	
DOC NUMBER: 569-DB7B-AIC-733-001		CLIENT NUMBER: PRD-AIC-DSH-075	
CLIENT: TAKEDA/BAXALTA			
PROJECT: BURITI EPCVM PROJECT			

DRUG SUBSTANCE - BMS - DATA SHEET MOTORIZED CONTROL VALVE

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

NUMBER: 569-DB7B-AIC-733-001

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TITLE

MOTORIZED CONTROL VALVE

SHEET:
2 de 7
REV.:
1

DOCUMENT REVIEW CONTROL

Revision	A	0	1	2	3	4	Revision	A	0	1	2	3	4	Revision	A	0	1	2	3	4
Page							Page							Page						
1	X	X	X				26							51						
2	X	X	X				27							52						
3	X	X	X				28							53						
4	X	X	X				29							54						
5	X	X	X				30							55						
6	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					40							65						
16	/	X					41							66						
17	/	X					42							67						
18	/	X					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 PV-960059, XV-960001, XV-960002, XV-960003, XV-960004, XV-960005, XV-960006, XV-960056, XV-960057, XV-960080, XV-960083.

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TITLE			SHEET:
MOTORIZED CONTROL VALVE			3 de 7
			REV.: 1
REFERENCE DOCUMENTS			
7B-M-0-5-44		P&I DIAGRAM - DRUG SUBSTANCE - CHILLED GLYCOL GENERATION SYSTEM	
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	
<p>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.</p> <p>2- 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.</p> <p>3- The shutter guides must be made of material of greater hardness than those of the shutters.</p> <p>4- 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.</p> <p>5- The manufacturer must send the valve calculation memory.</p> <p>6- The maximum and minimum flow rates to be controlled should be limited to 20% and 85%, respectively, of the available stroke of the control valve.</p>	

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MOTORIZED CONTROL VALVE

REV.: 1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-980001				
	2	SERVICE		GLYCOL DO PCH-7B-1 FOR BT-7B-1				
	3	P&ID		7B-M-0-5-44				
	4	PIPE LINE	EQUIPMENT NUMBER	10"-GW0S-980001-CS1-CC	-			
	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 2)				
	9							
BODY AND INTERVAL	10	BODY TYPE		BUTTERFLY				
	11	BODY / CAP MATERIAL		ASTM A-216 Gr. WCB				
	12	WEDGE, DISC OR GATE MATERIAL + COATING		ASTM A-216 Gr. WCB				
	13	SEAT / RINGS MATERIAL + COATING		EPDM				
	14	SHAFT MATERIAL		ASTM A-216 Gr. WCB				
	15	GASKET MATERIAL		PTFE				
	16	CONNECTION TO THE PROCESS		WAFER - 10", 150#				
	17	FLANGE FACE FINISH		NOT REQUIRED				
	18	SEAL CLASS		IV				
19								
ACTUATOR	20	TYPE OF ACTUATOR		SMART / ELETRIC MOTORIZED				
	21	OPENING /CLOSING		DIRECT ACTION				
	22	FAILURE ACTION		STATIONARY				
	23	POWER SUPPLY		3Ø - 380Vac / 60Hz				
	24	HANDWHEEL		YES				
	25	ELECTRICAL CONNECTION	QUANTITY	1/2" NPT(F)	BY MANUFACTURER			
	26	SELF DIAGNOSIS		YES				
	27	CONFIGURATION		LOCAL AND REMOTE				
	28	OPENING, CLOSING AND LOCAL STOP		LOCAL AND REMOTE				
	29							
	30							
SWITCH	31	TYPE INDICATION		OPEN / CLOSED				
	32	SENSOR TYPE		INDUCTIVE, WITH LOCAL INDICATION				
	33	CONTACT TYPE		REED SWITCH				
	34	QUANTITY	TYPE	2	SPDT			
	35	CAPACITY CONTACT		2A @ 250 Vca				
	36	ELECTRICAL CONNECTION		1/2" NPT(F)				
ACCESSÓR.	37	IDENTIFICATION PLATE		YES (SEE GENERAL NOTES 1)				
	38	CONFIGURATION MANUAL (HANDHELD)		YES				
	39							
OPERATING CONDITIONS	40	FLUID	PHYSICAL STATE		CHILLED WATER		LIQUID	
	41	MINIMUM FLOW	NORMAL	MAXIMUM	287	287	287	m³/h
	42	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	4	4	4	°C
	43	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0.55	0.55	0.55	bar-g
	44	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0.45	0.45	0.46	bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2.7 bar-g		34 °C	
	46	VISCOSITY @ OPERATING CONDITION		1.57 Cp				
	47	DENSITY @ OPERATING CONDITION		1000.1 kg/m³				
	48	SUSPENDED SOLIDS (%)		NO				
	49	SPECIAL FLUID CONDITIONS		NO				
	50	M.M. / Z / Cp/Cv		... / ... / ...				
	51	MANUFACTURER		ROTORK / AUMA				
	52	MODEL		IQ (ROTORK)				

NOTES: 1- THE SELECTED CV AND THE OPENING PERCENTAGE MUST BE SUPPLIED BY THE VALVE MANUFACTURER.
2- THE INSTRUMENT SHALL BE PREPARED TO OPERATE WITH PROPYLENE GLICOL 10% IF REQUIRED.

NUMBER: **569-DB7B-AIC-733-001**

CLIENT NR: **PRD-AIC-DSH-075**

TITLE

SHEET:

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MOTORIZED CONTROL VALVE

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-980002				
	2	SERVICE		GLYCOL DO PCH-7B-2 FOR BT-7B-1				
	3	P&ID		7B-M-0-5-44				
	4	PIPE LINE	EQUIPMENT NUMBER	10"-GW0S-980002-CS1-CC	-			
	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 2)				
	9							
BODY AND INTERVAL	10	BODY TYPE		BUTTERFLY				
	11	BODY / CAP MATERIAL		ASTM A-216 Gr. WCB				
	12	WEDGE, DISC OR GATE MATERIAL + COATING		ASTM A-216 Gr. WCB				
	13	SEAT / RINGS MATERIAL + COATING		EPDM				
	14	SHAFT MATERIAL		ASTM A-216 Gr. WCB				
	15	GASKET MATERIAL		PTFE				
	16	CONNECTION TO THE PROCESS		WAFER - 10", 150#				
	17	FLANGE FACE FINISH		NOT REQUIRED				
	18	SEAL CLASS		IV				
19								
ACTUATOR	20	TYPE OF ACTUATOR		SMART / ELETRIC MOTORIZED				
	21	OPENING /CLOSING		DIRECT ACTION				
	22	FAILURE ACTION		STATIONARY				
	23	POWER SUPPLY		3Ø - 380Vac / 60Hz				
	24	HANDWHEEL		YES				
	25	ELECTRICAL CONNECTION	QUANTITY	1/2" NPT(F)	BY MANUFACTURER			
	26	SELF DIAGNOSIS		YES				
	27	CONFIGURATION		LOCAL AND REMOTE				
	28	OPENING, CLOSING AND LOCAL STOP		LOCAL AND REMOTE				
	29							
	30							
SWITCH	31	TYPE INDICATION		OPEN / CLOSED				
	32	SENSOR TYPE		INDUCTIVE, WITH LOCAL INDICATION				
	33	CONTACT TYPE		REED SWITCH				
	34	QUANTITY	TYPE	2	SPDT			
	35	CAPACITY CONTACT		2A @ 250 Vca				
	36	ELECTRICAL CONNECTION		1/2" NPT(F)				
ACCESSOR.	37	IDENTIFICATION PLATE		YES (SEE GENERAL NOTES 1)				
	38	CONFIGURATION MANUAL (HANDHELD)		YES				
	39							
OPERATING CONDITIONS	40	FLUID	PHYSICAL STATE		CHILLED WATER		LIQUID	
	41	MINIMUM FLOW	NORMAL	MAXIMUM	287	287	287	m³/h
	42	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	4	4	4	°C
	43	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0.55	0.55	0.55	bar-g
	44	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0.45	0.45	0.46	bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		2.7 bar-g		34 °C	
	46	VISCOSITY @ OPERATING CONDITION			1.57 Cp			
	47	DENSITY @ OPERATING CONDITION			1000.1 kg/m³			
	48	SUSPENDED SOLIDS (%)			NO			
	49	SPECIAL FLUID CONDITIONS			NO			
	50	M.M. / Z / Cp/Cv			... / ... / ...			
	51	MANUFACTURER		ROTORK / AUMA				
	52	MODEL		IQ (ROTORK)				

NOTES: 1- THE SELECTED CV AND THE OPENING PERCENTAGE MUST BE SUPPLIED BY THE VALVE MANUFACTURER.
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NUMBER: **569-DB7B-AIC-733-001**

CLIENT NR: **PRD-AIC-DSH-075**

TITLE

SHEET:

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MOTORIZED CONTROL VALVE

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-980014				
	2	SERVICE		COOLING WATER - COOLING TOWERS PCH-7B-1				
	3	P&ID		7B-M-0-5-44				
	4	PIPE LINE	EQUIPMENT NUMBER		8"-TWR-980014-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 2)				
	9							
BODY AND INTERNAL	10	BODY TYPE		BUTTERFLY				
	11	BODY / CAP MATERIAL		ASTM A-216 Gr. WCB				
	12	WEDGE, DISC OR GATE MATERIAL + COATING		ASTM A-216 Gr. WCB				
	13	SEAT / RINGS MATERIAL + COATING		EPDM				
	14	SHAFT MATERIAL		ASTM A-216 Gr. WCB				
	15	GASKET MATERIAL		PTFE				
	16	CONNECTION TO THE PROCESS		WAFER - 8", 150#				
	17	FLANGE FACE FINISH		NOT REQUIRED				
	18	SEAL CLASS		IV				
19								
ACTUATOR	20	TYPE OF ACTUATOR		SMART / ELETRIC MOTORIZED				
	21	OPENING /CLOSING		DIRECT ACTION				
	22	FAILURE ACTION		STATIONARY				
	23	POWER SUPPLY		3Ø - 380Vac / 60Hz				
	24	HANDWHEEL		YES				
	25	ELECTRICAL CONNECTION	QUANTITY		1/2" NPT(F)	BY MANUFACTURER		
	26	SELF DIAGNOSIS		YES				
	27	CONFIGURATION		LOCAL AND REMOTE				
	28	OPENING, CLOSING AND LOCAL STOP		LOCAL AND REMOTE				
	29							
	30							
SWITCH	31	TYPE INDICATION		OPEN / CLOSED				
	32	SENSOR TYPE		INDUCTIVE, WITH LOCAL INDICATION				
	33	CONTACT TYPE		REED SWITCH				
	34	QUANTITY	TYPE	2	SPDT			
	35	CAPACITY CONTACT		2A @ 250 Vca				
	36	ELECTRICAL CONNECTION		1/2" NPT(F)				
ACCESSÓR.	37	IDENTIFICATION PLATE		YES (SEE GENERAL NOTES 1)				
	38	CONFIGURATION MANUAL (HANDHELD)		YES				
	39							
OPERATING CONDITIONS	40	FLUID	PHYSICAL STATE		CHILLED WATER		LIQUID	
	41	MINIMUM FLOW	NORMAL	MAXIMUM	202.6	202.6	202.6	m³/h
	42	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	37	37	37	°C
	43	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0.97	0.97	0.99	bar-g
	44	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0.77	0.77	0.79	bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		4.6 bar-g		37 °C	
	46	VISCOSITY @ OPERATING CONDITION		0.69 Cp				
	47	DENSITY @ OPERATING CONDITION		995.3 kg/m³				
	48	SUSPENDE SOLIDS (%)		NO				
	49	SPECIAL FLUID CONDITIONS		NO				
	50	M.M. / Z / Cp/Cv		... / ... / ...				
	51	MANUFACTURER		ROTORK / AUMA				
	52	MODEL		IQ (ROTORK)				

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CLIENT NR: **PRD-AIC-DSH-075**

TITLE

SHEET:
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MOTORIZED CONTROL VALVE

REV.:
1

GENERAL	1	INSTRUMENT TAG NUMBER		XV-980016				
	2	SERVICE		COOLING WATER - COOLING TOWERS PCH-7B-2				
	3	P&ID		7B-M-0-5-44				
	4	PIPE LINE	EQUIPMENT NUMBER	8"-TWR-980016-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 2)				
	9							
BODY AND INTERNAL	10	BODY TYPE		BUTTERFLY				
	11	BODY / CAP MATERIAL		ASTM A-216 Gr. WCB				
	12	WEDGE, DISC OR GATE MATERIAL + COATING		ASTM A-216 Gr. WCB				
	13	SEAT / RINGS MATERIAL + COATING		EPDM				
	14	SHAFT MATERIAL		ASTM A-216 Gr. WCB				
	15	GASKET MATERIAL		PTFE				
	16	CONNECTION TO THE PROCESS		WAFER - 8", 150#				
	17	FLANGE FACE FINISH		NOT REQUIRED				
	18	SEAL CLASS		IV				
19								
ACTUATOR	20	TYPE OF ACTUATOR		SMART / ELETRIC MOTORIZED				
	21	OPENING /CLOSING		DIRECT ACTION				
	22	FAILURE ACTION		STATIONARY				
	23	POWER SUPPLY		3Ø - 380Vac / 60Hz				
	24	HANDWHEEL		YES				
	25	ELECTRICAL CONNECTION	QUANTITY	1/2" NPT(F)	BY MANUFACTURER			
	26	SELF DIAGNOSIS		YES				
	27	CONFIGURATION		LOCAL AND REMOTE				
	28	OPENING, CLOSING AND LOCAL STOP		LOCAL AND REMOTE				
	29							
	30							
SWITCH	31	TYPE INDICATION		OPEN / CLOSED				
	32	SENSOR TYPE		INDUCTIVE, WITH LOCAL INDICATION				
	33	CONTACT TYPE		REED SWITCH				
	34	QUANTITY	TYPE	2	SPDT			
	35	CAPACITY CONTACT		2A @ 250 Vca				
	36	ELECTRICAL CONNECTION		1/2" NPT(F)				
ACCESSÓR.	37	IDENTIFICATION PLATE		YES (SEE GENERAL NOTES 1)				
	38	CONFIGURATION MANUAL (HANDHELD)		YES				
	39							
OPERATING CONDITIONS	40	FLUID	PHYSICAL STATE		CHILLED WATER		LIQUID	
	41	MINIMUM FLOW	NORMAL	MAXIMUM	202.6	202.6	202.6	m³/h
	42	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	37	37	37	°C
	43	MINIMUM UPSTREAM PRESSURE	NORMAL	MAXIMUM	0.97	0.97	0.99	bar-g
	44	MINIMUM DOWNSTREAM PRESSURE	NORMAL	MAXIMUM	0.77	0.77	0.79	bar-g
	45	DESIGN PRESSURE	DESIGN TEMPERATURE		4.6 bar-g		37 °C	
	46	VISCOSITY @ OPERATING CONDITION		0.69 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		ROTORK / AUMA				
	52	MODEL		IQ (ROTORK)				

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