DOC NUMBER: **569-DB7A-AIC-731-006**	CLIENT NUMBER: **PRD-AIC-DSH-060**
CLIENT: **TAKEDA/BAXALTA**	
PROJECT: **BURITI EPCVM PROJECT**	

DRUG PRODUCT - BMS - DATA SHEET
ON-OFF CONTROL VALVE

REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV
2	02MAY2022	ISSUE FOR CONSTRUCTION AS PER NOTE	ACC	MAF	RSP
1	29OCT2021	ISSUE FOR CONSTRUCTION CONSIDERING COMMENTS	MAV	MAF	RSP
0	29JUL2021	ISSUE FOR CONSTRUCTION	JHA	MAF	RSP
A	24MAR2021	60% DD ISSUE	JHA	MAF	RSP

NUMBER:	569-DB7A-AIC-731-006	CLIENT NR:	PRD-AIC-DSH-060

TITLE

ON-OFF CONTROL VALVE

SHEET: 2 de 6

REV.: **2**

DOCUMENT REVIEW CONTROL

Revision	A	B	0	1	2	3	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	/	/		32							57						
8	/		/	/	/		33							58						
9							34							59						
10							35							60						
11							36							61						
12							37							62						
13							38							63						
14							39							64						
15							40							65						
16							41							66						
17							42							67						
18							43							68						
19							44							69						
20							45							70						
21							46							71						
22							47							72						
23							48							73						
24							49							74						
25							50							75						

REVISION 0 NOTES:

1- UPDATE ACCORDING TO P&ID (HVAC AND PROCESS).
2- INSERTION OF PROCESS DATA.
3- INSERTION OF INSTRUMENT REFERENCE MODELS.

REVISION 1 NOTES:

1- CANCELLED LV-960070

REVISION 2 NOTES AS PER N+1 UPDATE:

1- INDICATED FUTURE VALVE: XV-940081

REFERENCE DOCUMENTS

7A-M-0-5-42	P&I DIAGRAM - DRUG PRODUCT - COOLING WATER SYSTEM
PRD-AIC-LIS-014	DRUG PRODUCT - BMS - INSTRUMENT INDEX
PRD-PIP-TSP-501	PIPE CLASS AND SPECIFICATION - TECHNICAL SPECIFICATION
PRD-AIC-LIS-046	INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST

GENERAL NOTES

1- The identification plates must be supplied in AISI 304 stainless steel, permanently attached to the valve body, with engraving of the respective "TAGs", model, body material, manufacturer, diameter, type, pressure class, Cv and serial number. The serial number of the instrument, when possible, can be recorded on the body itself.

2- The regulator filter is a mandatory accessory and its material must be suitable for fluid and local environmental conditions. The regulator filter must be provided with a manometer and coalescing filter.

3- For all valves must be presented type and degree of protection certificates, both proofs must be explained in the same certificate. Certificates must be issued by INMETRO or accredited body.

4- The shutter guides must be made of material of greater hardness than those of the shutters.

5- The maximum permissible noise level is 82 dB to 1 m from the valve and must comply with ISA 75.17 and IEC 60534-8-4.

6- The manufacturer must send the valve calculation memory.

7- Temperature control valve with built-in flow balancing to ensure the required flow rate in the equipment. For lines above 1" it was considered motorized valve proportional type.

NUMBER:	569-DB7A-AIC-731-006	CLIENT NR:	PRD-AIC-DSH-060

TITLE

ON-OFF CONTROL VALVE

SHEET: 4 de 6

REV.: **2**

GENERAL	1	INSTRUMENT TAG NUMBER			XV-940081		
	2	SERVIÇE			TOWER DRAIN CT-7A-1		
	3	P&ID			7A-M-0-5-42		
	4	PIPE LINE	EQUIPMENT NUMBER		7A-2"-D-940081-CS1-NI	-	
	5	EQUIPMENT MATERIAL / PIPE			CARBON STEEL ASTM-A106 Gr.B		
	6	AREA CLASSIFICATION			NOT CLASSIFIED		
	7	ENCLOSURE CLASSIFICATION			IP 65 (MÍN.) CONF. NBR IEC 60529		
	8	CERTIFICATES			(SEE GENERAL NOTES 5)		
	9						
BODY AND INTERNAL	10	BODY TYPE			BALL		
	11	BODY MATERIAL + COATING			ASTM A-105 + CHROME COATING HARD		
	12	BALL MATERIAL + COATING			SS 304 + STELLITE		
	13	SEED MATERIAL + COATING			SS 304 + STELLITE		
	14	SHAFT MATERIAL			SS 304 CHROME COATING		
	15	GASKET MATERIAL			CRYOSTEAM		
	16	CONNECTION TO THE PROCESS			2", 150# FR, ASME B.16.5		
	17	FLANGE FACE FINISH			MSS SP-6		
	18	SEAL CLASS			IV		
	19						
ACTUATOR	20	TYPE OF ACTUATOR			PNEUMATIC - SPRING RETURN		
	21	AIR FAILURE ACTION			CLOSE		
	22	AVAILABLE AIR SUPPLY			6.2 @ 6.9 bar(g)		
	23	DRILLING PATTERN			ISO 5211-DIN 3337		
	24	PNEUMATIC CONNECTION			1/4" NPT(F)		
	26	HANDWHEEL			NO		
SOLENOID	27	BODY TYPE	BODY MATERIAL		3 WAY	SS304	
	37	POWER SUPPLY			24Vdc		
	38	ELECTRICAL FAILURE ACTION			CLOSE		
	39	CONSUMPTION			BY MANUFACTURER		
	28	ELECTRICAL CONNECTION	PNEUMATIC CONNECTION		1/2" NPT(F)	1/4" NPT (F)	
SWITCH	29	TYPE INDICATION			OPEN / CLOSED		
	30	SENSOR TYPE			INDUCTIVE, WITH LOCAL INDICATION		
	31	CONTACT TYPE			REED SWITCH		
	32	QUANTITY	TYPE		2	SPDT	
	33	CAPACITY			2A @ 250 Vca		
	34	ELECTRICAL CONNECTION			1/2" NPT(F)		
ACESSÓR.	36	IDENTIFICATION PLATE			YES (SEE GENERAL NOTES 1)		
	40	REGULATOR FILTER WITH MANOMETER			YES (SEE GENERAL NOTES 2)		
	41						
OPERATING CONDITIONS	42	FLUID	PHYSICAL STATUS		WATER	LIQUID	
		MINIMUM FLOW	NORMAL	MAXIMUM		NOTE 2	m³/h
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5		°C
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	ATM		bar-g
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM			bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2 bar-g	67 ºC	
	46	VISCOSITY @ OPERATING CONDITION			Cp		
	47	DENSITY @ OPERATING CONDITION			995.3 kg/m³		
	48	SUSPENDED SOLIDS (%)			NO		
	49	SPECIAL FLUID CONDITIONS			NO		
	50	M.M. / Z / Cp/Cv			... / ... / ...		
	51	MANUFACTURER			FISHER		
	52	MODEL			Vee-Ball V300		

NOTES:
1- THE SELECTED CV AND THE OPENING PERCENTAGE MUST BE SUPPLIED BY THE VALVE MANUFACTURER.
2- THE VALVE HAS USE ONLY FOR DRAINING THE RESERVOIR OF THE COOLING TOWER, USE VALVE WITH FULL PASSAGE.

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NUMBER: **569-DB7A-AIC-731-006** | CLIENT NR: **PRD-AIC-DSH-060**

TITLE

ON-OFF CONTROL VALVE

SHEET: 5 de 6

REV.: **2**

GENERAL	1	INSTRUMENT TAG NUMBER			XV-940083		
	2	SERVIÇE			TOWER DRAIN CT-7A-2		
	3	P&ID			7A-M-0-5-42		
	4	PIPE LINE	EQUIPMENT NUMBER		7A-2"-D-940083-CS1-NI	-	
	5	EQUIPMENT MATERIAL / PIPE			CARBON STEEL ASTM-A106 Gr.B		
	6	AREA CLASSIFICATION			NOT CLASSIFIED		
	7	ENCLOSURE CLASSIFICATION			IP 65 (MÍN.) CONF. NBR IEC 60529		
	8	CERTIFICATES			(SEE GENERAL NOTES 5)		
	9						
BODY AND INTERNAL	10	BODY TYPE			BALL		
	11	BODY MATERIAL + COATING			ASTM A-105 + CHROME COATING HARD		
	12	BALL MATERIAL + COATING			SS 304 + STELLITE		
	13	SEED MATERIAL + COATING			SS 304 + STELLITE		
	14	SHAFT MATERIAL			SS 304 CHROME COATING		
	15	GASKET MATERIAL			CRYOSTEAM		
	16	CONNECTION TO THE PROCESS			2", 150# FR, ASME B.16.5		
	17	FLANGE FACE FINISH			MSS SP-6		
	18	SEAL CLASS			IV		
	19						
ACTUATOR	20	TYPE OF ACTUATOR			PNEUMATIC - SPRING RETURN		
	21	AIR FAILURE ACTION			CLOSE		
	22	AVAILABLE AIR SUPPLY			6.2 @ 6.9 bar(g)		
	23	DRILLING PATTERN			ISO 5211-DIN 3337		
	24	PNEUMATIC CONNECTION			1/4" NPT(F)		
	26	HANDWHEEL			NO		
SOLENOID	27	BODY TYPE	BODY MATERIAL		3 WAY	SS304	
	37	POWER SUPPLY			24Vdc		
	38	ELECTRICAL FAILURE ACTION			CLOSE		
	39	CONSUMPTION			BY MANUFACTURER		
	28	ELECTRICAL CONNECTION	PNEUMATIC CONNECTION		1/2" NPT(F)	1/4" NPT (F)	
SWITCH	29	TYPE INDICATION			OPEN / CLOSED		
	30	SENSOR TYPE			INDUCTIVE, WITH LOCAL INDICATION		
	31	CONTACT TYPE			REED SWITCH		
	32	QUANTITY	TYPE		2	SPDT	
	33	CAPACITY			2A @ 250 Vca		
	34	ELECTRICAL CONNECTION			1/2" NPT(F)		
ACESSÓR.	36	IDENTIFICATION PLATE			YES (SEE GENERAL NOTES 1)		
	40	REGULATOR FILTER WITH MANOMETER			YES (SEE GENERAL NOTES 2)		
	41						
OPERATING CONDITIONS	42	FLUID	PHYSICAL STATUS		WATER	LIQUID	
		MINIMUM FLOW	NORMAL	MAXIMUM		NOTE 2	m³/h
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5		°C
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	ATM		bar-g
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM			bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2 bar-g	67 ºC	
	46	VISCOSITY @ OPERATING CONDITION			Cp		
	47	DENSITY @ OPERATING CONDITION			995.3 kg/m³		
	48	SUSPENDED SOLIDS (%)			NO		
	49	SPECIAL FLUID CONDITIONS			NO		
	50	M.M. / Z / Cp/Cv			... / ... / ...		
	51	MANUFACTURER			FISHER		
	52	MODEL			Vee-Ball V300		

NOTES:
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NUMBER:	569-DB7A-AIC-731-006	CLIENT NR:	PRD-AIC-DSH-060

TITLE

ON-OFF CONTROL VALVE

SHEET: 6 de 6

REV.: **2**

GENERAL	1	INSTRUMENT TAG NUMBER			XV-940085		
	2	SERVIÇE			TOWER DRAIN CT-7A-3		
	3	P&ID			7A-M-0-5-42		
	4	PIPE LINE	EQUIPMENT NUMBER		7A-2"-D-940085-CS1-NI	-	
	5	EQUIPMENT MATERIAL / PIPE			CARBON STEEL ASTM-A106 Gr.B		
	6	AREA CLASSIFICATION			NOT CLASSIFIED		
	7	ENCLOSURE CLASSIFICATION			IP 65 (MÍN.) CONF. NBR IEC 60529		
	8	CERTIFICATES			(SEE GENERAL NOTES 5)		
	9						
BODY AND INTERNAL	10	BODY TYPE			BALL		
	11	BODY MATERIAL + COATING			ASTM A-105 + CHROME COATING HARD		
	12	BALL MATERIAL + COATING			SS 304 + STELLITE		
	13	SEED MATERIAL + COATING			SS 304 + STELLITE		
	14	SHAFT MATERIAL			SS 304 CHROME COATING		
	15	GASKET MATERIAL			CRYOSTEAM		
	16	CONNECTION TO THE PROCESS			2", 150# FR, ASME B.16.5		
	17	FLANGE FACE FINISH			MSS SP-6		
	18	SEAL CLASS			IV		
	19						
ACTUATOR	20	TYPE OF ACTUATOR			PNEUMATIC - SPRING RETURN		
	21	AIR FAILURE ACTION			CLOSE		
	22	AVAILABLE AIR SUPPLY			6.2 @ 6.9 bar(g)		
	23	DRILLING PATTERN			ISO 5211-DIN 3337		
	24	PNEUMATIC CONNECTION			1/4" NPT(F)		
	26	HANDWHEEL			NO		
SOLENOID	27	BODY TYPE	BODY MATERIAL		3 WAY	SS304	
	37	POWER SUPPLY			24Vdc		
	38	ELECTRICAL FAILURE ACTION			CLOSE		
	39	CONSUMPTION			BY MANUFACTURER		
	28	ELECTRICAL CONNECTION	PNEUMATIC CONNECTION		1/2" NPT(F)	1/4" NPT (F)	
SWITCH	29	TYPE INDICATION			OPEN / CLOSED		
	30	SENSOR TYPE			INDUCTIVE, WITH LOCAL INDICATION		
	31	CONTACT TYPE			REED SWITCH		
	32	QUANTITY	TYPE		2	SPDT	
	33	CAPACITY			2A @ 250 Vca		
	34	ELECTRICAL CONNECTION			1/2" NPT(F)		
ACESSÓR.	36	IDENTIFICATION PLATE			YES (SEE GENERAL NOTES 1)		
	40	REGULATOR FILTER WITH MANOMETER			YES (SEE GENERAL NOTES 2)		
	41						
OPERATING CONDITIONS	42	FLUID	PHYSICAL STATUS		WATER	LIQUID	
		MINIMUM FLOW	NORMAL	MAXIMUM		NOTE 2	m³/h
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5		°C
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	ATM		bar-g
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM			bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2 bar-g	67 ºC	
	46	VISCOSITY @ OPERATING CONDITION			Cp		
	47	DENSITY @ OPERATING CONDITION			995.3 kg/m³		
	48	SUSPENDED SOLIDS (%)			NO		
	49	SPECIAL FLUID CONDITIONS			NO		
	50	M.M. / Z / Cp/Cv			... / ... / ...		
	51	MANUFACTURER			FISHER		
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