	
DOC NUMBER: 569-DB7B-AIC-712-002		CLIENT NUMBER: PRD-AIC-DSH-037	
CLIENT: TAKEDA/BAXALTA			
PROJECT: BURITI EPCVM PROJECT			

DATA SHEET PRESSURE SWITCH

2	26JAN2022	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
1	17NOV2021	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
0	13SEP2021	ISSUED FOR CONSTRUCTION	MAB	MAF	RSP
A	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV

NUMBER: **569-DB7B-AIC-712-002**

CLIENT NR: **PRD-AIC-DSH-037**

TITLE

SHEET: **2 de 7**

PRESSURE SWITCH

REV.: **2**

DOCUMENT REVIEW CONTROL

Revision	A	0	1	2	3	4	Revision	A	B	0	1	2	3	Revision	A	B	0	1	2	3
Page							Page							Page						
1	X	X	X	X			26							51						
2	X	X	X	X			27							52						
3	X	X	X	X			28							53						
4	X	X	X	X			29							54						
5	X	X	X	X			30							55						
6	X	X	X	X			31							56						
7	X	X		X			32							57						
8	X	X					33							58						
9	X	X					34							59						
10	X	X					35							60						
11	X	X					36							61						
12	X	X					37							62						
13	X	X					38							63						
14	X	X					39							64						
15	X	X					40							65						
16	X	X					41							66						
17	X	X					42							67						
18	X	X					43							68						
19	X	X					44							69						
20	X	X					45							70						
21	X	X					46							71						
22	X	X					47							72						
23	X	X					48							73						
24		X					49							74						
25							50							75						

 		 	
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TITLE PRESSURE SWITCH			SHEET: 3 de 7 REV.: 2
REFERENCE DOCUMENTS			
PRD-AIC-LIS-046		INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST	

GENERAL NOTES
1 - Each key must be appropriate for the classified area as indicated on the data sheet. the instrument must comply with the ordinance inmetro 83, dated
2 - The nameplate must be in aisi 316, contain the tag, the serial number and the model of the level switch and be permanently attached to the respective instrument.
3 - All electronic and electrical components subject to the attack of fungi and moisture must be tropicalized, that is, treated with a polyurethane cover or equivalent
4 - The manufacture / construction can only be started after the drawings and other documents related to the part considered have been returned approved without any comments received.
5 - Technical documents in general (drawings, technical specifications, data sheets and material requests, lists, manuals, etc.), must be identified.
6- All transmitters must be provided with protection type certificates compatible with the respective area classification. If the enclosure requires certificates regarding type and degree of protection, both proofs must be explicit in the same certificate. The certificates must be issued by INMETRO or an accredited body.

REVISION 0 - NOTES
1- REVISED AS PER INSTRUMENT LIST NUMBER PRD-AIC-LIS-010_B_PCS_INSTRUMENT_INDEX AND BACKLOG NUMBER 99000-184.0 2021.03.30 - A&IC DOCUMENTS - COMMENTS_REV.01
REVISION 1 - NOTES
1 - ACCORDING NEW ARQUITECTURE UPDATED
REVISION 2 - NOTES
1 - ACCORDING NEW ARQUITECTURE UPDATED
2 - ADDED INSTRUMENTS: PSH-230002 / PSH-240002
3 - CANCELED INSTRUMENT: PSL-430001

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TITLE





PRESSURE SWITCH

SHEET: 4 de 7

REV.: 2

GENERAL	1	INSTRUMENT TAG NUMBER		PSL-230003					
	2	SERVICE		CO2 GAS TO SYSTEM					
	3	P&ID		7B-Z-0-2-70					
	4	PIPE LINE	EQUIPMENT NUMBER		1/2"-GCO2-230002-SS10-NI	-			
	5	EQUIPMENT LINE		ASTM A270 Gr.TP316L, SEAMLESS					
	6	AREA CLASSIFICATION		-					
	7	CLASSIFICATION OF THE CASE		IP-65					
ELEMENT	8	ASSEMBLY		DIAPHRAGM SEAL					
	9	TYPE		HIGIENIC CLAMP Ø1/2"NPT					
	10	CONNECTION TO THE PROCESS		HIGIENIC CLAMP Ø1/2"NPT					
	11	FACE FLANGE FINISH		MANUFATURE STANDARD					
	12	SCALE		0 - 10barG					
	13	PERFORMANCE POINT 1		-					
	14	PERFORMANCE POINT 2		-					
	15	FIXED / ADJUSTABLE DIFFERENTIAL		-					
	16	DIFFERENTIAL		-					
	17	STATIC PRESSURE		-					
	18	MATERIAL		ASTM A270 Gr.TP316L					
KEYS	19	TYPE		HERMETICALLY SEALED					
	20	AMOUNT		2					
	21	NUMBER OF CONTACTS		2 SPDT					
	22	LOAD TYPE		RESISTIVE					
	23	CONTACTS CAPACITY		5A					
	24	CONT / PRESS ACTION UNDER		-					
	25	CONT / PRESS ACTION DOWN		OPEN					
	26	ELECTRICAL CONNECTION		1/2" CABLE PRESS					
ACCESSORIES	27	IDENTIFICATION PLATE		NOTE 2, PAGE 3					
	28	DIAPHRAGM SEAL		ASTM A270 Gr.TP316L					
	29	FILLING FLUID		MANUFATURE STANDARD					
	30	CAPILLARY LENGTH		-					
	31	CAPILLARY MATERIAL		-					
	32	REGULATING FILTER		-					
	33	PULSATION SHOCK ABSORBER		-					
	34	PIG RABBIT SIPHON		-					
	35	OVERPRESSURE PROTECTOR		-					
	36								
OPERATING CONDITIONS	37	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	38	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	
	39	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	8,2barG	-	
	40	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-10°C	-	140°C	
	41	PROJECT FLOW		-					
	42	DESIGN PRESSURE	DESIGN TEMPERATURE		-	barG	°C		
	43	DENSITY @ OPERATING CONDITION		-		kg/m³			
	44	VISCOSITY @ OPERATING CONDITION		-		Cp			
	45	FLUID CONDUCTIVITY		-		µS/cm²			
	46	INCRUSTATION		-					
	47	SUSPENDED SOLIDS (%)		-					
	48	MAXIMUM LOSS OF LOAD ALLOWED		-					
	49								
		50	MANUFACTURER		WIKA OR SIMILAR				
		51	MODEL						

 				 				
NUMBER: 569-DB7B-AIC-712-002				CLIENT NR: PRD-AIC-DSH-037				
TITLE							SHEET: 5 de 7	
PRESSURE SWITCH							REV.: 2	
GENERAL	1	INSTRUMENT TAG NUMBER			PSL-230003			
	2	SERVICE			O2			
	3	P&ID			7B-Z-0-2-70			
	4	PIPE LINE	EQUIPMENT NUMBER		1/2"-GCO2-230002-SS10-NI	-		
	5	EQUIPMENT LINE			ASTM A270 Gr. TP316L, SEAMLESS			
	6	AREA CLASSIFICATION			-			
	7	CLASSIFICATION OF THE CASE			IP-65			
ELEMENT	8	ASSEMBLY			DIAPHRAGM SEAL			
	9	TYPE			HIGIENIC CLAMP Ø1/2"NPT			
	10	CONNECTION TO THE PROCESS			HIGIENIC CLAMP Ø1/2"NPT			
	11	FACE FLANGE FINISH			MANUFACTURE STANDARD			
	12	SCALE			0 - 10barG			
	13	PERFORMANCE POINT 1			-			
	14	PERFORMANCE POINT 2			-			
	15	FIXED / ADJUSTABLE DIFFERENTIAL			-			
	16	DIFFERENTIAL			-			
	17	STATIC PRESSURE			-			
	18	MATERIAL			ASTM A270 Gr. TP316L			
KEYS	19	TYPE			HERMETICALLY SEALED			
	20	AMOUNT			2			
	21	NUMBER OF CONTACTS			2 SPDT			
	22	LOAD TYPE			RESISTIVE			
	23	CONTACTS CAPACITY			5A			
	24	CONT / PRESS ACTION UNDER			-			
	25	CONT / PRESS ACTION DOWN			OPEN			
	26	ELECTRICAL CONNECTION			1/2" CABLE PRESS			
ACCESSORIES	27	IDENTIFICATION PLATE			NOTE 2, PAGE 3			
	28	DIAPHRAGM SEAL			ASTM A270 Gr. TP316L			
	29	FILLING FLUID			MANUFACTURE STANDARD			
	30	CAPILLARY LENGTH			-			
	31	CAPILLARY MATERIAL			-			
	32	REGULATING FILTER			-			
	33	PULSATION SHOCK ABSORBER			-			
	34	PIG RABBIT SIPHON			-			
	35	OVERPRESSURE PROTECTOR			-			
	36							
OPERATING CONDITIONS	37	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID	
	38	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	39	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	8,2barG	-
	40	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-10°C	-	140°C
	41	PROJECT FLOW			-			
	42	DESIGN PRESSURE	DESIGN TEMPERATURE		- barG		°C	
	43	DENSITY @ OPERATING CONDITION			-		kg/m³	
	44	VISCOSITY @ OPERATING CONDITION			-		Cp	
	45	FLUID CONDUCTIVITY			-		µS/cm²	
	46	INCRUSTATION			-			
	47	SUSPENDED SOLIDS (%)			-			
	48	MAXIMUM LOSS OF LOAD ALLOWED			-			
	49							
	50	MANUFACTURER			WIKA OR SIMILAR			
51	MODEL							

 				 				
NUMBER: 569-DB7B-AIC-712-002				CLIENT NR: PRD-AIC-DSH-037				
TITLE						SHEET: 6 de 7		
PRESSURE SWITCH						REV.: 2		
GENERAL	1	INSTRUMENT TAG NUMBER			PSH-230002			
	2	SERVICE			BIOREACTOR, BRE-5401 O2 GAS TO 40L			
	3	P&ID			7B-Z-0-2-70			
	4	PIPE LINE	EQUIPMENT NUMBER		1/2"-GOP-240002-SS10-NI	-		
	5	EQUIPMENT LINE			ASTM A270 Gr.TP316L, SEAMLESS			
	6	AREA CLASSIFICATION			-			
	7	CLASSIFICATION OF THE CASE			IP-65			
ELEMENT	8	ASSEMBLY			DIAPHRAGM SEAL			
	9	TYPE			HIGIENIC CLAMP Ø1/2"NPT			
	10	CONNECTION TO THE PROCESS			HIGIENIC CLAMP Ø1/2"NPT			
	11	FACE FLANGE FINISH			MANUFACTURE STANDARD			
	12	SCALE			0 - 10barG			
	13	PERFORMANCE POINT 1			-			
	14	PERFORMANCE POINT 2			-			
	15	FIXED / ADJUSTABLE DIFFERENTIAL			-			
	16	DIFFERENTIAL			-			
	17	STATIC PRESSURE			-			
	18	MATERIAL			ASTM A270 Gr.TP316L			
KEYS	19	TYPE			HERMETICALLY SEALED			
	20	AMOUNT			2			
	21	NUMBER OF CONTACTS			2 SPDT			
	22	LOAD TYPE			RESISTIVE			
	23	CONTACTS CAPACITY			5A			
	24	CONT / PRESS ACTION UNDER			-			
	25	CONT / PRESS ACTION DOWN			OPEN			
	26	ELECTRICAL CONNECTION			1/2" CABLE PRESS			
ACCESSORIES	27	IDENTIFICATION PLATE			NOTE 2, PAGE 3			
	28	DIAPHRAGM SEAL			ASTM A270 Gr.TP316L			
	29	FILLING FLUID			MANUFACTURE STANDARD			
	30	CAPILLARY LENGTH			-			
	31	CAPILLARY MATERIAL			-			
	32	REGULATING FILTER			-			
	33	PULSATION SHOCK ABSORBER			-			
	34	PIG RABBIT SIPHON			-			
	35	OVERPRESSURE PROTECTOR			-			
	36							
OPERATING CONDITIONS	37	FLUID	PHYSICAL STATUS		GAS		GAS	
	38	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	39	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	2barG	-
	40	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	30°C
	41	PROJECT FLOW			-			
	42	DESIGN PRESSURE	DESIGN TEMPERATURE		- barG		°C	
	43	DENSITY @ OPERATING CONDITION			-		kg/m³	
	44	VISCOSITY @ OPERATING CONDITION			-		Cp	
	45	FLUID CONDUCTIVITY			-		µS/cm²	
	46	INCRUSTATION			-			
	47	SUSPENDED SOLIDS (%)			-			
	48	MAXIMUM LOSS OF LOAD ALLOWED			-			
	49							
	50	MANUFACTURER			WIKA OR SIMILAR			
51	MODEL							

NUMBER: 569-DB7B-AIC-712-002

CLIENT NR: PRD-AIC-DSH-037

TITLE

PRESSURE SWITCH

SHEET: 7 de 7

REV.: 2

GENERAL	1	INSTRUMENT TAG NUMBER		PSH-240002					
	2	SERVICE		BIOREACTOR, BRE-5401 O2 GAS TO 40L					
	3	P&ID		7B-Z-0-2-70					
	4	PIPE LINE	EQUIPMENT NUMBER		1/2"-GOP-240002-SS10-NI	-			
	5	EQUIPMENT LINE		ASTM A270 Gr.TP316L, SEAMLESS					
	6	AREA CLASSIFICATION		-					
	7	CLASSIFICATION OF THE CASE		IP-65					
ELEMENT	8	ASSEMBLY		DIAPHRAGM SEAL					
	9	TYPE		HIGIENIC CLAMP Ø1/2"NPT					
	10	CONNECTION TO THE PROCESS		HIGIENIC CLAMP Ø1/2"NPT					
	11	FACE FLANGE FINISH		MANUFATURE STANDARD					
	12	SCALE		0 - 10barG					
	13	PERFORMANCE POINT 1		-					
	14	PERFORMANCE POINT 2		-					
	15	FIXED / ADJUSTABLE DIFFERENTIAL		-					
	16	DIFFERENTIAL		-					
	17	STATIC PRESSURE		-					
	18	MATERIAL		ASTM A270 Gr.TP316L					
KEYS	19	TYPE		HERMETICALLY SEALED					
	20	AMOUNT		2					
	21	NUMBER OF CONTACTS		2 SPDT					
	22	LOAD TYPE		RESISTIVE					
	23	CONTACTS CAPACITY		5A					
	24	CONT / PRESS ACTION UNDER		-					
	25	CONT / PRESS ACTION DOWN		OPEN					
	26	ELECTRICAL CONNECTION		1/2" CABLE PRESS					
ACCESSORIES	27	IDENTIFICATION PLATE		NOTE 2, PAGE 3					
	28	DIAPHRAGM SEAL		ASTM A270 Gr.TP316L					
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	30	CAPILLARY LENGTH		-					
	31	CAPILLARY MATERIAL		-					
	32	REGULATING FILTER		-					
	33	PULSATION SHOCK ABSORBER		-					
	34	PIG RABBIT SIPHON		-					
	35	OVERPRESSURE PROTECTOR		-					
	36								
OPERATING CONDITIONS	37	FLUID	PHYSICAL STATUS		GAS		GAS		
	38	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	
	39	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	2barG	-	
	40	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	30°C	
	41	PROJECT FLOW		-					
	42	DESIGN PRESSURE	DESIGN TEMPERATURE		- barG		°C		
	43	DENSITY @ OPERATING CONDITION		-		kg/m³			
	44	VISCOSITY @ OPERATING CONDITION		-		Cp			
	45	FLUID CONDUCTIVITY		-		µS/cm²			
	46	INCRUSTATION		-					
	47	SUSPENDED SOLIDS (%)		-					
	48	MAXIMUM LOSS OF LOAD ALLOWED		-					
	49								
		50	MANUFACTURER		WIKA OR SIMILAR				
51		MODEL							