

 NISOC	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: 053 - 073 - 9184	پروژه: BK	بسته کاری: GCS	صادر کننده: PEDCO	تجهیزات: 120	رشته: IN	نوع مدارک: DT	سریال: 0010	نسخه: D03
شماره صفحه: 1 از 44								

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR ON/OFF & SHUTDOWN VALVES

نگهداشت و افزایش تولید میدان نفتی بینک

D03	NOV.2024	AFC	P.Hajisadeghi	M.Fakharian	M.Sadeghian	
D02	AUG.2024	AFC	P.Hajisadeghi	M.Fakharian	M.Sadeghian	
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-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

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:

053 - 073 - 9184

نسخه	میرال	بوع مدرك	رشته	تهيات	صادرکننده	بسته کاری	پروژه
D03	0010	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: 2 از 44

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X	X	X		65					
2	X	X	X	X		66					
3	X	X	X	X		67					
4	X	X	X	X		68					
5	X	X	X	X		69					
6	X	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	X		77					
14	X	X	X	X		78					
15	X	X	X	X		79					
16	X	X	X	X		80					
17	X	X	X	X		81					
18	X	X	X	X		82					
19	X	X	X	X		83					
20	X	X	X	X		84					
21	X	X	X	X		85					
22	X	X	X	X		86					
23	X	X	X	X		87					
24	X	X	X	X		88					
25	X	X	X	X		89					
26	X	X	X	X		90					
27	X	X	X	X		91					
28	X	X	X	X		92					
29	X	X	X	X		93					
30	X	X	X	X		94					
31	X	X	X	X		95					
32	X	X	X	X		96					
33	X	X	X	X		97					
34	X	X	X	X		98					
35	X	X	X	X		99					
36	X	X	X	X		100					
37	X	X	X	X		101					
38			X	X		102					
39			X	X		103					
40			X	X		104					
41			X	X		105					
42			X	X		106					
43			X	X		107					
44			X	X		108					
45						109					
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64						128					



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:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 3 از 44
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0010	D03	

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
Specification For Painting	BK-GNRAL-PEDCO-000-PI-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 Sheets For ON/OFF & Shutdown Valves

شماره پیمان:
053 - 073 - 9184

نسخه	سریال	پوشه مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه
D03	0010	DT	IN	120	PEDCO	GCS	BK

شماره صفحه: 4 از 44

GENERAL NOTES:

- Calculations shall be provided for each completely piped actuated valve assembly (including solenoid valve), the stroking times i.e. to close and to open.
- The duty, failure action and stroke time shall all be approved by the Purchaser.
- The actuator shall be designed to operate the valve through its full stroke.
- 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.
- The piping indicates corrosion allowance selected as per document "Piping & Pipeline Material Specification, No. " BK-GCS-PEDCO-120-PI-SP-0001 "
- Hydro-test duration shall be in accordance with API 6D.
- 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.
- Vendor shall guarantee and demonstrate the required stroking speed, during the Functional Test (FAT).
- 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
- Solenoid valve shall be selected in accordance with low power type.
- 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.
- The actuator shall be fail safe in operation (as specified in data sheets) in loss of electrical signal or loss of air supply.
- The spring return actuator shall be "pre stressed".
- 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.
- 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

- Material Test Certificate and calibration Certificate for all transmitters to be submitted by Vendor.
- Flow direction shall be permanently and clearly indicated on the valve body.
- External grounding shall be provided for each solenoid valve.
- 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.
- Valves in safety related services should have been fire tested and certification to be provided by Vendor.
- Seat rings shall be spring loaded and so designed that line pressure will assist in sealing round the ball.
- Valve stem extension shall be detachable for easy replacements.
- At least two stem seals shall be provided with facility for injection of secondary sealant and with stainless steel fittings.
- Stem seal shall be replaceable while the valve is in closed operation position.
- Short stroke single acting pneumatic piston actuators shall preferably be used on emergency shutdown service.
- 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.

28- In cases where on-off valve has been equipped with two solenoid valves, one shall be SIL certified and the other could be non-SIL (one SOV is connected to ESD system and another, to the process control system).

29- Valves 2" and larger shall be as per API 6D.

30- All wet parts in sour service shall meet requirements of NACE MR0175 and "Project specification for Material Requirements in Sour Service". Document No.:BK-GNRL-PEDCO-000-PI-SP-0008.

D03

 NISOC		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						 												
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سرپال	نسخه	شماره صفحه: 5 از 44										
BK		GCS		PEDCO		120		IN		DT		0010		D03						
Shut Down Valve																				
TAG NO: ESDV-2102		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0003-D08						SERVICE: Gas Compression Inlet Gas Pipeline (Golghari)										
FLUID STATE: PROCESS GAS		PHASE: GAS		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 DESIGN PRESSURE				bar(g)				90											
	9 DESIGN TEMPERATURE				°C				175											
	10 VAPOR PRESSURE Pv				bar(a)				-		-		-		-					
11 CRITICAL PRESSURE				bar(a)				103.1		103.1		103.1		-						
LINE	PIPE LINE SIZE & SCHEDULE		IN	8"	100	CORROSION ALLOWANCE(mm)		6		54 TYPE		Single Acting , Spring Return								
			OUT	8"	100					55 SIZE		VTA								
VALVE BODY & BONNET	13 LINE NO.		GAS-111-0001-FN07-8"-PT								56 SPRING FAIL ACTION		Fail to Close							
	14 TYPE		Full Bore Ball Valve/Trunnion Mounted								57 MAX ALLOWABLE PRESSURE		VTA							
	15 SIZE		8"								58 MIN REQUIRES PRESSURE		VTA							
	16 MAX PRESS./TEMP.		As per PMS								59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
	17 MFR. & MODEL		Will be finalized later								60 BENCH RANGE		VTA							
	18 BODY / BONNET MATL		ASTM A216 Gr. WCB								61 TRAVELING TIME		9 S							
	19 LINER MATERIAL / ID		VTA								62 FUNCTION		On/Off							
	20 END CONNECTION		IN	8"	600#							63 LOCAL POSITION INDICATOR		Required						
			OUT	8"	600#							64 ACT. ORIENTATION		VTA						
	21 FLG FACE FINISH		RF										65 HAND WHEEL TYPE		Declutchable side mounted					
	22 END EXT./MATL.		N/A										66 ADJUSTABLE LIMIT STOP		Yes					
TRIM	23 FLOW DIRECTION		(Note 18 in Page 4)										67 INPUT SIGNAL		24VDC					
	24 TYPE OF BONNET		Standard										68 MFR. & MODEL		Will be finalized later					
	25 LUBE & ISO VALVE		No										69 TYPE		N/A					
	26 PACKING MATERIAL		PACKING TYPE		RPTFE		Standard						70 MFR. & MODEL		Will be finalized later					
	27 ENTRY DESIGN		Top / Side Entry										71 ON INCR SIGNAL OUTPUT INCR/ DECR		N/A					
	28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes										72 GAUGES		N/A					
	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE						73 CAM CHARACTERISTIC		N/A				
	30 SIZE		RATED TRAVEL		VTA		VTA								74 AIR CONNECTION		N/A			
SOLENOID VALVE	31 CHARACTERISTICS		On/Off										75 TAG NO. :		EZSC-2102 / EZSO-2102					
	32 BALANCED / UNBALANCED		BALANCED										76 TYPE		QUANTITY	Magnetically operated "REED" contacts		2		
	33 RATED Cv		FL	XT		VTA		VTA		VTA				77 CONTACTS / RATING		110V DC , 10A				
	34 PLUG / BALL / DISK MATERIAL		316 SS										78 ACTUATION POINT		Fully Open/Close					
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE						79 ENCLOSURE MATERIAL		Die Cast Aluminum				
	36 CAGE / GUIDE MATERIAL		VTA												80 WEATHER PROTECTION		IP-65			
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS						81 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5		
	38 LEAKAGE CLASS		ANSI Class VI												82 MFR. & MODEL		Will be finalized later			
	39 VALVE STEM EXTENSION REQUIREMENT		No												83 SET PRESSURE		Yes			
SPECIAL / ACCESS.	40 TAG NO		ESOVS-2102												84 PNEUMATIC CONNECTION		1/4" NPT			
	41 TYPE		3 Way												85 GAUGES		FILTER	Required	Required	
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65								86 MFR. & MODEL		Will be finalized later			
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 × 1.5								87 ANSI/FCI LEAKAGE CLASS		Required			
	44 MANUAL RESET		Yes												88 HYDRO PRESSURE		Required			
	45 Power Supply		24 VDC												89 FUNCTIONAL TEST		Required			
	46 Pnu. Connection		1/4" NPT														90			
FIRE PROOF DESIGN	47 FUSIBLE LEAKAGE		No														91			
	48 BLOCK RELAY		No														92			
	49 QUICK EXHUST		Yes														93 PASSIVE FIRE PROTECTION		Yes	
	50 FILTER REGULATOR		Yes														94 API 6FA REQUIREMENTS		Yes	
	51 VOLUME TANK		No														95 SIL REQUIREMENTS		Yes	
	52 MECHANICAL POSITION INDICATOR		Required														96 PARTIAL STROKING VALVE TEST		Yes	
	53 MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes																97	
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.																				



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 سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

Data Sheets For ON/OFF & Shutdown Valves




شماره پیمان: 053 - 073 - 9038

پروژه بسته کاری صادر کننده تسهیلات رشته نوع مدرک سریال نسخه
 BK GCS PEDCO 120 IN DT 0010 D03

شماره صفحه: 6 از 44

TAG NO: ESDV-2101

P&ID NO :  BK-GCS-PEDCO-120-PR-PI-0002_D08

SERVICE: Gas Compression Inlet Gas Pipeline (Binak)

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.

 NISOC		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: 053 - 073 - 9038		پرورده	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 7 از 44	
		BK	GCS	PEDCO	120	IN	DT	0010	D03		
Shut Down Valve											
TAG NO: ESDV-2113		P&ID NO :		BK-GCS-PEDCO-120-PR-PI-0005-D09				D03		SERVICE: Gas Compression Inlet Knock Out Drum to Closed Drain	
FLUID STATE: CLOSED DRAIN HYDROCARBON		PHASE:		Liquid				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)		-	-	-	13.9
	5	INLET TEMPERATURE				°C		19.02~36.9	19.02~36.9	19.02~36.9	-
	6	DENSITY				kg/m3		842.6~1012	842.6~1012	842.6~1012	-
	7	VISCOSITY				CP		0.69 ~ 1.026	0.69 ~ 1.026	0.69 ~ 1.026	-
	8	DESIGN PRESSURE				bar(g)		13.9			
	9	DESIGN TEMPERATURE				°C		85			
	10	VAPOR PRESSURE Pv				bar(a)		0.612	0.612	0.612	-
11	CRITICAL PRESSURE				bar(a)		221.4	221.4	221.4	-	
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	SCH.10S	CORROSION ALLOWANCE(mm)		0		54 TYPE Single Acting , Spring Return	
			OUT	2"	SCH.10S					55 SIZE VTA	
VALVE BODY & BONNET	13 LINE NO.		CDH-111-0019-AS00-2"-NP								
	14 TYPE		Full Bore Ball Valve/Floating Type								
	15 SIZE		2"								
	16 MAX PRESS./TEMP.		As per PMS								
	17 MFR. & MODEL		Will be finalized later								
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M								
	19 LINER MATERIAL / ID		VTA								
	20 END CONNECTION		IN	2"	/300#					56 SPRING FAIL ACTION Fail to Close	
			OUT	2"	/300#					57 MAX ALLOWABLE PRESSURE VTA	
	21 FLG FACE FINISH		RF								
	22 END EXT./MATL.		N/A								
	23 FLOW DIRECTION		(Note 18 in Page 4)								
	24 TYPE OF BONNET		Standard								
	25 LUBE & ISO VALVE		No								
	26 PACKING MATERIAL		PACKING TYPE		PTFE		Standard				58 MIN REQUIRES PRESSURE VTA
27 ENTRY DESIGN				Top / Side Entry						59 AVAILABLE AIR SUPPLY PRESSURE MAX/NOR/MIN: 10/7/3 bar-g	
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)				Yes						60 BENCH RANGE VTA	
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+PTFE		61 TRAVELING TIME 5 S	
	30 SIZE		RATED TRAVEL		VTA		VTA		62 FUNCTION On/Off		
	31 CHARACTERISTICS				On/Off				63 LOCAL POSITION INDICATOR Required		
	32 BALANCED / UNBALANCED				BALANCED				64 ACT. ORIENTATION VTA		
	33 RATED Cv		FL	XT		VTA	VTA	VTA	65 HAND WHEEL TYPE Declutchable side mounted		
	34 PLUG / BALL / DISK MATERIAL				316 SS				66 ADJUSTABLE LIMIT STOP Yes		
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+PTFE		67 INPUT SIGNAL 24VDC	
	36 CAGE / GUIDE MATERIAL				VTA				68 MFR. & MODEL Will be finalized later		
SOLENOID VALVE	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		69 TYPE N/A	
	38 LEAKAGE CLASS				ANSI Class VI				70 MFR. & MODEL Will be finalized later		
	39 VALVE STEM EXTENSION REQUIREMENT				No				71 ON INCR SIGNAL OUTPUT INCR / DECR N/A		
	40 TAG NO				ESOVS-2113				72 GAUGES N/A		
	41 TYPE				3 Way				73 CAM CHARACTERISTIC N/A		
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		74 AIR CONNECTION N/A		
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		75 TAG NO. : EZSC-2113 / EZSO-2113		
	44 MANUAL RESET				Yes				76 TYPE QUANTITY Magnetically operated 'REED' contacts 2		
SPECIAL / ACCESS.	45 Power Supply				24 VDC				77 CONTACTS / RATING 110V DC , 10A		
	46 Pnm. Connection				1/4" NPT				78 ACTUATION POINT Fully Open/Close		
	47 FUSIBLE LEAKAGE				No				79 ENCLOSURE MATERIAL Die Cast Aluminum		
	48 BLOCK RELAY				No				80 WEATHER PROTECTION IP-65		
	49 QUICK EXHUST				Yes				81 ELEC. CERTIFICATE ELEC. CONNECTION EEx "d" ,IIB T4 ISO M20 x 1.5		
	50 FILTER REGULATOR				Yes				82 MFR. & MODEL Will be finalized later		
	51 VOLUME TANK				No				83 SET PRESSURE Yes		
	52 MECHANICAL POSITION INDICATOR				Required				84 PNEUMATIC CONNECTION 1/4" NPT		
53 MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE				Yes				85 GAUGES FILTER Required Required			
								86 MFR. & MODEL Will be finalized later			
								87 ANSI/FCI LEAKAGE CLASS Required			
								88 HYDRO PRESSURE Required			
								89 FUNCTIONAL TEST Required			
								90			
								91			
								92			
								93 PASSIVE FIRE PROTECTION No			
								94 API 6FA REQUIREMENTS Yes			
								95 SIL REQUIREMENTS Yes			
								96 PARTIAL STROKING VALVE TEST No			
								97			
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		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: 053 - 073 - 9038		نسخه	سرپال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه	شماره صفحه: 8 از 44				
BK		GCS	PEDCO	120	IN	DT	0010	D03	Shut Down Valve					
TAG NO: ESDV-2272		P&ID NO: D03		BK-GCS-PEDCO-120-PR-PI-0022-D09				SERVICE: Fuel Gas System						
FLUID STATE: FUEL 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	556.3	505.8	151.7	-		
	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	37	37	37	-		
	6	DENSITY						kg/m3	5.77	5.77	5.77	-		
	7	VISCOSITY						CP	0.011	0.011	0.011	-		
	8	DESIGN PRESSURE						bar(g)	18.2					
	9	DESIGN TEMPERATURE						°C	85					
	10	VAPOR PRESSURE Pv						bar(a)	-	-	-	-		
11	CRITICAL PRESSURE						bar(a)	94.66	94.66	94.66	-			
LINE	PIPE LINE SIZE & SCHEDULE		IN	3"	80	CORROSION ALLOWANCE(mm)	6	54	TYPE Single Acting , Spring Return					
			OUT	3"	80			55	SIZE VTA					
VALVE BODY & BONNET	13		LINE NO.				GAS-111-0004-AN07-3"-PT		56	SPRING FAIL ACTION Fail to Close				
	14		TYPE				Full Bore Ball Valve/Trunion Mounted		57	MAX ALLOWABLE PRESSURE VTA				
	15		SIZE				3"		58	MIN REQUIRES PRESSURE VTA				
	16		MAX PRESS./TEMP.				As per PMS		59	AVAILABLE AIR SUPPLY PRESSURE MAX/NOR/MIN: 10/7/3 bar-g				
	17		MFR. & MODEL				Will be finalized later		60	BENCH RANGE VTA				
	18		BODY / BONNET MATL				ASTM A216 Gr. WCB		61	TRAVELING TIME 5 S				
	19		LINER MATERIAL / ID				VTA		62	FUNCTION On/Off				
	20		END CONNECTION		IN	3" /300#			63	LOCAL POSITION INDICATOR Required				
	21		FLG FACE FINISH		OUT	3" /300#			64	ACT. ORIENTATION VTA				
	22		END EXT./MATL.				N/A		65	HAND WHEEL TYPE Declutchable side mounted				
	23		FLOW DIRECTION				(Note 18 in Page 4)		66	ADJUSTABLE LIMIT STOP Yes				
	24		TYPE OF BONNET				Standard		67	INPUT SIGNAL 24VDC				
	25		LUBE & ISO VALVE				No		68	MFR. & MODEL Will be finalized later				
	TRIM	26		PACKING MATERIAL		PACKING TYPE	PTFE	Standard	69	TYPE N/A				
27		ENTRY DESIGN		Top / Side Entry			70	MFR. & MODEL Will be finalized later						
28		NACE REQUIREMENT		NACE (MR-0175/ISO 15156)	Yes		71	ON INCR SIGNAL OUTPUT INCR / DECR N/A						
29		TRIM TYPE		MATERIAL	VTA	316 SS+PTFE	72	GAUGES N/A						
30		SIZE		RATED TRAVEL	VTA	VTA	73	CAM CHARACTERISTIC N/A						
31		CHARACTERISTICS		On/Off			74	AIR CONNECTION N/A						
32		BALANCED / UNBALANCED		BALANCED			75	TAG NO. : EZSC-2272 / EZSO-2272						
33		RATED Cv		FL	XT	VTA	VTA	VTA	76	TYPE	QUANTITY	Magnetically operated 'REED' contacts	2	
34		PLUG / BALL / DISK MATERIAL		316 SS			77	CONTACTS / RATING 110V DC , 10A						
35		SEAT TYPE		MATERIAL	Soft Seat	316 SS+PTFE	78	ACTUATION POINT Fully Open/Close						
36		CAGE / GUIDE MATERIAL		VTA			79	ENCLOSURE MATERIAL Die Cast Aluminum						
37		STEM TYPE		MATERIAL	Anti-Blow Out	316 SS	80	WEATHER PROTECTION IP-65						
38		LEAKAGE CLASS		ANSI Class VI			81	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5			
39		VALVE STEM EXTENSION REQUIREMENT		No			82	MFR. & MODEL Will be finalized later						
SOLENOID VALVE	40		TAG NO		ESOV-2272		83	SET PRESSURE Yes						
	41		TYPE		3 Way		84	PNEUMATIC CONNECTION 1/4" NPT						
	42		BODY MATERIAL		WEATHER IP.	AISI 316 S.S	IP-65	85	GAUGES	FILTER	Required	Required		
	43		ELE. CERTIFICATE		ELE. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5	86	MFR. & MODEL Will be finalized later					
	44		MANUAL RESET		Yes			87	ANSI/PCI LEAKAGE CLASS Required					
	45		Power Supply		24 VDC			88	HYDRO PRESSURE Required					
SPECIAL / ACCESS.	46		Pnu. Connection		1/4" NPT		89	FUNCTIONAL TEST Required						
	47		FUSIBLE LEAKAGE		No		90							
	48		BLOCK RELAY		No		91							
	49		QUICK EXHUST		Yes		92							
	50		FILTER REGULATOR		Yes		93	PASSIVE FIRE PROTECTION No						
	51		VOLUME TANK		No		94	API 6FA REQUIREMENTS Yes						
	52		MECHANICAL POSITION INDICATOR		Required		95	SIL REQUIREMENTS Yes						
	53		MANUAL PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes		96	PARTIAL STROKING VALVE TEST No						
							97							
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.														

[illegible]

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض اجداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves										 											
شماره پیمان: 053 - 073 - 9038		پروژه		بسته کاری		صادر کننده		تسهیلات		رشته		نوع مدرک		سریال		نسخه		شماره صفحه: 10 از 44					
BK		GCS		PEDCO		120		IN		DT		0010		D03									
Blow Down Valve																							
TAG NO: BDV-2134A				P&ID NO : D03				BK-GCS-PEDCO-120-PR-PI-0009-D09 (1/3)								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		-		796.4		-		-	
		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		-		14.5 ~ 59.9		-		-	
		6		DENSITY										kg/m3		-		18.08		-		-	
		7		VISCOSITY										CP		-		0.013		-		-	
		8		DESIGN PRESSURE										bar(g)				47.7					
		9		DESIGN TEMPERATURE										°C				155					
		10		VAPOR PRESSURE Pv										bar(a)		-		-		-		-	
11		CRITICAL PRESSURE										bar(a)		-		94.65		-		-			
LINE		12		PIPE LINE SIZE & SCHEDULE		IN 2" 80		CORROSION ALLOWANCE(mm)		3		ACTUATOR		54		TYPE		Single Acting , Spring Return					
				OUT 2" 80						55				SIZE		VTA							
VALVE BODY & BONNET		13		LINE NO.		GAS-111-0160A-CN05-2"-PT						56		SPRING FAIL ACTION		Fail to Open							
		14		TYPE		Full Bore Ball Valve/ Floating Type						57		MAX ALLOWABLE PRESSURE		VTA							
		15		SIZE		2"						58		MIN REQUIRES PRESSURE		VTA							
		16		MAX PRESS/TEMP.		As per PMS						59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
		17		MFR. & MODEL		Will be finalized later						60		BENCH RANGE		VTA							
		18		BODY / BONNET MATL		ASTM A216 Gr. WCB						61		TRAVELING TIME		5 S							
		19		LINER MATERIAL / ID		VTA						62		FUNCTION		On/Off							
		20		END CONNECTION		IN 2"/300#								63		LOCAL POSITION INDICATOR		Required					
		21		FLG FACE FINISH		RF						64		ACT. ORIENTATION		VTA							
		22		END EXT./MATL.		N/A						65		HAND WHEEL TYPE		Declutchable side mounted							
		23		FLOW DIRECTION		(Note 18 in Page 4)						66		ADJUSTABLE LIMIT STOP		No							
		24		TYPE OF BONNET		Standard						67		INPUT SIGNAL		24VDC							
		25		LUBE & ISO VALVE		No						68		MFR. & MODEL		Will be finalized later							
		26		PACKING MATERIAL		PACKING TYPE		RPTFE				Standard		69		TYPE		N/A					
		27		ENTRY DESIGN		Top / Side Entry						70		MFR. & MODEL		Will be finalized later							
28		NACE REQUIREMENT		NACE (MR-0175/ISO 15156)		Yes						71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A							
TRIM		29		TRIM		TYPE		MATERIAL		VTA		316 SS+RPTFE		72		GAUGES		N/A					
		30		SIZE		RATED TRAVEL		VTA				VTA		73		CAM CHARACTERISTIC		N/A					
		31		CHARACTERISTICS		On/Off						74		AIR CONNECTION		N/A							
		32		BALANCED / UNBALANCED		BALANCED						75		TAG NO. :		BZSC-2134A / BZSO-2134A							
		33		RATED Cv		FL		XT		VTA		VTA		VTA		76		TYPE		QUANTITY			
		34		PLUG / BALL / DISK MATERIAL		316 SS						77		CONTACTS / RATING		110V DC , 10A							
		35		SEAT		TYPE		MATERIAL		Soft Seat		316 SS+RPTFE		78		ACTUATION POINT		Fully Open/Close					
		36		CAGE / GUIDE MATERIAL		VTA						79		ENCLOSURE MATERIAL		Die Cast Aluminum							
SOLENOID VALVE		37		STEM		TYPE		MATERIAL		Anti-Blow Out		316 SS		80		WEATHER PROTECTION		IP-65					
		38		LEAKAGE CLASS		ANSI Class VI						81		ELEC. CERTIFICATE		ELEC. CONNECTION							
		39		VALVE STEM EXTENSION REQUIREMENT		No						82		MFR. & MODEL		Will be finalized later							
		40		TAG NO		BSOV-2134A						83		SET PRESSURE		Yes							
		41		TYPE		3 Way						84		PNEUMATIC CONNECTION		1/4" NPT							
		42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S				IP-65		85		GAUGES		FILTER					
		43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d", IIB T4				ISO M20 x 1.5		86		MFR. & MODEL		Will be finalized later					
		44		MANUAL RESET		Yes						87		ANSI/FCI LEAKAGE CLASS		Required							
SPECIAL / ACCESS.		45		Power Supply		24 VDC						88		HYDRO PRESSURE		Required							
		46		Pnu. Connection		1/4" NPT						89		FUNCTIONAL TEST		Required							
		47		FUSIBLE LEAKAGE		No						90											
		48		BLOCK RELAY		No						91											
		49		QUICK EXHUST		Yes						92											
		50		FILTER REGULATOR		Yes						93		PASSIVE FIRE PROTECTION		No							
		51		VOLUME TANK		Yes						94		API 6FA REQUIREMENTS		Yes							
		52		MECHANICAL POSITION INDICATOR		Required						95		SIL REQUIREMENTS		Yes							
53		MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes						96		PARTIAL STROKING VALVE TEST		No									
												97											
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض					 HORGAN		 T8											
شماره پیمان: 053 - 073 - 9038		پروژه BK		بسته کاری GCS		صادر کننده PEDCO		تسهیلات 120		رشته IN		نوع مدرک DT		سریال 0010		نسخه D03				
شماره صفحه: 11 از 44																				
Blow Down Valve																				
TAG NO: BDV-2134B		P&ID NO: D03		BK-GCS-PEDCO-120-PR-PI-0009-D09 (2/3)										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		-		796.4		-		-						
	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		-		14.5 ~ 59.9		-		-						
	6 DENSITY					kg/m3		-		18.08		-		-						
	7 VISCOSITY					CP		-		0.013		-		-						
	8 DESIGN PRESSURE					bar(g)		47.7												
	9 DESIGN TEMPERATURE					°C		155												
	10 VAPOR PRESSURE Pv					bar(a)		-		-		-		-						
11 CRITICAL PRESSURE					bar(a)		-		94.65		-		-							
LINE	PIPE LINE SIZE & SCHEDULE		IN 2" 80		CORROSION ALLOWANCE(mm)		3		54 TYPE		Single Acting , Spring Return									
			OUT 2" 80						55 SIZE		VTA									
VALVE BODY & BONNET	13 LINE NO.		GAS-111-0160B-CN05-2"-JT										56 SPRING FAIL ACTION		Fail to Open					
	14 TYPE		Full Bore Ball Valve/ Floating Type										57 MAX ALLOWABLE PRESSURE		VTA					
	15 SIZE		2"										58 MIN REQUIRES PRESSURE		VTA					
	16 MAX PRESS/TEMP.		As per PMS										59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g					
	17 MFR. & MODEL		Will be finalized later										60 BENCH RANGE		VTA					
	18 BODY / BONNET MATL		ASTM A216 Gr. WCB										61 TRAVELING TIME		5 S					
	19 LINER MATERIAL / ID		VTA										62 FUNCTION		On/Off					
	20 END CONNECTION		IN		2" /300#				63 LOCAL POSITION INDICATOR		Required									
			OUT		2" /300#				64 ACT. ORIENTATION		VTA									
	21 FLG FACE FINISH		RF										65 HAND WHEEL TYPE		Declutchable side mounted					
	22 END EXT./MATL.		N/A										66 ADJUSTABLE LIMIT STOP		No					
	23 FLOW DIRECTION		(Note 18 in Page 4)										67 INPUT SIGNAL		24VDC					
	24 TYPE OF BONNET		Standard										68 MFR. & MODEL		Will be finalized later					
	25 LUBE & ISO VALVE		No										69 TYPE		N/A					
	26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard		70 MFR. & MODEL		Will be finalized later							
27 ENTRY DESIGN		Top / Side Entry										71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A						
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes										72 GAUGES		N/A						
TRIM	29 TRIM		TYPE		MATERIAL		VTA		316 SS+RPTFE		73 CAM CHARACTERISTIC		N/A							
	30 SIZE		RATED TRAVEL		VTA				VTA		74 AIR CONNECTION		N/A							
	31 CHARACTERISTICS		On/Off										75 TAG NO. :		BZSC-2134B / BZSO-2134B					
	32 BALANCED / UNBALANCED		BALANCED										76 TYPE		QUANTITY		Magnetically operated 'REED' contacts		2	
	33 RATED Cv		FL		XT		VTA		VTA		VTA		77 CONTACTS / RATING		110V DC , 10A					
	34 PLUG / BALL / DISK MATERIAL		316 SS										78 ACTUATION POINT		Fully Open/Close					
	35 SEAT		TYPE		MATERIAL		Soft Seat		316 SS+RPTFE		79 ENCLOSURE MATERIAL		Die Cast Aluminum							
	36 CAGE / GUIDE MATERIAL		VTA										80 WEATHER PROTECTION		IP-65					
SOLENOID VALVE	37 STEM		TYPE		MATERIAL		Anti-Blow Out		316 SS		81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 × 1.5			
	38 LEAKAGE CLASS		ANSI Class VI										82 MFR. & MODEL		Will be finalized later					
	39 VALVE STEM EXTENSION REQUIREMENT		No										83 SET PRESSURE		Yes					
	40 TAG NO		BSOV-2134B										84 PNEUMATIC CONNECTION		1/4" NPT					
	41 TYPE		3 Way										85 GAUGES		FILTER		Required		Required	
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S				IP-65		86 MFR. & MODEL		Will be finalized later							
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4				ISO M20 x 1.5		87 ANSI/FCI LEAKAGE CLASS		Required							
	44 MANUAL RESET		Yes										88 HYDRO PRESSURE		Required					
SPECIAL / ACCESS.	45 Power Supply		24 VDC										89 FUNCTIONAL TEST		Required					
	46 Pnu. Connection		1/4" NPT										90							
	47 FUSIBLE LEAKAGE		No										91							
	48 BLOCK RELAY		No										92							
	49 QUICK EXHUST		Yes										93 PASSIVE FIRE PROTECTION		No					
	50 FILTER REGULATOR		Yes										94 API 6FA REQUIREMENTS		Yes					
	51 VOLUME TANK		Yes										95 SIL REQUIREMENTS		Yes					
52 MECHANICAL POSITION INDICATOR		Required										96 PARTIAL STROKING VALVE TEST		No						
53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes										97								
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.																				
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 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک Data Sheets For ON/OFF & Shutdown Valves						 					
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 13 از 44			
BK		GCS	PEDCO	120	IN	DT	0010	D03					
Blow Down Valve													
TAG NO: BDV-2132A		P&ID NO: D03		BK-GCS-PEDCO-120-PR-PI-0011-D09 (1/3)				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	-	14.2 ~ 60	-	-		
	6	DENSITY					kg/m3	-	59.63	-	-		
	7	VISCOSITY					CP	-	0.014	-	-		
	8	DESIGN PRESSURE					bar(g)	62.4					
	9	DESIGN TEMPERATURE					°C	175					
	10	VAPOR PRESSURE Pv					bar(a)	-	-	-	-		
11	CRITICAL PRESSURE					bar(a)	-	94.65	-	-			
LINE	PIPE LINE SIZE & SCHEDULE		IN	1 1/2"	40S	CORROSION ALLOWANCE(mm)		0		54 TYPE Single Acting , Spring Return			
			OUT	1 1/2"	40S					55 SIZE VTA			
VALVE BODY & BONNET	13 LINE NO.		GAS-111-0054A-FS00-1 1/2"-4S					56 SPRING FAIL ACTION		Fail to Open			
	14 TYPE		Full Bore Ball Valve/ Floating Type					57 MAX ALLOWABLE PRESSURE		VTA			
	15 SIZE		1 1/2"					58 MIN REQUIRES PRESSURE		VTA			
	16 MAX PRESS/TEMP.		As per PMS					59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	17 MFR. & MODEL		Will be finalized later					60 BENCH RANGE		VTA			
	18 BODY / BONNET MATL		ASTM A182 GR.F316L					61 TRAVELING TIME		5 S			
	19 LINER MATERIAL / ID		VTA					62 FUNCTION		On/Off			
	20 END CONNECTION		IN	1 1/2" /600#				63 LOCAL POSITION INDICATOR		Required			
			OUT	1 1/2" /600#				64 ACT. ORIENTATION		VTA			
	21 FLG FACE FINISH		RF					65 HAND WHEEL TYPE		Decatchable side mounted			
	22 END EXT./MATL.		N/A					66 ADJUSTABLE LIMIT STOP		No			
	23 FLOW DIRECTION		(Note 18 in Page 4)					67 INPUT SIGNAL		24VDC			
	24 TYPE OF BONNET		Standard					68 MFR. & MODEL		Will be finalized later			
	25 LUBE & ISO VALVE		No					69 TYPE		N/A			
26 PACKING MATERIAL		PACKING TYPE		RPTFE		Standard		70 MFR. & MODEL		Will be finalized later			
27 ENTRY DESIGN		Top / Side Entry					71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A				
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes					72 GAUGES		N/A				
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		73 CAM CHARACTERISTIC		N/A	
	30 SIZE		RATED TRAVEL		VTA		VTA		74 AIR CONNECTION		N/A		
	31 CHARACTERISTICS		On/Off					75 TAG NO. :		BZSC-2132A / BZSO-2132A			
	32 BALANCED / UNBALANCED		BALANCED					76 TYPE		QUANTITY	Magnetically operated 'REED' contacts	2	
	33 RATED Cv		FL	XT		VTA		VTA		VTA			
	34 PLUG / BALL / DISK MATERIAL		316 SS					77 CONTACTS / RATING		110V DC , 10A			
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE		78 ACTUATION POINT		Fully Open/Close	
	36 CAGE / GUIDE MATERIAL		VTA					79 ENCLOSURE MATERIAL		Die Cast Aluminum			
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		80 WEATHER PROTECTION		IP-65	
	38 LEAKAGE CLASS		ANSI Class VI					81 ELEC. CERTIFICATE		ELEC. CONNECTION	EEEx "d" ,IIB T4	ISO M20 × 1.5	
SOLENOID VALVE	39 VALVE STEM EXTENSION REQUIREMENT		No					82 MFR. & MODEL		Will be finalized later			
	40 TAG NO		BSOV-2132A , PSOV-2132A					83 SET PRESSURE		Yes			
	41 TYPE		3 Way					84 PNEUMATIC CONNECTION		1/4" NPT			
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85 GAUGES		FILTER	Required	Required
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEEx "d" ,IIB T4		ISO M20 × 1.5		86 MFR. & MODEL		Will be finalized later		
	44 MANUAL RESET		Yes					87 ANSI/FCI LEAKAGE CLASS		Required			
	45 Power Supply		24 VDC					88 HYDRO PRESSURE		Required			
	46 Pnm. Connection		1/4" NPT					89 FUNCTIONAL TEST		Required			
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No					90					
	48 BLOCK RELAY		No					91					
	49 QUICK EXHUST		Yes					92					
	50 FILTER REGULATOR		Yes					93 PASSIVE FIRE PROTECTION		No			
	51 VOLUME TANK		Yes					94 API 6FA REQUIREMENTS		Yes			
	52 MECHANICAL POSITION INDICATOR		Required					95 SIL REQUIREMENTS		Yes			
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes					96 PARTIAL STROKING VALVE TEST		No			
							97						
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.													

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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 										
شماره پیمان: 053 - 073 - 9038		پروژه		بسته کاری		صادر کننده		تسهیلات		رشته		نوع مدرک		سریال		نسخه		
		BK		GCS		PEDCO		120		IN		DT		0010		D03		
Blow Down Valve																		
TAG NO: BDV-2132C				P&ID NO: 				BK-GCS-PEDCO-120-PR-PI-0011-D09 (3/3)				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		-		14.2 ~ 60		-		-		
	6 DENSITY							kg/m3		-		59.63		-		-		
	7 VISCOSITY							CP		-		0.014		-		-		
	8 DESIGN PRESSURE							bar(g)				62.4						
	9 DESIGN TEMPERATURE							°C				175						
	10 VAPOR PRESSURE Pv							bar(a)		-		-		-		-		
11 CRITICAL PRESSURE							bar(a)		-		94.65		-		-			
LINE	PIPE LINE SIZE & SCHEDULE		IN		1 1/2" 40S		!		0		54 TYPE		Single Acting , Spring Return					
			OUT		1 1/2" 40S													
VALVE BODY & BONNET	13 LINE NO.		GAS-111-0054C-FS00-1 1/2"-IS										56 SPRING FAIL ACTION		Fail to Open			
	14 TYPE		Full Bore Ball Valve/ Floating Type															
	15 SIZE		1 1/2"										57 MAX ALLOWABLE PRESSURE		VTA			
	16 MAX PRESS/TEMP.		As per PMS															
	17 MFR. & MODEL		Will be finalized later										58 MIN REQUIRES PRESSURE		VTA			
	18 BODY / BONNET MATL		ASTM A182 GR.F316L															
	19 LINER MATERIAL / ID		VTA										59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	20 END CONNECTION		IN		1 1/2" /600#													
	21 FLG FACE FINISH		OUT		1 1/2" /600#						60 BENCH RANGE		VTA					
	22 END EXT./MATL.		N/A										61 TRAVELING TIME		5 S			
	23 FLOW DIRECTION		(Note 18 in Page 4)															
	24 TYPE OF BONNET		Standard										62 FUNCTION		On/Off			
	25 LUBE & ISO VALVE		No															
	26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard		63 LOCAL POSITION INDICATOR		Required					
	27 ENTRY DESIGN				Top / Side Entry													
	28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)				Yes						64 ACT. ORIENTATION		VTA					
29 TRIM		TYPE		MATERIAL		VTA		316 SS+RPTFE										
TRIM	30 SIZE		RATED TRAVEL		VTA				VTA		65 HAND WHEEL TYPE		Decutchable side mounted					
	31 CHARACTERISTICS				On/Off													
	32 BALANCED / UNBALANCED				BALANCED						66 ADJUSTABLE LIMIT STOP		No					
	33 RATED Cv		FL		XT		VTA		VTA						VTA			
	34 PLUG / BALL / DISK MATERIAL				316 SS						67 INPUT SIGNAL		24VDC					
	35 SEAT		TYPE		MATERIAL		Soft Seat		316 SS+RPTFE									
	36 CAGE / GUIDE MATERIAL				VTA						68 MFR. & MODEL		Will be finalized later					
	37 STEM		TYPE		MATERIAL		Anti-Blow Out		316 SS									
	38 LEAKAGE CLASS				ANSI Class VI						69 TYPE		N/A					
	39 VALVE STEM EXTENSION REQUIREMENT				No													
SOLENOID VALVE	40 TAG NO				BSOV-2132C , PSOV-2132C						70 MFR. & MODEL		Will be finalized later					
	41 TYPE				3 Way													
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S				IP-65		71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A					
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d", IIB T4				ISO M20 x 1.5									
	44 MANUAL RESET				Yes						72 GAUGES		N/A					
	45 Power Supply				24 VDC													
	46 Pnu. Connection				1/4" NPT						73 CAM CHARACTERISTIC		N/A					
47 FUSIBLE LEAKAGE				No														
SPECIAL / ACCESS.	48 BLOCK RELAY				No						74 AIR CONNECTION		N/A					
	49 QUICK EXHUST				Yes													
	50 FILTER REGULATOR				Yes						75 TAG NO. :		BZSC-2132C / BZSO-2132C					
	51 VOLUME TANK				Yes													
	52 MECHANICAL POSITION INDICATOR				Required													
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE				Yes						76 TYPE		QUANTITY		Magnetically operated 'REED' contacts		2	
										77 CONTACTS / RATING		110V DC , 10A						
										78 ACTUATION POINT		Fully Open/Close						
										79 ENCLOSURE MATERIAL		Die Cast Aluminum						
										80 WEATHER PROTECTION		IP-65						
										81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d", IIB T4		ISO M20 x 1.5		
										82 MFR. & MODEL		Will be finalized later						
										83 SET PRESSURE		Yes						
										84 PNEUMATIC CONNECTION		1/4" NPT						
										85 GAUGES		FILTER		Required		Required		
										86 MFR. & MODEL		Will be finalized later						
										87 ANSI/FCI LEAKAGE CLASS		Required						
										88 HYDRO PRESSURE		Required						
										89 FUNCTIONAL TEST		Required						
										90								
										91								
										92								
										93 PASSIVE FIRE PROTECTION		No						
										94 API 6FA REQUIREMENTS		Yes						
										95 SIL REQUIREMENTS		Yes						
										96 PARTIAL STROKING VALVE TEST		No						
										97								
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		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						 شرکت گاز تهران 								
شماره پیمان: 053 - 073 - 9038		پرورژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 16 از 44						
BK		GCS	PEDCO	120	IN	DT	0010	D03								
Blow Down Valve																
TAG NO: BDV-2141		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0012-D09				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		12.5 ~ 59.89		12.5~ 59.89		12.5 ~ 59.89		-	
	6	DENSITY					kg/m3		59.17		59.17		59.17		-	
	7	VISCOSITY					CP		0.014		0.014		0.014		-	
	8	DESIGN PRESSURE					bar(g)						90			
	9	DESIGN TEMPERATURE					°C						175			
	10	VAPOR PRESSURE Pv					bar(a)		-		-		-		-	
11	CRITICAL PRESSURE					bar(a)		106		106		106		-		
LINE	PIPE LINE SIZE & SCHEDULE		IN	1 1/2"	160	CORROSION ALLOWANCE(mm)		3		54 TYPE		Single Acting , Spring Return				
			OUT	1 1/2"	160					55 SIZE		VTA				
VALVE BODY & BONNET	13 LINE NO.		GAS-111-0065-FN05-1 1/2"-IS							56 SPRING FAIL ACTION		Fail to Open				
	14 TYPE		Full Bore Ball Valve/ Floating Type							57 MAX ALLOWABLE PRESSURE		VTA				
	15 SIZE		1 1/2"							58 MIN REQUIRES PRESSURE		VTA				
	16 MAX PRESS/TEMP.		As per PMS							59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g				
	17 MFR. & MODEL		Will be finalized later							60 BENCH RANGE		VTA				
	18 BODY / BONNET MATL		ASTM A105							61 TRAVELING TIME		5 S				
	19 LINER MATERIAL / ID		VTA							62 FUNCTION		On/Off				
	20 END CONNECTION		IN	1 1/2" /600#						63 LOCAL POSITION INDICATOR		Required				
			OUT	1 1/2" /600#						64 ACT. ORIENTATION		VTA				
	21 FLG FACE FINISH		RF							65 HAND WHEEL TYPE		Decutchable side mounted				
	22 END EXT./MATL.		N/A							66 ADJUSTABLE LIMIT STOP		No				
	23 FLOW DIRECTION		(Note 18 in Page 4)							67 INPUT SIGNAL		24VDC				
	24 TYPE OF BONNET		Standard							68 MFR. & MODEL		Will be finalized later				
	25 LUBE & ISO VALVE		No							69 TYPE		N/A				
	26 PACKING MATERIAL		PACKING TYPE		RPTFE		Standard				70 MFR. & MODEL		Will be finalized later			
27 ENTRY DESIGN		Top / Side Entry							71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A					
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes							72 GAUGES		N/A					
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		73 CAM CHARACTERISTIC		N/A				
	30 SIZE		RATED TRAVEL		VTA		VTA		74 AIR CONNECTION		N/A					
	31 CHARACTERISTICS		On/Off							75 TAG NO. :		BZSC-2141 / BZSO-2141				
	32 BALANCED / UNBALANCED		BALANCED							76 TYPE		QUANTITY	Magnetically operated 'REED' contacts		2	
	33 RATED Cv		FL	XT		VTA		VTA	VTA	77 CONTACTS / RATING		110V DC , 10A				
	34 PLUG / BALL / DISK MATERIAL		316 SS							78 ACTUATION POINT		Fully Open/Close				
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE		79 ENCLOSURE MATERIAL		Die Cast Aluminum				
	36 CAGE / GUIDE MATERIAL		VTA							80 WEATHER PROTECTION		IP-65				
SOLENOID VALVE	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		81 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 × 1.5		
	38 LEAKAGE CLASS		ANSI Class VI							82 MFR. & MODEL		Will be finalized later				
	39 VALVE STEM EXTENSION REQUIREMENT		No							83 SET PRESSURE		Yes				
	40 TAG NO		BSOV-2141							84 PNEUMATIC CONNECTION		1/4" NPT				
	41 TYPE		3 Way							85 GAUGES		FILTER	Required	Required		
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		86 MFR. & MODEL		Will be finalized later					
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		87 ANSI/FCI LEAKAGE CLASS		Required					
	44 MANUAL RESET		Yes							88 HYDRO PRESSURE		Required				
SPECIAL / ACCESS.	45 Power Supply		24 VDC							89 FUNCTIONAL TEST		Required				
	46 Pnm. Connection		1/4" NPT							90						
	47 FUSIBLE LEAKAGE		No							91						
	48 BLOCK RELAY		No							92						
	49 QUICK EXHUST		Yes							93 PASSIVE FIRE PROTECTION		No				
	50 FILTER REGULATOR		Yes							94 API 6FA REQUIREMENTS		Yes				
	51 VOLUME TANK		Yes							95 SIL REQUIREMENTS		Yes				
52 MECHANICAL POSITION INDICATOR		Required							96 PARTIAL STROKING VALVE TEST		Yes					
53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes							97							
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 HORGAN ENERGY											
شماره پیمان: 053 - 073 - 9038		پروژه BK		بسته کاری GCS		صادر کننده PEDCO		تسهیلات 120		رشته IN		نوع مدرک DT		سریال 0010		نسخه D03		شماره صفحه: 18 از 44	
On-Off Valve																			
TAG NO: XV-2112		P&ID NO : D03 BK-GCS-PEDCO-120-PR-PI-0004-D09 (2/2)						SERVICE: Slug Catcher System											
FLUID STATE: SLUG		PHASE: LIQUID						AREA CLASSIFICATION: Zone2, IIB, T4											
SERVICE CONDITION	ITEM						UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off				
	1 FLOW RATE						Kg/H		7873.8		7158.0		2505.3		-				
	2 INLET PRESSURE						bar(g)		18.5		18.5		18.5		-				
	3 OUTLET PRESSURE						bar(g)		18.5		18.5		18.5		-				
	4 DIFFERENTIAL PRESSURE						bar(g)		-		-		-		47.7				
	5 INLET TEMPERATURE						°C		15.2- 32.0		15.2- 32.0		15.2- 32.0		-				
	6 DENSITY						kg/m3		715		715		715		-				
	7 VISCOSITY						CP		0.58		0.58		0.58		-				
	8 DESIGN PRESSURE						bar(g)		47.7										
	9 DESIGN TEMPERATURE						°C		155										
	10 VAPOR PRESSURE Pv						bar(a)		6.487		6.487		6.487		-				
11 CRITICAL PRESSURE						bar(a)		78		78		78		-					
LINE	PIPE LINE SIZE & SCHEDULE		IN	4"	120	CORROSION ALLOWANCE(mm)		6											
	LINE NO.		CDH-112-0118-CN07-4"-PT																
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Trunion Mounted																
	15 SIZE		4"																
	16 MAX PRESS./TEMP.		As per PMS																
	17 MFR. & MODEL		Will be finalized later																
	18 BODY / BONNET MATL		ASTM A216 Gr. WCB																
	19 LINER MATERIAL / ID		VTA																
	20 END CONNECTION		IN	4"/300#															
			OUT	4"/300#															
	21 FLG FACE FINISH		RF																
	22 END EXT./MATL.		N/A																
	23 FLOW DIRECTION		(Note 18 in Page 4)																
24 TYPE OF BONNET		Standard																	
25 LUBE & ISO VALVE		No																	
26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard											
27 ENTRY DESIGN		Top / Side Entry																	
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes																	
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE											
	30 SIZE		RATED TRAVEL		VTA		VTA												
	31 CHARACTERISTICS		On/Off																
	32 BALANCED / UNBALANCED		BALANCED																
	33 RATED Cv		FL	XT		VTA		VTA		VTA									
	34 PLUG / BALL / DISK MATERIAL		316 SS																
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE											
	36 CAGE / GUIDE MATERIAL		VTA																
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS											
	38 LEAKAGE CLASS		ANSI Class V1																
	39 VALVE STEM EXTENSION REQUIREMENT		No																
SOLENOID VALVE	40 TAG NO		ESOV-2112																
	41 TYPE		3 Way																
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65												
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5												
	44 MANUAL RESET		Yes																
	45 Power Supply		24 VDC																
	46 Pnu. Connection		1/4" NPT																
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No																
	48 BLOCK RELAY		No																
	49 QUICK EXHUST		Yes																
	50 FILTER REGULATOR		Yes																
	51 VOLUME TANK		No																
	52 MECHANICAL POSITION INDICATOR		Required																
	53 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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HORGAN ENERGY				
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 19 از 44		
BK		GCS	PEDCO	120	IN	DT	0010	D03				
On-Off Valve												
TAG NO: XV-2121A		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (1/3)				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	DESIGN PRESSURE					bar(g)	18.2				
	9	DESIGN TEMPERATURE					°C	85				
	10	VAPOR PRESSURE Pv					bar(a)	-	-	-	-	
11	CRITICAL PRESSURE					bar(a)	94.65	94.65	94.65	-		
LINE	12	PIPE LINE SIZE & SCHEDULE		IN	8"	60	CORROSION ALLOWANCE(mm)		6			
	13	LINE NO.		GAS-111-0026A-AN07-8"-PT								
VALVE BODY & BONNET	14	TYPE		Full Bore Ball Valve/Trunion Mounted								
	15	SIZE		8"								
	16	MAX PRESS./TEMP.		As per PMS								
	17	MFR. & MODEL		Will be finalized later								
	18	BODY / BONNET MATL		ASTM A216 Gr. WCB								
	19	LINER MATERIAL / ID		VTA								
	20	END CONNECTION	IN	8"/300#								
			OUT	8"/300#								
	21	FLG FACE FINISH		RF								
	22	END EXT./MATL.		N/A								
	23	FLOW DIRECTION		(Note 18 in Page 4)								
24	TYPE OF BONNET		Standard									
25	LUBE & ISO VALVE		No									
26	PACKING MATERIAL		PACKING TYPE		PTFE		Standard					
27	ENTRY DESIGN		Top / Side Entry									
28	NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes									
TRIM	29	TRIM	TYPE	MATERIAL		VTA		316 SS+PTFE				
	30	SIZE	RATED TRAVEL		VTA		VTA					
	31	CHARACTERISTICS		On/Off								
	32	BALANCED / UNBALANCED		BALANCED								
	33	RATED Cv	FL	XT	VTA		VTA		VTA			
	34	PLUG / BALL / DISK MATERIAL		316 SS								
	35	SEAT	TYPE	MATERIAL		Soft Seat		316 SS+PTFE				
	36	CAGE / GUIDE MATERIAL		VTA								
	37	STEM	TYPE	MATERIAL		Anti-Blow Out		316 SS				
38	LEAKAGE CLASS		ANSI Class VI									
39	VALVE STEM EXTENSION REQUIREMENT		No									
SOLENOID VALVE	40	TAG NO		PSOV-2121A, ESOV-2121A								
	41	TYPE		3 Way								
	42	BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	43	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	44	MANUAL RESET		Yes								
	45	Power Supply		24 VDC								
	46	Pnu. Connection		1/4" NPT								
SPECIAL / ACCESS.	47	FUSIBLE LEAKAGE		No								
	48	BLOCK RELAY		No								
	49	QUICK EXHUST		Yes								
	50	FILTER REGULATOR		Yes								
	51	VOLUME TANK		No								
	52	MECHANICAL POSITION INDICATOR		Required								
	53	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes								
ACTUATOR	54	TYPE		Single Acting, Spring Return								
	55	SIZE		VTA								
	56	SPRING FAIL ACTION		Fail to Close								
	57	MAX ALLOWABLE PRESSURE		VTA								
	58	MIN REQUIRES PRESSURE		VTA								
	59	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
	60	BENCH RANGE		VTA								
	61	TRAVELING TIME		9 S								
	62	FUNCTION		On/Off								
	63	LOCAL POSITION INDICATOR		Required								
	64	ACT. ORIENTATION		VTA								
	65	HAND WHEEL TYPE		Detachable side mounted								
	66	ADJUSTABLE LIMIT STOP		Yes								
	67	INPUT SIGNAL		24VDC								
	68	MFR. & MODEL		Will be finalized later								
	POSITIONER	69	TYPE		N/A							
		70	MFR. & MODEL		Will be finalized later							
71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
72		GAUGES		N/A								
LIMIT SWITCHES	73	CAM CHARACTERISTIC		N/A								
	74	AIR CONNECTION		N/A								
	75	TAG NO. :		XZSC-2121A / XZSO-2121A								
	76	TYPE	QUANTITY		Magnetically operated REED contacts		2					
	77	CONTACTS / RATING		110V DC , 10A								
	78	ACTUATION POINT		Fully Open/Close								
	79	ENCLOSURE MATERIAL		Die Cast Aluminum								
	80	WEATHER PROTECTION		IP-65								
AIR SET	81	ELEC. CERTIFICATE	ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	82	MFR. & MODEL		Will be finalized later								
	83	SET PRESSURE		Yes								
	84	PNEUMATIC CONNECTION		1/4" NPT								
	85	GAUGES	FILTER		Required		Required					
	86	MFR. & MODEL		Will be finalized later								
	TEST	87	ANSI/FCI LEAKAGE CLASS		Required							
		88	HYDRO PRESSURE		Required							
89		FUNCTIONAL TEST		Required								
90												
FIRE PROOF DESIGN	91											
	92											
	93	PASSIVE FIRE PROTECTION		No								
	94	API 6FA REQUIREMENTS		Yes								
	95	SIL REQUIREMENTS		Yes								
	96	PARTIAL STROKING VALVE TEST		No								
	97											
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 HORGAN ENERGY 			
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 20 از 44	
BK		GCS		PEDCO		120		IN		DT	
On-Off Valve											
TAG NO: XV-2121B		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (2/3)						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	
	1 FLOW RATE					kg/h		9530.4		8664.0	
	2 INLET PRESSURE					bar(g)		5.1		5.1	
	3 OUTLET PRESSURE					bar(g)		5.1		5.1	
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-	
	5 INLET TEMPERATURE					°C		19.02~ 36.92		19.02~ 36.92	
	6 DENSITY					kg/m3		5.56 ~ 5.96		5.56 ~ 5.96	
	7 VISCOSITY					CP		0.011		0.011	
	8 DESIGN PRESSURE					bar(g)		18.2			
	9 DESIGN TEMPERATURE					°C		85			
	10 VAPOR PRESSURE Pv					bar(a)		-		-	
11 CRITICAL PRESSURE					bar(a)		94.65		94.65		
LINE	PIPE LINE SIZE & SCHEDULE		IN	8"	60	CORROSION ALLOWANCE(mm)		6			
	13 LINE NO.		GAS-111-0026B-AN07-8"-PT								
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Trunnion Mounted								
	15 SIZE		8"								
	16 MAX PRESS./TEMP.		As per PMS								
	17 MFR. & MODEL		Will be finalized later								
	18 BODY / BONNET MATL		ASTM A216 Gr. WCB								
	19 LINER MATERIAL / ID		VTA								
	20 END CONNECTION		IN	8"/300#							
			OUT	8"/300#							
	21 FLG FACE FINISH		RF								
	22 END EXT.MATL.		N/A								
	23 FLOW DIRECTION		(Note 18 in Page 4)								
24 TYPE OF BONNET		Standard									
25 LUBE & ISO VALVE		No									
26 PACKING MATERIAL		PACKING TYPE		PTFE		Standard					
27 ENTRY DESIGN		Top / Side Entry									
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes									
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+PTFE			
	30 SIZE		RATED TRAVEL		VTA		VTA				
	31 CHARACTERISTICS		On/Off								
	32 BALANCED / UNBALANCED		BALANCED								
	33 RATED Cv		FL	XT		VTA		VTA		VTA	
	34 PLUG / BALL / DISK MATERIAL		316 SS								
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+PTFE			
	36 CAGE / GUIDE MATERIAL		VTA								
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS			
	38 LEAKAGE CLASS		ANSI Class VI								
	39 VALVE STEM EXTENSION REQUIREMENT		No								
SOLENOID VALVE	40 TAG NO		PSOV-2121B, ESOV-2121B								
	41 TYPE		3 Way								
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	44 MANUAL RESET		Yes								
	45 Power Supply		24 VDC								
	46 Pnu. Connection		1/4" NPT								
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No								
	48 BLOCK RELAY		No								
	49 QUICK EXHUST		Yes								
	50 FILTER REGULATOR		Yes								
	51 VOLUME TANK		No								
	52 MECHANICAL POSITION INDICATOR		Required								
	53 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.											

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HORGAN ENERGY											
شماره پیمان: 053 - 073 - 9038		پروژه		بسته کاری		صادر کننده		تسهیلات		رشته		نوع مدرک		سریال		نسخه		شماره صفحه: 21 از 44	
BK		GCS		PEDCO		120		IN		DT		0010		D03					
On-Off Valve																			
TAG NO: XV-2121C		P&ID NO : 		BK-GCS-PEDCO-120-PR-PI-0006-D09 (3/3)										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 DESIGN PRESSURE						bar(g)		18.2										
	9 DESIGN TEMPERATURE						°C		85										
	10 VAPOR PRESSURE Pv						bar(a)		-		-		-		-				
11 CRITICAL PRESSURE						bar(a)		94.65		94.65		94.65		-					
LINE	PIPE LINE SIZE & SCHEDULE		IN 8" 60		CORROSION ALLOWANCE(mm)		6		54 TYPE		Single Acting, Spring Return								
	13 LINE NO.		OUT 8" 60		GAS-111-0026C-AN07-8"-PT				55 SIZE		VTA								
VALVE BODY & BONNET	14 TYPE				Full Bore Ball Valve/Trunion Mounted				56 SPRING FAIL ACTION		Fail to Close								
	15 SIZE		8"						57 MAX ALLOWABLE PRESSURE		VTA								
	16 MAX PRESS./TEMP.				As per PMS				58 MIN REQUIRES PRESSURE		VTA								
	17 MFR. & MODEL				Will be finalized later				59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
	18 BODY / BONNET MATL				ASTM A216 Gr. WCB				60 BENCH RANGE		VTA								
	19 LINER MATERIAL / ID				VTA				61 TRAVELING TIME		9 S								
	20 END CONNECTION		IN 8"/300#		OUT 8"/300#				62 FUNCTION		On/Off								
	21 FLG FACE FINISH				RF				63 LOCAL POSITION INDICATOR		Required								
	22 END EXT./MATL.				N/A				64 ACT. ORIENTATION		VTA								
	23 FLOW DIRECTION				(Note 18 in Page 4)				65 HAND WHEEL TYPE		Detachable side mounted								
	24 TYPE OF BONNET				Standard				66 ADJUSTABLE LIMIT STOP		Yes								
TRIM	25 LUBE & ISO VALVE				No				67 INPUT SIGNAL		24VDC								
	26 PACKING MATERIAL		PACKING TYPE		PTFE		Standard		68 MFR. & MODEL		Will be finalized later								
	27 ENTRY DESIGN				Top / Side Entry				69 TYPE		N/A								
	28 NACE REQUIREMENT(NACE (MR-0175/ISO 15156)				Yes				70 MFR. & MODEL		Will be finalized later								
	29 TRIM		TYPE MATERIAL		VTA		316 SS+PTFE		71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
	30 SIZE		RATED TRAVEL		VTA		VTA		72 GAUGES		N/A								
	31 CHARACTERISTICS				On/Off				73 CAM CHARACTERISTIC		N/A								
	32 BALANCED / UNBALANCED				BALANCED				74 AIR CONNECTION		N/A								
	33 RATED Cv		FL XT		VTA		VTA		75 TAG NO. :		XZSC-2121C / XZSO-2121C								
	34 PLUG / BALL / DISK MATERIAL				316 SS				76 TYPE		QUANTITY		Magnetically operated REED' contacts 2						
	35 SEAT		TYPE MATERIAL		Soft Seat		316 SS+PTFE		77 CONTACTS / RATING		110V DC , 10A								
36 CAGE / GUIDE MATERIAL				VTA				78 ACTUATION POINT		Fully Open/Close									
37 STEM		TYPE MATERIAL		Anti-Blow Out		316 SS		79 ENCLOSURE MATERIAL		Die Cast Aluminum									
38 LEAKAGE CLASS				ANSI Class VI				80 WEATHER PROTECTION		IP-65									
39 VALVE STEM EXTENSION REQUIREMENT				No				81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx"d", IIB T4 ISO M20 x 1.5							
SOLENOID VALVE	40 TAG NO				PSOV-2121C, ESOV-2121C				82 MFR. & MODEL		Will be finalized later								
	41 TYPE				3 Way				83 SET PRESSURE		Yes								
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		84 PNEUMATIC CONNECTION		1/4" NPT								
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx"d", IIB T4		ISO M20 x 1.5		85 GAUGES		FILTER		Required Required						
	44 MANUAL RESET				Yes				86 MFR. & MODEL		Will be finalized later								
	45 Power Supply				24 VDC				87 ANSI/FCI LEAKAGE CLASS		Required								
	46 Pnu. Connection				1/4" NPT				88 HYDRO PRESSURE		Required								
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE				No				89 FUNCTIONAL TEST		Required								
	48 BLOCK RELAY				No				90										
	49 QUICK EXHUST				Yes				91										
	50 FILTER REGULATOR				Yes				92										
	51 VOLUME TANK				No				93 PASSIVE FIRE PROTECTION		No								
	52 MECHANICAL POSITION INDICATOR				Required				94 API 6FA REQUIREMENTS		Yes								
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE				Yes				95 SIL REQUIREMENTS		Yes								
								96 PARTIAL STROKING VALVE TEST		No									
								97											
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 HORGAN ENERGY 													
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 22 از 44											
BK		GCS		PEDCO		120	IN	DT	0010	D03											
On-Off Valve																					
TAG NO: XV-2122A		P&ID NO : 		BK-GCS-PEDCO-120-PR-PI-0006-D09 (1/3)				SERVICE: 1st Stage Gas Compression Suction Drums													
FLUID STATE: CLOSED DRAIN		PHASE:		LIQUID				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)		-		4.9		-		-						
	3	OUTLET PRESSURE					bar(g)		-		4.9		-		-						
	4	DIFFERENTIAL PRESSURE					bar(g)		-		-		-		30.3						
	5	INLET TEMPERATURE					°C		-		36.78		-		-						
	6	DENSITY					kg/m3		-		998.5		-		-						
	7	VISCOSITY					CP		-		0.69		-		-						
	8	DESIGN PRESSURE					bar(g)								30.3						
	9	DESIGN TEMPERATURE					°C								155						
	10	VAPOR PRESSURE Pv					bar(a)		0.61		0.61		0.61		-						
11	CRITICAL PRESSURE					bar(a)		221.3		221.3		221.3		-							
LINE	12	PIPE LINE SIZE & SCHEDULE		IN	2"	10S	CORROSION ALLOWANCE(mm)		0												
	13	LINE NO.		OUT		2"	10S	CDH-112-0021A-CS00-2"-NP													
VALVE BODY & BONNET	14	TYPE					Full Bore Ball Valve/Floating Type						54	TYPE		Single Acting, Spring Return					
	15	SIZE					2"						55	SIZE		VTA					
	16	MAX PRESS./TEMP.					As per PMS						56	SPRING FAIL ACTION		Fail to Close					
	17	MFR. & MODEL					Will be finalized later						57	MAX ALLOWABLE PRESSURE		VTA					
	18	BODY / BONNET MATL					ASTM A351 GR.CF3M						58	MIN REQUIRES PRESSURE		VTA					
	19	LINER MATERIAL / ID					VTA						59	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g					
	20	END CONNECTION		IN	2"/300#								60	BENCH RANGE		VTA					
	21	OUT		2"/300#								61	TRAVELING TIME		5 S						
	22	FLG FACE FINISH					RF						62	FUNCTION		On/Off					
	23	END EXT./MATL.					N/A						63	LOCAL POSITION INDICATOR		Required					
	24	FLOW DIRECTION					(Note 18 in Page 4)						64	ACT. ORIENTATION		VTA					
TRIM	25	TYPE OF BONNET					Standard						65	HAND WHEEL TYPE		Detachable side mounted					
	26	LUBE & ISO VALVE					No						66	ADJUSTABLE LIMIT STOP		Yes					
	27	PACKING MATERIAL		PACKING TYPE		RPTFE				Standard						67	INPUT SIGNAL		24VDC		
	28	ENTRY DESIGN					Top / Side Entry						68	MFR. & MODEL		Will be finalized later					
	29	NACE REQUIREMENT/NACE (MR-0175/ISO 15156)					Yes						69	TYPE		N/A					
	30	TRIM					TYPE MATERIAL		VTA		316 SS+RPTFE						70	MFR. & MODEL		Will be finalized later	
	31	SIZE		RATED TRAVEL		VTA				VTA						71	ON INCR SIGNAL OUTPUT INCR / DECR		N/A		
	32	CHARACTERISTICS					On/Off						72	GAUGES		N/A					
	33	BALANCED / UNBALANCED					BALANCED						73	CAM CHARACTERISTIC		N/A					
	34	RATED Cv		FL	XT		VTA		VTA		VTA						74	AIR CONNECTION		N/A	
	35	PLUG / BALL / DISK MATERIAL		316 SS								75	TAG NO. :		XZSC-2122A / XZSO-2122A						
36	SEAT		TYPE MATERIAL		Soft Seat				316 SS+RPTFE						76	TYPE		QUANTITY	Magetically operated 'REED' contacts	2	
37	CAGE / GUIDE MATERIAL		VTA								77	CONTACTS / RATING		110V DC , 10A							
38	STEM		TYPE MATERIAL		Anti-Blow Out				316 SS						78	ACTUATION POINT		Fully Open/Close			
39	LEAKAGE CLASS					ANSI Class VI						79	ENCLOSURE MATERIAL		Die Cast Aluminum						
40	VALVE STEM EXTENSION REQUIREMENT					No						80	WEATHER PROTECTION		IP-65						
SOLENOID VALVE	41	TAG NO					PSOV-2122A , ESOV-2122A						81	ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" , IIB T4	ISO M20 x 1.5			
	42	TYPE		3 Way								82	MFR. & MODEL		Will be finalized later						
	43	BODY MATERIAL		WEATHER IP.		AISI 316 S.S				IP-65						83	SET PRESSURE		Yes		
	44	ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4				ISO M20 x 1.5						84	PNEUMATIC CONNECTION		1/4" NPT		
	45	MANUAL RESET		Yes								85	GAUGES		FILTER	Required	Required				
	46	Power Supply		24 VDC								86	MFR. & MODEL		Will be finalized later						
SPECIAL / ACCESS.	47	Fusible Leakage					No						87	ANSI/FCI LEAKAGE CLASS		Required					
	48	BLOCK RELAY					No						88	HYDRO PRESSURE		Required					
	49	QUICK EXHUST					Yes						89	FUNCTIONAL TEST		Required					
	50	FILTER REGULATOR					Yes						90								
	51	VOLUME TANK					No						91								
	52	MECHANICAL POSITION INDICATOR					Required						92								
53	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE					Yes						93	PASSIVE FIRE PROTECTION		No						
												94	API 6FA REQUIREMENTS		Yes						
												95	SIL REQUIREMENTS		Yes						
												96	PARTIAL STROKING VALVE TEST		No						
												97									
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.																					

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 				
NISOC		Data Sheets For ON/OFF & Shutdown Valves										
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه			
		BK	GCS	PEDCO	120	IN	DT	0010	D03			
شماره صفحه: 24 از 44												
On-Off Valve												
TAG NO: XV-2122C		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (3/3)				SERVICE: 1st Stage Gas Compression Suction Drums				
FLUID STATE: CLOSED DRAIN		PHASE: LIQUID						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)		-		4.9	-	-
	3	OUTLET PRESSURE				bar(g)		-		4.9	-	-
	4	DIFFERENTIAL PRESSURE				bar(g)		-		-	-	30.3
	5	INLET TEMPERATURE				°C		-		36.78	-	-
	6	DENSITY				kg/m3		-		998.5	-	-
	7	VISCOSITY				CP		-		0.69	-	-
	8	DESIGN PRESSURE				bar(g)		30.3				
	9	DESIGN TEMPERATURE				°C		155				
	10	VAPOR PRESSURE Pv				bar(a)		0.61		0.61	0.61	-
11	CRITICAL PRESSURE				bar(a)		221.3		221.3	221.3	-	
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	10S	CORROSION ALLOWANCE(mm)		0				
	LINE NO.		CDH-112-0021C-CS00-2"-NP									
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Floating Type									
	15 SIZE		2"									
	16 MAX PRESS./TEMP.		As per PMS									
	17 MFR. & MODEL		Will be finalized later									
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M									
	19 LINER MATERIAL / ID		VTA									
	20 END CONNECTION		IN	2"/300#								
			OUT	2"/300#								
	21 FLG FACE FINISH		RF									
	22 END EXT./MATL.		N/A									
	23 FLOW DIRECTION		(Note 18 in Page 4)									
24 TYPE OF BONNET		Standard										
25 LUBE & ISO VALVE		No										
26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard				
27 ENTRY DESIGN		Top / Side Entry										
28 NACE REQUIREMENT/NACE (MR-0175/ISO 15156)		Yes										
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE				
	30 SIZE		RATED TRAVEL		VTA		VTA					
	31 CHARACTERISTICS		On/Off									
	32 BALANCED / UNBALANCED		BALANCED									
	33 RATED Cv		FL	XT		VTA		VTA				
	34 PLUG / BALL / DISK MATERIAL		316 SS									
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE				
	36 CAGE / GUIDE MATERIAL		VTA									
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS				
	38 LEAKAGE CLASS		ANSI Class VI									
	39 VALVE STEM EXTENSION REQUIREMENT		No									
SOLENOID VALVE	40 TAG NO		PSOV-2122C , ESOV-2122C									
	41 TYPE		3 Way									
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65					
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	44 MANUAL RESET		Yes									
	45 Power Supply		24 VDC									
	46 Pnu. Connection		1/4" NPT									
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No									
	48 BLOCK RELAY		No									
	49 QUICK EXHUST		Yes									
	50 FILTER REGULATOR		Yes									
	51 VOLUME TANK		No									
	52 MECHANICAL POSITION INDICATOR		Required									
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes									
ACTUATOR	54 TYPE		Single Acting, Spring Return									
	55 SIZE		VTA									
	56 SPRING FAIL ACTION		Fail to Close									
	57 MAX ALLOWABLE PRESSURE		VTA									
	58 MIN REQUIRES PRESSURE		VTA									
	59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g									
	60 BENCH RANGE		VTA									
	61 TRAVELING TIME		5 S									
	62 FUNCTION		On/Off									
	63 LOCAL POSITION INDICATOR		Required									
	64 ACT. ORIENTATION		VTA									
	65 HAND WHEEL TYPE		Detachable side mounted									
	66 ADJUSTABLE LIMIT STOP		Yes									
	67 INPUT SIGNAL		24VDC									
	68 MFR. & MODEL		Will be finalized later									
	POSITIONER	69 TYPE		N/A								
		70 MFR. & MODEL		Will be finalized later								
		71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
72 GAUGES		N/A										
LIMIT SWITCHES	73 CAM CHARACTERISTIC		N/A									
	74 AIR CONNECTION		N/A									
	75 TAG NO. :		XZSC-2122C / XZSO-2122C									
	76 TYPE		QUANTITY	Magnetically operated 'REED' contacts		2						
	77 CONTACTS / RATING		110V DC , 10A									
	78 ACTUATION POINT		Fully Open/Close									
	79 ENCLOSURE MATERIAL		Die Cast Aluminum									
	80 WEATHER PROTECTION		IP-65									
AIR SET	81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	82 MFR. & MODEL		Will be finalized later									
	83 SET PRESSURE		Yes									
	84 PNEUMATIC CONNECTION		1/4" NPT									
TEST	85 GAUGES		FILTER		Required		Required					
	86 MFR. & MODEL		Will be finalized later									
	87 ANSI/FCI LEAKAGE CLASS		Required									
	88 HYDRO PRESSURE		Required									
FIRE PROOF DESIGN	89 FUNCTIONAL TEST		Required									
	90											
	91											
	92											
	93 PASSIVE FIRE PROTECTION		No									
94 API 6FA REQUIREMENTS		Yes										
95 SIL REQUIREMENTS		Yes										
96 PARTIAL STROKING VALVE TEST		No										
97												
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.												

		تگداشت و افزایش تولید میدان نفتی بینک سطح الارض					 								
NISOC		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک													
Data Sheets For ON/OFF & Shutdown Valves															
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه						
		BK	GCS	PEDCO	120	IN	DT	0010	D03						
شماره صفحه: 25 از 44															
On-Off Valve															
TAG NO: XV-2123A		P&ID NO: D03 BK-GCS-PEDCO-120-FR-PI-0006-D09 (1/3)					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	DESIGN PRESSURE				bar(g)	18.2								
	9	DESIGN TEMPERATURE				°C	85								
	10	VAPOR PRESSURE Pv				bar(a)	-	-	-	-					
11	CRITICAL PRESSURE				bar(a)	94.65	94.65	94.65	-						
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	160	CORROSION ALLOWANCE(mm)	6		54	TYPE	Single Acting, Spring Return				
			OUT	2"	160			55	SIZE	VTA					
VALVE BODY & BONNET	LINE NO.		GAS-111-0024A-AN07-2"-PT				ACTUATOR	56	SPRING FAIL ACTION		Fail to Close				
	14 TYPE		Full Bore Ball Valve Fl					57	MAX ALLOWABLE PRESSURE		VTA				
	15 SIZE		2"					58	MIN REQUIRES PRESSURE		VTA				
	16 MAX PRESS./TEMP.		As per PMS					59	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g				
	17 MFR. & MODEL		Will be finalized later					60	BENCH RANGE		VTA				
	18 BODY / BONNET MATL.		ASTM A216 Gr. WCB					61	TRAVELING TIME		5 S				
	19 LINER MATERIAL / ID		VTA					62	FUNCTION		On/Off				
	20 END CONNECTION		IN	2"/300#				63	LOCAL POSITION INDICATOR		Required				
			OUT	2"/300#			64	ACT. ORIENTATION		VTA					
	21 FLG FACE FINISH		RF				65	HAND WHEEL TYPE		Decatchable side mounted					
	22 END EXT./MATL.		N/A				66	ADJUSTABLE LIMIT STOP		VTA					
	23 FLOW DIRECTION		(Note 1B in Page 4)				67	INPUT SIGNAL		24VDC					
	24 TYPE OF BONNET		Standard				68	MFR. & MODEL		Will be finalized later					
	25 LUBE & ISO VALVE		No				69	TYPE		N/A					
	26 PACKING MATERIAL		PACKING TYPE		PTFE		Standard		70	MFR. & MODEL		Will be finalized later			
	27 ENTRY DESIGN		Top Entry				71	ON INCR SIGNAL OUTPUT INCR / DECR		N/A					
	28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes				72	GAUGES		N/A					
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+PTFE		73	CAM CHARACTERISTIC		N/A		
	30 SIZE		RATED TRAVEL		VTA		VTA		74	AIR CONNECTION		N/A			
	31 CHARACTERISTICS		On/Off				LIMIT SWITCHES	75	TAG NO. :		XZSC-2123A / XZSO-2123A				
	32 BALANCED / UNBALANCED		BALANCED					76	TYPE	QUANTITY	Magnetically operated 'REED' contacts 2				
	33 RATED Cv		FL	XT		VTA		VTA		VTA					
	34 PLUG / BALL / DISK MATERIAL		316 SS					77	CONTACTS / RATING		110V DC, 10A				
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+PTFE		78	ACTUATION POINT		Fully Open/Close		
	36 CAGE / GUIDE MATERIAL		VTA					79	ENCLOSURE MATERIAL		Die Cast Aluminum				
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		80	WEATHER PROTECTION		IP-65		
	38 LEAKAGE CLASS		ANSI Class VI					81	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d" ,IIB T4 ISO M20 × 1.5				
39 VALVE STEM EXTENSION REQUIREMENT		No				82	MFR. & MODEL		Will be finalized later						
SOLENOID VALVE	40 TAG NO		PSOV-2123A , ESOV-2123A				AIR SET	83	SET PRESSURE		Yes				
	41 TYPE		3 Way					84	PNEUMATIC CONNECTION		1/4" NPT				
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S			IP-65		85	GAUGES	FILTER	Required Required		
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		86	MFR. & MODEL		Will be finalized later			
	44 MANUAL RESET		Yes				TEST	87	ANSI/FCI LEAKAGE CLASS		Required				
	45 Power Supply		24 VDC					88	HYDRO PRESSURE		Required				
	46 Pnu. Connection		1/4" NPT					89	FUNCTIONAL TEST		Required				
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No				FIRE PROOF DESIGN	90							
	48 BLOCK RELAY		No					91							
	49 QUICK EXHUST		Yes					92							
	50 FILTER REGULATOR		Yes					93	PASSIVE FIRE PROTECTION						

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HORGAN ENERGY								
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک														
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 26 از 44						
BK		GCS	PEDCO	120	IN	DT	0010	D03								
On-Off Valve																
TAG NO: XV-2123B		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (2/3)				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	DESIGN PRESSURE					bar(g)						18.2			
	9	DESIGN TEMPERATURE					°C						85			
	10	VAPOR PRESSURE Pv					bar(a)		-		-		-		-	
11	CRITICAL PRESSURE					bar(a)		94.65		94.65		94.65		-		
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	160	CORROSION ALLOWANCE(mm)		6		54		TYPE		Single Acting, Spring Return		
	LINE NO.		OUT	2"	160	GAS-111-0024B-AN07				55		SIZE		VTA		
VALVE BODY & BONNET	14		TYPE		Full Bore Ball Valve/Float				57		MAX ALLOWABLE PRESSURE		VTA			
	15		SIZE		2"				58		MIN REQUIRES PRESSURE		VTA			
	16		MAX PRESS./TEMP.		As per PMS				59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g			
	17		MFR. & MODEL		Will be finalized later				60		BENCH RANGE		VTA			
	18		BODY / BONNET MATL		ASTM A216 Gr. WCB				61		TRAVELING TIME		5 S			
	19		LINER MATERIAL / ID		VTA				62		FUNCTION		On/Off			
	20		END CONNECTION		IN	2"/300#			63		LOCAL POSITION INDICATOR		Required			
	21		FLG FACE FINISH		RF				64		ACT. ORIENTATION		VTA			
	22		END EXT./MATL.		N/A				65		HAND WHEEL TYPE		Detachable side mounted			
	23		FLOW DIRECTION		(Note 18 in Page 4)				66		ADJUSTABLE LIMIT STOP		Yes			
	24		TYPE OF BONNET		Standard				67		INPUT SIGNAL		24VDC			
	25		LUBE & ISO VALVE		No				68		MFR. & MODEL		Will be finalized later			
	26		PACKING MATERIAL		PACKING TYPE		PTFE	Standard	69		TYPE		N/A			
	27		ENTRY DESIGN		Top Entry				70		MFR. & MODEL		Will be finalized later			
	28		NACE REQUIREMENT		NACE (MR-0175/ISO 15156)		Yes		71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A			
	TRIM	29		TRIM		TYPE	MATERIAL	VTA	316 SS+PTFE	72		GAUGES		N/A		
		30		SIZE		RATED TRAVEL		VTA	VTA	73		CAM CHARACTERISTIC		N/A		
31		CHARACTERISTICS		On/Off				74		AIR CONNECTION		N/A				
32		BALANCED / UNBALANCED		BALANCED				75		TAG NO. :		XZSC-2123B / XZSO-2123B				
33		RATED Cv		FL	XT	VTA	VTA	VTA	76		TYPE		QUANTITY	Magnetically operated 'REED' contacts	2	
34		PLUG / BALL / DISK MATERIAL		316 SS				77		CONTACTS / RATING		110V DC , 10A				
35		SEAT		TYPE	MATERIAL	Soft Seat	316 SS+PTFE	78		ACTUATION POINT		Fully Open/Close				
36		CAGE / GUIDE MATERIAL		VTA				79		ENCLOSURE MATERIAL		Die Cast Aluminum				
37		STEM		TYPE	MATERIAL	Anti-Blow Out	316 SS	80		WEATHER PROTECTION		IP-65				
38		LEAKAGE CLASS		ANSI Class VI				81		ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d", IIB T4	ISO M20 x 1.5		
SOLENOID VALVE	40		TAG NO		PSOV-2123B , ESOV-2123B				82		MFR. & MODEL		Will be finalized later			
	41		TYPE		3 Way				83		SET PRESSURE		Yes			
	42		BODY MATERIAL		WEATHER IP.		AIISI 316 S.S	IP-65	84		PNEUMATIC CONNECTION		1/4" NPT			
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d", IIB T4	ISO M20 x 1.5	85		GAUGES		FILTER	Required	Required	
	44		MANUAL RESET		Yes				86		MFR. & MODEL		Will be finalized later			
	45		Power Supply		24 VDC				87		ANSI/FCI LEAKAGE CLASS		Required			
	46		Pnu. Connection		1/4" NPT				88		HYDRO PRESSURE		Required			
	47		FUSIBLE LEAKAGE		No				89		FUNCTIONAL TEST		Required			
SPECIAL / ACCESS.	48		BLOCK RELAY		No				90							
	49		QUICK EXHUST		Yes				91							
	50		FILTER REGULATOR		Yes				92							
	51		VOLUME TANK		No				93		PASSIVE FIRE PROTECTION		No			
	52		MECHANICAL POSITION INDICATOR		Required				94		API 6FA REQUIREMENTS		Yes			
	53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes				95		SIL REQUIREMENTS		Yes			
	54								96		PARTIAL STROKING VALVE TEST		No			
55								97								
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HORGAN ENERGY								
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک														
Data Sheets For ON/OFF & Shutdown Valves																
شماره پیمان:		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 27 از 44						
053 - 073 - 9038		BK	GCS	PEDCO	120	IN	DT	0010	D03							
On-Off Valve																
TAG NO:		XV-2123C		P&ID NO :		D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (3/3)		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 DESIGN PRESSURE				bar(g)						18.2					
	9 DESIGN TEMPERATURE				°C						85					
	10 VAPOR PRESSURE Pv				bar(a)		-		-		-		-			
11 CRITICAL PRESSURE				bar(a)		94.65		94.65		94.65		-				
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	160	CORROSION ALLOWANCE(mm)		6		ACTUATOR			54 TYPE		Single Acting, Spring Return	
	OUT		2"	160					55 SIZE				VTA			
13 LINE NO.		GAS-111-0024C-AN07-2"-PT				POS			56 SPRING FAIL ACTION		Fail to Close					
14 TYPE		Full Bore Ball Valve/Floating Type							57 MAX ALLOWABLE PRESSURE		VTA					
15 SIZE		2"				58 MIN REQUIRES PRESSURE		VTA								
16 MAX PRESS./TEMP.		As per PMS				59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
17 MFR. & MODEL		Will be finalized later				60 BENCH RANGE		VTA								
18 BODY / BONNET MATL		ASTM A216 Gr. WCB				61 TRAVELING TIME		5 S								
19 LINER MATERIAL / ID		VTA				62 FUNCTION		On/Off								
20 END CONNECTION		IN	2"/300#			63 LOCAL POSITION INDICATOR		Required								
21 FLG FACE FINISH		OUT	2"/300#			64 ACT. ORIENTATION		VTA								
22 END EXT./MATL.		N/A				65 HAND WHEEL TYPE		Detachable side mounted								
23 FLOW DIRECTION		(Note 18 in Page 4)				66 ADJUSTABLE LIMIT STOP		Yes								
24 TYPE OF BONNET		Standard				67 INPUT SIGNAL		24VDC								
25 LUBE & ISO VALVE		No				68 MFR. & MODEL		Will be finalized later								
26 PACKING MATERIAL		PACKING TYPE	PTFE			69 TYPE		N/A								
27 ENTRY DESIGN		Top Entry				70 MFR. & MODEL		Will be finalized later								
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes				71 INCR SIGNAL OUTPUT INCR / DECR		N/A								
29 TRIM		TYPE	MATERIAL			72 GAUGES		N/A								
30 SIZE		RATED TRAVEL			VTA		73 CAM CHARACTERISTIC		N/A							
31 CHARACTERISTICS		On/Off				74 AIR CONNECTION		N/A								
32 BALANCED / UNBALANCED		BALANCED				75 TAG NO. :		XZSC-2123C / XZSO-2123C								
33 RATED Cv		FL	XT		VTA		76 TYPE		QUANTITY	Magnetically operated / REED' contacts		2				
34 PLUG / BALL / DISK MATERIAL		316 SS				77 CONTACTS / RATING		110V DC , 10A								
35 SEAT		TYPE	MATERIAL			78 ACTUATION POINT		Fully Open/Close								
36 CAGE / GUIDE MATERIAL		VTA				79 ENCLOSURE MATERIAL		Die Cast Aluminum								
37 STEM		TYPE	MATERIAL			80 WEATHER PROTECTION		IP-65								
38 LEAKAGE CLASS		ANSI Class VI				81 ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d", IIB T4		ISO M20 x 1.5					
39 VALVE STEM EXTENSION REQUIREMENT		No				82 MFR. & MODEL		Will be finalized later								
40 TAG NO		PSOV-2123C , ESOV-2123C				83 SET PRESSURE		Yes								
41 TYPE		3 Way				84 PNEUMATIC CONNECTION		1/4" NPT								
42 BODY MATERIAL		WEATHER IP.			AISI 316 S.S		85 GAUGES		FILTER	Required		Required				
43 ELE. CERTIFICATE		ELE. CONNECTION			EEx "d", IIB T4		86 MFR. & MODEL		Will be finalized later							
44 MANUAL RESET		Yes				87 ANSI/FCI LEAKAGE CLASS		Required								
45 Power Supply		24 VDC				88 HYDRO PRESSURE		Required								
46 Pnu. Connection		1/4" NPT				89 FUNCTIONAL TEST		Required								
47 FUSIBLE LEAKAGE		No				90										
48 BLOCK RELAY		No				91										
49 QUICK EXHUST		Yes				92										
50 FILTER REGULATOR		Yes				93 PASSIVE FIRE PROTECTION		No								
51 VOLUME TANK		No				94 API 6FA REQUIREMENTS		Yes								
52 MECHANICAL POSITION INDICATOR		Required				95 SIL REQUIREMENTS		Yes								
53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes				96 PARTIAL STROKING VALVE TEST		No								
54						97										
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 گسترش انرژی												
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																		
		Data Sheets For ON/OFF & Shutdown Valves																		
شماره پیمان:		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 28 از 44										
053 - 073 - 9038		BK	GCS	PEDCO	120	IN	DT	0010	D03											
On-Off Valve																				
TAG NO:		XV-2124A		P&ID NO :		D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (1/3)		SERVICE: 1st Stage Gas Compression Suction Drums										
FLUID STATE:		Gas		PHASE:		Nitrogen		AREA CLASSIFICATION:		Zone2, IIB, T4										
SERVICE CONDITION	ITEM				UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off							
	1	FLOW RATE				kg/h		-		25		-								
	2	INLET PRESSURE				bar(g)		-		8		-								
	3	OUTLET PRESSURE				bar(g)		-		8		-								
	4	DIFFERENTIAL PRESSURE				bar(g)		-		-		-		18.2						
	5	INLET TEMPERATURE				°C		-		60		-								
	6	DENSITY				kg/m3		-		8.62		-								
	7	VISCOSITY				CP		-		0.02		-								
	8	DESIGN PRESSURE				bar(g)						18.2								
	9	DESIGN TEMPERATURE				°C						85								
	10	VAPOR PRESSURE Pv				bar(a)		-		-		-		-						
11	CRITICAL PRESSURE				bar(a)		-		33.94		-		-							
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40	CORROSION ALLOWANCE(mm)		1		54		TYPE		Single Acting, Spring Return						
			OUT	2"	40					55		SIZE		VTA						
LINE NO.		NIT-112-0006A-AN01-2"-PT				56		SPRING FAIL ACTION		Fail to Close										
VALVE BODY & BONNET	14		TYPE				Full Bore Ball Valve		57		MAX ALLOWABLE PRESSURE		VTA							
	15		SIZE				2"		58		MIN REQUIRES PRESSURE		VTA							
	16		MAX PRESS./TEMP.				As per PMS		59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
	17		MFR. & MODEL				Will be finalized later		60		BENCH RANGE		VTA							
	18		BODY / BONNET MATL				ASTM A216 Gr. WCB		61		TRAVELING TIME		5 S							
	19		LINER MATERIAL / ID				VTA		62		FUNCTION		On/Off							
	20		END CONNECTION		IN	2"/300#		63		LOCAL POSITION INDICATOR		Required								
	21		OUT		2"/300#		64		ACT. ORIENTATION		VTA									
	22		FLG FACE FINISH				RF		65		HAND WHEEL TYPE		Declutchable side mounted							
	23		END EXT./MATL.				N/A		66		ADJUSTABLE LIMIT STOP		Yes							
	24		FLOW DIRECTION				(Note 18 in Page 4)		67		INPUT SIGNAL		24VDC							
25		TYPE OF BONNET				Standard		68		MFR. & MODEL		Will be finalized later								
26		LUBE & ISO VALVE		No		69		TYPE		N/A										
27		PACKING MATERIAL		PACKING TYPE		PTFE		70		MFR. & MODEL		Will be finalized later								
28		ENTRY DESIGN				Top Entry		71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
29		NACE REQUIREMENTNACE (MR-0175/ISO 15156)				No		72		GAUGES		N/A								
TRIM	29		TRIM		TYPE	MATERIAL		VTA		13Cr+PTFE										
	30		SIZE		RATED TRAVEL		VTA		73		CAM CHARACTERISTIC		N/A							
	31		CHARACTERISTICS				On/Off		74		AIR CONNECTION		N/A							
	32		BALANCED / UNBALANCED				BALANCED		75		TAG NO. :		XZSC-2124A / XZSO-2124A							
	33		RATED Cv		FL	XT		VTA		VTA		VTA		76		TYPE		QUANTITY	Magnetically operated 'REED' contacts	2
	34		PLUG / BALL / DISK MATERIAL				13Cr		77		CONTACTS / RATING		110V DC , 10A							
	35		SEAT		TYPE	MATERIAL		Soft Seat		13Cr+PTFE		78		ACTUATION POINT		Fully Open/Close				
	36		CAGE / GUIDE MATERIAL				VTA		79		ENCLOSURE MATERIAL		Die Cast Aluminum							
	37		STEM		TYPE	MATERIAL		Anti-Blow Out		13Cr		80		WEATHER PROTECTION		IP-65				
	38		LEAKAGE CLASS				ANSI Class VI		81		ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5			
	39		VALVE STEM EXTENSION REQUIREMENT				No		82		MFR. & MODEL		Will be finalized later							
SOLENOID VALVE	40		TAG NO				PSOV-2124A , ESOV-2124A		83		SET PRESSURE		Yes							
	41		TYPE				3 Way		84		PNEUMATIC CONNECTION		1/4" NPT							
	42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85		GAUGES		FILTER		Required		Required	
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5		86		MFR. & MODEL		Will be finalized later					
	44		MANUAL RESET				Yes		87		ANSI/FCI LEAKAGE CLASS		Required							
	45		Power Supply				24 VDC		88		HYDRO PRESSURE		Required							
	46		Pnu. Connection		1/4" NPT		89		FUNCTIONAL TEST		Required									
SPECIAL / ACCESS.	47		FUSIBLE LEAKAGE				No		90											
	48		BLOCK RELAY				No		91											
	49		QUICK EXHUST				Yes		92											
	50		FILTER REGULATOR				Yes		93		PASSIVE FIRE PROTECTION		No							
	51		VOLUME TANK				No		94		API 6FA REQUIREMENTS		Yes							
	52		MECHANICAL POSITION INDICATOR				Required		95		SIL REQUIREMENTS		Yes							
	53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE				Yes		96		PARTIAL STROKING VALVE TEST		No							
54								97												
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																				
(1) PMS: Piping material specification.																				
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 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض										 HURGAN 							
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک										Data Sheets For ON/OFF & Shutdown Valves							
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریتال	نسخه	شماره صفحه: 29 از 44									
BK		GCS		PEDCO		120		IN		DT		0010		D03					
On-Off Valve																			
TAG NO:		XV-2124B		P&ID NO :		D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (2/3)		SERVICE:		1st Stage Gas Compression Suction Drums							
FLUID STATE:		Gas		PHASE:		Nitrogen		AREA CLASSIFICATION:		Zone2, IIB, T4									
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off					
	1	FLOW RATE					kg/h		-		25		-						
	2	INLET PRESSURE					bar(g)		-		8		-						
	3	OUTLET PRESSURE					bar(g)		-		8		-						
	4	DIFFERENTIAL PRESSURE					bar(g)		-		-		-		18.2				
	5	INLET TEMPERATURE					°C		-		60		-						
	6	DENSITY					kg/m3		-		8.62		-						
	7	VISCOSITY					CP		-		0.02		-						
	8	DESIGN PRESSURE					bar(g)						18.2						
	9	DESIGN TEMPERATURE					°C						85						
	10	VAPOR PRESSURE Pv					bar(a)		-		-		-		-				
11	CRITICAL PRESSURE					bar(a)		-		33.94		-		-					
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40	CORROSION ALLOWANCE(mm)		1		54		TYPE		Single Acting, Spring Return					
			OUT	2"	40					55		SIZE		VTA					
13		LINE NO.		NIT-112-0006B-AN01-2"-PT		56		SPRING FAIL ACTION		Fail to Close									
VALVE BODY & BONNET	14		TYPE		Full Bore Ball Valve		57		MAX ALLOWABLE PRESSURE		VTA								
	15		SIZE		2"		58		MIN REQUIRES PRESSURE		VTA								
	16		MAX PRESS./TEMP.		As per PMS		59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
	17		MFR. & MODEL		Will be finalized later		60		BENCH RANGE		VTA								
	18		BODY / BONNET MATL		ASTM A216 Gr. WCB		61		TRAVELING TIME		5 S								
	19		LINER MATERIAL / ID		VTA		62		FUNCTION		On/Off								
	20		END CONNECTION		IN	2"/300#	63		LOCAL POSITION INDICATOR		Required								
	21		FLG FACE FINISH		RF		64		ACT. ORIENTATION		VTA								
	22		END EXT./MATL.		N/A		65		HAND WHEEL TYPE		Detachable side mounted								
	23		FLOW DIRECTION		(Note 18 in Page 4)		66		ADJUSTABLE LIMIT STOP		Yes								
	24		TYPE OF BONNET		Standard		67		INPUT SIGNAL		24VDC								
	25		LUBE & ISO VALVE		No		68		MFR. & MODEL		Will be finalized later								
	26		PACKING MATERIAL		PACKING TYPE		PTFE		Standard		69		TYPE		N/A				
	27		ENTRY DESIGN		Top Entry		70		MFR. & MODEL		Will be finalized later								
	28		NACE REQUIREMENTNACE (MR-0175/ISO 15156)		No		71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
	TRIM	29		TRIM		TYPE	MATERIAL	VTA	13Cr+PTFE		72		GAUGES		N/A				
		30		SIZE		RATED TRAVEL		VTA		VTA		73		CAM CHARACTERISTIC		N/A			
31		CHARACTERISTICS		On/Off		74		AIR CONNECTION		N/A									
32		BALANCED / UNBALANCED		BALANCED		75		TAG NO. :		XZSC-2124B / XZSO-2124B									
33		RATED Cv		FL	XT	VTA	VTA		VTA		76		TYPE		QUANTITY	Magnetically operated / REED contacts	2		
34		PLUG / BALL / DISK MATERIAL		13Cr		77		CONTACTS / RATING		110V DC , 10A									
35		SEAT		TYPE	MATERIAL	Soft Seat	13Cr+PTFE		78		ACTUATION POINT		Fully Open/Close						
36		CAGE / GUIDE MATERIAL		VTA		79		ENCLOSURE MATERIAL		Die Cast Aluminum									
37		STEM		TYPE	MATERIAL	Anti-Blow Out	13Cr		80		WEATHER PROTECTION		IP-65						
38		LEAKAGE CLASS		ANSI Class VI		81		ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" , IIB T4	ISO M20 x 1.5							
SOLENOID VALVE	40		TAG NO		PSOV-2124B , ESOV-2124B		82		MFR. & MODEL		Will be finalized later								
	41		TYPE		3 Way		83		SET PRESSURE		Yes								
	42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		84		PNEUMATIC CONNECTION		1/4" NPT				
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5		85		GAUGES		FILTER	Required	Required		
	44		MANUAL RESET		Yes		86		MFR. & MODEL		Will be finalized later								
	45		Power Supply		24 VDC		87		ANSI/FCI LEAKAGE CLASS		Required								
	46		Pnu. Connection		1/4" NPT		88		HYDRO PRESSURE		Required								
	47		FUSIBLE LEAKAGE		No		89		FUNCTIONAL TEST		Required								
SPECIAL / ACCESS.	48		BLOCK RELAY		No		90												
	49		QUICK EXHUST		Yes		91												
	50		FILTER REGULATOR		Yes		92												
	51		VOLUME TANK		No		93		PASSIVE FIRE PROTECTION		No								
	52		MECHANICAL POSITION INDICATOR		Required		94		API 6FA REQUIREMENTS		Yes								
	53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes		95		SIL REQUIREMENTS		Yes								
												96		PARTIAL STROKING VALVE TEST		No			
																97			
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																			
(1) PMS: Piping material specification.																			
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 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HURGAN ENERGY													
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																			
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریتال	نسخه	شماره صفحه: 30 از 44											
BK		GCS	PEDCO	120	IN	DT	0010	D03													
On-Off Valve																					
TAG NO: XV-2124C		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0006-D09 (3/3)				SERVICE: 1st Stage Gas Compression Suction Drums													
FLUID STATE: Gas		PHASE: Nitrogen						AREA CLASSIFICATION: Zone2, IIB, T4													
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow		Min. Flow		Shut-Off							
	1	FLOW RATE					kg/h		-		25		-								
	2	INLET PRESSURE					bar(g)		-		8		-								
	3	OUTLET PRESSURE					bar(g)		-		8		-								
	4	DIFFERENTIAL PRESSURE					bar(g)		-		-		-		18.2						
	5	INLET TEMPERATURE					°C		-		60		-								
	6	DENSITY					kg/m3		-		8.62		-								
	7	VISCOSITY					CP		-		0.02		-								
	8	DESIGN PRESSURE					bar(g)						18.2								
	9	DESIGN TEMPERATURE					°C						85								
	10	VAPOR PRESSURE Pv					bar(a)		-		-		-		-						
11	CRITICAL PRESSURE					bar(a)		-		33.94		-		-							
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40	CORROSION ALLOWANCE(mm)		1		54		TYPE		Single Acting, Spring Return							
	LINE NO.		OUT	2"	40	NIT-112-0006C-AN01-2"-P				55		SIZE		VTA							
VALVE BODY & BONNET	13									56		SPRING FAIL ACTION		Fail to Close							
	14		TYPE					Full Bore Ball Valve		57		MAX ALLOWABLE PRESSURE		VTA							
	15		SIZE					2"		58		MIN REQUIRES PRESSURE		VTA							
	16		MAX PRESS./TEMP.					As per PMS		59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
	17		MFR. & MODEL					Will be finalized later		60		BENCH RANGE		VTA							
	18		BODY / BONNET MATL					ASTM A216 Gr. WCB		61		TRAVELING TIME		5 S							
	19		LINER MATERIAL / ID					VTA		62		FUNCTION		On/Off							
	20		END CONNECTION		IN	2"/300#				63		LOCAL POSITION INDICATOR		Required							
	21		OUT		2"/300#				64		ACT. ORIENTATION		VTA								
	22		FLG FACE FINISH					RF		65		HAND WHEEL TYPE		Detachable side mounted							
	23		END EXT./MATL.					N/A		66		ADJUSTABLE LIMIT STOP		Yes							
	24		FLOW DIRECTION					(Note 18 in Page 4)		67		INPUT SIGNAL		24VDC							
	25		TYPE OF BONNET					Standard		68		MFR. & MODEL		Will be finalized later							
	26		LUBE & ISO VALVE					No		69		TYPE		N/A							
	27		PACKING MATERIAL		PACKING TYPE		PTFE		Standard		70		MFR. & MODEL		Will be finalized later						
	28		ENTRY DESIGN					Top Entry		71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A							
29		NACE REQUIREMENTNACE (MR-0175/ISO 15156)					No		72		GAUGES		N/A								
TRIM	29		TRIM		TYPE	MATERIAL		VTA		13Cr+PTFE		73		CAM CHARACTERISTIC		N/A					
	30		SIZE		RATED TRAVEL		VTA		VTA		74		AIR CONNECTION		N/A						
	31		CHARACTERISTICS					On/Off		75		TAG NO. :		XZSC-2124C / XZSO-2124C							
	32		BALANCED / UNBALANCED					BALANCED		76		TYPE		QUANTITY		Magnetically operated 'REED' contacts		2			
	33		RATED Cv		FL	XT		VTA		VTA		VTA		77		CONTACTS / RATING		110V DC , 10A			
	34		PLUG / BALL / DISK MATERIAL					13Cr		78		ACTUATION POINT					Fully Open/Close				
	35		SEAT		TYPE	MATERIAL		Soft Seat		13Cr+PTFE		79		ENCLOSURE MATERIAL					Die Cast Aluminum		
	36		CAGE / GUIDE MATERIAL					VTA		80		WEATHER PROTECTION					IP-65				
	37		STEM		TYPE	MATERIAL		Anti-Blow Out		13Cr		81		ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5	
	38		LEAKAGE CLASS					ANSI Class VI		82		MFR. & MODEL					Will be finalized later				
39		VALVE STEM EXTENSION REQUIREMENT					No		83		SET PRESSURE					Yes					
SOLENOID VALVE	40		TAG NO					PSOV-2124C , ESOV-2124C		84		PNEUMATIC CONNECTION					1/4" NPT				
	41		TYPE					3 Way		85		GAUGES		FILTER		Required		Required			
	42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		86		MFR. & MODEL					Will be finalized later			
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5		87		ANSI/FCI LEAKAGE CLASS					Required			
	44		MANUAL RESET					Yes		88		HYDRO PRESSURE					Required				
	45		Power Supply					24 VDC		89		FUNCTIONAL TEST					Required				
	46		Pnu. Connection		1/4" NPT				90												
SPECIAL / ACCESS.	47		FUSIBLE LEAKAGE					No		91											
	48		BLOCK RELAY					No		92											
	49		QUICK EXHUST					Yes		93		PASSIVE FIRE PROTECTION					No				
	50		FILTER REGULATOR					Yes		94		API 6FA REQUIREMENTS					Yes				
	51		VOLUME TANK					No		95		SIL REQUIREMENTS					Yes				
	52		MECHANICAL POSITION INDICATOR					Required		96		PARTIAL STROKING VALVE TEST					No				
	53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE					Yes		97											
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																					
(1) PMS: Piping material specification.																					
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض					 			
NISOC		Data Sheets For ON/OFF & Shutdown Valves								
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
		BK	GCS	PEDCO	120	IN	DT	0010	D03	
شماره صفحه: 31 از 44										
On-Off Valve										
TAG NO: XV-2131A		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0009-D09 (1 of 3)				SERVICE: 2nd Stage Gas Compression Suction Drums		
FLUID STATE: CLOSED DRAIN		PHASE: LIQUID		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	DESIGN PRESSURE			bar(g)		30.3			
	9	DESIGN TEMPERATURE			°C		155			
	10	VAPOR PRESSURE Pv			bar(a)		-	3.23	-	-
11	CRITICAL PRESSURE			bar(a)		221.5	221.5	221.5	-	
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	10S	CORROSION ALLOWANCE(mm)		0		
			OUT	2"	10S					
LINE NO.		CDH-111-0023A-CS00-2"-NP								
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Floating Type							
	15 SIZE		2"							
	16 MAX PRESS./TEMP.		As per PMS							
	17 MFR. & MODEL		Will be finalized later							
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M							
	19 LINER MATERIAL / ID		VTA							
	20 END CONNECTION		IN	2"/300#						
			OUT	2"/300#						
	21 FLG FACE FINISH		RF							
	22 END EXT./MATL.		N/A							
	23 FLOW DIRECTION		(Note 18 in Page 4)							
24 TYPE OF BONNET		Standard								
25 LUBE & ISO VALVE		No								
26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard		
27 ENTRY DESIGN		Top / Side Entry								
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes								
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		
	30 SIZE		RATED TRAVEL		VTA		VTA			
	31 CHARACTERISTICS		On/Off							
	32 BALANCED / UNBALANCED		BALANCED							
	33 RATED Cv		FL	XT		VTA		VTA		
	34 PLUG / BALL / DISK MATERIAL		316 SS							
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE		
	36 CAGE / GUIDE MATERIAL		VTA							
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		
	38 LEAKAGE CLASS		ANSI Class VI							
	39 VALVE STEM EXTENSION REQUIREMENT		No							
SOLENOID VALVE	40 TAG NO		PSOV-2131A , ESOV-2131A							
	41 TYPE		3 Way							
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65			
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5			
	44 MANUAL RESET		Yes							
	45 Power Supply		24 VDC							
	46 Pnu. Connection		1/4" NPT							
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No							
	48 BLOCK RELAY		No							
	49 QUICK EXHUST		Yes							
	50 FILTER REGULATOR		Yes							
	51 VOLUME TANK		No							
	52 MECHANICAL POSITION INDICATOR		Required							
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes							
ACTUATOR	54 TYPE		Single Acting, Spring Return							
	55 SIZE		VTA							
	56 SPRING FAIL ACTION		Fail to Close							
	57 MAX ALLOWABLE PRESSURE		VTA							
	58 MIN REQUIRES PRESSURE		VTA							
	59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
	60 BENCH RANGE		VTA							
	61 TRAVELING TIME		5 S							
	62 FUNCTION		On/Off							
	63 LOCAL POSITION INDICATOR		Required							
	64 ACT. ORIENTATION		VTA							
	65 HAND WHEEL TYPE		Detachable side mounted							
	66 ADJUSTABLE LIMIT STOP		Yes							
	67 INPUT SIGNAL		24VDC							
	68 MFR. & MODEL		Will be finalized later							
	POSITIONER	69 TYPE		N/A						
		70 MFR. & MODEL		Will be finalized later						
		71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A						
72 GAUGES		N/A								
LIMIT SWITCHES	73 CAM CHARACTERISTIC		N/A							
	74 AIR CONNECTION		N/A							
	75 TAG NO. :		XZSC-2131A / XZSO-2131A							
	76 TYPE		QUANTITY		Magnetically operated 'REED' contacts		2			
	77 CONTACTS / RATING		110V DC , 10A							
	78 ACTUATION POINT		Fully Open/Close							
	79 ENCLOSURE MATERIAL		Die Cast Aluminum							
	80 WEATHER PROTECTION		IP-65							
	81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5			
	82 MFR. & MODEL		Will be finalized later							
AIR SET	83 SET PRESSURE		Yes							
	84 PNEUMATIC CONNECTION		1/4" NPT							
	85 GAUGES		FILTER		Required		Required			
	86 MFR. & MODEL		Will be finalized later							
TEST	87 ANSI/FCI LEAKAGE CLASS		Required							
	88 HYDRO PRESSURE		Required							
	89 FUNCTIONAL TEST		Required							
	90									
FIRE PROOF DESIGN	91									
	92									
	93 PASSIVE FIRE PROTECTION		No							
	94 API 6FA REQUIREMENTS		Yes							
	95 SIL REQUIREMENTS		Yes							
	96 PARTIAL STROKING VALVE TEST		No							
	97									
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 MORGAN SHIRAZ		 TG	
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 32 از 44	
BK		GCS		PEDCO		120		IN		DT	
0010		D03									
On-Off Valve											
TAG NO: XV-2131B		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0009-D09 (2 of 3)						SERVICE: 2nd Stage Gas Compression Suction Drums	
FLUID STATE: CLOSED DRAIN		PHASE: LIQUID		AREA CLASSIFICATION: Zone2, IIB, T4							
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow	
	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)		-		-	
	5 INLET TEMPERATURE					°C		-		59.88	
	6 DENSITY					kg/m3		-		981.1	
	7 VISCOSITY					CP		-		0.496	
	8 DESIGN PRESSURE					bar(g)		-		30.3	
	9 DESIGN TEMPERATURE					°C		-		155	
	10 VAPOR PRESSURE Pv					bar(a)		-		3.23	
11 CRITICAL PRESSURE					bar(a)		221.5		221.5		
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	10S	CORROSION ALLOWANCE(mm)		0			
	13 LINE NO.		CDH-111-0023B-CS00-2"-NP								
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Floating Type								
	15 SIZE		2"								
	16 MAX PRESS./TEMP.		As per PMS								
	17 MFR. & MODEL		Will be finalized later								
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M								
	19 LINER MATERIAL / ID		VTA								
	20 END CONNECTION		IN	2"/300#							
			OUT	2"/300#							
	21 FLG FACE FINISH		RF								
	22 END EXT./MATL.		N/A								
	23 FLOW DIRECTION		(Note 18 in Page 4)								
24 TYPE OF BONNET		Standard									
25 LUBE & ISO VALVE		No									
26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard			
27 ENTRY DESIGN		Top / Side Entry									
28 NACE REQUIREMENT/NACE (MR-0175/ISO 15156)		Yes									
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE			
	30 SIZE		RATED TRAVEL		VTA		VTA				
	31 CHARACTERISTICS		On/Off								
	32 BALANCED / UNBALANCED		BALANCED								
	33 RATED Cv		FL	XT		VTA		VTA		VTA	
	34 PLUG / BALL / DISK MATERIAL		316 SS								
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE			
	36 CAGE / GUIDE MATERIAL		VTA								
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS			
	38 LEAKAGE CLASS		ANSI Class VI								
	39 VALVE STEM EXTENSION REQUIREMENT		No								
SOLENOID VALVE	40 TAG NO		PSOV-2131B, ESOV-2131B								
	41 TYPE		3 Way								
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	44 MANUAL RESET		Yes								
	45 Power Supply		24 VDC								
	46 Pnu. Connection		1/4" NPT								
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No								
	48 BLOCK RELAY		No								
	49 QUICK EXHUST		Yes								
	50 FILTER REGULATOR		Yes								
	51 VOLUME TANK		No								
	52 MECHANICAL POSITION INDICATOR		Required								
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes								
ACTUATOR	54 TYPE		Single Acting, Spring Return								
	55 SIZE		VTA								
	56 SPRING FAIL ACTION		Fail to Close								
	57 MAX ALLOWABLE PRESSURE		VTA								
	58 MIN REQUIRES PRESSURE		VTA								
	59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
	60 BENCH RANGE		VTA								
	61 TRAVELING TIME		5 S								
	62 FUNCTION		On/Off								
	63 LOCAL POSITION INDICATOR		Required								
	64 ACT. ORIENTATION		VTA								
65 HAND WHEEL TYPE		Detachable side mounted									
66 ADJUSTABLE LIMIT STOP		Yes									
67 INPUT SIGNAL		24VDC									
68 MFR. & MODEL		Will be finalized later									
POSITIONER	69 TYPE		N/A								
	70 MFR. & MODEL		Will be finalized later								
	71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A								
	72 GAUGES		N/A								
LIMIT SWITCHES	73 CAM CHARACTERISTIC		N/A								
	74 AIR CONNECTION		N/A								
	75 TAG NO. :		XZSC-2131B / XZSO-2131B								
	76 TYPE		QUANTITY		Magnetically operated 'REED' contacts		2				
	77 CONTACTS / RATING		110V DC , 10A								
	78 ACTUATION POINT		Fully Open/Close								
	79 ENCLOSURE MATERIAL		Die Cast Aluminum								
	80 WEATHER PROTECTION		IP-65								
	81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5				
	82 MFR. & MODEL		Will be finalized later								
	AIR SET	83 SET PRESSURE		Yes							
84 PNEUMATIC CONNECTION		1/4" NPT									
85 GAUGES		FILTER		Required		Required					
86 MFR. & MODEL		Will be finalized later									
TEST	87 ANSI/FCI LEAKAGE CLASS		Required								
	88 HYDRO PRESSURE		Required								
	89 FUNCTIONAL TEST		Required								
	90										
FIRE PROOF DESIGN	91										
	92										
	93 PASSIVE FIRE PROTECTION		No								
	94 API 6FA REQUIREMENTS		Yes								
	95 SIL REQUIREMENTS		Yes								
	96 PARTIAL STROKING VALVE TEST		No								
	97										
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 HORGAN ENERGY 				
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 33 از 44		
BK		GCS		PEDCO		120		IN		DT		
0010		D03										
On-Off Valve												
TAG NO: XV-2131C		P&ID NO : 		BK-GCS-PEDCO-120-PR-PI-0009-D09 (3 of 3)				SERVICE: 2nd Stage Gas Compression Suction Drums				
FLUID STATE: CLOSED DRAIN		PHASE:		LIQUID				AREA CLASSIFICATION: Zone2, IIB, T4				
SERVICE CONDITION	ITEM					UNITS		Max Flow		Norm. Flow		
	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)		-		-		
	5 INLET TEMPERATURE					°C		-		59.88		
	6 DENSITY					kg/m3		-		981.1		
	7 VISCOSITY					CP		-		0.496		
	8 DESIGN PRESSURE					bar(g)		-		30.3		
	9 DESIGN TEMPERATURE					°C		-		155		
	10 VAPOR PRESSURE Pv					bar(a)		-		3.23		
11 CRITICAL PRESSURE					bar(a)		221.5		221.5			
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	10S	CORROSION ALLOWANCE(mm)		0				
	13 LINE NO.		CDH-111-0023C-CS00-2"-NP									
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve/Floating Type									
	15 SIZE		2"									
	16 MAX PRESS./TEMP.		As per PMS									
	17 MFR. & MODEL		Will be finalized later									
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M									
	19 LINER MATERIAL / ID		VTA									
	20 END CONNECTION		IN	2"/300#								
			OUT	2"/300#								
	21 FLG FACE FINISH		RF									
	22 END EXT.MATL.		N/A									
	23 FLOW DIRECTION		(Note 18 in Page 4)									
24 TYPE OF BONNET		Standard										
25 LUBE & ISO VALVE		No										
26 PACKING MATERIAL		PACKING TYPE		RPTFE				Standard				
27 ENTRY DESIGN		Top / Side Entry										
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes										
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE				
	30 SIZE		RATED TRAVEL		VTA		VTA					
	31 CHARACTERISTICS		On/Off									
	32 BALANCED / UNBALANCED		BALANCED									
	33 RATED Cv		FL	XT		VTA		VTA		VTA		
	34 PLUG / BALL / DISK MATERIAL		316 SS									
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE				
	36 CAGE / GUIDE MATERIAL		VTA									
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS				
	38 LEAKAGE CLASS		ANSI Class VI									
	39 VALVE STEM EXTENSION REQUIREMENT		No									
SOLENOID VALVE	40 TAG NO		PSOV-2131C, ESOV-2131C									
	41 TYPE		3 Way									
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65					
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	44 MANUAL RESET		Yes									
	45 Power Supply		24 VDC									
	46 Pnu. Connection		1/4" NPT									
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No									
	48 BLOCK RELAY		No									
	49 QUICK EXHUST		Yes									
	50 FILTER REGULATOR		Yes									
	51 VOLUME TANK		No									
	52 MECHANICAL POSITION INDICATOR		Required									
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes									
ACTUATOR	54 TYPE		Single Acting, Spring Return									
	55 SIZE		VTA									
	56 SPRING FAIL ACTION		Fail to Close									
	57 MAX ALLOWABLE PRESSURE		VTA									
	58 MIN REQUIRES PRESSURE		VTA									
	59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g									
	60 BENCH RANGE		VTA									
	61 TRAVELING TIME		5 S									
	62 FUNCTION		On/Off									
	63 LOCAL POSITION INDICATOR		Required									
	64 ACT. ORIENTATION		VTA									
	65 HAND WHEEL TYPE		Detachable side mounted									
	66 ADJUSTABLE LIMIT STOP		Yes									
	67 INPUT SIGNAL		24VDC									
	68 MFR. & MODEL		Will be finalized later									
	POSITIONER	69 TYPE		N/A								
		70 MFR. & MODEL		Will be finalized later								
71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A										
72 GAUGES		N/A										
LIMIT SWITCHES	73 CAM CHARACTERISTIC		N/A									
	74 AIR CONNECTION		N/A									
	75 TAG NO. :		XZSC-2131C / XZSO-2131C									
	76 TYPE		QUANTITY		Magnetically operated 'REED' contacts		2					
	77 CONTACTS / RATING		110V DC , 10A									
	78 ACTUATION POINT		Fully Open/Close									
	79 ENCLOSURE MATERIAL		Die Cast Aluminum									
	80 WEATHER PROTECTION		IP-65									
	81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	82 MFR. & MODEL		Will be finalized later									
AIR SET	83 SET PRESSURE		Yes									
	84 PNEUMATIC CONNECTION		1/4" NPT									
	85 GAUGES		FILTER		Required		Required					
	86 MFR. & MODEL		Will be finalized later									
TEST	87 ANSI/FCI LEAKAGE CLASS		Required									
	88 HYDRO PRESSURE		Required									
	89 FUNCTIONAL TEST		Required									
	90											
FIRE PROOF DESIGN	91											
	92											
	93 PASSIVE FIRE PROTECTION		No									
	94 API 6FA REQUIREMENTS		Yes									
	95 SIL REQUIREMENTS		Yes									
	96 PARTIAL STROKING VALVE TEST		No									
	97											
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 MORGAN SHIRAZ				
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 34 از 44		
BK		GCS	PEDCO	120	IN	DT	0010	D03				
On-Off Valve												
TAG NO: XV-2133A		P&ID NO : D03			BK-GCS-PEDCO-120-PR-PI-0011-D09 (1 of 3)			SERVICE: 2nd Stage Gas Compression Air Coolers				
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	3032.4	-	
	2	INLET PRESSURE					bar(g)	54.1	54.1	54.1	-	
	3	OUTLET PRESSURE					bar(g)	54.1	54.1	54.1	-	
	4	DIFFERENTIAL PRESSURE					bar(g)	-	-	-	62.4	
	5	INLET TEMPERATURE					°C	-	60	-	-	
	6	DENSITY					kg/m3	49.41 ~ 59.63	49.41 ~ 59.63	49.41 ~ 59.63	-	
	7	VISCOSITY					CP	0.014	0.014	0.014	-	
	8	DESIGN PRESSURE					bar(g)	62.4				
	9	DESIGN TEMPERATURE					°C	175				
	10	VAPOR PRESSURE Pv					bar(a)	-	-	-	-	
11	CRITICAL PRESSURE					bar(a)	94.66	94.66	94.66	-		
LINE	12	PIPE LINE SIZE & SCHEDULE		IN	6"	40S	CORROSION ALLOWANCE(mm)		0			
	13	LINE NO.		GAS-111-0055A-FS00-6"-IS								
VALVE BODY & BONNET	14	TYPE		Full Bore Ball Valve/Trunnion Mounted								
	15	SIZE		6"								
	16	MAX PRESS./TEMP.		As per PMS								
	17	MFR. & MODEL		Will be finalized later								
	18	BODY / BONNET MATL		ASTM A351 GR.CF3M								
	19	LINER MATERIAL / ID		VTA								
	20	END CONNECTION	IN	6"/600#								
			OUT	6"/600#								
	21	FLG FACE FINISH		RF								
	22	END EXT.MATL.		N/A								
	23	FLOW DIRECTION		(Note 18 in Page 4)								
	24	TYPE OF BONNET		Standard								
	25	LUBE & ISO VALVE		No								
	26	PACKING MATERIAL		PACKING TYPE	RPTFE		Standard					
27	ENTRY DESIGN		Top / Side Entry									
28	NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes									
TRIM	29	TRIM	TYPE	MATERIAL		VTA		316 SS+RPTFE				
	30	SIZE	RATED TRAVEL		VTA		VTA					
	31	CHARACTERISTICS		On/Off								
	32	BALANCED / UNBALANCED		BALANCED								
	33	RATED Cv	FL	XT	VTA		VTA		VTA			
	34	PLUG / BALL / DISK MATERIAL		316 SS								
	35	SEAT	TYPE	MATERIAL		Soft Seat		316 SS+RPTFE				
	36	CAGE / GUIDE MATERIAL		VTA								
	37	STEM	TYPE	MATERIAL		Anti-Blow Out		316 SS				
SOLENOID VALVE	40	TAG NO		PSOV-2133A, ESOV-2133A								
	41	TYPE		3 Way								
	42	BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65				
	43	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	44	MANUAL RESET		Yes								
	45	Power Supply		24 VDC								
	46	Pnu. Connection		1/4" NPT								
SPECIAL / ACCESS.	47	FUSIBLE LEAKAGE		No								
	48	BLOCK RELAY		No								
	49	QUICK EXHUST		Yes								
	50	FILTER REGULATOR		Yes								
	51	VOLUME TANK		No								
	52	MECHANICAL POSITION INDICATOR		Required								
	53	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes								
ACTUATOR	54	TYPE		Single Acting, Spring Return								
	55	SIZE		VTA								
	56	SPRING FAIL ACTION		Fail to Close								
	57	MAX ALLOWABLE PRESSURE		VTA								
	58	MIN REQUIRES PRESSURE		VTA								
	59	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g								
	60	BENCH RANGE		VTA								
	61	TRAVELING TIME		7 S								
	62	FUNCTION		On/Off								
	63	LOCAL POSITION INDICATOR		Required								
	64	ACT. ORIENTATION		VTA								
	65	HAND WHEEL TYPE		Detachable side mounted								
	66	ADJUSTABLE LIMIT STOP		Yes								
	67	INPUT SIGNAL		24VDC								
	68	MFR. & MODEL		Will be finalized later								
	POSITIONER	69	TYPE		N/A							
		70	MFR. & MODEL		Will be finalized later							
		71	ON INCR SIGNAL OUTPUT INCR / DECR		N/A							
72		GAUGES		N/A								
LIMIT SWITCHES	73	CAM CHARACTERISTIC		N/A								
	74	AIR CONNECTION		N/A								
	75	TAG NO. :		XZSC-2133A / XZSO-2133A								
	76	TYPE	QUANTITY		Magnetically operated 'REED' contacts		2					
	77	CONTACTS / RATING		110V DC , 10A								
	78	ACTUATION POINT		Fully Open/Close								
	79	ENCLOSURE MATERIAL		Die Cast Aluminum								
	80	WEATHER PROTECTION		IP-65								
AIR SET	81	ELEC. CERTIFICATE	ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	82	MFR. & MODEL		Will be finalized later								
	83	SET PRESSURE		Yes								
	84	PNEUMATIC CONNECTION		1/4" NPT								
	85	GAUGES	FILTER		Required		Required					
	86	MFR. & MODEL		Will be finalized later								
	87	ANSI/FCI LEAKAGE CLASS		Required								
	88	HYDRO PRESSURE		Required								
TEST	89	FUNCTIONAL TEST		Required								
	90											
	91											
	92											
FIRE PROOF DESIGN	93	PASSIVE FIRE PROTECTION		No								
	94	API 6FA REQUIREMENTS		Yes								
	95	SIL REQUIREMENTS		Yes								
	96	PARTIAL STROKING VALVE TEST		No								
	97											
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

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: 053 - 073 - 9038

نسخه: D03
سریال: 0010
نوع مدرک: DT
رشته: IN
تهیهات: 120
صادر کننده: PEDCO
بسته کاری: GCS
پروژه: BK

شماره صفحه: 35 از 44

On-Off Valve

TAG NO: XV-2133B
P&ID NO : D03
BK-GCS-PEDCO-120-PR-PI-0011-D09 (2 of 3)

SERVICE: 2nd Stage Gas Compression Air Coolers

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	3032.4	-		
	2	INLET PRESSURE			bar(g)	54.1	54.1	54.1	-		
	3	OUTLET PRESSURE			bar(g)	54.1	54.1	54.1	-		
	4	DIFFERENTIAL PRESSURE			bar(g)	-	-	-	62.4		
	5	INLET TEMPERATURE			°C	-	60	-	-		
	6	DENSITY			kg/m3	49.41 ~ 59.63	49.41 ~ 59.63	49.41 ~ 59.63	-		
	7	VISCOSITY			CP	0.014	0.014	0.014	-		
	8	DESIGN PRESSURE			bar(g)	62.4					
	9	DESIGN TEMPERATURE			°C	175					
	10	VAPOR PRESSURE Pv			bar(a)	-	-	-	-		
11	CRITICAL PRESSURE			bar(a)	94.66	94.66	94.66	-			
LINE	12	PIPE LINE SIZE & SCHEDULE	IN	6"	40S	CORROSION ALLOWANCE(mm)	0	54	TYPE	Single Acting, Spring Return	
	13	LINE NO.	OUT	6"	40S			55	SIZE	VTA	
VALVE BODY & BONNET	GAS-111-0055B-FS00-6"-IS					ACTUATOR	56	SPRING FAIL ACTION	Fail to Close		
	14	TYPE			Full Bore Ball Valve/Transition Mounted		57	MAX ALLOWABLE PRESSURE	VTA		
	15	SIZE			6"		58	MIN REQUIRES PRESSURE	VTA		
	16	MAX PRESS./TEMP.			As per PMS		59	AVAILABLE AIR SUPPLY PRESSURE	MAX/NOR/MIN: 10/7/3 bar-g		
	17	MFR. & MODEL			Will be finalized later		60	BENCH RANGE	VTA		
	18	BODY / BONNET MATL			ASTM A351 GR.CF3M		61	TRAVELING TIME	7 S		
	19	LINER MATERIAL / ID			VTA		62	FUNCTION	On/Off		
	20	END CONNECTION	IN	6"/600#	6"/600#		63	LOCAL POSITION INDICATOR	Required		
	OUT	6"/600#	64	ACT. ORIENTATION			VTA				
	21	FLG FACE FINISH			RF		65	HAND WHEEL TYPE	Detachable side mounted		
	22	END EXT./MATL.			N/A		66	ADJUSTABLE LIMIT STOP	Yes		
	23	FLOW DIRECTION			(Note 18 in Page 4)		67	INPUT SIGNAL	24VDC		
	24	TYPE OF BONNET			Standard		68	MFR. & MODEL	Will be finalized later		
	25	LUBE & ISO VALVE			No		POSITIONER	69	TYPE	N/A	
26	PACKING MATERIAL	PACKING TYPE		RPTE	Standard	70		MFR. & MODEL	Will be finalized later		
27	ENTRY DESIGN			Top / Side Entry	71	ON INCR SIGNAL OUTPUT INCR / DECR		N/A			
28	NACE REQUIREMENTNACE (MR-0175/ISO 15156)			Yes	72	GAUGES		N/A			
TRIM	29	TRIM	TYPE	MATERIAL	VTA	316 SS+RPTE	73	CAM CHARACTERISTIC	N/A		
	30	SIZE	RATED TRAVEL		VTA	VTA	74	AIR CONNECTION	N/A		
	31	CHARACTERISTICS			On/Off	LIMIT SWITCHES	75	TAG NO. : XZSC-2133B / XZSO-2133B			
	32	BALANCED / UNBALANCED			BALANCED		76	TYPE	QUANTITY	Magnetically operated "REED" contacts 2	
	33	RATED Cv	FL	XT	VTA		VTA	VTA	77	CONTACTS / RATING	110V DC , 10A
	34	PLUG / BALL / DISK MATERIAL			316 SS		78	ACTUATION POINT Fully Open/Close			
	35	SEAT	TYPE	MATERIAL	Soft Seat		316 SS+RPTE	79	ENCLOSURE MATERIAL Die Cast Aluminum		
	36	CAGE / GUIDE MATERIAL			VTA		80	WEATHER PROTECTION IP-65			
	37	STEM	TYPE	MATERIAL	Anti-Blow Out		316 SS	81	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d" , IIB T4 ISO M20 x 1.5
	38	LEAKAGE CLASS			ANSI Class V1		82	MFR. & MODEL Will be finalized later			
39	VALVE STEM EXTENSION REQUIREMENT			No	83		SET PRESSURE Yes				
SOLENOID VALVE	40	TAG NO			PSOV-2133B, ESOV-2133B		AIR SET	84	PNEUMATIC CONNECTION 1/4" NPT		
	41	TYPE			3 Way			85	GAUGES	FILTER	Required Required
	42	BODY MATERIAL	WEATHER IP.		AISI 316 S.S IP-65			86	MFR. & MODEL Will be finalized later		
	43	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d" , IIB T4 ISO M20 x 1.5		TEST	87	ANSI/FCI LEAKAGE CLASS Required		
	44	MANUAL RESET			Yes			88	HYDRO PRESSURE Required		
	45	Power Supply			24 VDC			89	FUNCTIONAL TEST Required		
	46	Pnm. Connection			1/4" NPT			90			
SPECIAL / ACCESS.	47	FUSIBLE LEAKAGE			No		FIRE PROOF DESIGN	91			
	48	BLOCK RELAY			No			92			
	49	QUICK EXHUST			Yes			93	PASSIVE FIRE PROTECTION No		
	50	FILTER REGULATOR			Yes			94	API 6FA REQUIREMENTS Yes		
	51	VOLUME TANK			No			95	SIL REQUIREMENTS Yes		
	52	MECHANICAL POSITION INDICATOR			Required			96	PARTIAL STROKING VALVE TEST No		
	53	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE			Yes			97			

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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 گسترش نیروی دریایی  IRGC  IRGC									
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 36 از 44							
BK		GCS	PEDCO	120	IN	DT	0010	D03									
On-Off Valve																	
TAG NO: XV-2133C		P&ID NO: D03		BK-GCS-PEDCO-120-PR-PI-0011-D09 (3 of 3)				SERVICE: 2nd Stage Gas Compression Air Coolers									
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		3032.4		-			
	2 INLET PRESSURE					bar(g)		54.1		54.1		54.1		-			
	3 OUTLET PRESSURE					bar(g)		54.1		54.1		54.1		-			
	4 DIFFERENTIAL PRESSURE					bar(g)		-		-		-		62.4			
	5 INLET TEMPERATURE					°C		-		60		-		-			
	6 DENSITY					kg/m3		49.41 ~ 59.63		49.41 ~ 59.63		49.41 ~ 59.63		-			
	7 VISCOSITY					CP		0.014		0.014		0.014		-			
	8 DESIGN PRESSURE					bar(g)						62.4					
	9 DESIGN TEMPERATURE					°C						175					
	10 VAPOR PRESSURE Pv					bar(a)		-		-		-		-			
11 CRITICAL PRESSURE					bar(a)		94.66		94.66		94.66		-				
LINE	PIPE LINE SIZE & SCHEDULE		IN	6"	40S	CORROSION ALLOWANCE(mm)		0									
	13 LINE NO.		OUT		6"	40S		GAS-111-0055C-FS00-6"-IS									
VALVE BODY & BONNET	14 TYPE					Full Bore Ball Valve/Trunion Mounted											
	15 SIZE					6"											
	16 MAX PRESS./TEMP.					As per PMS											
	17 MFR. & MODEL					Will be finalized later											
	18 BODY / BONNET MATL					ASTM A351 GR.CF3M											
	19 LINER MATERIAL / ID					VTA											
	20 END CONNECTION		IN	6"/600#													
			OUT	6"/600#													
	21 FLG FACE FINISH					RF											
	22 END EXT.MATL.					N/A											
	23 FLOW DIRECTION					(Note 18 in Page 4)											
24 TYPE OF BONNET					Standard												
25 LUBE & ISO VALVE					No												
26 PACKING MATERIAL			PACKING TYPE		RPTFE				Standard								
27 ENTRY DESIGN					Top / Side Entry												
28 NACE REQUIREMENTNACE (MR-0175/ISO 15156)					Yes												
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE									
	30 SIZE		RATED TRAVEL		VTA		VTA		VTA								
	31 CHARACTERISTICS					On/Off											
	32 BALANCED / UNBALANCED					BALANCED											
	33 RATED Cv		FL	XT		VTA		VTA		VTA							
	34 PLUG / BALL / DISK MATERIAL					316 SS											
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE									
	36 CAGE / GUIDE MATERIAL					VTA											
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS									
	38 LEAKAGE CLASS					ANSI Class VI											
	39 VALVE STEM EXTENSION REQUIREMENT					No											
SOLENOID VALVE	40 TAG NO					PSOV-2133C, ESOV-2133C											
	41 TYPE					3 Way											
	42 BODY MATERIAL			WEATHER IP.		AISI 316 S.S		IP-65									
	43 ELE. CERTIFICATE			ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5									
	44 MANUAL RESET					Yes											
	45 Power Supply					24 VDC											
	46 Pnu. Connection			1/4" NPT													
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE					No											
	48 BLOCK RELAY					No											
	49 QUICK EXHUST					Yes											
	50 FILTER REGULATOR					Yes											
	51 VOLUME TANK					No											
	52 MECHANICAL POSITION INDICATOR					Required											
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE					Yes											
ACTUATOR	54 TYPE					Single Acting, Spring Return											
	55 SIZE					VTA											
	56 SPRING FAIL ACTION					Fail to Close											
	57 MAX ALLOWABLE PRESSURE					VTA											
	58 MIN REQUIRES PRESSURE					VTA											
	59 AVAILABLE AIR SUPPLY PRESSURE					MAX/NOR/MIN: 10/7/3 bar-g											
	60 BENCH RANGE					VTA											
	61 TRAVELING TIME					7 S											
	62 FUNCTION					On/Off											
	63 LOCAL POSITION INDICATOR					Required											
	64 ACT. ORIENTATION					VTA											
65 HAND WHEEL TYPE					Detachable side mounted												
66 ADJUSTABLE LIMIT STOP					Yes												
67 INPUT SIGNAL					24VDC												
68 MFR. & MODEL					Will be finalized later												
POSITIONER	69 TYPE					N/A											
	70 MFR. & MODEL					Will be finalized later											
	71 ON INCR SIGNAL OUTPUT INCR / DECR					N/A											
	72 GAUGES					N/A											
LIMIT SWITCHES	73 CAM CHARACTERISTIC					N/A											
	74 AIR CONNECTION					N/A											
	75 TAG NO. :					XZSC-2133C / XZSO-2133C											
	76 TYPE		QUANTITY		Magnetically operated REED contacts		2										
	77 CONTACTS / RATING					110V DC , 10A											
	78 ACTUATION POINT					Fully Open/Close											
	79 ENCLOSURE MATERIAL					Die Cast Aluminum											
	80 WEATHER PROTECTION					IP-65											
AIR SET	81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5										
	82 MFR. & MODEL					Will be finalized later											
	83 SET PRESSURE					Yes											
	84 PNEUMATIC CONNECTION					1/4" NPT											
TEST	85 GAUGES		FILTER		Required		Required										
	86 MFR. & MODEL					Will be finalized later											
	87 ANSI/FCI LEAKAGE CLASS					Required											
	88 HYDRO PRESSURE					Required											
FIRE PROOF DESIGN	89 FUNCTIONAL TEST					Required											
	90																
	91																
	92																
	93 PASSIVE FIRE PROTECTION					No											
94 API 6FA REQUIREMENTS					Yes												
95 SIL REQUIREMENTS					Yes												
96 PARTIAL STROKING VALVE TEST					No												
97																	
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض										 HORGAN ENERGY								
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																		
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریتال	نسخه	شماره صفحه: 37 از 44										
BK		GCS	PEDCO	120	IN	DT	0010	D03	On-Off Valve											
TAG NO: XV-2134A		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0011-D09 (1/3)						SERVICE: 2nd Stage Gas Compression Air Coolers										
FLUID STATE: Purge 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				-		25		-						
	2	INLET PRESSURE				bar(g)				-		8		-						
	3	OUTLET PRESSURE				bar(g)				-		8		-						
	4	DIFFERENTIAL PRESSURE				bar(g)				-		-		-		62.4				
	5	INLET TEMPERATURE				°C				-		60		-						
	6	DENSITY				kg/m3				-		8.62		-						
	7	VISCOSITY				CP				-		0.02		-						
	8	DESIGN PRESSURE				bar(g)								62.4						
	9	DESIGN TEMPERATURE				°C								175						
	10	VAPOR PRESSURE Pv				bar(a)				-		-		-		-				
11	CRITICAL PRESSURE				bar(a)				-		-		-		-					
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40S	CORROSION ALLOWANCE(mm)		0		54		TYPE		Single Acting, Spring Return						
	LINE NO.		OUT	2"	40S	GAS-111-0030A-FS00-2"-NP				55		SIZE		VTA						
VALVE BODY & BONNET	14		TYPE		Full Bore Ball Valve				56		SPRING FAIL ACTION		Fail to Close							
	15		SIZE		2"				57		MAX ALLOWABLE PRESSURE		VTA							
	16		MAX PRESS./TEMP.		As per PMS				58		MIN REQUIRES PRESSURE		VTA							
	17		MFR. & MODEL		Will be finalized later				59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g							
	18		BODY / BONNET MATL		ASTM A351 GR.CF3M				60		BENCH RANGE		VTA							
	19		LINER MATERIAL / ID		VTA				61		TRAVELING TIME		5 S							
	20		END CONNECTION		IN	2"/600#			62		FUNCTION		On/Off							
	21		FLG FACE FINISH		RF				63		LOCAL POSITION INDICATOR		Required							
	22		END EXT./MATL.		N/A				64		ACT. ORIENTATION		VTA							
	23		FLOW DIRECTION		(Note 18 in Page 4)				65		HAND WHEEL TYPE		Detachable side mounted							
	24		TYPE OF BONNET		Standard				66		ADJUSTABLE LIMIT STOP		Yes							
	25		LUBE & ISO VALVE		No				67		INPUT SIGNAL		24VDC							
	26		PACKING MATERIAL		PACKING TYPE		RPTFE	Standard	68		MFR. & MODEL		Will be finalized later							
	27		ENTRY DESIGN		Top Entry				69		TYPE		N/A							
	28		NACE REQUIREMENT		NACE (MR-0175/ISO 15156)		Yes		70		MFR. & MODEL		Will be finalized later							
	TRIM	29		TRIM		TYPE	MATERIAL	VTA	316 SS+RPTFE	71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A						
		30		SIZE		RATED TRAVEL		VTA	VTA	72		GAUGES		N/A						
31		CHARACTERISTICS		On/Off				73		CAM CHARACTERISTIC		N/A								
32		BALANCED / UNBALANCED		BALANCED				74		AIR CONNECTION		N/A								
33		RATED Cv		FL	XT	VTA	VTA	VTA	75		TAG NO. :		XZSC-2134A / XZSO-2134A							
34		PLUG / BALL / DISK MATERIAL		316 SS				76		TYPE		QUANTITY	Magnetically operated 'REED' contacts		2					
35		SEAT		TYPE	MATERIAL	Soft Seat	316 SS+RPTFE	77		CONTACTS / RATING		110V DC , 10A								
36		CAGE / GUIDE MATERIAL		VTA				78		ACTUATION POINT		Fully Open/Close								
37		STEM		TYPE	MATERIAL	Anti-Blow Out	316 SS	79		ENCLOSURE MATERIAL		Die Cast Aluminum								
38		LEAKAGE CLASS		ANSI Class VI				80		WEATHER PROTECTION		IP-65								
SOLENOID VALVE	40		TAG NO		PSOV-2134A , ESOV-2134A				81		ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" , IIB T4	ISO M20 x 1.5					
	41		TYPE		3 Way				82		MFR. & MODEL		Will be finalized later							
	42		BODY MATERIAL		WEATHER IP.		AIISI 316 S.S	IP-65	83		SET PRESSURE		Yes							
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4	ISO M20 x 1.5	84		PNEUMATIC CONNECTION		1/4" NPT							
	44		MANUAL RESET		Yes				85		GAUGES		FILTER	Required	Required					
	45		Power Supply		24 VDC				86		MFR. & MODEL		Will be finalized later							
	46		Pnu. Connection		1/4" NPT				87		ANSI/FCI LEAKAGE CLASS		Required							
	47		FUSIBLE LEAKAGE		No				88		HYDRO PRESSURE		Required							
SPECIAL / ACCESS.	48		BLOCK RELAY		No				89		FUNCTIONAL TEST		Required							
	49		QUICK EXHUST		Yes				90											
	50		FILTER REGULATOR		Yes				91											
	51		VOLUME TANK		No				92											
	52		MECHANICAL POSITION INDICATOR		Required				93		PASSIVE FIRE PROTECTION		No							
53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes				94		API 6FA REQUIREMENTS		Yes								
								95		SIL REQUIREMENTS		Yes								
								96		PARTIAL STROKING VALVE TEST		No								
								97												
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HORGAN ENERGY												
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																		
		Data Sheets For ON/OFF & Shutdown Valves																		
شماره پیمان:		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریتال	نسخه	شماره صفحه: 38 از 44										
053 - 073 - 9038		BK	GCS	PEDCO	120	IN	DT	0010	D03											
On-Off Valve																				
TAG NO:		XV-2134B		P&ID NO :		D03		BK-GCS-PEDCO-120-PR-0011-D09 (2/3)		SERVICE: 2nd Stage Gas Compression Air Coolers										
FLUID STATE:		Purge 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		-		25		-								
	2	INLET PRESSURE				bar(g)		-		8		-								
	3	OUTLET PRESSURE				bar(g)		-		8		-								
	4	DIFFERENTIAL PRESSURE				bar(g)		-		-		-		62.4						
	5	INLET TEMPERATURE				°C		-		60		-								
	6	DENSITY				kg/m3		-		8.62		-								
	7	VISCOSITY				CP		-		0.02		-								
	8	DESIGN PRESSURE				bar(g)						62.4								
	9	DESIGN TEMPERATURE				°C						175								
	10	VAPOR PRESSURE Pv				bar(a)		-		-		-		-						
11	CRITICAL PRESSURE				bar(a)		-		-		-		-							
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40S	CORROSION ALLOWANCE(mm)		0		54		TYPE		Single Acting, Spring Return						
			OUT	2"	40S					55		SIZE		VTA						
13		LINE NO.		GAS-111-0030B-FS00-2"-N						56		SPRING FAIL ACTION		Fail to Close						
VALVE BODY & BONNET	14		TYPE		Full Bore Ball Valve						57		MAX ALLOWABLE PRESSURE		VTA					
	15		SIZE		2"						58		MIN REQUIRES PRESSURE		VTA					
	16		MAX PRESS./TEMP.		As per PMS						59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g					
	17		MFR. & MODEL		Will be finalized later						60		BENCH RANGE		VTA					
	18		BODY / BONNET MATL		ASTM A351 GR.CF3M						61		TRAVELING TIME		5 S					
	19		LINER MATERIAL / ID		VTA						62		FUNCTION		On/Off					
	20		END CONNECTION		IN	2"/600#					63		LOCAL POSITION INDICATOR		Required					
	21		FLG FACE FINISH		RF						64		ACT. ORIENTATION		VTA					
	22		END EXT./MATL.		N/A						65		HAND WHEEL TYPE		Detachable side mounted					
	23		FLOW DIRECTION		(Note 18 in Page 4)						66		ADJUSTABLE LIMIT STOP		Yes					
	24		TYPE OF BONNET		Standard						67		INPUT SIGNAL		24VDC					
	25		LUBE & ISO VALVE		No						68		MFR. & MODEL		Will be finalized later					
	26		PACKING MATERIAL		PACKING TYPE		RPTFE		Standard		69		TYPE		N/A					
	27		ENTRY DESIGN		Top Entry						70		MFR. & MODEL		Will be finalized later					
28		NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes						71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A						
TRIM	29		TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE		72		GAUGES		N/A				
	30		SIZE		RATED TRAVEL		VTA		VTA		73		CAM CHARACTERISTIC		N/A					
	31		CHARACTERISTICS		On/Off						74		AIR CONNECTION		N/A					
	32		BALANCED / UNBALANCED		BALANCED						75		TAG NO. :		XZSC-2134B / XZSO-2134B					
	33		RATED Cv		FL	XT		VTA		VTA		VTA		76		TYPE		QUANTITY	Magnetically operated / REED contacts	2
	34		PLUG / BALL / DISK MATERIAL		316 SS						77		CONTACTS / RATING		110V DC , 10A					
	35		SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE		78		ACTUATION POINT		Fully Open/Close				
	36		CAGE / GUIDE MATERIAL		VTA						79		ENCLOSURE MATERIAL		Die Cast Aluminum					
	37		STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS		80		WEATHER PROTECTION		IP-65				
	38		LEAKAGE CLASS		ANSI Class VI						81		ELEC. CERTIFICATE		ELEC. CONNECTION	EEx "d" , IIB T4	ISO M20 x 1.5			
SOLENOID VALVE	39		VALVE STEM EXTENSION REQUIREMENT		No						82		MFR. & MODEL		Will be finalized later					
	40		TAG NO		PSOV-2134B , ESOV-2134B						83		SET PRESSURE		Yes					
	41		TYPE		3 Way						84		PNEUMATIC CONNECTION		1/4" NPT					
	42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		85		GAUGES		FILTER	Required	Required			
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" , IIB T4		ISO M20 x 1.5		86		MFR. & MODEL		Will be finalized later					
	44		MANUAL RESET		Yes						87		ANSI/FCI LEAKAGE CLASS		Required					
SPECIAL / ACCESS.	45		Power Supply		24 VDC						88		HYDRO PRESSURE		Required					
	46		Pnu. Connection		1/4" NPT						89		FUNCTIONAL TEST		Required					
	47		FUSIBLE LEAKAGE		No						90									
	48		BLOCK RELAY		No						91									
	49		QUICK EXHUST		Yes						92									
	50		FILTER REGULATOR		Yes						93		PASSIVE FIRE PROTECTION		No					
	51		VOLUME TANK		No						94		API 6FA REQUIREMENTS		Yes					
52		MECHANICAL POSITION INDICATOR		Required						95		SIL REQUIREMENTS		Yes						
53		MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes						96		PARTIAL STROKING VALVE TEST		No						
54										97										
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HURGAN ENERGY				
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک										
شماره پیمان: 053 - 073 - 9038		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریتال	نسخه	شماره صفحه: 39 از 44		
BK		GCS	PEDCO	120	IN	DT	0010	D03				
On-Off Valve												
TAG NO: XV-2134C		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0011-D09 (3/3)				SERVICE: 2nd Stage Gas Compression Air Coolers				
FLUID STATE: Purge 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		-		25		-	
	2 INLET PRESSURE				bar(g)		-		8		-	
	3 OUTLET PRESSURE				bar(g)		-		8		-	
	4 DIFFERENTIAL PRESSURE				bar(g)		-		-		62.4	
	5 INLET TEMPERATURE				°C		-		60		-	
	6 DENSITY				kg/m3		-		8.62		-	
	7 VISCOSITY				CP		-		0.02		-	
	8 DESIGN PRESSURE				bar(g)						62.4	
	9 DESIGN TEMPERATURE				°C						175	
	10 VAPOR PRESSURE Pv				bar(a)		-		-		-	
11 CRITICAL PRESSURE				bar(a)		-		-		-		
LINE	PIPE LINE SIZE & SCHEDULE		IN	2"	40S	CORROSION ALLOWANCE(mm)		0				
	OUT		2"	40S								
LINE NO.		GAS-111-0030C-FS00-2"-NP										
VALVE BODY & BONNET	14 TYPE		Full Bore Ball Valve									
	15 SIZE		2"									
	16 MAX PRESS./TEMP.		As per PMS									
	17 MFR. & MODEL		Will be finalized later									
	18 BODY / BONNET MATL		ASTM A351 GR.CF3M									
	19 LINER MATERIAL / ID		VTA									
	20 END CONNECTION		IN	2"/600#								
	OUT		2"/600#									
	21 FLG FACE FINISH		RF									
	22 END EXT./MATL.		N/A									
	23 FLOW DIRECTION		(Note 18 in Page 4)									
24 TYPE OF BONNET		Standard										
25 LUBE & ISO VALVE		No										
26 PACKING MATERIAL		PACKING TYPE		RPTFE		Standard						
27 ENTRY DESIGN		Top Entry										
28 NACE REQUIREMENT		NACE (MR-0175/ISO 15156)		Yes								
TRIM	29 TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE				
	30 SIZE		RATED TRAVEL		VTA		VTA					
	31 CHARACTERISTICS		On/Off									
	32 BALANCED / UNBALANCED		BALANCED									
	33 RATED Cv		FL	XT	VTA		VTA		VTA			
	34 PLUG / BALL / DISK MATERIAL		316 SS									
	35 SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE				
	36 CAGE / GUIDE MATERIAL		VTA									
	37 STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS				
	38 LEAKAGE CLASS		ANSI Class VI									
	39 VALVE STEM EXTENSION REQUIREMENT		No									
SOLENOID VALVE	40 TAG NO		PSOV-2134C, ESOV-2134C									
	41 TYPE		3 Way									
	42 BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65					
	43 ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5					
	44 MANUAL RESET		Yes									
	45 Power Supply		24 VDC									
	46 Pnu. Connection		1/4" NPT									
SPECIAL / ACCESS.	47 FUSIBLE LEAKAGE		No									
	48 BLOCK RELAY		No									
	49 QUICK EXHUST		Yes									
	50 FILTER REGULATOR		Yes									
	51 VOLUME TANK		No									
	52 MECHANICAL POSITION INDICATOR		Required									
	53 MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes									
54 TYPE		Single Acting, Spring Return										
55 SIZE		VTA										
56 SPRING FAIL ACTION		Fail to Close										
57 MAX ALLOWABLE PRESSURE		VTA										
58 MIN REQUIRES PRESSURE		VTA										
59 AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g										
60 BENCH RANGE		VTA										
61 TRAVELING TIME		5 S										
62 FUNCTION		On/Off										
63 LOCAL POSITION INDICATOR		Required										
64 ACT. ORIENTATION		VTA										
65 HAND WHEEL TYPE		Detachable side mounted										
66 ADJUSTABLE LIMIT STOP		Yes										
67 INPUT SIGNAL		24VDC										
68 MFR. & MODEL		Will be finalized later										
69 TYPE		N/A										
70 MFR. & MODEL		Will be finalized later										
71 ON INCR SIGNAL OUTPUT INCR / DECR		N/A										
72 GAUGES		N/A										
73 CAM CHARACTERISTIC		N/A										
74 AIR CONNECTION		N/A										
75 TAG NO. :		XZSC-2134C / XZSO-2134C										
76 TYPE		QUANTITY		Magnetically operated /REED' contacts		2						
77 CONTACTS / RATING		110V DC , 10A										
78 ACTUATION POINT		Fully Open/Close										
79 ENCLOSURE MATERIAL		Die Cast Aluminum										
80 WEATHER PROTECTION		IP-65										
81 ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5						
82 MFR. & MODEL		Will be finalized later										
83 SET PRESSURE		Yes										
84 PNEUMATIC CONNECTION		1/4" NPT										
85 GAUGES		FILTER		Required		Required						
86 MFR. & MODEL		Will be finalized later										
87 ANSI/FCI LEAKAGE CLASS		Required										
88 HYDRO PRESSURE		Required										
89 FUNCTIONAL TEST		Required										
90												
91												
92												
93 PASSIVE FIRE PROTECTION		No										
94 API 6FA REQUIREMENTS		Yes										
95 SIL REQUIREMENTS		Yes										
96 PARTIAL STROKING VALVE TEST		No										
97												
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 HORGAN ENERGY									
شماره پیمان: 053 - 073 - 9038		پروژه	پسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 40 از 44							
BK		GCS	PEDCO	120	IN	DT	0010	D03									
On-Off Valve																	
TAG NO: XV-2142		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0012-D09				SERVICE: 2nd Stage Gas Compression Discharge Drum									
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		18977.7		17252.5		6038.4		-		
	2	INLET PRESSURE					bar(g)		53.9		53.9		53.9		-		
	3	OUTLET PRESSURE					bar(g)		53.9		53.9		53.9		-		
	4	DIFFERENTIAL PRESSURE					bar(g)		-		-		90		-		
	5	INLET TEMPERATURE					°C		59.89		59.89		59.89		-		
	6	DENSITY					kg/m3		49.41~ 59.17		49.41~ 59.17		49.41~ 59.17		-		
	7	VISCOSITY					CP		0.014		0.014		0.014		-		
	8	DESIGN PRESSURE					bar(g)		90								
	9	DESIGN TEMPERATURE					°C		175								
	10	VAPOR PRESSURE Pv					bar(a)		3.23		3.23		3.23		-		
11	CRITICAL PRESSURE					bar(a)		106		106		106		-			
LINE	12	PIPE LINE SIZE & SCHEDULE		IN	6"	80	CORROSION ALLOWANCE(mm)		3								
	13	LINE NO.		GAS-111-0066-FN05-6"-IS													
VALVE BODY & BONNET	14	TYPE		Full Bore Ball Valve/Trunion Mounted													
	15	SIZE		6"													
	16	MAX PRESS./TEMP.		As per PMS													
	17	MFR. & MODEL		Will be finalized later													
	18	BODY / BONNET MATL		ASTM A216 Gr. WCB													
	19	LINER MATERIAL / ID		VTA													
	20	END CONNECTION		IN	6"	600#											
	20	END CONNECTION		OUT	6"	600#											
	21	FLG FACE FINISH		RF													
	22	END EXT./MATL.		N/A													
	23	FLOW DIRECTION		(Note 18 in Page 4)													
24	TYPE OF BONNET		Standard														
25	LUBE & ISO VALVE		No														
26	PACKING MATERIAL		PACKING TYPE		RPTFE				Standard								
27	ENTRY DESIGN		Top / Side Entry														
28	NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes														
TRIM	29	TRIM		TYPE	MATERIAL		VTA		316 SS+RPTFE								
	30	SIZE		RATED TRAVEL		VTA		VTA									
	31	CHARACTERISTICS		On/Off													
	32	BALANCED / UNBALANCED		BALANCED													
	33	RATED Cv		FL	XT		VTA		VTA		VTA						
	34	PLUG / BALL / DISK MATERIAL		316 SS													
	35	SEAT		TYPE	MATERIAL		Soft Seat		316 SS+RPTFE								
	36	CAGE / GUIDE MATERIAL		VTA													
	37	STEM		TYPE	MATERIAL		Anti-Blow Out		316 SS								
	38	LEAKAGE CLASS		ANSI Class VI													
	39	VALVE STEM EXTENSION REQUIREMENT		No													
SOLENOID VALVE	40	TAG NO		PSOV-2142, ESOV-2142													
	41	TYPE		3 Way													
	42	BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65									
	43	ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5									
	44	MANUAL RESET		Yes													
	45	Power Supply		24 VDC													
	46	Pnu. Connection		1/4" NPT													
SPECIAL / ACCESS.	47	FUSIBLE LEAKAGE		No													
	48	BLOCK RELAY		No													
	49	QUICK EXHUST		Yes													
	50	FILTER REGULATOR		Yes													
	51	VOLUME TANK		No													
	52	MECHANICAL POSITION INDICATOR		Required													
	53	MANUALPNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		Yes													
ACTUATOR	54	TYPE		Single Acting, Spring Return													
	55	SIZE		VTA													
	56	SPRING FAIL ACTION		Fail to Close													
	57	MAX ALLOWABLE PRESSURE		VTA													
	58	MIN REQUIRES PRESSURE		VTA													
	59	AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g													
	60	BENCH RANGE		VTA													
	61	TRAVELING TIME		7 S													
	62	FUNCTION		On/Off													
	63	LOCAL POSITION INDICATOR		Required													
	64	ACT. ORIENTATION		VTA													
	65	HAND WHEEL TYPE		Detachable side mounted													
	66	ADJUSTABLE LIMIT STOP		Yes													
	67	INPUT SIGNAL		24VDC													
	68	MFR. & MODEL		Will be finalized later													
	POSITIONER	69	TYPE		N/A												
		70	MFR. & MODEL		Will be finalized later												
71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A													
72		GAUGES		N/A													
LIMIT SWITCHES	73	CAM CHARACTERISTIC		N/A													
	74	AIR CONNECTION		N/A													
	75	TAG NO. :		XZSC-2142 / XZSO-2142													
	76	TYPE		QUANTITY		Magnetically operated REED contacts		2									
	77	CONTACTS / RATING		110V DC , 10A													
	78	ACTUATION POINT		Fully Open/Close													
	79	ENCLOSURE MATERIAL		Die Cast Aluminum													
	80	WEATHER PROTECTION		IP-65													
	81	ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5									
	82	MFR. & MODEL		Will be finalized later													
AIR SET	83	SET PRESSURE		Yes													
	84	PNEUMATIC CONNECTION		1/4" NPT													
	85	GAUGES		FILTER		Required		Required									
	86	MFR. & MODEL		Will be finalized later													
TEST	87	ANSI/FCI LEAKAGE CLASS		Required													
	88	HYDRO PRESSURE		Required													
	89	FUNCTIONAL TEST		Required													
	90																
91																	
92																	
FIRE PROOF DESIGN	93	PASSIVE FIRE PROTECTION		No													
	94	API 6FA REQUIREMENTS		Yes													
	95	SIL REQUIREMENTS		Yes													
	96	PARTIAL STROKING VALVE TEST		Yes													
	97																
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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 شرکت انرژی هیرگان							
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک													
		Data Sheets For ON/OFF & Shutdown Valves													
شماره پیمان:		پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال	نسخه						
053 - 073 - 9038		BK	GCS	PEDCO	120	IN	DT	0010	D03						
On-Off Valve															
TAG NO: XV-2143		P&ID NO: D03		BK-GCS-PEDCO-120-PR-PI-0012-D09						SERVICE: 2nd Stage Gas Compression Discharge Drum					
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	-	1500.0	-	-				
	2	INLET PRESSURE					bar(g)	53.9	53.9	53.9	-				
	3	OUTLET PRESSURE					bar(g)	53.9	53.9	53.9	-				
	4	DIFFERENTIAL PRESSURE					bar(g)	-	-	-	90				
	5	INLET TEMPERATURE					°C	59.89	59.89	59.89	-				
	6	DENSITY					kg/m3	49.23~ 59.17	49.23~ 59.17	49.23~ 59.17	-				
	7	VISCOSITY					CP	0.014	0.014	0.014	-				
	8	DESIGN PRESSURE					bar(g)	90							
	9	DESIGN TEMPERATURE					°C	175							
	10	VAPOR PRESSURE Pv					bar(a)	-	-	-	-				
LINE	12	PIPE LINE SIZE & SCHEDULE		IN	2"	160	CORROSION ALLOWANCE(mm)		3						
	13	LINE NO.		GAS-111-0366-FN05-2"-IS											
VALVE BODY & BONNET	14	TYPE		Full Bore Ball Valve/Trunion Mounted											
	15	SIZE		2"											
	16	MAX PRESS./TEMP.		As per PMS											
	17	MFR. & MODEL		Will be finalized later											
	18	BODY / BONNET MATL		ASTM A216 Gr. WCB											
	19	LINER MATERIAL / ID		VTA											
	20	END CONNECTION	IN	2" /600#											
		OUT	2" /600#												
	21	FLG FACE FINISH		RF											
	22	END EXT./MATL.		N/A											
TRIM	23	FLOW DIRECTION		(Note 18 in Page 4)											
	24	TYPE OF BONNET		Standard											
	25	LUBE & ISO VALVE		No											
	26	PACKING MATERIAL	PACKING TYPE		RPTFE				Standard						
	27	ENTRY DESIGN		Top / Side Entry											
	28	NACE REQUIREMENTNACE (MR-0175/ISO 15156)		Yes											
	29	TRIM	TYPE	MATERIAL		VTA		316 SS+RPTFE							
	30	SIZE	RATED TRAVEL		VTA				VTA						
	31	CHARACTERISTICS		On/Off											
	32	BALANCED / UNBALANCED		BALANCED											
33	RATED Cv	FL	XT		VTA		VTA		VTA						
34	PLUG / BALL / DISK MATERIAL		316 SS												
35	SEAT	TYPE	MATERIAL		Soft Seat				316 SS+RPTFE						
36	CAGE / GUIDE MATERIAL		VTA												
37	STEM	TYPE	MATERIAL		Anti-Blow Out				316 SS						
38	LEAKAGE CLASS		ANSI Class V1												
39	VALVE STEM EXTENSION REQUIREMENT		No												
SOLENOID VALVE	40	TAG NO		ESOV-2143, PSOV-2143											
	41	TYPE		3 Way											
	42	BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65							
	43	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d", IIB T4		ISO M20 x 1.5								
	44	MANUAL RESET		Yes											
	45	Power Supply		24 VDC											
SPECIAL / ACCESS.	46	Pnu. Connection		1/4" NPT											
	47	FUSIBLE LEAKAGE		No											
	48	BLOCK RELAY		No											
	49	QUICK EXHUST		Yes											
	50	FILTER REGULATOR		Yes											
	51	VOLUME TANK		No											
	52	MECHANICAL POSITION INDICATOR		Required											
	53	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		نگهداشت و افزایش تولید میدان نفتی بینک سطلج الارض						 		
		احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
شماره پیمان: 053 - 073 - 9038		پروژه BK	پسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0010	نسخه D03	
شماره صفحه: 42 از 44										
On-Off Valve										
TAG NO: XV-2144		P&ID NO : D03		BK-GCS-PEDCO-120-PR-PI-0012-D09				SERVICE: 2nd Stage Gas Compression Discharge Drum		
FLUID STATE: CLOSED DRAIN		PHASE: LIQUID				AREA CLASSIFICATION: Zone2, IIB, T4				
SERVICE CONDITION	ITEM					UNITS	Max Flow	Norm. Flow	Min. Flow	Shut-Off
	1	FLOW RATE				kg/h	-	11500	-	-
	2	INLET PRESSURE				bar(g)	-	53.9	-	-
	3	OUTLET PRESSURE				bar(g)	-	53.9	-	-
	4	DIFFERENTIAL PRESSURE				bar(g)	-	-	-	62.4
	5	INLET TEMPERATURE				°C	-	59.9	-	-
	6	DENSITY				kg/m3	-	830 - 982	-	-
	7	VISCOSITY				CP	-	0.442 - 0.495	-	-
	8	DESIGN PRESSURE				bar(g)	62.4			
	9	DESIGN TEMPERATURE				°C	175			
	10	VAPOR PRESSURE Pv				bar(a)	4.43	4.43	4.43	-
11	CRITICAL PRESSURE				bar(a)	221.9	221.9	221.9	-	
LINE	12	PIPE LINE SIZE & SCHEDULE	IN	2"	40S	CORROSION ALLOWANCE(mm)	0			
	13	LINE NO.	OUT	2"	40S					
VALVE BODY & BONNET	14	TYPE			Full Bore Ball Valve/Floating Type					
	15	SIZE			2"					
	16	MAX PRESS./TEMP.			As per PMS					
	17	MFR. & MODEL			Will be finalized later					
	18	BODY / BONNET MATL			ASTM A351 GR.CF3M					
	19	LINER MATERIAL / ID			VTA					
	20	END CONNECTION	IN	2" /600#						
	20	END CONNECTION	OUT	2" /600#						
	21	FLG FACE FINISH			RF					
	22	END EXT./MATL.			N/A					
	23	FLOW DIRECTION			(Note 18 in Page 4)					
24	TYPE OF BONNET			Standard						
25	LUBE & ISO VALVE			No						
26	PACKING MATERIAL	PACKING TYPE		RP/TFE		Standard				
27	ENTRY DESIGN			Top / Side Entry						
28	NACE REQUIREMENT/NACE (MR-0175/ISO 15156)			Yes						
TRIM	29	TRIM	TYPE	MATERIAL	VTA	316 SS+RP/TFE				
	30	SIZE	RATED TRAVEL		VTA	VTA				
	31	CHARACTERISTICS			On/Off					
	32	BALANCED / UNBALANCED			BALANCED					
	33	RATED Cv	FL	XT	VTA	VTA	VTA			
	34	PLUG / BALL / DISK MATERIAL			316 SS					
	35	SEAT	TYPE	MATERIAL	Soft Seat	316 SS+RP/TFE				
	36	CAGE / GUIDE MATERIAL			VTA					
	37	STEM	TYPE	MATERIAL	Anti-Blow Out	316 SS				
	38	LEAKAGE CLASS			ANSI Class VI					
	39	VALVE STEM EXTENSION REQUIREMENT			No					
SOLENOID VALVE	40	TAG NO			PSOV-2144, ESOV-2144					
	41	TYPE			3 Way					
	42	BODY MATERIAL	WEATHER IP.		AISI 316 S.S	IP-65				
	43	ELE. CERTIFICATE	ELE. CONNECTION		EEx "d" ,IIB T4	ISO M20 x 1.5				
	44	MANUAL RESET			Yes					
	45	Power Supply			24 VDC					
46	Pnu. Connection			1/4" NPT						
SPECIAL / ACCESS.	47	FUSIBLE LEAKAGE			No					
	48	BLOCK RELAY			No					
	49	QUICK EXHUST			Yes					
	50	FILTER REGULATOR			Yes					
	51	VOLUME TANK			No					
	52	MECHANICAL POSITION INDICATOR			Required					
53	MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE			Yes						
ACTUATOR	54	TYPE			Single Acting, Spring Return					
	55	SIZE			VTA					
	56	SPRING FAIL ACTION			Fail to Close					
	57	MAX ALLOWABLE PRESSURE			VTA					
	58	MIN REQUIRES PRESSURE			VTA					
	59	AVAILABLE AIR SUPPLY PRESSURE			MAX/NOR/MIN: 10/7/3 bar-g					
	60	BENCH RANGE			VTA					
	61	TRAVELING TIME			5 S					
	62	FUNCTION			On/Off					
	63	LOCAL POSITION INDICATOR			Required					
	64	ACT. ORIENTATION			VTA					
65	HAND WHEEL TYPE			Detachable side mounted						
66	ADJUSTABLE LIMIT STOP			Yes						
67	INPUT SIGNAL			24VDC						
68	MFR. & MODEL			Will be finalized later						
POSITIONER	69	TYPE			N/A					
	70	MFR. & MODEL			Will be finalized later					
	71	ON INCR SIGNAL OUTPUT INCR / DECR			N/A					
	72	GAUGES			N/A					
LIMIT SWITCHES	73	CAM CHARACTERISTIC			N/A					
	74	AIR CONNECTION			N/A					
	75	TAG NO. :			XZSC-2144 / XZSO-2144					
	76	TYPE	QUANTITY	Magetically operated REED' contacts	2					
	77	CONTACTS / RATING			110V DC , 10A					
	78	ACTUATION POINT			Fully Open/Close					
	79	ENCLOSURE MATERIAL			Die Cast Aluminum					
	80	WEATHER PROTECTION			IP-65					
AIR SET	81	ELEC. CERTIFICATE	ELEC. CONNECTION	EEx "d" ,IIB T4	ISO M20 x 1.5					
	82	MFR. & MODEL			Will be finalized later					
	83	SET PRESSURE			Yes					
	84	PNEUMATIC CONNECTION			1/4" NPT					
TEST	85	GAUGES	FILTER	Required	Required					
	86	MFR. & MODEL			Will be finalized later					
	87	ANSI/API LEAKAGE CLASS			Required					
	88	HYDRO PRESSURE			Required					
FIRE PROOF DESIGN	89	FUNCTIONAL TEST			Required					
	90									
	91									
	92									
93	PASSIVE FIRE PROTECTION			No						
94	API 6FA REQUIREMENTS			Yes						
95	SIL REQUIREMENTS			Yes						
96	PARTIAL STROKING VALVE TEST			No						
97										
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		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							 													
شماره پیمان: 053 - 073 - 9038		نسخه	سریال	نوع مدرک	رشته	تجهیزات	صادرکننده	بسته کاری	پروژه	شماره صفحه: 44 از 44												
BK		GCS		PEDCO		120		IN		DT												
0010		D03																				
On-Off Valve																						
TAG NO: XV-2301		P&ID NO : D03		BK-GCS-PEDCO-120-SA-PI-0001-D05 (1/8)				SERVICE: Fire Water System														
FLUID STATE: FIRE WATER		PHASE: Liquid						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		-		18.2								
	5	INLET TEMPERATURE				°C		55		AMB		5		-								
	6	DENSITY				kg/m3		-		997		-		-								
	7	VISCOSITY				CP		-		0.81		-		-								
	8	DESIGN PRESSURE				bar(g)						18.2										
	9	DESIGN TEMPERATURE				°C						85										
	10	VAPOR PRESSURE Pv						-		-		-		-								
11	CRITICAL PRESSURE				bar(a)		-		-		-		-									
LINE	PIPE LINE SIZE & SCHEDULE		IN 3" 40		CORROSION ALLOWANCE(mm)		3		54		TYPE		Single Acting, Spring Return									
	OUT 3" 40								55		SIZE		VTA									
VALVE BODY & BONNET	LINE NO.		PTW-112-0007-AN04-3"-PT						56		SPRING FAIL ACTION		Fail to Close									
	14		TYPE		Full Bore Ball Valve/Turnunion Mounted				57		MAX ALLOWABLE PRESSURE		VTA									
	15		SIZE		3"				58		MIN REQUIRES PRESSURE		VTA									
	16		MAX PRESS./TEMP.		As per PMS				59		AVAILABLE AIR SUPPLY PRESSURE		MAX/NOR/MIN: 10/7/3 bar-g									
	17		MFR. & MODEL		Will be finalized later				60		BENCH RANGE		VTA									
	18		BODY / BONNET MATL		ASTM A216 Gr. WCB				61		TRAVELING TIME		5 S									
	19		LINER MATERIAL / ID		VTA				62		FUNCTION		On/Off									
	20		END CONNECTION		IN 3" /300#				63		LOCAL POSITION INDICATOR		Required									
	21		OUT 3" /300#						64		ACT. ORIENTATION		VTA									
	22		FLG FACE FINISH		RF				65		HAND WHEEL TYPE		Detachable side mounted									
	23		END EXT. MATL.		N/A				66		ADJUSTABLE LIMIT STOP		Yes									
	24		FLOW DIRECTION		(Note 18 in Page 4)				67		INPUT SIGNAL		24VDC									
	25		TYPE OF BONNET		Standard				68		MFR. & MODEL		Will be finalized later									
	26		LUBE & ISO VALVE		No				69		TYPE		N/A									
	27		PACKING MATERIAL		PACKING TYPE		PTFE		Standard		70		MFR. & MODEL		Will be finalized later							
	28		ENTRY DESIGN		Top / Side Entry				71		ON INCR SIGNAL OUTPUT INCR / DECR		N/A									
	29		NACE REQUIREMENTNACE (MR-0175/ISO 15156)		No				72		GAUGES		N/A									
TRIM	29		TRIM		TYPE		MATERIAL		VTA		316 SS+PTFE		73		CAM CHARACTERISTIC		N/A					
	30		SIZE		RATED TRAVEL		VTA		VTA		74		AIR CONNECTION		N/A							
	31		CHARACTERISTICS		On/Off				75		TAG NO. :		XZSC-2301 / XZSO-2301									
	32		BALANCED / UNBALANCED		BALANCED				76		TYPE		QUANTITY		Magnetically operated 'REED' contacts		2					
	33		RATED Cv		FL		XT		VTA		VTA		VTA		77		CONTACTS / RATING		110V DC , 10A			
	34		PLUG / BALL / DISK MATERIAL		316 SS				78		ACTUATION POINT		Fully Open/Close									
	35		SEAT		TYPE		MATERIAL		Soft Seat		316 SS+PTFE		79		ENCLOSURE MATERIAL		Die Cast Aluminum					
	36		CAGE / GUIDE MATERIAL		VTA				80		WEATHER PROTECTION		IP-65									
SOLENOID VALVE	37		STEM		TYPE		MATERIAL		Anti-Blow Out		316 SS		81		ELEC. CERTIFICATE		ELEC. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5	
	38		LEAKAGE CLASS		ANSI Class VI				82		MFR. & MODEL		Will be finalized later									
	39		VALVE STEM EXTENSION REQUIREMENT		No				83		SET PRESSURE		Yes									
	40		TAG NO		PSOV-2301				84		PNEUMATIC CONNECTION		1/4" NPT									
	41		TYPE		3 Way				85		GAUGES		FILTER		Required		Required					
	42		BODY MATERIAL		WEATHER IP.		AISI 316 S.S		IP-65		86		MFR. & MODEL		Will be finalized later							
	43		ELE. CERTIFICATE		ELE. CONNECTION		EEx "d" ,IIB T4		ISO M20 x 1.5		87		ANSI/FCI LEAKAGE CLASS		Required							
	44		MANUAL RESET		Yes				88		HYDRO PRESSURE		Required									
SPECIAL / ACCESS.	45		Power Supply		24 VDC				89		FUNCTIONAL TEST		Required									
	46		Pnu. Connection		1/4" NPT				90													
	47		FUSIBLE LEAKAGE		No				91													
	48		BLOCK RELAY		No				92													
	49		QUICK EXHUST		Yes				93		PASSIVE FIRE PROTECTION		No									
	50		FILTER REGULATOR		Yes				94		API 6FA REQUIREMENTS		Yes									
	51		VOLUME TANK		No				95		SIL REQUIREMENTS		No									
	52		MECHANICAL POSITION INDICATOR		Required				96		PARTIAL STROKING VALVE TEST		No									
53		MANUAL/PNEUMATIC BYPASS VALVE FOR SOLENOID VALVE		No				97														
NOTE: VTA : VENDOR TO ADVISE AT BIDDING STAGE VTC: VENDOR TO CONFIRM																						
(1) PMS: Piping material specification.																						
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