







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

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
Α	24MAR2021	60% DD ISSUE	JHA	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV









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

TITLE

2 de 6 REV.:

ON-OFF CONTROL VALVE

DOCUMENT REVIEW CONTROL

Revision	Α	В	0	1	2	3	Revision	Α	В	0	1	2	3	Revision	Α	В	0	1	2
Page							Page							Page					
1	Χ		Χ	Χ	Χ		26							51					
2	Χ		Χ	Χ	Χ		27							52					
3	Χ		Χ	Χ	Χ		28							53					
4	Χ		Χ	Χ	Χ		29							54					
5	Χ		Χ	Χ	Χ		30							55					
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8	/		/	/	/		33							58					
9							34							59					
10							35							60					
11							36							61					
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17							42							67					
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21							46							71					
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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

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TITLE SHEET:

ON-OFF CONTROL VALVE

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REV::

REFERENCE DOCUMENTS

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

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.









TITLE

ON-OFF CONTROL VALVE

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SHEET:

ON-	OF	FF CONTROL VALVE						REV.: 2		
	1	INSTRUMENT TAG NUMBER				XV	′-940081			
ı	2	SERVIÇE			TOWER DRAIN CT-7A-1					
-		P&ID			7A-M-0-5-42					
	_	PIPE LINE	EQUIPMENT NUM	IBER	7A-VI-U-5-42 7A-2"-D-940081-CS1-NI -					
≥ 1—	-	EQUIPMENT MATERIAL / PIPE			1		EL ASTM-A106 Gr.L	B		
	_	AREA CLASSIFICATION					CLASSIFIED			
` ⊩	_	ENCLOSURE CLASSIFICATION					ONF. NBR IEC 6052	20		
\vdash	_	CERTIFICATES						.9		
\vdash	9	OLIVIII IOATES			(SEE GENERAL NOTES 5)					
-	_	BODY TYPE			BALL					
	11	BODY MATERIAL + COATING			ASTM A-105 + CHROME COATING HARD					
<u>.</u>	12	BALL MATERIAL + COATING				SS 304	+ STELLITE			
-		SEED MATERIAL + COATING					+ STELLITE			
! -	_	SHAFT MATERIAL					ROME COATING			
H		GASKET MATERIAL			\		OSTEAM			
- ⊩	_	CONNECTION TO THE PROCES	S				R, ASME B.16.5			
ŀ		FLANGE FACE FINISH	-		E		SS SP-6			
		SEAL CLASS		-111		IVIC	IV			
⊢	19	OLAL OLAGO		70'			77			
_	_	TYPE OF ACTUATOR				PNFLIMATIC:	- SPRING RETURN	ı		
1		AIR FAILURE ACTION		/	PNEUMATIC - SPRING RETURN CLOSE					
: ⊢	_	AVAILABLE AIR SUPPLY	•							
É		DRILLING PATTERN			6.2 @ 6.9 bar(g)					
⊢		PNEUMATIC CONNECTION			ISO 5211-DIN 3337 1/4" NPT(F)					
Ľ						1/4	NO NO			
_		HANDWHEEL	DODYMATERIAL		3 WAY \$\$304					
_		BODY TYPE	BODY MATERIAL		3 WA	3 WAY 55304				
	_	POWER SUPPLY				CLOSE				
1 ⊢		ELECTRICAL FAILURE ACTION								
_	_	CONSUMPTION	D		BY MANUFACTURER 1/2" NPT(F) 1/4" NPT (F)					
+	_	ELECTRICAL CONNECTION	PNEUMATIC CON	NECTION	1/2" /	. ,		"NPT (F)		
⊢	_	TYPE INDICATION			ļ		I/CLOSED			
		SENSOR TYPE			INDUCTIVE, WITH LOCAL INDICATION					
: ⊢	_	CONTACT TYPE			REED SWITCH					
		QUANTITY	TYPE		2 SPDT					
\vdash		CAPACITY			2A @ 250 Vca					
+		ELECTRICAL CONNECTION					" NPT(F)			
Ŀ	-	IDENTIFICATION PLATE				•	ENERAL NOTES 1)			
! ⊩	40	REGULATOR FILTER WITH MAN	OMETER			YES (SEE GE	ENERAL NOTES 2)			
_	41									
Ľ		FLUID	PHYSICAL STATU		WATE	:R		QUID		
Ļ	_	MINIMUM FLOW	NORMAL	MAXIMUM			NOTE 2	m³/h		
Ľ		MINIMUM TEMPERATURE	NORMAL	MAXIMUM		31.5		℃		
⊢			NORMAL	MAXIMUM		ATM		bar-g		
Ľ	-	MINIMUM DOWNSTREAM PRESSURE		MAXIMUM				bar-g		
Ľ		DESIGN PRESSURE	DESIGN TEMPERA	ATURE	2 bar-g 67 °C					
Ľ		VISCOSITY @ OPERATING CON			Ср					
Ľ		DENSITY @ OPERATING COND	ITION			995.3	kg/m³			
Ľ	48	SUSPENDED SOLIDS (%)					NO			
L	49	SPECIAL FLUID CONDITIONS				NO				
	50	M.M. / Z / Cp/Cv					//			
[51	MANUFACTURER				F	ISHER			
[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.









TITLE

SHEET: 5 de 6

ON-OFF CONTROL VALVE

								2			
	1	INSTRUMENT TAG NUMBER				XV	/-940083				
	2	SERVIÇE			TOWER DRAIN CT-7A-2						
	3	P&ID			7A-M-0-5-42						
4L	4	PIPE LINE	EQUIPMENT NUM	1BER	7A-2"-D-940083-CS1-NI -						
ER.	5	EQUIPMENT MATERIAL / PIPE				CARBON STEEL ASTM-A106 Gr.B					
GENERAL	6	AREA CLASSIFICATION				NOT CLASSIFIED					
Ĭ		ENCLOSURE CLASSIFICATION			1	IP 65 (MÍN.) CO	ONF. NBR IEC 6052	9			
ŀ		CERTIFICATES				. ,	ERAL NOTES 5)				
ŀ	9					· · ·	,				
		BODY TYPE			-		BALL				
ŀ	-	BODY MATERIAL + COATING			457		ROME COATING H	ARD			
_∀ ŀ		BALL MATERIAL + COATING			7.07		+ STELLITE				
8		SEED MATERIAL + COATING					+ STELLITE				
JE I		SHAFT MATERIAL					ROME COATING				
<u>₩</u>		GASKET MATERIAL									
AN AN					_		OSTEAM				
BODY AND INTERNAL		CONNECTION TO THE PROCES	<u>ی</u>				R, ASME B.16.5				
B		FLANGE FACE FINISH				IVI	SS SP-6				
ŀ		SEAL CLASS			_		IV				
_	19	7/25 05 107/11702				D. (5) (1) (4) (5)	000000000000000000000000000000000000000				
ŀ	20	TYPE OF ACTUATOR					- SPRING RETURN				
ץ כ		AIR FAILURE ACTION					CLOSE				
A/		AVAILABLE AIR SUPPLY			6.2 @ 6.9 bar(g)						
ACIUAIUR		DRILLING PATTERN			ISO 5211-DIN 3337						
₹		PNEUMATIC CONNECTION				1/4	" NPT(F)				
		HANDWHEEL					NO				
_ ا		BODY TYPE	BODY MATERIAL		3 WA	3 WAY SS304					
	37	POWER SUPPLY				24Vdc					
SOLENOID	38	ELECTRICAL FAILURE ACTION				(CLOSE				
SO		CONSUMPTION				BY MAN	IUFACTURER	≣R			
	28	ELECTRICAL CONNECTION	PNEUMATIC CON	INECTION	1/2" ∧	IPT(F)	1/4	" NPT (F)			
	29	TYPE INDICATION				OPEN	I/CLOSED				
\downarrow		SENSOR TYPE			IN	DUCTIVE, WIT	H LOCAL INDICATI	ON			
SWIICH	31	CONTACT TYPE				REE	D SWITCH				
M/s	32	QUANTITY	TYPE		2	2 SPDT					
`	33	CAPACITY			2A @ 250 Vca						
	34	ELECTRICAL CONNECTION				1/2	" NPT(F)				
JR.	36	IDENTIFICATION PLATE				YES (SEE GE	ENERAL NOTES 1)				
ACESSOR.	40	REGULATOR FILTER WITH MAN	IOMETER			YES (SEE GI	ENERAL NOTES 2)				
AC	41										
	42	FLUID	PHYSICAL STATU	IS	WATE	R	LIQ	UID			
		MINIMUM FLOW	NORMAL	MAXIMUM			NOTE 2	m³/h			
SNS	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM		31.5		°C			
<u> </u>	44	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM		ATM		bar-g			
OPERATING CONDITIONS	43	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM				bar-g			
<u>ر</u> ا	45	DESIGN PRESSURE	DESIGN TEMPER	ATURE	2	2 bar-g 67 °C					
2	46	VISCOSITY @ OPERATING CON	IDITION		Ср						
Ž	47	DENSITY @ OPERATING COND	ITION			995.3	kg/m³				
7	48	SUSPENDED SOLIDS (%)					NO				
٦ ا	49	SPECIAL FLUID CONDITIONS					NO				
ľ		M.M. / Z / Cp/Cv					//				
ヿ		MANUFACTURER					ISHER				
ŀ		MODEL					-Ball V300				
1		<u> </u>									

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

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TITLE

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MODEL

SHEET:

6 de 6

ON-OFF CONTROL VALVE

								2			
	1	INSTRUMENT TAG NUMBER				XV	-940085				
	2	SERVIÇE			TOWER DRAIN CT-7A-3						
ı	3	P&ID			7A-M-0-5-42						
į	4	PIPE LINE	EQUIPMENT N	IUMBER	7A-2"-D-940085-CS1-NI -						
	5	EQUIPMENT MATERIAL / PIPE				CARBON STEE	EL ASTM-A106 Gr.B				
j	6	AREA CLASSIFICATION				NOTC	LASSIFIED				
ı	7	ENCLOSURE CLASSIFICATION			,	P 65 (MÍN.) CO	NF. NBR IEC 60529)			
Ī	8	CERTIFICATES				(SEE GENE	ERAL NOTES 5)				
ı	9										
1	10	BODY TYPE					BALL				
11	11	BODY MATERIAL + COATING			AS7	TM A-105 + CHI	ROME COATING HA	ARD			
I	12	BALL MATERIAL + COATING				SS 304	+ STELLITE				
İ	13	SEED MATERIAL + COATING				SS 304	+ STELLITE				
İ	14	SHAFT MATERIAL				SS 304 CHF	ROME COATING				
ŀ	15	GASKET MATERIAL				CRY	OSTEAM				
ľ		CONNECTION TO THE PROCES	S			2", 150# FF	R, ASME B.16.5				
ŀ	17	FLANGE FACE FINISH				MS	SS SP-6				
l		SEAL CLASS					IV				
ŀ	19										
t	20	TYPE OF ACTUATOR				PNEUMATIC -	SPRING RETURN				
ŀ	21	AIR FAILURE ACTION				С	CLOSE				
Ì	22	AVAILABLE AIR SUPPLY									
ŀ	23	DRILLING PATTERN			6.2 @ 6.9 bar(g) ISO 5211-DIN 3337						
ŀ	24	PNEUMATIC CONNECTION				1/4'	" NPT(F)				
ŀ	26	HANDWHEEL					NO				
t	27	BODY TYPE	BODY MATERI	IAL	3 WA	3 WAY SS304					
ŀ		POWER SUPPLY		· ·-	1						
ŀ		ELECTRICAL FAILURE ACTION					LOSE				
ŀ		CONSUMPTION				BY MANUFACTURER					
ŀ		ELECTRICAL CONNECTION	PNEUMATIC C	CONNECTION	1/2" N			NPT (F)			
t		TYPE INDICATION			†		/ CLOSED	()			
ŀ		SENSOR TYPE			INI	DUCTIVE. WITI	H LOCAL INDICATION	ON			
ŀ		CONTACT TYPE					SWITCH				
ŀ		QUANTITY	TYPE		2			SPDT			
ŀ		CAPACITY			 		250 Vca				
ŀ		ELECTRICAL CONNECTION					' NPT(F)				
t		IDENTIFICATION PLATE			1		ENERAL NOTES 1)				
ŀ	40	REGULATOR FILTER WITH MAN	IOMETER			<u>-</u>	ENERAL NOTES 2)				
ŀ	41				1	, 32	/				
t		FLUID	PHYSICAL STA	ATUS	WATE	R	LIQI	UID			
ŀ	_	MINIMUM FLOW	NORMAL	MAXIMUM	†		NOTE 2	m³/h			
ŀ	43		NORMAL	MAXIMUM		31.5		°C			
ŀ		MINIMUM UPSTREAM PRESSURE		MAXIMUM		ATM		bar-g			
ŀ				MAXIMUM				bar-g			
ŀ	_	DESIGN PRESSURE	DESIGN TEMP		2 bar-g 67 °C						
ŀ		VISCOSITY @ OPERATING CON			-		Ср				
ŀ	47	DENSITY @ OPERATING CONDI					-				
ŀ		SUSPENDED SOLIDS (%)				995.3 kg/m³ NO					
ŀ	49	SPECIAL FLUID CONDITIONS					NO				
ŀ		M.M. / Z / Cp/Cv			1		//				
t		MANUFACTURER			+		ISHER				
ŀ	υı	W. WOLKET				- 11	J. ILIX				

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

Vee-Ball V300

²⁻ THE VALVE HAS USE ONLY FOR DRAINING THE RESERVOIR OF THE COOLING TOWER, USE VALVE WITH FULL PASSAGE.