







DOC NUMBER:

569-DB7A-AIC-731-002

CLIENT NUMBER:

PRD-AIC-DSH-020

CLIENT:

TAKEDA/BAXALTA

PROJECT:

BURITI EPCVM PROJECT

DATA SHEET AUTOMATED DIAPHRAGM VALVE

2	26JAN2022	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
1	17NOV2021	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
0	13SEP2021	ISSUED FOR CONSTRUCTION	MAB	MAF	RSP
Α	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV









NUMBER: 569-DB7A-AIC-731-002 CLIENT NR: PRD-AIC-DSH-020
TITLE SHEET: 2 de 13

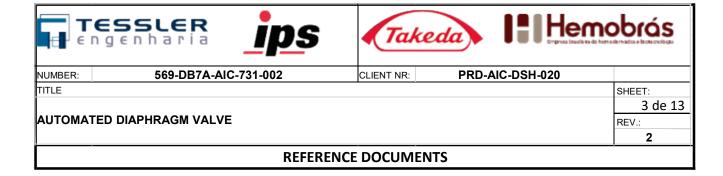
AUTOMATED DIAPHRAGM VALVE

REV.:

DOCUMENT REVIEW CONTROL

Revision	Α	0	1	2	3	4	Revision	Α	В	0	1	2	3	Revision	Α	В	0	1	2
Page							Page							Page					
1	\times	\boxtimes	\boxtimes	\boxtimes			26							51					
2	\times	\boxtimes	\boxtimes	\times			27							52					
3	\times	X	X	\times			28							53					
4	\times	X	X	\times			29							54					
5	\times	X	X	X			30							55					
6	${f \times}$	X	X	X			31							56					
7	${f \times}$	X	X	X			32							57					
8	\supset	X	X	X			33							58					
9	∇	X	X	X			34							59					
10	∇	X	X	X			35							60					
11	∇	X	X	X			36							61					
12	∇	X	X	X			37							62					
13	∇	X		X			38							63					
14	X						39							64	1				
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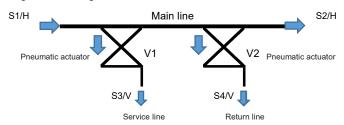
7A-Z-0-2-04	DRUG PRODUCT - FILLING LINE - LE-1100 - (WASH, DEPY, FILL, LYO, CAP)
7A-Z-0-2-07	DRUG PRODUCT - PARTS WASHER - LV-4601
7A-Z-0-2-08	DRUG PRODUCT - LYOPHILIZER N°1 - LYO-1105
7A-Z-0-2-09	DRUG PRODUCT - LYOPHILIZER N°2 - LYO-1106
7A-Z-0-2-20	DRUG PRODUCT - CIP CLEANING CHEMICAL STORAGE (TOTES) & DIST.
7A-Z-0-2-21	DRUG PRODUCT - CIP SYSTEM - CIP-7701
7A-Z-0-2-22	DRUG PRODUCT - PORTABLE VESSEL CIP/SIP STATION - STA-4701
7A-Z-0-2-24	DRUG PRODUCT - WFI STILL MES-6401
7A-Z-0-2-26	DRUG PRODUCT - HOT WFI DISTRIBUTION
7A-Z-0-2-27	DRUG PRODUCT - CLEAN STEAM GENERATOR CSG-6501
7A-Z-0-2-31	DRUG PRODUCT - PROC. WASTE - COLLECT & TEMP. / LIFT STATION - SK-8001
PRD-AIC-LIS-046	INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST

GENERAL NOTES

- 1 Each key must be appropriate for the classified area as indicated on the data sheet, the instrument must comply with the ordinance inmetro 83, dated.
- 2 The nameplate must be in aisi 316, contain the tag, the serial number and the model of the level switch and be permanently attached to the respective instrument.
- 3 All electronic and electrical components subject to the attack of fungi and moisture must be tropicalized, that is, treated with a polyurethane cover or equivalent
- 4 The manufacture / construction can only be started after the drawings and other documents related to the part considered have been returned approved without any comments received.
- 5 Technical documents in general (drawings, technical specifications, data sheets and material requests, lists, manuals, etc.), must be identified.
- 6 Grounding rings must be provided in compatible material, with the instrument box and easy access for assembly, being at least AISI 316.
- 7- The valves must be supplied in block, according to the configuration below:

Main line: S1/H; S2/H Service line: S3/V Return line: S4/V

Sanitary /valve ZERO DEAD-LEG type "T-VALVE BLOCK" - 4 way / 2 valves



8- See diaphragm valve arrangement diagram attached.

REVISION 0 - NOTES
1- REVISED AS PER INSTRUMENT LIST NUMBER PRD-AIC-LIS- 010_B_PCS_INSTRUMENT_INDEX AND BACKLOG NUMBER 99000-184.0 2021.03.30 - A&IC DOCUMENTS - COMMENTS_REV.01
REVISION 1 - NOTES
1 - ACCORDING NEW ARQUITECTURE UPDATED
REVISION 2 - NOTES
1 - ACCORDING TO LINE SPECIFICATION - SS3 TO SS10 2 - ADDED INSTRUMENTS: XV-390123









569-DB7A-AIC-731-002 PRD-AIC-DSH-020 CLIENT NR: NUMBER: TITI F SHEET: 4 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 2 INSTRUMENT TAG NUMBER 7A-XV-390123 2 SERVIÇE STERILE FILTER PRODUCT FROM P&ID 3 7A-Z-0-2-04 3/4"-PR-390101-SS10-CC 4 LINE SIZE LINE Nº VALVE TYPE BALL 6 AREA CLASSIFICATION NOT CLASSIFIED 7 **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 SEE NOTE 7 - PAGE 3 9 TYPE BODY THREE-WAY BALL 10 BODY SIZE 11 MATERIAL PIPE, CLASS. SS, SCH.40S, ASTM A312 Gr.TP304L.SEMALESS, ASME B36.19 12 END CONNECTION, AND TYPE. SS, SCH 40S, PL, ASTM A403 WP304L, ASME B16.9 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L PIPING MATERIAL SPECIFICATION SS, SCH 40S, PL, ASTM A403 WP304L, ASME B16.9 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS 31 **ENCLOSURE** MANUFACTURER STANDARD SOLENOID VALVE 32 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS STEAM VAPOR FLUID MINIMUM FLOW NORMAL MAXIMUM NORMAL MINIMUM PRESSURE MAXIMUM bar-g MINIMUM TEMPERATURE NORMAL MAXIMUM ٥С PROJECT FLOW SERVICE DESIGN PRESSURE DESIGN TEMPERATURE - ºC - bar-g DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср FLUID CONDUCTIVITY µS/cm² INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER FISHER OR SIMILAR MODEL









569-DB7A-AIC-731-002 CLIENT NR: PRD-AIC-DSH-020 TITLE SHEET: 5 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 2 INSTRUMENT TAG NUMBER XV-470108A/B SERVIÇE 2 CIP RETURN P&ID 7A-Z-0-2-22 3 **BENERAL** 3/4"-SFIC-470110-SS5-PP MAIN LINE SERVICE LINE 1 1/2"- FH-470103 1 1/2"-CIPR-470107-SS10-PP VALVE TYPE DIAPHRAGM 6 AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 (SEE GENERAL NOTES 1) 9 TYPE BODY ON-OFF / ZERO DEAD-LEG BODY SIZE 1.1/'2" / 3/4" / 1.1/2" (SEE NOTE 7) 10 11 MATERIAL PIPE, CLASS. STAINLESS STEEL AISI 316L END CONNECTION, AND TYPE. S1/H-PL / S2/H-PL / S3/V-PL 12 **BODY MATERIAL** STAINLESS STEEL AISI 316L 13 14 SEAL / SEAL TYPE PTFF 15 FULL FLOW BALL, YES / NO YES BALL & TRIM MATERIAL STAINLESS STEEL AISL 316L 16 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L BLOWOUT PROOF STEM MANUFACTURER STANDARD 18 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED PNEUMATIC, SINGLE ACTING TUPE OF ACTUATOR 23 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar **ACTUATOR** 26 OPEN AT (psig) 6 bar PNEUMATIC CONECTION 1/4" BSPF 27 28 BODY COLOR MANUFACTURER STANDARD HOUSING MATERIAL MANUFACTURER STANDARD 29 **ELETRICAL CLASS** 30 ENCLOSURE MANUFACTURER STANDARD 31 SOLENOID VALVE 32 ELETRICAL CONNECTION 33 34 VOLTAGE INDICATION 35 36 LIMIT SWITCH OPEN LIMIT SWITCH CLOSED 37 38 MOUNTING KIT FLUID PHYSICAL STATUS **PRODUTO** LIQUIDO MINIMUM FLOW NORMAL MAXIMUM 0.6 / 3.6 NM³/HR MINIMUM PRESSURE NORMAL MAXIMUM bar-g MINIMUM TEMPERATURE NORMAL MAXIMUM ٥С 80 PROJECT FLOW DESIGN TEMPERATURE DESIGN PRESSURE °С bar-g DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср FLUID CONDUCTIVITY µS/cm² INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER GEMU OR SIMILAR MODEL M600 NOTES:









AU 1	Oil	IATED DIAPHRAGINI V	ALVL					REV.: 2				
Τ	1	INSTRUMENT TAG NUMBER			<u> </u>	Χ\	/-640103					
		SERVIÇE			HOT HWFI SUPPLY							
		P&ID			7A-Z-0-2-26							
₹		LINE SIZE	LINE Nº		3"-HWFI-640105-SS10-HC 3"-HWFI-640113-SS10-HC							
GENERAL	- 1	VALVE TYPE					I PHRAGM					
<u>8</u>		AREA CLASSIFICATION				DIAPHRAGM NOT CLASSIFIED						
		ENCLOSURE CLASSIFICAT	ION			1101	IP-65					
-	-	CERTIFICATES	1014		··							
+	\dashv	TYPE BODY			(SEE GENERAL NOTES 1) ON-OFF / ZERO DEAD-LEG							
		BODY SIZE										
		MATERIAL PIPE, CLASS.			3" / 1/2" / 3" (SEE NOTE 7)							
-		END CONNECTION, AND TY	/DE		3102 33	316L SS, CLAMP, 0.6 μm; MECH. POLISHED & E.P. S1/H-PL / S2/H-TC / S3/V-TC						
- 1			IFE.									
$\forall \vdash$		BODY MATERIAL				STAINLESS	S STEEL AISI 316L					
- 1		SEAL / SEAL TYPE					PTFE					
- 1		FULL FLOW BALL, YES / NO	,			OTAINII FOO	YES					
- 1		BALL & TRIM MATERIAL	24701		0.74		S STEEL AISI 316L	20.4.01				
- 1		PIPING MATERIAL SPECIFIC	CATION		SIA		L ASTM A270 Gr.TF	316L				
		BLOWOUT PROOF STEM				MANUFACI	URER STANDARD					
		TYPE					-					
⇒		COLOR				-						
		LOCKING YES / NO			-							
-	\dashv	EXTENDED				D. 151 11 11 T.	-					
- 1		TUPE OF ACTUATOR					C, SINGLE ACTING					
- 1		FAIL POSITION			CLOSE							
		CLOSE AT (psig) SPRING			0 bar							
Ğ.		OPEN AT (psig)			6 bar							
≓ ŀ		PNEUMATIC CONECTION			1/4" BSPF							
· -		BODY COLOR			MANUFACTURER STANDARD							
- 1		HOUSING MATERIAL			MANUFACTURER STANDARD							
	30	ELETRICAL CLASS			-							
	31	ENCLOSURE			MANUFACTURER STANDARD							
-		SOLENOID VALVE			-							
RIES	33	ELETRICAL CONNECTION			-							
N	34	VOLTAGE			-							
SSE	35	INDICATION			-							
ACCESSO	36	LIMIT SWITCH OPEN			-							
٩	37	LIMIT SWITCH CLOSED					-					
	38	MOUNTING KIT					-					
		FLUID	PHYSICAL STATUS		WATE	:R		JIDO				
			NORMAL	MAXIMUM	-	-	178 / 478	LPM				
			NORMAL	MAXIMUM	-	-	2	bar-g				
			NORMAL	MAXIMUM	-	-	80	°C				
ู		PROJECT FLOW			-			-				
SERVICE		DESIGN PRESSURE	DESIGN TEMPER	ATURE	-	bar-g	- °C					
SER		DENSITY @ OPERATING CO	NOITION		-		kg/m³					
		VISCOSITY @ OPERATING	CONDITION		-							
		FLUID CONDUCTIVITY			- μS/cm²							
		INCRUSTATION										
		SUSPENDED SOLIDS (%)										
		MAXIMUM LOSS OF LOAD A	ALLOWED									
T		MANUFACTURER				GEMU	OR SIMILAR					
		MODEL					M600					
NOTE	ES:											









569-DB7A-AIC-731-002 PRD-AIC-DSH-020 NUMBER: CLIENT NR: TITLE SHEET: 7 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 2 1 INSTRUMENT TAG NUMBER XV-640104 2 SERVICE HOT HWFI SUPPLY P&ID 7A-Z-0-2-26 3 4 LINE SIZE 3"-HWFI-640105-SS10-HC LINE Nº 3"-HWFI-640112-SS10-HC 5 VALVE TYPE DIAPHRAGM 6 AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 (SEE GENERAL NOTES 1) TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 3" / 1/2" / 3" (SEE NOTE 7) 11 MATERIAL PIPE, CLASS. 316L SS, CLAMP, 0.6 µm; MECH. POLISHED & E.P. 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-TC / S3/V-TC 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS WATER LIQUIDO FLUID MINIMUM FLOW NORMAL MAXIMUM 178 / 478 LPM MINIMUM PRESSURE NORMAL MAXIMUM 2 bar-a MINIMUM TEMPERATURE NORMAL MAXIMUM 80 ٥С PROJECT FLOW SERVICE °С DESIGN PRESSURE DESIGN TEMPERATURE bar-a DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср μS/cm² FLUID CONDUCTIVITY INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR** MODEL M600



MODEL

NOTES:







M600

569-DB7A-AIC-731-002 PRD-AIC-DSH-020 NUMBER: CLIENT NR: TITLE SHEET: 8 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 1 INSTRUMENT TAG NUMBER 7A-XV-640106 2 SERVIÇE HOT HWFI SUPPLY P&ID 7A-Z-0-2-26 3 2"-HWFI-640109-SS10-HC 1.1/2"-HWFI-640115-SS10-HC 4 LINE SIZE LINE Nº 5 VALVE TYPE DIAPHRAGM AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 (SEE GENERAL NOTES 1) TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 2" / 1/2" / 1.1/2" (SEE NOTE 7) 11 MATERIAL PIPE, CLASS. 316L SS, CLAMP, 0.6 µm; MECH. POLISHED & E.P. 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-TC / S3/V-TC 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS WATER LIQUIDO FLUID MINIMUM FLOW NORMAL MAXIMUM 26 / 109 LPM MINIMUM PRESSURE NORMAL MAXIMUM 2 bar-a MINIMUM TEMPERATURE NORMAL MAXIMUM 80 ٥С PROJECT FLOW SERVICE °С DESIGN PRESSURE DESIGN TEMPERATURE bar-a DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср μS/cm² FLUID CONDUCTIVITY INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR**



MODEL

NOTES:







M600

569-DB7A-AIC-731-002 PRD-AIC-DSH-020 NUMBER: CLIENT NR: TITLE SHEET: 9 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 1 INSTRUMENT TAG NUMBER 7A-XV-640107 2 SERVIÇE HOT HWFI SUPPLY P&ID 7A-Z-0-2-26 3 4 LINE SIZE 2"-HWFI-640109-SS10-HC LINE Nº 1"-HWFI-640116-SS10-HC 5 VALVE TYPE DIAPHRAGM 6 AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 (SEE GENERAL NOTES 1) TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 2" / 1/2" / 1" (SEE NOTE 7) 11 MATERIAL PIPE, CLASS. 316L SS, CLAMP, 0.6 µm; MECH. POLISHED & E.P. 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-TC / S3/V-TC 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS WATER LIQUIDO FLUID MINIMUM FLOW NORMAL MAXIMUM 26 / 109 LPM MINIMUM PRESSURE NORMAL MAXIMUM 2 bar-a MINIMUM TEMPERATURE NORMAL MAXIMUM 80 ٥С PROJECT FLOW SERVICE °С DESIGN PRESSURE DESIGN TEMPERATURE bar-a DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср μS/cm² FLUID CONDUCTIVITY INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR**









569-DB7A-AIC-731-002 PRD-AIC-DSH-020 NUMBER: CLIENT NR: TITLE SHEET: 10 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 1 INSTRUMENT TAG NUMBER 7A-XV-640110 2 SERVIÇE HOT HWFI SUPPLY P&ID 7A-Z-0-2-26 3 4 LINE SIZE 2"-HWFI-640109-SS10-HC LINE Nº 1"-HWFI-640117-SS10-HC 5 VALVE TYPE DIAPHRAGM 6 AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES 8 (SEE GENERAL NOTES 1) TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 2" / 1/2" / 1" (SEE NOTE 7) 11 MATERIAL PIPE, CLASS. 316L SS, CLAMP, 0.6 µm; MECH. POLISHED & E.P. 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-TC / S3/V-TC 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS WATER LIQUIDO FLUID MINIMUM FLOW NORMAL MAXIMUM 26 / 109 LPM MINIMUM PRESSURE NORMAL MAXIMUM 2 bar-a MINIMUM TEMPERATURE NORMAL MAXIMUM 80 ٥С PROJECT FLOW SERVICE °С DESIGN PRESSURE DESIGN TEMPERATURE bar-a DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср μS/cm² FLUID CONDUCTIVITY INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR** MODEL M600









NUMBER: 569-DB7A-AIC-731-002 CLIENT NR: PRD-AIC-DSH-020 TITLE SHEET: 11 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 2 INSTRUMENT TAG NUMBER 7A-XV-770109A/B / 7A-XV-770110 2 SERVIÇE CIP SYSTEM RETURN FROM PORT, TK, CIP/SIP STATION STA-4701 P&ID 3 7A-Z-0-2-21 3/4"-CIPR-770104-SS10-PP 3/4"-CIPR-770105-SS10-PP GENERAL MAIN LINE SERVICE LINE 1 1/2"-CIPR-770103-SS10-PP 4 VALVE TYPE DIAPHRAGM 5 AREA CLASSIFICATION NOT CLASSIFIED 6 ENCLOSURE CLASSIFICATION IP-65 CERTIFICATES (SEE GENERAL NOTES 1) TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 1.1/'2" / 3/4" / 1.1/2" (SEE NOTE 7) 11 MATERIAL PIPE, CLASS. STAINLESS STEEL AISI 316L 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-PL / S3/V-PL STAINLESS STEEL AISI 316L 13 BODY MATERIAL 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES 16 BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE _ 20 COLOR HANDLI 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar ACTUATOR 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD HOUSING MATERIAL MANUFACTURER STANDARD 29 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 31 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION LIMIT SWITCH OPEN 36 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT FLUID PHYSICAL STATUS CIP LIQUIDO MINIMUM FLOW NORMAL MAXIMUM 60 / 20 LPM MINIMUM PRESSURE NORMAL MAXIMUM bar-g MINIMUM TEMPERATURE NORMAL MAXIMUM ٥С 80 PROJECT FLOW SERVICE DESIGN TEMPERATURE DESIGN PRESSURE °C bar-q **DENSITY @ OPERATING CONDITION** kg/m³ VISCOSITY @ OPERATING CONDITION Ср FLUID CONDUCTIVITY µS/cm² INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR** MODEL M600









569-DB7A-AIC-731-002 PRD-AIC-DSH-020 NUMBER: CLIENT NR: TITLE SHEET: 12 de 13 AUTOMATED DIAPHRAGM VALVE REV.: 2 INSTRUMENT TAG NUMBER 7A-XV-430001 2 SERVIÇE AIR SUPPLY COMP. (INSTRUMENT) P&ID 7A-Z-0-2-20 3 4 MAIN LINE SERVICE LINE 3/4"-CA-710013-SS5-NI 5 VALVE TYPE GATE AREA CLASSIFICATION NOT CLASSIFIED **ENCLOSURE CLASSIFICATION** IP-65 CERTIFICATES (SEE GENERAL NOTES 1) 8 TYPE BODY ON-OFF / ZERO DEAD-LEG 9 10 BODY SIZE 3/4" 11 MATERIAL PIPE, CLASS. STAINLESS STEEL AISI 316L 12 END CONNECTION, AND TYPE. S1/H-PL / S2/H-PL / S3/V-PL 13 BODY MATERIAL STAINLESS STEEL AISI 316L 14 SEAL / SEAL TYPE PTFE 15 FULL FLOW BALL, YES / NO YES BALL & TRIM MATERIAL STAINLESS STEEL AISI 316L 16 17 PIPING MATERIAL SPECIFICATION STAINLESS STEEL ASTM A270 Gr.TP316L 18 BLOWOUT PROOF STEM MANUFACTURER STANDARD 19 TYPE 20 COLOR HANDL 21 LOCKING YES / NO 22 EXTENDED 23 TUPE OF ACTUATOR PNEUMATIC, SINGLE ACTING 24 FAIL POSITION CLOSE 25 CLOSE AT (psig) SPRING 0 bar 26 OPEN AT (psig) 6 bar 27 PNEUMATIC CONECTION 1/4" BSPF 28 BODY COLOR MANUFACTURER STANDARD 29 HOUSING MATERIAL MANUFACTURER STANDARD 30 ELETRICAL CLASS ENCLOSURE MANUFACTURER STANDARD 32 SOLENOID VALVE 33 ELETRICAL CONNECTION 34 VOLTAGE 35 INDICATION 36 LIMIT SWITCH OPEN 37 LIMIT SWITCH CLOSED 38 MOUNTING KIT PHYSICAL STATUS **FLUID** AIR MINIMUM FLOW NORMAL MAXIMUM I PM MINIMUM PRESSURE NORMAL MAXIMUM 6 bar-g MINIMUM TEMPERATURE NORMAL MAXIMUM 30 ٥С PROJECT FLOW SERVICE °С DESIGN PRESSURE DESIGN TEMPERATURE bar-a DENSITY @ OPERATING CONDITION kg/m³ VISCOSITY @ OPERATING CONDITION Ср μS/cm² FLUID CONDUCTIVITY INCRUSTATION SUSPENDED SOLIDS (%) MAXIMUM LOSS OF LOAD ALLOWED MANUFACTURER **GEMU OR SIMILAR** MODEL M600







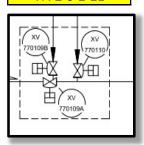


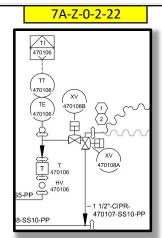
 NUMBER:
 569-DB7A-AIC-731-002
 CLIENT NR:
 PRD-AIC-DSH-020

 TITLE
 SHEET:

 AUTOMATED DIAPHRAGM VALVE
 13 de 13

7A-Z-0-2-21





7A-Z-0-2-26

