	
DOC NUMBER: 569-DB7B-AIC-731-006		CLIENT NUMBER: PRD-AIC-DSH-071	
CLIENT: TAKEDA/BAXALTA			
PROJECT: BURITI EPCVM PROJECT			

DRUG SUBSTANCE - BMS – DATA SHEET VALVE ON OFF

1	27JAN2022	ISSUE FOR CONSTRUCTION CONSIDERING COMMENTS	MAV	MAF	RSP
0	27AUG2021	ISSUE FOR CONSTRUCTION	JHA	MAF	RSP
A	24MAR2021	60% DD ISSUE	JHA	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV

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CLIENT NR: PRD-AIC-DSH-071

TITLE

VALVE ON OFF

SHEET:
2 de 6

REV.:
1

DOCUMENT REVIEW CONTROL

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2	X	X	X				27							52						
3	X	X	X				28							53						
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5	X	X	X				30							55						
6	X	X	X				31							56						
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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-070060

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REFERENCE DOCUMENTS					
7B-M-0-5-42	P&I DIAGRAM - DRUG SUBSTANCE - COOLING WATER SYSTEM				
7B-M-0-5-53	P&I DIAGRAM - DRUG PRODUCT - CHILLED WATER DISTRIB. SYSTEM LOOP 2				
PRD-AIC-LIS-015	DRUG SUBSTANCE - 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 dM 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.

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VALVE ON OFF

REV.: 1

GENERAL	1	INSTRUMENT TAG NUMBER		LV-980005					
	2	SERVICE		INDUSTRIAL WATER MAKE UP FOR TK-7B-1					
	3	P&ID		7B-M-0-5-44					
	4	PIPE LINE	EQUIPMENT NUMBER	11/2"-DW-980040-PP1-NI		-			
	5	EQUIPMENT MATERIAL / PIPE		POLIPROPILENO HOMOPOLÍMERO CONF. NBR EN 15494					
	6	AREA CLASSIFICATION		NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION		IP 65 (MÍN.) CONF. NBR IEC 60529					
	8	CERTIFICATES		(SEE GENERAL NOTES 5)					
	9								
BODY AND INTERVAL	10	BODY TYPE		BALL (THREE PIECE)					
	11	BODY MATERIAL + COATING		PP-H					
	12	BALL MATERIAL + COATING		PP-H					
	13	SEED MATERIAL + COATING		PP-H					
	14	SHAFT MATERIAL		PP-H					
	15	GASKET MATERIAL		PTFE					
	16	CONNECTION TO THE PROCESS		11/2"					
	17	FLANGE FACE FINISH		150# SW (ASME B16.5, ISO15494)					
	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	0	0	9.0	m³/h	
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	25.0	25.0	25.0	°C	
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	1.7	1.6	1.4	bar-g	
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0	0	0	bar-g	
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		5.3 bar-g		55.0 °C		
	46	VISCOSITY @ OPERATING CONDITION		0.89 Cp					
	47	DENSITY @ OPERATING CONDITION		997.2 kg/m³					
	48	SUSPENDED SOLIDS (%)		NO					
	49	SPECIAL FLUID CONDITIONS		NO					
	50	M.M. / Z / Cp/Cv		... / ... / ...					
	51	MANUFACTURER		FISHER OU SIMILAR					
	52	MODEL		Vee-Ball V300					

NOTES: 1- THE SELECTED CV AND THE OPENING PERCENTAGE MUST BE SUPPLIED BY THE VALVE MANUFACTURER.

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VALVE ON OFF

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-940031					
	2	SERVICE		TOWER DRAIN CT-7B-1					
	3	P&ID		7B-M-0-5-42					
	4	PIPE LINE	EQUIPMENT NUMBER	2"-D-940031-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 INTERVAL	10	BODY TYPE		BALL (TWO PIECE)					
	11	BODY MATERIAL + COATING		ASTM A-216 WCB					
	12	BALL MATERIAL + COATING		ASTM A182 F304					
	13	SEED MATERIAL + COATING		ASTM A182 F304					
	14	SHAFT MATERIAL		ASTM A182 F304					
	15	GASKET MATERIAL		PTFE					
	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)					
ACCESSÓR.	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	0.0	0.0	15.5	m³/h	
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5	31.5	31.5	°C	
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0	0	0	bar-g	
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0	0	0	bar-g	
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2.0 bar-g		67.0 °C		
	46	VISCOSITY @ OPERATING CONDITION		0.77 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					

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VALVE ON OFF

REV.:
1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-940033				
	2	SERVICE		TOWER DRAIN CT-7B-2				
	3	P&ID		7B-M-0-5-42				
	4	PIPE LINE	EQUIPMENT NUMBER	2"-D-940033-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 INTERVAL	10	BODY TYPE		BALL (TWO PIECE)				
	11	BODY MATERIAL + COATING		ASTM A-216 WCB				
	12	BALL MATERIAL + COATING		ASTM A182 F304				
	13	SEED MATERIAL + COATING		ASTM A182 F304				
	14	SHAFT MATERIAL		ASTM A182 F304				
	15	GASKET MATERIAL		PTFE				
	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)				
ACCESSÓR.	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	0.0	0.0	15.5	m³/h
	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5	31.5	31.5	°C
	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0	0	0	bar-g
	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0	0	0	bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2.0 bar-g		67.0 °C	
	46	VISCOSITY @ OPERATING CONDITION		0.77 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				

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