

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنيه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد ۰۸-۰۱۰-CO-GCS-HD-BK)								
	INSTRUMENT D.S. FOR FLOW TRANSMITTER								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادرکننده MF	تسهیلات 120	رشته IN	نوع مدرک DS	سریال 0015	نسخه V00	شماره صفحه: ۱ از ۵

طرح نگهداشت و افزایش تولید ۲۷ مخزن

INSTRUMENT D.S. FOR FLOW TRANSMITTER

نگهداشت و افزایش تولید میدان نفتی بینک

V00	Mar.2025	IFA	MFS	M.Fakharian	S.Faramarzpour	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
		CLIENT Doc. Number: -				

status:

IFA: Issued For Approval

IFI: Issued For Information

AFC: Approved For Construction

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REVISION RECORD SHEET

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2	X					62					
3	X					63					
4	X					64					
5	X					65					
6						66					
7						67					
8						68					
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60						120					

Note:

- 1- Engraved stainless steel corrosion resistant tag nameplate is required for transmitter.
- 2-Transmitter shall be provided with ground lug
- 3-Square root extraction shall be performed in transmitter
- 4-Flowrate range shall be indicated in LCD indicator
- 5-Due to operation and design temperature supplier shall advise about Max operation temperature of transmitter
- 6-All the wetted parts in sour service shall be in accordance with NACE MR-01-75/ISO 15156 standard

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زردای گاز ایستگاه تقویت فشار گاز بینک (قرارداد ۰۸-۰۰۱-۰۰۱-BK-HD-GCS-CO)											
	INSTRUMENT D.S. FOR FLOW TRANSMITTER											
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۴ از ۵			
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	MF	120	IN	DS	0015	V00				
GENERAL	1	Item Number		Tag Number		Quantity		2		D-FIT-2102		1
	2	Service								WET GAS TO C100		
	3	P & ID No.		Page No.				BK-GCS-MF-120-PR-PI-0003		1/7		
	4	Line No. / Equipment No.		Piping Class				GAS-111-0001-FN05-6"-PT		FN05		
PROCESS CONDITIONS	5	Fluid		Phase				GAS		Vapor		
	6	Flow Rate:	Minimum	Normal	Maximum	Unit	8626	17252.5	20703		kg/h	
	7	Operation Pressure:	Minimum	Normal	Maximum	Unit	50	53.9	58.0		barg	
	8	Operation Temperature				Unit	60				°C	
	9	Design Pressure				Unit	F.V. / 62				barg	
	10	Design Temperature				Unit	148				°C	
	11	Operating Viscosity				Unit	0.0141				cp	
	12	Solid in Suspension		Wet Gas			YES		YES			
	13	Corrosive Service		NACE Requirement			YES		YES			
	14	Toxic Service		Superheat			YES		NO			
	15											
	TRANSMITTER	16	Instrument Type		Model				D/P CELL		Will be selected later	
		17	Flow Rate Range Min / Max				Unit	0 - 2200				Kg/ h
		18	Calibration Range				Unit	0-250				mbar
		19	Adjustable Range Min. / Max.				Unit	VTA				Barg
20		Zero Adjustment		Span Adjustment				YES (Internal)		YES (Internal)		
21		Accuracy		Repeatability				± 0.1% of full scale.		± 0.25% of full scale (VTC)		
22		Integral Indicator		Scale Factor				YES		VTA		
23		RFI Protection		Write Protection				YES (VTC)		NO		
24		Power Supply		Power Consumption				24 Vdc (2 wire), loop powered		VTA		
25		Output Signal		Electrical Connection				4-20 mA, HART		ISO M20 x 1.5		
26		Failure / Diagnostic Alarm						Self-Diagnostics				
27		Housing Material		Mounting Type				Painted Copper Free Die Cast Aluminum		YOKE (2" Pipe)		
28		Ex Certificate		Ingress Protection				EEx-i IIB T4		IP65		
29		SIL Requirement/Level						NO				
SENSING & BODY		30	Element Type		Element Material				Diaphragm (VTC)		316 SS (NACE)	
	31	Body Material		Body Rating				316 SS		Mfr. Std.		
	32	O-Rings Material		Bolts Material				Mfr. Std.		SS		
	33	Instrument Connection						1/2" NPT Integral with 5-Way Valve Manifold				
	34	Fill Fluid						Silicone Oil				
	35	Over range Protection		Maximum Static Pressure (barg)				YES (130% of maximum range)		VTA		
	36	Ambient Temp. Effect		Operating Temp. Limits				kept to a minimum.		VTA		
	37											
DIAPHRAGM SEAL	38	Type		Model Number				Clamped Diaphragm Seals(VTC)		Will be finalized later		
	39	Process Connection		Instrument Connection				2" Flanged type		1/2" NPT(F)		
	40	Connection Material		Connection Rating				SS316 RF		600#		
	41	Diaphragm Material						316 SS(NACE)				
	42	Extended Length						316 SS(NACE)				
	43	Bottom Housing Material						316 SS(NACE)				
	44	Top Housing Material						316 SS(NACE)				
	45	Flushing Connection						1/4" NPTM(VTC)				
	46	Fill Connection						1/4" NPTF(VTC)				
	47	Fill Fluid						Silicone oil (VTC)				
	48	Capillary Length						3m				
	49	Capillary Bleeder						YES/1/4" NPTF(VTC)				
50	Capillary Material						6 SS shielded by flexible stainless steel tubing with PVC cover (VT					
51												
MANIFOLD	52	Valve Type		Model				NA		NA		
	53	Body Material		Trim Material				NA		NA		
	54	Process Connection		Instrument Connection				NA		NA		
	55	Vent / Drain size		Valve Rating				NA		NA		
	56	Packing Material						NA				
	57											
ACCESSORIES	58	Lightning Protection						YES				
	59	Mounting Brackets		Brackets Material				2" Pipe Mounting Bracket		SS		
	60	Name Plate						YES (SS)				
	61	Elec. integrally mounted indicator LCD		Tag Number				YES		YES		
	62											
PURCHASE	63	Manufacturer						Will be selected later				
	64	Model						Will be selected later				
	65	Requisition Number						Will be selected later				

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		INSTRUMENT D.S. FOR FLOW TRANSMITTER										
		شماره پیمان:		پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سرپال	نسخه	شماره صفحه: ۵ از ۵
۰۵۳ - ۰۷۳ - ۹۱۸۱		BK	GCS	MF	120	IN	DS	0015	V00			
GENERAL	1	Item Number		Tag Number		Quantity		3		D-FIT-2103		1
	2	Service								STRIPPING GAS TO REBOILER		
	3	P & ID No.		Page No.				BK-GCS-MF-120-PR-PI-0003		4/7		
	4	Line No. / Equipment No.		Piping Class				FLG-111-0028-AN04-1"-PT		AN04		
PROCESS CONDITIONS	5	Fluid		Phase				FUEL GAS		Gas		
	6	Flow Rate:	Minimum	Normal	Maximum	Unit	30	60	72	kg/h		
	7	Operation Pressure:	Minimum	Normal	Maximum	Unit	4	4.9	5.2	barg		
	8	Operation Temperature				Unit	48				°C	
	9	Design Pressure				Unit	9				barg	
	10	Design Temperature				Unit	85				°C	
	11	Operating Viscosity				Unit	0.01147				cp	
	12	Solid in Suspension		Wet Gas				NO		NO		
	13	Corrosive Service		NACE Requirement				YES		YES		
	14	Toxic Service		Superheat				NO		NO		
	15											
	TRANSMITTER	16	Instrument Type		Model				D/P CELL		Will be selected later	
		17	Flow Rate Range Min / Max				Unit	0-100				Kg/ h
		18	Calibration Range				Unit	0-250				mbar
		19	Adjustable Range Min. / Max.				Unit	VTA				Barg
20		Zero Adjustment		Span Adjustment				YES (Internal)		YES (Internal)		
21		Accuracy		Repeatability				± 0.1% of full scale.		± 0.25% of full scale (VTC)		
22		Integral Indicator		Scale Factor				YES		VTA		
23		RFI Protection		Write Protection				YES (VTC)		NO		
24		Power Supply		Power Consumption				24 Vdc (2 wire), loop powered		VTA		
25		Output Signal		Electrical Connection				4-20 mA, HART		ISO M20 x 1.5		
26		Failure / Diagnostic Alarm						Self-Diagnostics				
27		Housing Material		Mounting Type				Painted Copper Free Die Cast Aluminum		YOKE (2" Pipe)		
28		Ex Certificate		Ingress Protection				EEx-1 IIB T4		IP65		
29		SIL Requirement/Level						NO				
SENSING & BODY		30	Element Type		Element Material				Diaphragm (VTC)		316 SS	
	31	Body Material		Body Rating				316 SS		Mfr. Std.		
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	34	Fill Fluid						Silicone Oil				
	35	Over range Protection		Maximum Static Pressure (barg)				YES (130% of maximum range)		VTA		
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DIAPHRAGM SEAL	38	Type		Model Number				Clamped Diaphragm Seals(VTC)		Will be finalized later		
	39	Process Connection		Instrument Connection				2" Flanged type		1/2" NPT(F)		
	40	Connection Material		Connection Rating				SS316 RF		300#		
	41	Diaphragm Material						316 SS(NACE)				
	42	Extended Length						316 SS(NACE)				
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	44	Top Housing Material						316 SS(NACE)				
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	51											
	MANIFOLD	52	Valve Type		Model				NA		NA	
53		Body Material		Trim Material				NA		NA		
54		Process Connection		Instrument Connection				NA		NA		
55		Vent / Drain size		Valve Rating				NA		NA		
56		Packing Material						NA				
57												
ACCESSORIES		58	Lightning Protection						YES			
	59	Mounting Brackets		Brackets Material				2" Pipe Mounting Bracket		SS		
	60	Name Plate						YES (SS)				
	61	Elec. integrally mounted indicator LCD		Tag Number				YES		YES		
	62											
PURCHASE	63	Manufacturer						Will be selected later				
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