

نگهداشت و افزایش تولید میدان نفتی بینک بستههاي كارى تحتالارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاهمکان/واحد بهره برداری بینک

IN

320







053 - 073 - 9184

شماره پیمان:

پروژه

بسته کاری

PEDCO

DATASHEETS FOR LBV صادر کننده تسهيلات نوع مدرك سر يال

0012

D04

شماره صفحه: 1 از 6

طرح نگهداشت و افزایش تولید 27 مخزن

DATASHEETS FOR LBV

نگهداشت و افزایش تولید میدان نفتی بینک

Class: 1		CLIENT Doc. Number:	F9Z-708589			
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
D00	MAR.2022	IFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D01	JUN.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D02	OCT.2023	AFC	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D03	FEB.2024	AFC	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D04	OCT.2024	AFC	P.Hajisadeghi	M.Fakharian	M.Sadeghian	

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



60

نگهداشت و افزایش تولید میدان نفتی بینک بستههاي كارى تحتالارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاهمکان/واحد بهره برداری بینک



DATASHEETS FOR LBV

REVISION RECORD SHEET

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدر ک	سريال	نسخه
053 - 073 - 9184	BK	PPL	PEDCO	320	IN	DT	0012	D04

شماره صفحه: 2 از 6

Page	D00	D01	D02	D03	D04		Page	D00	D01	D02	D03	D04
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3	Х	Х	X				67					
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نگهداشت و افزایش تولید میدان نفتی بینک بستههای کاری تحتالارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاهمکان/واحد بهره برداری بینک



BK-GNRAL-PEDCO-000-PR-DB-0001_D08

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه
053 - 073 – 9184	BK	PPL	PEDCO	320	IN	DT	0012	D04

شماره صفحه: 3 از 6

REFERENCE DOCUMENTS:

Process Basis Of Design

Instrument & Control System Design Criteria

BK-PPL-PEDCO-320-IN-DC-0001_D02

P&ID - Gas Pipeline (to Siahmakan G.I. Station)

BK-PPL-PEDCO-320-PR-PI-0001_D05

P&ID - Condensate Pipeline (to Binak PU)

BK-PPL-PEDCO-320-PR-PI-0002_D05

Piping Material Specification

BK-PPL-PEDCO-320-PI-SP-0001_D03

Pipeline Material Specification

BK-PPL-PEDCO-320-PL-SP-0001_D05

Specification For LBV

BK-GNRAL-PEDCO-000-IN-SP-0013_D03

Instrument Hook-Up Diagram

BK-PPL-PEDCO-320-IN-DG-0002_D01



نگهداشت و افزایش تولید میدان نفتی بینک بستههاي كارى تحتالارض







NISOC

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053 - 073 – 9184	BK	PPL	PEDCO	320	IN	DT	0012	D04	٠ ١٠٠٠ ار ٥

GENERAL NOTES:

- 1. Calculations shall be provided for each completely piped actuated valve assembly the stroking times i.e. to close and to open
- 2. The duty, failure action and stroke time shall all be approved by the Purchaser.
- 3. The actuator shall be designed to operate the valve through its full stroke
- 4. The full stroke time for on-off valve which is less or equal than 4" size, shall be max. 4 second and for valves greater than 4", 1 second shall be added to the 4 sec for each increment of 1" in valve size. The maximum fully stroke time shall be 10 seconds
- 5. NACE consideration shall be regarded according to NACE MR-0175/ISO15156.
- 6. Hydro-test duration shall be in accordance with API 6D
- 7. Valves excluding check valves shall be capable of sealing at these pressures in either direction. Valves shall be designed to withstand a sustained internal vacuum of 1 (one) barg (i.e. full vacuum) in both open and closed positions.
- 8. Vendor shall guarantee and demonstrate the required stroking speed, during the Functional Test (FAT)
- 9. The gas-over-oil actuator shall basically comprise of the following components:
- Actuating control box
- Actuator cylinders
- Gas-over-oil tank
- · Hand pump with pertinent change-over valve
- Metering valve
- · Sensing tank and double check valves.
- Double check valves to be considered.
- 10. All accessories shall be mounted on a 316SS sub-plate. Tubing shall be suitably sized TP 316L stainless steel with stainless steel double ferrule compression fittings.
- 11. The actuator design shall be of cylinder type suitable for direct mounting on the valve as specified in Requisition. The actuator shall be capable of withstanding all envisaged line vibrations and movements.
- 12. All accessory equipment, shall be mounted, fully piped, connected and supplied with the actuator.
- 13. The actuator shall be equipped with suitable mechanical valve position indicator.
- 14. Two gas-over-oil pressure tanks which have different hydraulic oil levels are required. The difference between two oil level surfaces must be at least equal to the amount of oil required for a complete valve travel. Two gas-over-oil accumulator tanks (one for open and one for close actuation) complying with relevant accessories and circuit shall be considered. One N2 capacity tank for start up/back up shall be considered by vendor.
- 15.All actuators and accessories shall be clearly and permanently identified by nameplate. The nameplate shall be in stainless steel and affixed to the VALVE, actuator and accessories.
- 16. All actuator parts shall have suitable surface treatment to protect them against corrosion.
- 17. The actuator should be provided with a suitable hand-operated control valve for local operation of the valve.
- 18.emergency hand pump, local push buttons or lever, local position indicator and emergency power gas storage tank for complete operations (one open & one close stroke).
- 19. Self-control circuits shall be equipped with suitable control device for operating speed adjustment.
- 20. According to "Process Basic of Design" Document, Environmental Condition For Field Instrumentation of BINAK Complex Shall Be Considered As Per The Following:

Maximum ambient temperature: 50 (°C)

Minimum ambient temperature: 5 (°C)

Maximum steel surface exposed to sun: 85 (°C)

Maximum summer dry bulb: 50 (°C)

Maximum Design relative humidity (%): 100

Minimum Design relative humidity (%): 0

- 21. project specification for Painting (BK-GNRAL-PEDCO-000-PI-SP-0006) shall be considred by supplier.
- 22. LBVs shall be full bore ball valve suitable for pigging.





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								LBV								
		شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته		نوع مدرك	سريال	نسخه					
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	053 - 073 - 918	4	BK PPL PEDCO 320 IN						DT	0012	D04					
Item	Data Category		-	Technic	cal Features				Project Data & Requirements							
item	Data Category			I COIIIII	car i eatures	,			LBV-3201							
1		Tag No.														
2		P&ID No.										T-0001_D05 (page 2 of 3)				
3		Service							F	rom Pig Lau	ncher (PL-3201)	to Pig Receiver (PR-3201)				
4	Canaral Data	Fluid Phase							Gas							
5	General Data	Fluid State	Fluid State								Hydrocarb	one Gas				
6		Area Classification					Zone 2, IIB T4									
7		Line No.														
		Ambient Temperature C							GAS-113-0007-FN27-8"-PT Refer to Note 20 in General Note							
8			/ 37 1	/ .						1	18887.891 /1					
9		FLOW RATE (Kg/hr.) Ma		/ IVIIII.												
10		INLET/OUTLET PRESSURE									43.					
11		OPERATING FLUID TEMPE									15 ~ 3					
12		DENSITY (kg/m3) Mix./Gas	./Liq								59.21 / 58.2	27 / 547.4				
13	Carries Brasses Date	VISCOSITY (GAS/LIQ.) cP									0.013/	0.13				
14	Service Process Data	VAPOR PRESSURE Pv Bar ((a)								-					
15		CRITICAL PRESSURE Barg									104.9	barg				
16		DESIGN TEMPERATURE / N	MAX. TEMPE	RATURE							85/3	1.3				
17		DESIGN PRESSURE / MAX.	PRESSURE B	arg							62/43					
18		SHUT-OFF PRESSURE (barg									62					
19		VALVE TYPE	,						hall ve	alva Gaar T		ounted (see note 9 in below table)				
20		BODY MATERIAL							Dan V	aive, Gear 1	ASTM A2					
		NACE TO MR - 01 75														
21				II DIE D	ATED DDECCI	IDE				0.0	YE					
22		BODY SIZE		LINE R	ATED PRESSU	KE				8"		600				
23		MAX. PRES. & TEMP.	mn ve -						/ \	VTA		VTA				
24		END CONNECTIONS & RA	TINGS					/	D04	FLANGE		, 600#, ASTM A694 F52				
25		SEAT TYPE									Soft Seat					
26		SEAT MATERIAL									AISI 316L					
27		TRIM MATERIAL									AISI 316L+S	STELLTE6				
28	Body and Valve Trim	PLUG / BALL MATERIAL									AISI 316L+S					
29	•	STEM MATERIAL									VT.					
30		STEM GUIDE MATERIAL									VT.					
31		STUFFING BOX PACKING	(GLAND)								VT					
32		BOLTING	(OLI II ID)													
33		VALVE SEALING MATERIA	NT.	CEATC	EAL MATERI	ΑI		-	Based on PMS requirements							
					EAL MATERI	AL			ANTI STATIC (VTC) ANTI STATIC (VTC)							
34			INTI BLOW-OUT DEVICE OF THE STEM LEAKAGE CLASS							YES						
35										ANSI B16.104 Class VI (TSO) YES (API 6FA)						
36		FIRE SAFE														
37		MFR.		MODEL					Wil	be finalized		will be finalized later				
38		TYPE OF ACTUATOR								DO		GAS - OVER OIL				
39		MOUNTING TYPE				SUI	PPLY				DIRECT	D04 SOUR GAS				
40		NACE TO MR - 01 75									YE	s Z				
41		OPENING TIME								8	Sec.(VENDOR	TO CONFIRM)				
42		CLOSING TIME								8	Sec.(VENDOR	TO CONFIRM)				
43		MAX. ALLOW. PRESSURE	AX. ALLOW. PRESSURE MIN. REQ. PRESSURE							VTA	VTA					
44		MIN. REQ. TORQUE	IIN. REQ. TORQUE MAX. REQ. TORQUE						VTA VTA							
45	Actuator	GAS / OIL CONSUMPTION									VT					
		HANDWHEEL						-	Note 17 in General Note							
								-	VTA							
46										FAIL TO CLOSE						
47		CONNECTION SIZE	IRF							FAIL TO CLOSE Mechanical Position Indicator (see note 11 in below table)						
47 48		CONNECTION SIZE VALVE ACTION ON FAILU	JRE						,	footbook of D		CLOSE				
47 48 49		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION		TEM					Ν	1echanical P	osition Indicator	CLOSE (see note 11 in below table)				
47 48 49 50		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET		TEM					N	Mechanical P	osition Indicator Rate of pres	CLOSE (see note 11 in below table) ssure drop				
47 48 49 50 51		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER	ECTION SYS								Rate of pres speed adju	CLOSE (see note 11 in below table) ssure drop ustment				
47 48 49 50 51 52		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR.							will	be finalized	Rate of pres speed adjulater	CLOSE (see note 11 in below table) ssure drop usument will be finalized later				
47 48 49 50 51 52 53		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION	ECTION SYS						will	be finalized	Rate of pres speed adjulater EIN HIGH PREE	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP				
47 48 49 50 51 52 53 54		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE	ECTION SYS						will	be finalized	Rate of pres speed adjulater EIN HIGH PREE	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16				
47 48 49 50 51 52 53		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION	ECTION SYS						will	be finalized	Rate of pres speed adjulater EIN HIGH PREE	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16				
47 48 49 50 51 52 53 54		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE	ECTION SYS						will	be finalized	Rate of pres speed adjulater EIN HIGH PREE	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16				
47 48 49 50 51 52 53 54 55		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI	ECTION SYS						will	be finalized	Rate of pres speed adjulater EIN HIGH PREE SS3	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0				
47 48 49 50 51 52 53 54 55 56		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS	TYPE		5				will	be finalized	osition Indicator Rate of pres speed adjulater E IN HIGH PREE: SS3 SS3 #60	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 04 Class VI				
47 48 49 50 51 52 53 54 55 56 57		CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS TUBING / FITTING MATERI	TYPE		5				will	be finalized	Rate of pres speed adjulater EIN HIGH PREE: SS3 SS3 460 ANSI B16.10	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 14 Class VI S				
47 48 49 50 51 52 53 54 55 56 57 58		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS LIEMAGE (TASS) LEAKAGE CLASS MANUALL OPEN / CLOSE MANUALL OPEN / CLOSE	TYPE		5				will	be finalized	sition Indicator Rate of pres speed adji later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE.	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 0 14 Class VI S S				
47 48 49 50 51 52 53 54 55 56 57 58 59		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION	TYPE		5				will	be finalized	sition Indicator Rate of pres speed adji later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.1(C YE: YE: 3/4" NPTF ON V	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 0 14 Class VI S S VALVE BODY				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING	TYPE		5				will	be finalized	sition Indicator Rate of pres speed adjulater E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE. YE. 3/4" NPTF ON V	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 14 Class VI S S VALVE BODY AL				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FULID	TYPE AL AL NACE TO	0 MR - 01 7	5				will	be finalized	esition Indicator Rate of pres speed adjulater E IN HIGH PREE: SS3 #60 ANSI B16.10 YE: YE 3/4" NPTF ON X LOC. GA	CLOSE (see note 11 in below table) ssure drop ustment				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES! M	TYPE AL AL NACE TO IINIMUM-NO	0 MR - 01 7	5				will	be finalized	osition Indicator Rate of pres speed adjulater E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE YE 3/4" NPTF ON V LOCC GA VT	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 10 0 14 Class VI S S VALVE BODY AL S A				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FULID	TYPE AL AL NACE TO IINIMUM-NO	0 MR - 01 7	5		°C		will	be finalized	sition Indicator Rate of pres speed adj later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE. 3/4" NPTF ON V LOC. GA VT 0 - +35 / (0 - +	CLOSE (see note 11 in below table) ssure drop ustment				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES! M	TYPE AL AL NACE TO IINIMUM-NO ESIGN	0 MR - 01 7	5		°C		will	be finalized	osition Indicator Rate of pres speed adjulater E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE YE 3/4" NPTF ON V LOCC GA VT	CLOSE (see note 11 in below table) ssure drop ustment				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES: M TEMPERATURE NORM / D ELECTRICAL CONNECTION	TYPE AL AL NACE TO IINIMUM-NO ESIGN	0 MR - 01 7	5		°C		will	be finalized	sition Indicator Rate of pres speed adj later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE. 3/4" NPTF ON V LOC. GA VT 0 - +35 / (0 - +	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 14 Class VI S S VALVE BODY AL S A O -+85) A.				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES/ N TEMPERATURE NORM / D ELECTRICAL CONNECTIOL CABLE GLAND	TYPE AL AL NACE TO IINIMUM-NO ESIGN	0 MR - 01 7	5		°C		will	be finalized	sition Indicator Rate of pres speed adj later In HIGH PREE SS3 SS3 #60 ANSI B16.1(YE YE 3/4" NPTF ON V LOC. GA VT 0 - +35 / (N.6	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 0 4 Class VI S S VALVE BODY AL A 0 - +85) A.				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES: M TEMPERATURE NORM. / D ELECTRICAL CONNECTION PROTECTION CLASS	TYPE AL AL NACE TO BINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will	be finalized	sition Indicator Rate of pres speed adj later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.10 YE. 3/4" NPTF ON V LOC. GA VT 0 -+35 / (N./- N./- IP 6	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSUKE AND RATE OF PRESSURE DROP 16 16 0 04 Class VI S S VALVE BODY AL S A 0 - +85) A. A. 5				
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47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES/ N TEMPERATURE NORM / D ELECTRICAL CONNECTIOI CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Min HIGHLOW SET POINT (PSIG / MIN HIGH (PSIG / MIN H	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 0 04 Class VI S S S VALVE BODY AL A O - +85) A A A A A A Below table				
47 48 49 50 51 52 53 54 55 56 61 62 63 64 65 66 67 68 69 70	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FILUID SUPLLY PRESSURE DES: M TEMPERATURE NORM: / D ELECTRICAL CONNECTION CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Min HIGHLOW SET POINT MFR.	TYPE AL AL NACE TO BINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) sustreet will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 14 Class VI S S S VALVE BODY AL S A 0 - +85) A.				
47 48 49 50 51 52 53 54 55 56 61 62 63 64 65 66 67 68 69 70 71	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPILLY PRESSURE DES / M TEMPERATURE NORM / D ELECTRICAL CONNECTIO CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Mi HIGHLOW SET POINT MFR. TAG NO	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 0 04 Class VI S S S VALVE BODY AL A O - +85) A A A A A A Below table				
47 48 49 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 70 71 72	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPILLY PRESSURE DES / M TEMPERATURE NORM . / D ELECTRICAL CONNECTIOI CABLE GLAND PROTECTION CLASS R.O.D SET POINT (PSig / Min HIGHLOW SET POINT MFR. NO SWITCH TYPE	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 0 04 Class VI S S S VALVE BODY AL A O - +85) A A A A A A Below table				
47 48 49 50 51 52 53 54 55 56 61 62 63 64 65 66 67 68 69 70 71	Control Panel	CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPILLY PRESSURE DES / M TEMPERATURE NORM / D ELECTRICAL CONNECTIO CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Mi HIGHLOW SET POINT MFR. TAG NO	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 0 04 Class VI S S S VALVE BODY AL A O - +85) A A A A A A Below table				
47 48 49 50 51 52 53 54 55 56 67 58 59 60 61 62 63 64 65 66 67 70 71 72 73	Control Panel Limit Switch	CONNECTION SIZE VALVE ACTION ON FAILU VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPILLY PRESSURE DES / M TEMPERATURE NORM . / D ELECTRICAL CONNECTIOI CABLE GLAND PROTECTION CLASS R.O.D SET POINT (PSig / Min HIGHLOW SET POINT MFR. NO SWITCH TYPE	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	osition Indicator Rate of pres speed adji later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. YE. GAV'NPTF ON V. I.OC. GA VT 0 - +35 / (N.f. IP 6 VT See note 6 in	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 10 0 04 Class VI S S VALVE BODY AL S A 0 - +85) A A 5 A below table will be finalized later				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES / M TEMPERATURE NORM / D ELECTRICAL CONNECTIO CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Mir HIGHLOW SET POINT MFR. TAG No SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING	TYPE AL AL NACE TO JINIMUM-NO ESIGN N	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	sition Indicator Rate of pres speed adj later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. 3/4" NPTF ON V LOC. GA VT 0 -+35 / (N.4. N.6 N.7 IP 6 VT See note 6 in later	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 10 0 04 Class VI S S VALVE BODY AL S A 0 - +85) A A 5 A below table will be finalized later				
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47 48 49 50 51 52 53 54 55 55 56 57 58 59 60 61 62 63 64 67 68 69 70 71 72 73 74 75 76		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS LEAKAGE CLASS LEAKAGE CLASS PROCCESS CONECTION MOUNTING FILUID SUPLLY PRESSURE DES: M TEMPERATURE NORM: / D ELECTRICAL CONNECTION CABLE GLAND PROTECTION CLASS R.O. D SET POINT (Psig / Mi) HIGHLOW SET POINT MFR. TAG NO. SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING CABLE GLAND FORTACT RAT	TYPE AL AL NACE TO HINIMUM-NO ESIGN N MODE	0 MR - 01 7	5		°C		will SHUT DOWN	l be finalized	sition Indicator Rate of pres speed adj later E IN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. 3/4" NPTF ON V LOC. GA VT 0 -+35 / (N.4. N.6 N.7 IP 6 VT See note 6 in later	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 10 0 04 Class VI S S VALVE BODY AL S A 0 - +85) A A 5 A below table will be finalized later				
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 70 71 72 73 74 75 77		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES / M TEMPERATURE CORM. / D ELECTRICAL CONNECTIO CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Mi HIGHLOW SET POINT MFR. TAG NO SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING CABLE GLAND PROTECTION CLASS R.O.D SET POINT MFR. TAG NO SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING CABLE GLAND ELECTR. CONNECTION SE PROTECTION SE PR	TYPE AL AL NACE TO HINIMUM-NO ESIGN N MODE	0 MR - 01 7	5		°C		will will	be finalized	sition Indicator Rate of pres speed adj later IN HIGH PREE: SS3 SS3 SS3 #60 ANSI B16.1(YE. 3/4" NPTF ON V LOC. GA VT 0 - +35 / (N./- IP 6 VT See note 6 in later	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 16 0 04 Class VI S S VALVE BODY AL A. 0 - +85) A. A. below table will be finalized later				
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47 48 49 50 51 52 53 54 55 55 56 57 58 59 60 61 62 63 64 65 66 67 70 71 72 73 74 75 76 77 77 78		CONNECTION SIZE VALVE ACTION ON FAILL VALVE POSITION LINE PRESSURE LOSS DET SPEED CONTROLLER MFR. ACTION ENCLOSURE TUBING / FITTING MATERI REATING CLASS LEAKAGE CLASS TUBING / FITTING MATERI MANUALL OPEN / CLOSE PROCCESS CONECTION MOUNTING FLUID SUPLLY PRESSURE DES / M TEMPERATURE CORM. / D ELECTRICAL CONNECTIO CABLE GLAND PROTECTION CLASS R.O.D SET POINT (Psig / Mi HIGHLOW SET POINT MFR. TAG NO SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING CABLE GLAND PROTECTION CLASS R.O.D SET POINT MFR. TAG NO SWITCH TYPE VOLTAGE SUPPLY CONTACT RATING CABLE GLAND ELECTR. CONNECTION SE PROTECTION SE PR	TYPE AL AL NACE TO BINIMUM-NO ESIGN MODE	D MR - 01 7					will will	be finalized THE VALVI	sition Indicator Rate of pres speed adj later EIN HIGH PREE: SS3 SS3 #60 ANSI B16.1(YE. YE. 3/4" NPTF ON V LOC. GA VT 0 -+35 / (N./ IP 6 VT See note 6 in later	CLOSE (see note 11 in below table) ssure drop ustment will be finalized later SSURE AND RATE OF PRESSURE DROP 16 10 0 04 Class VI S S VALVE BODY AL S A 0 - +85) A A below table will be finalized later				
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(*). TO BE ADVISED & FILLED BY VENDOR

1. VALVE TYPE SHALL BE IN ACCORDANCE WITH PROJECT PRID

2. ACCORDING TO PIPELINE MATERIELA SECTIFICATION AS MINIMUM

3. BORE TO MATCH PIPELINE ID

4. ACTUATOR TESTED AT 1.5 TIMES THE MAX SUPPLY

5. CONTROL PANEL SHALL BE CAPABLE TO METER THE PIPE LINE PRESSURE AND BLOCK IT IN CASE OF R.O.D (RATE OF DROP

7. NO ELECTRICAL SIGNAL THE VALVE HAS

8. In ACCORDING TOPIPING MATERIAL SPECIFIACTION AS MINIMUM

9. ACCORDING TO APPEG

10. VALVE SHALL BE KNTALLED INSIDE CONCRETE PIT. EXTENDED STEM(1.5 m) IS REQUIRED TO BE CONSIDERED BY VENDOR

11. THE ACTUATOR SHALL HAVE MODULAR DESIGN AND SHALL EMPLOY SCOTCH YOKE MECHANISM PREFERABLY WITH 90° ROTATION.

12. MECHANICAL POSITION INDICATOR SHALL BE PROVIDED BY VENDOR S, SHOWING VALVE POSITION LOCALLY.



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک بستههاي كارى تحتالارض





احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاهمکان/واحد بهره برداري بينك

DATASHEETS FOR LBV

							DATASHEETS FOR	LBV										
		شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته		نوع مدرك	سريال	نسخه							
	053 - 073 - 918			DDI	DEDCO	220	INI		DT	0012	D04	شماره صفحه: 6 از 6						
L		4	BK PPL PEDCO 320 IN								D04							
Item	Data Category	category Technical Features									Project Data & Requirements							
1		Tag No.									LBV	-3202						
2		P&ID No.								BK-PPI -PI		PI-0001_D05 (page 2 of 3)						
3		Service							F) to Pig Receiver (PR-3201)						
4		Fluid Phase						-		Tom 1 ig Lac		as						
	General Data	Fluid State										rbone Gas						
5		Area Classification																
6									Zone 2, IIB T4									
7		Line No.					GAS-113-0009-FN27-8"-PT Refer to Note 20 in General Note											
8		Ambient Temperature C	/ NT	1/10														
9		FLOW RATE (Kg/hr.) Ma INLET/OUTLET PRESSURE		II / IVIIII.							18887.891							
10												13						
11		OPERATING FLUID TEMPE										31.3						
12		DENSITY (kg/m3) Mix./Gas.	/Lıq								47.16/47							
13	Service Process Data	VISCOSITY (GAS/LIQ.) cP									0.013	3/0.13						
14		VAPOR PRESSURE Pv Bar (a)								1010	-						
15		CRITICAL PRESSURE Barg		nn i mrinn								9 barg						
16		DESIGN TEMPERATURE / N									85 /							
17		DESIGN PRESSURE / MAX.		Barg								3 Barg						
18		SHUT-OFF PRESSURE (barg)									52						
19		VALVE TYPE							ball v	alve, Gear T		Mounted (see note 9 in below table)						
20		BODY MATERIAL									ASTM A							
21		NACE TO MR - 01 75		II DIE D	ATED DDEGG	UDE				0.11	YI	ES						
22		BODY SIZE		LINE R	ATED PRESS	UKE			_	8"		600						
23		MAX. PRES. & TEMP. END CONNECTIONS & RA	TINCS						$\overline{}$	VTA	NA Pri	VTA						
24		SEAT TYPE	TINUS					/	D04 \	FLANGE		F, 600#, ASTM A694 F52						
25											Soft Sea							
26		SEAT MATERIAL										+ RPTFE						
27	Dady and Value Tale	TRIM MATERIAL										-STELLTE6						
28	Body and Valve Trim	PLUG / BALL MATERIAL						-				-STELLTE6						
29		STEM MATERIAL									V							
30		STEM GUIDE MATERIAL	OT LATE									ГА						
31		STUFFING BOX PACKING	(GLAND)						VTA									
32		BOLTING							Based on PMS requirements									
33		ALVE SEALING MATERIAL SEAT SEAL MATERIAL NTI BLOW-OUT DEVICE OF THE STEM							ANTI STATIC (VTC) ANTI STATIC (VTC) YES									
34			AKAGE CLASS						ANSI B16.104 Class VI (TSO)									
35		FIRE SAFE						-	YES (API 6FA)									
36 37		MFR.		MODEI	r			-	wil	l be finalized		will be finalized later						
38		TYPE OF ACTUATOR		WODE	ь				WII			G GAS - OVER OIL						
39		MOUNTING TYPE				SII	PPLY	-		DO	DIRECT							
40		NACE TO MR - 01 75				50	IILI	-				ES D04 SOUR GAS						
41		OPENING TIME								Q		R TO CONFIRM)						
42		CLOSING TIME																
43		MAX. ALLOW. PRESSURE							8 Sec.(VENDOR TO CONFIRM) VTA VTA									
44			IN. REQ. TORQUE MAX. REQ. TORQUE							VTA		VTA						
45	Actuator		GAS / OIL CONSUMPTION						VTA									
46		HANDWHEEL										General Note						
47		CONNECTION SIZE										TA						
48		VALVE ACTION ON FAILU	RE								FAIL TO	O CLOSE						
49		VALVE POSITION							Mechanical Position Indicator (see note 11 in below table)									
50		LINE PRESSURE LOSS DET	ECTION SY	STEM					Rate of pressure drop									
51		SPEED CONTROLLER									speed ad	ljustment						
52		MFR.	TYP	Е						l be finalized		will be finalized later						
53		ACTION						5	SHUT DOWN	THE VAL		PREESSURE AND RATE OF PRESSURE						
54		ENCLOSURE										316						
55		TUBING / FITTING MATERI	AL									316						
56		REATING CLASS									#6							
57		LEAKAGE CLASS									ANSI B16.1	104 Class VI						
58		TUBING / FITTING MATERI	AL NACE T	O MR - 01 7	75							ES						
59		MANUALL OPEN / CLOSE										ES						
60		PROCCESS CONECTION										VALVE BODY						
61	Control Panel	MOUNTING							LOCAL									
62	John of Faller	FLUID										AS						
63		SUPLLY PRESSURE DES/ M	INIMUM-N	OR.					VTA									
64		TEMPERATURE NORM. / D	ESIGN				°C		0 - +35 / (0 - +85)									
65		ELECTRICAL CONNECTION	1								N.	.A.						
66		CABLE GLAND									N.	.A.						
67		PROTECTION CLASS									IP	65						
68		R.O.D SET POINT (Psig / Mir	1)								V'	ТА						
69		HIGH/LOW SET POINT									See note 6 ir	n below table						
70		MFR.	MOI	DEL					wil	l be finalized	later	will be finalized later						
71		TAG No								_								
72		SWITCH TYPE																
73		VOLTAGE SUPPLY																
74	Limit Switch	CONTACT RATING									Not Applical	ble(Note 12)						
75		CABLE GLAND																
76		ELECTR. CONNECTION SIZ	ZΕ															
77		PROTECTION CLASS																
78		VALVE TEST SYSTEM							\	Calibration K	it for Valve and a	ctuator Testing and Calibration						
79		VOLUME TANK, N2 START	UPTANK	.GAS-OVFR	R-OIL PRESSI	RE TANKS	S & ACCUMULATOR		YES C			essories with 1 stroke capacity (Note 14)						
80		DRAIN VALVE		, 0 121				D0	14			ES						
81	Accessories	CONTROL PANEL										ES						
82		HAND PUMP								Han		inent change-over valve						
83		TUBING / FITTING										316						
84		GAS FILTER REGULATOR						- t				/VTA						
37																		





(*): TO BE ADVISED & FILLED BY VENDOR

1. VALVE TYPE SHALL BE IN ACCORDANCE WITH PROJECT PAID

2. ACCORDING TO PIPELINE MATERIAL SECRETICATION AS MINIMUM

3. BORE TO MATCH PIPELINE ID

4. ACCUATION TESTED AT 1.5 TIMES THE MAX SUPPLY

5. CONTROL, PANEL SHALL BE CAPABLE TO METER THE PIPE LINE PRESSURE AND BLOCK IT IN CASE OF R.O.D (RATE OF DROP

7. NO ELECTRICAL SIGNAL THE VALVE HAS

8. IN ACCORDING TOPPING MATERIAL SPECIFIACTION AS MINIMUM

9. ACCORDING TO API 60

10. YALVE SHALL BE INSTALLED INSIDE CONCRETE PIT. EXTENDED STEM(1.5 m) IS REQUIRED TO BE CONSIDERED BY VENDOR

11. THE ACTUATORS SHALL HAVE MODULAR DESIGN AND SHALL EMPLOY SCOTCH YORE MECHANISM PREFERABLY WITH 90° ROTATION

12. MECHANICAL POSITION INDICATOR SHALL BE PROVIDED BY VENDOR 3. SHOWING VALVE POSITION LOCALLY.