



NISOC

شماره پیمان:

053 - 073 – 9184

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد 03_0008-GCS-HD-BK)



شماره صفحه: 1 از 10

DATASHEET FOR CONTROL/REGULATOR VALVES

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	پسته کاری	پروژه
V00	0002	DS	IN	120	HY	GCS	BK

طرح نگهداشت و افزایش تولید 27 مخزن

DATASHEET FOR CONTROL/REGULATOR VALVES

نگهداشت و افزایش تولید میدان نفتی بینک

V00	OCT.2024	IFR	Havayar Co.	M.Fakharian	M.SADEGHIAN	
Rev.	Date	Purpose of Issue/Status	Prepared By	Checked By	Approved By	Client Approval

Status:

IFA: Issued For Approval
IFR: Issued For Review
IFI: Issued For Information
AFC: Approved For Construction



شماره پیمان:

053 - 073 - 9184

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد 03 BK-HD-GCS-CO-0008)



شماره صفحه: 2 از 10

DATASHEET FOR CONTROL/REGULATOR VALVES

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	پسته کاری	پروژه
V00	0002	DS	IN	120	HY	GCS	BK

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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج های کمپرسور گاز (رقت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)										
		DATASHEET FOR CONTROL/REGULATOR VALVES								شماره صفحه: 3 از 10		
شماره پیمان: 053-073-9184		BK	GCS	HY	120	IN	DS	0002	V00			
General	1	Instrument Name					PRESSURE REGULATOR					
	2	Tag Number		P&ID No.		PCV-2120A/B/C			BK-GCS-HY-120-PR-PI-0001 page2/9			
	3	Service		Pipe No.		Instrument Air			ISA-112-0002A-AZ00-2"-IS			
	4	Pipe O. D. / I. D. mm		Pipe Class		1"			AZ00			
	5	Pipe Material		Pipe Insulation		Galvanized Carbon steel			NP			
Process Conditions	6	Fluid		State		Instrument Air			Gas			
	7	Design Pressure bar(g)		Max. Shut-Off DP. bar(g)		12/5			12/5			
	8	Operating Temperature °C		Design Temperature °C		65			85			
	9	Operating Density kg/m3		Standard Density kg/Nm3		9/155						
	10	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		2/303			0/02108			
	11	Speci. Heat Ratio Cp/Cv		Compress Factor		1/417			0/9982			
	12	Vapor Pressure		Critical Pressure (barg)					36/86			
	13	Flow Rate				Unit	Min. Flow		Nor. Flow		Max. Flow	
	14	kg/h(Liquid,Steam),Nm3/h(Gas)				Nm3/h	3		6		6	
	15	Inlet Pressure				bar(g)	6/01		7		8	
Calculation Data	16	Sizing Cv					VTA					
	17	Valve Travel				%			VTA			
	18	Allowable SPL dBA		Predicated SPL dBA		<85 dB			N/A			
	19	Rated Cv		Valve FI		VTA			N/A			
Valve Body/Bonnet	20	Model				Self-operated						
	21	Body Type		Control Mode		Globe			SELF			
	22	Body Size		End Connection & Rating		1"			Flange,300# RF			
	23	Allowable Operating Temperature °C		Pressure Rating								
	24	Bonnet Type		Flow Direction		Bolted			N/A			
Trim	25	Body Material		Stem/Shaft Material		Galvanized Carbon steel			S.S316L			
	26	Trim Type		Trim Size		Standard			Standard			
	27	Trim Material		Seat Material		S.S316L			S.S316L			
	28	Guiding		Packing Material		S.S316L			PTFE			
Actuator	29	Characteristics		Seat Leakage Class		Linear			IV			
	30	Model		Type		Diaphragm			Spring &Diaphragm			
	31	Pilot		Restrictor Type		N/A			Internal			
	32	Restrictor Input		Ext. Connection Size		DOWNSTREAM			-			
	33	Seal Type		Spring Material		S.S316L			S.S316L			
	34	Diaph. Temperature Rating		Diaph. Pressure Rating		50			12			
	35	Diaphragm Material		Available D. P.		EPDM · FKM · NBR						
	36	Pressure Set Point				6 barg						
	37	Temperature Assembly		Capillary Length		-			-			
	38	Fail Position		Tubing&Fitting		Open			S.S316L			
Accessories	39	Enclosure Protection				IP65						
	40	Filter		Mesh Size		-			-			
	41	Condenser		Check Valve		-			-			
Miscell.	42	Inlet Gauge		Control Gauge		-			-			
	43	Manufacturer										
	44	Requisition No.										

NOTES:
 1- Each Instrument Shall Have a S.S. Tag Plate With Purchaser's Tag Number, The Tag Plate Shall Be Permanently Attached To The Instrument .

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پنکیج های کمپرسور گاز (رقت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)									
شماره پیمان: 053-073-9184		DATASHEET FOR CONTROL/REGULATOR VALVES								شماره صفحه: 4 از 10	
		BK	GCS	HY	120	IN	DS	0002	V00		
General	1	Instrument Name				PRESSURE REGULATOR					
	2	Tag Number		P&ID No.		PCV-2205A/B/C			BK-GCS-HY-120-PR-PI-0001-page:4		
	3	Service		Pipe No.		N2 Gas Supply			NIT-112-0002A-SS-1"-IS		
	4	Pipe O. D. / I. D. mm		Pipe Class		1"			S.S		
	5	Pipe Material		Pipe Insulation		SS316L			NP		
Process Conditions	6	Fluid		State		Nitrogen			Gas		
	7	Design Pressure bar(g)		Max. Shut-Off DP. bar(g)		12/5			12/5		
	8	Operating Temperature °C		Design Temperature °C		60			85		
	9	Operating Density kg/m3		Standard Density kg/Nm3		8/62					
	10	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		2/32			0/02		
	11	Speci. Heat Ratio Cp/Cv		Compress Factor		1/408			0/9989		
	12	Vapor Pressure		Critical Pressure		NA			NA		
	13	Flow Rate kg/h(Liquid,Steam),Nm3/h(Gas)				Unit	Min. Flow		Nor. Flow		Max. Flow
Calculation Data	14	Inlet Pressure				Bar(g)	4		7/5		8
	15	Outlet Pressure				Bar(g)	0/5		0/5		0/5
	16	Sizing Cv									
Valve Body/Bonnet	17	Valve Travel				%					
	18	Allowable SPL dBA		Predicated SPL dBA		<85 dB			N/A		
	19	Rated Cv		Valve FI		VTA			N/A		
	20	Model				Self-operated					
Trim	21	Body Type		Control Mode		Globe			SELF		
	22	Body Size		End Connection & Rating		1"			Flange,300# RF		
	23	Allowable Operating Temperature °C		Pressure Rating							
	24	Bonnet Type		Flow Direction		Bolted			N/A		
	25	Body Material		Stem/Shaft Material		S.S316L			S.S316L		
Actuator	26	Trim Type		Trim Size		Standard			Standard		
	27	Trim Material		Seat Material		S.S316L			S.S316L		
	28	Guiding		Packing Material		S.S316L			PTFE		
	29	Characteristics		Seat Leakage Class		Linear			IV		
Accessories	30	Model		Type		Diaphragm			Spring&Diaphragm		
	31	Pilot		Restrictor Type		N/A			Internal		
	32	Restrictor Input		Ext. Connection Size		DOWNSTREAM			-		
	33	Seal Type		Spring Material		S.S316L			S.S316L		
	34	Diaph. Temperature Rating		Diaph. Pressure Rating		65			12		
	35	Diaphragm Material		Available D. P.		EPDM · FKM · NBR					
	36	Pressure Set Point				1 Barg					
	37	Temperature Assembly		Capillary Length		-			-		
	38	Fail Position		Tubing&Fitting		Open			S.S316L		
Miscell.	39	Enclosure Protection				-					
	40	Filter		Mesh Size		-			-		
	41	Condenser		Check Valve		-			-		
Miscell.	42	Inlet Gauge		Control Gauge		-			-		
	43	Manufacturer									
	44	Requisition No.									

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شماره پیمان: 053-073-9184		DATASHEET FOR CONTROL/REGULATOR VALVES								شماره صفحه: 5 از 10	
		BK	GCS	HY	120	IN	DS	0002	V00		
General	1	Instrument Name				PRESSURE REGULATOR					
	2	Tag Number		P&ID No.		PCV-2206A/B/C			BK-GCS-HY-120-PR-PI-0001-page:4		
	3	Service		Pipe No.		N2 Gas Supply			NIT-112-0001A-SS-1"-IS		
	4	Pipe O. D. / I. D. mm		Pipe Class		1"			S.S		
	5	Pipe Material		Pipe Insulation		SS316L			NP		
Process Conditions	6	Fluid		State		Nitrogen			Gas		
	7	Design Pressure bar(g)		Max. Shut-Off DP. bar(g)		12/5			12/5		
	8	Operating Temperature °C		Design Temperature °C		60			85		
	9	Operating Density kg/m3		Standard Density kg/Nm3		8/62					
	10	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		2/32			0/02		
	11	Speci. Heat Ratio Cp/Cv		Compress Factor		1/408			0/9989		
	12	Vapor Pressure		Critical Pressure		NA			NA		
	13	Flow Rate kg/h(Liquid,Steam),Nm3/h(Gas)				Unit	Min. Flow		Nor. Flow		Max. Flow
Calculation Data	14	Inlet Pressure				Bar(g)	4		7/5		8
	15	Outlet Pressure				Bar(g)	2		2		2
	16	Sizing Cv									
Valve Body/Bonnet	17	Valve Travel				%					
	18	Allowable SPL dBA		Predicated SPL dBA		<85 dB			N/A		
	19	Rated Cv		Valve FI		VTA			N/A		
Trim	20	Model				Self-operated					
	21	Body Type		Control Mode		Globe			SELF		
	22	Body Size		End Connection & Rating		1"			Flange,300# RF		
	23	Allowable Operating Temperature °C		Pressure Rating							
	24	Bonnet Type		Flow Direction		Bolted			N/A		
Actuator	25	Body Material		Stem/Shaft Material		S.S316L			S.S316L		
	26	Trim Type		Trim Size		Standard			Standard		
	27	Trim Material		Seat Material		S.S316L			S.S316L		
	28	Guiding		Packing Material		S.S316L			PTFE		
	29	Characteristics		Seat Leakage Class		Linear			IV		
Accessories	30	Model		Type		Diaphragm			Spring&Diaphragm		
	31	Pilot		Restrictor Type		N/A			Internal		
	32	Restrictor Input		Ext. Connection Size		Downstream			-		
	33	Seal Type		Spring Material		S.S316L			S.S316L		
	34	Diaph. Temperature Rating		Diaph. Pressure Rating		65			12		
	35	Diaphragm Material		Available D. P.		EPDM · FKM · NBR					
	36	Pressure Set Point				2.2 Barg					
	37	Temperature Assembly		Capillary Length		-			-		
	38	Fail Position		Tubing&Fitting		Open			S.S316L		
Miscell.	39	Enclosure Protection				-					
	40	Filter		Mesh Size		-			-		
	41	Condenser		Check Valve		-			-		
Miscell.	42	Inlet Gauge		Control Gauge		-			-		
	43	Manufacturer									
	44	Requisition No.									

NOTES:
 1- Each Instrument Shall Have a S.S. Tag Plate With Purchaser's Tag Number , The Tag Plate Shall Be Permanently Attached To The Instrument .

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)								
		DATASHEET FOR CONTROL/REGULATOR VALVES								
Contract No:		Project	Package	Issuer	Facility	Dicipline	Doc.	Sequence	Rev	شماره صفحه: 6 از 10
053-073-9184		BK	GCS	HY	120	IN	DS	0002	V00	
TAG NO. : PCV-2123A/B/C		Line Num: GAS-111-0045A-FS00-6"-IS				P&ID NO. : BK-GSC-HY-120-PR-PI-001-Rev.01 Page 1 /3				
1	SERVICE CONDITIONS	FLUID : Hydrocarbon								
2				UNITS	25% Summer	25% Winter	Summer	Winter		
3		STATE			Two Phase (Note 1)	Gas (Note 1)	Two Phase (Note 1)	Gas (Note 1)		
4		GAS MASS FLOW RATE (Liq. / Gas)		Kg/hr	10 / 2223	2086	38.54 / 8897	8343/5		
5		INLET PRESSURE		barg	54/1	54/1	54/1	54/1		
6		PRESSURE DIFFERENTIAL		bar	49	49	49	49		
7		INLET TEMPERATURE		°C	60	60	60	60		
8		MOLECULAR WEIGHT (Liq. / Gas)		M	18.05 / 24.56	- / 21.56	18.05 / 24.56	- / 21.56		
9		DYNAMIC VISCOSITY (Liq. / Gas)		cP	0.4943 / 0.0142	- / 0.0139	0.4943 / 0.0142	- / 0.0139		
10		RATIO OF SPECIFIC HEATS (Liq. / Gas)			1.163 / 1.462	1/434	1.163 / 1.462	1/434		
11		INLET COMPRESSIBILITY FACTOR			0.0366 / 0.8229	0/868	0.0366 / 0.8229	0/868		
12		*REQUIRED C _v			VTS	VTS	VTS	VTS		
13		*TRAVEL		%	VTS	VTS	VTS	VTS		
14	LINE	ALLOWABLE*/PREDICTED SPL		dBA	< 85	< 85	< 85	VTS		
15		PIPE LINE SIZE		6"	46	*TYPE <i>Spring Diaphragm</i> *MFR & MODEL VTS *SIZE VTS EFF. AREA VTS ON/OFF MODULATING: YES SPRING ACTION OPEN/CLOSE AIR TO OPEN *MAX. ALLOWABLE PRESSURE 10barg *MIN REQUIRED PRESSURE 4 barg AVAILABLE AIR SUPPLY PRESSURE (barg) 4 barg MAX:10 barg MIN: 4 barg *BENCH RANGE - ACT ORIENTATION Horizontal HANDWHEEL TYPE N/A AIR FAILURE VALVE: Yes,Open SET AT - INPUT SIGNAL 4-20 mA *TYPE: Smart HART *MFR & MODEL VTS AIR CONN.: 1/4" NPTF *ON INCR SIGNAL OUTPUT INCR/DECR: VALVE CLOSE ON INCREASE SIGNAL OUTPUT GAUGES: YES BYPASS YES MATERIAL Aluminum ENCLOSURE CLASS EX ia , IIB, T4 INGRESS PROTECTION IP 66 OUTPUT 4-20 mA EX ia , IIB, T4 TAG NO. AUXILIARY POWER 24 VDC HOUSING MATERIAL Included in Positioner INGRESS PROTECTION IP66 *MFR & MODEL VTS AIR CONN.: 1/4" NPTF *SET PRESSURE 4 barg FILTER: Yes GAUGE: Yes *HYDRO PRESSURE Yes ANSI/FCI LEAKAGE CLASS: IV				
16		PIPE LINE Mat. / INSULATION		Stainless Steel / No Insulation	47					
17		*TYPE		Globe Valve	48					
18		*SIZE /RATING		VTA , #600, Line Sch:40S	49					
19		DESIGN PRESS/TEMP.		62 barg /180 °C	50					
20		*MFR & MODEL			51					
21		*BODY/BONNET MATL		ASTM A351 CF3M(NACE MR0175)	52					
22		*LINER MATERIAL/ID		S.S316 (NACE MR0175)	53					
23		END CONNECTION		Flanged	54					
24		FLG. FACE FINISH		Raised Face	55					
25		END EXT/MATL			56					
26		*FLOW DIRECTION			57					
27	*TYPE OF BONNET		Bolted Bonnet	58						
28	LUB & ISO VALVE			59						
29	*PACKING MATERIAL		Teflon-Chevron	60						
30	*PACKING TYPE			61						
31	TRIM	*TYPE		Trim No. 10	62					
32		*SIZE		*RATED TRAVEL	63					
33		*CHARACTERISTIC		VTA	64					
34		*BALANCED / UNBALANCED		VTA	65					
35		DIAPHRAGM MATERIAL		VTA	66					
36		PLUG/BALL/DISK MATERIAL		Trim No. 10	67					
37		SEAT MATERIAL		Trim No. 10 (NACE MR0175)	68					
38		GUIDE MATERIAL		Trim No. 10 (NACE MR0175)	69					
39		STEM MATERIAL		Trim No. 10 (NACE MR0175)	70					
40		CAGE MATERIAL		Trim No. 10 (NACE MR0175)	71					
41		GASKET MATERIAL		Spiral Wound, 4.45 mm Thick., RF, SF, S.S 316 Winding/ Graphite Filler, C.S. Outer& S.S 316L Inner Ring ASME B16.20	72					
42		SOLENOID VALVE:		YES, Body S.S316	73					
43		COIL RATING:		Class F	74					
44	SUPPLY VOLTAGE		24VDC	75						
45	INGRESS PROTECTION		IP66 , EXd IIB T4	76						
46	Limit Switch (Open/Close)		Limit switch box Body Aluminum-24vdc-IP66 , EXd IIB T4							
NOTES: 1- See gas composition in attachment. 2- M20 x 1.5 Cable gland shall be provided by vendor. 3- VTS: Vendor to Specify, VTC: Vendor to Confirm, N/A: Not Applicable 4- Trim number shall be confirmed by Vendor. 5-LEAKAGE CLASS IV * All information shall be confirmed by Vendor.										



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و اینیه تحت الارض
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد 03-BK-HD-GCS-CO-0008)



DATASHEET FOR CONTROL/REGULATOR VALVES

Contract No:	Project	Package	Issuer	Facility	Dicipline	Doc.	Sequence	Rev	شماره صفحه: 7 از 10
053-073-9184	BK	GCS	HY	120	IN	DS	0002	V00	

				Summer	Winter
				M.W.	
AIR			28.966		
OXYGEN	O ₂		32.000		
NITROGEN	N ₂		28.016	0.298400	0.310100
WATER VAPOR	H ₂ O		18.016	1.031400	0.363775
CARBON MONOX.	CO		28.010		
CARBON DIOX.	CO ₂		44.010	3.160600	2.520200
HYDRO. SULFIDE	H ₂ S		34.076	5.411900	4.705600
HYDROGEN	H ₂		2.016		
METHANE	CH ₄		16.042	63.892100	73.980900
ETHYLENE	C ₂ H ₄		28.052		
ETHANE	C ₂ H ₆		30.068	13.751500	11.424900
PROPYLENE	C ₃ H ₆		42.078		
PROPANE	C ₃ H ₈		44.094	7.731400	4.737100
I-BUTANE	C ₄ H ₁₀		58.120	0.839400	0.394200
n-BUTANE	C ₄ H ₁₀		58.120	1.859400	0.813000
I-PENTANE	C ₅ H ₁₂		72.146	0.696800	0.306600
n-PENTANE	C ₅ H ₁₂		72.146	0.377400	0.145000
n-Hexane				0.654900	0.222400
n-Heptane				0.195600	0.054200
n-Octane				0.059600	0.014900
n-Nonane				0.029700	0.007100
n-Decane				0.009900	0.000000
n-C11				0.000000	0.000000
AMMONIA	NH ₃		17.031		
HYDRO. CHLOR.	HCl		36.461		
CHLORINE	Cl ₂		70.914		
CHLORIDES - TRACES					
Corrosive Agents				H2S/CO2	H2S/CO2
total				100	100
☐ CALCULATED MOL WT.				24.52	24.52

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنيه تحت الارض خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)										
شماره پیمان: 053-073-9184		DATASHEET FOR CONTROL/REGULATOR VALVES								شماره صفحه: 8 از 10		
		BK	GCS	HY	120	IN	DS	0002	V00			
General	1	Instrument Name					Temperature Control Valve					
	2	Tag Number		P&ID No.		TCV-2220 A/B/C			BK-GCS-HY-120-PR-PI-0001-page 5			
	3	Service		Pipe No.		Water Skid			CWS-112-0001A-C.S-3"-IS			
	4	Pipe O. D. / I. D. mm		Pipe Class		3"			C.S			
	5	Pipe Material		Pipe Insulation					NP			
Process Conditions	6	Fluid		State		Water + Glycol			Liquid			
	7	Design Pressure bar(g)		Design Temperature °C		8			85			
	8	Operating Pressure bar(g)		Operating Temperature °C		4			50 ~ 70			
	9	Operating Density kg/m3		Standard Density kg/Nm3		1076~1060						
	10	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		2.761 ~ 1.766			2.971 ~ 1.872			
	11	Speci. Heat Ratio Cp/Cv		Compress Factor		1.098 ~ 1.1			0.00675 ~ 0.00646			
	12	Vapor Pressure		Critical Pressure		NA			NA			
	13	Flow Rate				Unit	Cold Inlet Stream		Hot Inlet Stream		Outlet Stream	
		Liquid Flow Rate				kg/h	0 ~ 15300		0 ~ 15300		15300	
	14	Working temperature				°C	50 ~ 63		63 ~ 70		63	
	15	Outlet Pressure				Bar(g)					VTS	
	16	Temperature Set Point				63						
	17	Allowable SPL dBA				<85 dB						
18	Area Classification				Zone2,IIB,T4							
Valve Characteristics	19	Model				Self-operated						
	20	Type				Three-way Thermostatic Control Valve						
	21	Body Size		End Connection & Rating		3"			Flange,300# RF			
	22	Body Material				A216 GR. WCB						
	23	Trim Material				Trim No.12						
	24	Seat Leakage Class				IV						
	25	Restrictor Input				DOWNSTREAM						
	26	Seal Type				VTA						
	27	Rated Cv										
	28	Fail Position				Open						
	29	Weight										
Accessories	30	Accessories										
Miscell.	31	Manufacturer										
	32	Requisition No.										

NOTES:
 1- Each Instrument Shall Have a S.S. Tag Plate With Purchaser's Tag Number, The Tag Plate Shall Be Permanently Attached To The Instrument .

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج های کمپرسور گاز (رقت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)							
شماره پیمان: 053-073-9184		DATASHEET FOR CONTROL/REGULATOR VALVES						شماره صفحه: 9 از 10	
		BK	GCS	HY	120	IN	DS	0002	V00
General	1	Instrument Name				Temperature Control Valve			
	2	Tag Number		P&ID No.		TCV-2204 A/B/C		BK-GCS-HY-120-PR-PI-0001-page 3	
	3	Service		Pipe No.		Oil Skid		OIL-112-0015A-S.S-2"-IS	
	4	Pipe O. D. /I. D. mm		Pipe Class		2"		S.S	
	5	Pipe Material		Pipe Insulation				NP	
Process Conditions	6	Fluid		State		Mineral Oil ISO VG 100 (Liquid, SG: 0.88, Viscosity: 100 cP)		Liquid	
	7	Design Pressure bar(g)		Design Temperature °C		10		85	
	8	Operating Pressure bar(g)		Operating Temperature °C		5		5 ~ 70	
	9	Operating Density kg/m3		Standard Density kg/Nm3		869			
	10	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		33/86		29/42	
	11	Speci. Heat Ratio Cp/Cv		Compress Factor		1/148		0/06216	
	12	Vapor Pressure		Critical Pressure		NA		15/86	
	13	Flow Rate			Unit	Cold Inlet Stream		Hot Inlet Stream	Outlet Stream
		Liquid Flow Rate			lit/min	0 ~ 131		0 ~ 131	131
	14	Working temperature			°C	5 ~ 60		60 ~ 70	60
	15	Outlet Pressure			Bar(g)				VTS
	16	Temperature Set Point			60 °C				
	17	Allowable SPL dBA			<85 dB				
18	Area Classification			Zone2,IIB,T4					
Valve Characteristics	19	Model			Self-operated				
	20	Type			Three-way Thermostatic Control Valve				
	21	Body Size		End Connection & Rating		2"		Flange,300# RF	
	22	Body Material			ASTMA182 GR.F316L				
	23	Trim Material			,Trim No.10				
	24	Seat Leakage Class			IV				
	25	Restrictor Input			DOWNSTREAM				
	26	Seal Type			VTA				
	27	Rated Cv							
	28	Fail Position			Open				
	29	Weight							
Accessories	30	Accessories							
Miscell.	31	Manufacturer							
	32	Requisition No.							

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		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج های کمپرسور گاز (رگفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)									
		DATASHEET FOR CONTROL/REGULATOR VALVES								شماره صفحه: 10 از 10	
شماره پیمان: 053-073-9184		BK	GCS	HY	120	IN	DS	0002	V00		
General	1	Instrument Name				PRESSURE REGULATOR					
	2	Tag Number		P&ID No.		PCV-2201 A/B/C			BK-GCS-HY-120-PR-PI-0001-page 3		
	3	Service		Pipe No.		Oil Skid			OIL-112-0007A-S.S-2"-IS		
	4	Pipe O. D. /I. D. mm		Pipe Class		2"			S.S		
	5	Pipe Material		Pipe Insulation					NP		
	6	Area Classification				Zone2,IIB,T4					
Process Conditions	7	Fluid		State		Mineral Oil ISO VG 100 (Liquid, SG: 0.88, Viscosity: 100 cP)			Liquid		
	8	Design Pressure bar(g)		Max. Shut-Off DP. bar(g)		10					
	9	Operating Temperature °C		Design Temperature °C		5 ~ 70			85		
	10	Operating Density kg/m3		Standard Density kg/Nm3		862					
	11	Kinetic Viscosity (mm2/S)		Dynamic Viscosity (cP)		22/45			19/35		
	12	Speci. Heat Ratio Cp/Cv		Compress Factor		1/15			0/0608		
	13	Vapor Pressure		Critical Pressure (bar)					15/86		
	14	Flow Rate		Unit		Min. Flow		Nor. Flow		Max. Flow	
		Liquid Flow Rate		lit/min		13		20		131	
	15	Inlet Pressure		bar(g)		6		6 (Note 2)		6	
16	Outlet Pressure		bar(g)		Amb		Amb		Amb		
Calculation Data	17	Sizing Cv				VTA					
	18	Valve Travel		%				VTA			
	19	Allowable SPL dBA		Predicated SPL dBA		<85 dB			N/A		
	20	Rated Cv		Valve FI		VTA			N/A		
Valve Body/Bonnet	21	Model				Self-operated					
	22	Body Type		Control Mode		Globe			SELF		
	23	Body Size		End Connection & Rating		2"					
	25	Bonnet Type		Flow Direction		Bolted			N/A		
	26	Body Material		Stem/Shaft Material		ASTMA182 GR.F316L			Trim No.10		
Trim	27	Trim Type		Trim Size		Standard			Standard		
	28	Trim Material		Seat Material		Trim No.10			Trim No.10		
	29	Guiding		Packing Material		S.S316L			PTFE		
	30	Characteristics		Seat Leakage Class		Linear			IV		
Actuator	31	Model		Type		Diaphragm			Spring &Diaphragm		
	32	Pilot		Restrictor Type		N/A			Internal		
	33	Restrictor Input		Ext. Connection Size		DOWNSTREAM			-		
	34	Seal Type		Spring Material		S.S316L			S.S316L		
	35	Diaph. Temperature Rating		Diaph. Pressure Rating		50			12		
	36	Diaphragm Material		Available D. P.		VTA					
	37	Pressure Set Point				6 barg					
	38	Temperature Assembly		Capillary Length		-			-		
	39	Fail Position		Tubing&Fitting		Open			S.S316L		
	40	Enclosure Protection				IP65					
Accessories	41	Filter		Mesh Size		-			-		
	42	Condenser		Check Valve		-			-		
	43	Inlet Gauge		Control Gauge		-			-		
Miscell.	44	Manufacturer									
	45	Requisition No.									
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