2"	40S				
	11 LINE NO.		GAS-111-0054A-FS00-1 1/2"-NP								
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type								
	13 SIZE		1 1/2"								
	14 MAX PRESS./TEMP.		As per PMS								
	15 MFR. & MODEL		Will be finalized later								
	16 BODY / BONNET MATL		ASTM A351 GR.CF3M								
	17 LINER MATERIAL / ID		VTA								
	18 END CONNECTION		IN	1 1/2" /600#							
			OUT	1 1/2" /600#							
	19 FLG FACE FINISH		RF								
	20 END EXT.MATL		N/A								
	21 FLOW DIRECTION		(Note 18 in Page 4)								
	22 TYPE OF BONNET		Standard								
	23 LUBE & ISO VALVE		No								
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard				
25 ENTRY DESIGN		Top Entry									
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES									
TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE			
	28 SIZE		RATED TRAVEL		VTA		VTA				
	29 CHARACTERISTICS		On/Off								
	30 BALANCED / UNBALANCED		BALANCED								
	31 RATED Cv		FL	XT	VTA		VTA		VTA		
	32 PLUG / BALL / DISK MATERIAL		316 SS								
	33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE			
	34 CAGE / GUIDE MATERIAL		VTA								
	35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS			
	36 LEAKAGE CLASS		ANSI Class VI								
37 VALVE STEM EXTENSION REQUIREMENT		YES									
SOLENOID VALVE	38 TAG NO		BSOV-2132A , PSOV-2132A								
	39 TYPE		3 Way								
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	42 MANUAL RESET		Yes								
	43 Power Supply		24 VDC								
	44 Pmt. Connection		1/4" NPT								
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No								
	46 BLOCK RELAY		No								
	47 QUICK EXHUST		Yes								
	49 FILTER REGULATOR		Yes								
	50 VOLUME TANK		No								
51 MECHANICAL POSITION INDICATOR		Required									
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM											
(1) PMS: Piping material specification.											
(2) All material shall be suitable for minimum design metal temperature.											
(3) Shall be stated by vendor at quotation stage.											
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.											

 NIS OC		تجهاد است و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 HIRGAN ENERGY 			
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱۷ از ۳۸	
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02	
On-Off Valve											
TAG NO: BDV-2132B		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0011-D06 (2 of 3)				SERVICE: 2nd Stage Gas Compression Air Coolers			
FLUID STATE: VENT GAS		PHASE: GAS						AREA CLASSIFICATION: Zone2, IIB, T4			
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow	
	1 FLOW RATE					kg/h		-		1414	
	2 INLET PRESSURE					bar(g)		-		54.1 ~ 62	
	3 OUTLET PRESSURE					bar(g)		-		54.1 ~ 62	
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-	
	5 INLET TEMPERATURE					°C		-		22 ~ 60	
	6 DENSITY					kg/m3		-		59.63~ 1012	
	7 VISCOSITY					CP		-		0.014 ~ 0.976	
	8 VAPOR PRESSURE Pv					bar(a)		-		-	
	9 CRITICAL PRESSURE					bar(a)		-		94.65	
LINE	PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		1 1/2"	40S		0		
			OUT			1 1/2"	40S				
		LINE NO.		GAS-111-0054B-FS00-1 1/2"-NP							
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type								
	13 SIZE		1 1/2"								
	14 MAX PRESS./TEMP.		As per PMS								
	15 MFR. & MODEL		Will be finalized later								
	16 BODY / BONNET MATL		ASTM A351 GR.CF3M								
	17 LINER MATERIAL / ID		VTA								
	18 END CONNECTION		IN	1 1/2" /600#							
			OUT	1 1/2" /600#							
	19 FLG FACE FINISH		RF								
	20 END EXT./MATL.		N/A								
	21 FLOW DIRECTION		(Note 18 in Page 4)								
	22 TYPE OF BONNET		Standard								
	23 LUBE & ISO VALVE		No								
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard				
	25 ENTRY DESIGN		Top Entry								
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES									
TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE			
	28 SIZE		RATED TRAVEL		VTA		VTA				
	29 CHARACTERISTICS		On/Off								
	30 BALANCED / UNBALANCED		BALANCED								
	31 RATED Cv		FL	XT	VTA		VTA		VTA		
	32 PLUG / BALL / DISK MATERIAL		316 SS								
	33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE			
	34 CAGE / GUIDE MATERIAL		VTA								
	35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS			
	36 LEAKAGE CLASS		ANSI Class VI								
37 VALVE STEM EXTENSION REQUIREMENT		YES									
SOLENOID VALVE	38 TAG NO		BSOV-2132B , PSOV-2132B								
	39 TYPE		3 Way								
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	42 MANUAL RESET		Yes								
	43 Power Supply		24 VDC								
	44 Pmt. Connection		1/4" NPT								
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No								
	46 BLOCK RELAY		No								
	47 QUICK EXHUST		Yes								
	49 FILTER REGULATOR		Yes								
	50 VOLUME TANK		No								
51 MECHANICAL POSITION INDICATOR		Required									
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM											
(1) PMS: Piping material specification.											
(2) All material shall be suitable for minimum design metal temperature.											
(3) Shall be stated by vendor at quotation stage.											
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.											

 NIS OC		تجهیزات و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 شرکت توسعه و پارس			
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تهیه کننده	نوع مدرک	سریال	نسخه	شماره صفحه: ۱۸ از ۳۸		
BK		GCS	PEDCO	120	IN	DT	0010	D02	D02		
On-Off Valve											
TAG NO: BDV-2132C		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0011-D06 (3 of 3)				SERVICE: 2nd Stage Gas Compression Air Coolers			
FLUID STATE: VENT GAS		PHASE: GAS						AREA CLASSIFICATION: Zone2, IIB, T4			
SERVICE CONDITION	ITEM					UNITS		Max Flow	Norm. Flow	Min. Flow	Shut-Off
	1 FLOW RATE					kg/h		-	1414	-	-
	2 INLET PRESSURE					bar(g)		-	54.1 ~ 62	-	-
	3 OUTLET PRESSURE					bar(g)		-	54.1 ~ 62	-	-
	4 DIFFERENTIAL PRESSURE					bar(g)		-	-	-	62.4
	5 INLET TEMPERATURE					°C		-	22 ~ 60	-	-
	6 DENSITY					kg/m3		-	59.63~ 1012	-	-
	7 VISCOSITY					CP		-	0.014 ~ 0.976	-	-
	8 VAPOR PRESSURE Pv					bar(a)		-	-	-	-
9 CRITICAL PRESSURE					bar(a)		-	94.65	-	-	
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		1 1/2"	40S	0			
			OUT			1 1/2"	40S				
	11 LINE NO.		GAS-111-0054C-FS00-1 1/2"-NP								
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type								
	13 SIZE		1 1/2"								
	14 MAX PRESS./TEMP.		As per PMS								
	15 MFR. & MODEL		Will be finalized later								
	16 BODY / BONNET MATL		ASTM A351 GR.CF3M								
	17 LINER MATERIAL / ID		VTA								
	18 END CONNECTION		IN	1 1/2" /600#							
			OUT	1 1/2" /600#							
	19 FLG FACE FINISH		RF								
	20 END EXT./MATL.		N/A								
	21 FLOW DIRECTION		(Note 18 in Page 4)								
	22 TYPE OF BONNET		Standard								
	23 LUBE & ISO VALVE		No								
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard				
25 ENTRY DESIGN		Top Entry									
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES									
TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE			
	28 SIZE		RATED TRAVEL		VTA		VTA				
	29 CHARACTERISTICS		On/Off								
	30 BALANCED / UNBALANCED		BALANCED								
	31 RATED Cv		FL	XT	VTA		VTA		VTA		
	32 PLUG / BALL / DISK MATERIAL		316 SS								
	33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE			
	34 CAGE / GUIDE MATERIAL		VTA								
	35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS			
	36 LEAKAGE CLASS		ANSI Class VI								
	37 VALVE STEM EXTENSION REQUIREMENT		YES								
SOLENOID VALVE	38 TAG NO		BSOV-2132C , PSOV-2132C								
	39 TYPE		3 Way								
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	42 MANUAL RESET		Yes								
	43 Power Supply		24 VDC								
	44 Pmt. Connection		1/4" NPT								
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No								
	46 BLOCK RELAY		No								
	47 QUICK EXHUST		Yes								
	49 FILTER REGULATOR		Yes								
	50 VOLUME TANK		No								
51 MECHANICAL POSITION INDICATOR		Required									
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM											
(1) PMS: Piping material specification.											
(2) All material shall be suitable for minimum design metal temperature.											
(3) Shall be stated by vendor at quotation stage.											
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.											

 NIS OC		تجهادشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 					
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱۹ از ۳۸			
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02			
On-Off Valve													
TAG NO: BDV-2141		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0012-D06				SERVICE: 2nd Stage Gas Compression Discharge Drum					
FLUID STATE: FLARE GAS		PHASE: GAS						AREA CLASSIFICATION: Zone2, IIB, T4					
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow	Min. Flow	Shut-Off	
	1 FLOW RATE					kg/h		1825				-	
	2 INLET PRESSURE					bar(g)		53.9 ~ 62		53.9 ~ 62		53.9 ~ 62	-
	3 OUTLET PRESSURE					bar(g)		53.9 ~ 62		53.9 ~ 62		53.9 ~ 62	-
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-		-	90
	5 INLET TEMPERATURE					°C		21 ~ 59.89		21 ~ 59.89		21 ~ 59.89	-
	6 DENSITY					kg/m3		59.17 ~ 1012		59.17 ~ 1012		59.17 ~ 1012	-
	7 VISCOSITY					CP		0.014 ~ 0.976		0.014 ~ 0.976		0.014 ~ 0.976	-
	8 VAPOR PRESSURE Pv					bar(a)		3.25		3.25		3.25	-
9 CRITICAL PRESSURE					bar(a)		106		106		106	-	
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)	1 1/2" 160		3	53 TYPE		Single Acting , Spring Return			
			OUT		1 1/2" 160			54 SIZE		VTA			
	11 LINE NO.		GAS-111-0065-FN05-1 1/2"-PT					55 SPRING FAIL ACTION		Fail to Open			
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/ Floating Type					56 MAX ALLOWABLE PRESSURE		VTA			
	13 SIZE		1 1/2"					57 MIN REQUIRES PRESSURE		VTA			
	14 MAX PRESS./TEMP.		As per PMS					58 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	15 MFR. & MODEL		Will be finalized later					59 BENCH RANGE		VTA			
	16 BODY / BONNET MATL		ASTM A216 Gr. WCB					60 TRAVELING TIME		5 S			
	17 LINER MATERIAL / ID		VTA					61 FUNCTION		On/Off			
	18 END CONNECTION		IN	1 1/2" /600#		OUT	62 LOCAL POSITION INDICATOR		Required				
			1 1/2" /600#		63 ACT. ORIENTATION		VTA						
	19 FLG FACE FINISH		RF					64 HAND WHEEL TYPE		Decutchable side mounted			
	20 END EXT./MATL.		N/A					65 ADJUSTABLE LIMIT STOP		No			
	21 FLOW DIRECTION		(Note 18 in Page 4)					66 INPUT SIGNAL		24VDC			
	22 TYPE OF BONNET		Standard					67 MFR. & MODEL		Will be finalized later			
	23 LUBE & ISO VALVE		No					68 TYPE		N/A			
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard		69 MFR. & MODEL		Will be finalized later		
25 ENTRY DESIGN		Top Entry					70 ON INCR SIGNAL OUTPUT INCR / DECR		N/A				
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		YES					71 GAUGES		N/A				
TRIM	27 TRIM		TYPE	MATERIAL	VTA		316 SS+RPTFE		72 CAM CHARACTERISTIC		N/A		
	28 SIZE		RATED TRAVEL		VTA		VTA		73 AIR CONNECTION		N/A		
	29 CHARACTERISTICS		On/Off					74 TAG NO. :		BZSC-2110 / BZSO-2110			
	30 BALANCED / UNBALANCED		BALANCED				75 TYPE		QUANTITY	Magnetically operated 'REED' contacts		2	
	31 RATED Cv		FL	XT	VTA		VTA	VTA	76 CONTACTS / RATING		110V DC , 10A		
	32 PLUG / BALL / DISK MATERIAL		316 SS					77 ACTUATION POINT		Fully Open/Close			
	33 SEAT		TYPE	MATERIAL	Soft Seat		RPTFE		78 ENCLOSURE MATERIAL		Die Cast Amulium		
	34 CAGE / GUIDE MATERIAL		VTA					79 WEATHER PROTECTION		IP-65			
	35 STEM		TYPE	MATERIAL	Anti-Blow Out		316 SS		80 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5
	36 LEAKAGE CLASS		ANSI Class VI					81 MFR. & MODEL		Will be finalized later			
37 VALVE STEM EXTENSION REQUIREMENT		YES					82 SET PRESSURE		Yes				
SOLENOID VALVE	38 TAG NO		BSOV-2141					83 PNEUMATIC CONNECTION		1/4" NPT			
	39 TYPE		3 Way					84 GAUGES		FILTER	Required		
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85 MFR. & MODEL		Will be finalized later		
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		86 ANSI/FCI LEAKAGE CLASS		Required		
	42 MANUAL RESET		Yes					87 HYDRO PRESSURE		Required			
	43 Power Supply		24 VDC					88 FUNCTIONAL TEST		Required			
	44 Pna. Connection		1/4" NPT					89					
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No					90					
	46 BLOCK RELAY		No					91 PASSIVE FIRE PROTECTION		No			
	47 QUICK EXHUST		Yes					92 API 6FA REQUIREMENTS		Yes			
	49 FILTER REGULATOR		Yes					93 SIL 3 REQUIREMENTS		Yes			
	50 VOLUME TANK		No					94 PARTIAL STROKING VALVE TEST		Yes			
51 MECHANICAL POSITION INDICATOR		Required					95						
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM (1) PMS: Piping material specification. (2) All material shall be suitable for minimum design metal temperature. (3) Shall be stated by vendor at quotation stage. (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.													



احداث ردیف تو اکھ گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves



شماره پیمان:

• ΔΨ = •ΥΨ = 9.3A

029

فاری

	کننده
--	-------

سلالت	
-------	--

۵۳

۶۔ مدرک

سمو مال

نسخه

شماره صفحه: ۲۰؛ ۳۸

D0

On-Off Valve

TAG NO:

BDV-2151

P&ID NO :

BK-GCS-PEDCO-120-PR-PI-0013-D06

SERVICE

Dehydration Package

FLUID STATE:

VENT GAS

PHASE:

GAS

AREA CLASSIFICATION:

Zone2, IIB, T4

- (1) PMS: Piping material specification.
- (2) All material shall be suitable for minimum design metal temperature.
- (3) Shall be stated by vendor at quotation stage.
- (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID

 NIS OC		تکده‌داشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 						
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳۸ از ۳۳				
BK		GCS	PEDCO	120	IN	DT	0010	D02	D02					
On-Off Valve														
TAG NO: XV-2121B		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0006-D06 (2 of 3)				SERVICE: 1st Stage Gas Compression Suction Drums						
FLUID STATE: PROCESS GAS		PHASE:		GAS				AREA CLASSIFICATION: Zone2, IIB, T4						
SERVICE CONDITION	ITEM			UNITS			Max Flow		Norm. Flow		Min. Flow	Shut-Off		
	1	FLOW RATE			kg/h			9530.4		8664.0		3032.4	-	
	2	INLET PRESSURE			bar(g)			5.1		5.1		5.1	-	
	3	OUTLET PRESSURE			bar(g)			5.1		5.1		5.1	-	
	4	DIFFERENTIAL PRESSURE			bar(g)			-		-		-	18.2	
	5	INLET TEMPERATURE			°C			19.02 ~ 36.92		19.02 ~ 36.92		19.02 ~ 36.92	-	
	6	DENSITY			kg/m3			5.56 ~ 5.96		5.56 ~ 5.96		5.56 ~ 5.96	-	
	7	VISCOSITY			CP			0.011		0.011		0.011	-	
	8	VAPOR PRESSURE Pv			bar(a)			167.7		167.7		167.7	-	
9	CRITICAL PRESSURE			bar(a)			94.65		94.65		94.65	-		
LINE	10	PIPE LINE SIZE & SCHEDULE	IN	CORROSION ALLOWANCE (mm)	8"	60	6	53	TYPE		Single Acting, Spring Return			
	11	LINE NO.	OUT		8"	60		54	SIZE		VTA			
VALVE BODY & BONNET				GAS-111-0026B-AN27-8"-PT			ACTUATOR	55	SPRING FAIL ACTION		Fail to Close			
								56	MAX ALLOWABLE PRESSURE		VTA			
								57	MIN REQUIRES PRESSURE		VTA			
								58	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
								59	BENCH RANGE		VTA			
								60	TRAVELING TIME		9 S			
								61	FUNCTION		On/Off			
								62	LOCAL POSITION INDICATOR		Required			
								63	ACT. ORIENTATION		VTA			
								64	HAND WHEEL TYPE		Clutchable side mounted			
								65	ADJUSTABLE LIMIT STOP		Yes			
								66	INPUT SIGNAL		24VDC			
								67	MFR. & MODEL		Will be finalized later			
								68	TYPE		N/A			
TRIM				PACKING TYPE			PTFE	Standard		69	MFR. & MODEL		Will be finalized later	
				ENTRY DESIGN			Top Entry		70	ON INCR SIGNAL OUTPUT INCR / DECR		N/A		
				NACE REQUIREMENTNACE (MR-0175/ISO 15156)			YES		71	GAUGES		N/A		
	27	TRIM	TYPE	MATERIAL	VTA	316 SS+PTFE		72	CAM CHARACTERISTIC		N/A			
	28	SIZE	RATED TRAVEL		VTA	VTA		73	AIR CONNECTION		N/A			
	29	CHARACTERISTICS			On/Off			74	TAG NO. :		BZSC-2110 / BZSO-2110			
	30	BALANCED / UNBALANCED			BALANCED			75	TYPE	QUANTITY	Magnetically operated 'REED' contacts		2	
	31	RATED Cv	FL	XT	VTA	VTA	VTA	76	CONTACTS / RATING		110V DC , 10A			
	32	PLUG / BALL / DISK MATERIAL			316 SS			77	ACTUATION POINT		Fully Open/Close			
	33	SEAT	TYPE	MATERIAL	Soft Seat		PTFE	78	ENCLOSURE MATERIAL		Die Cast Amuluminum			
34	CAGE / GUIDE MATERIAL			VTA			79	WEATHER PROTECTION		IP-65				
35	STEM	TYPE	MATERIAL	Anti-Blow Out		316 SS	80	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 x 1.5			
36	LEAKAGE CLASS			ANSI Class VI			81	MFR. & MODEL		Will be finalized later				
37	VALVE STEM EXTENSION REQUIREMENT			YES			82	SET PRESSURE		Yes				
SOLENOID VALVE	38	TAG NO			PSOV-2121B, ESOV-2121B			83	PNEUMATIC CONNECTION		1/4" NPT			
	39	TYPE			3 Way			84	GAUGES	FILTER	Required	Required		
	40	BODY MATERIAL		WEATHER IP.	AISI 316 S.S		IP-65	85	MFR. & MODEL		Will be finalized later			
	41	ELE. CERTIFICATE		ELE. CONNECTION	EEx "d", IIB T4		ISO M20 x 1.5	86	ANSI/FCI LEAKAGE CLASS		Required			
	42	MANUAL RESET			Yes			87	HYDRO PRESSURE		Required			
	43	Power Supply			24 VDC			88	FUNCTIONAL TEST		Required			
	44	Pnu. Connection			1/4" NPT									
SPECIAL / ACCESS.	45	FUSIBLE LEAKAGE			No									
	46	BLOCK RELAY			No									
	47	QUICK EXHUST			Yes									
	49	FILTER REGULATOR			Yes									
	50	VOLUME TANK			Yes									
	51	MECHANICAL POSITION INDICATOR			Required									
	52	MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE			Yes									
	NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM (1) PMS: Piping material specification. (2) All material shall be suitable for minimum design metal temperature. (3) Shall be stated by vendor at quotation stage. (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.													

 NIS OC		تکده‌داشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 						
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۳۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳۸ از ۲۵				
BK		GCS	PEDCO	120	IN	DT	0010	D02	D02					
On-Off Valve														
TAG NO: XV-2122A		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0006-D06 (1 of 3)				SERVICE: 1st Stage Gas Compression Suction Drums						
FLUID STATE: PROCESS GAS		PHASE:		GAS				AREA CLASSIFICATION: Zonec2, IIB, T4						
SERVICE CONDITION	ITEM						UNITS		Max Flow	Norm. Flow	Min. Flow	Shut-Off		
	1	FLOW RATE						kg/h	-	10000	-	-		
	2	INLET PRESSURE						bar(g)	-	4.9	-	-		
	3	OUTLET PRESSURE						bar(g)	-	4.9	-	-		
	4	DIFFERENTIAL PRESSURE						bar(g)	-	-	-	13.9		
	5	INLET TEMPERATURE						°C	-	36.78	-	-		
	6	DENSITY						kg/m3	-	998.5	-	-		
	7	VISCOSITY						CP	-	0.69	-	-		
	8	VAPOR PRESSURE Pv						bar(a)	0.61	0.61	0.61	-		
9	CRITICAL PRESSURE						bar(a)	221.3	221.3	221.3	-			
LINE	10	PIPE LINE SIZE & SCHEDULE	IN	CORROSION ALLOWANCE (mm)	2"	10S	0	53	TYPE		Single Acting, Spring Return			
	11	LINE NO.	OUT		2"	10S		54	SIZE		VTA			
VALVE BODY & BONNET	CDH-112-0021A-AS00-2"-NP						ACTUATOR	55	SPRING FAIL ACTION		Fail to Close			
	12	TYPE				Full Bore Ball Valve/Trunnion Mounted		56	MAX ALLOWABLE PRESSURE		VTA			
	13	SIZE				2"		57	MIN REQUIRES PRESSURE		VTA			
	14	MAX PRESS./TEMP.				As per PMS		58	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	15	MFR. & MODEL				Will be finalized later		59	BENCH RANGE		VTA			
	16	BODY / BONNET MATL				ASTM A351 GR.CF3M		60	TRAVELING TIME		5 S			
	17	LINER MATERIAL /ID				VTA		61	FUNCTION		On/Off			
	18	END CONNECTION	IN	2"/300#		OUT		2"/300#	62	LOCAL POSITION INDICATOR		Required		
	19	FLG FACE FINISH						RF		63	ACT. ORIENTATION		VTA	
	20	END EXT./MATL.				N/A		64	HAND WHEEL TYPE		Clutchable side mounted			
	21	FLOW DIRECTION				(Note 18 in Page 4)		65	ADJUSTABLE LIMIT STOP		Yes			
	22	TYPE OF BONNET				Standard		66	INPUT SIGNAL		24VDC			
	23	LUBE & ISO VALVE				No		67	MFR. & MODEL		Will be finalized later			
	24	PACKING MATERIAL		PACKING TYPE		PTFE		Standard	68	TYPE		N/A		
25	ENTRY DESIGN				Top Entry		POSITIONER	69	MFR. & MODEL		Will be finalized later			
26	NACE REQUIREMENTNACE (MR-0175/ISO 15156)				No			70	ON INCR SIGNAL OUTPUT INCR / DECR		N/A			
27	TRIM	TYPE	MATERIAL		VTA			316 SS+PTFE	71	GAUGES		N/A		
TRIM	28	SIZE	RATED TRAVEL		VTA		VTA	72	CAM CHARACTERISTIC		N/A			
	29	CHARACTERISTICS				On/Off		73	AIR CONNECTION		N/A			
	30	BALANCED / UNBALANCED				BALANCED		LIMIT SWITCHES	74	TAG NO. :		BZSC-2110 / BZSO-2110		
	31	RATED Cv	FL	XT	VTA		VTA		VTA	75	TYPE	QUANTITY	Magnetically operated 'REED' contacts	2
	32	PLUG / BALL / DISK MATERIAL				316 SS			76	CONTACTS / RATING		110V DC , 10A		
	33	SEAT	TYPE	MATERIAL		Soft Seat			PTFE	77	ACTUATION POINT		Fully Open/Close	
	34	CAGE / GUIDE MATERIAL				VTA			78	ENCLOSURE MATERIAL		Die Cast Amuluminum		
	35	STEM	TYPE	MATERIAL		Anti-Blow Out			316 SS	79	WEATHER PROTECTION		IP-65	
	36	LEAKAGE CLASS				ANSI Class VI			80	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 x 1.5	
	37	VALVE STEM EXTENSION REQUIREMENT				YES			81	MFR. & MODEL		Will be finalized later		
SOLENOID VALVE	38	TAG NO				PSOV-2122A , ESOV-2122A		AIR SET	82	SET PRESSURE		Yes		
	39	TYPE				3 Way			83	PNEUMATIC CONNECTION		1/4" NPT		
	40	BODY MATERIAL		WEATHER IP.		AISI 316 S.S			IP-65	84	GAUGES	FILTER	Required	Required
	41	ELE. CERTIFICATE		ELE. CONNECTION		EEx "d", IIB T4			ISO M20 x 1.5	85	MFR. & MODEL		Will be finalized later	
	42	MANUAL RESET				Yes			TEST	86	ANSI/FCI LEAKAGE CLASS		Required	
	43	Power Supply				24 VDC				87	HYDRO PRESSURE		Required	
	44	Pnu. Connection				1/4" NPT				88	FUNCTIONAL TEST		Required	
SPECIAL / ACCESS.	45	FUSIBLE LEAKAGE				No								
	46	BLOCK RELAY				No								
	47	QUICK EXHUST				Yes								
	49	FILTER REGULATOR				Yes								
	50	VOLUME TANK				Yes								
	51	MECHANICAL POSITION INDICATOR				Required								
	52	MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE				Yes								
	NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM (1) PMS: Piping material specification. (2) All material shall be suitable for minimum design metal temperature. (3) Shall be stated by vendor at quotation stage. (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.													

 NIS OC		تکده‌داشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 				
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۲۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳۸ از ۳۸		
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02		
On-Off Valve												
TAG NO: XV-2131A		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0009-D06 (1 of 3)					SERVICE: 2nd Stage Gas Compression Suction Drums			
FLUID STATE: PROCESS GAS		PHASE:		GAS					AREA CLASSIFICATION: Zone2, IIB, T4			
SERVICE CONDITION	ITEM				UNITS		Max Flow		Norm. Flow		Min. Flow	Shut-Off
	1 FLOW RATE				kg/h		-		10000		-	
	2 INLET PRESSURE				bar(g)		-		18.1		-	
	3 OUTLET PRESSURE				bar(g)		-		18.1		-	
	4 DIFFERENTIAL PRESSURE				bar(g)		-		-		30.3	
	5 INLET TEMPERATURE				°C		-		59.88		-	
	6 DENSITY				kg/m3		-		981.1		-	
	7 VISCOSITY				CP		-		0.496		-	
	8 VAPOR PRESSURE Pv				bar(a)		-		3.23		-	
9 CRITICAL PRESSURE				bar(a)		221.5		221.5		221.5		
LINE	10 PIPE LINE SIZE & SCHEDULE		IN	CORROSION ALLOWANCE (mm)		2"	10S		0			
			OUT			2"	10S					
11 LINE NO.		CDH-111-0023A-CS00-2"-NP										
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/Trunnion Mounted									
	13 SIZE		2"									
	14 MAX PRESS./TEMP.		As per PMS									
	15 MFR. & MODEL		Will be finalized later									
	16 BODY / BONNET MATL		ASTM A351 GR.CF3M									
	17 LINER MATERIAL /ID		VTA									
	18 END CONNECTION	IN		2"/300#								
		OUT		2"/300#								
	19 FLG FACE FINISH		RF									
	20 END EXT./MATL.		N/A									
	21 FLOW DIRECTION		(Note 18 in Page 4)									
	22 TYPE OF BONNET		Standard									
23 LUBE & ISO VALVE		No										
24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard						
25 ENTRY DESIGN		Top Entry										
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		No										
TRIM	27 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE				
	28 SIZE		RATED TRAVEL		VTA		VTA					
	29 CHARACTERISTICS		On/Off									
	30 BALANCED / UNBALANCED		BALANCED									
	31 RATED Cv		FL	XT	VTA		VTA		VTA			
	32 PLUG / BALL / DISK MATERIAL		316 SS									
	33 SEAT		TYPE	MATERIAL		Soft Seat		RPTFE				
	34 CAGE / GUIDE MATERIAL		VTA									
	35 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS				
	36 LEAKAGE CLASS		ANSI Class VI									
37 VALVE STEM EXTENSION REQUIREMENT		YES										
SOLENOID VALVE	38 TAG NO		PSOV-2131A , ESOV-2131A									
	39 TYPE		3 Way									
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65					
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d", IIB T4		ISO M20 x 1.5					
	42 MANUAL RESET		Yes									
	43 Power Supply		24 VDC									
	44 Pnu. Connection		1/4" NPT									
SPECIAL / ACCESS.	45 FUSIBLE LEAKAGE		No									
	46 BLOCK RELAY		No									
	47 QUICK EXHUST		Yes									
	49 FILTER REGULATOR		Yes									
	50 VOLUME TANK		Yes									
	51 MECHANICAL POSITION INDICATOR		Required									
	52 MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes									
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM												
(1) PMS: Piping material specification.												
(2) All material shall be suitable for minimum design metal temperature.												
(3) Shall be stated by vendor at quotation stage.												
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.												



NISOC

تکهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves




شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۰۳۸

پروژه

پسته کاری

صادرکننده

تسهیلات

رشته

نوع مدارک

سریال

نسخه

BK

GCS

PEDCO

120

IN

DT

0010

D02

شماره صفحه: ۳۸ از ۳۵

D02

On-Off Valve

TAG NO:

XV-2143

P&ID NO :

BK-GCS-PEDCO-120-PR-PI-0012-D06

SERVICE:

Slug Catcher System

FLUID STATE:

PROCESS GAS

PHASE:

GAS

AREA CLASSIFICATION:

Zone2, IIB, T4

NOTE:

VTA : VENDOR TO ADVISE AT BIDDING STAGE

VTC: VENDOR TO CONFIRM

(1) PMS: Piping material specification.

(2) All material shall be suitable for minimum design metal temperature.

(3) Shall be stated by vendor at quotation stage.

(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.

 NIS OC		تکده‌داشت و افزایش تولید میدان نفتی بینک سطح الارض						 					
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۰۲۸		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳۸ از ۳۷			
		BK	GCS	PEDCO	120	IN	DT	0010	D02	D02			
On-Off Valve													
TAG NO: XV-2271		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0022-D06					SERVICE: Fuel Gas System				
FLUID STATE: Fuel Gas		PHASE: GAS					AREA CLASSIFICATION: Zonec2, IIB, T4						
SERVICE CONDITION	ITEM				UNITS		Max Flow		Norm. Flow		Min. Flow	Shut-Off	
	1	FLOW RATE				kg/h		-		603.15		-	-
	2	INLET PRESSURE				bar(g)		-		4.9		-	-
	3	OUTLET PRESSURE				bar(g)		-		4.9		-	-
	4	DIFFERENTIAL PRESSURE				bar(g)		-		-		-	18.2
	5	INLET TEMPERATURE				°C		-		18.88~ 36.7		-	-
	6	DENSITY				kg/m3		-		842~ 852		-	-
	7	VISCOSITY				CP		-		0.6934 ~ 1.03		-	-
	8	VAPOR PRESSURE Pv				bar(a)		-		0.6		-	-
9	CRITICAL PRESSURE				bar(a)		-		221.3		-	-	
LINE	10	PIPE LINE SIZE & SCHEDULE	IN	CORROSION ALLOWANCE (mm)	2"	160	6	53	TYPE		Single Acting, Spring Return		
	11	LINE NO.	OUT		2"	160		54	SIZE		VTA		
	11	CDH-112-0039-AN07-2"-PT						55	SPRING FAIL ACTION		Fail to Close		
VALVE BODY & BONNET	12	TYPE			Full Bore Ball Valve/Trunnion Mounted			56	MAX ALLOWABLE PRESSURE		VTA		
	13	SIZE			2"			57	MIN REQUIRES PRESSURE		VTA		
	14	MAX PRESS./TEMP.			As per PMS			58	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g		
	15	MFR. & MODEL			Will be finalized later			59	BENCH RANGE		VTA		
	16	BODY / BONNET MATL			ASTM A216 Gr. WCB			60	TRAVELING TIME		5 S		
	17	LINER MATERIAL /ID			VTA			61	FUNCTION		On/Off		
	18	END CONNECTION	IN	2" /300#			62	LOCAL POSITION INDICATOR		Required			
	19	FLG FACE FINISH	OUT	2" /300#			63	ACT. ORIENTATION		VTA			
	20	END EXT./MATL.	RF			64	HAND WHEEL TYPE		Clutchable side mounted				
	21	FLOW DIRECTION	N/A			65	ADJUSTABLE LIMIT STOP		Yes				
	22	TYPE OF BONNET	(Note 18 in Page 4)			66	INPUT SIGNAL		24VDC				
	23	LUBE & ISO VALVE	Standard			67	MFR. & MODEL		Will be finalized later				
	24	PACKING MATERIAL	No			68	TYPE		N/A				
	25	PACKING TYPE	PTFE			69	MFR. & MODEL		Will be finalized later				
TRIM	26	ENTRY DESIGN			Top Entry			70	ON INCR SIGNAL OUTPUT INCR / DECR		N/A		
	27	TRIM	TYPE	MATERIAL	NACE REQUIREMENTNACE (MR-0175/ISO 15156)			71	GAUGES		N/A		
	28	SIZE	VTA			72	CAM CHARACTERISTIC		N/A				
	29	CHARACTERISTICS	VTA			73	AIR CONNECTION		N/A				
	30	BALANCED / UNBALANCED	On/Off			74	TAG NO. :		BZSC-2110 / BZSO-2110				
	31	BALANCED				75	TYPE	QUANTITY	Magnetically operated 'REED' contacts		2		
	32	RATED Cv	FL	XT	VTA			76	CONTACTS / RATING		110V DC , 10A		
	33	PLUG / BALL / DISK MATERIAL	VTA			77	ACTUATION POINT		Fully Open/Close				
	34	SEAT	TYPE	MATERIAL	316 SS+PTFE			78	ENCLOSURE MATERIAL		Die Cast Amulimum		
	35	CAGE / GUIDE MATERIAL	Soft Seat			79	WEATHER PROTECTION		IP-65				
SOLENOID VALVE	36	STEM	TYPE	MATERIAL	VTA			80	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 x 1.5	
	37	LEAKAGE CLASS	Anti-Blow Out			81	MFR. & MODEL		Will be finalized later				
	38	VALVE STEM EXTENSION REQUIREMENT	ANSI Class VI			82	SET PRESSURE		Yes				
	39	TAG NO	YES			83	PNEUMATIC CONNECTION		1/4" NPT				
	40	TYPE	PSOV-2271, ESOV-2271			84	GAUGES	FILTER	Required	Required			
	41	BODY MATERIAL	3 Way			85	MFR. & MODEL		Will be finalized later				
	42	ELE. CERTIFICATE	WEATHER IP.			86	ANSI/FCI LEAKAGE CLASS		Required				
	43	MANUAL RESET	EEx "d", IIB T4			87	HYDRO PRESSURE		Required				
SPECIAL / ACCESS.	44	Power Supply	EEx "d", IIB T4			88	FUNCTIONAL TEST		Required				
	45	Pnu. Connection	24 VDC										
	46	FUSIBLE LEAKAGE	1/4" NPT										
	47	BLOCK RELAY	No										
	48	QUICK EXHUST	Yes										
	49	FILTER REGULATOR	Yes										
	50	VOLUME TANK	Yes										
51	MECHANICAL POSITION INDICATOR	Required											
52	MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE	Yes											
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM (1) PMS: Piping material specification. (2) All material shall be suitable for minimum design metal temperature. (3) Shall be stated by vendor at quotation stage. (4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.													

 NIS OC				نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves								 								
شماره پیمان: ۹۰۳۸ - ۰۷۳ - ۰۵۳				نسخه: ۰۰۱۰ سریال: ۰۰۱۰ رشته: IN تهیلات: 120 صادرکننده: PEDCO بسته کاری: GCS پروژه: BK								شماره صفحه: ۳۸ از ۳۸								
On-Off Valve																				
TAG NO: XV-2301				P&ID NO : BK-GCS-PEDCO-120-SA-PI-0001-D01(1 of 2)				SERVICE: Fire Water System												
FLUID STATE: FIRE WATER				PHASE: GAS				AREA CLASSIFICATION: Zone2, IIB, T4												
SERVICE CONDITION	ITEM							UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off				
	1 FLOW RATE							kg/h		-		29910		-		-				
	2 INLET PRESSURE							bar(g)		-		1		-		-				
	3 OUTLET PRESSURE							bar(g)		-		0.95		-		-				
	4 DIFFERENTIAL PRESSURE							bar(g)		-		0.05		-		-				
	5 INLET TEMPERATURE							°C		55		AMB		5		-				
	6 DENSITY							kg/m3		-		997		-		-				
	7 VISCOSITY							CP		-		0.81		-		-				
	8 VAPOR PRESSURE Pv									-		-		-		-				
9 CRITICAL PRESSURE							bar(a)		-		-		-		-					
LINE	PIPE LINE SIZE & SCHEDULE		IN		CORROSION ALLOWANCE (mm)		3" 40		3		53 TYPE Single Acting, Spring Return									
			OUT				3" 40													
	LINE NO.		FWA-112-0007-AN04-3"-PT																	
VALVE BODY & BONNET	12 TYPE		Full Bore Ball Valve/Trunnion Mounted								60 TRAVELING TIME 5 S									
	13 SIZE		3"																	
	14 MAX PRESS./TEMP.		As per PMS																	
	15 MFR. & MODEL		Will be finalized later																	
	16 BODY / BONNET MATL		ASTM A216 Gr. WCB																	
	17 LINER MATERIAL / ID		VTA																	
	18 END CONNECTION		IN		3" /300#		61 FUNCTION On/Off													
			OUT		3" /300#															
	19 FLG FACE FINISH		RF																	
	20 END EXT./MATL		N/A																	
	21 FLOW DIRECTION		(Note 18 in Page 4)																	
	22 TYPE OF BONNET		Standard																	
	23 LUBE & ISO VALVE		No																	
	24 PACKING MATERIAL		PACKING TYPE		PTFE		Standard		68 TYPE N/A											
25 ENTRY DESIGN		Top Entry																		
26 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		No																		
TRIM	27 TRIM		TYPE		MATERIAL		VTA		316 SS+PTFE		74 TAG NO. : BZSC-2110 / BZSO-2110									
	28 SIZE		RATED TRAVEL		VTA		VTA													
	29 CHARACTERISTICS		On/Off																	
	30 BALANCED / UNBALANCED		BALANCED		75 TYPE QUANTITY Magnetically operated 'REED' contacts 2															
	31 RATED Cv		FL													XT		VTA		VTA
	32 PLUG / BALL / DISK MATERIAL		316 SS																	
	33 SEAT		TYPE		MATERIAL		Soft Seat		PTFE							76 CONTACTS / RATING 110V DC , 10A				
	34 CAGE / GUIDE MATERIAL		VTA																	
	35 STEM		TYPE		MATERIAL		Anti-Blow Out		316 SS											
	36 LEAKAGE CLASS		ANSI Class VI																	
37 VALVE STEM EXTENSION REQUIREMENT		YES																		
SOLENOID VALVE	38 TAG NO		PSOV-2301								82 SET PRESSURE Yes									
	39 TYPE		3 Way																	
	40 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65													
	41 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5													
	42 MANUAL RESET		Yes								83 PNEUMATIC CONNECTION 1/4" NPT									
	43 Power Supply		24 VDC																	
	44 Pnu. Connection		1/4" NPT																	
	45 FUSIBLE LEAKAGE		No																	
SPECIAL / ACCESS.	46 BLOCK RELAY		No								84 GAUGES FILTER Required Required									
	47 QUICK EXHUST		Yes																	
	49 FILTER REGULATOR		Yes																	
	50 VOLUME TANK		Yes																	
	51 MECHANICAL POSITION INDICATOR		No																	
	52 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		No																	
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																				
(1) PMS: Piping material specification.																				
(2) All material shall be suitable for minimum design metal temperature.																				
(3) Shall be stated by vendor at quotation stage.																				
(4) Manual Reset to be consider for all Emergency Shut off solenoids as per P&ID.																				