





CLIENT NUMBER:



DOC NUMBER:

569-DB7B-AIC-731-006

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









PRD-AIC-DSH-071 NUMBER: 569-DB7B-AIC-731-006 CLIENT NR:

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SHEET:

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VALVE ON OFF

DOCUMENT REVIEW CONTROL

Revision	Α	0	1	2	3	4	Revision	Α	0	1	2	3	4	Revision	Α	0	1	2	3
Page							Page							Page					
1	Х	Χ	Χ				26							51					
2	Х	Χ	Χ				27							52					
3	Х	Χ	Χ				28							53					
4	Х	Χ	Χ				29							54					
5	Х	Χ	Χ				30							55					
6	Х	Χ	Χ				31							56					
7	/	Χ	/				32							57					
8	/	/					33							58					
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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

The information contained in this document is the property of TESSLER Engenharia and is provided to the customer under the condition that they are not used for other purposes other than those contractually established.









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REV:

REFERENCE DOCUMENTS

7B-M-0-5-42 7B-M-0-5-53 PRD-AIC-LIS-015 PRD-PIP-TSP-501 PRD-AIC-LIS-046 P&I DIAGRAM - DRUG SUBSTANCE - COOLING WATER SYSTEM
P&I DIAGRAM - DRUG PRODUCT - CHILLED WATER DISTRIB. SYSTEM LOOP 2
DRUG SUBSTANCE - BMS - INSTRUMENT INDEX

DRUG SUBSTANCE - 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 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.



VALVE ON OFF







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							1					
1	INSTRUMENT TAG NUMBER			LV-980005								
2	SERVIÇE			INDUSTRIAL WATER MAKE UP FOR TK-7B-1								
3	P&ID			7B-M-0-5-44								
4	PIPE LINE	EQUIPMENT NUM	MBER	11/2"-DW-980040-PP1-NI -								
				POLIPROPILENO HOMOPOLÍMERO CONF. NBR EN 15494								
							9					
					· · · · · · · · · · · · · · · · · · ·							
_	OEKTII TOATEO			+	(OLL OLIV	LIVIL NOTES O						
_	PODY TYPE			+	DALL /T	UDEE DIECE)						
				1								
				1								
		S		1								
				1	150# SW (ASN)					
18	SEAL CLASS			1		IV						
19												
20	TYPE OF ACTUATOR				PNEUMATIC	- SPRING RETURN						
21	AIR FAILURE ACTION				C	CLOSE						
22	AVAILABLE AIR SUPPLY				6.2 @	0 6.9 bar(g)						
23	DRILLING PATTERN				ISO 5211-DIN 3337							
24	PNEUMATIC CONNECTION			1/4" NPT(F)								
26	HANDWHEEL			NO								
27	BODY TYPE	BODY MATERIAL		3 WAY \$\$304								
37	POWER SUPPLY			24Vdc								
				CLOSE								
				BY MANUFACTURER								
_		PNEUMATIC CON	INECTION	1								
				v /								
				IN								
					•							
		TVDE										
		, , , , , , , , , , , , , , , , , , ,		 								
_												
		IOMETER		·								
	REGULATUR FILTER WITH MAN	ONETER		 	TES (SEE GE	ENERAL NUTES 2)						
	EL LIID	DUVOICAL OTAT	10	14/4 75	. _D		1110					
_			1									
							m³/h					
			MAXIMUM	1.7	1.6	1.4	bar-g					
			1	0	0	0	bar-g					
			RATURE	5.3 bar-g 55.0 °C								
46	VISCOSITY @ OPERATING CON	IDITION		0.89 Cp								
47	DENSITY @ OPERATING CONDI	ITION			997.2 kg/m³							
48	SUSPENDED SOLIDS (%)			NO								
49	SPECIAL FLUID CONDITIONS			NO								
_	M.M. / Z / Cp/Cv			/								
50	1VI.IVI. / 2 / Op/OV				FISHER OU SIMILAR							
	MANUFACTURER				FISHER	OU SIMILAR						
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27 38 39 30 31 32 33 34 40 41 42 43 44 43 44 45 46 47 48 48 48 48 48 48 48 48 48 48	2 SERVIÇE 3 P&ID 4 PIPE LINE 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION 7 ENCLOSURE CLASSIFICATION 8 CERTIFICATES 9 10 BODY TYPE 11 BODY MATERIAL + COATING 12 BALL MATERIAL + COATING 13 SEED MATERIAL + COATING 14 SHAFT MATERIAL 15 GASKET MATERIAL 16 CONNECTION TO THE PROCES 17 FLANGE FACE FINISH 18 SEAL CLASS 19 20 TYPE OF ACTUATOR 21 AIR FAILURE ACTION 22 AVAILABLE AIR SUPPLY 23 DRILLING PATTERN 24 PNEUMATIC CONNECTION 26 HANDWHEEL 27 BODY TYPE 37 POWER SUPPLY 38 ELECTRICAL FAILURE ACTION 39 CONSUMPTION 20 TYPE INDICATION 30 SENSOR TYPE 31 CONTACT TYPE 32 QUANTITY 33 CAPACITY 34 ELECTRICAL CONNECTION 36 IDENTIFICATION PLATE 40 REGULATOR FILTER WITH MANA 41 42 FLUID 43 MINIMUM FLOW 44 MINIMUM UPSTREAM PRESSURE 45 DESIGN PRESSURE 46 VISCOSITY @ OPERATING COND 47 DENSITY @ OPERATING COND 48 SUSPENDED SOLIDS (%)	2 SERVIÇE 3 P&ID 4 PIPE LINE EQUIPMENT NUM 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION 7 ENCLOSURE CLASSIFICATION 8 CERTIFICATES 9 10 BODY TYPE 11 BODY MATERIAL + COATING 12 BALL MATERIAL + COATING 13 SEED MATERIAL + COATING 14 SHAFT MATERIAL 15 GASKET MATERIAL 16 CONNECTION TO THE PROCESS 17 FLANGE FACE FINISH 18 SEAL CLASS 19 20 TYPE OF ACTUATOR 21 AIR FAILURE ACTION 22 AVAILABLE AIR SUPPLY 23 DRILLING PATTERN 24 PNEUMATIC CONNECTION 26 HANDWHEEL 27 BODY TYPE 38 ELECTRICAL FAILURE ACTION 39 CONSUMPTION 28 ELECTRICAL FAILURE ACTION 30 SENSOR TYPE 31 CONTACT TYPE 32 QUANTITY TYPE 33 CAPACITY 34 ELECTRICAL CONNECTION 36 IDENTIFICATION PLATE 40 REGULATOR FILTER WITH MANOMETER 41 MINIMUM FLOW NORMAL 43 MINIMUM TEMPERATURE NORMAL 44 MINIMUM TEMPERATURE NORMAL 45 DESIGN PRESSURE DESIGN TEMPER 46 VISCOSITY @ OPERATING CONDITION 48 SUSPENDED SOLIDS (%)	2	SERVIÇE INDU	2 SERVIÇE 3 PAID 4 PIPE LINE 5 EQUIPMENT MATERIAL / PIPE 5 EQUIPMENT NUMBER 11/2*-DW-980040-PP1-NI 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION 7 ENCLOSURE CLASSIFICATION 8 OFFICIAL FAIL 9 0 10 BODY TYPE 8 BALL (T. 11 BODY MATERIAL + COATING 13 SEED MATERIAL + COATING 14 SHAFT MATERIAL 15 CONNECTION TO THE PROCESS 17 FLANGE FACE FINISH 15 SEAL CLASS 19 1 20 TYPE OF ACTUATOR 21 AVAILABLE AIR SUPPLY 22 DRILLING PATTERN 15 AND MATERIAL 23 DRILLING PATTERN 24 PPELIMATIC CONNECTION 26 HANDWHEEL 27 BODY TYPE 8 BODY MATERIAL 8 SELECTRICAL FAIL LURE ACTION 10 CONSECURION 10 CONSIDERTION 10 CONSIDERTICAL FAILURE ACTION 10 CONSIDERTION 10 CONSIDERTICAL FOR WATERIAL 10 CONSIDERTICAL FOR WATERIAL 11 CONTACT TYPE 12 CONTACT TYPE 13 CAPACITY 14 CONTACT TYPE 15 CONTACT TYPE 16 CONTACT TYPE 17 CONTACT TYPE 17 CONTACT TYPE 18 CONTACT TYPE 19 CONTACT TYPE 19 CONTACT TYPE 10 CONTACT TYPE 10 CONTACT TYPE 10 CONTACT TYPE 10 CONTACT TYPE 11 CONTACT TYPE 12 CONTACT TYPE 12 CONTACT TYPE 13 CONTACT TYPE 14 CONTACT TYPE 15 CONTACT TYPE 16 CONTACT TYPE 17 CONTACT TYPE 18 CONTACT TYPE 18 CONTACT TYPE 18 CONTACT TYPE 19 CONTACT TYPE 19 CONTACT TYPE 10 CONTACT TYPE 10 CONTACT TYPE 10 CONTACT TYPE 11 CONTACT TYPE 11 CONTACT TYPE 12 CONTACT TYPE 12 CONTACT TYPE 13 CONTACT TYPE 14 CONTACT TYPE 15 CONTACT TYPE 16 CONTACT TYPE 17 CONTACT TYPE 18 CONTACT TYPE 18 CONTACT TYPE 19 CO	2 SERVIÇE INDUSTRIAL WATER MAKE UP FOR TO 78-Mo-5-44					









PRD-AIC-DSH-071 569-DB7B-AIC-731-006 NUMBER: CLIENT NR:

TITLE

Vee-Ball V300

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VALVE ON OFF INSTRUMENT TAG NUMBER XV-940031 SERVIÇE TOWER DRAIN CT-7B-1 2 P&ID 7B-M-0-5-42 3 PIPE LINE **EQUIPMENT NUMBER** 2"-D-940031-CS1-NI 4 GENERAL EQUIPMENT MATERIAL / PIPE 5 CARBON STEEL ASTM-A106 Gr.B AREA CLASSIFICATION 6 NOT CLASSIFIED ENCLOSURE CLASSIFICATION IP 65 (MÍN.) CONF. NBR IEC 60529 CERTIFICATES (SEE GENERAL NOTES 5) 8 **BODY TYPE** BALL (TWO PIECE) 10 BODY MATERIAL + COATING ASTM A-216 WCB 11 BALL MATERIAL + COATING ASTM A182 F304 BODY AND INTERNAL 13 SEED MATERIAL + COATING ASTM A182 F304 SHAFT MATERIAL ASTM A182 F304 14 15 GASKET MATERIAL PTFF CONNECTION TO THE PROCESS 16 2", 150# FR, ASME B.16.5 FLANGE FACE FINISH MSS SP-6 17 SEAL CLASS IV 18 19 TYPE OF ACTUATOR PNEUMATIC - SPRING RETURN 20 AIR FAILURE ACTION CLOSE 21 **4CTUATOR** AVAILABLE AIR SUPPLY 6.2 @ 6.9 bar(g) 22 23 DRILLING PATTERN ISO 5211-DIN 3337 PNEUMATIC CONNECTION 1/4" NPT(F) 24 HANDWHEEL NO 26 **BODY TYPE BODY MATERIAL** 3 WAY SS304 POWER SUPPLY SOLENOID 24Vdc 37 ELECTRICAL FAILURE ACTION CLOSE 38 CONSUMPTION BY MANUFACTURER 39 ELECTRICAL CONNECTION PNEUMATIC CONNECTION 1/2" NPT(F) 1/4" NPT (F) 28 TYPE INDICATION OPEN/CLOSED 30 SENSOR TYPE INDUCTIVE, WITH LOCAL INDICATION 10H CONTACT TYPE REED SWITCH 31 SWI 32 QUANTITY TYPE 2 SPDT 2A @ 250 Vca 33 CAPACITY ELECTRICAL CONNECTION 34 1/2" NPT(F) 36 IDENTIFICATION PLATE YES (SEE GENERAL NOTES 1) REGULATOR FILTER WITH MANOMETER YES (SEE GENERAL NOTES 2) 40 41 FLUID PHYSICAL STATUS WATER LIQUID 42 MINIMUM FLOW NORMAL MAXIMUM 0.0 0.0 15.5 m³/h OPERATING CONDITIONS NORMAL MAXIMUM °C MINIMUM TEMPERATURE 43 31.5 31.5 31.5 MINIMUM UPSTREAM PRESSURE NORMAL MAXIMUM 44 0 0 0 bar-g 43 MINIMUM DOWNSTREAM PRESSURE NORMAL MAXIMUM 0 0 0 bar-g DESIGN TEMPERATURE 45 DESIGN PRESSURE 2.0 bar-g 67.0 °C VISCOSITY @ OPERATING CONDITION 46 0.77 Cp 995.3 kg/m³ DENSITY @ OPERATING CONDITION 47 48 SUSPENDED SOLIDS (%) NO SPECIAL FLUID CONDITIONS NO 49 M.M. /Z/Cp/Cv .../.../... 50 MANUFACTURER **FISHER**

MODEL

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SHEET:

VALVE ON OFF

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	LV							1				
	1	INSTRUMENT TAG NUMBER				XV	-940033	<u> </u>				
	2	SERVIÇE			TOWER DRAIN CT-7B-2							
ı	3	P&ID			7B-M-0-5-42							
4	4	PIPE LINE	EQUIPMENT NUI	MBER	2"-D-940033-CS1-NI -							
GENERAL	5	EQUIPMENT MATERIAL / PIPE			CARBON STEEL ASTM-A106 Gr.B							
Į,	6	AREA CLASSIFICATION				NOT CLASSIFIED						
J	7	ENCLOSURE CLASSIFICATION				IP 65 (MÍN.) CO	NF. NBR IEC 60529	9				
	8	CERTIFICATES				(SEE GENE	ERAL NOTES 5)					
	9					•	*					
	10	BODY TYPE			BALL (TWO PIECE)							
ı	11	BODY MATERIAL + COATING					A-216 WCB					
į		BALL MATERIAL + COATING				ASTM	A182 F304					
Ž		SEED MATERIAL + COATING				ASTM	A182 F304					
2		SHAFT MATERIAL				ASTM	A182 F304					
١		GASKET MATERIAL					PTFE					
Ì		CONNECTION TO THE PROCES	S			2". 150# FF	R, ASME B.16.5					
DOD'T AND INTERNAL		FLANGE FACE FINISH			1		S SP-6					
4		SEAL CLASS			 		IV					
ŀ	19											
┪		TYPE OF ACTUATOR			†	PNEUMATIC -	SPRING RETURN					
,	-	AIR FAILURE ACTION			CLOSE							
YO / KO / OK	-	AVAILABLE AIR SUPPLY				6.2 @ 6.9 bar(g)						
5		DRILLING PATTERN				ISO 5211-DIN 3337						
5		PNEUMATIC CONNECTION			1/4" NPT(F)							
ŀ		HANDWHEEL			NO NO							
+	_	BODY TYPE	BODY MATERIAL	1	3 WAY SS304							
<u> </u>		POWER SUPPLY			24Vdc							
SOLENOID		ELECTRICAL FAILURE ACTION			CLOSE							
OFF	39	CONSUMPTION			BY MANUFACTURER							
'		ELECTRICAL CONNECTION	PNEUMATIC CO	NNECTION	1/2" NPT(F) 1/4" NPT (F)							
-	_	TYPE INDICATION			OPEN / CLOSED							
ŀ		SENSOR TYPE			INDUCTIVE, WITH LOCAL INDICATION							
5	31	CONTACT TYPE			REED SWITCH							
CONTROL	32	QUANTITY	TYPE		2 SPDT							
2		CAPACITY			2A @ 250 Vca							
ŀ		ELECTRICAL CONNECTION			1/2" NPT(F)							
;	36	IDENTIFICATION PLATE			YES (SEE GENERAL NOTES 1)							
	40	REGULATOR FILTER WITH MAN	IOMETER		YES (SEE GENERAL NOTES 2)							
ACESSON.	41					•	,					
Ì	42	FLUID	PHYSICAL STAT	US	WAT	ER	LIQ	UID				
ŀ		MINIMUM FLOW	NORMAL	MAXIMUM	0.0	0.0	15.5	m³/h				
2	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	31.5	31.5	31.5	℃				
2	44	MINIMUM UPSTREAM PRESSURE		MAXIMUM	0	0	0	bar-g				
	43	MINIMUM DOWNSTREAM PRESSURE		MAXIMUM	0	0	0	bar-g				
}	_	DESIGN PRESSURE	DESIGN TEMPER		2.0 bar-g 67.0 °C							
	46	VISCOSITY @ OPERATING CON			0.77 Cp							
OPERATING CONDITIONS	47	DENSITY @ OPERATING COND			995.3 kg/m³							
]		SUSPENDED SOLIDS (%)	•		NO							
۰ 		SPECIAL FLUID CONDITIONS			NO							
		M.M. / Z / Cp/Cv			/							
j	50	101.101.7 Z 7 Op/OV			FISHER							
\dashv		MANUFACTURER				Fi	SHER					